1974

Water Resources Data for Maryland and Delaware

Part 1. Surface Water Records

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Prepared in cooperation with the States of Maryland and Delaware and with other agencies

CALENDAR FOR WATER YEAR 1974

1973

OCTOBER

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
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NOVEMBER

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DECEMBER

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1974

JANUARY

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FEBRUARY

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31						

APRIL

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JUNE

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JULY

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AUGUST

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SEPTEMBER

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22	23	24	25	26	27	28
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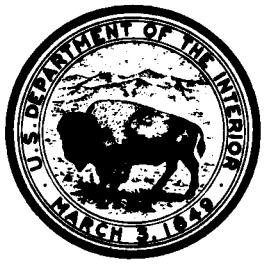
1974

Water Resources Data for Maryland and Delaware

Part 1. Surface Water Records



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Prepared in cooperation with the States of Maryland and Delaware and with other agencies

Prepared in cooperation with

Delaware Geological Survey
Delaware Department of Highways and Transportation
Maryland Geological Survey
Maryland State Highway Administration
Maryland Department of Health and Mental Hygiene
County of Montgomery
City of Baltimore
District of Columbia
Maryland National Capital Park and Planning Commission
Washington Suburban Sanitary Commission
Corps of Engineers, U. S. Army
National Park Service, U. S. Department of the Interior

Water resources records, 1974, for Maryland and Delaware are in the following reports of the U. S. Geological Survey:

1. Water Resources Data for Maryland and Delaware
   Part 1: Surface Water Records

2. Water Resources Data for Maryland and Delaware
   Part 2: Water Quality Records

Copies of this report may be obtained from
District Chief, Water Resources Division
U. S. Geological Survey
8809 Satyr Hill Road
Parkville, Maryland 21234

1975

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WATER RESOURCES DATA FOR MARYLAND AND DELAWARE, 1974

PART 1. SURFACE WATER RECORDS

INTRODUCTION

Water resources data for the 1974 water year for Maryland and Delaware including records of streamflow or reservoir storage at gaging stations, partial-record stations, and miscellaneous sites are given in this report. Records are included for 107 gaging stations of which 106 are streamflow discharge stations, and 1 is a reservoir station; also included are records for 9 low-flow partial-record stations, 60 crest-stage partial-record stations, 4 tidal crest-stage partial-record stations, and 42 miscellaneous sites. Locations of gaging stations are shown in figure 2. A few pertinent stations (not included above) in bordering States are also included in this report. The records were collected and computed by the Water Resources Division of the U. S. Geological Survey under the direction of Walter F. White, district chief. These data represent that portion of the National Water Data System collected by the U. S. Geological Survey and cooperating State and Federal agencies in Maryland and Delaware.

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

Records of discharge and stage of streams, and contents and stage of lakes and reservoirs are published in a series of U. S. Geological Survey water-supply papers entitled, "Surface Water Supply of the United States." Through September 30, 1960, these water-supply papers were in an annual series and since then are in a 5-year series. More information is given under the headings "Publications" on page 8.

COOPERATION

Cooperative agreements between the U. S. Geological Survey and organizations of the State of Maryland for the systematic collection of streamflow records began in 1896, continued through 1909, and after a lapse of 15 years, resumed in 1924. Similar agreements between the Survey and organizations of the State of Delaware began in 1943. Organizations that supplied data are acknowledged in station descriptions. Organizations that assisted in collecting data through cooperative agreements with the Survey are:

Delaware Geological Survey, R. R. Jordan, State geologist.

Delaware Department of Highways and Transportation, R. A. Haber, director of highways.

Maryland Geological Survey, K. N. Weaver, director.

Maryland State Highway Administration, W. E. Woodford, Jr., deputy administrator.

Maryland Department of Health and Mental Hygiene, H. E. Chaney, director.

Maryland National Capital Park and Planning Commission, J. F. Downs, acting executive director.

Maryland Water Resources Administration, H. M. Sachs, director.

Montgomery County Department of Environmental Protection, H. C. Ervine, director.

Washington Suburban Sanitary Commission, R. J. McLeod, general manager.

District of Columbia Department of Environmental Services, W. C. McKinney, director.

City of Baltimore, Department of Public Works, R. J. Kretzschmar, chief of water supply division, bureau of engineering.

Assistance in the form of funds or services was given by the Corps of Engineers, U. S. Army, for 27 gaging stations and by the National Park Service, U. S. Department of the Interior for 1 station.

The following organizations aided in collecting records:

Delaware: State Department of Natural Resources and Environmental Control; and New Castle County.

Maryland: Upper Potomac River Commission; Natural Resources Institute, University of Maryland; Anne Arundel County; Baltimore County; Harford County; city of Salisbury; Potomac Electric Power Co.; and Virginia Electric Power Co.

DEFINITION OF TERMS

Terms related to streamflow and other hydrologic data, as used in this report, are defined on the following pages. See also table 1, "Factors for converting English units to International System (SI) units" on page 11.

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, about 326,000 gallons, or about 1,233 cubic metres.

Cfs-day is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, about 646,000 gallons, or about 2,447 cubic metres, and represents a runoff of approximately 0.0372 inch (0.945 millimetre) from 1 square mile (2.590 square kilometres).

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. One CFSM is equivalent to 0.01093 cubic metres per second per square kilometre, approximately.

Cubic foot per second (cfs) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to approximately 7.48 gallons per second, approximately 448.8 gallons per minute, or 0.02832 cubic metres per second.

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

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

Instantaneous discharge is the discharge at a particular instant of time. If this discharge is reported instead of the daily mean, the heading of the discharge column in the tables is "Discharge (cfs)."

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

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

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

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. One IN. is equivalent to 25.4 mm.

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

WRD is used as an abbreviation for "Water-Resources Data" in the summary REVISIONS paragraph to refer to previously published State annual basic-data reports.

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

DOWNSTREAM ORDER AND STATION NUMBER

Stations are listed in a downstream direction along the main stream, and stations on tributaries are listed between stations on the main stream in the order in which those tributaries enter the main stream. Stations on tributaries entering above all mainstream stations are listed before the first mainstream station. Stations on tributaries to tributaries are listed in a similar manner. In the 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 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 series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete 8-digit number for each station, such as 01646500, which appears just to the left of the station name, includes the 2-digit part number "01" and the 6-digit downstream order number "646500." In this report, the records are listed in downstream order by parts. The part number refers to an area whose boundaries coincide with certain natural drainage lines. Records in this report are in Part 1 (North Atlantic Slope basins) and Part 3 (Ohio River basin). All records for a drainage basin encompassing more than one State can be arranged in downstream order by assembling pages from the various State reports by station number to include all records in the basin.

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 direct readings on a nonrecording gage or from a water-stage recorder that gives either a continuous graph of the fluctuations or a tape punched at 15-, 30-, or 60-minute intervals. Measurements of discharge are made with a current meter, using the general methods adopted by the Geological Survey on the basis of experience in stream gaging since 1888. These methods are described in standard textbooks, in Water-Supply Paper 888, and in U. S. Geological Survey Techniques of Water Resources Investigations, book 3, chapter A6. Surface areas

of lakes or reservoirs are determined from instrument surveys using standard methods. The configuration of the reservoir bottom is determined by sounding at many points.

For stream-gaging stations, rating tables giving the discharge for any stage are prepared from stage-discharge relation curves. If extensions to the rating curves are necessary to express discharge greater than measured, they are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, computation of flow over dams or weirs), velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage heights and rating tables, then the monthly and yearly mean discharge are computed from the daily figures. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is computed by the shifting-control method, in which correction factors based on individual discharge measurements and notes by hydrologists and observers are used in applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the control, the daily mean discharge is computed by what is basically the shifting-control method.

At some stream-gaging stations the stage-discharge relation is affected by 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 reservoir station, capacity tables giving the contents for any stage are prepared from stage-area relation curves defined by surveys. The application of the stage to the capacity table gives the contents, from which the daily, monthly, or yearly change in contents is computed.

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

For some gaging stations there are periods when no gage-height record is obtained or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods the daily discharges are estimated on the basis of recorded range in stage, adjoining good record, discharge measurements, weather records, and comparison with other station records from the same or nearby basins. Likewise daily contents may be estimated on the basis of operator's log, adjoining good record, inflow-outflow studies, and other information.

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

The description of the gaging stations gives the location, drainage area, period of record, type and history of gages, average discharge, extremes of discharge or contents, general remarks, and notations of revisions of previously published records. The location of the gaging station and the drainage area are obtained from the most accurate maps available. River mileage, given under "LOCATION" for some stations, is that determined and used by the Corps of Engineers or other agencies. Periods for which there are published records for the present station or for stations generally equivalent to the present one are given under "PERIOD OF RECORD." The type of gage currently in use, the datum of the present gage above mean sea level, and a condensed history of the types, locations, and datums of previous gages used during the period of record are given under "GAGE." In references to datum of gage, the phrase "mean sea level" denotes "Sea Level Datum of 1929" as used by the Topographic Division of the Geological Survey unless otherwise qualified. The average discharge for the number of years indicated is given under "AVERAGE DISCHARGE;" it is not given for stations having fewer than 5 complete years of record or for stations where changes in water development during the period of record cause the figure to have little significance. The maximum discharge (or contents) and the maximum gage height, the minimum discharge if there is little or no regulation (or minimum contents) and the minimum gage height if it is significant are given under "EXTREMES." The minimum daily discharge is given if there is extensive regulation (also the minimum discharge and gage height if they are abnormally low). In the first paragraph headed "Current year," the data given are for the complete current water year unless otherwise specified. In the second paragraph under "EXTREMES" headed "Period of record:" the data given are for the period of record given in PERIOD OF RECORD paragraph. Reliable information concerning major floods that occurred outside the period of record is given in the third or last paragraph under "EXTREMES." Unless otherwise qualified, the maximum discharge (or contents) 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 reports. In order to make it easier to find such revised records, a paragraph headed "REVISIONS (WATER YEARS)" has been added to the description of all stations for which revised records have been published. Listed therein are all the reports in which revisions have been published, each followed by the water years for which figures are revised in that report. In listing the water years only one number is given; for instance, 1965 stands for the water year October 1, 1964, to September 30, 1965. If no daily, monthly, or annual figures of discharge were revised, that fact is brought out by notations after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the revised figure was first published is given. It should be noted that for all stations for which cubic feet per second per square mile and runoff in inches are published, a revision of the drainage area necessitates corresponding revision of all figures based on the drainage area. Revised figures of cubic feet per second per square mile and runoff in inches resulting from a revision of the drainage area only are usually not published in the annual series of reports.

The daily table for stream-gaging stations gives the mean discharge for each day and is followed by monthly and yearly summaries. In the monthly summary below the daily table, the line headed "TOTAL" gives the sum of the daily figures. The line headed "MEAN" gives the average flow in cubic feet per second during the month. The lines headed "MAX" and "MIN" 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"). Figures for cubic feet per second per square mile and runoff in inches are omitted if there is extensive regulation or diversion.

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.

Footnotes to the table of daily discharges are introduced by the word "NOTE." Footnotes are used to indicate periods for which the discharge is computed or estimated by special methods because of no gage-height record, backwater from various sources, or other unusual conditions. Periods of no gage-height record are indicated if the period is continuous for a month or more or includes the maximum discharge for the year. Periods of backwater from an unusual source, of indefinite stage discharge relation, or of any other unusual condition at the gage site are indicated only if they are a month or more in length and the accuracy of the records is affected. Days on which the stage-discharge relation is affected by ice are not indicated. The methods used in computing discharge for various unusual conditions have been explained in preceding paragraphs.

Peak discharges and their times of occurrence and corresponding gage heights for many stations are listed below the yearly summary. All independent peaks above the selected base are given. The base discharge, which is given in parentheses, is selected so that an average of about three peaks a year can be presented. Peak discharges are not published for any canals, ditches, drains, or for any stream for which the peaks are subjected to substantial control by man. Time of day is expressed in 24-hour local standard time; for example, 12:30 a.m. is 0030, 1:30 p.m. is 1330.

For most gaging stations on lakes and reservoirs the data presented comprise a description of the station and a monthly summary table of stage and contents. For some reserviors a table showing daily contents or stage is given. A skeleton table of capacity at given stages is published for all reservoirs for which records are published on a daily basis, but is not published for reservoirs for which only monthly data are given.

Data collected at partial-record stations and miscellaneous sites are given in three tables at the end of the surface-water records in this report. The first is a table of discharge measurements at low-flow partial-record stations, the second is a table of annual maximum stage and discharge at crest-stage stations, and the third is a table of discharge measurements at miscellaneous sites.

Accuracy of Data

The accuracy of discharge data depends primarily on (1) the stability of the stage-discharge relation, or if the control is unstable, the frequency of discharge measurements, and (2) the accuracy of observations of stage, measurements of discharge, and interpretation of records.

The station description under "REMARKS" states the degree of accuracy of the records. "Excellent" means that about 95 percent of the daily discharges are within 5 percent; "good" within 10 percent; and "fair" within 15 percent. "Poor" means that daily discharges have less than "fair" accuracy.

Figures of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second for discharges of less than 1 cfs; to tenths between 1.0 and 10 cfs; to whole numbers between 10 and 1,000 cfs; and to 3 significant figures above 1,000 cfs. The number of significant figures used is based solely on the magnitude of the figure. The same rounding rules apply to discharge figures listed for partial-record stations 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

In each water-supply paper entitled, "Surface Water Supply of the United States" there is a list of numbers of preceding water-supply papers containing streamflow information for the area covered by that report. In addition, there is a list of numbers of water-supply papers containing detailed information on major floods in the area. Records for stations in Maryland and Delaware for the period October 1960 to September 1965 are in Water-Supply Papers 1902, 1903, and 1907.

Two series of summary reports entitled, "Compilation of Records of Surface Waters of the United States" have been published; the first series covers the entire period of record through September 1950 and the second series covers the period October 1950 to September 1960. These reports contain summaries of monthly and annual discharge and 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. Records for stations in Maryland and Delaware are compiled in Water-Supply Papers 1302 and 1305 through September 1950, and in 1722 and 1725 for October 1950 to September 1960.

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

Other Data Available

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 Maryland and Delaware through 1967 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, on suspended-sediment concentration, and on the particle-size distribution of suspended sediment and bed material. 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.

HYDROLOGIC CONDITIONS

Streamflow averaged above normal throughout the bi-State area and was excessive in western Maryland. Although no significant floods occurred during the year, runoff at four index stations ranged from 105 percent of normal in the east to 130 percent of normal in the west. Monthly flows at the index station, Potomac River at Paw Paw, W. Va., were in the excessive range, upper 25 percent of recorded flows, from October to January, June, July, and September. Monthly flows at the index station, Potomac River near Washington, D. C., ranged from 55 percent of median in March to 223 percent of median in January, reference period 1941-70.

Graphical illustrations of streamflow conditions during the year in comparison with previous records for two stations are shown on page 10. Data for the station, Potomac River at Point of Rocks, Md., a long-term record, reflects runoff conditions in the Potomac River basin excluding the coastal plain. Data for the station, Choptank River at Greensboro, Md., reflects runoff from a 113 square mile area (21.6 square miles in Delaware) in the central part of the Delmarva peninsula. Annual mean discharge is shown in figure 1 for the period of record of the two stations.

Average fresh-water inflow to the Chesapeake Bay was estimated at 85,200 cfs, 116 percent of the long-term average of 73,300 cfs, reference period 1952-73. Excessive inflows occurred during December and January, and a record high inflow of 46,800 cfs occurred during September.

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.

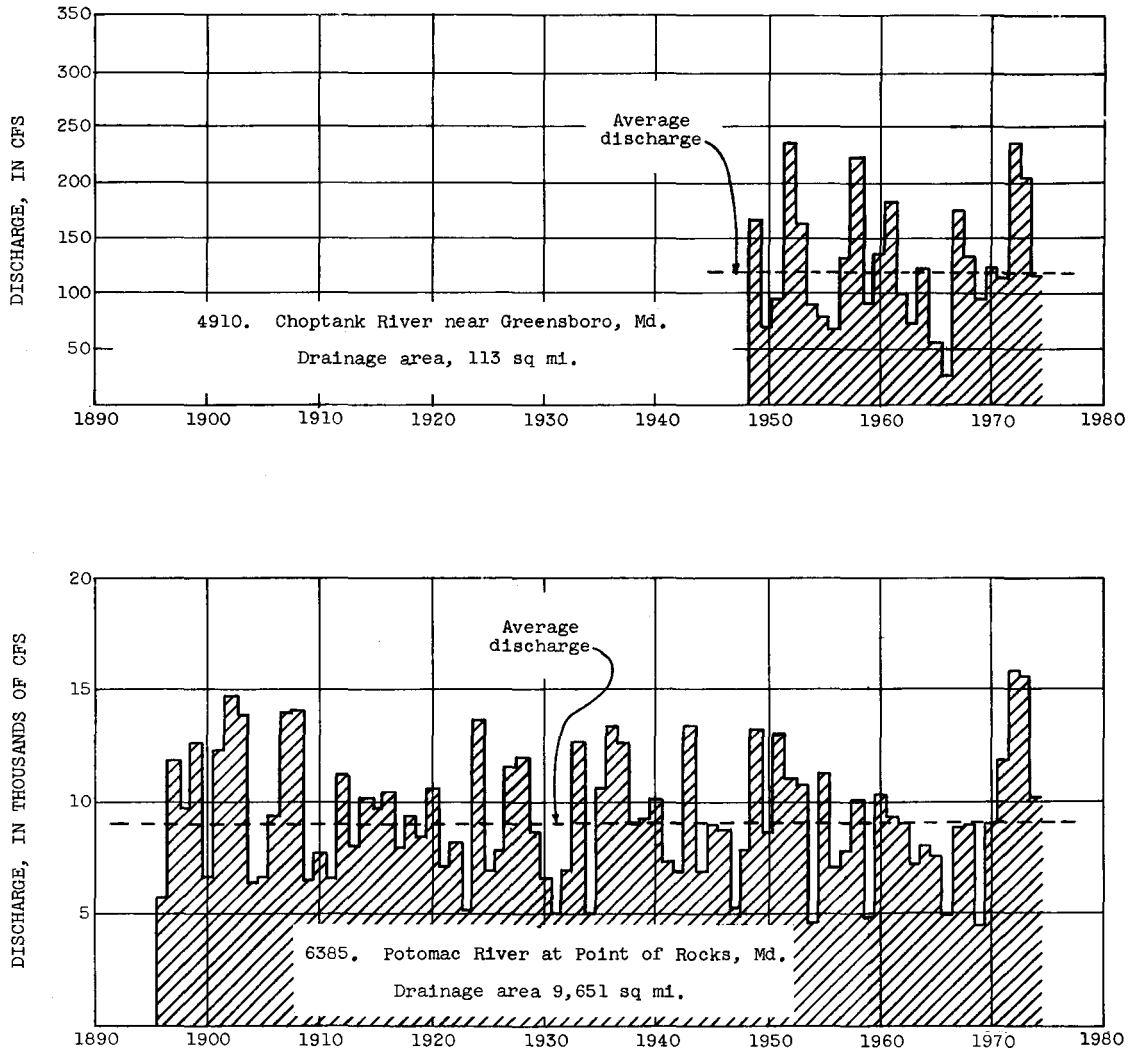

Figure 1.--Annual mean discharge at two gaging stations in Maryland.

Table 1.--Factors for converting English units to International System (SI) units

The following factors may be used to convert the English units published herein to the International System of Units (SI).

Multiply English units	By	To obtain SI units
Length		
inches (in)	25.4	millimetres (mm)
	2.540×10^{-2}	metres (m)
feet (ft)	.3048	metres (m)
miles (mi)	1.609	kilometres (km)
Area		
acres	4047	square metres (m^2)
	4.047×10^{-3}	square kilometres (km^2)
square miles (sq mi)	2.590	square kilometres (km^2)
Volume		
gallons (gal)	3.785	litres (l)
	3.785×10^{-3}	cubic metres (m^3)
million gallons (mg)	3785	cubic metres (m^3)
	3.785×10^{-3}	cubic hectometres (hm^3)
cubic feet	2.832×10^{-2}	cubic metres (m^3)
cfs-day	2447	cubic metres (m^3)
	2.447×10^{-3}	cubic hectometres (hm^3)
acre-feet (acre-ft)	1233	cubic metres (m^3)
	1.233×10^{-3}	cubic hectometres (hm^3)
Flow		
cubic feet per second (cfs)	2.832×10^{-2}	cubic metres per second (m^3/s)
gallons per minute (gpm)	6.309×10^{-2}	litres per second (l/s)
	$.06309 \times 10^{-3}$	cubic metres per second (m^3/s)
million gallons per day (mgd)	4.381×10^{-2}	cubic metres per second (m^3/s)

DELAWARE RIVER BASIN

01477800 Shellpot Creek at Wilmington, Del.

LOCATION.--Lat 39°45'39", long 75°31'10", New Castle County, on right bank 100 ft (30 m) east of intersection of 44th and Pine Streets in Clifton Park, 700 ft (213 m) downstream from highway bridge on North Market Street in Wilmington, 0.2 mile (0.3 km) downstream from Matson Run, and 2.3 miles (3.7 km) upstream from mouth.

DRAINAGE AREA.--7.46 sq mi (19.32 sq km).

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 15.16 ft (4.621 m) above mean sea level.

AVERAGE DISCHARGE.--28 years (1946-74), 9.61 cfs (0.272 cu m/s), 17.49 in/yr (444 mm/yr).

EXTREMES.--Current year: Maximum discharge, 3,300 cfs (93.5 cu m/s) Aug. 23, gage height, 8.00 ft (2.438 m); minimum daily, 0.64 cfs (0.018 cu m/s) Oct. 20-23, 25, 26.
Period of record: Maximum discharge, 6,850 cfs (194 cu m/s) Sept. 13, 1971, gage height, 11.91 ft (3.630 m), from rating curve extended above 620 cfs (17.6 cu m/s) on basis of computation of flow over dam at gage height 6.52 ft (1.987 m); contracted-opening measurements at gage heights 6.52 ft (1.987 m), 7.97 ft (2.429 m), and 8.6 ft (2.62 m), from floodmarks; Type V culvert measurement at 9.10 ft (2.774 m); and contracted-opening measurement of peak flow; minimum daily, 0.09 cfs (0.003 cu m/s) Oct. 2, 4, 1968.
Maximum stage known since at least 1940, that of Sept. 13, 1971. Flood of Aug. 1, 1945, reached a stage of about 8.5 ft (2.59 m), from floodmarks.

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 1382: 1948(m).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	3.6	.93	19	3.8	11	13	2.2	3.1	6.7	1.3	1.3
2	11	1.5	.86	5.8	10	6.2	12	1.9	5.8	1.9	15	2.0
3	4.0	1.2	.93	15	4.6	5.8	6.9	18	2.4	1.6	6.2	50
4	1.5	1.0	.93	36	3.7	4.3	22	3.3	1.7	1.6	1.7	14
5	1.2	2.4	56	7.9	3.0	3.7	40	2.3	1.6	8.7	2.3	2.1
6	.93	1.7	12	6.1	3.0	3.2	12	5.9	1.5	2.6	1.2	6.0
7	.79	1.0	2.6	5.1	10	3.2	6.1	4.0	1.4	1.6	12	30
8	.86	.93	2.0	4.0	12	2.9	22	2.1	1.5	1.4	1.9	5.0
9	.86	1.5	61	7.5	5.0	7.7	98	7.4	1.6	1.3	2.3	3.0
10	.93	1.2	6.7	17	3.4	7.4	12	22	2.0	1.3	1.2	2.3
11	1.1	.79	3.0	70	3.2	3.4	6.3	3.9	2.0	1.1	.88	2.7
12	.86	.79	2.2	17	3.8	3.1	5.1	63	1.6	.88	.79	2.1
13	.86	.86	14	6.1	6.8	2.8	43	13	1.1	.85	.76	18
14	.79	.93	38	4.8	7.2	2.6	10	4.0	1.2	.86	.79	24
15	.79	.86	4.3	4.8	3.6	2.5	6.5	2.9	1.1	.95	.77	2.9
16	.79	.79	3.3	6.8	4.0	75	4.7	2.4	61	.93	.76	2.1
17	.69	.69	3.8	6.8	5.4	18	4.2	2.1	11	.77	4.6	1.8
18	.69	.69	2.6	4.3	3.6	5.7	3.8	6.0	2.0	.75	2.5	2.1
19	.69	.86	2.2	5.4	8.8	5.3	4.2	2.2	1.5	.92	1.3	1.4
20	.64	.86	78	4.6	14	3.9	3.9	1.8	1.4	.80	.94	1.4
21	.64	.79	355	22	4.3	120	3.2	1.8	29	.73	.72	3.7
22	.64	.93	10	8.8	11	12	3.1	2.5	4.8	.77	.95	3.4
23	.64	1.3	5.8	5.4	6.4	6.1	11	36	40	.88	386	1.8
24	.79	1.3	4.3	4.6	4.6	5.0	3.5	7.3	5.8	20	5.5	1.7
25	.64	1.4	3.6	4.8	7.5	4.0	2.8	3.6	3.9	1.8	16	1.6
26	.64	1.3	63	4.0	7.9	3.8	2.6	2.2	2.4	1.1	3.7	1.7
27	.74	1.3	21	8.0	6.8	3.4	2.5	2.2	1.9	1.0	2.4	1.6
28	.86	6.4	6.8	6.0	9.7	3.3	2.4	1.9	17	1.0	1.5	34
29	146	3.3	5.1	5.0	------	7.5	2.3	1.9	7.8	1.0	1.5	9.2
30	6.8	1.2	5.1	4.2	------	99	2.2	2.0	2.4	34	5.0	1.9
31	2.4	------	8.8	4.0	------	42	------	1.8	------	1.7	1.4	------
TOTAL	191.96	43.37	783.85	330.8	177.1	483.8	371.3	233.6	221.5	101.49	483.86	234.8
MEAN	6.19	1.45	25.3	10.7	6.33	15.6	12.4	7.54	7.38	3.27	15.6	7.83
MAX	146	6.4	355	70	14	120	98	63	61	34	386	50
MIN	.64	.69	.86	4.0	3.0	2.5	2.2	1.8	1.1	.73	.72	1.3
CFSM	.83	.19	3.39	1.43	.85	2.09	1.66	1.01	.99	.44	2.09	1.05
IN.	.96	.22	3.91	1.65	.88	2.41	1.85	1.16	1.10	.51	2.41	1.17

CAL YR 1973 TOTAL 5,179.62 MEAN 14.2 MAX 355 MIN .50 CFSM 1.90 IN 25.83
WTR YR 1974 TOTAL 3,657.43 MEAN 10.0 MAX 386 MIN .64 CFSM 1.34 IN 18.24

PEAK DISCHARGE (BASE, 550 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-29	1800	6.01	1,880	5-12	1910	3.85	704
12-21	0030	5.01	1,360	6-16	1545	3.99	794
3-21	1325	4.12	866	8-23	0525	8.00	3,300

01478000 Christina River at Coochs Bridge, Del.

LOCATION (revised).--Lat 39°38'14", long 75°43'43", New Castle County, on right bank 60 ft (18 m) downstream from highway bridge, 0.5 mile (0.8 km) southeast of Coochs Bridge, 3.6 miles (5.8 km) upstream from Muddy Run, 3.3 miles (5.3 km) south of Newark, and 22.6 miles (36.4 km) upstream from mouth.

DRAINAGE AREA.--20.5 sq mi (53.1 sq km).

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

GAGE (revised).--Water-stage recorder. Datum of gage is 25.54 ft (7.78 m) above mean sea level. Prior to Sept. 14, 1944, nonrecording gage on upstream side of bridge at same datum. Sept. 14, 1944 to May 13, 1969, recording gage at site on left bank at downstream side of highway bridge at same datum. May 26, 1969 to Dec. 5, 1973 recording gage on left bank 82 ft (25 m) downstream from highway bridge at same datum.

AVERAGE DISCHARGE.--31 years, 26.7 cfs (0.756 cu m/s), 17.69 in/yr (449 mm/yr).

EXTREMES.--Current year: Maximum discharge, 1,920 cfs (54.4 cu m/s) Dec. 21, gage height, 10.42 ft (3.176 m); minimum daily, 2.9 cfs (0.082 cu m/s) Aug. 1.
Period of record: Maximum discharge, 3,320 cfs (94.0 cu m/s) June 22, 1972; maximum gage height, 12.41 ft (3.783 m) May 1, 1947; minimum daily discharge, 0.2 cfs (0.006 cu m/s) Aug. 7, 14, 18, 21, 27, 28, 1966.

REMARKS.--Records good. Low and medium flow regulated by mill above station.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	11	11	64	18	24	45	17	15	10	2.9	8.2
2	18	12	9.4	26	21	19	36	15	27	7.2	18	12
3	17	10	11	32	23	19	29	50	19	6.6	18	33
4	9.4	8.9	10	109	15	18	75	20	14	5.8	6.1	47
5	8.6	14	157	31	17	18	109	17	15	17	13	11
6	8.1	11	97	24	16	17	52	23	12	10	5.6	12
7	7.9	12	20	22	25	18	27	22	13	6.3	12	145
8	8.6	9.3	15	20	22	19	62	17	14	6.6	6.8	18
9	8.7	11	172	27	21	20	347	18	13	5.7	8.3	14
10	9.9	10	45	45	18	23	50	58	13	5.6	7.9	12
11	5.2	8.9	21	184	18	19	30	20	11	5.3	5.2	12
12	9.9	12	17	73	19	18	27	116	12	5.2	7.5	9.4
13	6.4	8.6	30	28	28	17	118	86	11	5.0	4.0	34
14	7.2	12	131	22	31	17	50	23	12	4.1	4.4	84
15	9.2	8.7	25	22	20	17	33	18	11	6.1	5.0	17
16	6.2	9.2	19	25	18	87	25	16	23	4.4	5.2	14
17	10	10	21	25	21	80	23	16	27	5.9	14	10
18	5.0	8.9	17	21	19	24	21	44	11	4.2	15	8.3
19	7.4	12	15	22	20	22	21	17	11	5.6	6.9	11
20	7.6	8.2	50	21	34	20	20	15	10	4.1	5.8	11
21	7.6	12	1,100	66	19	231	19	14	14	4.1	7.6	9.2
22	8.1	7.9	66	42	24	60	19	15	15	6.0	4.5	13
23	7.2	12	34	26	22	27	38	109	68	4.5	71	11
24	9.6	8.3	25	22	17	23	22	40	17	17	11	7.1
25	5.7	9.1	22	24	22	20	19	39	13	7.2	7.7	12
26	8.3	11	105	21	19	21	18	17	14	6.9	144	11
27	8.1	8.8	102	27	19	19	17	16	11	4.7	55	6.8
28	6.7	19	33	23	22	18	17	17	82	4.1	12	26
29	137	23	24	23	------	23	17	16	28	5.8	9.3	64
30	27	12	23	20	------	296	16	15	8.2	24	12	19
31	15	------	27	19	------	227	------	15	------	6.8	6.8	------
TOTAL	420.6	330.8	2,454.4	1,156	588	1,481	1,402	941	564.2	221.8	512.5	702.0
MEAN	13.6	11.0	79.2	37.3	21.0	47.8	46.7	30.4	18.8	7.15	16.5	23.4
MAX	137	23	1,100	184	34	296	347	116	82	24	144	145
MIN	5.0	7.9	9.4	19	15	17	16	14	8.2	4.1	2.9	6.8
CFSM	.66	.54	3.86	1.82	1.02	2.33	2.28	1.48	.92	.35	.80	1.14
IN.	.76	.60	4.45	2.10	1.07	2.69	2.54	1.71	1.02	.40	.93	1.27

CAL YR 1973 TOTAL 15,933.3 MEAN 43.7 MAX 1,100 MIN 5.0 CFSM 2.13 IN 28.91
WTR YR 1974 TOTAL 10,774.3 MEAN 29.5 MAX 1,100 MIN 2.9 CFSM 1.44 IN 19.55

PEAK DISCHARGE (BASE, 1,000 CFS).--Dec. 21 (0715) 1,920 cfs (10.42 ft).

01478500 White Clay Creek above Newark, Del.

LOCATION.--Lat 39°42'52", long 75°45'34", New Castle County, on right bank at downstream wingwall of abandoned bridge, 0.9 mile (1.4 km) downstream from small tributary, 1.7 miles (2.7 km) southeast of Delaware-Maryland-Pennsylvania State corner, 2.1 miles (3.4 km) downstream from Pennsylvania-Delaware State line, 2.2 miles (3.5 km) north of Newark, and 12.8 miles (20.6 km) upstream from mouth.

DRAINAGE AREA.--66.7 sq mi (172.8 sq km).

PERIOD OF RECORD.--February 1952 to September 1959, July 1962 to current year.

GAGE.--Water-stage recorder. Datum of gage is 78.6 ft (24.0 m) above mean sea level.

AVERAGE DISCHARGE.--19 years, 81.0 cfs (2.294 cu m/s), 16.49 in/yr (419 mm/yr).

EXTREMES.--Current year: Maximum discharge, 2,690 cfs (76.2 cu m/s) Dec. 21, gage height, 7.40 ft (2.256 m); minimum daily, 33 cfs (0.93 cu m/s) July 21-23, Aug. 16.
Period of record: Maximum discharge, 10,200 cfs (289 cu m/s) June 22, 1972, gage height, 13.77 ft (4.197 m), from rating curve extended above 1,800 cfs (51.0 cu m/s) on basis of contracted-opening measurements at gage heights 9.97 ft (3.039 m) and 13.77 ft (4.197 m); minimum, 4.6 cfs (0.13 cu m/s) Dec. 7, 1954, gage height, 0.55 ft (0.168 m), result of freezeup; minimum daily, 5.6 cfs (0.16 cu m/s) Sept. 10, 1966.

REMARKS.--Records fair. Records do not include a negligible diversion above station by plant of E. I. du Pont de Nemours & Co. Water-quality records for the current water year are published in Part 2 of this report.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	53	40	126	88	101	152	85	80	66	36	48
2	51	45	38	105	92	86	142	82	81	59	67	52
3	68	43	37	96	101	85	125	122	79	54	118	64
4	51	41	37	191	88	81	164	96	69	52	216	89
5	46	43	219	127	85	77	174	87	65	246	138	56
6	43	43	145	103	102	74	152	91	62	131	59	54
7	43	40	67	96	94	75	119	93	61	71	59	221
8	43	40	55	91	94	73	128	85	64	54	48	87
9	43	42	236	88	100	81	485	88	63	49	51	62
10	44	40	126	95	108	90	170	118	60	47	45	57
11	43	38	74	246	92	74	136	91	56	43	40	54
12	43	39	61	188	88	73	125	297	55	41	38	54
13	43	40	58	137	89	70	270	280	54	40	36	127
14	42	40	170	124	99	68	175	114	53	39	37	99
15	40	39	78	109	86	68	140	98	53	40	34	62
16	40	39	66	104	80	87	123	88	64	43	33	54
17	40	37	70	120	84	114	116	84	62	37	207	51
18	40	37	68	106	80	78	111	85	53	36	139	49
19	41	38	75	94	88	76	109	80	50	36	47	48
20	41	37	89	97	117	73	107	76	49	34	41	47
21	40	37	1,560	338	87	203	104	74	95	33	37	49
22	40	39	187	167	107	128	102	73	97	33	36	67
23	40	38	155	142	96	91	126	188	214	33	52	48
24	40	38	139	132	79	87	106	116	111	68	40	45
25	40	39	106	116	85	78	98	97	71	46	86	45
26	40	39	347	104	81	76	95	79	69	40	214	45
27	40	40	241	110	79	74	92	77	63	39	77	43
28	40	59	148	109	85	73	91	76	110	38	56	170
29	167	74	123	99	------	76	89	73	118	37	53	249
30	104	44	106	95	------	313	87	73	71	94	50	60
31	53	------	98	91	------	390	------	70	------	41	49	------
TOTAL	1,534	1,261	5,019	3,946	2,554	3,193	4,213	3,236	2,252	1,720	2,239	2,256
MEAN	49.5	42.0	162	127	91.2	103	140	104	75.1	55.5	72.2	75.2
MAX	167	74	1,560	338	117	390	485	297	214	246	216	249
MIN	40	37	37	88	79	68	87	70	49	33	33	43
CFSM	.74	.63	2.43	1.90	1.37	1.54	2.10	1.56	1.13	.83	1.08	1.13
IN.	.86	.70	2.80	2.20	1.42	1.78	2.35	1.80	1.26	.96	1.25	1.26

CAL YR 1973 TOTAL 46,929 MEAN 129 MAX 1,560 MIN 37 CFSM 1.93 IN 26.17
WTR YR 1974 TOTAL 33,423 MEAN 91.6 MAX 1,560 MIN 33 CFSM 1.37 IN 18.64

PEAK DISCHARGE (BASE, 1,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-21	0900	7.40	2,690	8-26	1645	7.02	2,490

01479000 White Clay Creek near Newark, Del.

LOCATION.--Lat 39°42'01", long 75°41'00", New Castle County, on left bank 300 ft (91 m) upstream from Baltimore & Ohio Railroad bridge, 0.4 mile (0.6 km) downstream from Pike Creek, 3.5 miles (5.6 km) east of Newark, and 5.5 miles (8.8 km) upstream from mouth.

DRAINAGE AREA.--87.8 sq mi (227.4 sq km).

PERIOD OF RECORD.--October 1931 to September 1936, June 1943 to September 1957, October 1959 to current year. Monthly discharge only for some periods, published in WSP 1302.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 11.6 ft (3.54 m) above mean sea level. Nov. 17, 1931 to Sept. 30, 1936, at site 15 ft (5 m) downstream at same datum.

AVERAGE DISCHARGE.--34 years, 109 cfs (3.087 cu m/s), 16.86 in/yr (428 mm/yr).

EXTREMES.--Current year: Maximum discharge, 4,760 cfs (135 cu m/s) Dec. 21, gage height, 14.16 ft (4.316 m), from high-water mark in well; minimum, 38 cfs (1.08 cu m/s) Sept. 27; minimum daily, 40 cfs (1.13 cu m/s) Sept. 27.
Period of record: Maximum discharge, 9,080 cfs (257 cu m/s) June 22, 1972, gage height, 17.74 ft (5.407 m), from rating curve extended above 6,000 cfs (170 cu m/s) on basis of contracted-opening and flow-over-road measurement of peak flow; minimum, 4.7 cfs (0.13 cu m/s) Sept. 11, 1966; minimum gage height, 3.66 ft (1.116 m) July 26, 1954; minimum daily discharge, 5.0 cfs (0.14 cu m/s) Sept. 10, 1966.
Maximum stage known, 23 ft (7 m) in July 1937 (probably affected by backwater from railroad bridge which has since been raised and widened), from information by Baltimore & Ohio Railroad.

REMARKS.--Records good except those for no gage-height record, which are fair. Slight diurnal fluctuation at low flow caused by mills above station. Records do not include a negligible diversion above station by plant of E. I. du Pont de Nemours & Co.

REVISIONS (WATER YEARS).--WSP 1051: 1933(M). WSP 1382: 1932, 1934.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	61	48	160	100	127	179	93	98	82	44	56
2	66	53	46	135	110	107	161	85	109	66	98	64
3	80	49	44	110	120	106	143	154	96	60	162	106
4	57	47	43	270	110	100	186	108	76	57	153	133
5	51	54	330	160	100	95	216	92	71	192	228	66
6	47	50	180	130	125	91	187	102	68	198	67	61
7	47	47	82	110	115	92	136	105	65	82	75	313
8	49	48	70	107	110	89	159	89	69	65	59	101
9	46	49	370	105	120	98	775	93	69	58	61	69
10	47	47	150	110	130	117	207	156	65	55	55	59
11	46	46	80	370	115	93	164	101	59	52	50	55
12	45	46	72	240	100	89	150	305	56	48	46	53
13	45	46	68	170	100	84	346	469	55	47	45	145
14	45	46	250	140	120	81	214	143	54	47	46	148
15	43	46	90	125	100	81	168	117	54	48	45	72
16	42	44	78	120	93	142	145	103	86	52	45	57
17	42	44	82	130	96	163	134	97	84	45	117	50
18	42	44	78	115	93	98	129	116	55	44	241	48
19	43	45	94	110	120	91	125	93	50	44	59	44
20	44	44	115	105	160	87	122	87	48	44	48	44
21	43	44	2,500	510	96	298	117	86	80	44	44	49
22	43	45	250	200	116	190	116	85	128	43	43	72
23	43	45	205	165	126	120	155	252	242	43	120	46
24	43	44	170	145	92	110	124	162	134	102	49	42
25	43	45	135	130	105	94	111	127	79	61	94	41
26	42	45	520	120	97	90	106	91	76	48	516	41
27	42	46	350	125	93	88	102	90	68	48	147	40
28	42	70	200	120	103	86	101	93	138	47	80	109
29	264	100	155	110	------	94	101	89	155	45	69	315
30	142	60	130	105	------	461	96	89	82	138	60	81
31	64	------	115	100	------	612	------	85	------	53	59	------
TOTAL	1,788	1,500	7,100	4,852	3,065	4,274	5,175	3,957	2,569	2,058	3,025	2,580
MEAN	57.7	50.0	229	157	109	138	173	128	85.6	66.4	97.6	86.0
MAX	264	100	2,500	510	160	612	775	469	242	198	516	315
MIN	42	44	43	100	92	81	96	85	48	43	43	40
CFSM	.66	.57	2.61	1.79	1.24	1.57	1.97	1.46	.97	.76	1.11	.98
IN.	.76	.64	3.01	2.06	1.30	1.81	2.19	1.68	1.09	.87	1.28	1.09

CAL YR 1973 TOTAL 61,199 MEAN 168 MAX 2,500 MIN 42 CFSM 1.91 IN 25.93
WTR YR 1974 TOTAL 41,943 MEAN 115 MAX 2,500 MIN 40 CFSM 1.31 IN 17.77

PEAK DISCHARGE (BASE, 2,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-21	*1200	14.16	4,760	8-26	2000	11.95	2,860

* About.
NOTE.--No gage-height record Nov. 8 to Feb. 20.

01480000 Red Clay Creek at Wooddale, Del.

LOCATION.--Lat 39°45'52", long 75°38'08", New Castle County, on right bank 12 ft (4 m) upstream from bridge on State Highway 48, 0.3 mile (0.5 km) south of Wooddale, 2.3 miles (3.7 km) north of Marshallton, and 4.9 miles (7.9 km) upstream from mouth.

DRAINAGE AREA.--47.0 sq mi (121.7 sq km).

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 81.46 ft (24.829 m) above mean sea level. Prior to Sept. 21, 1950, nonrecording gage at site 10 ft (3 m) downstream at same datum.

AVERAGE DISCHARGE.--31 years, 63.1 cfs (1.787 cu m/s), 18.23 in/yr (463 mm/yr).

EXTREMES.--Current year: Maximum discharge, 1,870 cfs (53.0 cu m/s) Dec. 21, gage height, 5.82 ft (1.774 m); minimum, 5.3 cfs (0.150 cu m/s) Aug. 15, result of regulation; minimum daily, 23 cfs (0.651 cu m/s) July 23. Period of record: Maximum discharge, 4,780 cfs (135.4 cu m/s) Sept. 12, 1960, gage height, 9.93 ft (3.027 m); minimum, 2.9 cfs (0.082 cu m/s) Sept. 4, 1966; minimum daily, 4.5 cfs (0.127 cu m/s) Sept. 4, 1966.

REMARKS.--Records good. Some diurnal fluctuation at low flow caused by mills above station. Water-quality records for the current water year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1141: 1948. WSP 1272: 1951(m). WSP 1432: 1944(M), 1945, 1946(M), 1948, 1949(M). WRD Md. and Del. 1969: 1960(M), 1964(M), 1966-67(M).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	40	30	91	57	77	96	54	58	49	28	30
2	55	34	29	65	61	63	89	51	58	41	63	32
3	65	31	28	66	68	62	76	90	56	38	108	44
4	39	29	31	142	58	58	101	61	48	35	122	84
5	35	31	174	77	53	56	116	54	45	184	105	37
6	32	32	112	67	53	54	98	59	44	89	43	35
7	31	29	44	63	66	54	73	62	40	49	44	184
8	31	30	38	59	66	53	83	53	44	41	40	61
9	32	31	164	63	58	63	317	57	42	38	38	44
10	33	29	76	71	54	68	112	91	40	36	35	40
11	32	28	48	201	55	54	86	59	38	34	32	38
12	31	29	41	132	55	53	82	224	36	32	30	37
13	31	29	44	79	61	50	196	183	36	30	30	66
14	30	29	145	67	69	48	119	80	35	30	32	70
15	28	29	55	68	58	47	93	69	34	30	26	43
16	29	29	47	73	53	81	80	61	68	32	27	36
17	28	27	52	80	57	104	74	58	50	28	41	35
18	28	27	42	66	53	59	71	58	37	28	58	33
19	29	27	39	65	60	57	71	55	35	28	31	31
20	29	27	53	65	83	54	69	51	33	26	29	31
21	28	28	1,050	183	59	176	67	50	94	25	27	32
22	28	29	130	110	90	99	66	50	66	27	27	53
23	29	28	84	80	77	71	93	137	206	23	44	31
24	29	29	68	71	58	64	69	74	79	46	31	29
25	28	29	61	69	64	58	63	68	55	35	143	30
26	28	28	210	64	60	58	60	51	53	30	147	30
27	28	30	183	80	58	56	59	51	45	29	76	28
28	27	53	85	69	64	55	58	51	89	28	41	52
29	113	66	72	67	------	59	58	51	88	27	35	174
30	78	34	67	62	------	233	56	52	51	79	32	42
31	40	------	66	60	------	232	------	49	------	32	31	------
TOTAL	1,136	951	3,368	2,575	1,728	2,376	2,751	2,214	1,703	1,279	1,596	1,512
MEAN	36.6	31.7	109	83.1	61.7	76.6	91.7	71.4	56.8	41.3	51.5	50.4
MAX	113	66	1,050	201	90	233	317	224	206	184	147	184
MIN	27	27	28	59	53	47	56	49	33	23	26	28
CFSM	.78	.67	2.32	1.77	1.31	1.63	1.95	1.52	1.21	.88	1.10	1.07
IN.	.90	.75	2.67	2.04	1.37	1.88	2.18	1.75	1.35	1.01	1.26	1.20

CAL YR 1973 TOTAL 34,093 MEAN 93.4 MAX 1,050 MIN 26 CFSM 1.99 IN 26.98
WTR YR 1974 TOTAL 23,189 MEAN 63.5 MAX 1,050 MIN 23 CFSM 1.35 IN 18.35

PEAK DISCHARGE (BASE, 1,200 CFS).--Dec. 21 (1130) 1,870 cfs (5.82 ft).

01480100 Little Mill Creek at Elsmere, Del.

LOCATION.--Lat 39°44'05", long 75°35'14", New Castle County, on left bank at downstream side of highway bridge on North Du Pont Road at Elsmere, 0.5 mile (0.8 km) downstream from unnamed tributary, and 2.2 miles (3.5 km) upstream from mouth.

DRAINAGE AREA.--6.70 sq mi (17.35 sq km).

PERIOD OF RECORD.--October 1963 to current year.

GAGE.--Water-stage recorder. Concrete control since Nov. 5, 1968. Prior to Mar. 19, 1964, nonrecording gage at same site and datum. Datum of gage is 48.62 ft (14.819 m) above mean sea level.

AVERAGE DISCHARGE.--11 years, 10.0 cfs (0.283 cu m/s), 20.27 in/yr (515 mm/yr).

EXTREMES.--Current year: Maximum discharge, 1,070 cfs (30.3 cu m/s) Aug. 23, gage height, 5.68 ft (1.731 m); minimum, 1.4 cfs (0.040 cu m/s) July 21, 22, Aug. 15.
Period of record: Maximum discharge, 3,960 cfs (112 cu m/s) Aug. 10, 1967, gage height, 8.58 ft (2.615 m), from rating curve extended above 380 cfs (10.8 cu m/s) on basis of contracted-opening measurement of peak flow; minimum, 0.10 cfs (0.003 cu m/s) July 17, 18, Sept. 18, 19, 1966.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	2.8	1.7	13	4.4	6.1	9.3	3.7	4.7	9.7	2.2	1.6
2	13	1.9	1.6	5.0	7.6	5.0	8.9	3.5	8.9	3.5	12	3.1
3	5.9	1.6	1.6	14	6.0	5.0	6.1	35	4.1	3.0	5.0	36
4	2.6	1.5	1.6	29	4.4	4.4	18	7.0	3.5	2.8	2.6	20
5	2.4	2.5	52	6.8	3.5	4.1	35	4.5	3.3	8.8	2.7	3.0
6	2.1	2.1	12	5.5	3.5	3.8	12	12	3.1	3.4	2.2	5.0
7	2.1	1.9	3.1	5.2	8.5	3.8	6.8	6.0	3.0	2.6	12	51
8	1.9	1.7	2.4	4.5	4.7	3.5	19	4.0	3.2	2.5	2.8	4.6
9	2.4	2.2	39	9.3	4.1	6.3	83	8.0	3.5	2.4	2.5	3.2
10	2.4	2.1	5.6	15	3.8	7.7	11	45	4.5	2.2	2.2	2.7
11	2.1	1.7	3.5	57	4.4	3.8	6.4	7.6	4.5	2.1	2.0	3.5
12	1.9	1.7	3.0	14	4.6	4.1	5.5	150	3.5	1.9	1.9	3.3
13	1.9	1.7	13	6.8	5.5	4.1	39	15	2.5	1.8	1.8	20
14	1.9	1.7	22	5.2	5.8	3.3	11	8.0	2.5	1.8	1.7	34
15	1.9	1.7	4.1	5.5	4.1	3.3	8.0	6.0	2.5	7.7	1.5	4.0
16	1.9	1.7	3.3	6.4	4.1	58	5.5	4.5	130	2.1	1.6	3.0
17	1.9	1.7	3.3	6.1	5.2	18	5.0	4.0	15	1.7	13	2.9
18	1.7	1.6	3.1	5.0	3.8	6.1	4.7	12	4.5	2.0	4.4	2.6
19	1.9	1.9	3.1	5.8	6.4	5.8	5.2	4.5	3.2	1.9	3.1	2.5
20	1.9	1.9	51	4.4	8.0	4.7	5.0	3.5	60	1.7	1.8	2.4
21	1.7	2.1	228	16	4.4	90	4.1	3.5	15	1.5	1.7	5.4
22	1.9	2.1	12	8.0	9.1	12	3.9	5.0	90	1.5	1.8	3.5
23	1.9	2.1	6.1	5.5	5.2	6.1	14	70	11	1.6	110	2.3
24	1.9	2.1	4.7	5.2	3.8	5.0	7.0	20	6.0	48	2.8	2.1
25	1.9	2.4	4.1	5.8	7.1	4.4	5.6	7.0	4.1	3.0	3.4	2.2
26	2.1	1.9	42	4.7	5.5	4.1	4.9	4.5	4.1	2.1	7.4	2.2
27	2.1	2.2	17	7.2	4.7	3.8	4.5	4.3	3.3	1.8	3.1	2.2
28	1.9	8.6	6.1	5.8	5.2	3.5	4.3	4.1	21	1.7	2.1	47
29	32	3.1	5.0	5.5	------	6.4	4.1	4.1	7.2	1.7	2.0	11
30	6.8	1.7	5.0	4.7	------	71	4.0	3.8	4.1	36	6.5	3.0
31	2.8	------	9.4	4.4	------	35	------	3.8	------	2.7	1.7	------
TOTAL	113.0	65.9	569.4	296.3	147.4	402.2	360.8	473.9	435.8	167.2	221.5	289.3
MEAN	3.65	2.20	18.4	9.56	5.26	13.0	12.0	15.3	14.5	5.39	7.15	9.64
MAX	32	8.6	228	57	9.1	90	83	150	130	48	110	51
MIN	1.7	1.5	1.6	4.4	3.5	3.3	3.9	3.5	2.5	1.5	1.5	1.6
CFSM	.54	.33	2.75	1.43	.79	1.94	1.79	2.28	2.16	.80	1.07	1.44
IN.	.63	.37	3.16	1.65	.82	2.23	2.00	2.63	2.42	.93	1.23	1.61

CAL YR 1973 TOTAL 4,399.9 MEAN 12.1 MAX 228 MIN 1.5 CFSM 1.81 IN 24.43
WTR YR 1974 TOTAL 3,542.7 MEAN 9.71 MAX 228 MIN 1.5 CFSM 1.45 IN 19.67

PEAK DISCHARGE (BASE, 350 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-21	0230	4.47	578	*6-16	†	3.87	364
3-21	1500	3.97	400	7-24	1000	4.64	650
*5-12	†	4.00	410	8-23	0430	5.68	1,070

* Probably.
† Unknown.
NOTE.--No gage-height record Apr. 20 to May 28, June 1-3, 5-25.

01481000 Brandywine Creek at Chadds Ford, Pa.

LOCATION.--Lat 39°52'11", long 75°35'37", Delaware County, on left bank 27 ft (8 m) upstream from Penn Central Railroad bridge at Chadds Ford, 150 ft (46 m) upstream from Harvey Run and 1,200 ft (366 m) downstream from highway bridge on U.S. Highway 1.

DRAINAGE AREA.--287 sq mi (743 sq km), 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 (45.857 m) above mean sea level. Prior to May 21, 1927, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--54 years (1911-53, 1962-74), 386 cfs (10.9 cu m/s), 18.26 in/yr (464 mm/yr), adjusted for storage since November 1973.

EXTREMES.--Current year: Maximum discharge, 6,790 cfs (192 cu m/s) Dec. 21, gage height, 9.99 ft (3.045 m); minimum, 122 cfs (3.46 cu m/s) Sept. 28, gage height, 1.39 ft (0.424 m).
Period of record: Maximum discharge, 23,800 cfs (674 cu m/s) June 22, 1972, gage height, 16.56 ft (5.047 m), from rating curve extended above 7,000 cfs (198 cu m/s) on basis of area-velocity study; minimum, 4.9 cfs (0.14 cu m/s) Oct. 2, 1941, gage height, 0.28 ft (0.085 m); minimum daily, 42 cfs (1.19 cu m/s) Sept. 12, 1966.

REMARKS.--Records good. Flow regulated by Marsh Creek Reservoir about 17 miles (27 km) upstream. Records of water quality for current water year are published in Part 2 of the Pennsylvania annual report.

REVISIONS (WATER YEARS).--WSP 756: Drainage area. WSP 1202: 1919-20, 1932-33, 1936, 1938(P), 1942 (maximum only, 1917-18, 1922-31, 1934, 1939, 1944-46). WRD Pa. 1972 and WRD Md. and Del. 1972: 1971.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	183	226	157	550	465	440	870	415	395	347	189	164
2	206	194	150	465	465	400	695	390	371	309	202	177
3	252	179	147	495	485	390	635	510	376	291	505	228
4	194	168	147	775	450	371	790	460	319	273	309	725
5	176	172	625	570	415	356	870	405	291	352	314	255
6	161	172	725	500	390	337	780	405	273	337	232	206
7	157	168	283	475	410	333	580	410	268	273	210	545
8	157	161	230	465	415	328	565	385	286	246	202	328
9	157	164	695	450	380	371	1,730	385	291	232	198	246
10	172	157	640	480	361	435	885	590	277	224	210	219
11	172	154	311	860	385	366	675	480	259	210	181	198
12	157	157	252	895	361	337	625	750	241	206	172	202
13	157	154	234	560	380	328	1,330	1,770	241	198	164	202
14	154	157	475	480	405	314	1,220	570	241	198	164	241
15	150	150	311	490	376	309	780	475	259	202	152	202
16	150	150	256	500	347	366	670	430	356	202	145	177
17	143	140	269	560	356	575	610	405	314	181	237	164
18	143	140	234	515	347	380	580	405	246	181	615	160
19	143	143	222	475	361	352	565	376	228	219	210	152
20	147	143	260	500	480	337	555	361	224	193	177	152
21	147	147	5,260	1,000	395	705	525	342	356	172	164	160
22	143	147	1,470	1,060	425	760	510	337	640	164	160	202
23	143	147	605	660	460	450	595	490	905	164	181	160
24	143	143	490	590	366	415	530	455	540	202	181	141
25	140	150	420	550	376	380	480	371	570	228	380	141
26	143	150	1,500	525	366	371	460	337	440	198	189	141
27	140	150	2,830	605	347	361	450	328	385	189	177	137
28	140	206	770	550	366	352	440	328	425	185	156	356
29	575	252	585	530	------	366	440	319	615	181	156	910
30	695	179	525	500	------	930	430	333	380	366	181	300
31	260	------	485	480	------	2,160	------	314	------	219	185	------
TOTAL	6,000	4,920	21,563	18,110	11,135	14,675	20,870	14,331	11,012	7,142	6,898	7,591
MEAN	194	164	696	584	398	473	696	462	367	230	223	253
MAX	695	252	5,260	1,060	485	2,160	1,730	1,770	905	366	615	910
MIN	140	140	147	450	347	309	430	314	224	164	145	137
(ƒ)	0	+8.2	+64.3	-8.3	+18.2	+42.0	+64.3	+36.9	+16.0	-3.1	+0.2	+0.8
MEAN≠	194	172	760	576	416	515	760	499	383	227	223	250
CFSM≠	.68	.60	2.65	2.01	1.45	1.79	2.65	1.74	1.33	.79	.78	.87
IN≠	.78	.67	3.06	2.32	1.51	2.06	2.96	2.01	1.48	.91	.90	.97

CAL YR 1973 TOTAL 202,067 MEAN 554 MAX 5,260 MIN 140 MEAN≠ 560 CFSM≠ 1.95 IN≠ 26.49
WTR YR 1974 TOTAL 144,247 MEAN 395 MAX 5,260 MIN 137 MEAN≠ 415 CFSM≠ 1.45 IN≠ 19.63

ƒ Change in contents in Marsh Creek Reservoir, equivalent in cubic feet per second, furnished by Pennsylvania Department of Environmental Resources.
≠ Adjusted for change in reservoir contents.

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 (0.3 km) downstream from Henry Clay Bridge, in Wilmington, and 4.2 miles (6.8 km) upstream from mouth.

DRAINAGE AREA.--314 sq mi (813 sq km).

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 (20.797 m) above mean sea level.

AVERAGE DISCHARGE.--28 years, 461 cfs (13.06 cu m/s), 19.94 in/yr (506 mm/yr), adjusted for storage since November 1973.

EXTREMES.--Current year: Maximum discharge, 5,890 cfs (167 cu m/s) Dec. 21, gage height, 8.26 ft (2.518 m); minimum, 112 cfs (3.17 cu m/s) Nov. 27; minimum daily, 146 cfs (4.13 cu m/s) Nov. 17.
Period of record: Maximum discharge, 29,000 cfs (821 cu m/s) June 23, 1972, gage height, 15.49 ft (4.721 m), from rating curve extended above 18,000 cfs (510 cu m/s); minimum, about 30 cfs (0.85 cu m/s) Dec. 26, 1948, during period of ice effect; minimum daily, 56 cfs (1.59 cu m/s) Aug. 23, 24, 1957.

REMARKS.--Records good. Some diurnal fluctuation at low flow caused by mills above station. Flow regulated since November 1973 by Marsh Creek Reservoir about 27 miles (43 km) upstream. No diversion just above station by plant of E. I. du Pont de Nemours & Co. since June 13, 1960. Water-quality records for the current water year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1432: 1948, 1950.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	199	245	167	608	521	477	1,080	476	430	387	199	177
2	209	217	161	515	522	450	861	447	425	346	194	182
3	292	196	154	517	556	429	813	570	432	318	508	265
4	199	182	154	840	507	420	897	539	364	298	309	733
5	176	184	656	631	477	404	1,070	470	327	352	386	295
6	172	188	1,040	535	455	381	967	469	311	404	251	225
7	171	177	376	510	476	383	767	481	297	303	233	595
8	171	167	281	489	487	378	745	441	313	265	217	393
9	173	170	756	479	446	415	2,150	443	320	247	210	275
10	184	164	846	516	431	477	1,060	630	306	237	220	237
11	180	161	406	956	454	416	876	569	281	222	192	221
12	177	161	310	1,100	430	382	818	856	258	217	180	230
13	178	160	294	616	447	369	1,320	2,120	263	206	173	245
14	177	161	644	509	476	355	1,530	647	254	204	172	291
15	171	155	419	527	445	350	808	531	272	202	164	229
16	170	155	324	531	418	466	725	485	419	215	155	193
17	171	146	337	594	426	668	668	451	376	187	168	176
18	171	148	290	550	420	435	639	452	275	186	648	176
19	169	153	265	495	420	395	623	423	249	213	237	170
20	171	153	400	521	542	300	614	405	245	202	189	167
21	164	154	4,890	976	458	806	585	386	349	179	173	173
22	163	158	2,090	1,450	474	1,070	572	380	661	175	166	225
23	163	157	705	755	520	545	654	577	947	173	414	179
24	165	157	571	670	408	495	602	550	604	227	184	158
25	161	161	489	623	411	455	547	430	540	252	433	158
26	167	163	1,230	586	406	437	521	387	494	209	257	158
27	166	153	3,260	668	390	505	511	375	421	202	218	155
28	167	213	879	626	412	411	505	375	437	197	177	327
29	648	319	652	597	------	417	501	366	641	190	170	1,020
30	898	204	584	559	------	1,060	491	383	433	400	188	363
31	302	------	531	532	------	2,730	------	364	------	246	197	------
TOTAL	6,845	5,282	24,161	20,081	12,835	17,361	24,520	16,478	11,944	7,661	7,582	8,391
MEAN	221	176	779	648	458	560	817	532	398	247	245	280
MAX	898	319	4,890	1,450	556	2,730	2,150	2,120	947	404	648	1,020
MIN	161	146	154	479	390	350	491	364	245	173	155	155
(ƒ)	0	+8.2	+64.3	-8.3	+18.2	+42.0	+64.3	+36.9	+16.0	-3.1	+0.2	+0.8
MEAN≠	221	184	843	640	476	602	881	569	414	244	245	281
CFSM≠	0.70	0.59	2.68	2.04	1.52	1.92	2.81	1.81	1.32	0.78	0.78	0.89
IN≠	0.81	0.65	3.10	2.35	1.58	2.21	3.13	2.09	1.47	0.90	0.90	1.00

CAL YR 1973 TOTAL 235,605 MEAN 645 MAX 4,890 MIN 146 MEAN≠ 651 CFSM≠ 2.07 IN≠ 28.17
WTR YR 1974 TOTAL 163,141 MEAN 447 MAX 4,890 MIN 146 MEAN≠ 467 CFSM≠ 1.49 IN≠ 20.18

PEAK DISCHARGE (BASE, 4,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-21	2200	8.26	5,890	12-27	0545	7.22	4,730

ƒ Change in contents in Marsh Creek Reservoir, equivalent in cubic feet per second, furnished by Pennsylvania Department of Environmental Resources.
≠ Adjusted for change in reservoir contents.

01483200 Blackbird Creek at Blackbird, Del.

LOCATION.--Lat 39°21'58", long 75°40'10", New Castle County, on right bank 15 ft (5 m) downstream from highway bridge, 0.5 mile (0.8 km) upstream from Barlow Branch, 0.6 mile (1.0 km) southwest of Blackbird, 5.6 miles (9.0 km) northwest of Smyrna, and 13.8 miles (22.2 km) upstream from mouth.

DRAINAGE AREA.--3.85 sq mi (9.97 sq km).

PERIOD OF RECORD.--Annual maximum, water years 1952-56, and occasional low-flow measurements, water years 1952-53, 1955-56. October 1956 to current year.

GAGE.--Water-stage recorder. Concrete control since May 23, 1968. Datum of gage is 18.89 ft, revised (5.758 m) above mean sea level. Mar. 5, 1951, to Oct. 16, 1956, nonrecording gage and crest-stage gage at site 15 ft (5 m) upstream at same datum.

AVERAGE DISCHARGE.--18 years, 4.66 cfs (0.132 cu m/s), 16.44 in/yr (418 mm/yr).

EXTREMES.--Current year: Maximum discharge, 83 cfs (2.35 cu m/s) Sept. 4, gage height, 2.50 ft (0.762 m); minimum, 0.40 cfs (0.011 cu m/s) July 23; minimum daily, 0.53 cfs (0.015 cu m/s) Aug. 1.
Period of record: Maximum discharge, 712 cfs (20.2 cu m/s) June 22, 1972, gage height, 5.04 ft (1.536 m), from rating curve extended above 200 cfs (5.66 cu m/s) on basis of Type III culvert measurement of peak flow; no flow at times during 1964, 1965, 1966, 1969.

REMARKS.--Records good.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	1.8	1.3	10	3.7	3.9	9.5	3.2	4.3	2.7	.53	3.8
2	2.0	1.5	1.2	5.5	3.9	4.2	6.6	2.9	20	2.1	.63	16
3	4.3	1.3	1.2	5.0	4.3	4.0	6.4	12	17	1.8	.83	13
4	1.5	1.2	1.3	10	3.9	3.9	14	6.9	5.1	1.6	.63	41
5	1.2	1.6	1.8	6.6	3.1	3.5	14	4.2	3.7	1.5	6.1	5.7
6	.93	1.7	2.9	4.7	3.3	3.6	9.8	4.1	3.1	1.6	1.4	3.4
7	.86	1.3	1.6	4.3	7.1	3.7	6.9	3.7	3.1	1.6	7.0	20
8	.87	1.3	1.4	3.8	5.0	4.2	7.5	3.3	3.9	1.3	4.0	7.7
9	.83	3.6	13	8.2	4.7	3.7	32	4.2	3.2	1.2	2.5	3.2
10	.90	2.3	11	11	4.2	3.7	12	6.2	2.6	1.2	3.6	2.6
11	.80	1.5	3.3	14	4.3	3.1	9.1	4.0	2.1	1.1	1.3	2.3
12	.81	1.4	2.4	11	4.3	3.4	7.5	5.0	2.6	.94	1.0	2.3
13	.89	1.4	2.6	5.5	6.2	3.0	10	7.9	2.2	.93	.93	2.0
14	.96	1.4	6.7	4.3	7.9	2.9	10	3.9	2.0	.89	.97	6.2
15	.82	1.5	3.2	4.9	5.0	2.9	7.7	3.1	1.9	.84	.93	2.8
16	.71	1.3	3.0	5.2	4.3	7.4	6.4	2.7	7.5	.81	.79	2.1
17	.64	1.2	3.4	4.9	6.0	15	6.0	2.5	14	.73	.79	1.9
18	.70	1.2	2.7	4.2	4.4	5.3	5.7	9.9	3.1	.71	.93	1.9
19	.72	1.3	2.3	4.4	4.3	4.4	5.7	5.2	2.2	1.5	.75	1.7
20	.77	1.2	4.0	4.3	4.3	3.0	5.8	3.0	1.9	.86	.80	1.7
21	.76	1.2	49	5.4	3.7	9.1	5.2	2.6	2.3	.69	.64	1.7
22	.78	1.3	16	5.8	4.4	11	5.0	2.4	4.5	.74	5.5	1.6
23	.83	1.3	5.6	4.6	4.0	4.2	8.1	5.2	4.7	.57	6.8	1.4
24	.84	1.3	4.5	4.5	3.3	3.5	5.7	5.4	4.1	.71	1.7	1.3
25	.83	1.4	3.8	7.0	4.6	3.1	4.9	9.0	2.5	.94	1.1	1.5
26	.87	1.3	5.0	5.0	4.5	3.1	4.5	3.3	2.4	1.0	1.4	1.5
27	.81	1.3	7.0	5.5	4.2	3.0	4.2	3.2	2.2	.90	1.6	1.4
28	.81	1.7	4.4	4.9	4.6	3.0	4.1	4.3	12	.80	1.1	3.7
29	7.5	2.0	3.7	4.8	------	3.5	3.8	3.0	11	.73	1.2	14
30	10	1.4	3.9	4.3	------	12	3.6	3.3	3.2	.90	1.1	2.7
31	2.8	------	4.1	4.2	------	26	------	2.9	------	.72	1.8	------
TOTAL	49.54	45.2	177.3	187.8	127.5	170.3	241.7	142.5	154.4	34.61	60.35	172.1
MEAN	1.60	1.51	5.72	6.06	4.55	5.49	8.06	4.60	5.15	1.12	1.95	5.74
MAX	10	3.6	49	14	7.9	26	32	12	20	2.7	7.0	41
MIN	.64	1.2	1.2	3.8	3.1	2.9	3.6	2.4	1.9	.57	.53	1.3
CFSM	.42	.39	1.49	1.57	1.18	1.43	2.09	1.19	1.34	.29	.51	1.49
IN.	.48	.44	1.71	1.81	1.23	1.65	2.34	1.38	1.49	.33	.58	1.66

CAL YR 1973 TOTAL 2,407.47 MEAN 6.60 MAX 73 MIN .30 CFSM 1.71 IN 23.26
WTR YR 1974 TOTAL 1,563.30 MEAN 4.28 MAX 49 MIN .53 CFSM 1.11 IN 15.11

PEAK DISCHARGE (BASE, 50 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-21	1115	2.40	76	9-04	0345	2.50	83

01483700 St. Jones River at Dover, Del.

LOCATION.--Lat 39°09'49", long 75°31'10", Kent County, on left bank 150 ft (46 m) upstream from Division Street Bridge in Dover, 1,950 ft (594 m) downstream from Silver Lake, and 12.5 miles (20.1 km) upstream from mouth.

DRAINAGE AREA.--31.9 sq mi (82.6 sq km).

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 0.50 ft (0.152 m) above mean sea level.

AVERAGE DISCHARGE.--16 years, 35.5 cfs (1.01 cu m/s), 15.11 in/yr (384 mm/yr).

EXTREMES.--Current year: Maximum discharge, 310 cfs (8.78 cu m/s) Mar. 31, gage height, 4.40 ft (1.341 m); minimum, 0.50 cfs (0.014 cu m/s) Apr. 19, gage height, 2.40 ft (0.732 m), result of regulation.
Period of record: Maximum discharge, 1,900 cfs (53.8 cu m/s) Sept. 13, 1960, gage height, 9.45 ft (2.880 m), from floodmark; no flow at times in 1959, 1961, 1962.

REMARKS.--Records good. Flow affected by Silver Lake.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.0	18	11	74	52	37	215	19	27	57	6.3	11
2	28	12	8.4	106	52	37	130	14	65	43	7.0	30
3	44	12	9.2	77	50	37	86	36	179	30	11	48
4	30	9.0	9.5	72	50	37	72	49	158	23	11	110
5	13	12	12	79	49	37	69	30	69	20	13	128
6	8.4	13	13	68	48	37	69	23	36	64	11	62
7	7.1	12	11	57	48	37	58	22	27	73	29	70
8	6.3	11	11	56	48	37	50	19	27	34	39	98
9	6.7	23	55	56	48	37	72	23	26	22	50	69
10	7.1	21	52	58	47	37	116	40	22	17	40	33
11	6.7	18	44	104	47	37	90	33	19	14	22	22
12	6.7	13	21	138	45	36	60	28	15	11	13	20
13	6.7	12	17	116	45	36	53	31	12	11	11	17
14	6.7	12	25	70	47	36	62	25	12	11	9.5	22
15	4.2	12	25	56	48	36	64	20	11	11	9.0	20
16	6.3	13	25	52	49	37	50	16	42	11	7.6	16
17	4.2	8.0	28	50	49	37	47	16	191	9.0	7.6	14
18	3.9	8.4	21	49	48	47	32	75	116	8.0	8.0	13
19	5.0	11	17	49	50	74	5.4	195	44	9.5	6.3	13
20	5.5	11	21	49	50	56	24	113	26	9.0	6.7	12
21	5.9	11	110	49	50	68	27	43	24	6.3	6.3	13
22	5.5	12	183	50	50	146	27	25	33	5.9	7.6	11
23	5.9	12	124	50	50	140	36	27	51	5.9	30	11
24	6.3	12	66	50	49	85	40	38	76	7.1	85	8.4
25	5.9	13	43	50	50	56	30	62	52	8.4	33	9.5
26	5.9	11	37	50	49	50	25	69	32	8.4	14	10
27	5.9	12	40	50	45	49	23	37	34	10	12	10
28	5.9	18	42	53	37	49	21	27	58	10	10	12
29	60	18	34	53	------	49	20	25	102	8.0	9.0	18
30	40	13	34	52	------	66	20	30	104	9.0	11	13
31	30	------	40	52	------	245	------	36	------	8.0	15	------
TOTAL	392.7	393.4	1,189.1	1,995	1,350	1,805	1,693.4	1,246	1,690	574.5	550.9	943.9
MEAN	12.7	13.1	38.4	64.4	48.2	58.2	56.4	40.2	56.3	18.5	17.8	31.5
MAX	60	23	183	138	52	245	215	195	191	73	85	128
MIN	3.9	8.0	8.4	49	37	36	5.4	14	11	5.9	6.3	8.4
CFSM	.40	.41	1.20	2.02	1.51	1.82	1.77	1.26	1.76	.58	.56	.99
IN.	.46	.46	1.39	2.33	1.57	2.10	1.97	1.45	1.97	.67	.64	1.10

CAL YR 1973 TOTAL 17,071.3 MEAN 46.8 MAX 691 MIN 3.9 CFSM 1.47 IN 19.91
WTR YR 1974 TOTAL 13,823.9 MEAN 37.9 MAX 245 MIN 3.9 CFSM 1.19 IN 16.12

01484000 Murderkill River near Felton, Del.

LOCATION.--Lat 38°58'33", long 75°34'03", Kent County, on left bank 30 ft (9 m) downstream from northbound lane of bridge on U.S. Highway 13, 400 ft (122 m) downstream from Black Swamp Creek, 1.3 miles (2.1 km) upstream from Killen Pond, 2.2 miles (3.5 km) south of Felton, and 17.6 miles (28.3 km) upstream from mouth.

DRAINAGE AREA.--13.6 sq mi (35.2 sq km).

PERIOD OF RECORD.--July 1931 to October 1933. Monthly discharge only for July to September 1931, published in WSP 1302. Annual maximum, water years 1952-60, and occasional low-flow measurements, water years 1952-53, 1955-57, 1959-60. June 1960 to current year.

GAGE.--Water-stage recorder. Datum of gage is 21.87 ft, revised (6.666 m) above mean sea level. July 1931 to October 1933, nonrecording gage at bridge 200 ft (61 m) upstream at datum 2.00 ft (0.610 m) higher. March 1951 to May 1960, nonrecording gage and crest-stage gage at bridge 200 ft (61 m) upstream at datum 2.00 ft (0.610 m) higher.

AVERAGE DISCHARGE.--16 years (1931-33, 1960-74), 18.5 cfs (0.524 cu m/s), 18.47 in/yr (469 mm/yr).

EXTREMES.--Current year: Maximum discharge, 204 cfs (5.78 cu m/s) Aug. 7; maximum gage height, 5.14 ft (1.567 m) June 2; minimum, 2.3 cfs (0.065 cu m/s) July 20.
Period of record: Maximum discharge, 2,090 cfs (59.2 cu m/s) Aug. 4, 1967, gage height, 8.83 ft (2.691 m); minimum, 0.80 cfs (0.023 cu m/s) Aug. 28, Sept. 11, 1966.

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

REVISIONS (WATER YEARS).--WSP 1432: 1932.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.1	5.7	4.1	53	23	17	50	5.2	13	5.4	2.8	7.6
2	17	6.1	3.9	37	21	17	38	4.6	88	5.0	2.9	11
3	22	5.2	4.3	31	22	17	33	29	142	4.8	4.0	9.2
4	8.4	5.1	4.5	41	22	16	31	17	45	4.6	3.8	28
5	6.6	11	4.9	35	19	15	30	8.9	26	4.5	3.0	8.5
6	5.0	8.6	4.8	29	17	15	28	8.0	18	7.0	2.7	7.7
7	4.3	6.1	4.3	27	30	16	23	8.0	16	5.4	112	29
8	4.6	5.7	4.1	25	26	15	22	6.2	18	4.5	41	14
9	4.8	17	31	34	24	14	37	14	15	4.3	16	8.5
10	4.8	8.4	19	53	21	13	35	30	11	4.2	15	6.9
11	4.8	5.9	9.5	73	21	12	27	18	8.6	4.1	9.7	6.3
12	4.6	6.6	6.9	56	21	14	24	16	7.2	4.1	7.8	5.9
13	4.1	6.3	7.2	36	28	14	24	26	6.5	4.0	7.2	5.5
14	3.6	6.2	13	29	33	11	24	14	6.1	4.0	6.9	5.3
15	3.9	6.1	7.3	28	26	10	21	8.5	5.4	6.0	6.4	4.9
16	5.5	6.9	9.3	28	23	28	17	6.1	6.9	3.9	5.8	4.4
17	4.8	5.9	20	27	31	38	14	4.9	7.0	3.2	5.5	4.2
18	4.7	5.4	12	24	25	23	13	7.7	6.0	3.4	6.2	3.9
19	4.6	6.5	8.5	24	23	19	12	7.9	5.4	3.6	5.7	4.1
20	3.9	6.3	19	23	23	17	11	6.9	5.0	2.9	5.2	4.7
21	4.6	5.9	124	27	19	45	9.7	6.2	5.0	3.5	5.0	3.8
22	4.7	5.8	88	33	25	66	9.6	5.7	15	3.6	5.7	3.7
23	4.7	6.0	39	27	27	34	22	9.1	13	3.3	6.5	3.4
24	5.0	5.7	31	25	20	27	16	10	7.0	3.7	5.6	3.4
25	5.2	5.3	27	31	21	24	11	12	6.0	4.0	5.4	3.2
26	5.0	5.7	26	29	20	21	9.3	6.9	5.6	3.9	5.3	3.1
27	4.2	5.8	28	28	18	19	7.8	7.5	5.4	3.5	5.2	3.0
28	4.4	6.0	25	27	17	18	7.2	10	12	3.5	4.7	4.0
29	17	5.6	22	33	------	23	6.5	7.2	7.0	3.2	4.4	3.5
30	11	4.6	24	27	------	60	5.8	11	6.0	3.6	4.1	3.3
31	6.3	------	26	25	------	90	------	8.1	------	3.1	4.8	------
TOTAL	199.2	197.4	657.6	1,025	646	768	618.9	340.6	538.1	127.8	326.3	214.0
MEAN	6.43	6.58	21.2	33.1	23.1	24.8	20.6	11.0	17.9	4.12	10.5	7.13
MAX	22	17	124	73	33	90	50	30	142	7.0	112	29
MIN	3.6	4.6	3.9	23	17	10	5.8	4.6	5.0	2.9	2.7	3.0
CFSM	.47	.48	1.56	2.43	1.70	1.82	1.51	.81	1.32	.30	.77	.52
IN.	.54	.54	1.80	2.80	1.77	2.10	1.69	.93	1.47	.35	.89	.59

CAL YR 1973 TOTAL 6,486.0 MEAN 17.8 MAX 185 MIN 3.6 CFSM 1.31 IN 17.74
WTR YR 1974 TOTAL 5,658.9 MEAN 15.5 MAX 142 MIN 2.7 CFSM 1.14 IN 15.48

PEAK DISCHARGE (BASE, 130 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-21	1715	5.00	173	8-07	1545	5.10	204
6-02	2345	5.14	200				

NOTE.--No gage-height record Mar. 2 to Apr. 2, June 4-7, June 17 to July 17, and Sept. 24-30.

01484100 Beaverdam Branch at Houston, Del.

LOCATION.--Lat 38°54'20", long 75°30'49", Kent County, on left bank 15 ft (5 m) upstream from bridge on State Highway 384, 0.8 mile (1.3 km) south of Houston, 2,000 ft (610 m) upstream from unnamed stream, and 1.2 miles (1.9 km) upstream from Blairs Pond and mouth.

DRAINAGE AREA.--2.83 sq mi (7.33 sq km).

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

GAGE.--Water-stage recorder and timber control. Datum of gage is 35.67 ft (10.872 m) above mean sea level.

AVERAGE DISCHARGE.--16 years, 3.64 cfs (0.103 cu m/s), 17.47 in/yr (444 mm/yr).

EXTREMES.--Current year: Maximum discharge, 31 cfs (0.88 cu m/s) June 2, gage height, 3.14 ft (0.957 m); minimum daily, 0.74 cfs (0.021 cu m/s) Aug. 1.
Period of record: Maximum discharge, 176 cfs (4.98 cu m/s) Sept. 12, 1960, gage height, 5.55 ft (1.692 m); minimum daily, 0.20 cfs (0.006 cu m/s) Sept. 18, 19, 1966.

REMARKS.--Records good.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	1.3	1.1	8.3	4.4	4.4	6.9	2.8	2.7	2.6	.74	1.0
2	2.6	1.3	1.1	4.8	4.6	4.4	6.0	2.8	11	2.5	.92	1.0
3	3.1	1.2	1.1	4.9	4.5	4.3	5.5	5.1	14	2.3	1.3	1.2
4	1.9	1.2	1.1	6.9	4.3	4.3	5.5	3.5	6.1	2.3	1.3	2.0
5	1.6	1.4	1.1	5.4	4.0	4.3	5.4	3.2	5.2	2.2	1.1	1.3
6	1.5	1.4	1.1	5.0	3.9	4.0	5.2	3.2	4.7	2.2	1.2	1.3
7	1.5	1.3	1.0	4.5	4.7	4.2	4.8	3.1	4.7	2.2	5.1	3.5
8	1.5	1.3	1.1	4.3	4.3	4.0	4.7	3.0	4.8	2.0	2.2	1.7
9	1.5	1.5	2.7	5.7	4.0	4.0	5.7	3.1	4.4	2.0	1.8	1.5
10	1.4	1.3	1.8	6.8	3.8	3.9	5.0	3.6	4.0	1.7	1.9	1.4
11	1.4	1.3	1.5	6.5	3.9	3.7	4.5	3.2	3.7	1.4	1.6	1.3
12	1.4	1.3	1.5	5.7	3.9	4.0	4.4	3.3	3.4	1.2	1.5	1.3
13	1.4	1.3	1.5	5.0	5.0	3.7	4.5	3.4	3.4	1.0	1.5	1.2
14	1.4	1.3	1.6	4.8	5.5	3.5	4.5	3.0	3.4	1.2	1.5	1.2
15	1.4	1.3	1.5	4.9	4.6	3.4	4.2	2.8	3.2	1.1	1.4	1.2
16	1.4	1.1	1.6	4.8	4.6	5.1	3.8	2.7	3.3	.83	1.3	1.2
17	1.4	1.1	2.8	4.5	5.5	5.9	3.7	2.6	3.2	.83	1.3	1.1
18	1.4	1.2	1.7	4.3	4.7	4.5	3.6	3.6	3.1	.83	1.3	1.1
19	1.4	1.1	1.6	4.3	4.6	4.3	3.6	2.9	3.0	1.3	1.3	1.1
20	1.4	1.1	2.9	4.3	4.4	4.0	3.4	2.7	2.9	1.2	1.3	1.1
21	1.3	1.1	19	6.1	4.0	12	3.4	2.6	2.9	1.1	1.2	1.1
22	1.3	1.1	6.0	5.9	5.8	8.8	3.4	2.5	3.0	1.3	1.4	1.0
23	1.3	1.1	4.2	5.0	5.8	6.1	4.2	2.6	3.3	1.4	1.4	1.0
24	1.4	1.1	3.7	4.6	4.9	5.7	3.5	2.9	3.0	1.2	1.4	1.1
25	1.4	1.1	3.7	5.6	5.1	5.3	3.3	3.1	2.9	1.0	1.3	1.1
26	1.4	1.2	3.7	5.2	4.7	5.2	3.1	2.6	2.8	.83	1.3	.92
27	1.3	1.2	3.5	5.2	4.6	5.0	3.1	2.7	2.7	1.2	1.3	.91
28	1.3	1.2	3.3	5.0	4.6	4.9	3.1	2.7	3.6	1.4	1.2	.99
29	1.9	1.1	3.3	5.1	------	5.1	3.0	2.7	3.2	1.1	1.1	1.1
30	1.5	1.1	3.4	4.7	------	8.9	2.9	3.2	2.8	1.0	1.1	.99
31	1.4	------	4.0	4.6	------	13	------	2.8	------	.83	1.1	------
TOTAL	47.5	36.6	89.2	162.7	128.7	163.9	127.9	94.0	124.4	45.25	45.36	37.91
MEAN	1.53	1.22	2.88	5.25	4.60	5.29	4.26	3.03	4.15	1.46	1.46	1.26
MAX	3.1	1.5	19	8.3	5.8	13	6.9	5.1	14	2.6	5.1	3.5
MIN	1.3	1.1	1.0	4.3	3.8	3.4	2.9	2.5	2.7	.83	.74	.91
CFSM	.54	.43	1.02	1.86	1.63	1.87	1.51	1.07	1.47	.52	.52	.45
IN.	.62	.48	1.17	2.14	1.69	2.15	1.68	1.24	1.64	.59	.60	.50

CAL YR 1973 TOTAL 1,438.65 MEAN 3.94 MAX 27 MIN .97 CFSM 1.39 IN 18.91
WTR YR 1974 TOTAL 1,103.42 MEAN 3.02 MAX 19 MIN .74 CFSM 1.07 IN 14.50

PEAK DISCHARGE (BASE, 30 CFS).--June 2 (2245) 31 cfs (3.14 ft).

01484300 Sowbridge Branch near Milton, Del.

LOCATION.--Lat 38°48'51", long 75°19'39", Sussex County, on left bank at downstream side of highway bridge, 1 mile (1.6 km) downstream from Reynolds Pond, 2.5 miles (4.0 km) north of Milton, and 0.7 mile (1.1 km) upstream from mouth.

DRAINAGE AREA.--7.08 sq mi (18.34 sq km).

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

GAGE.--Water-stage recorder. Concrete control since Oct. 28, 1968. Datum of gage is 3.43 ft (1.045 m) above mean sea level.

AVERAGE DISCHARGE.--18 years, 10.0 cfs (0.283 cu m/s), 19.18 in/yr (487 mm/yr).

EXTREMES.--Maximum discharge, 24 cfs (0.680 cu m/s) Aug. 8, gage height, 5.10 ft (1.554 m); minimum, 2.5 cfs (0.071 cu m/s) July 20, 21, 22, 23, gage height, 4.64 ft (1.414 m).
Period of record: Maximum discharge, 134 cfs (3.79 cu m/s) Aug. 5, 1967, gage height, 6.33 ft (1.929 m); minimum, 0.47 cfs (0.013 cu m/s) Feb. 10, 1969 (result of freezeup).

REMARKS.--Records good. Flow regulated by Reynolds Pond.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.0	13	5.2	17	11	11	16	9.0	11	11	3.1	4.5
2	8.0	11	5.2	15	11	11	15	8.5	15	9.6	3.2	4.8
3	9.0	9.9	5.2	14	11	11	13	14	18	8.7	3.4	5.2
4	7.0	9.6	5.2	15	11	11	13	15	16	8.0	3.6	7.5
5	5.6	9.9	5.4	14	11	11	13	13	13	7.2	3.8	6.2
6	5.0	4.8	5.6	13	10	11	13	12	12	7.0	3.7	6.5
7	4.5	3.6	5.2	13	11	11	12	11	11	6.8	9.8	9.6
8	4.3	3.6	5.3	12	12	11	12	11	12	6.6	22	19
9	4.1	4.6	9.3	13	12	11	13	10	12	6.4	16	14
10	4.0	4.1	11	14	12	11	12	10	12	6.5	14	10
11	4.0	4.7	14	14	11	10	12	10	11	6.0	12	8.2
12	4.0	5.1	10	14	10	11	12	10	9.8	6.0	9.8	6.0
13	4.0	5.4	9.0	13	11	11	11	11	9.4	5.7	8.3	3.4
14	4.0	5.6	9.5	12	11	10	12	10	9.2	5.3	7.6	3.2
15	4.0	5.6	8.3	12	11	10	11	9.8	8.9	5.6	6.8	3.1
16	4.0	5.3	8.3	12	11	11	11	9.1	9.0	5.6	5.1	2.8
17	4.4	4.6	10	12	12	14	10	9.0	9.3	5.2	3.8	2.8
18	4.6	4.6	9.5	12	12	13	10	11	9.0	3.6	3.4	2.9
19	4.8	4.9	8.4	12	12	12	10	12	8.6	3.3	2.9	2.9
20	4.9	5.1	9.3	12	12	12	10	11	7.7	2.6	2.8	3.0
21	5.0	5.2	18	12	12	13	9.9	10	7.7	2.6	2.7	3.1
22	5.2	5.3	18	13	12	13	9.7	9.5	9.6	2.6	3.2	3.2
23	5.3	5.4	16	12	12	13	12	9.3	12	2.6	4.4	2.9
24	5.4	5.2	13	12	11	12	12	9.9	11	2.8	4.3	3.1
25	5.2	5.2	12	12	12	11	11	12	10	2.8	3.9	3.3
26	5.2	5.2	12	12	12	11	11	12	9.4	2.9	4.1	3.5
27	5.2	5.3	11	12	11	11	10	12	9.2	2.8	4.2	3.6
28	5.2	5.7	11	12	11	11	9.7	11	12	2.7	4.4	4.2
29	7.6	5.8	11	12	------	11	9.5	11	13	2.8	4.3	6.2
30	14	5.6	11	12	------	14	9.1	11	12	3.0	4.1	4.2
31	16	------	12	11	------	16	------	11	------	3.1	4.2	------
TOTAL	179.5	178.9	303.9	397	318	360	344.9	335.1	329.8	157.4	188.9	162.9
MEAN	5.79	5.96	9.80	12.8	11.4	11.6	11.5	10.8	11.0	5.08	6.09	5.43
MAX	16	13	18	17	12	16	16	15	18	11	22	19
MIN	4.0	3.6	5.2	11	10	10	9.1	8.5	7.7	2.6	2.7	2.8
CFSM	.82	.84	1.38	1.81	1.61	1.64	1.62	1.53	1.55	.72	.86	.77
IN.	.94	.94	1.60	2.09	1.67	1.89	1.81	1.76	1.73	.83	.99	.86

CAL YR 1973 TOTAL 3,851.0 MEAN 10.6 MAX 28 MIN 3.2 CFSM 1.50 IN 20.23
WTR YR 1974 TOTAL 3,256.3 MEAN 8.92 MAX 22 MIN 2.6 CFSM 1.26 IN 17.11

01484500 Stockley Branch at Stockley, Del.

LOCATION.--Lat 38°38'19", long 75°20'31", Sussex County, on left bank at highway bridge in Stockley, 4.4 miles (7.1 km) southeast of Georgetown, and 1.6 miles (2.6 km) upstream from mouth.

DRAINAGE AREA.--5.24 sq mi (13.57 sq km).

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 24.54 ft (7.480 m) above mean sea level. Prior to Aug. 16, 1950, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--31 years, 6.98 cfs (0.198 cu m/s), 18.09 in/yr (459 mm/yr).

EXTREMES.--Maximum discharge, 51 cfs (1.44 cu m/s) Aug. 22, gage height, 2.99 ft (0.911 m); minimum, 1.4 cfs (0.040 cu m/s) July 31, Aug. 1, 2.
Period of record: Maximum discharge, 132 cfs (3.74 cu m/s) June 4, 1948, gage height, 5.0 ft (1.52 m), from graph based on gage readings, from rating curve extended above 50 cfs (1.42 cu m/s); minimum observed, 0.13 cfs (0.004 cu m/s) Sept. 1-11, 1944.

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 1141: 1948(P). WSP 1432: Drainage area.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	2.3	2.4	29	7.4	6.3	12	3.8	2.6	3.3	1.6	2.5
2	3.2	2.2	2.4	18	7.3	6.2	9.9	3.5	6.6	3.1	1.7	2.4
3	3.8	2.2	2.4	17	7.4	6.2	8.5	14	11	2.9	1.9	2.7
4	2.9	2.1	2.4	25	7.4	6.1	8.5	11	6.3	2.8	1.8	5.3
5	2.7	2.9	2.4	20	6.8	6.0	8.2	8.1	5.1	2.7	1.8	2.8
6	2.6	2.8	2.3	16	6.7	5.8	7.5	7.7	4.7	2.7	1.6	2.8
7	2.6	2.5	2.2	15	7.8	5.8	6.5	7.5	4.6	2.7	5.6	3.7
8	2.6	2.4	2.3	13	7.4	5.7	6.3	6.3	4.8	2.5	2.6	3.0
9	2.6	3.2	7.4	16	7.2	5.5	9.1	5.9	4.5	2.4	9.7	2.8
10	2.7	2.7	3.7	17	6.7	5.7	9.2	5.9	4.2	2.3	6.8	2.6
11	2.5	2.6	3.1	17	6.8	5.4	7.4	5.5	3.9	2.3	3.1	2.6
12	2.5	2.5	3.0	15	6.7	6.2	6.6	5.6	3.7	2.2	2.7	2.5
13	2.5	2.5	3.3	12	7.0	5.8	6.5	6.8	3.6	2.2	2.6	2.5
14	2.4	2.4	4.6	11	6.9	5.4	6.5	5.4	3.5	2.1	2.5	2.4
15	2.4	2.5	3.5	11	6.5	5.2	6.3	4.5	3.5	2.0	2.4	2.3
16	2.3	2.3	4.6	11	6.7	7.7	5.6	4.0	3.5	2.0	2.4	2.3
17	2.3	2.3	9.9	10	10	12	5.2	3.7	3.5	2.0	2.3	2.2
18	2.3	2.4	5.8	9.1	7.9	6.6	4.9	3.8	3.4	1.9	2.3	2.2
19	2.2	2.4	4.8	9.0	7.6	5.5	4.9	3.5	3.2	1.9	2.2	2.2
20	2.3	2.3	5.6	8.6	7.6	5.6	4.6	3.2	3.1	1.8	2.2	2.2
21	2.2	2.4	29	8.9	6.8	8.7	4.4	2.9	3.1	1.9	2.1	2.1
22	2.2	2.4	18	8.9	7.5	9.1	4.6	2.7	3.2	1.8	12	2.2
23	2.2	2.4	12	8.4	7.7	6.9	6.2	2.7	3.5	1.6	8.8	2.0
24	2.2	2.4	9.9	8.0	6.8	6.5	5.5	2.6	3.4	1.7	3.9	2.0
25	2.2	2.4	9.2	8.3	7.0	5.6	4.7	2.4	3.3	1.7	3.5	2.0
26	2.2	2.4	8.9	8.3	6.7	5.4	4.5	2.2	3.2	1.7	3.1	2.0
27	2.1	2.4	8.7	8.7	6.4	5.2	4.3	3.0	3.0	1.7	3.0	1.9
28	2.0	2.7	8.3	8.3	6.4	5.0	4.0	2.9	4.5	1.7	2.8	2.1
29	3.2	3.2	7.9	8.2	------	5.3	4.0	2.5	4.0	1.6	2.7	2.5
30	2.9	2.5	7.9	7.8	------	11	3.9	3.5	3.4	1.6	2.5	1.9
31	2.5	------	9.4	7.6	------	18	------	2.9	------	1.6	2.5	------
TOTAL	77.9	74.7	207.3	391.1	201.1	211.4	190.3	150.0	123.9	66.4	106.7	74.7
MEAN	2.51	2.49	6.69	12.6	7.18	6.82	6.34	4.84	4.13	2.14	3.44	2.49
MAX	3.8	3.2	29	29	10	18	12	14	11	3.3	12	5.3
MIN	2.0	2.1	2.2	7.6	6.4	5.0	3.9	2.2	2.6	1.6	1.6	1.9
CFSM	.48	.48	1.28	2.40	1.37	1.30	1.21	.92	.79	.41	.66	.48
IN.	.55	.53	1.47	2.78	1.43	1.50	1.35	1.06	.88	.47	.76	.53

CAL YR 1973 TOTAL 2,457.0 MEAN 6.73 MAX 74 MIN 2.0 CFSM 1.28 IN 17.44
WTR YR 1974 TOTAL 1,875.5 MEAN 5.14 MAX 29 MIN 1.6 CFSM .98 IN 13.31

PEAK DISCHARGE (BASE, 45 CFS).--Aug. 22 (2100) 51 cfs (2.99 ft).

01485000 Pocomoke River near Willards, Md.

LOCATION.--Lat 38°23'20", long 75°19'30", Worcester County, on left bank 30 ft (9 m) downstream from bridge on State Highway 346, 0.6 mile (1.0 km) upstream from Burnt Mill Branch, 1.3 miles (2.1 km) east of Willards, 1.3 miles (2.1 km) west of Whaleysville, and 50.3 miles (80.9 km) upstream from mouth.

DRAINAGE AREA.--60.5 sq mi (156.7 sq km).

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

GAGE.--Water-stage recorder. Datum of gage is 13.95 ft (4.252 m) above mean sea level.

AVERAGE DISCHARGE.--24 years (1950-74), 68.9 cfs (1.951 cu m/s), 15.47 in/yr (393 mm/yr).

EXTREMES.--Current year: Maximum discharge, 522 cfs (14.8 cu m/s) Dec. 21, gage height, 9.72 ft (2.963 m); minimum, 6.3 cfs (0.18 cu m/s) Aug. 1, 2.
Period of record: Maximum discharge, 924 cfs (26.2 cu m/s) June 30, 1972, gage height, 13.67 ft (4.167 m); minimum, 2.2 cfs (0.062 cu m/s) Aug. 18, 19, 1957, gage height, 1.91 ft (0.582 m).

REMARKS.--Records fair.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	20	20	288	85	49	222	34	57	22	6.5	24
2	22	19	19	216	78	48	156	32	82	20	6.7	22
3	34	18	19	177	76	48	123	57	180	18	12	22
4	31	18	19	392	76	47	110	79	132	16	10	35
5	27	19	19	378	71	46	138	64	98	15	20	41
6	24	24	19	204	68	42	200	60	72	15	12	34
7	23	22	18	176	76	40	141	57	61	15	95	44
8	22	21	18	156	80	38	114	51	58	14	95	55
9	21	24	52	169	79	36	123	48	53	13	45	47
10	20	25	78	192	73	36	134	46	46	12	363	38
11	19	24	64	184	72	34	111	44	38	12	177	31
12	19	23	56	171	70	40	94	41	31	12	91	28
13	18	22	52	148	76	42	83	46	28	11	67	26
14	18	22	85	125	78	44	76	42	26	11	56	24
15	17	21	79	120	68	44	72	37	24	10	46	22
16	17	21	79	117	65	48	65	34	23	11	38	21
17	16	20	258	111	122	141	61	32	22	10	36	20
18	16	19	207	101	106	112	57	31	20	9.8	31	20
19	16	20	141	97	87	88	54	30	19	9.5	28	19
20	16	19	123	91	84	77	52	29	18	9.0	27	18
21	16	18	411	90	71	104	49	28	17	8.5	25	18
22	15	19	433	100	70	166	46	27	20	8.2	24	17
23	15	18	266	96	84	124	55	26	19	8.0	60	16
24	15	18	183	89	67	107	58	26	20	8.0	112	16
25	15	18	152	96	63	87	53	25	20	8.0	68	16
26	15	18	138	111	59	75	48	24	19	8.0	55	15
27	15	18	127	134	54	69	44	28	18	8.2	44	15
28	15	18	118	126	52	59	42	34	21	7.8	35	15
29	18	22	108	124	------	55	39	34	26	7.3	29	20
30	20	21	106	112	------	145	36	66	24	7.1	26	18
31	19	------	112	98	------	354	------	66	------	6.9	25	------
TOTAL	595	609	3,579	4,789	2,110	2,445	2,656	1,278	1,292	351.3	1,765.2	757
MEAN	19.2	20.3	115	154	75.4	78.9	88.5	41.2	43.1	11.3	56.9	25.2
MAX	34	25	433	392	122	354	222	79	180	22	363	55
MIN	15	18	18	89	52	34	36	24	17	6.9	6.5	15
CFSM	.32	.34	1.90	2.55	1.25	1.30	1.46	.68	.71	.19	.94	.42
IN.	.37	.37	2.20	2.94	1.30	1.50	1.63	.79	.79	.22	1.09	.47

CAL YR 1973 TOTAL 26,132.0 MEAN 71.6 MAX 693 MIN 14 CFSM 1.18 IN 16.07
WTR YR 1974 TOTAL 22,226.5 MEAN 60.9 MAX 433 MIN 6.5 CFSM 1.01 IN 13.67

PEAK DISCHARGE (BASE, 500 CFS).--Dec. 21 (1800) 522 cfs (9.72 ft).

01485500 Nassawango Creek near Snow Hill, Md.

LOCATION.--Lat 38°13'44", long 75°28'19", Worcester County, on right bank 15 ft (5 m) downstream from bridge on State Highway 12, 0.5 mile (0.8 km) upstream from Furnace Branch, 0.6 mile (1.0 km) downstream from Millville Creek, 5.5 miles (8.8 km) northwest of Snow Hill, and 7.3 miles (11.7 km) upstream from mouth.

DRAINAGE AREA.--44.9 sq mi (116.3 sq km).

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 12.29 ft (3.746 m) above mean sea level.

AVERAGE DISCHARGE.--24 years (1950-74), 51.9 cfs (1.470 cu m/s), 15.70 in/yr (399 mm/yr).

EXTREMES.--Current year: Maximum discharge, 365 cfs (10.3 cu m/s) Aug. 11, gage height, 6.00 ft (1.829 m); minimum, 2.0 cfs (0.057 cu m/s) July 21, 22, 23, 24, 25, 26.
Period of record: Maximum discharge, 1,320 cfs (37.4 cu m/s) June 30, 1972; maximum gage height, 7.82 ft (2.384 m) Aug. 16, 1953; minimum discharge, 0.80 cfs (0.023 cu m/s) Sept. 8, 9, 10, 1966.

REMARKS.--Records good.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.8	14	13	106	60	40	260	18	46	7.9	2.1	16
2	8.6	11	12	155	52	38	202	16	46	6.5	2.2	13
3	25	9.7	11	169	50	37	136	39	70	5.2	2.5	13
4	24	8.7	10	177	52	37	102	48	89	4.3	9.9	28
5	22	14	10	239	47	35	88	47	86	3.5	22	34
6	17	17	11	235	43	34	87	45	56	3.2	9.6	36
7	13	16	11	163	44	33	93	41	37	3.6	27	44
8	11	14	11	120	44	32	97	36	33	3.4	44	48
9	9.5	17	31	108	45	31	89	32	31	3.0	71	48
10	8.6	17	35	118	43	30	83	32	25	2.7	226	43
11	8.0	16	36	125	44	28	76	30	19	2.4	351	36
12	7.3	15	35	126	43	37	68	27	14	2.3	290	29
13	6.9	14	34	111	46	39	56	29	11	2.2	164	22
14	6.5	13	43	92	43	38	48	26	9.4	2.1	90	17
15	5.9	12	42	82	40	37	44	22	8.1	2.1	50	14
16	5.5	12	53	70	41	45	39	18	7.7	2.4	35	12
17	5.2	10	97	62	80	98	36	15	8.1	2.5	29	9.9
18	5.2	9.4	114	56	99	126	33	12	6.9	2.2	32	9.0
19	5.3	9.6	123	50	105	127	31	11	5.6	2.1	28	8.1
20	5.3	9.7	107	47	97	100	29	10	4.6	2.1	23	7.3
21	5.3	9.7	150	46	80	88	26	9.0	4.2	2.0	18	6.6
22	5.5	9.7	273	48	71	107	24	8.0	6.1	2.0	16	6.3
23	5.6	9.7	287	48	76	112	32	8.0	6.5	2.0	20	6.3
24	5.6	9.7	183	47	71	105	38	11	14	2.0	29	5.8
25	5.5	9.5	125	52	67	84	40	9.8	13	2.0	53	5.5
26	5.6	9.4	99	58	57	63	37	8.1	9.4	2.1	72	5.2
27	5.6	9.6	86	76	49	51	32	20	7.9	2.4	55	4.9
28	5.4	11	74	86	43	44	28	30	11	2.3	38	5.1
29	14	17	63	90	------	42	24	25	14	2.1	30	13
30	18	15	61	83	------	94	20	49	11	2.4	22	19
31	16	------	67	71	------	200	------	51	------	2.2	19	------
TOTAL	298.7	369.4	2,307	3,116	1,632	2,012	1,998	782.9	710.5	89.2	1,880.3	565.0
MEAN	9.64	12.3	74.4	101	58.3	64.9	66.6	25.3	23.7	2.88	60.7	18.8
MAX	25	17	287	239	105	200	260	51	89	7.9	351	48
MIN	5.2	8.7	10	46	40	28	20	8.0	4.2	2.0	2.1	4.9
CFSM	.21	.27	1.66	2.25	1.30	1.45	1.48	.56	.53	.06	1.35	.42
IN.	.25	.31	1.91	2.58	1.35	1.67	1.66	.65	.59	.07	1.56	.47

CAL YR 1973 TOTAL 19,420.5 MEAN 53.2 MAX 640 MIN 2.8 CFSM 1.18 IN 16.09
WTR YR 1974 TOTAL 15,761.0 MEAN 43.2 MAX 351 MIN 2.0 CFSM .96 IN 13.06

PEAK DISCHARGE (BASE, 280 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-22	2300	5.68	320	8-11	1400	6.00	365

01486500 Beaverdam Creek near Salisbury, Md.

LOCATION.--Lat 38°21'05", long 75°34'11", Wicomico County, on upstream side of Schumaker Dam between spillway and emergency floodgate, 0.6 mile (1.0 km) upstream from Beaglin Branch, 2 miles (3 km) southeast of Salisbury, and 0.8 mile (1.3 km) upstream from mouth.

DRAINAGE AREA.--19.5 sq mi (50.5 sq km).

PERIOD OF RECORD.--October 1929 to August 1933, May 1934 to September 1935, May 1936 to current year. Prior to October 1948, published as East Branch Wicomico River near Salisbury.

GAGE.--Water-stage recorder and concrete spillway of dam for control. Datum of gage is 8.93 ft (2.722 m) above mean sea level (city of Salisbury bench mark). Prior to Sept. 28, 1938, at site on left bank at datum 9.02 ft (2.749 m) higher.

AVERAGE DISCHARGE.--39 years (1929-32, 1938-74), 23.9 cfs (0.68 cu m/s), 16.64 in/yr (423 mm/yr).

EXTREMES.--Current year: Maximum discharge, 254 cfs (7.19 cu m/s) Aug. 10, gage height, 11.55 ft (3.520 m); minimum daily, 0.80 cfs (0.023 cu m/s) Sept. 11 (leakage under dam following closing of floodgate).
1929-74: Maximum discharge, not determined, probably occurred Aug. 23, 1933, when dam was partially washed out; maximum known discharge, 1,480 cfs (41.9 cu m/s) Aug. 4, 1948, gage height, 14.31 ft (4.362 m), from high-water mark in well; minimum daily discharge recorded, 0.40 cfs (0.011 cu m/s) Dec. 17, 1963 (leakage under dam following closing of floodgate).

REMARKS.--Records good. Records represent total flow and include flow over spillway, through spillway valve, over or through floodgate, and leakage under dam. Occasional regulation at low and medium flow caused by mill above station. Water-quality records for the current water year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 741: 1931(m). WSP 1232: Drainage area. WSP 1432: 1931, 1936-37, 1940.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	13	9.3	54	58	22	80	16	13	11	7.4	13
2	20	13	8.6	68	35	22	50	16	36	10	7.4	15
3	28	10	8.3	46	34	21	38	28	42	9.3	8.6	29
4	20	8.6	8.0	73	35	20	36	35	38	9.3	9.3	27
5	19	13	10	89	31	20	47	29	26	8.0	15	25
6	17	18	10	49	30	21	82	25	20	9.3	10	23
7	15	9.3	10	42	33	20	66	19	24	10	96	23
8	15	12	20	34	34	19	44	24	16	8.0	80	23
9	15	10	31	34	34	19	45	18	18	8.0	35	21
10	15	15	20	45	31	21	45	19	16	8.0	201	12
11	15	14	18	43	29	22	39	18	14	7.7	93	.80
12	14	9.0	18	40	27	26	35	18	13	6.8	31	.90
13	14	8.3	19	35	26	23	35	21	13	6.8	24	.90
14	14	8.6	19	27	24	23	35	18	12	7.4	19	1.0
15	14	9.0	24	25	25	22	26	17	12	7.4	16	4.8
16	13	9.0	28	26	24	28	26	23	12	9.3	15	11
17	13	16	49	25	39	44	25	24	12	8.0	16	12
18	13	14	50	23	41	44	24	20	9.3	6.8	17	12
19	13	10	40	22	36	41	24	12	8.6	8.0	12	12
20	13	9.7	32	20	32	29	21	10	8.6	8.6	11	12
21	11	9.3	88	22	29	33	18	12	9.6	6.8	9.3	12
22	10	9.3	131	24	30	50	17	15	14	7.2	11	12
23	10	9.3	62	23	32	44	24	12	14	6.8	15	11
24	10	9.7	31	23	29	30	24	12	15	6.8	16	11
25	10	10	29	29	26	25	24	12	13	6.8	16	12
26	10	10	29	29	24	24	26	10	12	8.0	16	12
27	10	10	27	36	23	9.3	18	19	12	9.3	14	12
28	10	13	23	36	23	.85	17	20	12	8.6	13	12
29	15	21	23	34	------	.98	17	20	14	7.4	13	13
30	14	16	24	30	------	28	17	31	12	9.3	13	11
31	16	------	26	64	------	88	------	23	------	8.0	14	------
TOTAL	440	347.1	925.2	1,170	874	840.13	1,025	596	491.1	252.7	874.0	396.40
MEAN	14.2	11.6	29.8	37.7	31.2	27.1	34.2	19.2	16.4	8.15	28.2	13.2
MAX	28	21	131	89	58	88	82	35	42	11	201	29
MIN	10	8.3	8.0	20	23	.85	17	10	8.6	6.8	7.4	.80
CFSM	.73	.59	1.53	1.93	1.60	1.39	1.75	.98	.84	.42	1.45	.68
IN.	.84	.66	1.76	2.23	1.67	1.60	1.96	1.14	.94	.48	1.67	.76

CAL YR 1973 TOTAL 9,261.25 MEAN 25.4 MAX 330 MIN .85 CFSM 1.30 IN 17.67
WTR YR 1974 TOTAL 8,231.63 MEAN 22.6 MAX 201 MIN .80 CFSM 1.16 IN 15.70

01487000 Nanticoke River near Bridgeville, Del.

LOCATION (revised).--Lat 38°43'42", long 75°33'44", Sussex County, on left bank at downstream side of highway bridge, 800 ft (244 m) downstream from Gum Branch, 2.5 miles (4.0 km) southeast of Bridgeville, and 50.5 miles (81.3 km) upstream from mouth.

DRAINAGE AREA.--75.4 sq mi (195.3 sq km).

PERIOD OF RECORD.--April 1943 to current year. Prior to October 1955, published as Gravelly Fork near Bridgeville.

GAGE.--Water-stage recorder. Datum of gage is 13.64 ft (4.157 m) above mean sea level (levels by Soil Conservation Service). Prior to Apr. 19, 1947 nonrecording gage, and Apr. 19, 1947 to Dec. 18, 1969 recording gage at present site and datum. Timber control Sept. 3, 1947 to Dec. 18, 1969. Feb. 18, 1970 to Oct. 1, 1973 recording gage at site 300 ft (91 m) downstream at same datum.

AVERAGE DISCHARGE.--31 years, 92.1 cfs (2.608 cu m/s), 16.59 in/yr (421 mm/yr).

EXTREMES.--Current year: Maximum discharge, 490 cfs (13.9 cu m/s) Dec. 21, gage height, 6.45 ft (1.966 m); minimum, 23 cfs (0.65 cu m/s) July 31, Aug. 1, 2.
Period of record: Maximum discharge, 2,360 cfs (66.8 cu m/s) Aug. 5, 1967, gage height, 8.86 ft (2.701 m); minimum observed, 6.3 cfs (0.18 cu m/s) Sept. 29, 1943.
Maximum stage known, about 11.0 ft (3.35 m) in September 1935, from information by local residents.

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 1111: 1947. WSP 1232: 1945-49.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	41	37	155	105	97	159	99	76	72	24	32
2	49	41	37	138	102	96	138	95	104	68	24	32
3	69	40	37	125	101	95	128	123	216	63	26	34
4	55	40	37	144	99	94	126	122	133	60	26	58
5	49	46	38	142	96	93	125	110	107	55	27	42
6	46	43	37	131	94	92	123	109	97	53	25	38
7	45	41	36	125	104	91	116	108	91	53	46	54
8	45	40	36	117	104	90	113	103	91	50	48	50
9	45	47	58	126	103	88	123	101	88	48	52	41
10	45	42	53	141	97	89	123	102	84	45	88	39
11	44	40	44	146	96	86	115	100	80	43	56	37
12	44	40	41	141	95	90	112	100	75	41	45	37
13	43	40	41	127	97	88	113	110	72	39	42	36
14	43	40	45	120	109	85	114	102	68	37	41	35
15	42	40	42	119	106	84	113	98	66	38	38	35
16	42	40	44	116	103	92	109	96	78	36	37	34
17	41	39	70	112	116	122	107	95	87	35	38	34
18	41	39	60	105	110	107	106	96	80	33	37	35
19	41	40	53	104	106	102	105	96	76	34	36	34
20	40	39	58	102	107	101	104	92	73	33	36	34
21	40	39	311	109	99	151	102	89	70	31	35	34
22	40	39	250	129	103	206	103	87	82	31	35	33
23	40	39	137	116	117	142	113	86	98	30	41	32
24	40	39	118	109	104	130	109	86	86	31	38	31
25	39	39	109	112	104	119	105	93	79	31	36	31
26	40	39	107	113	102	114	102	85	75	31	35	31
27	39	39	105	115	97	112	101	83	72	30	35	31
28	39	40	101	112	97	109	100	83	76	28	34	32
29	49	40	97	119	------	108	100	80	79	28	34	36
30	47	37	98	112	------	127	100	84	74	25	33	30
31	42	------	99	108	------	220	------	80	------	24	32	------
TOTAL	1,367	1,208	2,436	3,790	2,873	3,420	3,407	2,993	2,633	1,256	1,180	1,092
MEAN	44.1	40.3	78.6	122	103	110	114	96.5	87.8	40.5	38.1	36.4
MAX	69	47	311	155	117	220	159	123	216	72	88	58
MIN	39	37	36	102	94	84	100	80	66	24	24	30
CFSM	.58	.53	1.04	1.62	1.37	1.46	1.51	1.28	1.16	.54	.51	.48
IN.	.67	.60	1.20	1.87	1.42	1.69	1.68	1.48	1.30	.62	.58	.54

CAL YR 1973 TOTAL 34,855 MEAN 95.5 MAX 620 MIN 33 CFSM 1.27 IN 17.20
WTR YR 1974 TOTAL 27,655 MEAN 75.8 MAX 311 MIN 24 CFSM 1.01 IN 13.64

PEAK DISCHARGE (BASE, 360 CFS).--Dec. 21 (1800) 490 cfs (6.45 ft).

01488500 Marshyhope Creek near Adamsville, Del.

LOCATION.--Lat 38°50'59", long 75°40'24", Kent County, on left bank 45 ft (14 m) upstream from highway bridge, 1.4 miles (2.3 km) upstream from Cattail Branch, 1.6 miles (2.6 km) northeast of Adamsville, 4.9 miles (7.9 km) northwest of Greenwood, and 33 miles (53 km) upstream from mouth.

DRAINAGE AREA.--43.9 sq mi (113.7 sq km). Area at site used prior to Oct. 1, 1971, 44.8 sq mi (116.0 sq km).

PERIOD OF RECORD.--April 1943 to March 1969, October 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is 26.21 ft, revised (7.989 m) above mean sea level. Prior to Nov. 24, 1953, nonrecording gage and crest-stage gage, and Nov. 24, 1953 to March 1969, recording gage at site on old channel about 240 ft (73 m) southeast of present site at datum 2.00 ft (0.610 m) higher.

AVERAGE DISCHARGE.--28 years (1943-68, 1971-74), 53.3 cfs (1.509 cu m/s), 16.49 in/yr (419 mm/yr).

EXTREMES.--Current year: Maximum discharge, 1,390 cfs (39.4 cu m/s) Aug. 7, gage height, 7.48 ft (2.280 m), from rating curve extended above 590 cfs (16.7 cu m/s); minimum, 14 cfs (0.40 cu m/s) Aug. 2, 5, 6, 7.
Period of record: Maximum discharge, 3,060 cfs (86.7 cu m/s) Aug. 5, 1967, gage height, 13.98 ft (4.261 m), present datum; minimum, 1.0 cfs (0.28 cu m/s) Sept. 9, 10, 1964, Aug. 20, 1965.
Maximum stage known, 16.5 ft (5.03 m), present datum, in September 1935, from information by local residents.

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 1141: 1948(P). WSP 1432: 1946(M), 1948, 1952.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	19	16	182	65	54	158	42	56	34	15	21
2	23	18	16	111	63	53	125	40	403	32	15	22
3	45	18	16	96	62	52	107	60	503	31	16	24
4	29	17	16	145	61	51	98	56	192	30	16	41
5	25	19	17	114	57	51	97	48	118	29	15	32
6	23	19	16	94	55	48	93	47	87	29	14	25
7	23	18	16	85	70	48	79	45	72	28	595	41
8	22	18	16	75	70	47	75	42	69	27	164	40
9	22	21	33	104	66	46	106	47	62	27	85	30
10	22	20	31	246	61	46	103	73	57	26	95	27
11	22	18	24	245	61	44	84	61	52	25	44	25
12	21	18	23	179	59	46	76	58	47	24	36	24
13	21	18	23	125	72	44	74	82	44	23	34	23
14	21	18	26	99	95	43	73	60	42	23	32	22
15	20	18	24	93	76	42	69	52	41	22	30	21
16	21	18	26	90	69	52	62	48	40	21	29	20
17	20	18	45	84	84	89	58	45	41	21	28	20
18	20	18	33	76	72	66	56	54	38	20	27	19
19	19	18	29	75	67	60	53	49	35	20	26	19
20	19	18	33	71	65	55	52	44	34	21	25	18
21	19	17	516	78	58	274	50	42	35	19	24	18
22	19	17	190	89	69	210	48	41	40	19	24	18
23	18	17	104	77	80	124	55	41	44	18	24	17
24	18	17	81	70	64	101	53	70	39	18	23	17
25	18	17	71	84	63	83	49	136	36	18	22	17
26	18	17	67	83	60	75	47	59	35	18	21	16
27	18	17	69	84	56	70	45	51	34	17	21	16
28	17	17	61	77	55	65	44	52	36	17	21	17
29	22	17	56	85	------	64	43	50	37	16	20	18
30	21	16	56	75	------	153	43	85	35	17	20	16
31	19	------	60	70	------	290	------	64	------	15	19	------
TOTAL	664	536	1,810	3,261	1,855	2,546	2,175	1,744	2,404	705	1,580	684
MEAN	21.4	17.9	58.4	105	66.3	82.1	72.5	56.3	80.1	22.7	51.0	22.8
MAX	45	21	516	246	95	290	158	136	503	34	595	41
MIN	17	16	16	70	55	42	43	40	34	15	14	16
CFSM	.49	.41	1.33	2.39	1.51	1.87	1.65	1.28	1.82	.52	1.16	.52
IN.	.56	.45	1.53	2.76	1.57	2.16	1.84	1.48	2.04	.60	1.34	.58

CAL YR 1973 TOTAL 19,865 MEAN 54.4 MAX 602 MIN 16 CFSM 1.24 IN 16.83
WTR YR 1974 TOTAL 19,964 MEAN 54.7 MAX 595 MIN 14 CFSM 1.25 IN 16.92

PEAK DISCHARGE (BASE, 450 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-21	1300	6.34	904	3-30	2400	4.94	487
1-10	1900	5.08	529	6-02	2100	6.78	1,110
3-21	1700	5.55	672	8-07	1400	7.48	1,390

01489000 Faulkner Branch at Federalsburg, Md.

LOCATION.--Lat 38°42'44", long 75°47'34", Caroline County, on right bank 25 ft (8 m) downstream from highway bridge on Nichols Road, 1.6 miles (2.6 km) northwest of Federalsburg, and 0.9 mile (1.4 km) upstream from mouth.

DRAINAGE AREA.--7.10 sq mi (18.39 sq km).

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 16.70 ft (5.090 m) above mean sea level.

AVERAGE DISCHARGE.--24 years, 8.67 cfs (0.246 cu m/s), 16.58 in/yr (421 mm/yr).

EXTREMES.--Current year: Maximum discharge, 130 cfs (3.68 cu m/s) Mar. 21, gage height, 2.84 ft (0.866 m); minimum, 0.85 cfs (0.024 cu m/s) July 29, Aug. 1, 2.
Period of record: Maximum discharge, 792 cfs (22.4 cu m/s) Aug. 25, 1967, gage height, 5.03 ft (1.533 m), from rating curve extended above 210 cfs (5.95 cu m/s) on basis of slope-area measurement at gage height 4.10 ft (1.250 m); no flow at times during many years (result of pumpage for irrigation).

REMARKS.--Records good. Diversion for irrigation of about 100 acres (40.5 ha) above station during some years.

REVISIONS (WATER YEARS).--WSP 1552: 1952.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	2.8	2.3	31	11	7.9	22	4.9	4.1	4.2	1.0	1.5
2	6.0	2.7	2.3	20	10	7.8	18	4.5	18	3.6	1.0	1.4
3	8.1	2.6	2.3	18	10	7.7	15	12	25	3.2	1.3	1.7
4	4.2	2.5	2.3	24	9.8	7.6	15	7.9	13	2.9	1.1	3.5
5	3.5	3.4	2.4	20	9.0	7.4	15	6.2	9.4	2.7	1.2	2.1
6	3.0	3.3	2.4	17	9.0	7.0	16	6.0	7.8	2.7	1.1	2.2
7	2.9	3.0	2.2	16	13	7.0	13	5.8	7.1	2.6	32	5.6
8	2.8	2.9	2.2	14	12	6.6	12	5.1	7.1	2.4	12	3.3
9	2.8	4.0	8.8	22	10	6.4	18	6.1	6.4	2.3	6.2	2.5
10	2.7	2.9	5.7	23	9.4	6.3	17	7.6	5.7	2.2	12	2.2
11	2.6	2.7	4.5	22	9.4	5.8	13	6.2	5.0	2.3	5.7	2.0
12	2.5	2.7	4.0	21	9.4	6.9	12	7.8	4.5	1.9	4.4	1.9
13	2.5	2.7	4.1	16	12	6.5	12	11	4.2	1.9	3.9	1.8
14	2.3	2.7	4.9	14	14	6.0	12	7.3	4.0	1.8	3.5	1.7
15	2.2	2.7	4.3	14	12	5.7	11	6.2	3.9	1.7	3.0	1.6
16	2.2	2.5	5.0	14	11	11	9.5	5.4	4.6	1.8	2.8	1.5
17	2.1	2.3	8.3	13	14	17	8.7	5.0	5.5	1.6	2.6	1.5
18	2.1	2.5	6.1	11	11	11	8.3	4.8	4.1	1.5	2.5	1.4
19	2.0	2.5	5.5	11	11	9.7	7.9	4.6	3.6	1.5	2.3	1.3
20	2.1	2.4	9.6	11	10	9.1	7.3	4.2	3.4	1.4	2.2	1.3
21	2.2	2.4	58	13	8.8	48	7.0	4.0	3.4	1.3	2.0	1.3
22	2.1	2.5	29	15	12	36	6.9	3.8	4.2	1.3	2.1	1.3
23	2.2	2.5	19	14	12	20	8.4	4.2	5.5	1.3	2.3	1.2
24	2.2	2.5	16	12	9.8	17	7.3	4.0	4.7	1.4	2.0	1.2
25	2.1	2.5	14	14	9.9	14	6.5	3.6	4.1	1.5	1.9	1.2
26	2.1	2.5	14	14	8.8	13	6.1	3.3	3.6	1.4	2.0	1.1
27	2.0	2.5	13	14	8.2	12	5.8	3.8	3.3	1.5	2.4	1.1
28	2.0	2.6	12	13	8.1	11	5.6	3.8	5.6	1.3	2.1	1.8
29	5.4	2.6	11	14	------	11	5.4	3.5	5.1	1.1	1.8	2.7
30	3.9	2.4	11	13	------	20	5.2	7.1	4.3	1.6	1.6	1.5
31	3.2	------	13	12	------	35	------	4.5	------	1.2	1.6	------
TOTAL	90.0	80.8	299.2	500	294.6	397.4	326.9	174.2	190.2	61.1	123.6	56.4
MEAN	2.90	2.69	9.65	16.1	10.5	12.8	10.9	5.62	6.34	1.97	3.99	1.88
MAX	8.1	4.0	58	31	14	48	22	12	25	4.2	32	5.6
MIN	2.0	2.3	2.2	11	8.1	5.7	5.2	3.3	3.3	1.1	1.0	1.1
CFSM	.41	.38	1.36	2.27	1.48	1.80	1.54	.79	.89	.28	.56	.26
IN.	.47	.42	1.57	2.62	1.54	2.08	1.71	.91	1.00	.32	.65	.30

CAL YR 1973 TOTAL 2,809.10 MEAN 7.70 MAX 89 MIN .05 CFSM 1.08 IN 14.72
WTR YR 1974 TOTAL 2,594.40 MEAN 7.11 MAX 58 MIN 1.0 CFSM 1.00 IN 13.59

PEAK DISCHARGE (BASE, 60 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-21	1430	2.82	94	8-07	1730	2.23	68
3-21	1900	2.84	130				

01490000 Chicamacomico River near Salem, Md.

LOCATION.--Lat 38°30'43", long 75°52'51", Dorchester County, on left bank 30 ft (9 m) downstream from Big Mill Pond dam, 1.6 miles (2.6 km) east of Salem, 3.5 miles (5.6 km) northwest of Vienna, and 13 miles (21 km) upstream from mouth.

DRAINAGE AREA.--15.0 sq mi (38.8 sq km).

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

GAGE.--Water-stage recorder. Altitude of gage is 10 ft (3.05 m), from topographic map.

AVERAGE DISCHARGE.--23 years, 18.1 cfs (0.51 cu m/s), 16.39 in/yr (416 mm/yr).

EXTREMES.--Current year: Maximum discharge, 168 cfs (4.76 cu m/s) Dec. 21, gage height, 3.48 ft (1.061 m); minimum daily, 4.2 cfs (0.119 cu m/s) Sept. 2.
Period of record: Maximum discharge, 542 cfs (15.3 cu m/s) Aug. 3, 1973, gage height, 4.48 ft (1.366 m); minimum daily, 0.5 cfs (0.014 cu m/s) June 11, 1965.

REMARKS.--Records fair. Occasional regulation by Big Mill Pond.

REVISIONS (WATER YEARS).--WSP 1332: 1952.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	13	12	52	22	17	50	11	16	8.9	4.9	4.3
2	13	12	11	40	21	17	35	11	27	7.8	5.0	4.2
3	22	11	11	30	21	17	28	34	72	7.1	5.6	6.5
4	15	11	11	48	21	17	28	29	43	6.6	5.6	16
5	12	13	12	45	19	17	29	18	25	6.4	5.2	9.1
6	12	15	12	33	19	16	27	16	17	6.4	4.6	7.1
7	11	12	11	28	26	16	21	15	14	6.3	17	14
8	11	12	12	25	25	16	22	13	14	5.9	16	12
9	11	15	22	31	23	15	36	13	13	5.6	13	8.4
10	11	14	17	42	21	15	35	14	13	5.8	23	7.2
11	11	12	14	39	21	14	26	13	11	8.0	12	6.6
12	11	12	13	34	21	18	22	14	10	6.6	8.8	6.4
13	11	12	13	27	23	19	22	26	11	6.1	7.8	6.3
14	11	12	16	23	23	15	22	16	10	5.8	7.5	5.8
15	9.7	12	14	23	20	13	20	14	10	5.6	7.6	5.3
16	9.5	13	15	23	20	20	17	12	11	5.8	6.5	5.4
17	9.0	12	20	22	27	44	16	10	12	5.4	6.2	5.3
18	8.9	12	17	20	24	28	15	10	10	5.3	5.9	5.3
19	9.0	13	15	20	22	22	15	9.9	9.4	5.4	5.6	5.3
20	8.9	13	18	19	22	22	14	9.8	9.3	5.3	5.5	5.4
21	8.9	12	112	24	19	37	14	9.5	10	5.1	5.3	5.7
22	8.5	13	99	34	21	68	14	9.5	20	5.1	5.4	5.3
23	8.5	13	45	29	27	42	19	9.8	11	5.1	5.6	4.6
24	8.6	13	32	26	21	31	17	9.8	11	5.4	5.6	4.6
25	8.6	13	26	27	20	24	14	9.0	10	5.4	5.2	4.6
26	8.6	13	24	28	19	21	13	7.8	10	5.4	5.6	4.6
27	9.0	12	23	30	17	20	13	9.0	10	5.6	10	4.6
28	8.9	13	21	28	17	18	13	9.8	12	5.6	7.1	5.9
29	16	14	19	30	------	18	12	9.9	12	5.4	5.5	11
30	17	12	19	26	------	32	12	35	10	5.8	4.9	7.7
31	14	------	22	24	------	64	------	24	------	5.3	4.5	------
TOTAL	345.6	379	728	930	602	753	641	451.8	473.7	185.3	238.0	204.5
MEAN	11.1	12.6	23.5	30.0	21.5	24.3	21.4	14.6	15.8	5.98	7.68	6.82
MAX	22	15	112	52	27	68	50	35	72	8.9	23	16
MIN	8.5	11	11	19	17	13	12	7.8	9.3	5.1	4.5	4.2
CFSM	.74	.84	1.57	2.00	1.43	1.62	1.43	.97	1.05	.40	.51	.45
IN.	.86	.94	1.81	2.31	1.49	1.87	1.59	1.12	1.17	.46	.59	.51

CAL YR 1973 TOTAL 9,420.2 MEAN 25.8 MAX 447 MIN 4.1 CFSM 1.72 IN 23.36
WTR YR 1974 TOTAL 5,931.9 MEAN 16.3 MAX 112 MIN 4.2 CFSM 1.09 IN 14.71

01491000 Choptank River near Greensboro, Md.

LOCATION.--Lat 38°59'50", long 75°47'09", Caroline County, on left bank at highway bridge, 0.1 mile (0.2 km) upstream from Gravelly Branch, 2 miles (3 km) northeast of Greensboro, and 60 miles (97 km) upstream from mouth.

DRAINAGE AREA.--113 sq mi (293 sq km).

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 3.51 ft (1.070 m) above mean sea level.

AVERAGE DISCHARGE.--26 years, 128 cfs (3.625 cu m/s), 15.38 in/yr (391 mm/yr).

EXTREMES.--Current year: Maximum discharge, 944 cfs (26.7 cu m/s) Apr. 1, gage height, 6.28 ft (1.914 m); minimum, 13 cfs (0.37 cu m/s) Aug. 1, gage height, 1.91 ft (0.582 m); minimum daily, 15 cfs (0.42 cu m/s) Aug. 1.
Period of record: Maximum discharge, 6,970 cfs (197 cu m/s) Aug. 4, 1967, gage height, 14.47 ft (4.410 m), from rating curve extended above 3,600 cfs (102 cu m/s); minimum, 1.2 cfs (0.034 cu m/s) Aug. 29, 1966.

REMARKS.--Records good. Slight diurnal fluctuation at low flow caused by mill above station. Water-quality records for the current water year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1622: 1948.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	28	26	179	170	114	859	74	107	131	15	27
2	31	26	26	311	151	111	584	65	186	94	17	32
3	72	25	26	270	144	110	380	90	614	76	23	35
4	50	24	26	237	145	110	301	119	764	63	32	128
5	36	26	26	292	139	107	257	118	433	51	40	180
6	30	29	28	259	126	104	249	97	258	132	33	137
7	28	25	26	203	134	104	228	88	174	149	47	124
8	28	25	26	177	167	106	194	80	137	102	67	160
9	26	32	48	170	166	107	266	78	120	71	65	167
10	25	33	77	235	166	108	448	101	104	57	88	111
11	24	30	83	403	151	108	378	129	88	51	93	77
12	24	29	60	535	141	105	262	120	76	44	58	64
13	22	28	49	463	146	101	209	120	66	38	43	55
14	22	28	59	299	185	98	205	126	59	36	39	51
15	21	28	62	213	224	91	214	104	54	36	36	53
16	22	28	62	182	198	101	191	83	60	35	33	49
17	22	27	66	175	183	213	162	71	113	33	31	44
18	21	27	67	164	191	362	139	79	159	30	33	42
19	21	27	65	151	180	293	125	438	117	29	31	38
20	20	26	58	141	162	217	115	415	79	30	28	34
21	19	30	280	143	150	229	106	263	65	27	26	34
22	19	38	646	177	137	474	100	176	61	25	23	34
23	19	31	475	209	138	518	121	133	69	22	23	33
24	19	23	276	188	141	349	147	119	77	21	24	31
25	20	23	195	176	132	250	142	134	78	23	30	30
26	19	24	161	191	128	197	118	206	72	22	26	35
27	20	22	151	205	124	168	102	192	68	24	24	27
28	20	24	151	193	119	150	91	146	77	21	25	26
29	29	29	142	211	------	139	86	121	105	21	24	32
30	39	27	129	218	------	178	81	113	149	21	23	31
31	30	------	125	194	------	599	------	104	------	20	25	------
TOTAL	823	822	3,697	7,164	4,338	6,021	6,860	4,302	4,589	1,535	1,125	1,921
MEAN	26.5	27.4	119	231	155	194	229	139	153	49.5	36.3	64.0
MAX	72	38	646	535	224	599	859	438	764	149	93	180
MIN	19	22	26	141	119	91	81	65	54	20	15	26
CFSM	.23	.24	1.05	2.04	1.37	1.72	2.03	1.23	1.35	.44	.32	.57
IN.	.27	.27	1.22	2.36	1.43	1.98	2.26	1.42	1.51	.51	.37	.63

CAL YR 1973 TOTAL 50,368 MEAN 138 MAX 2,320 MIN 14 CFSM 1.22 IN 16.58
WTR YR 1974 TOTAL 43,197 MEAN 118 MAX 859 MIN 15 CFSM 1.04 IN 14.22

PEAK DISCHARGE (BASE, 1,000 CFS).--No peak above base.

01492000 Beaverdam Branch at Matthews, Md.

LOCATION.--Lat 38°48'41", long 75°58'15", Talbot County, on left bank 50 ft (15 m) upstream from bridge on State Highway 328, 1 mile (2 km) west of Matthews, 6 miles (10 km) northeast of Easton, and 1.2 miles (1.9 km) upstream from mouth.

DRAINAGE AREA.--5.85 sq mi (15.15 sq km).

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 2.33 ft (0.710 m) above mean sea level.

AVERAGE DISCHARGE.--24 years, 6.67 cfs (0.189 cu m/s), 15.48 in/yr (393 mm/yr).

EXTREMES.--Current year: Maximum discharge, 150 cfs (4.25 cu m/s) Dec. 21, gage height, 3.03 ft (0.924 m); minimum, 0.14 cfs (0.004 cu m/s) July 20, 21, 22, 23, 29, 30, Aug. 1, 2, gage height, 1.09 ft (0.332 m).
Period of record: Maximum discharge, 2,200 cfs (62.3 cu m/s) Sept. 12, 1960, gage height, 10.24 ft (3.121 m), from high-water mark in gage shelter, from rating curve extended above 440 cfs (12.5 cu m/s) on basis of contracted-opening measurement at gage height 7.15 ft (2.179 m); no flow at times during many years.

REMARKS.--Records good.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.30	.79	.89	24	5.2	4.3	12	1.9	2.3	1.7	.18	.39
2	8.1	.76	.79	6.5	5.1	4.5	10	1.7	54	1.2	.21	1.3
3	3.8	.70	.77	7.1	5.6	4.5	8.1	14	39	.88	.70	17
4	1.0	.60	.77	14	5.7	4.2	8.1	5.0	6.6	.72	11	54
5	.61	1.1	.91	7.1	4.5	3.9	9.1	2.9	3.7	.60	2.1	4.4
6	.37	1.1	1.5	5.6	4.6	3.6	8.1	2.9	2.6	3.9	.60	3.0
7	.38	.76	1.0	5.0	11	3.9	5.8	3.6	2.3	1.2	15	42
8	.39	.66	.89	4.2	6.8	3.7	6.5	2.5	3.0	.76	2.2	7.5
9	.40	2.4	23	11	6.4	3.6	44	9.0	2.5	.60	29	3.4
10	.40	1.4	5.7	43	6.1	3.6	14	13	1.9	.88	31	2.4
11	.38	.92	2.8	29	6.1	3.2	7.6	5.6	1.5	.79	2.8	2.1
12	.35	.86	2.2	15	6.9	5.4	6.9	9.6	1.3	.40	1.4	1.8
13	.38	.87	3.4	7.6	11	4.1	7.2	13	1.2	.31	1.1	1.4
14	.35	.78	9.0	6.0	9.7	3.3	7.2	4.2	1.1	.29	1.1	1.2
15	.29	.77	3.4	6.5	6.5	3.0	6.1	2.9	1.1	.26	.82	1.1
16	.35	.76	3.6	6.6	6.1	15	4.8	2.2	1.7	.25	.71	1.0
17	.43	.71	4.6	6.1	9.5	19	4.2	1.9	5.8	.22	.70	.96
18	.42	.68	3.0	5.2	6.1	6.4	4.2	1.9	1.6	.19	.72	.91
19	.35	.73	2.4	5.4	5.9	5.5	3.9	1.9	1.2	.24	.52	.80
20	.38	.75	14	5.0	5.9	5.0	3.6	1.6	1.0	.22	.51	.74
21	.38	.70	107	15	4.7	32	3.4	1.3	2.4	.18	.37	.73
22	.38	.78	12	13	6.1	14	3.3	1.2	2.6	.18	.41	1.1
23	.43	.73	6.1	7.4	5.8	7.3	6.7	2.0	8.4	.19	1.1	.71
24	.44	.72	4.9	6.3	4.5	6.4	4.4	2.0	2.8	.22	.62	.59
25	.44	.78	4.3	11	5.5	5.0	3.5	1.6	1.9	.29	.46	.83
26	.60	.77	4.4	8.2	4.9	4.6	3.1	1.2	1.6	.27	.94	.82
27	.63	.88	4.8	8.6	4.2	4.4	2.7	1.4	1.5	.29	1.3	.57
28	.66	1.1	3.8	7.4	4.2	4.4	2.5	2.0	3.4	.22	.65	.74
29	2.5	1.7	3.2	8.5	------	5.0	2.4	1.6	2.6	.19	.48	1.4
30	1.3	1.0	4.2	6.4	------	37	2.1	5.5	1.5	.47	.40	.67
31	.79	------	6.0	5.8	------	46	------	2.6	------	.24	.36	------
TOTAL	27.98	27.26	245.32	317.5	174.6	275.8	215.5	123.7	164.1	18.35	109.46	155.56
MEAN	.90	.91	7.91	10.2	6.24	8.90	7.18	3.99	5.47	.59	3.53	5.19
MAX	8.1	2.4	107	43	11	46	44	14	54	3.9	31	54
MIN	.29	.60	.77	4.2	4.2	3.0	2.1	1.2	1.0	.18	.18	.39
CFSM	.15	.16	1.35	1.74	1.07	1.52	1.23	.68	.94	.10	.60	.89
IN.	.18	.17	1.56	2.02	1.11	1.75	1.37	.79	1.04	.12	.70	.99

CAL YR 1973 TOTAL 2,127.78 MEAN 5.83 MAX 169 MIN .16 CFSM 1.00 IN 13.53
WTR YR 1974 TOTAL 1,855.13 MEAN 5.08 MAX 107 MIN .18 CFSM .87 IN 11.80

PEAK DISCHARGE (BASE, 120 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-21	0815	3.03	150	6-02	2045	2.81	128

01493000 Unicorn Branch near Millington, Md.

LOCATION.--Lat 39°14'59", long 75°51'40", Kent County, on right bank 20 ft (6 m) upstream from bridge on State Highway 313, 1.4 miles (2.3 km) southwest of Millington, and 0.9 mile (1.4 km) upstream from mouth.

DRAINAGE AREA.--22.3 sq mi (57.8 sq km).

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 3.57 ft (1.088 m) above mean sea level.

AVERAGE DISCHARGE.--26 years, 24.5 cfs (0.694 cu m/s), 14.92 in/yr (379 mm/yr).

EXTREMES.--Current year: Maximum discharge, 168 cfs (4.76 cu m/s) June 3, gage height, 3.67 ft (1.119 m); minimum, 0.85 cfs (0.024 cu m/s) Mar. 1, 2 (result of regulation).
Period of record: Maximum discharge, 1,060 cfs (30.0 cu m/s) Sept. 12, 1960, gage height, 7.17 ft (2.185 m); no flow for part of each day June 13, 14, 1965, caused by regulation at Unicorn Lake Dam.

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

REVISIONS (WATER YEARS).--WSP 1382: 1952(P).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	13	11	26	22	11	89	20	24	18	10	11
2	15	12	11	36	22	1.2	50	20	45	17	9.6	16
3	20	11	15	30	22	19	40	29	141	16	11	24
4	14	11	17	36	22	21	38	29	61	15	12	45
5	12	12	17	41	22	21	42	24	32	14	34	20
6	11	12	17	32	24	21	39	22	25	15	12	16
7	12	11	12	29	26	22	32	21	22	15	21	30
8	11	11	5.8	32	27	22	31	20	22	14	19	24
9	11	15	9.8	22	27	23	89	22	21	13	52	17
10	11	13	27	33	27	23	83	26	20	13	55	15
11	11	12	22	52	26	22	46	23	18	14	19	15
12	11	11	18	82	26	22	35	24	17	13	15	14
13	11	11	18	48	26	21	37	28	16	13	14	14
14	11	11	22	36	27	21	45	24	16	12	14	17
15	11	11	16	28	29	20	37	21	16	13	14	14
16	11	10	14	35	32	24	31	20	17	12	13	13
17	11	10	21	21	31	54	28	19	20	12	12	13
18	11	11	18	28	31	39	27	94	17	11	12	13
19	11	11	4.6	32	31	29	26	111	16	10	12	12
20	11	11	9.7	26	30	26	25	44	15	11	12	12
21	11	11	89	32	26	35	24	29	19	11	12	12
22	11	11	88	36	23	76	24	25	18	11	12	12
23	11	11	35	36	23	42	30	25	20	11	12	12
24	11	11	28	26	23	32	30	31	20	10	12	12
25	11	11	22	28	23	27	26	59	17	11	11	12
26	11	11	27	38	24	25	24	39	17	12	11	12
27	10	11	28	28	23	23	23	28	17	11	11	12
28	11	12	21	34	23	23	23	27	23	11	11	21
29	23	12	23	37	------	23	22	27	27	11	12	22
30	20	11	26	31	------	40	21	30	20	12	11	13
31	14	------	19	27	------	134	------	27	------	11	12	------
TOTAL	383	342	711.9	1,058	718	942.2	1,117	988	779	393	499.6	495
MEAN	12.4	11.4	23.0	34.1	25.6	30.4	37.2	31.9	26.0	12.7	16.1	16.5
MAX	23	15	89	82	32	134	89	111	141	18	55	45
MIN	10	10	4.6	21	22	1.2	21	19	15	10	9.6	11
CFSM	.56	.51	1.03	1.53	1.15	1.36	1.67	1.43	1.17	.57	.72	.74
IN.	.64	.57	1.19	1.76	1.20	1.57	1.86	1.65	1.30	.66	.83	.83

CAL YR 1973 TOTAL 10,485.8 MEAN 28.7 MAX 398 MIN 4.6 CFSM 1.29 IN 17.49
WTR YR 1974 TOTAL 8,426.7 MEAN 23.1 MAX 141 MIN 1.2 CFSM 1.04 IN 14.06

PEAK DISCHARGE (BASE, 180 CFS).--No peak above base.

01493500 Morgan Creek near Kennedyville, Md.

LOCATION.--Lat 39°16'48", long 76°00'54", Kent County, on right bank 200 ft (61 m) upstream from highway bridge, 2 miles (3 km) southwest of Kennedyville, and 4.5 miles (7.2 km) upstream from mouth.

DRAINAGE AREA.--10.5 sq mi (27.2 sq km).

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 15 ft (4.6 m), from topographic map.

AVERAGE DISCHARGE.--23 years, 10.4 cfs (0.295 cu m/s), 13.45 in/yr (342 mm/yr).

EXTREMES.--Current year: Maximum discharge, 466 cfs (13.2 cu m/s) Sept. 29, gage height, 5.63 ft (1.716 m); minimum, 3.8 cfs (0.11 cu m/s) July 20, 21, gage height, 1.35 ft (0.411 m).
Period of record: Maximum discharge, 7,500 cfs (212 cu m/s) June 22, 1972, gage height, 13.07 ft (3.984 m), from rating curve extended above 590 cfs (16.7 cu m/s) on basis of Type IV culvert and flow-over-road measurement of peak flow; minimum, 0.60 cfs (0.017 cu m/s) Aug. 28, 29, 1966.

REMARKS.--Records good except those for periods of no gage-height record, which are fair. Water-quality records for the current water year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1552: 1952, 1953(P), 1954(M), 1955, 1956-57(M). WRD Md. and Del. 1970: 1969.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.7	9.1	7.1	23	7.0	8.5	18	6.8	8.3	6.8	4.3	14
2	62	7.3	7.1	12	6.6	8.9	13	6.2	54	5.9	4.3	19
3	75	7.1	7.3	13	8.8	8.8	11	17	41	5.4	4.4	19
4	12	7.0	7.6	29	9.0	8.7	17	11	10	5.2	4.3	33
5	7.5	9.1	15	15	7.0	8.1	23	7.6	7.8	5.3	6.0	11
6	6.3	8.9	20	12	7.0	8.3	21	8.0	7.0	6.2	4.6	7.6
7	6.5	7.2	8.8	12	15	9.1	11	7.7	6.8	5.5	10	28
8	7.1	7.3	7.7	9.7	10	9.6	13	7.1	7.4	4.9	7.8	15
9	6.9	13	57	17	9.4	10	77	11	7.3	4.7	14	7.2
10	7.0	9.3	31	25	9.0	9.2	22	15	6.6	4.7	12	6.4
11	6.6	7.6	10	31	9.0	7.8	12	9.0	5.9	7.6	6.3	6.0
12	6.6	7.8	7.9	22	10	9.3	10	13	9.2	4.9	5.6	6.0
13	6.6	7.7	9.8	11	15	7.9	17	19	6.4	4.9	5.6	5.5
14	6.5	7.8	22	10	13	7.6	15	8.5	6.1	4.9	5.8	11
15	6.0	7.6	11	11	9.1	7.5	11	7.4	6.0	4.5	5.7	7.0
16	6.3	7.6	8.5	11	8.8	16	9.1	6.7	7.3	4.9	5.1	5.7
17	6.1	6.7	10	10	12	25	8.5	6.4	19	4.5	5.2	5.5
18	6.1	7.1	9.7	9.0	8.7	9.7	8.5	18	8.0	4.5	5.1	5.4
19	6.6	7.6	7.5	10	9.1	9.0	8.5	13	6.1	4.5	4.8	5.3
20	6.6	7.4	20	9.0	9.1	8.5	8.5	7.5	5.8	4.1	5.1	5.2
21	6.6	7.5	256	20	7.9	45	8.5	6.8	7.4	4.0	4.9	5.4
22	6.6	7.7	52	19	9.2	36	8.5	6.5	9.0	4.3	5.0	5.8
23	7.1	7.6	20	11	9.2	11	15	10	10	4.4	5.8	5.1
24	7.1	7.7	12	10	7.8	10	9.7	29	10	5.1	5.2	4.8
25	7.1	8.1	11	17	9.8	8.2	8.5	56	6.9	5.2	4.8	5.1
26	7.0	7.7	14	11	8.6	8.4	8.0	11	6.7	5.0	4.8	5.3
27	6.8	7.7	21	12	8.3	8.4	7.7	12	6.9	5.0	4.9	5.0
28	6.3	9.1	13	10	8.7	8.4	7.6	20	15	4.7	5.7	46
29	40	9.6	11	12	------	11	7.5	11	14	4.5	12	200
30	34	7.3	11	9.0	------	66	7.2	14	7.2	6.6	6.9	35
31	12	------	12	8.6	------	96	------	8.6	------	4.7	12	------
TOTAL	402.6	240.2	718.0	441.3	262.1	505.9	422.3	390.8	329.1	157.4	198.0	540.3
MEAN	13.0	8.01	23.2	14.2	9.36	16.3	14.1	12.6	11.0	5.08	6.39	18.0
MAX	75	13	256	31	15	96	77	56	54	7.6	14	200
MIN	6.0	6.7	7.1	8.6	6.6	7.5	7.2	6.2	5.8	4.0	4.3	4.8
CFSM	1.24	.76	2.21	1.35	.89	1.55	1.34	1.20	1.05	.48	.61	1.71
IN.	1.43	.85	2.54	1.56	.93	1.79	1.50	1.38	1.17	.56	.70	1.91

CAL YR 1973 TOTAL 6,641.4 MEAN 18.2 MAX 383 MIN 5.2 CFSM 1.73 IN 23.53
WTR YR 1974 TOTAL 4,608.0 MEAN 12.6 MAX 256 MIN 4.0 CFSM 1.20 IN 16.33

PEAK DISCHARGE (BASE, 200 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-02	2145	4.15	205	3-30	2145	4.20	210
*12-21	/	≠5.48	436	9-29	0045	5.63	466

* Probably.
/ Unknown.
≠ From recorded range in stage.
NOTE.--No gage-height record Dec. 19-22, Jan. 13 to Feb. 15.

01495000 Big Elk Creek at Elk Mills, Md.

LOCATION.--Lat 39°39'26", long 75°49'20", Cecil County, on right bank 100 ft (30 m) downstream from highway bridge at Elk Mills, 3.5 miles (5.6 km) north of Elkton, and 7 miles (11 km) upstream from confluence with Little Elk Creek.

DRAINAGE AREA.--52.6 sq mi (136.2 sq km).

PERIOD OF RECORD.--April 1932 to current year. Monthly discharge only for some periods, published in WSP 1302.

GAGE.--Water-stage recorder. Datum of gage is 68.5 ft (20.88 m) above mean sea level. Apr. 10, 1932 to May 16, 1946, nonrecording gage at bridge 100 ft (30 m) upstream at same datum.

AVERAGE DISCHARGE.--42 years, 68.4 cfs (1.937 cu m/s), 17.66 in/yr (449 mm/yr).

EXTREMES.--Current year: Maximum discharge, 2,040 cfs (57.8 cu m/s) Dec. 21, gage height, 6.80 ft (2.073 m), from rating curve extended above 500 cfs (14.2 cu m/s) on basis of slope-area measurement at gage height 13.46 ft (4.103 m); minimum, 24 cfs (0.68 cu m/s) Aug. 15, 16, 17; minimum daily, 24 cfs (0.68 cu m/s) Aug. 16.

Period of record: Maximum discharge, 10,600 cfs (300 cu m/s) July 5, 1937, gage height, 14.5 ft (4.42 m), from floodmarks, from rating curve extended above 1,700 cfs (48.1 cu m/s) on basis of velocity-area and conveyance studies; minimum, 4.5 cfs (0.13 cu m/s) Jan. 21, 1955 (result of freezeup); minimum daily, 4.8 cfs (0.14 cu m/s) Sept. 8-10, 1966; minimum gage height observed, 2.09 ft (0.637 m) Sept. 19, 22-24, 1932.

Maximum stage known, about 19 ft (5.8 m) in June 1884, from information by local residents.

REMARKS.--Records good. Slight diurnal fluctuation caused by mills above station.

REVISIONS (WATER YEARS).--WSP 1432: 1932-33, 1934(M), 1935, 1936(M), 1938, 1939-40(M), 1942(M), 1943-51, 1952-53(P).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	39	27	98	68	80	122	61	67	49	31	29
2	39	36	25	72	71	69	106	57	67	44	33	34
3	47	33	25	71	80	68	95	88	66	39	79	46
4	36	31	25	155	68	65	127	73	54	38	99	99
5	33	36	182	84	64	61	136	63	50	84	104	40
6	31	33	159	72	68	58	123	65	47	96	38	36
7	30	31	57	68	73	60	86	69	46	46	38	171
8	31	32	45	64	79	57	98	61	50	39	35	66
9	31	33	241	67	73	60	400	64	49	36	35	47
10	31	30	162	72	68	72	134	89	46	35	33	41
11	30	29	68	215	75	59	101	67	41	34	29	39
12	30	30	50	162	68	57	92	188	40	32	27	38
13	30	30	57	84	71	53	207	226	40	31	26	92
14	29	30	144	75	82	52	141	86	38	31	27	74
15	28	30	62	72	67	52	105	74	38	31	26	50
16	28	29	53	75	62	73	89	67	44	35	24	40
17	27	27	60	89	64	101	83	63	55	30	198	37
18	27	27	62	75	60	62	80	68	40	30	201	36
19	28	29	75	68	67	60	78	60	37	31	48	34
20	28	28	85	71	97	57	77	56	36	31	37	34
21	28	27	1,200	229	68	175	74	54	51	30	33	34
22	27	29	153	142	74	117	73	54	78	28	32	52
23	29	27	92	98	79	74	91	154	189	28	48	35
24	28	27	76	86	62	69	79	111	98	55	35	32
25	28	29	66	83	68	61	71	79	53	41	53	32
26	28	30	294	77	65	60	69	62	52	35	35	32
27	28	30	264	92	63	59	67	60	46	34	40	30
28	27	46	97	82	69	57	66	63	77	33	33	154
29	169	58	79	79	------	59	65	58	104	34	32	241
30	99	31	74	73	------	249	63	58	55	101	30	58
31	39	------	71	71	------	361	------	55	------	40	30	------
TOTAL	1,157	957	4,130	2,921	1,973	2,617	3,198	2,453	1,754	1,281	1,569	1,783
MEAN	37.3	31.9	133	94.2	70.5	84.4	107	79.1	58.5	41.3	50.6	59.4
MAX	169	58	1,200	229	97	361	400	226	189	101	201	241
MIN	27	27	25	64	60	52	63	54	36	28	24	29
CFSM	.71	.61	2.53	1.79	1.34	1.60	2.03	1.50	1.11	.79	.96	1.13
IN.	.82	.68	2.92	2.07	1.40	1.85	2.26	1.73	1.24	.91	1.11	1.26

CAL YR 1973 TOTAL 34,402 MEAN 94.3 MAX 1,200 MIN 25 CFSM 1.79 IN 24.33
WTR YR 1974 TOTAL 25,793 MEAN 70.7 MAX 1,200 MIN 24 CFSM 1.34 IN 18.24

PEAK DISCHARGE (BASE, 1,700 CFS).--Dec. 21 (0415) 2,040 cfs (6.80 ft).

01496000 Northeast Creek at Leslie, Md.

LOCATION.--Lat 39°37'38", long 75°56'40", Cecil County, on left bank at downstream side of highway bridge, 0.7 mile (1.1 km) northeast of Leslie, 1.5 miles (2.4 km) southeast of Bay View, and 1.7 miles (2.7 km) upstream from confluence with Little Northeast Creek.

DRAINAGE AREA.--24.3 sq mi (62.9 sq km).

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 115.0 ft (35.05 m) above mean sea level.

AVERAGE DISCHARGE.--26 years, 34.3 cfs (0.971 cu m/s), 19.17 in/yr (487 mm/yr).

EXTREMES.--Current year: Maximum discharge, 2,120 cfs (60.0 cu m/s) Dec. 21, gage height, 5.77 ft (1.759 m); minimum, 7.2 cfs (0.204 cu m/s) Oct. 15, 16, 23, 28, 29; minimum daily, 7.6 cfs (0.215 cu m/s) Oct. 28.
Period of record: Maximum discharge, 4,800 cfs (136 cu m/s) June 22, 1972, gage height, 8.41 ft (2.563 m), from rating curve extended above 2,300 cfs (65.1 cu m/s), on basis of contracted-opening measurement at gage height 7.74 ft (2.359 m); minimum, 1.2 cfs (0.034 cu m/s) Sept. 8, 9, 10, 11, 12, 13, 14, 1966; minimum daily, 1.2 cfs (0.034 cu m/s) Sept. 9, 10, 12, 13, 1966.

REMARKS.--Records good. Slight diurnal fluctuation at low flow caused by powerplant above station.

REVISIONS (WATER YEARS).--WSP 1232: 1949-51.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	22	14	59	28	36	58	20	35	18	12	11
2	13	18	13	36	29	30	43	18	37	16	12	13
3	22	16	13	33	40	30	39	30	38	14	18	19
4	14	14	13	116	29	28	66	25	24	13	76	32
5	12	15	184	46	25	26	93	21	21	70	142	16
6	10	17	170	34	26	24	69	22	19	54	19	14
7	9.9	14	31	32	30	26	36	26	18	19	17	177
8	9.9	13	23	30	35	25	43	21	20	15	16	31
9	10	14	212	29	32	23	355	26	19	14	14	20
10	9.8	14	100	34	31	28	65	42	18	13	14	17
11	9.2	13	33	195	28	23	40	26	16	12	12	15
12	9.4	13	25	165	28	22	35	89	15	11	11	15
13	9.5	13	32	45	31	20	148	206	14	11	11	82
14	8.9	14	133	35	44	19	78	35	14	11	11	44
15	8.4	14	37	33	30	19	45	26	14	11	10	22
16	8.2	13	28	39	25	29	33	23	16	18	9.5	17
17	7.9	12	30	55	27	52	30	21	24	11	77	15
18	8.0	12	29	38	26	25	29	27	16	11	169	15
19	8.5	12	27	34	32	23	27	22	14	11	19	14
20	8.6	13	80	36	64	22	27	20	13	11	14	13
21	8.5	12	1,270	143	31	127	26	19	15	9.5	12	14
22	8.4	13	136	105	38	69	25	18	23	9.3	12	21
23	8.1	13	48	51	41	32	35	108	23	9.3	29	14
24	8.3	13	38	39	26	29	28	51	25	18	16	12
25	8.3	13	32	38	29	24	24	59	17	15	14	12
26	8.1	15	152	34	29	23	23	25	18	12	12	12
27	8.0	14	259	46	27	23	22	24	16	12	88	11
28	7.6	21	54	40	32	22	22	117	38	11	17	93
29	231	32	36	37	------	23	22	31	42	12	14	277
30	304	17	33	32	------	161	21	27	20	50	12	27
31	29	------	32	30	------	312	------	23	------	15	12	------
TOTAL	840.5	449	3,317	1,719	893	1,375	1,607	1,248	642	537.1	921.5	1,095
MEAN	27.1	15.0	107	55.5	31.9	44.4	53.6	40.3	21.4	17.3	29.7	36.5
MAX	304	32	1,270	195	64	312	355	206	42	70	169	277
MIN	7.6	12	13	29	25	19	21	18	13	9.3	9.5	11
CFSM	1.12	.62	4.40	2.28	1.31	1.83	2.21	1.66	.88	.71	1.22	1.50
IN.	1.29	.69	5.08	2.63	1.37	2.10	2.46	1.91	.98	.82	1.41	1.68

CAL YR 1973 TOTAL 18,772.8 MEAN 51.4 MAX 1,270 MIN 4.8 CFSM 2.12 IN 28.74
WTR YR 1974 TOTAL 14,644.1 MEAN 40.1 MAX 1,270 MIN 7.6 CFSM 1.65 IN 22.42

PEAK DISCHARGE (BASE, 800 CFS).--Dec. 21 (0900) 2,120 cfs (5.77 ft).

01496200 Principio Creek near Principio Furnace, Md.

LOCATION.--Lat 39°37'34", long 76°02'27", Cecil County, on left bank, 55 ft (17 m) downstream from highway bridge on Belvedere Road, 3.5 miles (5.6 km) north of Principio Furnace, and 4.9 miles (7.9 km) upstream from mouth.

DRAINAGE AREA.--9.03 sq mi (23.39 sq km).

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

GAGE.--Water-stage recorder. Altitude of gage is 215 ft (65.5 m), from topographic map.

AVERAGE DISCHARGE.--7 years, 13.1 cfs (0.371 cu m/s), 19.70 in/yr (500 mm/yr).

EXTREMES.--Current year: Maximum discharge, 934 cfs (26.5 cu m/s) Dec. 21, gage height, 6.06 ft (1.847 m), from rating curve extended as explained below; minimum, 2.6 cfs (0.074 cu m/s) July 21.
Period of record: Maximum discharge, 7,060 cfs (200 cu m/s) Aug. 4, 1969, gage height, 9.26 ft (2.822 m), from rating curve extended above 170 cfs (4.81 cu m/s) on basis of slope-area measurements at gage heights 8.89 ft (2.710 m) and 9.26 ft (2.822 m); minimum, 1.6 cfs (0.045 cu m/s) Oct. 4, 5, 1968, July 17, 18, 1969.

REMARKS.--Records good.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.2	6.8	4.2	19	9.9	10	16	8.0	9.3	5.5	3.1	3.6
2	6.3	5.3	4.1	12	11	9.3	15	7.7	12	4.9	3.1	5.0
3	7.6	4.9	4.2	14	11	9.7	12	12	9.6	4.6	3.4	6.5
4	5.2	4.6	4.1	33	10	9.1	19	8.8	7.4	4.4	68	8.6
5	4.7	5.6	66	13	8.9	8.5	29	8.2	6.8	10	11	4.5
6	4.2	5.0	16	12	8.0	8.3	16	9.1	6.3	6.1	4.8	5.0
7	4.2	4.7	7.9	12	11	8.7	12	9.2	6.2	4.5	5.1	54
8	4.5	4.7	6.7	11	11	8.2	19	8.1	6.7	4.0	4.4	8.9
9	4.2	5.0	58	11	10	9.3	89	11	6.3	3.8	4.2	6.8
10	4.1	4.6	13	13	10	9.6	18	10	5.8	3.7	4.2	6.0
11	4.0	4.5	8.9	69	9.5	8.1	14	8.3	5.2	3.6	3.7	5.5
12	4.0	4.7	7.5	27	9.6	7.9	13	51	5.1	3.4	3.5	5.8
13	4.0	4.7	15	13	12	7.4	40	21	4.9	3.3	3.5	29
14	4.0	4.7	28	12	12	7.2	18	11	4.8	3.3	3.5	15
15	3.9	4.7	9.7	12	9.9	7.2	14	9.2	4.8	3.2	3.3	7.7
16	3.9	4.5	8.7	16	9.3	12	12	8.3	6.2	3.2	3.3	6.5
17	3.9	4.3	8.3	14	9.9	13	11	7.7	7.1	3.0	24	6.0
18	4.0	4.5	8.0	12	9.1	8.4	11	10	5.1	3.0	5.8	5.8
19	4.0	4.7	7.7	13	12	8.3	11	8.0	4.7	3.2	4.0	5.2
20	4.1	4.5	80	12	14	7.7	10	7.4	4.5	3.0	3.6	5.2
21	4.0	4.5	317	35	9.7	37	10	7.0	6.1	2.8	3.4	6.0
22	4.0	4.7	20	17	12	13	10	6.8	5.9	2.8	3.4	6.3
23	4.1	4.5	14	13	10	10	13	22	8.8	2.8	24	5.0
24	4.1	4.5	12	12	8.9	9.4	10	10	6.6	5.4	5.2	4.7
25	4.1	4.8	11	12	10	8.4	9.6	9.2	5.5	3.6	4.2	4.7
26	4.2	4.6	64	11	9.5	8.3	9.3	7.4	5.8	3.3	4.2	4.7
27	4.2	4.8	32	14	9.7	7.9	9.0	8.2	5.3	3.3	5.2	4.5
28	4.2	8.0	15	12	10	7.8	8.9	11	10	3.2	4.0	89
29	95	6.9	13	12	------	8.8	8.7	7.9	9.1	3.7	3.9	19
30	13	4.5	12	11	------	91	8.4	7.6	5.8	14	3.6	7.1
31	6.6	------	12	10	------	49	------	7.1	------	3.5	3.6	------
TOTAL	237.5	148.8	888.0	509	287.9	428.5	495.9	338.2	197.7	132.1	234.2	351.6
MEAN	7.66	4.96	28.6	16.4	10.3	13.8	16.5	10.9	6.59	4.26	7.55	11.7
MAX	95	8.0	317	69	14	91	89	51	12	14	68	89
MIN	3.9	4.3	4.1	10	8.0	7.2	8.4	6.8	4.5	2.8	3.1	3.6
CFSM	.85	.55	3.17	1.82	1.14	1.53	1.83	1.21	.73	.47	.84	1.30
IN.	.98	.61	3.66	2.10	1.19	1.77	2.04	1.39	.81	.54	.96	1.45

CAL YR 1973 TOTAL 6,072.9 MEAN 16.6 MAX 317 MIN 2.5 CFSM 1.84 IN 25.02
WTR YR 1974 TOTAL 4,249.4 MEAN 11.6 MAX 317 MIN 2.8 CFSM 1.28 IN 17.51

PEAK DISCHARGE (BASE, 300 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-29	1745	4.50	398	4-09	0300	4.08	300
12-21	0045	6.06	934	8-04	1745	4.58	425
3-30	2000	4.47	398	9-28	1900	5.31	654

01578310 Susquehanna River at Conowingo, Md.

LOCATION.--Lat 39°39'31", long 76°10'28", Harford County, at downstream side of Conowingo Dam, 1 mile (1.6 km) southwest of Conowingo, and 9.9 miles (15.9 km) upstream from mouth.

DRAINAGE AREA.--27,100 sq mi (70,190 sq km).

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

GAGE.--Water-stage recorder. Datum of gage is 5.00 ft (1.524 m) above mean sea level.

EXTREMES.--Current year: Maximum discharge, 235,000 cfs (6,660 cu m/s) Apr. 5, gage height, 22.35 ft (6.812 m); minimum, 798 cfs (22.6 cu m/s) Nov. 17, gage height, 7.28 ft (2.219 m).
Period of record: Maximum discharge, 1,130,000 cfs (32,000 cu m/s) June 24, 1972, gage height, 37.83 ft (11.226 m); minimum, 144 cfs (4.08 cu m/s) Mar. 2, 1969, gage height, 6.28 ft (1.914 m).

REMARKS.--Records good. Flow regulated by Conowingo Reservoir beginning October 1928, usable capacity, 55,070,000,000 gal (208.4 cu hm); dead storage, 45,290,000,000 gal (171.4 cu hm). Records do not include a small infrequent diversion above station to augment municipal supply of city of Baltimore. Records of diversion available from Baltimore Department of Public Works.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23,400	46,800	46,300	113,000	108,000	50,100	85,400	32,300	18,200	37,800	19,000	2,960
2	21,100	59,500	40,700	107,000	86,900	37,500	98,600	28,900	15,600	50,100	18,200	9,640
3	20,500	47,100	43,900	88,000	76,500	34,700	102,000	35,600	29,000	53,100	19,200	31,800
4	21,000	33,800	39,900	82,400	75,400	42,300	148,000	27,700	29,500	54,500	11,500	38,800
5	20,000	45,100	37,900	74,300	67,700	43,000	201,000	26,400	24,700	48,900	26,100	31,400
6	8,760	41,200	45,300	52,500	54,500	50,700	197,000	37,400	22,700	28,900	19,900	44,100
7	10,200	29,900	62,700	53,500	48,700	48,200	159,000	33,100	22,700	23,500	14,000	33,200
8	17,200	32,600	62,300	53,000	43,700	80,100	144,000	29,600	12,900	35,600	16,300	27,000
9	20,500	36,600	55,300	46,900	32,800	71,700	121,000	32,100	6,610	36,300	19,300	32,500
10	21,100	15,000	81,800	43,500	25,100	83,300	112,000	33,600	25,600	32,100	4,630	31,400
11	18,500	10,500	93,600	44,000	35,100	123,000	97,600	27,300	14,200	24,500	1,250	22,400
12	18,300	31,000	112,000	36,000	27,700	127,000	86,200	24,900	12,500	16,700	14,400	22,500
13	7,290	28,100	92,200	28,200	29,400	108,000	85,800	50,800	15,300	14,700	13,200	20,500
14	1,140	25,300	84,400	40,200	36,000	82,500	86,000	66,600	17,100	11,300	13,200	11,300
15	11,100	27,000	66,100	35,600	39,300	75,900	107,000	82,800	7,800	24,600	9,600	9,590
16	15,000	27,200	59,000	34,800	25,100	64,100	106,000	88,300	4,050	15,700	10,300	22,100
17	15,100	14,600	51,500	42,200	20,600	59,500	117,000	81,400	23,900	12,500	4,990	19,600
18	14,400	6,290	50,800	51,200	26,500	48,100	106,000	65,800	24,800	15,800	1,380	19,500
19	14,700	25,700	35,700	44,800	28,800	54,100	87,000	44,500	28,100	18,400	8,170	20,400
20	2,600	21,900	43,900	34,400	29,300	51,900	75,600	45,300	25,500	7,950	10,600	15,400
21	1,030	19,600	71,400	56,300	28,900	47,100	62,300	48,900	28,600	969	9,530	10,900
22	10,100	11,700	128,000	83,700	29,200	51,800	58,800	48,400	13,200	14,300	10,700	1,420
23	14,000	23,100	174,000	102,000	47,400	59,000	60,900	34,000	17,100	11,900	13,900	20,200
24	12,200	7,430	137,000	121,000	56,800	47,100	54,100	38,800	24,600	11,200	3,960	21,800
25	13,100	3,360	109,000	118,000	70,700	56,600	43,000	20,700	19,700	12,600	1,280	22,400
26	19,000	23,700	108,000	114,000	81,000	59,700	41,800	24,600	20,700	20,000	9,830	23,500
27	1,170	26,500	114,000	91,700	74,500	50,900	30,000	25,900	24,500	3,600	8,990	25,000
28	1,160	38,700	145,000	93,300	62,200	47,100	32,000	29,800	20,400	928	9,910	14,300
29	20,700	40,700	190,000	95,400	------	47,300	35,000	31,100	19,200	15,300	9,080	11,600
30	41,800	41,200	178,000	122,000	------	45,400	32,200	27,700	14,900	19,200	10,900	18,600
31	48,900	------	150,000	122,000	------	56,400	------	27,000	------	21,900	6,410	------
TOTAL	485,050	841,180	2,709.7M	2,224.9M	1,367.8M	1,904.1M	2,772.3M	1,251.3M	583,660	694,847	349,710	635,810
MEAN	15,650	28,040	87,410	71,770	48,850	61,420	92,410	40,360	19,460	22,410	11,280	21,190
MAX	48,900	59,500	190,000	122,000	108,000	127,000	201,000	88,300	29,500	54,500	26,100	44,100
MIN	1,030	3,360	35,700	28,200	20,600	34,700	30,000	20,700	4,050	928	1,250	1,420
CFSM	.58	1.03	3.23	2.65	1.80	2.27	3.41	1.49	.72	.83	.42	.78
IN.	.67	1.15	3.72	3.05	1.88	2.61	3.81	1.72	.80	.95	.48	.87

CAL YR 1973 TOTAL 16,504,761 MEAN 45,220 MAX 208,000 MIN 987 CFSM 1.67 IN 22.66
WTR YR 1974 TOTAL 15,820,357 MEAN 43,340 MAX 201,000 MIN 928 CFSM 1.60 IN 21.72

01578500 Octoraro Creek near Rising Sun, Md.

LOCATION.--Lat 39°41'24", long 76°07'43", Cecil County, on right bank at downstream side of Porter Bridge, 300 ft (91 m) downstream from Love Run, 3.5 miles (5.6 km) west of Rising Sun, and 3.5 miles (5.6 km) upstream from mouth.

DRAINAGE AREA.--193 sq mi (500 sq km).

PERIOD OF RECORD.--April 1932 to September 1958, annual maximum, water years 1963-68, December 1968 to current year. Monthly discharge only for some periods, published in WSP 1302.

GAGE.--Water-stage recorder. Datum of gage is 73.77 ft (22.485 m) above mean sea level.

AVERAGE DISCHARGE.--31 years (1932-58, 1969-74), 266 cfs (7.53 cu m/s), 18.72 in/yr (475 mm/yr), adjusted for storage and diversion since October 1951.

EXTREMES.--Current year: Maximum discharge, 5,460 cfs (155 cu m/s) Dec. 21, gage height, 8.81 ft (2.685 m); minimum, 40 cfs (1.13 cu m/s) Oct. 26, gage height, 3.76 ft (1.146 m); minimum daily, 43 cfs (1.22 cu m/s) Oct. 21, 26.

Period of record: Maximum discharge, 35,000 cfs (991 cu m/s) Aug. 9, 1942, gage height, 17.57 ft (5.355 m), from rating curve extended above 5,000 cfs (142 cu m/s) on basis of velocity-area studies; maximum gage height, 18.92 ft (5.767 m) June 22, 1972; minimum, 18 cfs (0.51 cu m/s) July 30, 31, Aug. 2, 1954; minimum daily, 22 cfs (0.62 cu m/s) Aug. 2, 1954.

Floods of 1884 and 1918 reached stages of 24.3 ft (7.41 m) and 16.5 ft (5.03 m), respectively, from floodmarks.

REMARKS.--Records good. Slight diurnal fluctuation caused by mills above station. Flow regulated by Chester-Octoraro Reservoir (formerly Pine Grove Reservoir), beginning Feb. 22, 1951 (capacity, 2,800 mil gal or 10.60 cu hm). Diversion above station by Octoraro Water Co., and from Chester-Octoraro Reservoir beginning November 1951 by Chester Municipal Authority for municipal supply of Chester and surrounding boroughs.

REVISIONS (WATER YEARS).--WSP 1051: Drainage area. WSP 1432: 1933, 1935, 1936(M), 1937-38, 1939(M), 1944-45, 1947(M), 1949.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	88	152	72	303	274	193	526	214	218	180	97	70
2	83	115	64	277	271	191	377	197	227	155	81	74
3	91	96	61	248	303	191	335	229	213	137	110	128
4	87	82	59	399	281	185	354	232	183	127	115	343
5	78	85	383	344	252	174	442	207	166	353	103	184
6	74	80	522	271	234	166	436	204	156	387	87	121
7	70	73	218	249	256	166	322	205	150	196	77	266
8	68	69	138	231	268	165	321	191	148	146	72	210
9	65	68	297	220	264	170	894	205	145	127	67	143
10	63	69	354	230	256	192	540	257	140	115	64	122
11	61	65	207	453	235	177	376	248	133	108	60	96
12	63	63	142	545	210	165	332	624	125	98	56	82
13	61	61	130	342	191	157	617	1,060	124	90	52	108
14	55	62	199	263	255	144	741	401	124	88	50	108
15	56	65	173	245	200	140	452	283	117	90	48	100
16	53	59	141	246	186	158	371	243	135	100	47	87
17	52	59	149	263	192	243	335	218	145	88	229	77
18	51	52	135	254	183	205	315	221	127	84	327	69
19	50	56	122	231	183	172	303	196	116	82	153	65
20	45	56	236	245	232	164	296	185	111	81	101	59
21	43	51	3,440	430	216	269	280	172	146	75	79	60
22	46	52	969	785	201	403	276	169	222	69	65	88
23	45	58	398	403	217	255	305	317	512	66	64	75
24	45	60	288	315	183	220	301	287	347	79	72	68
25	45	63	230	286	186	190	263	234	295	85	69	61
26	43	65	969	267	184	175	246	188	269	82	78	54
27	51	63	1,980	281	172	174	234	179	194	79	147	52
28	67	76	623	288	177	166	224	247	220	76	125	254
29	491	101	392	271	------	171	226	189	295	78	91	537
30	776	89	325	255	------	518	217	183	217	179	73	231
31	240	------	284	288	------	1,140	------	174	------	137	73	------
TOTAL	3,206	2,165	13,700	9,728	6,262	7,199	11,257	8,159	5,720	3,837	2,932	3,992
MEAN	103	72.2	442	314	224	232	375	263	191	124	94.6	133
MAX	776	152	3,440	785	303	1,140	894	1,060	512	387	327	537
MIN	43	51	59	220	172	140	217	169	111	66	47	52
(ƒ)	+51.0	+42.5	+47.9	+42.5	+41.9	+50.2	+37.7	+44.5	+46.8	+45.8	+45.9	+51.5
MEAN≠	154	115	490	356	266	282	413	308	238	170	140	184
CFSM≠	0.80	0.60	2.54	1.84	1.38	1.46	2.14	1.60	1.23	0.88	0.73	0.95
IN≠	0.92	0.66	2.93	2.13	1.43	1.69	2.39	1.84	1.37	1.01	0.84	1.07

CAL YR 1973 TOTAL 110,128 MEAN 302 MAX 3,440 MIN 43 MEAN≠ 347 CFSM≠ 1.80 IN≠ 24.39
WTR YR 1974 TOTAL 78,157 MEAN 214 MAX 3,440 MIN 43 MEAN≠ 260 CFSM≠ 1.35 IN≠ 18.27

ƒ Diversion above station and diversion from and change in contents in Chester-Octoraro Reservoir, equivalent in cubic feet per second; furnished by Octoraro Water Co. and Chester Municipal Authority, respectively.
≠ Adjusted for diversion and change in reservoir contents.

01580000 Deer Creek at Rocks, Md.

LOCATION.--Lat 39°37'49", long 76°24'13", Harford County, on right bank 0.3 mile (0.5 km) upstream from highway bridge on Cherry Hill Road, 0.8 mile (1.3 km) southeast of Rocks, 1.2 miles (1.9 km) upstream from Stirrup Run, and 23.5 miles (37.8 km) upstream from mouth.

DRAINAGE AREA.--94.4 sq mi (244.5 sq km).

PERIOD OF RECORD.--October 1926 to current year. Monthly discharge only, November and December 1926, published in WSP 1302.

GAGE.--Water-stage recorder. Concrete control since Sept. 7, 1938. Datum of gage is 250.40 ft (76.322 m) above mean sea level (city of Baltimore bench mark).

AVERAGE DISCHARGE.--48 years, 122 cfs (3.455 cu m/s), 17.55 in/yr (446 mm/yr).

EXTREMES.--Current year: Maximum discharge, 2,340 cfs (66.3 cu m/s) Dec. 26, gage height, 6.69 ft (2.039 m); minimum, 48 cfs (1.36 cu m/s) Aug. 22, gage height, 2.10 ft (0.640 m).
Period of record: Maximum discharge, 13,600 cfs (385 cu m/s) Aug. 23, 1933, gage height, 17.7 ft (5.39 m) from floodmarks, from rating curve extended above 3,000 cfs (85.0 cu m/s) on basis of slope-area measurements at gage heights 13.3 ft (4.05 m) and 17.7 ft (5.39 m); minimum, 8 cfs (0.23 cu m/s) Dec. 16, 1930, Jan. 26, 1939, result of regulation; minimum daily, 8.6 cfs (0.24 cu m/s) Sept. 11, 12, 1966.
Maximum stage known since at least 1888, that of Aug. 23, 1933.

REMARKS.--Records excellent.

REVISIONS (WATER YEARS).--WSP 726: Drainage area. WSP 1502: 1927-36 (maximum and minimum only 1927-29, maximum only 1930-32, 1936).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	80	85	66	173	138	115	231	132	162	99	61	56
2	86	76	62	149	142	111	200	128	160	88	60	85
3	117	72	61	148	155	114	176	156	150	82	69	98
4	84	68	61	196	139	110	254	140	126	78	92	166
5	76	73	194	159	130	107	253	131	116	81	180	80
6	71	74	162	145	130	106	223	136	110	83	69	72
7	69	68	95	139	136	110	191	133	107	78	63	166
8	69	67	81	132	137	111	201	126	110	72	61	100
9	69	68	321	135	130	109	340	135	107	70	62	81
10	69	65	165	138	130	112	229	150	100	69	60	73
11	67	64	113	252	127	103	199	131	102	67	57	112
12	67	64	94	224	122	102	187	270	96	64	54	108
13	66	64	91	167	130	99	332	277	93	61	63	193
14	64	63	118	160	137	98	258	166	91	60	60	132
15	61	63	92	146	123	97	220	148	90	71	75	94
16	61	63	86	152	117	105	199	137	119	77	57	81
17	61	66	85	174	120	121	186	130	107	61	60	75
18	62	64	85	148	116	102	178	153	94	60	60	72
19	62	62	85	144	118	102	174	133	89	73	54	69
20	63	60	195	147	135	99	168	124	89	60	54	67
21	61	60	1,060	391	119	167	161	119	92	57	50	76
22	61	60	261	263	125	151	159	117	95	55	112	100
23	61	59	182	205	124	118	197	209	107	56	527	69
24	61	59	155	185	112	113	165	164	121	66	88	63
25	61	61	134	175	118	105	154	160	99	64	70	63
26	61	67	994	164	112	103	149	127	98	61	71	62
27	60	65	552	172	110	102	144	132	97	67	67	60
28	60	85	257	160	112	100	140	151	113	71	59	287
29	217	105	207	161	------	110	138	125	138	113	57	162
30	154	71	183	149	------	426	136	126	99	115	60	87
31	87	------	166	143	------	439	------	120	------	70	60	------
TOTAL	2,368	2,041	6,463	5,396	3,544	4,067	5,942	4,586	3,277	2,249	2,592	3,009
MEAN	76.4	68.0	208	174	127	131	198	148	109	72.5	83.6	100
MAX	217	105	1,060	391	155	439	340	277	162	115	527	287
MIN	60	59	61	132	110	97	136	117	89	55	50	56
CFSM	.81	.72	2.20	1.84	1.35	1.39	2.10	1.57	1.15	.77	.89	1.06
IN.	.93	.80	2.55	2.13	1.40	1.60	2.34	1.81	1.29	.89	1.02	1.19

CAL YR 1973 TOTAL 65,592 MEAN 180 MAX 1,060 MIN 54 CFSM 1.91 IN 25.85
WTR YR 1974 TOTAL 45,534 MEAN 125 MAX 1,060 MIN 50 CFSM 1.32 IN 17.94

PEAK DISCHARGE (BASE, 1,900 CFS).--Dec. 26 (1600) 2,340 cfs (6.69 ft).

01580200 Deer Creek near Kalmia, Md.

LOCATION.--Lat 39°37'16", long 76°17'57", Harford County, on left bank 50 ft (15 m) upstream from bridge on U. S. Highway 1, 1 mile (1.6 km) north of Kalmia, 6.5 miles (10.5 km) northeast of Bel Air, and 12.5 miles (20.1 km) upstream from mouth.

DRAINAGE AREA.--125 sq mi (324 sq km).

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

GAGE.--Water-stage recorder. Altitude of gage is 145 ft (44 m), from topographic map.

AVERAGE DISCHARGE.--7 years, 191 cfs (5.409 cu m/s), 20.75 in/yr (527 mm/yr).

EXTREMES.--Current year: Maximum discharge, 2,840 cfs (80.4 cu m/s) Dec. 26, gage height, 7.33 ft (2.234 m); minimum, 64 cfs (1.81 cu m/s) Aug. 30.
Period of record: Maximum discharge, 16,800 cfs (476 cu m/s) June 22, 1972, gage height, 16.08 ft (4.901 m); minimum, 29 cfs (0.82 cu m/s) Dec. 7, 1969, result of freezeup.

REMARKS.--Records good.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	113	116	87	229	179	151	304	170	202	129	89	69
2	112	105	83	199	180	147	258	165	213	120	82	99
3	152	99	81	196	200	151	227	196	208	111	98	113
4	116	95	81	260	178	147	290	182	169	107	97	190
5	105	99	287	214	170	143	319	168	155	127	251	106
6	97	103	239	196	170	140	296	174	148	120	98	88
7	93	95	133	185	177	145	238	176	141	110	88	206
8	93	91	113	178	182	148	241	164	146	103	85	135
9	93	93	463	180	170	147	515	175	145	97	85	102
10	93	89	240	185	170	150	306	190	138	97	81	91
11	91	87	158	352	165	140	254	172	136	97	77	87
12	89	87	133	333	161	138	236	339	129	91	73	149
13	89	87	128	229	170	134	395	431	126	87	82	211
14	87	87	167	200	181	130	362	218	123	85	81	156
15	83	87	133	190	164	129	277	192	121	89	93	116
16	83	85	122	196	156	140	248	179	139	119	79	96
17	81	83	120	228	160	164	231	166	146	89	75	88
18	81	89	120	202	155	138	221	196	126	85	81	84
19	83	85	120	190	155	136	215	176	119	110	72	80
20	83	83	330	199	174	134	210	163	117	90	71	76
21	83	81	1,500	466	158	234	202	156	122	82	68	77
22	81	81	375	377	161	226	198	155	132	80	66	116
23	81	81	242	259	165	165	240	255	135	79	598	81
24	81	81	208	232	149	156	211	196	162	94	122	72
25	81	83	182	220	155	145	195	215	138	93	85	71
26	81	89	1,030	205	150	141	188	168	130	88	76	71
27	81	87	844	211	145	140	182	168	129	87	84	69
28	79	97	346	199	148	138	180	194	144	100	72	269
29	279	135	268	196	------	145	177	166	183	138	67	290
30	259	95	238	188	------	512	175	165	134	156	67	108
31	123	------	217	186	------	697	------	159	------	106	74	------
TOTAL	3,226	2,755	8,788	7,080	4,648	5,551	7,591	5,989	4,356	3,166	3,217	3,566
MEAN	104	91.8	283	228	166	179	253	193	145	102	104	119
MAX	279	135	1,500	466	200	697	515	431	213	156	598	290
MIN	79	81	81	178	145	129	175	155	117	79	66	69
CFSM	.83	.73	2.26	1.82	1.33	1.43	2.02	1.54	1.16	.82	.83	.95
IN.	.96	.82	2.62	2.11	1.38	1.65	2.26	1.78	1.30	.94	.96	1.06

CAL YR 1973 TOTAL 87,119 MEAN 239 MAX 1,500 MIN 79 CFSM 1.91 IN 25.93
WTR YR 1974 TOTAL 59,933 MEAN 164 MAX 1,500 MIN 66 CFSM 1.31 IN 17.84

PEAK DISCHARGE (BASE, 2,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-20	2330	7.03	2,570	12-26	1930	7.33	2,840

01581700 Winters Run near Benson, Md.

LOCATION.--Lat 39°31'12", long 76°22'24", Harford County, on left bank 30 ft (9 m) downstream from bridge on U. S. Highway 1, 0.1 mile (0.2 km) upstream from Heavenly Waters, 1.2 miles (1.9 km) northeast of Benson, 1.8 miles (2.9 km) southwest of Bel Air, and 10.5 miles (16.9 km) upstream from mouth.

DRAINAGE AREA.--34.8 sq mi (90.1 sq km).

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

GAGE.--Water-stage recorder and crest-stage gage. Altitude of gage is 195 ft (59 m), from topographic map.

AVERAGE DISCHARGE.--7 years, 53.7 cfs (1.521 cu m/s), 20.96 in/yr (532 mm/yr).

EXTREMES.--Current year: Maximum discharge, 1,440 cfs (40.8 cu m/s) Dec. 20, gage height, 5.20 ft (1.585 m); minimum, 14 cfs (0.40 cu m/s) Aug. 30.
Period of record: Maximum discharge, 7,600 cfs (215 cu m/s) June 22, 1972, gage height, 11.60 ft (3.536 m); minimum, 7.2 cfs (0.20 cu m/s) July 5, 1969.

REMARKS.--Records good.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	32	26	63	43	40	70	42	64	33	21	19
2	32	27	24	50	48	40	61	41	89	29	21	35
3	37	26	24	55	50	42	52	54	60	27	24	34
4	29	25	24	79	43	41	72	44	47	26	33	32
5	27	28	134	54	42	40	82	42	44	36	25	20
6	24	26	66	49	43	39	65	45	40	33	21	22
7	23	25	37	47	48	42	53	45	39	28	21	73
8	24	25	32	44	48	41	73	43	40	26	21	27
9	25	25	175	47	46	41	170	51	39	24	23	22
10	25	24	62	52	46	40	79	50	38	23	23	21
11	25	24	41	128	45	36	65	44	35	22	20	21
12	25	24	35	91	44	37	59	154	34	22	19	20
13	25	24	39	59	49	34	120	102	34	21	24	31
14	25	24	55	55	51	34	87	58	33	21	21	49
15	23	24	37	52	43	34	69	50	32	23	21	23
16	22	24	34	57	41	44	60	48	37	26	19	20
17	22	23	32	62	42	46	57	48	38	21	21	20
18	22	23	30	51	41	38	56	121	33	21	19	19
19	22	23	30	49	42	38	52	56	32	39	18	18
20	22	23	191	50	46	36	51	47	31	23	18	17
21	22	23	378	132	41	99	49	45	32	21	17	19
22	22	24	86	83	44	63	49	45	34	20	17	22
23	22	23	68	62	41	47	71	82	42	20	18	17
24	22	24	58	56	39	43	50	56	37	25	18	17
25	22	24	51	56	42	40	47	48	36	22	17	17
26	22	24	271	52	40	39	45	45	34	22	17	17
27	22	24	124	58	39	39	43	48	34	22	17	16
28	22	33	74	52	40	38	44	49	44	22	16	106
29	114	33	60	51	------	46	43	45	43	35	16	50
30	55	26	56	48	------	233	43	48	32	35	15	26
31	31	------	54	45	------	134	------	45	------	22	16	------
TOTAL	885	757	2,408	1,889	1,227	1,604	1,937	1,741	1,207	790	617	850
MEAN	28.5	25.2	77.7	60.9	43.8	51.7	64.6	56.2	40.2	25.5	19.9	28.3
MAX	114	33	378	132	51	233	170	154	89	39	33	106
MIN	22	23	24	44	39	34	43	41	31	20	15	16
CFSM	.82	.72	2.23	1.75	1.26	1.49	1.86	1.61	1.16	.73	.57	.81
IN.	.95	.81	2.57	2.02	1.31	1.71	2.07	1.86	1.29	.84	.66	.91

CAL YR 1973 TOTAL 24,027 MEAN 65.8 MAX 378 MIN 20 CFSM 1.89 IN 25.68
WTR YR 1974 TOTAL 15,912 MEAN 43.6 MAX 378 MIN 15 CFSM 1.25 IN 17.01

PEAK DISCHARGE (BASE, 1,000 CFS).--Dec. 20 (2230) 1,440 cfs (5.20 ft).

01582000 Little Falls at Blue Mount, Md.

LOCATION.--Lat 39°36'16", long 76°37'16", Baltimore County, on left bank at downstream side of Pennsylvania Railroad bridge, 0.2 mile (0.3 km) north of Blue Mount, 0.6 mile (1.0 km) upstream from mouth, 0.9 mile (1.4 km) downstream from First Mine Branch, and 1.2 miles (1.9 km) south of White Hall.

DRAINAGE AREA.--52.9 sq mi (137.0 sq km).

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

GAGE.--Water-stage recorder. Altitude of gage is 305 ft (93 m), from topographic map.

AVERAGE DISCHARGE.--30 years, 66.8 cfs (1.892 cu m/s), 17.15 in/yr (436 mm/yr).

EXTREMES.--Current year: Maximum discharge, 950 cfs (26.9 cu m/s) Mar. 30, gage height, 3.87 ft (1.180 m); minimum, 25 cfs (0.71 cu m/s) Aug. 21, 22.
Period of record: Maximum discharge, 8,280 cfs (234 cu m/s) June 22, 1972, gage height, 18.54 ft (5.651 m), from rating curve extended above 1,300 cfs (36.8 cu m/s) on basis of contracted-opening measurement of peak flow; minimum, 1.9 cfs (0.054 cu m/s) Aug. 29, 1966; minimum daily, 4.5 cfs (0.13 cu m/s) Sept. 11, 1966.

REMARKS --Records good. Slight diurnal fluctuation at low flow caused by mill above station.

REVISIONS (WATER YEARS).--WSP 1111: 1944(M), 1945-47(P).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	46	33	79	73	60	124	72	89	59	34	31
2	58	40	32	70	77	59	106	71	92	50	35	69
3	56	38	32	75	78	60	93	86	79	47	38	69
4	44	37	32	92	72	59	155	75	69	45	93	80
5	40	41	94	73	70	57	141	73	64	49	62	42
6	36	38	65	69	70	57	115	74	61	48	38	40
7	36	35	45	68	72	59	101	72	60	45	36	85
8	36	35	41	63	71	60	111	70	61	42	35	50
9	38	35	147	68	70	61	154	78	59	41	35	43
10	36	34	68	70	65	60	113	80	57	40	36	40
11	35	33	53	135	65	57	101	72	59	39	33	68
12	35	34	46	101	66	57	96	156	55	37	31	54
13	35	34	46	80	69	54	172	122	53	36	33	140
14	34	33	55	75	70	54	125	86	53	36	32	70
15	33	33	44	75	65	57	111	79	52	37	31	49
16	33	32	43	80	63	64	101	74	69	40	32	42
17	33	31	46	81	65	68	95	72	62	35	34	40
18	33	31	44	72	62	62	91	88	55	35	32	38
19	33	33	42	73	66	63	90	73	52	44	31	36
20	33	32	94	74	69	60	87	69	53	35	30	35
21	33	32	422	239	63	103	84	67	55	33	27	44
22	33	33	105	127	69	75	83	66	54	32	35	45
23	33	31	79	104	65	65	108	113	72	33	139	34
24	33	32	69	93	61	62	87	82	64	40	36	33
25	33	35	62	88	63	59	82	80	57	37	36	32
26	33	35	433	85	59	58	80	70	57	36	54	32
27	33	35	201	88	58	57	78	75	56	37	38	30
28	33	50	111	83	59	57	77	74	65	36	33	110
29	121	46	92	82	------	68	76	69	70	47	31	59
30	62	36	81	78	------	322	74	74	55	55	37	42
31	44	------	76	76	------	217	------	69	------	37	32	------
TOTAL	1,248	1,070	2,833	2,716	1,875	2,331	3,111	2,481	1,859	1,263	1,259	1,582
MEAN	40.3	35.7	91.4	87.6	67.0	75.2	104	80.0	62.0	40.7	40.6	52.7
MAX	121	50	433	239	78	322	172	156	92	59	139	140
MIN	33	31	32	63	58	54	74	66	52	32	27	30
CFSM	.76	.67	1.73	1.66	1.27	1.42	1.97	1.51	1.17	.77	.77	1.00
IN.	.88	.75	1.99	1.91	1.32	1.64	2.19	1.74	1.31	.89	.89	1.11

CAL YR 1973 TOTAL 34,152 MEAN 93.6 MAX 433 MIN 30 CFSM 1.77 IN 24.02
WTR YR 1974 TOTAL 23,628 MEAN 64.7 MAX 433 MIN 27 CFSM 1.22 IN 16.62

PEAK DISCHARGE (BASE, 1,000 CFS).--No peak above base.

01583000 Slade Run near Glyndon, Md.

LOCATION.--Lat 39°29'40", long 76°47'45", Baltimore County, on left bank at downstream side of bridge on Longnecker Road, 1.1 miles (1.8 km) upstream from mouth, 1.6 miles (2.6 km) northeast of Glyndon, and 2.6 miles (4.2 km) northeast of Reisterstown.

DRAINAGE AREA.--2.09 sq mi (5.41 sq km).

PERIOD OF RECORD.--September 1947 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 420 ft (128 m), from topographic map.

AVERAGE DISCHARGE.--27 years, 2.27 cfs (0.0643 cu m/s), 14.75 in/yr (375 mm/yr).

EXTREMES.--Current year: Maximum discharge, 200 cfs (5.66 cu m/s) May 17, gage height, 3.85 ft (1.173 m), from rating curve extended as explained below; minimum, 0.56 cfs (0.016 cu m/s) May 7, gage height, 2.06 ft (0.628 m), result of regulation.
Period of record: Maximum discharge, 515 cfs (14.6 cu m/s) June 22, 1972, gage height, 4.80 ft (1.463 m), from rating curve extended above 40 cfs (1.13 cu m/s) on basis of slope-area measurement at gage height 3.96 ft (1.207 m); no flow many days in August and September 1966.

REMARKS.--Records good.

REVISIONS.--WSP 1502: Drainage area.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	1.9	1.4	3.0	2.7	2.1	4.3	2.4	4.3	3.6	1.4	2.5
2	3.0	1.6	1.3	2.7	2.8	2.2	4.0	2.2	6.5	2.5	1.4	3.4
3	2.4	1.6	1.3	2.8	2.8	2.1	3.6	2.8	4.3	2.2	1.4	6.0
4	1.9	1.7	1.3	3.6	2.5	2.2	4.7	2.1	3.4	2.1	1.4	3.0
5	1.6	2.0	3.8	2.8	2.4	2.1	4.3	1.6	3.0	6.0	1.4	1.6
6	1.5	1.7	2.2	2.8	2.4	2.1	3.8	.97	2.7	9.1	1.3	1.9
7	1.5	1.6	1.9	2.7	2.7	2.2	3.6	1.2	2.7	4.0	1.4	4.5
8	1.5	1.5	1.7	2.5	2.7	2.1	4.1	2.2	2.7	2.7	1.4	2.2
9	1.5	1.5	6.0	2.7	2.5	2.1	5.3	2.7	2.5	2.4	1.4	1.9
10	1.5	1.5	2.8	3.0	2.4	2.2	4.0	2.4	2.4	2.1	1.3	1.7
11	1.5	1.4	2.2	5.3	2.4	2.1	3.8	1.9	2.2	1.9	1.2	1.6
12	1.5	1.4	1.9	4.1	2.5	2.2	3.6	6.5	2.2	1.9	1.1	1.7
13	1.4	1.4	2.1	3.2	2.7	2.1	5.3	4.1	2.1	1.8	1.2	4.7
14	1.3	1.4	2.4	2.8	2.5	2.1	4.0	2.8	2.1	1.8	1.1	8.5
15	1.3	1.4	1.9	2.8	2.2	2.1	3.4	2.5	2.1	1.8	1.1	2.4
16	1.3	1.3	1.9	3.2	2.2	2.2	3.2	2.4	4.0	1.7	1.1	2.0
17	1.3	1.3	2.0	3.0	2.4	2.4	3.0	10	3.0	1.6	1.3	1.8
18	1.3	1.3	1.8	2.8	2.2	2.2	3.0	11	2.2	1.7	1.1	1.6
19	1.3	1.3	1.7	2.8	2.4	2.2	3.0	4.0	2.1	1.9	1.9	1.5
20	1.3	1.3	4.5	2.7	2.4	2.2	2.8	3.0	2.1	1.6	1.5	1.5
21	1.3	1.3	13	7.9	2.2	3.2	2.5	2.8	4.5	1.5	1.2	1.9
22	1.3	1.4	4.1	4.3	2.7	2.7	2.5	3.4	2.5	1.5	1.4	1.7
23	1.3	1.3	3.2	3.4	2.2	2.4	3.8	6.0	3.8	1.6	1.7	1.4
24	1.3	1.3	2.7	3.0	2.1	2.2	2.8	4.3	2.8	1.9	1.3	1.4
25	1.3	1.5	2.5	3.3	2.2	2.2	2.7	3.6	2.5	1.8	1.1	1.4
26	1.3	1.4	16	3.0	2.1	2.2	2.7	3.0	6.5	1.7	1.9	1.3
27	1.3	1.4	6.2	3.2	2.0	2.2	2.5	3.6	3.4	1.8	1.5	1.3
28	1.3	1.9	4.0	3.0	2.1	2.2	2.5	3.0	3.8	1.7	1.2	4.7
29	4.5	1.7	3.4	3.0	------	2.7	2.5	2.8	3.6	1.6	1.1	2.7
30	2.2	1.5	3.2	2.8	------	12	2.4	3.4	2.8	2.0	1.1	1.8
31	1.8	------	3.0	2.8	------	6.0	------	3.0	------	1.5	1.1	------
TOTAL	50.3	44.8	107.4	101.0	67.4	83.2	103.7	107.67	94.8	73.0	41.0	75.6
MEAN	1.62	1.49	3.46	3.26	2.41	2.68	3.46	3.47	3.16	2.35	1.32	2.52
MAX	4.5	2.0	16	7.9	2.8	12	5.3	11	6.5	9.1	1.9	8.5
MIN	1.3	1.3	1.3	2.5	2.0	2.1	2.4	.97	2.1	1.5	1.1	1.3
CFSM	.78	.71	1.66	1.56	1.15	1.28	1.66	1.66	1.51	1.12	.63	1.21
IN.	.90	.80	1.91	1.80	1.20	1.48	1.85	1.92	1.69	1.30	.73	1.35

CAL YR 1973 TOTAL 1,378.20 MEAN 3.78 MAX 23 MIN .80 CFSM 1.81 IN 24.53
WTR YR 1974 TOTAL 949.87 MEAN 2.60 MAX 16 MIN .97 CFSM 1.24 IN 16.91

PEAK DISCHARGE (BASE, 90 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
5-17	2315	3.85	200	7-06	1900	3.45	115

01583500 Western Run at Western Run, Md.

LOCATION.--Lat 39°30'38", long 76°40'37", Baltimore County, on right bank 100 ft (30 m) downstream from bridge on Western Run Road, 0.3 mile (0.5 km) southeast of Western Run, 2.5 miles (4.0 km) northwest of Cockeysville, 3.2 miles (5.1 km) upstream from Beaverdam Run, and 5.0 miles (8.0 km) upstream from mouth.

DRAINAGE AREA.--59.8 sq mi (154.9 sq km).

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

GAGE.--Water-stage recorder. Datum of gage is 262.78 ft (80.095 m), Baltimore County bench mark.

AVERAGE DISCHARGE.--30 years, 66.3 cfs (1.878 cu m/s), 15.06 in/yr (383 mm/yr).

EXTREMES.--Current year: Maximum discharge, 988 cfs (28.0 cu m/s) Mar. 30, gage height, 4.42 ft (1.347 m); minimum, 30 cfs (0.85 cu m/s) Aug. 16, 29, 30, 31, Sept. 1.
Period of record: Maximum discharge, 38,000 cfs (1,080 cu m/s) June 22, 1972, gage height, 26.0 ft (7.92 m), from floodmarks, from rating curve extended above 3,200 cfs (90.6 cu m/s) on the basis of slope-area measurements at gage heights 8.55 ft (2.606 m), 9.88 ft (3.011 m), and 26.0 ft (7.92 m), and contracted-opening measurement at gage height 26.0 ft (7.92 m); minimum, 2.4 cfs (0.068 cu m/s) Sept. 12, 1966.

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 1502: 1945-46, 1948(M).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47	52	38	96	79	64	130	69	95	74	39	32
2	74	45	36	83	82	64	111	68	126	60	41	83
3	72	43	36	87	85	64	98	80	97	55	45	87
4	52	41	36	112	77	63	154	72	79	51	40	86
5	46	47	110	90	73	61	132	69	72	82	52	44
6	42	44	70	84	72	60	110	70	68	78	40	43
7	41	41	50	81	79	63	97	68	65	80	40	101
8	41	41	46	76	78	64	108	66	66	57	39	57
9	42	41	170	80	70	64	169	75	65	52	40	47
10	42	39	80	87	70	64	116	75	61	49	38	43
11	40	39	60	160	70	60	102	68	60	47	36	41
12	40	39	50	137	72	61	97	141	57	45	34	40
13	39	39	50	99	76	58	150	127	55	44	34	121
14	38	39	60	89	78	57	121	82	54	43	34	161
15	37	39	48	87	72	56	104	75	53	42	33	61
16	36	39	48	94	69	60	95	70	72	41	32	50
17	36	37	50	96	71	64	88	68	66	39	40	46
18	36	38	50	84	68	57	85	153	56	39	35	43
19	37	38	48	84	70	58	84	83	53	47	42	40
20	37	38	85	82	74	56	81	74	52	40	45	39
21	36	37	420	234	67	94	79	70	62	38	34	41
22	36	38	127	145	73	77	78	68	65	38	38	48
23	37	37	98	115	69	66	105	115	84	38	62	38
24	37	37	85	104	66	63	85	84	72	48	38	36
25	37	39	78	103	68	59	78	79	60	44	34	36
26	36	38	392	95	65	59	76	70	75	43	37	36
27	36	38	229	98	64	58	74	71	78	45	39	34
28	36	55	131	92	64	57	73	74	74	49	33	126
29	150	50	109	94	------	66	73	68	86	45	32	79
30	76	40	99	86	------	343	71	77	64	54	31	53
31	52	------	91	82	------	221	------	70	------	42	31	------
TOTAL	1,444	1,228	3,080	3,136	2,021	2,381	3,024	2,499	2,092	1,549	1,188	1,792
MEAN	46.6	40.9	99.4	101	72.2	76.8	101	80.6	69.7	50.0	38.3	59.7
MAX	150	55	420	234	85	343	169	153	126	82	62	161
MIN	36	37	36	76	64	56	71	66	52	38	31	32
CFSM	.78	.68	1.66	1.69	1.21	1.28	1.69	1.35	1.17	.84	.64	1.00
IN.	.90	.76	1.92	1.95	1.26	1.48	1.88	1.55	1.30	.96	.74	1.11

CAL YR 1973 TOTAL 38,289 MEAN 105 MAX 479 MIN 33 CFSM 1.76 IN 23.82
WTR YR 1974 TOTAL 25,434 MEAN 69.7 MAX 420 MIN 31 CFSM 1.17 IN 15.82

PEAK DISCHARGE (BASE, 1,000 CFS).--No peak above base.

01585100 Whitemarsh Run at White Marsh, Md.

LOCATION.--Lat 39°22'15", long 76°26'46", Baltimore County, on left bank at upstream side of bridge on State Highway 7, 1 mile (1.6 km) southwest of White Marsh, and 3 miles (4.8 km) upstream from mouth.

DRAINAGE AREA.--7.61 sq mi (19.71 sq km).

PERIOD OF RECORD.--February 1959 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 38.96 ft (11.875 m) above mean sea level.

AVERAGE DISCHARGE.--15 years, 10.4 cfs (0.295 cu m/s), 18.56 in/yr (471 mm/yr).

EXTREMES.--Current year: Maximum discharge, 1,060 cfs (30.0 cu m/s) July 6, gage height, 5.61 ft (1.710 m); minimum, 1.0 cfs (0.028 cu m/s) many days in July and August, gage height, 1.28 ft (0.390 m).
Period of record: Maximum discharge, 8,000 cfs (227 cu m/s) Aug. 1, 1971, gage height, 14.05 ft (4.282 m), from rating curve extended above 1,300 cfs (36.8 cu m/s) on basis of computation of flow-through-culvert at gage height 10.04 ft (3.060 m) and computation of flow-through-culvert and over road at gage height 14.05 ft (4.282 m); no flow for part of Mar. 20, 1965, caused by construction work above station; minimum daily, 0.10 cfs (0.003 cu m/s) Sept. 11, 1966.

REMARKS.--Records good. Low flow affected by operations of sand and gravel plant in vicinity of gage.

REVISIONS (WATER YEARS).--WRD Md. and Del. 1973: 1960(M), 1967-68, 1969(M).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	6.4	2.5	16	5.2	3.8	13	3.6	9.1	5.5	1.7	1.7
2	13	2.8	2.7	6.9	5.8	4.5	11	3.5	87	3.0	1.7	12
3	5.4	2.5	2.5	13	5.7	4.0	8.5	13	16	2.6	3.6	23
4	3.2	2.3	2.5	31	4.8	3.8	23	4.6	7.9	2.3	6.6	11
5	2.4	6.6	56	10	4.6	3.6	23	3.9	5.7	5.5	4.0	2.7
6	1.9	3.1	11	7.7	4.6	3.7	12	5.2	4.8	60	1.6	14
7	2.0	2.4	4.4	6.4	5.5	4.4	8.1	4.0	4.4	22	3.9	59
8	2.2	2.8	3.6	5.0	6.0	4.8	31	3.5	4.7	4.5	2.1	6.1
9	2.1	4.5	78	12	5.5	4.5	76	10	4.2	3.1	2.1	3.7
10	2.2	2.5	11	24	5.0	5.4	15	5.9	3.8	2.2	1.9	3.4
11	2.1	2.2	5.8	59	5.0	3.7	9.4	3.9	3.2	1.9	1.5	18
12	2.1	2.2	4.5	17	6.0	4.9	8.3	83	3.0	1.7	1.3	4.8
13	2.2	2.4	11	8.5	7.0	3.4	37	21	2.8	1.9	1.6	3.2
14	2.0	2.6	13	8.0	6.5	3.2	15	7.9	2.8	1.9	13	31
15	1.8	2.8	5.3	7.5	4.8	3.2	9.6	5.5	2.8	1.8	3.7	4.2
16	1.8	2.3	4.8	6.9	5.0	12	7.1	4.5	7.3	1.4	1.8	2.8
17	1.7	2.0	4.8	6.3	5.0	7.7	6.3	4.6	3.1	1.2	1.6	2.4
18	1.9	2.2	4.8	5.1	5.0	4.2	5.9	39	2.4	2.2	1.4	2.4
19	2.0	2.4	4.5	5.7	4.9	4.6	5.7	8.1	2.2	4.5	1.3	2.2
20	2.1	2.2	123	5.0	5.2	3.8	5.1	5.2	2.3	1.5	1.6	2.5
21	2.0	2.3	134	32	4.0	37	5.0	4.4	8.2	1.3	1.2	8.3
22	2.0	2.4	18	12	5.5	11	5.1	4.2	11	1.2	1.2	4.2
23	2.2	2.4	11	8.1	3.9	6.5	20	15	16	1.3	22	2.3
24	2.3	2.6	8.5	6.9	3.6	5.4	6.2	8.8	5.1	6.4	2.1	2.1
25	2.1	2.7	7.0	12	6.1	4.4	5.0	6.7	3.7	2.2	1.5	2.4
26	2.1	2.3	64	7.4	4.6	4.2	4.6	4.2	15	2.0	7.6	2.3
27	2.1	2.7	24	11	4.0	4.1	4.3	5.8	7.4	1.9	2.9	2.2
28	2.1	13	10	7.7	3.9	4.0	4.3	4.8	17	1.7	1.8	86
29	42	5.4	7.6	7.0	------	9.0	4.6	4.1	8.2	10	7.4	13
30	6.8	2.9	6.3	5.7	------	171	4.0	23	3.9	15	2.3	5.0
31	3.7	------	9.7	5.3	------	36	------	6.8	------	2.2	1.8	------
TOTAL	125.5	97.9	655.8	376.1	142.7	385.8	393.1	327.7	275.0	175.9	109.8	337.9
MEAN	4.05	3.26	21.2	12.1	5.10	12.4	13.1	10.6	9.17	5.67	3.54	11.3
MAX	42	13	134	59	7.0	171	76	83	87	60	22	86
MIN	1.7	2.0	2.5	5.0	3.6	3.2	4.0	3.5	2.2	1.2	1.2	1.7
CFSM	.53	.43	2.79	1.59	.67	1.63	1.72	1.39	1.21	.75	.47	1.48
IN.	.61	.48	3.21	1.84	.70	1.89	1.92	1.60	1.34	.86	.54	1.65

CAL YR 1973 TOTAL 4,627.6 MEAN 12.7 MAX 211 MIN 1.2 CFSM 1.67 IN 22.62
WTR YR 1974 TOTAL 3,403.2 MEAN 9.32 MAX 171 MIN 1.2 CFSM 1.22 IN 16.64

PEAK DISCHARGE (BASE, 500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-20	2215	5.48	1,040	7-06	2215	5.61	1,060
3-30	1730	5.11	958	9-28	1700	3.86	601
5-12	1830	4.74	860				

01585200 West Branch Herring Run at Idlewylde, Md.

LOCATION.--Lat 39°22'25", long 76°35'05", Baltimore County, on left bank 40 ft (12 m) downstream from bridge on Regester Avenue, at Idlewylde, 0.1 mile (0.2 km) north of Baltimore city limits, 1 mile (1.6 km) upstream from mouth, and 1.3 miles (2.1 km) east of State Highway 45.

DRAINAGE AREA.--2.13 sq mi (5.52 sq km).

PERIOD OF RECORD.--July 1957 to May 1965, January 1966 to current year.

GAGE.--Water-stage recorder and concrete control. Prior to May 31, 1965, at site 40 ft (12 m) upstream at datum 3.24 ft (0.988 m) higher. Altitude of gage is 285 ft (87 m), from topographic map.

AVERAGE DISCHARGE.--15 years (1957-64, 1966 to current year), 2.53 cfs (0.0716 cu m/s), 16.13 in/yr (410 mm/yr).

EXTREMES.--Current year: Maximum discharge, 445 cfs (12.6 cu m/s) Aug. 22, gage height, 4.02 ft (1.225 m); minimum, 0.20 cfs (0.006 cu m/s) Oct. 25, Aug. 21, 22; minimum daily, 0.38 cfs (0.011 cu m/s) Oct. 28.
Period of record: Maximum discharge, 1,740 cfs (49.3 cu m/s) Sept. 11, 1971, gage height, 6.80 ft (2.073 m), from rating curve extended above 90 cfs (2.55 cu m/s) on basis of slope-area measurement at gage height 6.37 ft (1.942 m); no flow Aug. 14-24, 1957.

REMARKS.--Records good. Diurnal fluctuation (occasionally extensive) caused by ready-mixed concrete plant above station.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.69	2.1	.67	2.2	1.2	.95	2.2	1.1	3.5	3.0	.73	6.7
2	8.2	.57	.65	1.1	2.3	1.8	2.6	1.5	19	1.3	.58	2.2
3	.81	.56	.66	5.0	1.3	1.0	1.5	5.8	2.0	1.2	6.2	18
4	.63	.62	.52	5.5	1.2	.97	7.3	1.1	1.6	1.2	3.0	1.9
5	.55	3.4	20	1.4	1.1	.91	5.0	1.1	1.3	9.0	.86	.59
6	.48	.60	1.2	1.2	1.6	1.3	1.8	1.5	1.2	1.6	.55	12
7	.50	.57	.79	1.1	2.0	1.1	1.5	1.1	1.3	1.3	1.6	14
8	.54	.58	.92	1.0	1.2	1.2	13	1.0	1.3	1.1	.65	1.1
9	.54	1.6	20	4.0	1.4	1.9	11	4.5	1.2	.90	.65	.81
10	.55	.56	1.4	6.1	1.2	1.7	2.3	1.2	1.1	.80	.53	.75
11	.61	.58	.99	13	1.2	1.3	1.9	3.8	1.0	.70	.77	2.8
12	.48	.53	.87	2.6	1.6	1.5	1.8	24	.91	.70	1.8	.69
13	.49	.53	5.5	1.7	1.6	.83	12	2.6	.86	.70	1.2	3.9
14	.52	.49	1.6	1.3	1.3	.88	2.2	3.0	.86	.66	11	7.7
15	.41	.54	.90	1.3	1.2	.86	1.8	3.6	.86	.60	1.1	.75
16	.40	.74	.90	1.3	1.3	6.3	1.7	1.5	4.9	.59	.59	.66
17	.39	.65	.90	1.2	1.5	1.2	1.9	6.2	.87	.53	.54	.64
18	.43	.48	.90	1.1	1.2	.90	1.7	7.1	.86	.57	.78	.61
19	.52	.47	.90	1.2	1.1	1.3	1.5	1.3	.76	1.5	1.4	.55
20	.44	.49	26	1.2	1.1	.89	1.4	1.3	.82	.72	.57	.55
21	.41	.48	22	9.8	1.0	13	1.5	1.2	2.3	.56	.44	5.3
22	.41	.50	3.0	2.2	1.1	1.3	1.5	1.7	6.6	.52	10	.70
23	.41	.52	2.2	1.6	1.0	1.2	8.3	4.4	8.0	.51	1.7	.51
24	.44	.87	1.4	1.8	1.0	1.1	1.3	4.5	1.0	3.0	.60	.48
25	.43	.61	1.1	3.2	1.4	.98	1.3	1.7	1.0	.59	.50	.51
26	.45	.96	19	1.6	1.1	.96	1.5	1.2	4.4	.59	8.0	.48
27	.40	.68	3.2	2.6	1.0	.94	1.3	4.3	1.4	.64	.62	.48
28	.38	5.5	1.8	1.9	1.1	.93	1.2	1.4	7.0	.84	2.9	24
29	29	.93	1.4	1.4	------	6.9	1.1	1.2	1.7	4.8	1.8	1.2
30	2.2	1.0	1.3	1.2	------	33	1.2	4.0	1.0	3.8	.57	.64
31	.81	------	4.1	1.2	------	4.4	------	1.2	------	.56	.74	------
TOTAL	53.52	28.71	146.77	83.0	36.3	93.50	96.3	101.1	80.60	45.08	62.97	111.20
MEAN	1.73	.96	4.73	2.68	1.30	3.02	3.21	3.26	2.69	1.45	2.03	3.71
MAX	29	5.5	26	13	2.3	33	13	24	19	9.0	11	24
MIN	.38	.47	.52	1.0	1.0	.83	1.1	1.0	.76	.51	.44	.48
CFSM	.81	.45	2.22	1.26	.61	1.42	1.51	1.53	1.26	.68	.95	1.74
IN.	.93	.50	2.56	1.45	.63	1.63	1.68	1.77	1.41	.79	1.10	1.94

CAL YR 1973 TOTAL 1,177.75 MEAN 3.23 MAX 36 MIN .38 CFSM 1.52 IN 20.57
WTR YR 1974 TOTAL 939.05 MEAN 2.57 MAX 33 MIN .38 CFSM 1.21 IN 16.40

PEAK DISCHARGE (BASE, 290 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
5-12	1645	3.80	381	9-28	1515	3.61	331
8-22	2230	4.02	445				

01585300 Stemmers Run at Rossville, Md.

NOTE.--Station discontinued September 30, 1972, owing to relocation of stream channel in vicinity of gage. Station reestablished October 1, 1973. Records for the 1974 water year have been withheld pending better definition of the stage-discharge relation. They will be published in a subsequent annual report.

01585400 Brien Run at Stemmers Run, Md.

LOCATION.--Lat 39°20'01", long 76°28'23", Baltimore County, on right bank 0.2 mile (0.3 km) upstream from mouth and 0.3 mile (0.5 km) north of Stemmers Run.

DRAINAGE AREA.--1.97 sq mi (5.10 sq km).

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 10 ft (3.0 m), from topographic map.

AVERAGE DISCHARGE.--16 years, 2.42 cfs (0.0685 cu m/s), 16.68 in/yr (424 mm/yr).

EXTREMES.--Current year: Maximum discharge, 199 cfs (5.64 cu m/s) Mar. 30, gage height, 3.07 ft (0.936 m); minimum, 0.43 cfs (0.012 cu m/s) Aug. 14.
Period of record: Maximum discharge, 3,500 cfs (99.1 cu m/s) Aug. 1, 1971, gage height, 10.75 ft (3.277 m), from high-water mark in well, from rating curve extended above 180 cfs (5.10 cu m/s) on basis of computation of peak flow through culvert and over road at site 0.8 mile (1.3 km) upstream, adjusted for flow from intervening area; no flow at times many years.

REMARKS.--Records good.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.65	1.1	.67	3.4	.85	.83	2.3	.76	1.8	1.0	.58	.82
2	5.3	.67	.67	1.3	.93	1.0	2.2	.78	30	.75	.59	.97
3	1.3	.67	.67	3.5	1.0	.85	1.4	3.1	3.4	.63	.57	3.2
4	.66	.67	.67	9.3	.85	.83	3.3	.92	1.2	.63	1.0	3.2
5	.62	1.4	13	1.6	.75	.76	7.9	.82	1.1	.68	.66	.72
6	.58	.67	2.0	1.2	.83	.86	2.5	1.8	.94	2.5	.55	6.8
7	.58	.67	.98	1.2	1.9	.89	1.2	.93	.87	1.5	1.0	15
8	.60	.67	.80	.86	1.1	.98	12	.83	.85	.64	.56	.85
9	.60	1.1	23	5.4	1.2	1.1	24	3.5	.81	.63	.57	.95
10	.58	.76	1.9	8.2	1.2	1.1	2.7	1.3	.79	.60	.56	.67
11	.60	.67	1.2	17	1.2	.87	1.4	.91	.74	.55	.55	.67
12	.60	.67	.84	3.3	1.7	1.0	1.1	23	.72	.53	.55	.69
13	.60	.67	3.5	1.2	1.8	.82	8.6	5.0	.63	.51	.58	.66
14	.60	.67	3.1	.98	1.5	.76	2.6	1.3	.64	.51	4.7	6.6
15	.60	.67	.96	1.2	1.0	.75	1.6	.92	.62	.51	.87	.67
16	.60	.67	.95	.99	1.1	3.1	1.2	.92	.78	.49	.55	.67
17	.60	.67	1.2	.94	1.3	1.7	1.0	2.4	.65	.50	.51	.54
18	.60	.67	.93	.85	.97	1.0	.95	5.6	.64	.51	.49	.54
19	.60	.67	.80	.89	1.0	.93	.93	1.2	.61	.57	.53	.54
20	.60	.67	23	.85	.99	.93	.85	1.1	.61	.48	.55	.54
21	.60	.67	38	9.8	.85	14	.85	.81	1.7	.48	.51	1.8
22	.60	.67	2.8	2.5	1.0	2.6	.95	.79	1.1	.51	.51	.77
23	.60	.67	1.6	1.4	.92	1.3	3.7	2.4	3.6	.53	.93	.62
24	.60	.76	1.2	1.4	.87	1.0	1.2	5.4	.87	2.1	.51	.58
25	.60	.76	.95	2.8	1.3	.86	.97	1.8	.73	.60	.51	.58
26	.60	.67	16	1.4	.86	.85	.94	.91	3.6	.58	.82	.58
27	.60	.67	5.3	1.9	.82	.85	.81	1.2	1.1	.56	.58	.57
28	.60	3.4	1.5	1.3	.96	.82	.80	.93	3.8	.64	.58	19
29	10	1.1	1.1	1.1	------	2.6	.85	.85	1.2	1.5	1.9	1.9
30	.95	.76	.93	.94	------	47	.82	3.7	.71	2.7	.68	.88
31	.76	------	2.2	.85	------	9.0	------	1.1	------	.64	.76	------
TOTAL	33.98	25.21	152.42	89.55	30.75	101.94	91.62	76.98	66.81	25.56	24.81	72.58
MEAN	1.10	.84	4.92	2.89	1.10	3.29	3.05	2.48	2.23	.82	.80	2.42
MAX	10	3.4	38	17	1.9	47	24	23	30	2.7	4.7	19
MIN	.58	.67	.67	.85	.75	.75	.80	.76	.61	.48	.49	.54
CFSM	.56	.43	2.50	1.47	.56	1.67	1.55	1.26	1.13	.42	.41	1.23
IN.	.64	.48	2.88	1.69	.58	1.92	1.73	1.45	1.26	.48	.47	1.37

CAL YR 1973 TOTAL 1,221.29 MEAN 3.35 MAX 133 MIN .57 CFSM 1.70 IN 23.06
WTR YR 1974 TOTAL 792.21 MEAN 2.17 MAX 47 MIN .48 CFSM 1.10 IN 14.96

PEAK DISCHARGE (BASE, 150 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-30	1745	3.07	199	5-12	1730	2.75	160

01585500 Cranberry Branch near Westminster, Md.

LOCATION.--Lat 39°35'35", long 76°58'05", Carroll County, on left bank 80 ft (24 m) upstream from culvert, 0.7 mile (1.1 km) upstream from mouth, and 1.8 miles (2.9 km) northeast of Westminster.

DRAINAGE AREA.--3.29 sq mi (8.52 sq km).

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 670 ft (204 m), from topographic map.

AVERAGE DISCHARGE.--25 years, 3.51 cfs (0.0994 cu m/s), 14.49 in/yr (368 mm/yr), unadjusted for storage and diversion.

EXTREMES.--Current year: Maximum discharge, 95 cfs (2.69 cu m/s) Jan. 21, gage height, 3.07 ft (0.936 m); minimum daily, 0.40 cfs (0.011 cu m/s) Dec. 1-4.
Period of record: Maximum discharge, 1,510 cfs (42.8 cu m/s) June 22, 1972, gage height, 5.85 ft (1.783 m), from rating curve extended above 200 cfs (5.66 cu m/s) on the basis of computation of flow through culvert at gage height 5.54 ft (1.689 m); minimum daily, 0.27 cfs (0.008 cu m/s) Dec. 3, 1969.

REMARKS.--Records good. Occasional small diversions to and releases from Cranberry Reservoir located offstream 1 mile (1.6 km) above station since August 1967, capacity, 113,700,000 gal (430,400 cu m). Beginning October 1972 occasional large diversions past the gaging station from the reservoir through a 30-inch pipe.

REVISIONS (WATER YEARS).--WSP 1432: Drainage area, 1954-55. Monthly and yearly figures of runoff in cubic feet per second per square mile and inches for water year 1973 published in WRD, Md. and Del., 1973, should not be used. These figures do not represent runoff from the basin owing to the diversion to and releases from Cranberry Reservoir. See "REMARKS" paragraph above.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	.99	.40	4.0	4.0	2.7	7.3	3.4	4.0	3.6	1.6	4.2
2	3.6	.58	.40	2.9	3.6	2.7	6.2	3.6	6.1	2.3	1.6	3.5
3	2.1	.58	.40	4.1	3.6	2.5	5.1	4.5	3.9	2.1	1.6	5.7
4	1.4	.55	.40	5.6	3.6	2.4	15	3.6	3.2	2.0	1.6	3.5
5	1.1	.76	3.4	3.3	5.1	2.2	13	3.5	3.0	2.1	1.5	2.0
6	.96	.52	1.1	3.0	10	2.4	7.5	3.6	2.8	2.1	1.5	2.2
7	.87	.50	.50	3.1	12	2.6	6.1	3.3	2.8	2.0	1.4	6.5
8	.69	.50	.47	2.5	12	3.0	8.1	3.3	2.8	1.9	1.5	2.6
9	.69	.50	13	2.7	12	2.7	9.6	5.9	2.7	1.9	1.9	2.3
10	.65	.50	1.6	3.9	12	2.7	6.2	4.2	3.2	1.9	1.6	2.2
11	.59	.48	.63	12	12	2.4	5.4	3.5	3.5	1.8	1.4	2.1
12	.59	.45	.55	5.3	12	2.5	5.0	16	2.6	1.7	1.4	3.8
13	.50	.45	.59	3.4	13	2.3	16	6.5	2.5	1.6	1.3	8.3
14	.49	.45	.64	2.9	13	2.2	7.7	4.4	2.4	1.6	1.5	6.2
15	.49	.45	.52	3.2	11	2.2	6.3	3.8	2.3	1.6	1.3	2.8
16	.50	.49	.52	6.5	11	2.8	5.6	3.5	4.3	1.6	1.4	2.5
17	.51	.55	.55	5.6	12	2.5	5.2	4.1	3.4	1.6	1.8	2.4
18	.54	.55	.50	2.6	11	2.2	5.0	9.1	2.6	2.8	1.4	2.2
19	.54	.55	.50	1.1	13	2.3	4.9	4.4	2.4	2.8	1.4	2.1
20	.53	.55	11	1.0	14	2.2	4.6	3.6	2.4	1.9	1.4	2.1
21	.53	.51	29	21	12	5.7	4.4	3.4	2.6	1.6	1.3	2.2
22	.52	.49	4.6	4.1	14	3.0	4.4	3.5	2.4	1.6	2.1	2.0
23	.52	.71	3.3	2.6	13	2.6	8.9	5.6	3.9	1.8	2.4	1.8
24	.53	.45	2.7	1.8	13	2.4	4.6	4.0	2.8	1.9	1.5	1.7
25	.56	.47	2.4	1.7	13	2.2	4.3	3.6	2.6	1.9	1.4	1.7
26	.56	.46	39	1.5	12	2.3	4.1	3.3	2.9	1.9	2.7	1.7
27	.65	.45	11	3.6	12	2.1	4.0	3.2	2.6	2.0	1.6	1.7
28	.85	.59	5.8	5.4	9.7	2.1	3.9	3.1	3.6	2.0	1.5	3.4
29	6.2	.47	4.4	4.4	------	3.9	3.7	3.2	3.2	2.5	2.8	2.2
30	1.0	.42	3.9	3.4	------	34	3.6	4.6	2.5	2.1	2.5	1.8
31	.56	------	3.7	4.0	------	13	------	3.5	------	1.8	1.8	------
TOTAL	30.92	15.97	147.47	132.2	298.6	122.8	195.7	138.8	92.0	62.0	51.7	89.4
MEAN	1.00	.53	4.76	4.26	10.7	3.96	6.52	4.48	3.07	2.00	1.67	2.98
MAX	6.2	.99	39	21	14	34	16	16	6.1	3.6	2.8	8.3
MIN	.49	.42	.40	1.0	3.6	2.1	3.6	3.1	2.3	1.6	1.3	1.7

CAL YR 1973 TOTAL 1,385.13 MEAN 3.79 MAX 39 MIN .40
WTR YR 1974 TOTAL 1,377.56 MEAN 3.77 MAX 39 MIN .40

PEAK DISCHARGE (BASE, 80 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1-21	1215	3.07	95	3-30	1845	3.00	91

01586000 North Branch Patapsco River at Cedarhurst, Md.

LOCATION.--Lat 39°30'00", long 76°53'00", Carroll County, on left bank at downstream side of private footbridge at Cedarhurst, 0.8 mile (1.3 km) downstream from Roaring Run, 8 miles (12.9 km) southeast of Westminster, and 16.5 miles (26.5 km) upstream from mouth.

DRAINAGE AREA.--56.6 sq mi (146.6 sq km).

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 425 ft (130 m), from topographic map.

AVERAGE DISCHARGE.--29 years, 62.0 cfs (1.756 cu m/s), 14.88 in/yr (378 mm/yr).

EXTREMES.--Current year: Maximum discharge, 1,200 cfs (34.0 cu m/s) Mar. 30, gage height, 5.32 ft (1.622 m); minimum, 8.5 cfs (0.24 cu m/s) Aug. 4, gage height, 1.29 ft (0.393 m).
Period of record: Maximum discharge, 27,800 cfs (787 cu m/s) June 22, 1972, gage height, 20.75 ft (6.325 m), from high-water mark in well, from rating curve extended above 2,800 cfs (79.3 cu m/s) on basis of contracted-opening measurement of peak flow; minimum, 1.9 cfs (0.054 cu m/s) Sept. 10, 1966, result of filling pond above station; minimum daily, 3.1 cfs (0.088 cu m/s) Sept. 10, 12, 1966.

REMARKS.--Records good. Slight diurnal fluctuation at low and medium flow caused by mill above station. Low flow affected slightly by Cranberry Reservoir since August 1957, capacity, 113,700,000 gal (430,400 cu m). Records do not include a mean discharge of 1.65 cfs (0.047 cu m/s) diverted above station for municipal supply of Westminster; sewage effluent discharged into Little Pipe Creek in Monocacy River basin.

REVISIONS (WATER YEARS).--WSP 1903: 1959-60.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	43	27	94	70	51	140	62	73	70	27	24
2	80	32	25	76	74	52	118	60	101	45	26	78
3	76	31	24	79	79	51	101	76	73	39	26	54
4	46	29	25	108	68	47	232	64	60	37	26	76
5	39	33	94	81	62	46	200	60	53	44	27	29
6	34	32	75	74	60	46	145	60	49	40	24	29
7	34	28	38	72	66	51	120	58	47	37	24	92
8	33	28	32	64	66	52	132	54	48	34	24	39
9	33	28	211	68	62	49	185	96	47	33	25	32
10	32	24	86	83	60	51	127	79	44	31	26	29
11	31	24	55	163	60	44	111	60	64	30	23	28
12	31	24	43	135	58	47	103	165	44	29	22	44
13	30	26	43	92	64	44	205	132	41	27	22	186
14	32	26	58	79	68	43	137	83	40	27	22	142
15	28	27	41	79	58	43	118	72	39	27	23	51
16	27	26	39	96	54	46	106	62	65	26	37	40
17	26	25	38	101	58	52	96	68	56	25	32	37
18	26	26	39	81	54	43	92	130	43	25	27	34
19	26	26	38	79	56	44	89	76	39	59	24	32
20	27	25	89	76	62	43	85	68	39	30	24	31
21	26	26	502	268	52	81	83	64	50	27	21	35
22	25	28	136	142	60	64	81	62	46	26	27	40
23	24	26	98	113	58	51	118	101	70	26	38	30
24	24	27	83	99	51	49	83	72	57	37	24	29
25	23	28	72	94	51	44	76	66	44	30	22	29
26	23	32	498	85	47	44	74	60	61	29	52	28
27	21	28	245	94	46	43	70	58	58	30	29	28
28	21	37	132	83	47	43	68	54	55	39	24	78
29	121	42	111	87	------	54	66	54	72	35	22	51
30	58	29	96	79	------	426	64	69	49	42	39	35
31	38	------	87	74	------	265	------	59	------	29	24	------
TOTAL	1,133	866	3,180	2,998	1,671	2,109	3,425	2,304	1,627	1,065	833	1,490
MEAN	36.5	28.9	103	96.7	59.7	68.0	114	74.3	54.2	34.4	26.9	49.7
MAX	121	43	502	268	79	426	232	165	101	70	52	186
MIN	21	24	24	64	46	43	64	54	39	25	21	24
CFSM	.64	.51	1.82	1.71	1.05	1.20	2.01	1.31	.96	.61	.48	.88
IN.	.74	.57	2.09	1.97	1.10	1.39	2.25	1.51	1.07	.70	.55	.98

CAL YR 1973 TOTAL 32,858 MEAN 90.0 MAX 510 MIN 21 CFSM 1.59 IN 21.60
WTR YR 1974 TOTAL 22,701 MEAN 62.2 MAX 502 MIN 21 CFSM 1.10 IN 14.92

PEAK DISCHARGE (BASE 1,000 CFS).--Mar. 30 (1945) 1,200 cfs (5.32 ft).

01587500 South Branch Patapsco River at Henryton, Md.

LOCATION.--Lat 39°21'05", long 76°54'50", Howard County, on right bank at downstream side of bridge on Henryton Road at Henryton, 1.3 miles (2.1 km) upstream from Piney Run, 2.5 miles (4.0 km) upstream from confluence with North Branch, and 3.2 miles (5.1 km) southeast of Sykesville.

DRAINAGE AREA.--64.4 sq mi (166.8 sq km).

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 289.15 ft (88.133 m) above mean sea level.

AVERAGE DISCHARGE.--26 years, 70.2 cfs (1.988 cu m/s), 14.80 in/yr (376 mm/yr).

EXTREMES.--Current year: Maximum discharge, 1,750 cfs (49.6 cu m/s) Mar. 30, gage height, 5.73 ft (1.747 m); minimum, 18 cfs (0.51 cu m/s) Aug. 16.
Period of record: Maximum discharge, 26,900 cfs (762 cu m/s) June 22, 1972, gage height, 28.14 ft (8.577 m), from floodmarks, from rating curve extended above 1,900 cfs (53.8 cu m/s) on basis of slope-area measurements at gage height 7.88 ft (2.402 m) and 28.14 ft (8.577 m), and contracted-opening measurements at gage heights 10.12 ft (3.085 m) and 19.40 ft (5.913 m); minimum, 0.40 cfs (0.011 cu m/s) Sept. 9-12, 1966.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	52	35	99	76	58	148	65	72	46	24	32
2	66	44	33	84	77	59	121	64	222	42	23	189
3	61	41	33	86	84	58	103	77	110	40	24	103
4	42	38	33	118	74	56	159	69	77	38	25	86
5	38	47	75	89	69	54	164	65	65	42	27	39
6	36	47	72	83	68	54	130	68	59	43	23	36
7	36	41	47	76	75	56	106	64	56	39	23	119
8	36	40	42	70	76	56	120	62	56	36	23	52
9	36	40	216	77	70	56	228	98	54	34	25	41
10	36	37	85	102	70	59	136	84	51	34	24	37
11	35	37	58	215	65	53	117	68	51	34	22	36
12	35	37	51	163	57	56	108	167	47	31	20	35
13	34	37	50	106	70	54	165	161	45	30	21	73
14	34	37	58	95	79	52	137	88	44	29	20	183
15	33	37	48	89	67	52	113	76	43	28	19	51
16	34	37	46	94	63	55	100	69	66	28	19	41
17	32	35	44	90	66	57	96	63	68	27	21	37
18	33	35	44	79	64	51	91	68	48	26	24	34
19	33	36	46	79	65	52	90	63	44	27	60	33
20	33	36	75	76	67	51	87	59	43	25	47	31
21	33	36	588	318	61	95	83	57	43	24	26	36
22	33	37	148	157	67	77	82	55	52	24	23	47
23	32	36	100	118	64	62	94	135	71	24	29	32
24	33	36	85	102	58	58	81	101	60	29	23	30
25	34	37	76	105	61	54	78	88	49	28	21	29
26	33	36	627	95	56	54	75	63	56	28	33	29
27	33	36	308	97	55	53	72	60	66	28	29	28
28	33	47	150	90	57	52	71	57	56	36	24	112
29	367	45	122	92	------	55	71	56	69	28	27	57
30	105	36	105	83	------	537	68	60	54	40	22	36
31	55	------	94	80	------	327	------	56	------	27	21	------
TOTAL	1,550	1,173	3,594	3,307	1,881	2,523	3,294	2,386	1,897	995	792	1,724
MEAN	50.0	39.1	116	107	67.2	81.4	110	77.0	63.2	32.1	25.5	57.5
MAX	367	52	627	318	84	537	228	167	222	46	60	189
MIN	32	35	33	70	55	51	68	55	43	24	19	28
CFSM	.78	.61	1.80	1.66	1.04	1.26	1.71	1.20	.98	.50	.40	.89
IN.	.90	.68	2.08	1.91	1.09	1.46	1.90	1.38	1.10	.57	.46	1.00

CAL YR 1973 TOTAL 36,755 MEAN 101 MAX 627 MIN 27 CFSM 1.57 IN 21.23
WTR YR 1974 TOTAL 25,116 MEAN 68.8 MAX 627 MIN 19 CFSM 1.07 IN 14.51

PEAK DISCHARGE (BASE, 950 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-29	1630	4.80	1,350	1-21	1500	4.30	1,120
12-21	0900	4.27	1,110	3-30	2030	5.73	1,750
12-26	1930	4.93	1,410				

01589000 Patapsco River at Hollofield, Md.

LOCATION.--Lat 39°18'36", long 76°47'34", Baltimore County, on left bank at downstream side of highway bridge, at Hollofield, 0.3 mile (0.5 km) downstream from Dogwood Run, 3.0 miles (4.8 km) north of Ellicott City, and 28 miles (45 km) upstream from mouth.

DRAINAGE AREA.--285 sq mi (738 sq km).

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

GAGE.--Water-stage recorder. Altitude of gage is 190 ft (58 m), from topographic map. June 26 to Dec. 8, 1972, nonrecording gage at same site and datum. Prior to June 22, 1972, water-stage recorder at site on opposite bank at same datum.

EXTREMES.--Current year: Maximum discharge, 2,870 cfs (81.3 cu m/s) Mar. 30, gage height, 5.69 ft (1.734 m); minimum, 37 cfs (1.05 cu m/s) Aug. 16, 17.
Period of record: Maximum discharge, 80,600 cfs (2.280 cu m/s) June 22, 1972, gage height, 31.3 ft (9.54 m), from floodmarks, from rating curve extended above 13,000 cfs (368 cu m/s) on basis of slope-area measurement of peak flow; minimum 6 cfs (0.17 cu m/s) Sept. 6, 1944; minimum daily, 9.6 cfs (0.27 cu m/s) Aug. 12, 1963.

REMARKS.--Records good. Flow regulated by Liberty Reservoir 11 miles (18 km) upstream beginning July 22, 1954, usable capacity, 42,070 mil gal (159.2 cu hm); dead storage, 1,260 mil gal (4.769 cu hm). Diversions above station for municipal supply of Westminster (sewage effluent discharged into Little Pipe Creek) and from Liberty Reservoir beginning Feb. 26, 1953, for municipal supply of Baltimore, and beginning February 1970 for a small municipal supply for part of Carroll County. Water-quality records for the current water year are published in Part 2 of this report.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	61	93	71	157	136	108	270	124	179	94	50	49
2	102	83	65	137	136	108	235	121	550	86	50	311
3	129	76	65	132	151	111	204	149	419	79	50	208
4	78	72	65	204	134	108	292	136	263	74	50	185
5	67	78	140	150	120	105	291	120	199	88	55	83
6	60	91	162	137	120	103	243	125	160	91	50	76
7	57	70	95	130	134	107	199	118	132	79	52	245
8	59	70	84	121	139	108	226	118	122	73	49	115
9	59	70	388	130	130	110	467	149	116	67	50	85
10	60	60	183	170	120	115	258	169	106	64	56	75
11	59	60	117	379	120	105	215	127	101	65	48	71
12	58	60	98	310	117	108	202	269	97	58	43	71
13	57	65	96	182	130	102	293	377	90	57	45	111
14	56	67	116	150	146	98	268	174	88	57	46	329
15	53	67	96	140	125	97	213	145	86	55	44	123
16	54	65	90	154	116	103	190	131	121	55	40	84
17	51	61	90	156	121	113	178	122	120	55	43	73
18	51	61	90	138	119	98	170	144	95	54	46	67
19	52	63	90	133	117	98	166	147	87	53	88	63
20	53	65	143	132	127	98	163	133	84	50	132	60
21	54	63	1,190	558	113	187	155	116	84	47	56	68
22	54	65	275	296	123	177	156	106	93	47	72	94
23	54	65	165	204	123	122	183	198	147	48	128	64
24	55	64	142	178	108	112	165	209	131	65	51	57
25	56	67	123	187	114	104	162	238	96	60	43	56
26	55	68	825	168	106	102	147	175	100	55	42	57
27	55	69	750	176	104	101	139	153	121	55	78	54
28	55	75	241	162	107	99	135	155	106	75	48	210
29	505	102	183	168	------	105	134	132	135	60	74	164
30	245	75	163	149	------	1,060	131	135	110	85	49	81
31	99	------	146	143	------	713	------	137	------	55	45	------
TOTAL	2,563	2,110	6,547	5,731	3,456	4,985	6,250	4,852	4,338	2,006	1,773	3,389
MEAN	82.7	70.3	211	185	123	161	208	157	145	64.7	57.2	113
MAX	505	102	1,190	558	151	1,060	467	377	550	94	132	329
MIN	51	60	65	121	104	97	131	106	84	47	40	49
(ƒ)	39,870	37,490	39,830	41,250	40,850	41,360	43,110	43,350	43,180	41,190	38,930	39,150
(≠)	170	216	212	214	213	213	225	214	181	217	207	186

CAL YR 1973 TOTAL 108,614 MEAN 298 MAX 2,050 MIN 48 ≠ 198
WTR YR 1974 TOTAL 48,000 MEAN 132 MAX 1,190 MIN 40 ≠ 206

ƒ Month-end contents, in millions of gallons in Liberty Reservoir (contents on Sept. 30, 1973, 40,940 million gallons); records furnished by Baltimore Department of Public Works.
≠ Diversions, in cubic feet per second, above station for municipal supply of city of Westminster; and from Liberty Reservoir for municipal supply of city of Baltimore, and for part of Carroll County. Records furnished by cities of Westminster and Baltimore respectively.

01589100 East Branch Herbert Run at Arbutus, Md.

LOCATION.--Lat 39°14'24", long 76°41'33", Baltimore County, on right bank at downstream side of highway bridge on Tom Day Boulevard at U. S. Route 1 in Arbutus, 0.5 mile (0.8 km) upstream from mouth, and 2 miles (3 km) south of Baltimore city limits.

DRAINAGE AREA.--2.47 sq mi (6.40 sq km).

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 45 ft (14 m), from topographic map.

AVERAGE DISCHARGE.--17 years, 3.24 cfs (0.0918 cu m/s), 17.81 in/yr (452 mm/yr).

EXTREMES.--Current year: Maximum discharge, 484 cfs (13.7 cu m/s) May 24, gage height, 3.40 ft (1.036 m), from rating curve extended above 50 cfs (1.42 cu m/s) on basis of computation of flow-through-culvert at gage height 3.67 ft (1.119 m); minimum daily, 0.70 cfs (0.020 cu m/s) July 28.
Period of record: Maximum discharge, 1,340 cfs (37.9 cu m/s) June 22, 1972, gage height, 6.35 ft (1.935 m), from rating curve extended above 250 cfs (7.08 cu m/s) on basis of slope-area measurement of flood of July 20, 1956 (prior to establishment of station) at gage height 5.7 ft (1.74 m), from floodmarks, discharge, 1,090 cfs (30.9 cu m/s); minimum daily, 0.30 cfs (0.008 cu m/s) July 24, Sept. 4, 11, 1966.

REMARKS.--Records good. Slight regulation at low flow from unknown source above station.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	2.3	1.2	3.9	2.1	1.7	3.0	1.8	2.4	1.5	1.2	1.1
2	20	1.4	1.1	2.3	2.5	2.1	3.0	2.5	36	1.3	1.3	1.4
3	1.4	1.2	1.2	6.0	3.3	1.5	2.5	5.3	2.7	1.2	4.0	18
4	1.3	1.1	1.3	9.3	2.0	1.6	7.7	1.7	2.1	.93	2.4	2.4
5	1.3	3.5	24	2.7	1.9	1.7	6.3	1.7	2.0	1.2	1.3	1.4
6	1.3	1.3	2.1	2.4	2.4	2.2	2.7	2.7	1.8	1.5	1.2	13
7	1.3	1.3	1.6	2.3	3.7	1.9	2.2	1.7	1.9	.99	2.5	23
8	1.3	1.4	1.8	2.2	2.2	2.2	20	1.7	1.8	1.0	2.6	1.4
9	1.3	3.5	33	9.1	2.9	2.5	17	4.3	1.6	.99	5.8	1.2
10	1.3	1.4	2.4	11	2.1	2.0	2.7	2.0	1.7	.97	1.3	1.3
11	1.3	1.3	1.9	13	2.2	2.0	2.2	1.5	1.7	.97	.94	1.6
12	1.3	1.4	1.8	3.3	2.6	2.2	2.0	25	1.7	1.0	1.1	1.3
13	1.3	1.3	4.6	2.5	2.9	1.6	7.0	2.7	1.7	.89	8.1	5.5
14	1.3	1.4	2.4	2.4	2.4	1.6	2.7	2.3	1.6	.79	5.8	5.3
15	1.3	1.3	1.6	2.4	2.0	1.7	2.5	2.0	1.4	.98	1.3	1.1
16	1.3	1.3	1.9	2.4	2.5	5.4	2.3	1.9	7.6	1.1	1.3	1.1
17	1.3	1.3	2.3	2.2	2.1	1.9	2.3	2.3	1.5	1.0	1.1	1.2
18	1.3	1.2	2.1	2.2	1.8	1.9	2.3	3.3	1.5	1.0	.82	1.2
19	1.3	1.3	1.9	2.1	2.2	2.1	2.2	1.7	1.3	1.1	2.0	1.3
20	1.3	1.3	39	1.9	1.9	1.9	2.0	1.7	1.4	.83	1.2	1.1
21	1.3	1.4	44	14	1.8	15	2.0	1.8	1.4	.77	1.1	4.0
22	1.3	1.3	3.7	2.8	2.6	2.2	2.0	1.8	1.9	.96	2.0	.98
23	1.3	1.4	3.0	2.5	1.7	1.8	3.4	4.0	6.1	1.3	1.3	.96
24	1.3	1.3	2.3	3.7	1.5	1.6	2.0	21	2.8	1.7	.89	.88
25	1.3	1.3	2.2	4.3	2.5	1.6	2.0	2.2	1.7	1.2	.77	.91
26	1.3	1.4	22	2.7	1.7	1.7	1.8	1.6	2.4	1.1	1.0	.90
27	1.2	1.6	4.4	3.0	1.7	1.7	1.8	3.2	1.5	.96	1.2	.87
28	1.3	8.0	2.9	2.7	1.7	1.7	1.7	1.8	7.5	.70	9.5	23
29	38	1.4	2.6	2.3	------	5.9	1.8	2.0	1.6	3.3	4.2	1.3
30	1.7	1.3	2.5	2.2	------	56	1.8	2.3	1.2	3.0	1.3	1.2
31	1.7	------	5.4	2.2	------	5.3	------	1.7	------	1.2	1.5	------
TOTAL	96.6	51.9	224.2	128.0	62.9	136.2	114.9	113.2	103.5	37.43	72.02	119.90
MEAN	3.12	1.73	7.23	4.13	2.25	4.39	3.83	3.65	3.45	1.21	2.32	4.00
MAX	38	8.0	44	14	3.7	56	20	25	36	3.3	9.5	23
MIN	1.2	1.1	1.1	1.9	1.5	1.5	1.7	1.5	1.2	.70	.77	.87
CFSM	1.26	.70	2.93	1.67	.91	1.78	1.55	1.48	1.40	.49	.94	1.62
IN.	1.45	.78	3.38	1.93	.95	2.05	1.73	1.70	1.56	.56	1.08	1.81

CAL YR 1973 TOTAL 1,621.30 MEAN 4.44 MAX 52 MIN 1.0 CFSM 1.80 IN 24.42
WTR YR 1974 TOTAL 1,260.75 MEAN 3.45 MAX 56 MIN .70 CFSM 1.40 IN 18.99

PEAK DISCHARGE (BASE, 330 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-29	0500	3.15	404	5-24	1630	3.40	484
12-20	2015	3.04	371	8-28	2245	3.04	371
5-12	1645	2.98	352	9-28	1500	3.01	363

01589200 Gwynns Falls near Owings Mills, Md.

LOCATION.--Lat 39°26'16", long 76°46'57", Baltimore County, on left bank at downstream side of bridge on railroad sideing, 0.4 mile (0.6 km) upstream from small right bank tributary, 1.2 miles (1.9 km) north of Owings Mills, and 21 miles (34 km) upstream from mouth.

DRAINAGE AREA.--4.90 sq mi (12.69 sq km).

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 520 ft (158 m), from topographic map.

AVERAGE DISCHARGE.--16 years, 5.05 cfs (0.143 cu m/s), 14.00 in/yr (356 mm/yr).

EXTREMES.--Current year: Maximum discharge, 422 cfs (12.0 cu m/s) Sept. 14, gage height, 3.12 ft (0.951 m), from rating curve extended above 100 cfs (2.83 cu m/s); minimum daily, 1.8 cfs (0.051 cu m/s) Aug. 16.
Period of record: Maximum discharge, about 5,500 cfs (156 cu m/s) June 22, 1972, gage height, 5.70 ft (1.737 m), from floodmarks, by contracted-opening and flow-over-road computation of peak flow at road crossing 0.5 mile (0.8 km) downstream, adjusted for flow from intervening area; minimum daily, 0.5 cfs (0.014 cu m/s) Sept. 5, 8, 1966.

REMARKS.--Records fair.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	4.8	3.3	6.6	4.8	4.6	7.3	5.8	9.2	4.7	2.2	2.7
2	14	3.3	3.3	4.8	6.4	5.1	6.3	3.9	24	3.1	3.1	27
3	5.3	3.3	3.3	7.0	5.4	4.6	5.7	5.8	6.6	2.7	2.7	23
4	3.8	3.3	3.3	9.6	4.8	4.0	13	4.0	4.8	2.7	5.3	11
5	3.3	4.3	16	5.0	4.6	3.8	9.3	3.8	4.0	13	3.2	3.8
6	3.1	4.0	4.6	4.8	4.6	3.8	6.0	3.8	3.6	4.4	2.5	5.1
7	3.1	3.6	3.3	4.8	5.7	3.8	5.1	3.8	3.6	3.6	2.7	20
8	2.9	3.6	3.1	4.6	4.8	3.8	12	3.8	3.6	3.1	2.5	4.8
9	2.9	3.6	25	5.1	4.8	4.3	14	5.9	3.3	2.7	2.5	4.0
10	2.9	3.3	4.8	8.8	4.6	4.8	6.3	4.6	3.1	2.7	2.5	3.6
11	2.9	3.3	3.6	22	4.4	3.8	5.4	4.0	3.1	2.7	2.2	3.6
12	2.9	3.1	3.3	8.8	4.4	4.0	5.1	28	3.1	2.7	2.0	3.8
13	2.9	3.3	4.9	5.5	5.4	3.8	16	7.6	3.1	2.7	2.2	14
14	2.9	3.1	5.0	5.0	5.7	3.6	7.0	4.6	3.1	2.7	2.4	46
15	2.9	3.1	3.3	5.0	4.8	3.6	5.7	4.0	2.9	2.7	2.2	4.3
16	2.9	3.1	3.3	6.6	4.6	5.3	5.4	3.6	7.4	2.7	1.8	3.3
17	2.9	2.9	3.3	6.0	4.8	5.1	4.8	8.6	5.0	2.7	2.6	3.3
18	2.9	2.9	3.3	5.4	4.6	3.8	4.6	18	3.1	2.7	2.5	3.3
19	2.9	2.9	3.3	5.7	5.6	3.8	4.6	5.7	2.7	3.1	3.7	3.3
20	2.9	2.9	24	5.4	4.8	3.8	4.6	4.6	2.7	2.5	2.7	3.3
21	2.9	2.9	52	30	4.3	14	4.6	4.0	3.9	2.3	2.2	4.9
22	2.9	3.1	6.3	8.8	6.3	5.1	4.6	8.7	3.1	2.3	11	4.0
23	2.9	2.9	5.1	7.0	4.6	4.3	9.5	21	7.4	2.5	5.6	3.3
24	2.9	2.9	4.8	6.3	4.3	4.0	4.8	7.4	3.8	3.8	2.7	3.3
25	2.9	3.2	4.6	7.3	4.3	3.8	4.8	5.4	3.3	2.5	2.5	3.3
26	2.9	2.9	70	6.0	4.3	3.8	4.6	4.3	5.6	2.5	4.4	3.3
27	2.9	2.9	12	6.6	4.3	3.8	4.3	5.8	3.8	2.7	2.6	3.3
28	2.9	7.5	6.0	6.7	4.6	3.8	4.0	4.6	7.9	2.5	2.2	25
29	20	4.1	5.1	6.0	------	7.9	3.8	4.3	4.9	2.7	2.2	7.9
30	4.8	3.3	5.1	5.4	------	68	3.8	6.2	3.3	5.3	2.2	4.8
31	4.0	------	5.3	5.1	------	14	------	4.3	------	2.5	2.2	------
TOTAL	126.1	103.4	303.6	231.7	136.6	215.7	197.0	207.9	149.0	101.5	93.3	256.3
MEAN	4.07	3.45	9.79	7.47	4.88	6.96	6.57	6.71	4.97	3.27	3.01	8.54
MAX	20	7.5	70	30	6.4	68	16	28	24	13	11	46
MIN	2.9	2.9	3.1	4.6	4.3	3.6	3.8	3.6	2.7	2.3	1.8	2.7
CFSM	.83	.70	2.00	1.52	1.00	1.42	1.34	1.37	1.01	.67	.61	1.74
IN.	.96	.78	2.30	1.76	1.04	1.64	1.50	1.58	1.13	.77	.71	1.95

CAL YR 1973 TOTAL 2,875.2 MEAN 7.88 MAX 79 MIN 2.9 CFSM 1.61 IN 21.83
WTR YR 1974 TOTAL 2,122.1 MEAN 5.81 MAX 70 MIN 1.8 CFSM 1.19 IN 16.11

PEAK DISCHARGE (BASE, 120 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-21	0630	2.20	130	7-05	1400	2.26	144
12-26	1500	2.52	214	9-02	0130	2.46	196
1-21	1200	2.32	158	9-03	0530	2.24	139
3-30	1830	2.57	230	9-14	0100	3.12	422
5-12	1800	2.32	158	9-28	1900	2.50	208
5-18	0100	2.40	179				

01589300 Gwynns Falls at Villa Nova, Md.

LOCATION.--Lat 39°20'45", long 76°44'01", Baltimore County, on right bank 300 ft (91 m) downstream from bridge on Essex Road, 300 ft (91 m) north of State Highway 26 (Liberty Road), in Villa Nova, 1.1 miles (1.8 km) west of Baltimore city limits, and 11.5 miles (18.5 km) upstream from mouth.

DRAINAGE AREA.--32.5 sq mi (84.2 sq km).

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

GAGE.--Water-stage recorder. Datum of gage is 361.32 ft (110.130 m) above mean sea level (Baltimore County bench mark). Prior to Aug. 27, 1963 and Oct. 25, 1972 to Sept. 20, 1973, water-stage recorder, and June 26, 1972, to Oct. 24, 1972, nonrecording gage at site 300 ft (91 m) upstream at same datum.

AVERAGE DISCHARGE.--17 years, 34.9 cfs (0.988 cu m/s), 14.58 in/yr (370 mm/yr).

EXTREMES.--Current year: Maximum discharge, 1,130 cfs (32.0 cu m/s) Mar. 30, gage height, 5.38 ft (1.640 m); minimum daily, 10 cfs (0.28 cu m/s) Aug. 16, 21.
Period of record: Maximum discharge, 16,200 cfs (459 cu m/s) June 22, 1972, gage height, 21.5 ft (6.55 m), from floodmarks, from rating curve extended above 1,900 cfs (53.8 cu m/s) on basis of contracted-opening measurement of peak flow; minimum, 1.7 cfs (0.048 cu m/s) Sept. 7, 8, 1966.
Flood of July 21, 1956, reached a stage of 12.6 ft (3.84 m), discharge, 5,270 cfs (149 cu m/s) on basis of contracted-opening measurement.

REMARKS.--Records good. Slight diurnal fluctuation at times from unknown source above station. Small diversion for irrigation above station.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	27	17	46	27	24	55	22	54	22	11	23
2	88	20	15	33	31	26	45	21	212	18	12	163
3	38	23	15	45	35	25	38	37	58	16	23	137
4	18	23	16	88	27	24	90	24	34	15	20	88
5	15	38	126	39	24	23	74	23	27	51	27	21
6	13	26	46	34	24	23	47	23	24	24	12	39
7	13	23	24	31	30	25	38	21	22	22	16	169
8	14	22	21	29	30	25	92	20	23	15	12	32
9	14	22	201	39	28	31	159	32	22	16	12	22
10	14	18	43	71	28	30	50	26	21	16	13	19
11	14	17	28	202	26	24	39	21	18	15	12	19
12	14	17	23	77	26	27	35	175	17	14	11	17
13	14	17	30	38	33	23	110	77	16	14	13	21
14	14	17	42	34	35	21	53	33	16	14	19	198
15	13	16	24	31	27	21	40	27	16	13	14	27
16	13	16	23	35	25	32	33	24	35	12	10	20
17	12	16	22	36	28	34	31	23	24	12	11	18
18	13	16	22	30	26	23	30	113	18	11	11	16
19	13	16	22	30	27	23	30	32	15	13	19	15
20	13	16	137	30	32	22	29	25	15	11	19	15
21	13	16	442	211	24	122	27	22	15	11	10	34
22	12	16	60	64	35	43	28	22	26	11	47	25
23	13	16	41	41	28	30	55	84	49	11	100	15
24	13	16	35	36	24	26	30	44	26	17	15	14
25	13	17	30	44	29	23	27	39	20	13	12	14
26	13	17	377	35	24	23	26	25	28	12	11	14
27	13	16	133	41	23	22	24	27	30	39	15	13
28	13	41	50	36	24	22	24	29	43	19	20	185
29	149	32	39	38	------	38	23	23	37	13	31	49
30	31	18	36	30	------	497	23	32	22	26	11	24
31	21	------	37	29	------	155	------	25	------	12	15	------
TOTAL	678	611	2,177	1,603	780	1,507	1,405	1,171	983	528	584	1,466
MEAN	21.9	20.4	70.2	51.7	27.9	48.6	46.8	37.8	32.8	17.0	18.8	48.9
MAX	149	41	442	211	35	497	159	175	212	51	100	198
MIN	12	16	15	29	23	21	23	20	15	11	10	13
CFSM	.67	.63	2.16	1.59	.86	1.50	1.44	1.16	1.01	.52	.58	1.50
IN.	.78	.70	2.49	1.83	.89	1.72	1.61	1.34	1.13	.60	.67	1.68

CAL YR 1973 TOTAL 19,270.5 MEAN 52.8 MAX 553 MIN 9.0 CFSM 1.62 IN 22.06
WTR YR 1974 TOTAL 13,493.0 MEAN 37.0 MAX 497 MIN 10 CFSM 1.14 IN 15.44

PEAK DISCHARGE (BASE, 650 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-21	0800	4.20	760	3-30	1815	5.38	1,130
12-26	1815	5.00	1,000				

01589330 Dead Run at Franklintown, Md.

LOCATION.--Lat 39°18'40", long 76°43'02", Baltimore County, on right bank at downstream side of bridge on Colonial Road at Security Boulevard at Franklintown, 0.3 mile (0.5 km) west of Baltimore city limits, 1.2 miles (1.9 km) southwest of Woodlawn, and 2.5 miles (4.0 km) upstream from mouth.

DRAINAGE AREA.--5.52 sq mi (14.30 sq km).

PERIOD OF RECORD.--October 1959 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 310 ft (94 m), from topographic map.

AVERAGE DISCHARGE.--15 years, 6.85 cfs (0.194 cu m/s), 16.85 in/yr (428 mm/yr).

EXTREMES.--Current year: Maximum discharge, 747 cfs (21.2 cu m/s) May 12, gage height, 4.29 ft (1.308 m); minimum, 0.76 cfs (0.022 cu m/s) many days in July and August, gage height, 0.71 ft (0.216 m).
Period of record: Maximum discharge, 7,400 cfs (210 cu m/s) June 22, 1972, gage height, 12.5 ft (3.81 m), from floodmarks, from rating curve extended above 1,600 cfs (45.3 cu m/s) on basis of contracted-opening measurement of peak flow at bridge 0.6 mile (1.0 km) downstream, adjusted for flow from intervening area; minimum, 0.10 cfs (0.003 cu m/s) Sept. 11-12, 1966, gage height, 0.57 ft (0.174 m).

REMARKS.--Records good.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	4.9	.98	8.5	2.9	2.3	5.2	2.0	3.8	1.7	.98	1.5
2	33	1.4	.98	3.3	5.9	3.3	5.6	2.7	75	1.1	1.2	1.4
3	2.2	1.2	1.0	14	4.2	2.3	3.7	12	5.4	1.2	4.1	23
4	1.4	1.2	1.0	29	2.9	2.3	22	2.1	2.9	1.1	9.9	4.4
5	1.2	7.1	40	4.3	2.6	2.3	19	2.0	2.2	14	1.8	1.2
6	1.2	1.4	3.8	3.6	3.1	2.7	5.8	2.7	2.1	2.7	1.0	20
7	.98	1.2	2.3	3.3	7.1	2.8	4.1	2.0	1.8	1.7	3.6	31
8	.98	1.2	2.6	3.0	3.1	4.7	42	1.9	2.0	1.4	1.2	2.2
9	1.0	3.6	71	22	3.6	6.8	43	8.0	1.6	1.3	1.2	1.6
10	1.2	.98	4.6	32	3.1	4.0	6.5	2.3	1.6	1.2	.98	1.4
11	1.0	.98	2.9	59	3.0	2.7	4.4	1.9	1.5	1.2	.74	1.6
12	1.0	.98	2.3	12	3.8	4.5	3.9	65	1.4	1.2	.87	1.2
13	1.2	.98	11	3.8	5.8	2.6	22	6.2	1.3	.95	6.7	2.0
14	1.0	1.0	5.0	3.6	5.1	2.5	5.5	3.0	1.4	.96	3.0	10
15	1.0	1.0	2.4	3.5	3.0	2.5	4.2	2.4	1.3	1.0	1.0	1.4
16	1.0	1.0	3.0	3.5	3.4	12	3.5	2.3	7.2	1.1	1.0	1.2
17	1.0	1.0	3.0	3.3	3.8	3.4	3.3	2.2	1.4	1.3	2.1	1.2
18	1.0	1.0	3.1	2.9	2.8	2.5	3.2	4.4	1.3	.98	.92	1.1
19	1.0	1.0	2.7	2.9	3.4	2.8	3.2	2.1	1.3	1.5	3.4	1.0
20	1.0	1.0	99	2.8	2.9	2.5	3.0	1.9	1.2	.92	1.3	1.0
21	1.0	1.2	97	64	2.5	41	2.9	1.6	1.3	.85	.91	8.7
22	1.0	1.2	7.1	8.3	5.9	4.9	3.0	1.8	8.4	.87	3.8	1.5
23	1.0	1.2	5.1	4.5	2.7	3.5	9.8	5.4	16	1.1	2.8	1.0
24	1.0	1.6	3.7	5.4	2.5	3.1	3.0	25	1.9	1.9	.97	.99
25	1.0	1.2	3.3	9.5	4.5	2.9	2.8	2.9	1.4	1.1	.84	1.0
26	1.0	1.2	81	4.0	2.3	2.9	2.5	2.0	5.3	1.1	.97	.90
27	1.0	1.2	17	9.9	2.3	2.7	2.4	6.3	1.7	1.8	.96	.88
28	1.0	7.1	5.0	5.6	2.3	2.6	2.4	2.2	18	1.1	8.5	29
29	74	1.4	3.7	4.1	------	15	2.5	2.4	2.3	2.2	5.6	2.1
30	2.9	1.2	3.5	3.3	------	164	2.4	3.0	1.3	6.0	1.2	1.3
31	2.2	------	10	3.2	------	15	------	1.6	------	1.2	4.1	------
TOTAL	143.06	52.62	499.06	342.1	100.5	329.1	246.8	183.3	175.3	57.73	77.64	156.77
MEAN	4.61	1.75	16.1	11.0	3.59	10.6	8.23	5.91	5.84	1.86	2.50	5.23
MAX	74	7.1	99	64	7.1	164	43	65	75	14	9.9	31
MIN	.98	.98	.98	2.8	2.3	2.3	2.4	1.6	1.2	.85	.74	.88
CFSM	.84	.32	2.92	1.99	.65	1.92	1.49	1.07	1.06	.34	.45	.95
IN.	.96	.35	3.36	2.31	.68	2.22	1.66	1.24	1.18	.39	.52	1.06

CAL YR 1973 TOTAL 3,226.56 MEAN 8.84 MAX 200 MIN .85 CFSM 1.60 IN 21.74
WTR YR 1974 TOTAL 2,363.98 MEAN 6.48 MAX 164 MIN .74 CFSM 1.17 IN 15.93

PEAK DISCHARGE (BASE, 650 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-20	2030	4.22	727	5-12	1715	4.29	747
3-30	1600	4.18	717				

01589440 Jones Falls at Sorrento, Md.

LOCATION.--Lat 39°23'30", long 76°39'42", Baltimore County, on right bank 0.3 mile (0.5 km) downstream from bridge on State Highway 25 (Falls Road), 0.4 mile (0.6 km) downstream from Slaughterhouse Branch and Sorrento, and 18 miles (29 km) upstream from mouth.

DRAINAGE AREA.--25.2 sq mi (65.3 sq km).

PERIOD OF RECORD.--Annual maximum, water years 1958-66. April 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 240 ft (73 m), from topographic map. January 1958 to April 1966, nonrecording gage at site 450 ft (140 m) upstream at same datum.

AVERAGE DISCHARGE.--8 years, 32.4 cfs (0.918 cu m/s), 17.46 in/yr (443 mm/yr).

EXTREMES.--Current year: Maximum discharge, 1,320 cfs (37.4 cu m/s) Aug. 23, gage height, 8.63 ft (2.630 m); minimum, 6.6 cfs (0.19 cu m/s) July 22.
Period of record: Maximum discharge, 13,800 cfs (391 cu m/s) June 22, 1972, gage height, 18.11 ft (5.520 m), from floodmarks, from rating curve extended above 1,400 cfs (39.6 cu m/s) on basis of slope-area measurement of peak flow; minimum, 1.8 cfs (0.051 cu m/s) Sept. 7, 8, 1966, gage height, 1.16 ft (0.354 m).

REMARKS.--Records good.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	21	15	35	27	24	50	25	37	16	8.8	27
2	39	17	15	30	29	25	42	24	95	14	9.2	64
3	25	17	15	33	30	24	35	30	34	12	13	50
4	18	17	14	46	28	23	54	26	24	11	14	43
5	17	22	54	32	26	23	50	25	22	22	13	19
6	16	18	29	30	26	23	39	26	20	20	9.5	26
7	15	17	21	29	30	23	33	25	19	18	11	86
8	15	16	20	27	29	23	57	24	20	16	11	27
9	15	17	90	29	28	24	100	29	19	14	11	21
10	15	16	31	36	28	25	47	27	17	13	13	18
11	14	16	24	91	26	23	39	25	15	13	11	18
12	13	16	22	49	26	24	36	93	14	12	9.3	16
13	14	16	24	34	29	22	69	51	14	12	9.4	16
14	14	15	27	31	29	22	47	33	13	12	11	70
15	12	15	22	31	26	22	39	29	14	11	9.9	21
16	12	15	22	31	26	26	33	26	18	10	9.1	17
17	11	14	23	31	27	26	32	29	16	9.4	11	16
18	12	15	22	29	26	23	31	80	13	9.2	10	15
19	12	15	20	29	26	23	31	33	12	11	20	14
20	12	14	77	28	27	22	30	28	12	9.7	14	14
21	12	14	223	110	25	57	30	27	16	10	10	20
22	12	15	46	46	28	32	29	26	22	9.0	85	18
23	12	15	36	37	26	27	40	51	28	11	166	14
24	12	15	31	33	25	25	30	33	19	15	21	13
25	12	16	29	36	26	24	28	30	16	13	16	13
26	12	15	187	32	24	23	28	27	19	12	15	13
27	12	15	79	34	24	23	27	27	19	12	14	12
28	12	20	42	32	24	22	27	26	26	12	16	84
29	84	19	36	31	------	28	27	25	23	12	21	31
30	27	16	33	29	------	215	26	28	17	16	13	19
31	20	------	32	29	------	90	------	26	------	11	14	------
TOTAL	544	489	1,361	1,160	751	1,036	1,186	1,014	653	398.3	619.2	835
MEAN	17.5	16.3	43.9	37.4	26.8	33.4	39.5	32.7	21.8	12.8	20.0	27.8
MAX	84	22	223	110	30	215	100	93	95	22	166	86
MIN	11	14	14	27	24	22	26	24	12	9.0	8.8	12
CFSM	.69	.65	1.74	1.48	1.06	1.33	1.57	1.30	.87	.51	.79	1.10
IN.	.80	.72	2.01	1.71	1.11	1.53	1.75	1.50	.96	.59	.91	1.23

CAL YR 1973 TOTAL 16,049.0 MEAN 44.0 MAX 281 MIN 10 CFSM 1.75 IN 23.69
WTR YR 1974 TOTAL 10,046.5 MEAN 27.5 MAX 223 MIN 8.8 CFSM 1.09 IN 14.83

PEAK DISCHARGE (BASE, 600 CFS).--Aug. 23 (0030) 1,320 cfs (8.63 ft).

01590000 North River near Annapolis, Md.

LOCATION.--Lat 38°59'09", long 76°37'21", Anne Arundel County, on left bank 500 ft (150 m) downstream from bridge on State Highway 450, 0.8 mile (1.3 km) upstream from mouth, and 7 miles (11 km) west of Annapolis.

DRAINAGE AREA.--8.5 sq mi (22 sq km), approximately.

PERIOD OF RECORD.--December 1931 to current year.

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Datum of gage is 6.73 ft (2.051 m) above mean sea level. Prior to Nov. 2, 1933, staff gage at same site and datum.

AVERAGE DISCHARGE.--42 years (1932-74), 10.2 cfs (0.289 cu m/s), 16.30 in/yr (414 mm/yr).

EXTREMES.--Current year: Maximum discharge, 127 cfs (3.60 cu m/s) Oct. 2, gage height, 2.38 ft (0.725 m); minimum daily, 3.4 cfs (0.10 cu m/s) July 18, 21.
Period of record: Maximum discharge, 5,000 cfs (142 cu m/s) Aug. 2, 1944, gage height, 6.22 ft (1.896 m), from rating curve extended above 260 cfs (7.36 cu m/s) on basis of velocity-area studies; minimum, 0.90 cfs (0.025 cu m/s) Sept. 12, 1966, gage height, 0.78 ft (0.238 m).

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

REVISIONS (WATER YEARS).--WSP 1432: 1932-38, 1939(M), 1942(M).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.6	8.3	7.6	18	9.1	8.3	20	8.0	8.0	5.8	3.8	4.4
2	43	7.3	7.3	13	9.1	8.7	16	7.6	31	5.2	4.2	4.2
3	43	7.6	7.3	12	10	8.7	13	17	23	5.0	4.2	12
4	12	8.7	7.6	20	9.9	8.3	13	11	9.9	4.6	4.6	26
5	8.6	11	16	14	8.3	8.3	17	8.7	8.0	4.6	7.0	7.0
6	7.3	11	20	12	8.3	8.3	16	9.9	6.9	6.0	4.4	9.0
7	6.5	9.5	10	11	12	9.9	12	8.7	6.5	5.5	7.0	36
8	6.9	9.5	8.7	9.9	9.1	8.3	15	8.3	8.0	5.0	7.5	10
9	6.9	13	36	15	9.0	8.0	46	9.9	7.3	4.6	11	6.0
10	6.9	10	21	17	8.5	8.3	20	11	6.5	4.4	14	5.5
11	6.5	8.7	13	21	9.9	7.6	15	8.7	5.8	4.2	5.5	6.5
12	6.2	8.3	11	16	9.9	9.5	13	15	5.5	4.2	4.8	6.0
13	5.8	8.0	11	12	12	8.3	17	23	5.2	3.8	6.0	5.0
14	5.8	7.6	15	11	13	7.6	16	10	5.2	3.8	5.5	5.5
15	5.8	7.6	10	12	9.9	8.0	13	8.7	5.2	4.2	4.8	4.8
16	6.2	7.6	9.5	11	9.1	13	12	8.0	8.0	4.2	4.0	4.6
17	5.8	6.9	11	11	11	17	11	7.6	7.3	3.6	4.4	4.4
18	5.8	7.3	11	9.9	9.5	9.9	11	7.3	5.5	3.4	4.6	4.4
19	5.8	7.6	9.5	9.9	9.5	9.5	10	7.3	4.9	3.8	4.4	4.4
20	5.8	7.6	12	9.5	9.5	9.1	10	6.9	4.9	3.6	4.4	4.4
21	5.8	7.6	59	13	8.3	21	9.9	6.5	5.2	3.4	4.0	4.2
22	5.8	7.6	28	13	9.5	18	9.9	6.5	5.2	3.6	4.2	4.2
23	5.8	7.6	17	10	9.9	12	13	8.3	9.5	3.6	10	4.2
24	6.2	7.3	13	9.9	8.3	11	10	8.7	9.1	3.8	4.6	4.2
25	6.2	7.6	12	14	9.1	9.5	9.5	7.3	6.2	4.0	4.0	4.2
26	6.2	7.6	16	11	8.3	9.5	9.1	6.5	5.8	4.4	4.0	5.0
27	6.2	7.6	23	11	8.0	9.5	9.1	6.5	12	4.2	4.2	4.6
28	6.2	9.9	14	10	8.3	9.1	8.7	6.5	9.5	4.0	4.4	10
29	15	15	12	11	------	9.9	8.7	6.5	11	3.8	4.6	24
30	13	8.7	12	9.9	------	46	8.3	9.9	6.9	8.0	4.4	9.0
31	8.7	------	12	9.5	------	48	------	7.6	------	4.4	7.0	------
TOTAL	291.3	259.6	472.5	387.5	266.3	388.1	412.2	283.4	253.0	136.7	171.5	243.7
MEAN	9.40	8.65	15.2	12.5	9.51	12.5	13.7	9.14	8.43	4.41	5.53	8.12
MAX	43	15	59	21	13	48	46	23	31	8.0	14	36
MIN	5.6	6.9	7.3	9.5	8.0	7.6	8.3	6.5	4.9	3.4	3.8	4.2
CFSM	1.11	1.02	1.79	1.47	1.12	1.47	1.61	1.08	.99	.52	.65	.96
IN.	1.27	1.14	2.07	1.70	1.17	1.70	1.80	1.24	1.11	.60	.75	1.07

CAL YR 1973 TOTAL 4,447.3 MEAN 12.2 MAX 62 MIN 4.6 CFSM 1.44 IN 19.46
WTR YR 1974 TOTAL 3,565.8 MEAN 9.77 MAX 59 MIN 3.4 CFSM 1.15 IN 15.61

PEAK DISCHARGE (BASE, 75 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-02	1900	2.38	127	3-30	2200	2.21	99
12-21	1300	2.02	76				

NOTE.--No gage-height record July 3 to Sept. 30.

01591000 Patuxent River near Unity, Md.

LOCATION.--Lat 39°14'18", long 77°03'23", Montgomery County, on right bank at downstream side of bridge on State Highway 97, 0.6 mile (1 km) upstream from Cattail Creek, 0.8 mile (1.3 km) upstream from Triadelphia Reservoir, 1.1 miles (1.8 km) northeast of Unity, and 97 miles (155 km) upstream from mouth.

DRAINAGE AREA.--34.8 sq mi (90.1 sq km).

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 364.76 ft (111.179 m) above mean sea level (Washington Suburban Sanitary Commission bench mark). Prior to Aug. 14, 1946, wire-weight gage and crest-stage gage at same site and datum.

AVERAGE DISCHARGE.--30 years, 37.9 cfs (1.073 cu m/s), 14.79 in/yr (376 mm/yr).

EXTREMES.--Current year: Maximum discharge, 961 cfs (27.2 cu m/s) Mar. 30, gage height, 5.99 ft (1.826 m); minimum, 8.0 cfs (0.23 cu m/s) Aug. 15, 16, gage height, 2.04 ft (0.622 m).
Period of record: Maximum discharge, 21,800 cfs (595 cu m/s) Sept. 11, 1971, gage height, 18.60 ft (5.669 m), from rating curve extended above 870 cfs (24.6 cu m/s) on basis of slope-area measurement at gage height 13.58 ft (4.139 m); minimum, 0.20 cfs (0.006 cu m/s) Sept. 10, 11, 12, 1966, gage height, 1.66 ft (0.506 m).

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 1111: 1947. WSP 1432: 1948.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	21	16	52	41	32	110	30	34	22	11	13
2	38	18	15	43	42	32	80	29	122	19	11	24
3	34	17	16	45	45	32	60	38	63	18	12	39
4	23	17	15	61	40	32	90	32	39	17	12	39
5	20	22	40	47	37	30	100	30	32	18	13	17
6	18	24	37	43	37	28	80	32	28	21	10	17
7	18	19	23	41	40	30	65	30	26	34	11	66
8	18	19	20	37	38	30	80	28	27	20	10	27
9	18	19	107	46	32	28	140	56	25	17	13	21
10	18	17	46	65	34	30	85	43	24	19	14	19
11	17	17	31	129	36	28	65	33	21	22	11	19
12	17	17	25	92	34	30	60	87	20	16	9.9	18
13	16	17	25	61	38	28	90	78	19	16	10	16
14	16	18	30	54	55	26	70	45	19	15	9.4	51
15	15	17	24	51	44	26	60	38	18	15	8.5	23
16	15	17	23	51	38	28	55	33	29	15	8.3	18
17	15	15	25	48	38	30	51	30	36	14	12	17
18	15	16	24	43	40	28	49	34	23	14	14	16
19	15	16	22	43	38	26	48	30	20	14	39	15
20	15	16	33	41	40	26	45	28	19	13	26	15
21	15	16	319	179	34	50	43	26	20	13	13	18
22	15	17	78	86	36	38	43	25	22	12	12	26
23	15	16	53	65	34	33	46	42	40	13	13	16
24	15	16	44	58	32	30	40	35	30	16	11	15
25	15	17	39	61	34	28	38	36	31	14	10	15
26	15	16	365	54	32	27	37	27	28	14	26	14
27	15	16	183	55	30	27	36	26	32	14	17	13
28	15	29	84	51	30	26	35	25	28	13	12	48
29	52	25	65	50	------	29	34	24	32	12	35	23
30	31	17	56	46	------	322	32	28	25	21	14	14
31	20	------	50	44	------	201	------	26	------	12	13	------
TOTAL	602	544	1,933	1,842	1,049	1,391	1,867	1,104	932	513	441.1	692
MEAN	19.4	18.1	62.4	59.4	37.5	44.9	62.2	35.6	31.1	16.5	14.2	23.1
MAX	52	29	365	179	55	322	140	87	122	34	39	66
MIN	15	15	15	37	30	26	32	24	18	12	8.3	13
CFSM	.56	.52	1.79	1.71	1.08	1.29	1.79	1.02	.89	.47	.41	.66
IN.	.64	.58	2.07	1.97	1.12	1.49	2.00	1.18	1.00	.55	.47	.74

CAL YR 1973 TOTAL 19,228.0 MEAN 52.7 MAX 365 MIN 13 CFSM 1.51 IN 20.55
WTR YR 1974 TOTAL 12,910.1 MEAN 35.4 MAX 365 MIN 8.3 CFSM 1.02 IN 13.80

PEAK DISCHARGE (BASE, 770 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-26	2000	5.73	856	3-30	2400	5.99	961

NOTE.--No gage-height record Feb. 7 to Mar. 22.

01592500 Patuxent River near Laurel, Md.

LOCATION.--Lat 39°06'56", long 76°52'27", Prince Georges County, on right bank at Rocky Gorge Pumping station, 600 ft (180 m) downstream from T. Howard Duckett Reservoir, 0.7 mile (1.1 km) upstream from Walker Branch, 1.3 miles (2.1 km) northwest of Laurel, and 81 miles (130 km) upstream from mouth.
DRAINAGE AREA.--132 sq mi (342 sq km).
PERIOD OF RECORD.--October 1944 to current year.
GAGE.--Water-stage recorder and concrete control. Datum of gage is 153.5 ft (46.79 m) above mean sea level, levels by Washington Suburban Sanitary Commission. Prior to Oct. 1, 1955, water-stage recorder and concrete control at site 0.3 mile (0.5 km) downstream at different datum. Oct. 1, 1955, to Sept. 30, 1956, non-recording gage at present site at datum 1.2 ft (0.37 m) lower. Oct. 1, 1956, to Jan. 27, 1957, nonrecording gage at present site and datum. Jan. 28, 1957, to May 3, 1972, water-stage recorder and concrete control at present site and datum. May 4, 1972, to Sept. 4, 1973, nonrecording gage at present site and datum.
EXTREMES.--Current year: Maximum discharge, 1,070 cfs (30.3 cu m/s) Dec. 21, gage height, 7.70 ft (2.347 m); minimum daily, 15 cfs (0.42 cu m/s) July 29 to Aug. 2.
Period of record: Maximum discharge, about 26,000 cfs (736 cu m/s) June 22, 1972, gage height, about 25 ft (7.6 m), from floodmarks, from rating curve extended above 6,600 cfs (187 cu m/s) on basis of contracted-opening measurement of peak flow; minimum, 0.10 cfs (0.003 cu m/s) Sept. 25, 1964, (valve closed for repair); minimum daily, 1.1 cfs (0.031 cu m/s) June 26, 1956.
REMARKS.--Records good. Records do not include diversion at Patuxent (formerly Willis School) filtration plant for supply of Washington Suburban Sanitary District. Flow regulated by Triadelphia Reservoir, and since March 1954 by T. Howard Duckett Reservoir, combined usable capacity, 12,500 mil gal (47.31 cu hm); dead storage, 80 mil gal (302,800 cu m).
CORRECTIONS.--Combined month-end total reservoir contents and monthly and yearly diversions for water year 1973 were omitted from WRD Md. and Del., 1973. Combined reservoir contents on Sept. 30, 1972: 11,290 million gallons. Diversions for calendar year 1972, 77.9 cfs and for water year 1973, 76.8 cfs. Monthly figures of contents and diversions for water year 1973 are given below:

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
(ƒ)	11,320	12,030	11,960	12,360	11,770	11,890	12,280	12,060	12,330	11,740	11,600	11,440
(≠)	67.9	80.3	85.1	75.3	65.4	68.2	76.4	75.2	81.1	79.6	80.9	85.8

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	18	22	186	71	69	651	22	118	22	15	16
2	24	18	22	184	71	69	505	22	145	22	15	16
3	24	18	22	185	71	69	505	22	169	22	16	16
4	24	18	22	144	71	42	625	22	82	22	16	16
5	24	18	22	117	47	17	468	20	24	22	17	16
6	24	18	22	117	28	17	173	20	24	22	17	16
7	24	18	22	70	27	17	173	20	60	22	17	17
8	24	18	22	31	26	17	182	22	82	23	17	18
9	23	18	22	61	30	17	403	90	82	22	17	18
10	23	18	22	80	66	17	225	107	82	22	17	26
11	23	18	22	144	66	41	177	108	63	22	17	18
12	22	18	22	181	135	80	177	115	23	22	17	18
13	22	18	22	181	109	80	177	115	23	22	17	18
14	22	18	22	189	69	59	177	117	23	22	17	18
15	21	18	22	192	72	23	132	115	23	22	18	20
16	21	18	22	184	73	22	72	115	23	22	18	20
17	21	18	22	192	73	20	72	58	23	22	17	20
18	20	18	22	166	72	20	71	20	24	22	16	20
19	20	18	22	28	72	20	83	20	24	22	16	60
20	19	17	22	28	72	20	130	20	23	23	16	88
21	19	16	493	157	71	63	132	22	22	23	16	87
22	19	16	559	270	69	117	132	22	22	19	16	87
23	19	16	358	286	69	117	128	22	22	16	16	86
24	19	16	184	286	69	117	101	22	22	16	16	86
25	19	16	184	286	69	56	72	23	23	16	16	86
26	19	16	312	286	69	17	42	23	23	16	17	86
27	19	16	801	232	69	17	22	23	23	16	17	85
28	19	20	745	176	69	17	22	22	70	16	17	85
29	19	23	366	120	------	16	22	22	157	15	16	85
30	18	23	187	71	------	330	22	23	40	15	16	86
31	18	------	187	71	------	700	------	52	------	15	16	------
TOTAL	656	537	4,816	4,901	1,875	2,303	5,873	1,446	1,564	625	512	1,334
MEAN	21.2	17.9	155	158	67.0	74.3	196	46.6	52.1	20.2	16.5	44.5
MAX	24	23	801	286	135	700	651	117	169	23	18	88
MIN	18	16	22	28	26	16	22	20	22	15	15	16
(ƒ)	11,140	10,680	11,860	11,740	11,820	12,870	11,840	11,890	11,530	10,490	9,840	9,070
(≠)	81.0	80.4	71.8	70.9	72.6	74.0	78.8	81.5	81.0	85.2	80.6	81.4

CAL YR 1973 TOTAL 49,010.4 MEAN 134 MAX 990 MIN 8.2 (ƒ) 76.8
WTR YR 1974 TOTAL 26,442.0 MEAN 72.4 MAX 801 MIN 15 (ƒ) 78.3

ƒ Combined month-end total contents, in million of gallons, in Triadelphia and T. Howard Duckett Reservoirs (contents on Sept. 30, 1973: 11,440 million gallons); furnished by Washington Suburban Sanitary Commission.
≠ Diversion, in cubic feet per second, above station at Patuxent (formerly Willis School) filtration plant for supply of Washington Suburban Sanitary District. Records furnished by Washington Suburban Sanitary Commission.

01593500 Little Patuxent River at Guilford, Md.

LOCATION.--Lat 39°10'04", long 76°51'07", Howard County, on left bank 75 ft (23 m) upstream from bridge on State Highway 32, 1 mile (1.6 km) west of Guilford, 3 miles (4.8 km) upstream from Middle Patuxent River, 4 miles (6.4 km) north of Laurel, and 20.1 miles (32.3 km) upstream from mouth.

DRAINAGE AREA.--38.0 sq mi (98.4 sq km).

PERIOD OF RECORD.--April 1932 to current year. Monthly discharge only for April 1932, published in WSP 1302.

GAGE.--Water-stage recorder. Concrete control since June 20, 1946. Altitude of gage is 260 ft (79.2 m), from topographic map. Prior to June 25, 1946, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--42 years, 41.4 cfs (1.172 cu m/s), 14.80 in/yr (376 mm/yr).

EXTREMES.--Current year: Maximum discharge, 1,110 cfs (31.4 cu m/s) March 30, gage height, 8.70 ft (2.652 m); minimum, 7.5 cfs (0.21 cu m/s) July 20, 21, gage height, 2.59 ft (0.789 m).
Period of record: Maximum discharge, 12,400 cfs (351 cu m/s) June 22, 1972, gage height, 18.38 ft (5.602 m), from high-water mark in well, from rating curve extended above 1,800 cfs (51.0 cu m/s) on basis of contracted-opening measurement at gage height 13.26 ft (4.042 m) and contracted-opening and flow-over-embankment measurement at gage height, 18.38 ft (5.602 m); no flow Sept. 8, and parts of Sept. 6, 7, 9-12, 1966.

REMARKS.--Records good. Low flow affected by regulation from unknown source.

REVISIONS (WATER YEARS).--WSP 1502: 1933, 1934(M), 1939(M), 1945(M), 1948(P).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	24	15	57	33	29	81	26	44	19	9.6	15
2	73	18	14	39	34	30	62	24	288	17	9.2	12
3	56	16	15	47	40	29	50	53	92	16	12	50
4	22	15	15	98	32	29	104	33	43	15	20	77
5	18	23	111	50	30	28	104	28	32	16	23	18
6	15	22	63	41	28	29	72	31	28	19	12	29
7	14	18	25	38	35	31	48	27	26	63	16	242
8	15	18	20	34	34	34	87	26	26	21	13	38
9	15	29	211	54	34	31	263	37	26	16	18	22
10	16	20	62	90	32	31	77	34	24	15	17	19
11	15	18	57	188	30	28	56	28	22	15	13	19
12	15	18	25	84	30	31	48	159	20	13	12	17
13	15	19	27	48	39	27	88	143	19	12	21	15
14	14	18	46	42	54	26	72	45	19	12	12	37
15	14	17	38	40	35	25	53	34	19	12	13	17
16	14	16	36	40	31	33	42	30	38	11	9.5	14
17	12	15	32	39	34	40	39	26	27	9.5	31	13
18	12	15	28	35	31	30	38	38	21	9.1	25	13
19	12	15	26	35	31	28	38	29	19	10	24	12
20	13	16	107	34	32	26	36	26	18	9.3	33	12
21	13	16	608	217	28	122	35	24	19	8.5	13	14
22	13	16	79	79	37	61	34	24	19	8.5	12	20
23	13	16	48	51	35	37	41	33	49	8.5	19	12
24	13	16	41	47	29	33	33	56	30	11	11	11
25	12	17	36	62	31	29	30	85	21	10	9.6	11
26	13	15	215	45	28	29	29	33	21	11	67	11
27	13	18	187	50	27	28	29	29	25	10	40	10
28	13	32	57	43	29	27	29	29	31	10	16	68
29	157	30	44	44	------	32	29	29	35	9.4	61	54
30	46	21	39	37	------	452	28	37	22	29	23	19
31	22	------	40	35	------	377	------	29	------	13	15	------
TOTAL	723	567	2,367	1,843	923	1,822	1,775	1,285	1,123	458.8	629.9	921
MEAN	23.3	18.9	76.4	59.5	33.0	58.8	59.2	41.5	37.4	14.8	20.3	30.7
MAX	157	32	608	217	54	452	263	159	288	63	67	242
MIN	12	15	14	34	27	25	28	24	18	8.5	9.2	10
CFSM	.61	.50	2.01	1.57	.87	1.55	1.56	1.09	.98	.39	.53	.81
IN.	.71	.56	2.32	1.80	.90	1.78	1.74	1.26	1.10	.45	.62	.90

CAL YR 1973 TOTAL 23,313.0 MEAN 63.9 MAX 614 MIN 12 CFSM 1.68 IN 22.82
WTR YR 1974 TOTAL 14,437.7 MEAN 39.6 MAX 608 MIN 8.5 CFSM 1.04 IN 14.13

PEAK DISCHARGE (BASE, 800 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-21	0900	7.33	810	3-30	2100	8.70	1,110

01594500 Western Branch near Largo, Md.

LOCATION.--Lat 38°52'24", long 76°47'54", Prince Georges County, on right bank 200 ft (61 m) upstream from culvert on State Highway 202, 200 ft (61 m) downstream from small tributary, 0.1 mile (0.2 km) upstream from Southwest Branch, 2.3 miles (3.7 km) southeast of Largo, 4.8 miles (7.7 km) northwest of Upper Marlboro, and 11 miles (17.6 km) upstream from mouth.

DRAINAGE AREA.--30.2 sq mi (78.2 sq km).

PERIOD OF RECORD.--October 1949 to current year. Monthly discharge only for some periods, published in WSP 1302.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 46.50 ft (14.173 m) above mean sea level (levels by private consultant engineers).

AVERAGE DISCHARGE.--25 years, 31.8 cfs (0.901 cu m/s), 14.30 in/yr (363 mm/yr).

EXTREMES.--Current year: Maximum discharge, 997 cfs (28.2 cu m/s) Mar. 30, gage height, 7.21 ft (2.198 m), from rating curve extended above 400 cfs (11.3 cu m/s); minimum, 0.50 cfs (0.014 cu m/s) Sept. 27, gage height, 1.50 ft (0.457 m).
Period of record: Maximum discharge, 1,760 cfs (49.8 cu m/s) Aug. 27, 1971, gage height, 8.97 ft (2.734 m), from rating curve extended above 400 cfs (11.3 cu m/s); no flow Sept. 8-13, 1966.

REMARKS.--Records fair except those above 100 cfs (2.83 cu m/s), which are poor.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.6	13	11	78	24	16	107	9.1	18	13	1.8	6.9
2	281	7.5	7.9	41	23	20	58	7.9	329	10	1.6	3.2
3	132	5.8	7.1	35	24	19	45	36	121	7.7	2.3	110
4	35	4.3	6.8	94	24	17	42	20	40	5.9	23	146
5	22	14	83	56	22	16	60	14	24	5.1	18	32
6	15	13	65	36	23	19	50	18	17	5.0	3.7	33
7	12	7.7	26	27	38	23	35	13	12	5.2	8.3	233
8	11	5.9	17	22	29	18	74	10	14	4.0	7.3	51
9	11	26	228	53	28	16	383	28	12	3.4	218	25
10	10	15	71	79	26	16	106	23	8.7	3.5	132	16
11	9.5	9.4	33	131	25	14	51	14	6.1	3.0	23	20
12	9.1	8.1	22	76	25	20	39	122	3.9	2.3	14	17
13	8.6	7.4	22	44	33	16	47	99	2.9	2.1	15	11
14	7.9	6.9	29	37	36	15	45	40	2.1	2.0	11	8.0
15	7.0	6.5	19	31	29	14	35	23	1.9	1.9	7.0	7.1
16	7.4	5.9	19	30	25	29	27	15	14	1.9	4.5	4.0
17	6.6	4.8	22	28	29	36	24	11	8.5	1.7	3.5	2.3
18	5.7	4.5	22	24	26	23	22	8.1	3.6	1.7	2.9	1.8
19	5.0	5.2	19	24	25	20	20	7.9	2.0	2.6	4.7	1.5
20	5.1	4.7	63	22	24	18	19	7.7	5.3	2.5	4.6	1.3
21	4.7	5.2	546	64	21	119	18	5.3	22	2.0	1.9	1.2
22	4.7	6.0	212	59	24	79	17	4.7	19	2.0	14	1.5
23	5.0	5.4	59	40	20	42	33	18	43	2.2	12	.86
24	5.4	5.6	38	36	18	29	21	18	31	4.0	5.7	.66
25	6.2	6.4	30	64	20	22	17	8.8	18	2.4	4.4	.77
26	6.5	5.6	57	45	18	19	16	5.4	77	2.5	29	.75
27	6.2	6.1	86	40	16	18	14	4.7	75	2.5	43	.57
28	6.5	50	48	34	17	17	13	4.6	40	2.0	11	51
29	38	37	32	38	------	22	12	6.3	34	1.8	16	52
30	26	15	28	31	------	437	11	24	20	13	40	22
31	17	------	36	27	------	532	------	12	------	3.7	23	------
TOTAL	734.7	317.9	1,964.8	1,446	692	1,721	1,461	638.5	1,025.0	122.6	706.2	861.41
MEAN	23.7	10.6	63.4	46.6	24.7	55.5	48.7	20.6	34.2	3.95	22.8	28.7
MAX	281	50	546	131	38	532	383	122	329	13	218	233
MIN	4.7	4.3	6.8	22	16	14	11	4.6	1.9	1.7	1.6	.57
CFSM	.78	.35	2.10	1.54	.82	1.84	1.61	.68	1.13	.13	.76	.95
IN.	.90	.39	2.42	1.78	.85	2.12	1.80	.79	1.26	.15	.87	1.06

CAL YR 1973 TOTAL 14,530.80 MEAN 39.8 MAX 546 MIN 3.9 CFSM 1.32 IN 17.90
WTR YR 1974 TOTAL 11,691.11 MEAN 32.0 MAX 546 MIN .57 CFSM 1.06 IN 14.40

PEAK DISCHARGE (BASE, 550 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-02	1600	6.46	751	4-09	0300	5.94	604
12-21	0930	6.25	689	6-02	1600	6.35	718
3-30	2200	7.21	997	8-09	2000	6.50	763

01594600 Cocktown Creek near Huntingtown, Md.

NOTE.--Records for the 1974 water year have been withheld pending better definition of the stage-discharge relation. They will be published in a subsequent annual report.

POTOMAC RIVER BASIN

01595000 North Branch Potomac River at Steyer, Md.

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

DRAINAGE AREA.--73.0 sq mi (189.1 sq km).

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

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

AVERAGE DISCHARGE.--18 years, 170 cfs (4.814 cu m/s), 31.62 in/yr (803 mm/yr).

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

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

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

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

CAL YR 1973 TOTAL 65,787 MEAN 180 MAX 1,830 MIN 13 CFSM 2.47 IN 33.52
WTR YR 1974 TOTAL 81,910 MEAN 224 MAX 2,600 MIN 14 CFSM 3.07 IN 41.74

PEAK DISCHARGE (BASE, 2,200 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-26	1830	6.80	3,100	4-04	0945	7.05	3,400
1-10	*	*	*	6-02	0815	6.11	2,340

* Unknown, discharge probably greater than base.
NOTE: No gage-height record Oct. 1-15, Dec. 29 to Feb. 7, and June 9 to July 15.

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

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

DRAINAGE AREA.--48.8 sq mi (126.4 sq km).

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

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

AVERAGE DISCHARGE.--13 years, 95.6 cfs (2.707 cu m/s), 26.60 in/yr (676 mm/yr), unadjusted.

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

REMARKS.--Records fair. Flow regulated by Stony River Reservoir, 14.0 mi (22.5 km) upstream from station, capacity, 1,948,000,000 gal (7.373 cu hm), of which 1,681,000,000 gal (6.363 cu hm) is controlled above minimum pool. Since 1963, minor regulation by Virginia Electric and Power Company dam 4.0 mi (6.4 km) upstream from station.

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

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

CAL YR 1973 TOTAL 38,642.3 MEAN 106 MAX 968 MIN 8.1 CFSM 2.17 IN 29.45
WTR YR 1974 TOTAL 41,061.9 MEAN 112 MAX 1,170 MIN 9.5 CFSM 2.30 IN 31.29

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

01595500 North Branch Potomac River at Kitzmiller, Md.

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

DRAINAGE AREA.--225 sq mi (583 sq km).

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

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

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

EXTREMES.--Current year: Maximum discharge, 7,450 cfs (211 cu m/s) Jan. 11, gage height, 7.95 ft (2.423 m); minimum, 38 cfs (1.08 cu m/s) Aug. 28, gage height, 2.50 ft (0.762 m).
Period of record: Maximum discharge, 33,400 cfs (946 cu m/s) Oct. 15, 1954, gage height, 13.73 ft (4.185 m), from floodmarks, present site and datum; minimum, 4.6 cfs (0.13 cu m/s) Oct. 3-7, 1953.

REMARKS.--Records good except those for winter months, which are fair. Regulation at low flow by Stony River Reservoir, 30 miles (48.3 km) above station (see station 01595200). Water-quality records for the current water year are published in Part 2 of this report.

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

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

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

PEAK DISCHARGE (BASE, 3,400 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-26	1930	7.80	6,750	6-01	0130	6.86	3,710
1-10	1700	7.83	6,880	6-02	0945	7.59	5,860
1-11	1100	7.95	7,450	6-23	1800	7.63	6,020
4-04	1345	7.93	7,350				

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

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

DRAINAGE AREA.--266 sq mi (689 sq km).

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

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

AVERAGE DISCHARGE.--8 years, 531 cfs (15.04 cu m/s), 27.11 in/yr (689 mm/yr).

EXTREMES.--Current year: Maximum discharge, 6,750 cfs (191 cu m/s) Apr. 4, gage height, 8.02 ft (2.444 m); minimum, 42 cfs (1.19 cu m/s) Aug. 28, 29, gage height, 2.32 ft (0.707 m).
Period of record: Maximum discharge, 12,800 cfs (362 cu m/s) Dec. 8, 1972, gage height, 9.86 ft (3.005 m); minimum, 10 cfs (0.28 cu m/s) Oct. 2, 3, 1968, gage height, 1.69 ft (0.515 m).

REMARKS.--Records fair. Regulation at low flow by Stony River Reservoir, 39 miles (63 km) above station (see station 01595200). Water-quality records for the current water year are published in Part 2 of this report.

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

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

CAL YR 1973 TOTAL 201,643 MEAN 552 MAX 4,350 MIN 42 CFSM 2.08 IN 28.19
WTR YR 1974 TOTAL 205,594 MEAN 563 MAX 4,800 MIN 43 CFSM 2.12 IN 28.74

PEAK DISCHARGE (BASE, 4,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-26	2030	7.85	6,320	4-04	1200	8.02	6,750
1-10	1730	7.87	6,360	6-02	0945	7.83	6,260
1-11	1115	7.90	6,440				

01596500 Savage River near Barton, Md.

LOCATION.--Lat 39°34'05", long 79°06'10", Garrett County, on right bank 0.9 mile (1.4 km) upstream from Bear Pen Run, 1.5 miles (2.4 km) downstream from Popular Lick Run, 5.4 miles (8.7 km) northwest of Barton, and 10 miles (16 km) upstream from mouth.

DRAINAGE AREA.--49.1 sq mi (127.2 sq km).

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 1,605 ft (489 m), from topographic map.

AVERAGE DISCHARGE.--26 years 73.5 cfs (2.082 cu m/s), 20.33 in/yr (516 mm/yr).

EXTREMES.--Current year: Maximum discharge, 1,580 cfs (44.7 cu m/s) Dec. 26, gage height, 4.18 ft (1.274 m); minimum, 5.0 cfs (0.14 cu m/s) Sept. 27, 28, gage height, 1.22 ft (0.372 m).
Period of record: Maximum discharge, 7,510 cfs (213 cu m/s) Oct. 15, 1954, gage height, 8.45 ft (2.576 m), from rating curve extended above 1,600 cfs (45.3 cu m/s) on basis of slope-area measurement of peak flow; minimum, 0.40 cfs (0.011 cu m/s) Sept. 3, 4, 1966, gage height, 0.96 ft (0.293 m).

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	152	134	168	52	80	105	21	126	75	11	11
2	34	127	96	131	46	110	123	20	276	57	10	9.4
3	37	99	78	132	42	140	124	34	276	45	11	13
4	32	75	67	189	39	120	304	33	163	48	10	15
5	28	66	69	168	34	100	317	29	106	64	9.5	13
6	23	56	75	137	48	82	201	29	76	51	8.1	13
7	20	46	62	106	53	87	136	28	58	40	7.5	34
8	19	41	58	80	56	84	123	27	48	33	7.8	23
9	18	42	66	81	51	82	181	28	39	28	9.3	20
10	18	37	59	294	46	107	180	26	33	24	14	17
11	15	33	52	1,000	41	102	149	23	28	22	9.8	14
12	14	32	51	670	38	107	118	80	24	19	9.4	16
13	13	32	49	324	48	93	136	134	21	17	9.3	21
14	12	32	51	205	58	78	133	105	19	15	7.6	21
15	11	31	46	158	56	70	133	82	22	14	6.6	17
16	13	46	44	139	54	60	110	66	34	14	76	15
17	12	46	28	133	52	55	92	58	32	12	126	13
18	11	46	22	122	48	51	77	159	22	11	50	12
19	10	50	24	131	45	51	65	148	18	13	31	11
20	9.4	46	41	145	60	51	55	131	29	12	22	11
21	8.8	44	78	398	54	68	48	106	28	10	17	11
22	8.2	43	90	439	72	102	43	82	38	9.3	15	9.4
23	8.2	39	88	270	84	107	42	78	235	11	15	8.2
24	8.2	47	75	186	78	93	38	62	357	25	11	7.0
25	7.6	54	68	136	72	76	34	52	196	14	9.4	7.0
26	7.6	59	567	111	66	65	29	44	136	17	10	6.0
27	7.6	94	1,150	102	59	58	27	38	96	44	8.2	6.0
28	8.8	473	583	90	54	52	25	33	77	20	11	10
29	467	364	325	77	------	50	23	40	86	15	11	7.6
30	376	202	255	64	------	67	23	54	63	18	14	6.5
31	188	------	203	57	------	101	------	50	------	13	13	------
TOTAL	1,463.4	2,554	4,654	6,443	1,506	2,549	3,194	1,900	2,762	810.3	580.5	398.1
MEAN	47.2	85.1	150	208	53.8	82.2	106	61.3	92.1	26.1	18.7	13.3
MAX	467	473	1,150	1,000	84	140	317	159	357	75	126	34
MIN	7.6	31	22	57	34	50	23	20	18	9.3	6.6	6.0
CFSM	.96	1.73	3.06	4.24	1.10	1.67	2.16	1.25	1.88	.53	.38	.27
IN.	1.11	1.94	3.53	4.88	1.14	1.93	2.42	1.44	2.09	.61	.44	.30

CAL YR 1973 TOTAL 32,275.4 MEAN 88.4 MAX 1,150 MIN 5.1 CFSM 1.80 IN 24.45
WTR YR 1974 TOTAL 28,814.3 MEAN 78.9 MAX 1,150 MIN 6.0 CFSM 1.61 IN 21.83

PEAK DISCHARGE (BASE, 800 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-29	1300	3.44	879	1-11	1400	3.91	1,310
12-26	2100	4.18	1,580				

NOTE: No gage-height record Jan. 28 to Mar. 5.

01597000 Crabtree Creek near Swanton, Md.

LOCATION.--Lat 39°30'00", long 79°09'35", Garrett County, on left bank 0.5 mile (0.8 km) upstream from mouth, 1.0 mile (1.6 km) downstream from Springlick Run, and 5.0 miles (8.0 km) northeast of Swanton.

DRAINAGE AREA.--16.7 sq mi (43.3 sq km).

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,529.06 ft (466.058 m) above mean sea level (Corps of Engineers bench mark).

AVERAGE DISCHARGE.--26 years, 28.5 cfs (0.807 cu m/s), 23.18 in/yr (589 mm/yr).

EXTREMES.--Current year: Maximum discharge, 1,290 cfs (36.5 cu m/s) July 4, gage height, 3.90 ft (1.189 m); minimum, 1.6 cfs (0.045 cu m/s) Sept. 24, 25, 30, gage height, 0.78 ft (0.238 m).
Period of record: Maximum discharge, 3,260 cfs (92.3 cu m/s) July 12, 1949, gage height, 5.01 ft (1.527 m), from rating curve extended above 210 cfs (5.95 cu m/s) on basis of slope-area and contracted-opening measurements of peak flow; minimum, 0.1 cfs (0.003 cu m/s) Dec. 3, 1953, gage height, 0.56 ft (0.171 m); minimum daily, 0.8 cfs (0.023 cu m/s) Nov. 6, 1953.

REMARKS.--Records good except those for the winter months, which are fair. Small diversion above station by Baltimore and Ohio Railroad.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	42	50	94	24	35	39	12	73	37	4.0	2.8
2	8.7	40	39	80	24	51	46	12	140	29	4.3	3.2
3	7.4	34	33	81	22	72	44	22	100	24	4.3	3.8
4	6.5	27	28	102	18	68	124	21	70	213	4.3	3.2
5	5.8	24	28	91	16	58	135	20	56	210	4.0	2.5
6	4.7	19	24	71	14	48	92	19	45	105	3.6	3.8
7	4.2	16	20	55	24	44	65	18	37	64	3.4	7.8
8	10	14	18	42	26	41	64	17	30	44	3.4	3.4
9	15	16	22	44	27	39	95	16	25	32	3.6	2.7
10	11	14	19	177	25	39	97	15	21	26	3.4	2.5
11	8.8	14	17	410	24	33	76	14	17	20	3.2	2.4
12	7.2	14	16	213	21	33	59	40	15	14	5.2	2.4
13	6.0	14	16	116	22	30	66	70	12	13	4.5	3.2
14	5.6	14	18	79	29	26	70	60	11	11	3.4	5.8
15	4.7	14	17	58	29	23	67	51	11	10	3.0	2.7
16	7.3	16	16	46	28	23	54	45	17	9.5	2.8	2.3
17	5.7	14	13	42	27	21	43	39	14	8.4	4.0	2.1
18	4.8	14	9.0	35	24	18	36	90	10	7.8	3.2	2.0
19	4.5	14	10	34	23	24	31	80	10	7.8	3.0	1.9
20	4.3	14	16	33	31	25	26	70	14	7.2	2.8	1.9
21	4.0	14	30	83	28	39	22	59	21	6.4	2.5	1.9
22	3.8	13	35	108	40	54	20	51	42	5.8	3.2	1.9
23	3.6	12	34	83	45	56	20	44	93	6.9	2.8	1.7
24	3.5	13	31	59	44	48	17	38	121	7.5	2.5	1.6
25	3.4	14	29	45	40	36	15	32	87	5.8	2.4	1.7
26	3.4	14	140	37	33	30	14	27	69	5.8	2.4	1.7
27	3.3	21	362	34	30	26	13	23	49	5.6	2.3	1.7
28	4.8	97	196	31	27	22	13	21	41	5.0	2.5	2.0
29	100	95	122	30	------	20	12	24	43	4.7	2.8	2.3
30	72	67	103	27	------	27	12	30	38	5.8	3.8	1.7
31	46	------	99	27	------	37	------	27	------	4.3	3.6	------
TOTAL	383.8	748	1,610.0	2,467	765	1,146	1,487	1,107	1,332	956.3	104.2	80.6
MEAN	12.4	24.9	51.9	79.6	27.3	37.0	49.6	35.7	44.4	30.8	3.36	2.69
MAX	100	97	362	410	45	72	135	90	140	213	5.2	7.8
MIN	3.3	12	9.0	27	14	18	12	12	10	4.3	2.3	1.6
CFSM	.74	1.49	3.11	4.77	1.63	2.22	2.97	2.14	2.66	1.84	.20	.16
IN.	.85	1.67	3.59	5.50	1.70	2.55	3.31	2.47	2.97	2.13	.23	.18

CAL YR 1973 TOTAL 11,020.6 MEAN 30.2 MAX 362 MIN 1.8 CFSM 1.81 IN 24.55
WTR YR 1974 TOTAL 12,186.9 MEAN 33.4 MAX 410 MIN 1.6 CFSM 2.00 IN 27.15

PEAK DISCHARGE (BASE, 330 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-26	2345	2.63	435	7-04	1815	3.90	1,290
1-11	1000	2.77	508				

NOTE: No gage height record May 2 to June 12.

01597500 Savage River, below Savage River Dam, near Bloomington, Md.

LOCATION.--Lat 39°30'05", long 79°07'25", Garrett County, on left bank 0.7 mile (1.1 km) downstream from Savage River Dam, 1.1 miles (1.8 km) downstream from Crabtree Creek, 3.2 miles (5.1 km) northwest of Bloomington, and 3.7 miles (6.0 km) upstream from mouth.

DRAINAGE AREA.--106 sq mi (275 sq km).

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,276.40 ft (389.047 m) above mean sea level (Corps of Engineers bench mark).

AVERAGE DISCHARGE.--26 years, 164 cfs (4.644 cu m/s), 21.01 in/yr (534 mm/yr).

EXTREMES.--Current year: Maximum discharge, 2,590 cfs (73.3 cu m/s) Apr. 6, gage height, 5.48 ft (1.670 m); maximum gage height, 5.74 ft (1.750 m) July 4 (backwater from temporary bridge downstream); minimum, 4.2 cfs (0.12 cu m/s) Oct. 4, gage height, 0.81 ft (0.247 m).
Period of record: Maximum discharge, 6,530 cfs (185 cu m/s) Oct. 16, 1954, gage height, 7.70 ft (2.347 m); minimum, 0.35 cfs (0.010 cu m/s) Oct. 27, 1966, gage height, 0.57 ft (0.174 m); minimum daily, 0.6 cfs (0.017 cu m/s) July 27-31, Aug. 5, 6, 9, 10, 1951.

REMARKS.--Records good. Diversions above station by Baltimore & Ohio Railroad and by cities of Frostburg and Westernport for municipal supply. Flow regulated by Savage River Reservoir beginning December 1950, capacity, 20,000 acre-ft (24.7 cu hm).

REVISIONS (WATER YEAR).--WSP 1432: 1955.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	60	604	533	519	218	94	30	12	255	176	41	520
2	60	439	523	357	174	95	31	12	626	142	41	256
3	86	339	208	218	174	97	31	13	722	111	41	68
4	89	337	44	348	174	375	37	12	434	459	41	53
5	97	335	69	380	172	516	598	12	289	1,010	41	43
6	97	186	90	380	118	255	1,390	13	210	383	41	44
7	95	97	90	377	86	96	52	38	163	226	41	43
8	95	97	90	372	86	351	50	53	134	452	49	43
9	95	97	92	182	86	257	52	54	110	222	54	43
10	95	97	92	97	86	97	52	35	88	14	54	43
11	95	97	92	125	86	97	52	51	72	14	54	43
12	95	95	90	1,410	86	98	52	131	63	13	55	43
13	783	97	92	2,080	86	100	53	285	51	13	54	52
14	1,110	97	195	1,890	180	100	53	258	46	13	54	57
15	453	97	258	602	238	204	53	221	48	13	54	57
16	67	97	255	225	236	98	53	182	82	12	65	57
17	37	97	252	296	184	98	52	154	83	12	73	56
18	26	97	146	348	84	98	52	285	54	12	73	56
19	26	97	88	379	86	74	52	289	45	20	74	56
20	323	97	88	260	86	39	52	282	86	24	73	57
21	471	228	89	232	86	27	51	249	82	24	73	57
22	188	95	89	764	331	27	52	211	120	35	73	57
23	16	231	89	952	499	28	52	193	452	41	73	57
24	13	315	90	522	231	28	51	168	967	41	73	57
25	17	312	90	302	89	28	29	134	654	41	189	57
26	21	170	365	302	89	28	13	111	595	41	77	57
27	21	94	1,140	299	348	28	12	98	366	41	77	57
28	22	376	1,920	167	259	28	12	81	256	41	77	58
29	24	905	1,980	89	------	28	12	93	233	41	77	58
30	70	886	1,210	89	------	29	12	126	177	41	77	57
31	422	------	522	211	------	30	------	122	------	41	374	------
TOTAL	5,161	7,208	10,971	14,774	4,658	3,548	3,143	3,978	7,563	3,769	2,313	2,262
MEAN	166	240	354	477	166	114	105	128	252	122	74.6	75.4
MAX	1,110	905	1,980	2,080	499	516	1,390	289	967	1,010	374	520
MIN	13	94	44	89	84	27	12	12	45	12	41	43
(ƒ)	10,070	6,150	4,540	4,310	4,220	9,500	18,920	20,140	20,110	19,680	16,730	13,080

CAL YR 1973 TOTAL 71,668 MEAN 196 MAX 2,100 MIN 12 CFSM 1.85 IN 25.14
WTR YR 1974 TOTAL 69,348 MEAN 190 MAX 2,080 MIN 12 CFSM 1.79 IN 24.33

ƒ Month-end contents, in acre-ft, in Savage River Reservoir (contents on Sept. 30, 1973, 14,820 acre-ft).
Records furnished by Corps of Engineers.

01598500 North Branch Potomac River at Luke, Md.

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

DRAINAGE AREA.--404 sq mi (1,046 sq km).

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

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

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

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

REMARKS.--Records good. Flow regulated since 1913 by Stony River Reservoir, 45 miles (72.4 km) above station (see station 01595200), and since December 1950, by Savage River Reservoir, 5 miles (8.0 km) above station (see station 01597500). Some regulation at low flow by West Virginia Pulp and Paper Company at site used 1899-1906. Water-quality records for the current water year are published in Part 2 of this report.

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

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

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

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

01599000 Georges Creek at Franklin, Md.

LOCATION.--Lat 39°29'38", long 79°02'42", Allegany County, on right bank at Franklin, and 1.2 miles (1.9 km) upstream from Westernport and mouth.

DRAINAGE AREA.--72.4 sq mi (187.5 sq km).

PERIOD OF RECORD.--May 1905 to July 1906 (published as "at Westernport"), October 1929 to current year.

GAGE.--Water-stage recorder. Datum of gage is 958.96 ft (292.291 m) above mean sea level (Westvaco Corporation bench mark). May 4, 1905, to July 15, 1906, nonrecording gage at bridge 0.8 mile (1.3 km) downstream at different datum. Oct. 16, 1929, to Oct. 1, 1937, water-stage recorder at site 95 ft (29 m) downstream at present datum.

AVERAGE DISCHARGE.--45 years (1929-74), 79.2 cfs (2.243 cu m/s), 14.86 in/yr (377 mm/yr).

EXTREMES.--Current year: Maximum discharge, 1,020 cfs (28.9 cu m/s) Dec. 26, gage height, 6.03 ft (1.838 m); minimum, 8.0 cfs (0.23 cu m/s) Sept. 27, 28, 30, gage height, 3.13 ft (0.954 m).
Period of record: Maximum discharge, 8,500 cfs (241 cu m/s) Mar. 17, 1936, gage height, 9.6 ft (2.93 m), site then in use, from rating curve extended above 2,000 cfs (56.6 cu m/s) on basis of slope-area measurement of peak flow; minimum, 1.6 cfs (0.045 cu m/s) Sept. 29 to Oct. 13, 1930.
Flood of Mar. 29, 1924, reached a stage of about 10 ft (3.0 m), from floodmarks, at site 95 ft (29 m) downstream.
CORRECTIONS.--The minimum discharge for water year 1970 is 5.1 cfs (0.14 cu m/s) Sept. 25, 26, 1970, gage height, 3.05 ft (0.930 m); the previously published figure was not the minimum.

REMARKS.--Records good. Records include about 0.5 cfs (0.014 cu m/s) of sewage from city of Frostburg, which obtains its water supply from Big Piney Run (Monongahela River basin) and Savage River. A negligible discharge diverted above station by Frostburg Water Co. for municipal supplies of Eckhart and Welch Hill. An undetermined amount of water is diverted from the upper third of basin into the Wills Creek basin by the Hoffman drainage tunnel (see station 01601500).

REVISIONS (WATER YEARS).--WSP 726: Drainage area. WSP 1502: 1940.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	149	103	253	118	109	123	48	191	135	18	19
2	69	117	88	203	116	115	130	46	344	107	28	19
3	54	97	80	202	113	112	119	68	231	86	25	17
4	40	84	75	210	101	106	284	54	173	95	23	18
5	32	90	90	173	90	104	231	48	138	110	20	17
6	27	80	87	157	85	101	196	48	119	107	17	17
7	25	66	66	143	98	106	170	46	99	87	16	45
8	24	61	59	125	91	101	180	45	89	73	15	35
9	24	62	97	142	82	95	253	48	78	62	16	25
10	21	56	111	483	77	119	188	47	66	56	19	21
11	19	50	92	683	78	103	170	44	60	51	18	17
12	18	49	80	530	75	107	155	171	55	43	19	15
13	18	46	78	378	82	101	205	162	48	39	20	15
14	17	43	83	286	95	92	177	126	44	36	19	19
15	16	42	75	249	82	90	162	106	52	33	17	12
16	18	56	66	236	77	88	141	91	83	32	27	10
17	17	45	62	216	77	87	128	86	69	30	87	10
18	16	40	60	186	76	78	119	143	47	27	37	9.6
19	15	41	59	183	75	77	113	131	46	27	21	10
20	15	39	62	181	80	75	101	116	102	27	15	9.6
21	15	38	127	419	84	115	92	106	70	23	12	9.6
22	14	38	105	348	118	113	87	90	67	22	11	9.6
23	14	36	98	279	124	99	85	99	277	22	12	9.1
24	14	42	92	234	111	96	77	85	266	38	11	8.5
25	13	48	88	205	113	87	72	76	340	27	9.6	8.5
26	13	47	468	181	99	83	66	67	280	26	9.6	8.5
27	13	66	793	170	94	80	60	62	181	109	9.1	8.5
28	33	208	558	161	97	77	56	56	166	37	12	9.6
29	509	150	400	157	------	78	54	65	200	28	15	9.6
30	240	119	339	137	------	123	60	74	139	30	23	8.5
31	156	------	286	127	------	143	------	100	------	22	31	------
TOTAL	1,543	2,105	4,927	7,637	2,608	3,060	4,054	2,554	4,120	1,647	632.3	450.2
MEAN	49.8	70.2	159	246	93.1	98.7	135	82.4	137	53.1	20.4	15.0
MAX	509	208	793	683	124	143	284	171	344	135	87	45
MIN	13	36	59	125	75	75	54	44	44	22	9.1	8.5
CFSM	.69	.97	2.20	3.40	1.29	1.36	1.86	1.14	1.89	.73	.28	.21
IN.	.79	1.08	2.53	3.92	1.34	1.57	2.08	1.31	2.12	.85	.32	.23

CAL YR 1973 TOTAL 38,563.0 MEAN 106 MAX 793 MIN 12 CFSM 1.46 IN 19.81
WTR YR 1974 TOTAL 35,337.5 MEAN 96.8 MAX 793 MIN 8.5 CFSM 1.34 IN 18.16

PEAK DISCHARGE (BASE, 1,200 CFS).--No peak above base.

01600000 North Branch Potomac River at Pinto, Md.

LOCATION.--Lat 39°33'59", long 78°50'25", Mineral County, W. Va., on right bank at downstream side of Western Maryland Railway bridge at Pinto, 2.8 miles (4.5 km) downstream from Mill Run, and at mile 32.6 (52.5 km).

DRAINAGE AREA.--596 sq mi (1,544 sq km).

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

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

AVERAGE DISCHARGE.--36 years, 874 cfs (24.75 cu m/s), 19.91 in/yr (506 mm/yr), unadjusted.

EXTREMES.--Current year: Maximum discharge, 10,800 cfs (306 cu m/s) Dec. 27, gage height, 12.02 ft (3.664 m); minimum, 118 cfs (3.34 cu m/s) Sept. 28, gage height, 1.89 ft (0.576 m).
Period of record: Maximum discharge, 37,000 cfs (1,050 cu m/s) Oct. 16, 1954, gage height, 23.23 ft (7.081 m); minimum, 31 cfs (0.88 cu m/s) Dec. 18, 19, 1943, gage height, 1.37 ft (0.418 m), result of freezeup.
Flood of Mar. 29, 1924, reached a stage of about 24 ft (7.3 m), discharge, about 55,000 cfs or about 1,560 cu m/s. Flood of Mar. 17, 1936, reached a stage of about 23.5 ft (7.16 m), from floodmarks (discharge, about 50,000 cfs or about 1,420 cu m/s).

REMARKS.--Records good. Some regulation at low flow by Stony River Reservoir, 66 miles (106 km) above station (see station 01595200), and since December 1950, by Savage River Reservoir (see station 01597500). Water-quality records for the current water year are published in Part 2 of this report.

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

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

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

CAL YR 1973 TOTAL 373,415 MEAN 1,023 MAX 9,480 MIN 125 CFSM 1.72 IN 23.30
WTR YR 1974 TOTAL 375,360 MEAN 1,028 MAX 8,890 MIN 130 CFSM 1.73 IN 23.42

01601500 Wills Creek near Cumberland, Md.

LOCATION.--Lat 39°40'07", long 78°47'18", Allegany County, on right bank at downstream side of Western Maryland Railway bridge, 2.0 miles (3.2 km) upstream from Cumberland, and mouth.

DRAINAGE AREA.--247 sq mi (640 sq km).

PERIOD OF RECORD.--May 1905 to July 1906 (published as "at Cumberland"), October 1929 to current year.

GAGE.--Water-stage recorder. Datum of gage is 640.89 ft (195.343 m) above mean sea level (Corps of Engineers bench mark). May 6, 1905, to July 14, 1906, nonrecording gage at highway bridge 700 ft (213 m) upstream at different datum. Oct. 18, 1929, to Mar. 17, 1936, water-stage recorder, and Apr. 1, 1936, to Mar. 19, 1937, nonrecording gage at site 200 ft (61 m) upstream at present datum.

AVERAGE DISCHARGE.--45 years (1929-74), 317 cfs (8.977 cu m/s), 17.43 in/yr (443 mm/yr).

EXTREMES.--Current year: Maximum discharge, 5,020 cfs (142 cu m/s) Oct. 29, gage height, 7.14 ft (2.176 m); minimum, 31 cfs (0.88 cu m/s) Sept. 30, gage height, 1.65 ft (0.503 m).
Period of record: Maximum discharge, 38,100 cfs (1,080 cu m/s) Mar. 17, 1936, gage height, 20.2 ft (6.16 m), from floodmarks at present site, from rating curve extended above 6,500 cfs (184 cu m/s) on basis of slope-area measurements at gage heights 13.45 ft (4.100 m) and 20.2 ft (6.16 m); minimum, 9 cfs (0.25 cu m/s) Oct. 14, 1930.

REMARKS.--Records good. Records include drainage from numerous active and abandoned coal mines. An undetermined amount of water is diverted into the basin from Georges Creek basin by Hoffman drainage tunnel. Miscellaneous measurements of discharge from the Hoffman drainage tunnel have been made in the water years 1944, 1964-1965, 1967-74, by the U. S. Geological Survey and in the water years 1958 and 1959 by the Maryland Geological Survey. See page 133. Slight diurnal fluctuation at low flow caused by quarry upstream.

REVISIONS (WATER YEARS).--WSP 726: Drainage area. WSP 1432: 1906, 1930(M), 1933-34(M), 1936-37, 1945(M).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	547	497	795	392	360	576	136	626	931	70	54
2	85	396	381	629	377	344	630	131	895	791	64	61
3	106	313	316	608	365	340	587	167	823	514	63	103
4	83	258	276	643	320	322	799	157	652	357	65	74
5	71	240	319	526	255	333	765	131	491	428	65	54
6	63	219	459	485	256	337	719	127	379	591	58	64
7	58	181	368	444	266	354	615	125	302	364	53	123
8	55	161	342	353	249	405	577	118	255	266	53	88
9	54	150	672	381	214	422	778	118	224	211	61	64
10	53	138	792	1,070	203	695	676	120	189	176	151	56
11	50	124	669	2,820	207	710	644	112	173	162	90	52
12	48	117	552	2,680	197	674	590	397	149	134	68	51
13	46	113	487	1,420	213	561	671	903	133	115	63	49
14	43	109	455	956	239	463	627	696	118	103	57	52
15	40	106	373	818	210	404	649	539	119	94	51	49
16	42	124	312	862	190	375	610	430	219	89	77	45
17	41	130	267	994	197	341	555	353	179	82	64	40
18	42	118	231	946	183	297	482	521	133	76	51	39
19	40	120	253	923	217	283	415	526	115	74	48	37
20	40	118	270	899	245	256	348	470	119	70	44	36
21	39	113	562	1,970	243	330	294	405	110	65	42	36
22	38	113	507	1,990	393	347	261	352	115	60	42	36
23	37	106	490	1,360	571	303	257	370	613	67	42	36
24	38	118	453	961	571	313	228	309	1,020	94	42	35
25	37	141	403	754	543	288	201	254	685	76	39	34
26	36	142	1,280	627	441	283	182	224	491	198	38	33
27	36	188	3,400	579	389	268	167	200	354	236	36	32
28	62	915	2,380	520	372	251	157	178	298	134	40	34
29	2,730	980	1,510	530	------	255	147	188	335	112	41	35
30	1,440	671	1,130	449	------	358	140	239	237	97	47	32
31	716	------	910	420	------	584	------	233	------	85	47	------
TOTAL	6,326	7,269	21,316	29,412	8,518	11,856	14,347	9,229	10,551	6,852	1,772	1,534
MEAN	204	242	688	949	304	382	478	298	352	221	57.2	51.1
MAX	2,730	980	3,400	2,820	571	710	799	903	1,020	931	151	123
MIN	36	106	231	353	183	251	140	112	110	60	36	32
CFSM	.83	.98	2.79	3.84	1.23	1.55	1.94	1.21	1.43	.89	.23	.21
IN.	.95	1.09	3.21	4.43	1.28	1.79	2.16	1.39	1.59	1.03	.27	.23

CAL YR 1973 TOTAL 142,557 MEAN 391 MAX 3,490 MIN 33 CFSM 1.58 IN 21.47
WTR YR 1974 TOTAL 128,982 MEAN 353 MAX 3,400 MIN 32 CFSM 1.43 IN 19.43

PEAK DISCHARGE (BASE, 3,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-29	1430	7.14	5,020	1-11	1945	6.72	4,250
12-27	0930	6.33	3,560				

01603000 North Branch Potomac River near Cumberland, Md.

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

DRAINAGE AREA.--875 sq mi (2,266 sq km).

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

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

AVERAGE DISCHARGE.--45 years, 1,231 cfs (34.86 cu m/s), 19.11 in/yr (485 mm/yr), unadjusted.

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

REMARKS.--Records good. Regulation by Stony River Reservoir, about 79 miles (127 km) above station (see station 01595200), and since December 1950, by Savage River Reservoir (see station 01597500). Prior to July 1957, small amount of inflow from industrial wastes and sewage from city of Cumberland from water diverted from Evitts Creek, mouth of which is below station. Diversion to Chesapeake and Ohio Canal prior to 1935. Water-quality records for the current water year are published in Part 2 of this report.

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

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

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

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

PEAK DISCHARGE (BASE, 10,000 CFS)

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

01603500 Evitts Creek near Centerville, Pa.

LOCATION.--Lat 39°47'23", long 78°38'48", Bedford County, on left bank 2.0 miles (3.2 km) upstream from Thomas W. Koon Dam, 3.0 miles (4.8 km) south of Centerville, 7.0 miles (11.3 km) upstream from Rock Gully Creek, and at mile 16.3 (26.2 km).

DRAINAGE AREA.--30.2 sq mi (78.2 sq km).

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 (313.209 m) above mean sea level (city of Cumberland bench mark).

AVERAGE DISCHARGE.--42 years, 31.3 cfs (0.886 cu m/s), 14.07 in/yr (357 mm/yr).

EXTREMES.--Current year: Maximum discharge, 754 cfs (21.4 cu m/s) Oct. 29, gage height, 3.26 ft (0.994 m); minimum, 3.4 cfs (0.10 cu m/s) Sept. 23, 28, 30, gage height, 1.12 ft (0.341 m).
Period of record: Maximum discharge, 5,240 cfs (148 cu m/s) Mar. 17, 1936, gage height, 7.13 ft (2.173 m), from rating curve extended above 400 cfs (11.3 cu m/s) on basis of slope-area measurements at gage heights 4.64 ft (1.414 m) and 7.13 ft (2.173 m); minimum, 0.70 cfs (0.020 cu m/s) Dec. 17, 1958, gage height, 0.79 ft (0.241 m), result of freezeup.
Maximum stage known, about 8 ft (2.4 m), 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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.7	44	26	90	44	30	55	20	59	85	5.8	5.5
2	16	31	23	70	43	30	59	19	83	28	5.8	5.8
3	12	27	22	73	42	30	50	25	57	21	6.0	9.0
4	8.7	22	22	81	37	27	98	20	47	18	6.2	6.2
5	7.5	23	35	59	34	26	76	18	40	40	6.0	4.5
6	6.7	21	40	53	31	25	66	18	34	29	5.3	5.1
7	6.4	18	26	50	32	27	59	17	30	20	5.1	10
8	6.4	17	24	41	30	47	61	16	28	17	5.5	5.8
9	6.4	16	127	43	30	38	100	16	26	15	6.0	4.7
10	6.4	16	106	117	32	55	66	15	23	14	6.2	4.5
11	6.2	14	61	214	26	40	55	15	22	13	5.5	4.4
12	6.2	13	46	143	26	41	54	63	19	11	5.1	4.2
13	6.0	13	41	92	30	38	76	71	17	10	5.3	4.4
14	5.8	13	48	79	29	34	70	43	16	9.8	4.9	4.9
15	5.5	13	38	83	25	32	76	39	17	9.4	4.4	4.4
16	5.5	17	32	96	23	33	59	34	26	9.0	4.2	3.8
17	5.5	13	24	86	23	32	54	33	18	8.4	4.5	3.7
18	5.5	12	20	75	21	28	48	71	15	8.1	4.5	3.7
19	5.3	12	24	85	23	29	46	52	13	7.8	4.2	3.5
20	5.3	11	46	79	30	26	41	44	13	7.2	4.0	3.5
21	5.3	11	119	264	26	41	36	38	13	6.7	3.8	3.7
22	5.3	11	74	171	46	34	35	35	13	6.4	4.2	4.0
23	5.3	11	62	132	38	28	36	40	61	7.2	4.5	3.5
24	5.3	13	54	105	29	26	32	33	42	9.0	4.0	3.4
25	5.1	15	50	89	30	23	29	29	22	7.5	3.8	3.4
26	5.1	14	261	78	29	23	27	26	18	8.7	3.7	3.5
27	5.1	18	442	75	28	22	25	24	16	11	3.7	3.5
28	6.0	77	247	70	28	22	24	22	17	7.8	4.0	3.7
29	362	40	157	70	------	24	23	27	25	7.2	4.4	3.8
30	87	29	120	56	------	66	21	30	16	7.5	5.1	3.5
31	50	------	102	50	------	91	------	29	------	6.4	5.5	------
TOTAL	681.5	605	2,519	2,869	865	1,068	1,557	982	846	466.1	151.2	137.6
MEAN	22.0	20.2	81.3	92.5	30.9	34.5	51.9	31.7	28.2	15.0	4.88	4.59
MAX	362	77	442	264	46	91	100	71	83	85	6.2	10
MIN	5.1	11	20	41	21	22	21	15	13	6.4	3.7	3.4
CFSM	.73	.67	2.69	3.06	1.02	1.14	1.72	1.05	.93	.50	.16	.15
IN.	.84	.75	3.10	3.53	1.07	1.32	1.92	1.21	1.04	.57	.19	.17

CAL YR 1973 TOTAL 15,174.0 MEAN 41.6 MAX 442 MIN 4.4 CFSM 1.38 IN 18.69
WTR YR 1974 TOTAL 12,747.4 MEAN 34.9 MAX 442 MIN 3.4 CFSM 1.16 IN 15.70

PEAK DISCHARGE (BASE, 400 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-29	1115	3.26	754	1-21	1000	2.82	414
12-26	2300	3.12	636				

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

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

DRAINAGE AREA.--1,471 sq mi (3,810 sq km).

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

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

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

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

REMARKS.--Records good.

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

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

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

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

PEAK DISCHARGE (BASE, 10,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-22	0115	10.97	12,900	4-05	0715	9.55	10,400
12-27	1945	20.16	41,300	6-03	1230	18.15	32,600

01609000 Town Creek near Oldtown, Md.

LOCATION.--Lat 39°33'12", long 78°33'19", Allegany County, on left bank at downstream side of highway bridge, 2.0 miles (3.2 km) upstream from Sawpit Run, 3.0 miles (4.8 km) northeast of Oldtown, and 4.0 miles (6.4 km) upstream from mouth.

DRAINAGE AREA.--148 sq mi (383 sq km).

PERIOD OF RECORD.--July 1928 to September 1935, June 1967 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 550 ft (168 m), from topographic map. July 1928, to September 1935, nonrecording gage on upstream side of highway bridge at datum 0.08 ft (0.024 m) lower.

AVERAGE DISCHARGE.--14 years (1928-35, 1967-74), 151 cfs (4.276 cu m/s), 13.86 in/yr (352 mm/yr).

EXTREMES.--Current year: Maximum discharge, 3,690 cfs (105 cu m/s) Oct. 30, gage height, 10.36 ft (3.158 m); minimum, 6.3 cfs (0.18 cu m/s) Sept. 28, gage height, 1.94 ft (0.591 m).
Period of record: Maximum discharge, 11,700 (331 cu m/s) June 22, 1972, gage height, 14.13 ft (4.307 m); minimum, 0.9 cfs (0.025 cu m/s) Aug. 2, 3, 7-14, 1930, gage height, 1.49 ft (0.454 m).
Flood of Mar. 17 or 18, 1936, reached a stage of 19.08 ft (5.816 m), from floodmarks, discharge, 27,000 cfs (765 cu m/s), from rating curve extended above 9,500 cfs (269 cu m/s) on basis of contracted-opening measurement of peak flow.
CORRECTIONS.--The minimum discharge for water year 1973 is 11 cfs (0.31 cu m/s) Aug. 12, 1973, gage height, 1.99 ft (0.607 m); the previously published date was incorrect.

REMARKS.--Records good.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	267	129	344	180	147	489	76	684	355	25	14
2	59	193	110	274	170	140	388	70	782	297	32	16
3	128	152	99	249	170	147	311	77	626	184	29	14
4	89	126	92	327	154	137	797	85	343	130	26	18
5	65	118	94	273	127	133	663	70	223	139	24	17
6	48	121	188	242	112	127	446	64	161	127	21	16
7	40	104	150	223	130	130	333	63	131	107	20	32
8	35	94	127	187	127	172	278	59	112	88	18	33
9	33	86	527	170	106	221	385	57	101	74	18	25
10	29	78	947	451	112	279	393	59	89	62	18	18
11	26	71	492	879	104	267	327	55	90	57	17	15
12	25	65	325	905	101	258	284	98	71	48	17	14
13	24	62	256	538	107	226	427	352	61	42	16	13
14	21	61	246	390	121	188	484	198	57	37	16	14
15	19	58	215	328	106	168	397	154	53	35	15	11
16	18	60	179	347	90	161	323	129	227	34	15	10
17	18	61	168	365	92	164	270	111	241	31	16	10
18	17	53	123	337	89	140	230	130	135	29	14	9.6
19	17	50	120	295	90	131	202	200	98	27	13	9.6
20	17	49	147	265	104	127	176	157	86	25	13	8.8
21	17	46	716	656	112	154	152	127	73	23	12	7.7
22	17	44	536	945	124	251	145	113	65	22	13	7.7
23	17	44	381	601	248	190	140	108	262	21	13	7.7
24	16	43	317	454	212	174	130	106	665	25	14	7.3
25	16	52	267	357	198	152	115	92	389	27	14	7.3
26	16	55	861	291	163	139	104	80	204	25	12	6.9
27	16	55	2,110	279	136	134	96	71	149	83	11	6.9
28	16	123	1,260	244	159	126	89	64	124	44	10	6.9
29	1,210	212	738	255	------	121	85	62	180	37	9.2	8.8
30	1,360	152	506	212	------	221	79	83	142	32	12	6.9
31	393	------	386	196	------	716	------	77	------	30	13	------
TOTAL	3,849	2,755	12,812	11,879	3,744	5,841	8,738	3,247	6,536	2,297	516.2	392.1
MEAN	124	91.8	413	383	134	188	291	105	218	74.1	16.7	13.1
MAX	1,360	267	2,110	945	248	716	797	352	782	355	32	33
MIN	16	43	92	170	89	121	79	55	53	21	9.2	6.9
CFSM	.84	.62	2.79	2.59	.91	1.27	1.97	.71	1.47	.50	.11	.09
IN.	.97	.69	3.22	2.99	.94	1.47	2.20	.82	1.64	.58	.13	.10

CAL YR 1973 TOTAL 78,160.0 MEAN 214 MAX 2,110 MIN 12 CFSM 1.45 IN 19.65
WTR YR 1974 TOTAL 62,606.3 MEAN 172 MAX 2,110 MIN 6.9 CFSM 1.16 IN 15.74

PEAK DISCHARGE (BASE, 1,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-30	0100	10.36	3,690	12-27	0645	9.12	2,580

01610000 Potomac River at Paw Paw, W. Va.

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

DRAINAGE AREA.--3,109 sq mi (8,052 sq km).

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

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

AVERAGE DISCHARGE.--36 years, 3,167 cfs (89.69 cu m/s), 13.84 in/yr (352 mm/yr).

EXTREMES.--Current year: Maximum discharge, 55,300 cfs (1,570 cu m/s) Dec. 28, gage height, 26.41 ft (8.050 m); minimum, 420 cfs (11.9 cu m/s) Sept. 27, 28, gage height, 3.56 ft (1.085 m).
Period of record: Maximum discharge, 111,000 cfs (3,140 cu m/s) Oct. 16, 1942, gage height, 38.36 ft (11.692 m); minimum, 164 cfs (4.64 cu m/s) Sept. 10, 11, 1966.
Maximum stage known, 54.0 ft (16.46 m) Mar. 18, 1936, discharge, 240,000 cfs (6,800 cu m/s), from rating curve extended above 85,000 cfs (2,410 cu m/s) on basis of slope-area measurement of peak flow at site 5.0 miles (8.0 km) upstream at Okonoko, W. Va.

REMARKS.--Records good. Low flow affected by Stony River Reservoir (see station 01595200), and since December 1950, by Savage River Reservoir (see station 01597500).

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

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

CAL YR 1973 TOTAL 1,564,517 MEAN 4,286 MAX 44,700 MIN 483 CFSM 1.38 IN 18.71
WTR YR 1974 TOTAL 1,405,764 MEAN 3,851 MAX 44,700 MIN 420 CFSM 1.24 IN 16.82

PEAK DISCHARGE (BASE, 20,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-28	0015	26.41	55,300	4-05	0845	15.90	21,000
1-12	0430	18.17	27,500	6-03	1630	21.49	37,900

01610155 Sideling Hill Creek near Bellegrove, Md.

LOCATION.--Lat 39°38'58", long 78°20'40", Washington County, on left bank at Highway bridge on Pearre Road, 1.2 miles (1.9 km) upstream from mouth, and 4.0 miles (6.4 km) south of Bellegrove.

DRAINAGE AREA.--102 sq mi (264 sq km).

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

GAGE.--Water-stage recorder. Datum of gage is 440.41 ft (134.237 m) above mean sea level, adjustment of 1944.

AVERAGE DISCHARGE.--7 years, 122 cfs (3.455 cu m/s), 16.24 in/yr (412 mm/yr).

EXTREMES.--Current year: Maximum discharge, 5,610 cfs (159 cu m/s) Oct. 29, gage height, 8.08 ft (2.463 m); minimum, 0.39 cfs (0.011 cu m/s) Sept. 28, 29, 30 , gage height, 1.02 ft (0.311 m).
Period of record: Maximum discharge, 14,200 cfs (402 cu m/s) June 22, 1972, gage height, 12.44 ft (3.792 m); minimum, no flow for many days in August and September 1968.

REMARKS.--Records fair.

REVISIONS (WATER YEARS).--WRD Md. and Del. 1970: 1967-69(P).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.5	210	78	191	99	78	383	31	365	304	10	2.5
2	27	137	62	150	92	76	268	29	333	256	6.8	2.7
3	107	102	52	134	92	74	202	28	295	150	14	4.1
4	76	76	50	163	82	70	491	33	169	97	34	9.0
5	52	64	50	163	68	68	520	30	109	72	11	7.6
6	38	66	72	157	60	66	294	27	75	58	7.1	7.3
7	28	54	66	141	58	64	208	26	57	72	5.2	20
8	23	47	57	118	58	76	164	24	45	54	4.2	20
9	18	43	314	97	55	141	188	23	39	39	3.6	17
10	17	38	697	160	39	184	215	24	33	30	3.1	10
11	14	34	360	388	48	188	197	24	33	26	2.7	7.5
12	13	30	226	538	43	184	172	90	30	22	2.3	6.3
13	11	29	180	360	45	157	211	313	20	16	1.9	5.2
14	9.1	28	170	252	49	123	269	181	16	13	1.5	4.9
15	7.5	27	141	210	46	104	244	128	14	10	1.1	4.2
16	6.3	27	115	214	38	97	201	95	129	9.1	4.9	3.5
17	5.7	27	109	265	39	99	161	74	124	7.5	9.1	3.2
18	5.6	25	99	274	39	82	133	72	80	6.3	2.6	2.5
19	5.6	23	97	230	39	76	113	86	52	5.9	1.4	2.1
20	5.5	21	99	188	42	70	95	86	42	5.2	1.1	1.7
21	5.2	20	550	418	43	80	79	66	36	4.6	.80	1.3
22	5.1	19	454	654	45	157	72	57	30	3.7	1.6	1.0
23	4.2	18	308	400	126	141	70	55	92	2.9	5.2	.72
24	4.0	18	230	270	128	134	66	57	397	2.7	4.5	.62
25	4.0	18	188	202	118	112	55	46	206	2.7	3.1	.54
26	4.0	21	587	163	97	97	48	39	144	3.2	2.0	.54
27	3.8	22	1,800	153	66	90	43	34	114	3.5	1.5	.46
28	3.8	34	809	131	76	80	39	29	95	5.2	1.1	.39
29	2,470	115	448	123	------	72	36	26	119	5.5	1.2	.39
30	989	97	293	115	------	119	33	28	103	14	2.2	.39
31	328	------	218	104	------	627	------	31	------	16	2.7	------
TOTAL	4,298.9	1,490	8,979	7,126	1,830	3,786	5,270	1,892	3,396	1,317.0	153.50	147.65
MEAN	139	49.7	290	230	65.4	122	176	61.0	113	42.5	4.95	4.92
MAX	2,470	210	1,800	654	128	627	520	313	397	304	34	20
MIN	3.8	18	50	97	38	64	33	23	14	2.7	.80	.39
CFSM	1.36	.49	2.84	2.25	.64	1.20	1.73	.60	1.11	.42	.05	.05
IN.	1.57	.54	3.27	2.60	.67	1.38	1.92	.69	1.24	.48	.06	.05

CAL YR 1973 TOTAL 51,011.68 MEAN 140 MAX 2,470 MIN .39 CFSM 1.37 IN 18.60
WTR YR 1974 TOTAL 39,686.05 MEAN 109 MAX 2,470 MIN .39 CFSM 1.07 IN 14.47

PEAK DISCHARGE (BASE, 1,100 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-29	1800	8.08	5,610	12-27	0230	5.61	2,690

01613000 Potomac River at Hancock, Md.

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

DRAINAGE AREA.--4,073 sq mi (10,549 sq km).

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

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

AVERAGE DISCHARGE.--42 years, 4,039 cfs (114.4 cu m/s), 13.47 in/yr (342 mm/yr).

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

REMARKS.--Records good. Slight regulation at low flow from power plants upstream. Low flow affected slightly by Stony River Reservoir (see station 01595200) and since December 1950, by Savage River Reservoir (see station 01597500). Water-quality records for the current water year are published in Part 2 of this report.

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

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

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

CAL YR 1973 TOTAL 1,963,626 MEAN 5,380 MAX 57,800 MIN 564 CFSM 1.32 IN 17.93
WTR YR 1974 TOTAL 1,715,769 MEAN 4,701 MAX 57,800 MIN 518 CFSM 1.15 IN 15.67

PEAK DISCHARGE (BASE, 23,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-28	0330	23.19	65,100	4-05	1700	13.85	25,300
1-12	1300	15.38	30,700	6-03	2330	17.83	40,300

01614500 Conococheague Creek at Fairview, Md.

LOCATION.--Lat 39°42'57", long 77°49'28", Washington County, on right bank 0.7 mile (1.1 km) upstream from highway bridge in Fairview, 2.0 miles (3.2 km) upstream from Rockdale Run, 6.5 miles (10.5 km) northwest of Hagerstown, and 19.1 miles (30.7 km) upstream from mouth.

DRAINAGE AREA.--494 sq mi (1,279 sq km).

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

GAGE.--Water-stage recorder. Datum of gage is 391.85 ft (119.436 m) above mean sea level, adjustment of 1929. Prior to Dec. 6, 1932, nonrecording gage at highway bridge 0.7 mile (1.1 km) downstream at datum 2.93 ft (0.893 m) lower. Dec. 6, 1932, to Oct. 7, 1933, nonrecording gage 150 ft (46 m) downstream from former site at datum 4.92 ft (1.500 m) lower than present datum.

AVERAGE DISCHARGE.--46 years, 577 cfs (16.34 cu m/s), 15.86 in/yr (403 mm/yr).

EXTREMES.--Current year: Maximum discharge, 9,560 cfs (271 cu m/s) Oct. 29, gage height, 11.33 ft (3.453 m); minimum, 109 cfs (3.09 cu m/s) Sept. 27, 28, gage height, 1.54 ft (0.469 m).
Period of record: Maximum discharge, 32,400 cfs (918 cu m/s) June 23, 1972, gage height, 24.5 ft (7.47 m), from floodmark, from rating curve extended above 15,000 cfs (425 cu m/s) on basis of contracted-opening and flow-over-road measurement of peak flow; minimum, 21 cfs (0.59 cu m/s) Aug. 8, Sept. 12, 1966; minimum daily, 25 cfs (0.71 cu m/s) Nov. 28, 1930.
Maximum stage known prior to 1928, about 16.5 ft (5.03 m), present datum, sometime in 1889, from information by local residents, discharge, about 22,000 cfs or about 620 cu m/s.

REMARKS.--Records good. Low flow partly regulated by small powerplants near Mercersburg, Pa. Water-quality records for the current water year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 756: Drainage area. WSP 1432: 1929(M), 1930, 1931-32(M), 1935(M).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	683	1,770	277	1,830	860	451	3,400	608	677	712	202	144
2	1,180	1,360	257	1,550	812	451	2,350	575	722	680	183	231
3	1,600	1,080	247	1,400	794	455	1,870	592	681	512	204	228
4	1,030	878	247	1,750	740	433	3,680	592	541	447	608	429
5	768	812	288	1,560	658	412	3,860	533	471	399	408	231
6	604	758	652	1,370	619	390	2,820	512	424	382	281	175
7	513	641	575	1,250	602	408	2,140	502	395	357	216	357
8	466	575	460	1,100	597	442	1,790	478	371	318	185	361
9	428	533	1,530	1,010	548	478	2,290	512	363	299	170	231
10	398	483	2,370	1,130	512	575	1,950	597	354	281	170	196
11	373	447	1,520	1,570	522	602	1,630	502	388	270	162	172
12	367	425	1,160	2,010	493	559	1,460	724	335	254	151	194
13	325	408	984	1,510	493	522	1,950	2,700	305	240	148	318
14	300	390	1,040	1,240	493	478	2,420	1,460	293	228	142	247
15	279	378	961	1,160	460	451	2,030	1,110	288	228	137	202
16	268	374	819	1,360	429	460	1,720	919	680	219	133	178
17	256	353	773	1,840	420	559	1,480	794	1,400	204	144	168
18	251	329	691	1,640	403	483	1,330	731	741	194	146	216
19	247	318	713	1,440	408	442	1,210	707	530	199	162	158
20	238	310	672	1,330	438	425	1,110	650	455	202	140	144
21	230	292	2,990	2,140	420	696	1,000	563	447	183	131	137
22	224	284	2,930	3,080	451	1,300	940	526	402	175	123	135
23	220	277	1,990	2,220	782	914	1,090	790	635	172	125	133
24	217	274	1,620	1,810	614	782	998	720	1,440	175	125	125
25	212	284	1,350	1,550	538	680	848	605	946	178	121	121
26	206	281	1,990	1,360	483	602	782	528	908	172	119	117
27	201	281	5,100	1,340	451	559	734	480	872	175	119	115
28	197	310	4,570	1,200	442	522	696	446	712	172	119	117
29	4,660	349	3,270	1,140	------	498	674	422	690	216	121	142
30	6,370	318	2,480	1,020	------	1,600	636	429	602	493	125	123
31	2,330	------	2,020	933	------	6,160	------	429	------	281	137	------
TOTAL	25,641	15,572	46,546	46,843	15,482	23,789	50,888	21,736	18,068	9,017	5,457	5,845
MEAN	827	519	1,501	1,511	553	767	1,696	701	602	291	176	195
MAX	6,370	1,770	5,100	3,080	860	6,160	3,860	2,700	1,440	712	608	429
MIN	197	274	247	933	403	390	636	422	288	172	119	115
CFSM	1.67	1.05	3.04	3.06	1.12	1.55	3.43	1.42	1.22	.59	.36	.39
IN.	1.93	1.17	3.51	3.53	1.17	1.79	3.83	1.64	1.36	.68	.41	.44

CAL YR 1973 TOTAL 375,365 MEAN 1,028 MAX 6,370 MIN 170 CFSM 2.08 IN 28.27
WTR YR 1974 TOTAL 284,884 MEAN 781 MAX 6,370 MIN 115 CFSM 1.58 IN 21.45

PEAK DISCHARGE (BASE, 4,300 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-29	2215	11.33	9,560	3-31	1445	9.23	6,430
12-27	1530	8.41	5,320	4-04	1830	8.55	5,500

01617800 Marsh Run at Grimes, Md.

LOCATION.--Lat 39°30'53", long 77°46'38", Washington County, on right bank 220 ft (67 m) upstream from bridge on Sprecher Road, 0.1 mile (0.2 km) downstream from unnamed tributary, 0.5 mile (0.8 km) southwest of Grimes, 1.5 miles (2.4 km) upstream from mouth, and 2.2 miles (3.5 km) southwest of Fairplay.

DRAINAGE AREA.--18.9 sq mi (49.0 sq km).

PERIOD OF RECORD.--October 1963 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 360 ft (110 m), from topographic map.

AVERAGE DISCHARGE.--11 years, 12.0 cfs (0.340 cu m/s), 8.62 in/yr (219 mm/yr).

EXTREMES.--Current year: Maximum discharge, 71 cfs (2.01 cu m/s) Oct. 29, gage height, 1.98 ft (0.604 m); minimum daily, 4.1 cfs (0.12 cu m/s) Sept. 30.
Period of record: Maximum discharge, 268 cfs (7.59 cu m/s) June 22, 1972, gage height, 3.44 ft (1.049 m); minimum daily, 0.40 cfs (0.011 cu m/s) Jan. 31, 1966, result of freezeup.

REMARKS.--Records good.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.0	9.3	4.2	24	19	14	25	15	14	10	5.7	8.2
2	8.0	8.0	4.2	21	19	13	22	15	16	8.9	5.6	9.6
3	7.0	7.2	4.2	22	19	13	20	15	14	8.4	5.6	13
4	6.5	7.0	4.2	31	18	13	42	14	12	8.0	5.9	12
5	6.0	7.4	5.4	24	17	13	34	14	11	7.9	5.9	7.7
6	6.0	6.8	5.1	23	17	13	26	14	10	7.9	5.6	7.3
7	6.0	6.5	4.6	22	17	13	24	14	9.9	7.6	5.4	13
8	6.0	6.4	4.5	20	17	13	28	14	9.9	7.4	5.4	9.1
9	6.0	6.2	15	20	17	13	30	15	9.8	7.2	5.5	7.8
10	6.0	5.8	12	31	16	13	25	14	9.9	7.0	5.4	7.1
11	6.0	5.7	9.0	45	16	12	23	18	11	7.1	5.2	6.6
12	6.0	5.8	7.9	41	16	13	44	24	9.5	6.9	5.1	6.2
13	6.0	5.6	7.7	30	17	12	42	20	9.0	6.9	5.2	6.6
14	5.5	5.3	8.1	28	16	12	36	18	8.8	6.8	5.0	9.7
15	5.5	5.1	7.2	28	16	12	32	16	8.7	6.6	4.7	7.4
16	5.5	4.9	6.9	29	15	13	28	15	10	6.4	4.6	6.6
17	5.5	4.6	6.0	28	15	13	26	16	10	6.0	4.7	6.2
18	5.5	4.6	6.6	25	15	12	24	15	9.2	5.9	4.6	5.9
19	5.5	4.4	6.8	24	15	12	22	15	8.6	5.9	4.6	6.0
20	5.5	4.4	7.7	23	15	11	20	14	8.8	5.6	4.6	5.6
21	5.5	4.4	17	36	14	15	20	14	9.0	5.5	4.3	5.7
22	6.0	4.8	15	34	15	14	20	15	9.0	5.4	4.3	6.0
23	5.5	4.4	13	28	14	13	22	14	12	5.5	4.6	5.3
24	5.5	4.4	12	26	14	12	20	13	11	5.7	4.4	5.4
25	5.5	4.4	12	26	14	12	18	12	9.9	5.8	4.3	5.3
26	5.4	4.4	30	24	13	12	17	11	9.4	5.9	4.6	5.4
27	5.4	4.6	47	24	13	11	17	11	8.9	5.9	11	5.2
28	5.5	5.5	36	22	14	11	16	11	8.7	5.8	6.1	5.0
29	49	5.1	29	22	------	12	16	12	9.0	6.5	5.3	4.2
30	17	4.4	26	21	------	43	15	12	9.4	7.3	5.2	4.1
31	11	------	24	20	------	33	------	12	------	6.0	5.0	------
TOTAL	241.3	167.4	398.3	822	443	441	754	452	306.4	209.7	163.4	213.2
MEAN	7.78	5.58	12.8	26.5	15.8	14.2	25.1	14.6	10.2	6.76	5.27	7.11
MAX	49	9.3	47	45	19	43	44	24	16	10	11	13
MIN	5.4	4.4	4.2	20	13	11	15	11	8.6	5.4	4.3	4.1
CFSM	.41	.30	.68	1.40	.84	.75	1.33	.77	.54	.36	.28	.38
IN.	.47	.33	.78	1.62	.87	.87	1.48	.89	.60	.41	.32	.42

CAL YR 1973 TOTAL 6,353.3 MEAN 17.4 MAX 53 MIN 3.0 CFSM .92 IN 12.50
WTR YR 1974 TOTAL 4,611.7 MEAN 12.6 MAX 49 MIN 4.1 CFSM .67 IN 9.08

PEAK DISCHARGE (BASE, 60 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-29	0515	1.98	71	3-30	1445	1.97	70

NOTE.--No gage-height record Apr. 15 to May 23.

01618000 Potomac River at Shepherdstown, W. Va.

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

DRAINAGE AREA.--5,936 sq mi (15,374 sq km).

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

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

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

EXTREMES.--Current year: Maximum discharge, 80,600 cfs (2,283 cu m/s) Dec. 28, gage height, 19.52 ft (5.950 m); minimum, 793 cfs (22.5 cu m/s) Sept. 29, gage height, 1.80 ft (0.549 m).
Period of record: Maximum discharge, 335,000 cfs (9,490 cu m/s) Mar. 19, 1936, gage height, 42.1 ft (12.83 m), from floodmarks, from rating curve extended above 200,000 cfs (5,660 cu m/s) on basis of slope-area measurement of peak flow; minimum, 170 cfs (4.81 cu m/s) Aug. 1, 1966; minimum daily, 185 cfs (5.24 cu m/s) July 31, 1966.
Floods in June 1889 and May 1924 reached stages of 39.2 ft (11.95 m) and 29.8 ft (9.08 m) respectively, from floodmarks, discharges, about 290,000 cfs (8,210 cu m/s) and 168,000 cfs (4,760 cu m/s) respectively, from rating curve extended as explained above.

REMARKS.--Records good. Some regulation at low flow by powerplants above station, Stony River Reservoir (see station 01595200), and since December 1950 by Savage River Reservoir (see station 01597500).

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

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

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

CAL YR 1973 TOTAL 3,085,380 MEAN 8,453 MAX 78,500 MIN 1,100 CFSM 1.42 IN 19.34
WTR YR 1974 TOTAL 2,577,226 MEAN 7,061 MAX 78,500 MIN 826 CFSM 1.19 IN 16.15

PEAK DISCHARGE (BASE, 23,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-30	0700	12.98	42,500	1-12	2100	12.56	40,400
12-23	0300	10.46	30,300	4-06	0330	11.35	34,500
12-28	1100	19.52	80,600	6-04	0900	13.08	43,000

01619000 Antietam Creek near Waynesboro, Pa.

LOCATION.--Lat 39°42'59", long 77°36'28", Washington County, Md., on right bank 100 ft (30 m) upstream from highway bridge at Rocky Forge, 0.4 mile (0.6 km) downstream from Pennsylvania-Maryland State line, 0.7 mile (1.1 km) downstream from confluence of west and east branches, 1.9 miles (3.1 km) northeast of Leitersburg, Md., 2.5 miles (4.0 km) southwest of Waynesboro, Pa., and 36.6 miles (58.9 km) upstream from mouth.

DRAINAGE AREA.--93.5 sq mi (242.2 sq km).

PERIOD OF RECORD.--May 1948 to September 1951, October 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 550.64 ft (167.835 m) above mean sea level (Corps of Engineers bench mark). May 1948 to September 1951, nonrecording gage and crest-stage gage 100 ft (30 m) downstream at present datum.

AVERAGE DISCHARGE.--12 years (1948-51, 1965-74), 114 cfs (3.228 cu m/s), 16.56 in/yr (421 mm/yr).

EXTREMES.--Current year: Maximum discharge, 1,350 cfs (38.2 cu m/s) Apr. 4, gage height, 6.28 ft (1.914 m); minimum, 38 cfs (1.08 cu m/s) Aug. 24, 25, 26, gage height, 3.21 ft (0.978 m).
Period of record: Maximum discharge, 5,430 cfs (154 cu m/s) June 22, 1972, gage height, 12.33 ft (3.758 m), from rating curve extended above 2,700 cfs (76.5 cu m/s); minimum daily, 11 cfs (0.31 cu m/s) Jan. 30, 1966.

REMARKS.--Records good. Occasional regulation from mills above station.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68	106	57	233	153	98	368	137	108	93	49	60
2	86	90	55	196	150	98	309	134	119	73	47	61
3	84	84	53	200	146	100	245	140	106	70	71	100
4	73	78	53	229	137	96	833	134	93	67	90	78
5	68	82	80	177	131	93	618	128	88	66	67	50
6	65	80	80	174	125	90	466	125	86	66	54	51
7	64	78	63	167	128	96	382	122	84	61	51	100
8	64	75	59	153	125	106	362	119	84	62	49	60
9	63	73	131	153	122	100	408	131	82	61	50	52
10	63	72	110	174	119	100	318	125	84	61	49	49
11	61	71	90	274	116	93	267	116	84	60	48	58
12	61	68	86	254	113	93	245	216	78	57	46	82
13	61	68	84	193	116	90	498	212	75	56	46	93
14	60	67	90	177	116	88	414	143	73	54	45	65
15	59	67	80	181	108	88	438	134	78	55	44	54
16	58	68	78	200	106	103	350	131	106	53	42	50
17	57	64	76	212	106	108	299	128	86	51	44	48
18	58	62	74	181	103	93	276	128	78	51	44	47
19	57	63	73	181	106	93	245	122	73	53	44	45
20	57	61	88	177	108	88	220	116	78	52	43	44
21	57	60	396	410	98	140	204	110	82	49	42	47
22	57	61	216	359	116	128	193	110	78	48	41	46
23	57	60	163	304	113	113	281	125	108	48	41	44
24	57	60	143	263	100	110	193	110	98	51	40	42
25	56	61	131	233	100	106	177	108	84	50	39	41
26	56	59	528	216	96	103	163	100	78	49	46	41
27	56	60	832	220	90	100	157	100	73	50	46	41
28	54	66	497	196	93	100	153	98	73	49	42	42
29	383	67	387	181	------	100	150	98	80	61	41	41
30	177	59	327	167	------	374	143	98	75	71	46	41
31	108	------	263	160	------	584	------	98	------	54	43	------
TOTAL	2,405	2,090	5,443	6,595	3,240	3,872	9,375	3,896	2,572	1,802	1,490	1,673
MEAN	77.6	69.7	176	213	116	125	313	126	85.7	58.1	48.1	55.8
MAX	383	106	832	410	153	584	833	216	119	93	90	100
MIN	54	59	53	153	90	88	143	98	73	48	39	41
CFSM	.83	.75	1.88	2.28	1.24	1.34	3.35	1.35	.92	.62	.51	.60
IN.	.96	.83	2.17	2.62	1.29	1.54	3.73	1.55	1.02	.72	.59	.67

CAL YR 1973 TOTAL 56,126 MEAN 154 MAX 969 MIN 53 CFSM 1.65 IN 22.33
WTR YR 1974 TOTAL 44,453 MEAN 122 MAX 833 MIN 39 CFSM 1.30 IN 17.69

PEAK DISCHARGE (BASE, 850 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-27	0100	5.98	1,200	4-04	1130	6.28	1,350
3-30	2215	5.70	1,060				

01619500 Antietam Creek near Sharpsburg, Md.

LOCATION.--Lat 39°27'01", long 77°43'52", Washington County, on left bank 400 ft (120 m) downstream from Burnside Bridge, 1 mile (1.6 km) southeast of Sharpsburg, and 4 miles (6.4 km) upstream from mouth.

DRAINAGE AREA.--281 sq mi (728 sq km).

PERIOD OF RECORD.--June 1897 to September 1905. August 1928 to current year. Monthly discharge only for some periods, published in WSP 1302.

GAGE.--Water-stage recorder. Concrete control since Mar. 29, 1934. Datum of gage is 311.00 ft (94.793 m) above mean sea level, adjustment of 1912. June 24, 1897, to Aug. 25, 1905, nonrecording gage a few hundred feet downstream from Middle Bridge, 1.2 miles (1.9 km) upstream at datum about 12 feet (3.7 m) higher. Aug. 21, 1928, to July 13, 1933, nonrecording gage at Burnside Bridge at present datum.

AVERAGE DISCHARGE.--51 years (1897-1903, 1904-5, 1930-74), 266 cfs (7,533 cu m/s) 12.86 in/yr (327 mm/yr), adjusted for inflow since 1930.

EXTREMES.--Current year: Maximum discharge, 1,940 cfs (54.9 cu m/s) Dec. 27, gage height, 6.10 ft (1.859 m); minimum, 110 cfs (3.12 cu m/s) Aug. 25, 26, gage height, 2.40 ft (0.732 m).
Period of record: Maximum discharge, 12,600 cfs (357 cu m/s) July 20, 1956, gage height, 16.73 ft (5.099 m); minimum, 9.4 cfs (0.266 cu m/s) Nov. 22, 1957, result of regulation caused by construction work above station; minimum daily, 37 cfs (1.05 cu m/s) Jan. 30, 1966.

REMARKS.--Records good. Some diurnal fluctuation caused by powerplant above station. Since 1928, records include pumpage from Potomac River for municipal supply of Hagerstown. This water later enters Antietam Creek above station as sewage. Water-quality records for the current water year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 192: 1897-1905. WSP 726: Drainage area. WSP 1432: 1929-31(M), 1933, 1935(M), 1937(M), 1949(M), 1952(M).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	207	257	152	606	467	291	831	408	306	243	145	121
2	227	245	148	548	455	292	696	394	339	234	140	189
3	246	220	146	523	455	293	615	404	331	202	137	209
4	214	198	149	612	434	287	883	393	287	193	209	298
5	197	205	169	551	412	280	1,320	372	269	189	192	172
6	183	204	217	510	397	274	964	367	257	190	154	147
7	183	191	181	497	394	284	793	360	249	186	142	220
8	180	186	162	472	394	291	729	350	247	178	138	205
9	180	182	249	461	383	295	818	364	244	170	137	158
10	177	173	347	531	369	288	736	374	241	169	141	148
11	175	176	253	684	365	277	655	345	280	164	132	141
12	173	168	227	805	358	269	616	435	236	161	129	147
13	171	166	217	642	356	266	804	601	226	158	132	301
14	164	169	228	589	357	260	1,060	436	220	156	127	280
15	163	168	226	573	343	253	876	394	216	154	123	184
16	162	166	207	568	331	261	778	375	277	162	121	158
17	159	168	214	580	327	295	705	362	264	153	124	151
18	158	162	200	543	322	268	656	387	232	149	165	161
19	158	159	203	523	325	261	620	360	217	149	154	150
20	155	158	199	509	332	257	588	344	220	148	126	144
21	152	153	563	707	316	298	553	327	240	143	123	145
22	152	156	619	934	326	366	535	328	235	140	120	155
23	158	156	455	725	344	307	610	351	262	140	126	139
24	155	159	409	668	314	297	554	336	306	146	120	135
25	153	159	372	627	305	291	501	318	250	146	115	133
26	154	159	740	590	296	283	478	302	233	144	112	132
27	151	159	1,760	582	290	279	469	294	222	143	163	130
28	145	163	1,140	553	288	274	455	287	213	141	125	128
29	387	172	859	532	------	275	442	287	219	153	118	127
30	600	161	736	501	------	569	423	293	226	199	127	122
31	299	------	644	484	------	1,220	------	285	------	166	122	------
TOTAL	6,138	5,318	12,391	18,230	10,055	10,001	20,763	11,233	7,564	5,169	4,239	5,030
MEAN	198	177	400	588	359	323	692	362	252	167	137	168
MAX	600	257	1,760	934	467	1,220	1,320	601	339	243	209	301
MIN	145	153	146	461	288	253	423	285	213	140	112	121
(f)	-13.1	-8.4	-7.5	-6.3	-5.6	-6.7	-6.2	-6.1	-8.2	-12.4	-14.1	-13.4
MEAN ≠	185	169	393	582	353	316	686	356	244	155	123	155
CFSM ≠	.66	.60	1.40	2.07	1.26	1.12	2.44	1.27	.87	.55	.44	.55
IN ≠	.76	.67	1.61	2.39	1.31	1.29	2.72	1.46	.97	.63	.51	.61

CAL YR 1973 TOTAL 146,670 MEAN 402 MAX 1,760 MIN 145 MEAN≠ 393 CFSM≠ 1.40 IN≠ 19.00
WTR YR 1974 TOTAL 116,131 MEAN 318 MAX 1,760 MIN 112 MEAN≠ 309 CFSM≠ 1.10 IN≠ 14.93

PEAK DISCHARGE (BASE, 1,500 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-27	0930	6.10	1,940	4-05	0200	5.71	1,690

≠ Pumpage, in cubic feet per second, from Potomac River for municipal supply of Hagerstown.
≠ Adjusted for pumpage.

01636500 Shenandoah River at Millville, W. Va.

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

DRAINAGE AREA.--3,040 sq mi (7,874 sq km).

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

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

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

EXTREMES.--Current year: Maximum discharge, 46,200 cfs (1,310 cu m/s) Dec. 28, gage height, 14.78 ft (4.505 m); minimum, 614 cfs (17.4 cu m/s) July 22; minimum gage height, 1.55 ft (0.472 m) Oct. 27; minimum daily discharge, 670 cfs (19.0 cu m/s) July 22, 23.
Period of record: Maximum discharge, 230,000 cfs (6,510 cu m/s) Oct. 16, 1942, gage height, 32.4 ft (9.88 m), from floodmarks; minimum, about 59 cfs (1.67 cu m/s) Oct. 4, 1930, gage height, 0.39 ft (0.119 m); minimum daily, 194 cfs (5.49 cu m/s) July 24, 1930.
Flood of 1870 reached practically same stage as flood of Mar. 18, 1936, 26.36 ft (8.035 m), discharge, 151,000 cfs (4,280 cu m/s).

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

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

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

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

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

PEAK DISCHARGE (BASE, 15,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-22	1830	10.93	25,200	6-04	0300	11.08	25,900
12-28	0845	14.78	46,200				

01637500 Catoctin Creek near Middletown, Md.

LOCATION.--Lat 39°25'35", long 77°33'25", Frederick County, on right bank 300 ft (91 m) downstream from bridge on State Highway 17, 1.3 miles (2.1 km) south of Middletown, 2.2 miles (3.5 km) downstream from Little Catoctin Creek and 14.8 miles (23.8 km) upstream from mouth.

DRAINAGE AREA.--66.9 sq mi (173.3 sq km).

PERIOD OF RECORD.--August 1947 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 385 ft (117.3 m), from topographic map.

AVERAGE DISCHARGE.--27 years, 72.1 cfs (2.042 cu m/s), 14.64 in/yr (372 mm/yr).

EXTREMES.--Current year: Maximum discharge, 1,710 cfs (48.4 cu m/s) Dec. 26, gage height, 5.04 ft (1.536 m); minimum, 3.5 cfs (0.10 cu m/s) Aug. 29, gage height, 0.90 ft (0.274 m).
Period of record: Maximum discharge, 11,200 cfs (317 cu m/s) June 22, 1972, gage height, 12.28 ft (3.743 m), from rating curve extended above 1,500 cfs (42.5 cu m/s) on basis of slope-area measurement at gage height, 11.18 ft (3.408 m); no flow Aug. 27 to Sept. 12, 1966.

REMARKS.--Records fair.

REVISIONS (WATER YEAR).--WSP 1432: 1947-48.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	24	15	148	87	36	314	53	67	43	8.3	9.5
2	23	22	13	130	85	36	250	49	97	31	7.0	53
3	36	16	13	124	84	36	195	58	83	22	6.9	64
4	20	14	12	179	70	34	362	51	59	18	8.2	77
5	14	16	37	142	60	33	272	46	50	16	16	20
6	12	18	65	130	60	32	221	47	45	18	9.4	18
7	10	15	31	118	64	36	185	45	41	16	7.2	70
8	9.6	14	25	102	63	36	181	41	39	14	7.9	30
9	9.4	14	108	94	50	37	238	66	38	13	14	24
10	10	13	87	153	55	40	183	69	39	12	16	22
11	9.5	12	50	320	55	35	161	47	57	11	7.9	20
12	9.2	12	40	305	54	35	149	322	35	10	6.5	20
13	8.8	12	37	205	52	34	413	247	30	9.6	7.0	50
14	8.3	12	42	172	53	31	314	138	28	9.3	6.5	95
15	7.0	12	38	157	47	31	256	113	27	9.1	5.7	33
16	6.6	12	32	159	43	36	206	95	45	8.5	5.1	23
17	6.3	11	31	152	44	55	174	82	39	7.9	9.5	18
18	6.5	11	49	122	36	40	151	81	29	7.6	14	35
19	6.6	11	46	112	43	38	133	73	25	7.8	15	22
20	6.9	11	43	103	44	37	117	66	25	7.4	8.2	17
21	6.9	11	463	388	38	86	105	57	32	6.7	6.3	23
22	7.0	11	188	280	45	93	98	60	29	6.2	5.4	23
23	7.1	11	135	224	47	70	131	109	43	6.2	5.6	17
24	7.1	11	111	190	38	67	96	68	54	9.1	5.2	13
25	7.0	11	94	173	37	60	81	87	31	9.0	4.6	12
26	6.7	13	686	150	30	56	74	56	28	8.4	4.2	12
27	6.7	13	774	147	28	54	68	50	26	8.4	4.2	11
28	6.7	15	370	128	35	51	65	46	26	8.3	3.9	11
29	104	27	247	116	------	52	62	46	29	13	11	11
30	72	19	193	105	------	484	57	56	26	30	20	9.8
31	27	------	158	97	------	586	------	49	------	13	9.1	------
TOTAL	490.9	424	4,233	5,125	1,447	2,387	5,312	2,473	1,222	409.5	265.8	863.3
MEAN	15.8	14.1	137	165	51.7	77.0	177	79.8	40.7	13.2	8.57	28.8
MAX	104	27	774	388	87	586	413	322	97	43	20	95
MIN	6.3	11	12	94	28	31	57	41	25	6.2	3.9	9.5
CFSM	.24	.21	2.05	2.47	.77	1.15	2.65	1.19	.61	.20	.13	.43
IN.	.27	.24	2.35	2.85	.80	1.33	2.95	1.38	.68	.23	.15	.48

CAL YR 1973 TOTAL 32,816.4 MEAN 89.9 MAX 774 MIN 4.2 CFSM 1.34 IN 18.25
WTR YR 1974 TOTAL 24,652.5 MEAN 67.5 MAX 774 MIN 3.9 CFSM 1.01 IN 13.71

PEAK DISCHARGE (BASE, 1,200 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-26	2000	5.04	1,710	3-30	1900	4.36	1,370

01638500 Potomac River at Point of Rocks, Md.

LOCATION.--Lat 39°16'25", long 77°32'35", Frederick County, on left bank at downstream side of bridge on U. S. Highway 15 at Point of Rocks, 0.3 mile (0.5 km) downstream from Catoctin Creek (Virginia), 6 miles (9.7 km) upstream from Monocacy River, and at mile 159.5 (256.6 km).
DRAINAGE AREA.--9,651 sq mi (24,996 sq km).
PERIOD OF RECORD.--February 1895 to current year.
GAGE.--Water-stage recorder. Datum of gage is 200.54 ft (61.125 m) above mean sea level, adjustment of 1912. Prior to October 28, 1929, nonrecording gage at same site. Prior to Sept. 2, 1902, at datum about 0.45 ft (0.137 m) higher.
AVERAGE DISCHARGE.--79 years, 9,263 cfs (262.3 cu m/s), 13.03 in/yr (331 mm/yr).
EXTREMES.--Current year: Maximum discharge, 132,000 cfs (3,738 cu m/s) Dec. 28, gage height, 21.27 ft (6.483 m); minimum, 1,690 cfs (47.9 cu m/s) Sept. 30, gage height, 1.03 ft (0.314 m).
Period of record: Maximum discharge, 480,000 cfs (13,600 cu m/s) Mar. 19, 1936, gage height, 41.03 ft (12.506 m), from rating curve extended above 300,000 cfs (8,500 cu m/s) on the basis of adjustment of figure of peak flow at station near Washington for inflow and storage, and slope-area measurement of peak flow; minimum, 530 cfs (15.0 cu m/s) Sept. 11, 12, 1966, gage height, 0.27 ft (0.082 m).
Flood of June 2, 1889, reached a stage of 40.2 ft (12.25 m), from floodmarks (discharge, about 460,000 cfs or about 13,000 cu m/s, from rating curve extended as explained above).
REMARKS.--Records good. Low flow affected slightly since 1913 by Stony River Reservoir (see station 01595200) and since December 1950 by Savage River Reservoir (see station 01597500). Low flow affected extensively at times by run-of-the-river hydroelectric plants. Water quality records for the current year are published in Part 2 of this report.
REVISIONS (WATER YEARS).--WSP 192: 1895-1905. WSP 1432: 1899, 1901-2, 1904-5, 1912, 1914(M), 1915, 1917(M), 1918, 1919(M), 1920, 1921-23(M), 1924, 1925-28(M), 1930(M).

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

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

CAL YR 1973 TOTAL 4,847,440 MEAN 13,280 MAX 125,000 MIN 1,960 CFSM 1.38 IN 18.68
WTR YR 1974 TOTAL 3,737,060 MEAN 10,240 MAX 125,000 MIN 1,720 CFSM 1.06 IN 14.40

PEAK DISCHARGE (BASE, 35,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-30	1400	10.05	43,100	1-13	0400	10.62	46,700
12-23	0600	11.37	51,600	4-06	1000	9.55	40,000
12-28	1300	21.27	132,000	6-04	1400	13.14	64,000

01639000 Monocacy River at Bridgeport, Md.

LOCATION.--Lat 39°40'43", long 77°14'06", Frederick County, on right bank 60 ft (18 m) downstream from bridge on State Highway 97 at Bridgeport, 0.9 mile (1.4 km) upstream from Cattail Branch, 3.4 miles (5.5 km) northwest of Taneytown, 4.8 miles (7.7 km) downstream from concluence of Rock and Marsh Creeks at Pennsylvania-Maryland State line, and 52 miles (83.7 km) upstream from mouth.

DRAINAGE AREA.--173 sq mi (448 sq km).

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

GAGE.--Water-stage recorder. Concrete control since Sept. 15, 1947. Datum of gage is 340.83 ft (103.885 m) above mean sea level (Corps of Engineers bench mark). Prior to May 3, 1946, nonrecording gage and crest-stage gages at site 0.3 mile (0.5 km) downstream at datum 0.98 ft (0.299 m) lower.

AVERAGE DISCHARGE.--32 years, 196 cfs (5.551 cu m/s), 15.39 in/yr (391 mm/yr).

EXTREMES.--Current year: Maximum discharge, 5,770 cfs (163 cu m/s) Mar. 31, gage height, 13.25 ft (4.039 m); minimum, 3.4 cfs (0.10 cu m/s) Aug. 25, 26, gage height, 1.82 ft (0.555 m).
Period of record: Maximum discharge, 21,300 cfs (603 cu m/s) June 22, 1972, gage height, 24.05 ft (7.330 m), from rating curve extended above 7,000 cfs (198 cu m/s) on basis of slope-conveyance study; no flow July 24-29, 1966.
Flood of Aug. 24, 1933, reached a stage of about 25 ft (7.6 m), present site and datum, from floodmarks; stage exceeded that of June 1889, from information by local residents.

REMARKS.--Records good. Occasional regulation at low flow from unknown source above station. Water-quality records for the current water year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1382: 1944(M).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	138	182	35	362	153	88	581	66	63	50	15	9.8
2	74	147	30	276	140	87	401	60	69	53	9.7	45
3	60	105	28	252	150	98	298	64	97	29	7.6	36
4	50	85	27	856	120	90	1,500	70	54	21	15	129
5	40	78	104	430	100	80	835	58	41	19	34	39
6	34	86	378	291	100	71	501	54	34	20	25	21
7	30	65	135	261	100	84	322	53	29	21	15	62
8	30	54	91	240	100	97	284	49	27	18	11	77
9	30	52	1,090	180	70	117	1,200	56	28	15	9.4	32
10	30	46	636	271	80	139	547	121	27	12	8.6	.23
11	29	39	290	960	80	113	323	72	26	9.5	8.5	18
12	27	36	194	936	92	88	263	329	26	8.7	8.4	73
13	25	35	174	370	100	79	1,370	842	20	9.2	7.1	64
14	22	34	276	261	108	69	716	212	18	8.0	5.8	57
15	27	34	213	239	88	64	697	141	18	7.7	4.8	34
16	33	33	154	555	68	71	337	107	22	6.9	4.9	24
17	31	32	110	863	70	249	248	86	43	6.1	5.1	17
18	31	29	110	405	65	128	209	77	34	5.3	5.3	15
19	31	27	110	294	68	96	181	78	24	6.0	4.8	13
20	32	28	140	320	107	91	165	70	21	7.0	5.2	11
21	32	28	3,660	2,340	97	360	143	59	20	8.0	6.0	11
22	32	28	940	1,080	180	450	130	54	24	6.2	6.4	15
23	31	29	492	504	305	203	221	61	30	5.4	7.2	12
24	32	28	392	379	139	164	167	64	90	5.7	5.6	11
25	31	28	300	321	117	132	125	53	49	6.1	4.6	9.0
26	31	32	2,100	270	92	113	103	44	37	11	3.6	8.2
27	30	30	2,700	359	78	105	91	39	32	11	4.5	8.0
28	29	35	750	279	82	93	82	38	28	10	4.4	8.2
29	505	55	447	241	------	95	78	35	46	13	4.1	13
30	915	48	370	205	------	1,740	71	38	48	20	5.0	15
31	205	------	300	174	------	2,680	------	44	------	23	4.5	------
TOTAL	2,677	1,568	16,776	14,774	3,049	8,134	12,189	3,194	1,125	451.8	266.1	910.2
MEAN	86.4	52.3	541	477	109	262	406	103	37.5	14.6	8.58	30.3
MAX	915	182	3,660	2,340	305	2,680	1,500	842	97	53	34	129
MIN	22	27	27	174	65	64	71	35	18	5.3	3.6	8.0
CFSM	.50	.30	3.13	2.76	.63	1.51	2.35	.60	.22	.08	.05	.18
IN.	.58	.34	3.61	3.18	.66	1.75	2.62	.69	.24	.10	.06	.20

CAL YR 1973 TOTAL 90,390.6 MEAN 248 MAX 3,660 MIN 4.5 CFSM 1.43 IN 19.44
WTR YR 1974 TOTAL 65,114.1 MEAN 178 MAX 3,660 MIN 3.6 CFSM 1.03 IN 14.00

PEAK DISCHARGE (BASE, 4,800 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-21	1200	12.69	5,320	1-21	1900	12.60	5,250
12-27	0100	12.90	5,490	3-31	0130	13.25	5,770

01639500 Big Pipe Creek at Bruceville, Md.

LOCATION.--Lat 39°36'45", long 77°14'10", Carroll County, on left bank 300 ft (91 m) downstream from bridge on State Highway 194, 800 ft (240 m) downstream from Bruceville, 3.5 miles (5.6 km) upstream from Detour, and confluence with Little Pipe Creek.

DRAINAGE AREA.--102 sq mi (264 sq km).

PERIOD OF RECORD.--October 1947 to current year. Prior to December 1947, monthly discharge only, published in WSP 1302.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 340 ft (104 m), from topographic map.

AVERAGE DISCHARGE.--27 years, 106 cfs (3.002 cu m/s), 14.11 in/yr (358 mm/yr).

EXTREMES.--Current year: Maximum discharge, 3,430 cfs (97.1 cu m/s) Dec. 26, gage height, 8.76 ft (2.670 m); minimum, 15 cfs (0.42 cu m/s) Aug. 29, gage height, 0.92 ft (0.280 m); minimum daily, 24 cfs (0.68 cu m/s) Aug. 22.
Period of record: Maximum discharge, 22,800 cfs (646 cu m/s) June 22, 1972, gage height, 17.86 ft (5.444 m), from rating curve extended above 3,500 cfs (99.1 cu m/s) on basis on contracted-opening measurement of peak flow; minimum daily, 1.0 cfs (0.028 cu m/s) Sept. 12, 1966.

REMARKS.--Records good. Occasional diversion for irrigation above station.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	57	34	172	116	85	322	94	91	105	40	102
2	50	48	31	131	114	81	248	89	107	110	32	378
3	82	41	32	163	124	89	199	111	103	65	41	117
4	50	37	32	327	105	82	594	100	81	60	60	192
5	41	38	47	179	90	76	475	89	72	55	129	71
6	35	42	91	153	90	73	312	90	64	60	44	59
7	34	37	49	140	95	82	235	88	60	55	36	205
8	34	35	41	121	100	95	257	83	61	55	34	100
9	34	35	271	117	85	94	459	108	60	50	37	75
10	34	35	147	177	90	93	267	120	58	48	35	64
11	33	32	86	481	90	80	209	91	107	46	32	57
12	32	33	66	339	94	79	190	312	63	44	30	60
13	32	33	61	180	96	74	533	320	56	42	29	242
14	31	33	76	150	104	70	320	145	52	42	27	384
15	28	34	63	145	89	68	242	119	51	40	41	105
16	28	34	54	242	81	73	202	106	109	42	27	81
17	27	32	50	240	84	93	179	98	222	39	36	68
18	27	31	50	165	80	72	163	115	83	37	38	62
19	28	32	50	152	85	71	153	98	67	47	31	53
20	28	32	75	146	119	69	144	90	62	41	30	50
21	28	32	1,180	1,010	90	146	132	83	69	36	28	53
22	27	33	284	418	109	145	127	84	68	37	24	84
23	27	33	174	259	106	100	224	191	90	35	46	51
24	28	33	141	212	86	93	145	116	104	42	32	44
25	27	35	121	196	87	83	125	107	75	42	26	43
26	28	38	1,650	170	78	80	116	87	71	42	119	42
27	28	36	891	187	76	77	109	83	67	41	42	39
28	26	39	281	156	78	75	105	80	70	47	30	59
29	230	44	205	155	------	83	103	76	105	49	28	81
30	112	36	170	133	------	1,130	99	87	100	67	90	50
31	54	------	150	127	------	959	------	81	------	50	50	------
TOTAL	1,346	1,090	6,653	6,943	2,641	4,570	6,988	3,541	2,448	1,571	1,324	3,071
MEAN	43.4	36.3	215	224	94.3	147	233	114	81.6	50.7	42.7	102
MAX	230	57	1,650	1,010	124	1,130	594	320	222	110	129	384
MIN	26	31	31	117	76	68	99	76	51	35	24	39
CFSM	.43	.36	2.11	2.20	.92	1.44	2.28	1.12	.80	.50	.42	1.00
IN.	.49	.40	2.43	2.53	.96	1.67	2.55	1.29	.89	.57	.48	1.12

CAL YR 1973 TOTAL 54,460 MEAN 149 MAX 1,650 MIN 22 CFSM 1.46 IN 19.86
WTR YR 1974 TOTAL 42,186 MEAN 116 MAX 1,650 MIN 24 CFSM 1.14 IN 15.39

PEAK DISCHARGE (BASE, 1,600 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-21	1000	6.62	2,040	1-21	1300	7.72	2,700
12-26	2000	8.76	3,430	3-30	2030	8.60	3,310

01640500 Owens Creek at Lantz, Md.

LOCATION.--Lat 39°40'36", long 77°27'50", Frederick County, on right bank 0.5 mile (0.8 km) west of Lantz Post Office (Deerfield station on Western Maryland Railway), 1.5 miles (2.4 km) south of Sabillasville, 4.5 miles (7.2 km) northwest of Thurmont, and 14.2 miles (22.8 km) upstream from mouth.

DRAINAGE AREA.--5.93 sq mi (15.36 sq km).

PERIOD OF RECORD.--October 1931 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 965 ft (294 m), from topographic map.

AVERAGE DISCHARGE.--43 years, 8.89 cfs (0.252 cu m/s), 20.36 in/yr (517 mm/yr), adjusted for diversions.

EXTREMES.--Current year: Maximum discharge, 162 cfs (4.59 cu m/s) April 13, gage height, 3.05 ft (0.930 m); minimum, 0.61 cfs (0.017 cu m/s) July 17, 18.
Period of record: Maximum discharge, 3,270 cfs (92.6 cu m/s) Dec. 1, 1934, gage height, 8.4 ft (2.56 m), from rating curve extended above 750 cfs (21.2 cu m/s) on basis of slope-area measurements at gage heights 5.11 ft (1.558 m) and 6.30 ft (1.920 m); no flow Sept. 2-11, 1966.

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 921: 1932(m). WSP 1202: 1935(M). WSP 1382: Drainage area. WSP 1432: 1937(M), 1943(M), 1949(P).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.5	10	2.9	23	13	6.2	41	11	10	8.7	1.3	3.6
2	8.5	6.3	2.8	18	13	6.4	33	10	12	4.1	1.3	3.1
3	5.5	5.4	2.9	18	12	6.2	26	12	8.1	3.1	1.4	8.4
4	3.4	4.9	2.9	19	11	5.8	49	9.7	6.0	2.7	1.6	3.9
5	2.8	5.6	14	15	10	5.5	38	9.0	5.1	2.8	1.4	1.2
6	2.4	5.0	8.4	14	9.2	5.7	30	8.9	4.6	2.9	1.3	1.8
7	2.4	4.3	6.1	14	9.8	6.8	25	8.2	4.4	2.5	1.2	7.9
8	2.3	4.1	5.4	12	9.3	11	31	7.8	4.9	2.3	1.3	2.1
9	2.4	4.0	32	12	9.0	8.3	40	12	4.4	2.1	1.3	1.5
10	2.6	3.7	19	16	8.5	8.7	30	9.5	4.5	2.0	1.2	1.2
11	2.4	3.5	13	38	8.2	7.5	26	7.9	5.3	1.8	1.1	1.1
12	2.3	3.5	11	26	8.1	7.7	23	37	3.7	1.5	1.0	5.0
13	2.2	3.5	10	20	8.6	7.1	62	26	3.4	1.5	1.0	9.5
14	2.0	3.5	12	18	8.6	6.8	41	18	3.2	1.5	.98	8.7
15	1.8	3.4	9.2	18	7.3	6.7	34	15	3.2	1.4	.97	2.6
16	1.7	3.6	8.3	23	6.9	12	28	13	7.6	1.5	.98	1.8
17	1.8	3.2	7.6	21	6.7	11	25	13	4.5	1.3	1.7	1.7
18	1.8	3.0	7.1	18	6.3	8.5	22	13	3.4	1.3	1.2	1.9
19	1.8	3.2	7.1	18	6.9	8.7	20	12	3.0	1.3	1.0	1.4
20	1.8	3.0	18	17	6.9	8.1	18	10	3.5	1.2	.98	1.2
21	1.7	3.0	64	56	6.1	18	17	9.5	5.9	1.2	.96	1.4
22	1.8	3.2	31	36	8.8	14	16	9.4	4.6	1.3	.96	1.6
23	1.8	2.9	23	29	7.1	12	28	11	13	1.4	.99	1.0
24	1.8	3.0	19	26	6.1	12	17	8.6	7.4	1.5	.96	.92
25	1.8	3.0	17	22	5.9	10	15	7.9	5.3	1.4	.96	.95
26	1.8	3.2	112	21	5.4	10	14	7.4	4.4	1.5	1.1	.95
27	1.8	3.3	81	20	5.8	9.5	13	7.0	3.9	1.5	.96	.87
28	1.8	4.8	44	17	5.9	9.1	13	6.5	4.8	1.4	1.0	.97
29	52	4.2	34	16	------	9.6	12	6.5	6.0	1.6	1.1	1.0
30	15	3.2	28	15	------	49	11	6.4	4.5	3.5	1.3	.73
31	7.9	------	24	14	------	60	------	7.0	------	1.5	1.1	------
TOTAL	143.6	120.5	676.7	650	230.4	367.9	798	350.2	164.6	65.3	35.60	79.99
MEAN	4.63	4.02	21.8	21.0	8.23	11.9	26.6	11.3	5.49	2.11	1.15	2.67
MAX	52	10	112	56	13	60	62	37	13	8.7	1.7	9.5
MIN	1.7	2.9	2.8	12	5.4	5.5	11	6.4	3.0	1.2	.96	.73
CFSM	.78	.68	3.68	3.54	1.39	2.01	4.49	1.91	.93	.36	.19	.45
IN.	.90	.76	4.25	4.08	1.45	2.31	5.01	2.20	1.03	.41	.22	.50

CAL YR 1973 TOTAL 4,660.30 MEAN 12.8 MAX 112 MIN 1.2 CFSM 2.16 IN 29.23
WTR YR 1974 TOTAL 3,682.79 MEAN 10.1 MAX 112 MIN .73 CFSM 1.70 IN 23.10

PEAK DISCHARGE (BASE, 120 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-29	1100	2.98	147	3-30	1830	3.03	158
1-21	1145	2.92	135	4-13	1115	3.05	162

01641000 Hunting Creek at Jimtown, Md.

LOCATION.--Lat 39°35'40", long 77°23'50", Frederick County, on right bank just downstream from highway bridge, 0.4 mile (0.6 km) southwest of Jimtown, about 2.2 miles (3.5 km) southeast of Thurmont, 2.2 miles (3.5 km) upstream from Little Hunting Creek, and 5.2 miles (8.4 km) upstream from mouth.

DRAINAGE AREA.--18.4 sq mi (47.7 sq km).

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 355 ft (108 m), from topographic map.

AVERAGE DISCHARGE.--25 years, 24.5 cfs (0.694 cu m/s), 18.08 in/yr (459 mm/yr).

EXTREMES.--Current year: Maximum discharge, 757 cfs (21.4 cu m/s) Mar. 30, gage height, 4.02 ft (1.225 m); minimum, 2.8 cfs (0.079 cu m/s) Aug. 15, 16, 28, 29, gage height, 1.56 ft (0.475 m).
Period of record: Maximum discharge, 1,330 cfs (37.7 cu m/s) June 22, 1972, gage height, 5.26 ft (1.603 m), from rating curve extended above 500 cfs (14.2 cu m/s); minimum, 0.4 cfs (0.011 cu m/s) Sept. 9, 1966, gage height, 1.48 ft (0.451 m).

REMARKS.--Records good. Slight regulation at irregular intervals caused by pumpage at recreation camp near Foxville, and from occasional draining and refilling of pond near Thurmont by Maryland Game and Inland Fish Commission.

REVISIONS (WATER YEARS).--WSP 1332: 1952.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.4	16	6.7	51	31	16	113	23	31	19	3.7	7.3
2	16	12	6.2	41	31	16	93	22	40	13	3.8	7.1
3	14	9.6	6.0	49	30	16	75	25	32	10	4.0	16
4	9.6	8.1	6.0	59	27	15	110	21	24	8.0	4.8	8.3
5	7.5	8.8	33	42	23	14	91	19	20	8.6	4.6	4.4
6	5.6	8.1	27	36	22	14	78	19	17	8.4	3.8	5.5
7	5.0	7.5	17	34	23	16	66	17	16	7.1	3.6	15
8	5.0	7.5	12	30	24	21	73	17	16	6.4	3.8	7.5
9	5.5	7.5	61	28	22	20	102	32	15	5.9	3.8	6.0
10	5.3	6.2	46	53	20	23	78	29	15	5.4	3.7	4.9
11	5.1	5.6	28	110	20	19	68	22	15	5.2	3.5	4.5
12	5.0	5.6	20	96	19	19	61	116	13	4.6	3.4	5.1
13	5.0	5.6	19	63	20	18	137	107	12	4.2	3.4	7.1
14	5.0	5.6	22	51	20	16	111	79	10	4.1	3.1	8.5
15	4.5	5.6	18	48	18	16	96	61	9.8	4.3	2.9	6.3
16	4.5	5.6	16	58	17	24	79	48	17	4.7	3.2	4.8
17	4.5	5.6	16	56	17	26	67	43	16	4.2	5.2	4.2
18	4.5	5.6	15	47	15	21	58	44	12	4.2	3.9	4.1
19	4.5	5.6	14	43	16	20	52	37	10	4.2	3.5	3.8
20	4.5	5.0	39	41	16	18	46	32	10	3.9	3.4	3.9
21	4.0	5.1	196	158	15	48	41	29	13	3.8	3.3	5.3
22	4.5	5.4	102	113	24	38	39	33	13	4.1	3.4	4.8
23	4.5	5.1	67	85	20	35	53	37	25	4.4	3.6	4.2
24	4.5	5.3	51	68	16	31	42	36	22	4.8	3.4	4.0
25	4.5	5.8	42	60	15	26	37	32	17	4.5	3.3	4.0
26	4.5	5.8	294	53	14	24	33	26	14	4.7	3.7	3.6
27	4.5	6.0	230	54	14	22	31	23	12	4.6	3.7	3.6
28	4.5	8.2	118	47	14	21	29	21	13	4.4	3.2	4.0
29	34	8.7	83	42	------	30	27	20	13	4.8	5.8	4.0
30	35	7.6	64	38	------	206	24	20	11	6.8	5.6	4.0
31	16	------	54	35	------	199	------	22	------	3.9	3.9	------
TOTAL	247.5	209.7	1,728.9	1,789	563	1,048	2,010	1,112	503.8	186.2	118.0	175.8
MEAN	7.98	6.99	55.8	57.7	20.1	33.8	67.0	35.9	16.8	6.01	3.81	5.86
MAX	35	16	294	158	31	206	137	116	40	19	5.8	16
MIN	4.0	5.0	6.0	28	14	14	24	17	9.8	3.8	2.9	3.6
CFSM	.43	.38	3.03	3.14	1.09	1.84	3.64	1.95	.91	.33	.21	.32
IN.	.50	.42	3.50	3.62	1.14	2.12	4.06	2.25	1.02	.38	.24	.36

CAL YR 1973 TOTAL 13,261.6 MEAN 36.3 MAX 347 MIN 3.2 CFSM 1.97 IN 26.81
WTR YR 1974 TOTAL 9,691.9 MEAN 26.6 MAX 294 MIN 2.9 CFSM 1.45 IN 19.59

PEAK DISCHARGE (BASE, 350 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-26	2030	3.95	729	4-13	1200	2.99	352
1-21	1030	3.07	381	5-12	1700	3.18	422
3-30	1830	4.02	757				

01641500 Fishing Creek near Lewistown, Md.

LOCATION.--Lat 39°31'35", long 77°28'00", Frederick County, on left bank immediately upstream from Fishing Creek Reservoir, 50 ft (15 m) downstream from Little Fishing Creek, 2.8 miles (4.5 km) west of Lewistown, and 9.9 miles (15.9 km) upstream from mouth.

DRAINAGE AREA.--7.29 sq mi (18.88 sq km).

PERIOD OF RECORD.--October 1947 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 735 ft (224 m), from topographic map.

AVERAGE DISCHARGE.--27 years, 11.0 cfs (0.312 cu m/s), 20.49 in/yr (520 mm/yr).

EXTREMES.--Current year: Maximum discharge, 102 cfs (2.89 cu m/s) Dec. 26, gage height, 2.33 ft (0.710 m); minimum, 1.7 cfs (0.048 cu m/s) Aug. 27, 28, 29.
Period of record: Maximum discharge, 610 cfs (17.3 cu m/s) June 21, 1972, gage height, 4.01 ft (1.222 m), from rating curve extended above 100 cfs (2.83 cu m/s) on basis of slope-area measurement at gage height 3.73 ft (1.137 m); minimum, 0.6 cfs (0.017 cu m/s) Sept. 10, 11, 12, 1966.

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 1432: Drainage area.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.7	7.2	4.4	27	18	7.3	40	13	18	8.4	2.9	6.1
2	5.8	6.1	4.3	23	18	7.4	37	13	19	6.3	2.7	5.3
3	3.8	5.8	4.3	22	17	7.2	31	13	16	5.6	2.7	7.5
4	3.2	5.8	4.3	22	16	7.1	39	12	15	5.3	6.0	5.1
5	3.0	6.4	8.9	20	15	7.0	35	12	14	5.3	4.2	2.8
6	2.8	5.8	6.5	18	14	6.8	33	12	13	5.2	3.0	3.1
7	2.8	5.8	5.8	18	14	6.9	30	11	13	4.9	2.8	6.8
8	2.9	5.8	5.8	16	13	6.8	31	11	13	4.5	2.8	3.2
9	2.9	5.8	15	16	13	6.8	34	15	12	4.3	2.8	2.9
10	2.9	5.4	12	17	12	7.0	29	12	13	4.3	2.7	2.7
11	2.9	5.1	12	25	11	6.4	28	11	14	4.1	2.6	2.6
12	2.9	5.1	12	23	11	6.5	27	39	11	3.8	2.4	2.8
13	2.9	5.1	12	22	11	6.2	43	47	10	3.6	2.4	3.5
14	2.8	5.1	12	22	11	6.1	42	38	10	3.5	2.2	8.0
15	2.7	5.1	11	22	10	6.0	42	33	9.8	3.4	2.1	3.0
16	2.7	5.1	11	23	9.7	7.5	37	29	12	3.3	2.2	2.6
17	2.7	4.7	11	22	9.6	7.0	33	26	10	3.2	3.2	3.0
18	2.7	4.7	10	20	9.2	6.4	29	24	9.3	3.2	2.6	3.7
19	2.7	4.8	9.7	20	9.1	6.5	27	23	8.7	3.3	2.5	2.6
20	2.7	4.6	16	19	9.0	6.2	24	21	8.3	3.1	2.3	2.5
21	2.7	4.6	45	34	8.4	10	22	19	8.3	3.0	2.1	2.8
22	2.7	4.6	31	32	9.8	8.3	21	21	8.0	2.9	2.2	2.7
23	2.7	4.5	28	32	8.7	8.0	22	25	11	2.9	2.2	2.3
24	2.7	4.5	25	30	8.1	8.4	19	21	8.8	3.2	2.0	2.2
25	2.7	4.9	22	28	7.9	8.1	17	19	7.9	3.0	1.9	2.2
26	2.7	4.8	62	27	7.5	8.3	16	18	7.4	3.0	2.0	2.1
27	2.7	4.6	75	27	7.2	8.4	15	17	7.3	3.0	1.9	2.0
28	2.7	6.0	54	24	7.2	8.4	15	16	7.9	2.8	1.8	2.3
29	15	5.4	44	22	------	9.3	15	16	7.6	3.3	2.2	2.2
30	8.1	4.6	36	21	------	36	14	16	6.6	4.7	3.3	1.9
31	7.0	------	30	20	------	51	------	16	------	3.0	2.1	------
TOTAL	112.2	157.8	640.0	714	315.4	299.3	847	619	329.9	123.4	80.8	102.5
MEAN	3.62	5.26	20.6	23.0	11.3	9.65	28.2	20.0	11.0	3.98	2.61	3.42
MAX	15	7.2	75	34	18	51	43	47	19	8.4	6.0	8.0
MIN	2.7	4.5	4.3	16	7.2	6.0	14	11	6.6	2.8	1.8	1.9
CFSM	.50	.72	2.83	3.16	1.55	1.32	3.87	2.74	1.51	.55	.36	.47
IN.	.57	.81	3.27	3.64	1.61	1.53	4.32	3.16	1.68	.63	.41	.52

CAL YR 1973 TOTAL 5,592.9 MEAN 15.3 MAX 75 MIN 2.0 CFSM 2.10 IN 28.54
WTR YR 1974 TOTAL 4,341.3 MEAN 11.9 MAX 75 MIN 1.8 CFSM 1.63 IN 22.15

PEAK DISCHARGE (BASE, 100 CFS).--Dec. 26 (1900) 102 cfs (2.33 ft).

01642500 Linganore Creek near Frederick, Md.

LOCATION.--Lat 39°24'55", long 77°20'00", Frederick County, on left bank 2.4 miles (3.9 km) upstream from mouth and 4 miles (6.4 km) east of Frederick.

DRAINAGE AREA.--82.3 sq mi (213.2 sq km).

PERIOD OF RECORD.--November 1931 to March 1932, September 1934 to current year.

GAGE.--Water-stage recorder. Concrete control since Sept. 23, 1946. Altitude of gage is 270 ft (82 m), from topographic map. Prior to Mar. 27, 1932, nonrecording gage at Frederick pumping station, 1.5 miles (2.4 km) downstream at datum about 20 ft (6.1 m) lower. Sept. 12, 1934, to Sept. 25, 1946, nonrecording gage at present site and datum.

AVERAGE DISCHARGE.--40 years (1934-73), 83.0 cfs (2.351 cu m/s), 13.70 in/yr (348 mm/yr).

EXTREMES.--Current year: Maximum discharge, 1,390 cfs (39.4 cu m/s) Sept. 14, gage height, 6.27 ft (1.911 m); minimum, 1.8 cfs (0.051 cu m/s) May 24, gage height, 1.12 ft (0.341 m), result of regulation.
Period of record: Maximum discharge, 20,100 (569 cu m/s) June 22, 1972, gage height, 19.46 ft (5.931 m), from high-water mark in well; from rating curve extended above 1,500 cfs (42.5 cu m/s) on basis of slope-area measurement at gage height 10.01 ft (3.051 m) and contracted-opening measurement at gage height 19.46 ft (5.931 m) at site 2.6 miles (4.2 km) upstream, adjusted for flow from intervening area; minimum discharge, 1.4 cfs (0.040 cu m/s) Nov. 24, 1972, gage height, 1.10 ft (0.335 m), result of regulation.

REMARKS.--Records good. Flow regulated by Linganore Reservoir 0.5 mile (0.8 km) upstream beginning September 1972, total capacity, 883,200,000 gal (3.343 cu hm).

REVISIONS (WATER YEARS).--WSP 891: 1938-39. WSP 1432: 1934, 1936, 1937(M).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	41	29	326	136	77	422	57	14	72	27	24
2	47	36	29	205	118	102	402	53	30	62	25	295
3	60	32	28	113	117	114	376	61	37	53	26	13
4	40	108	28	86	116	89	368	64	16	50	25	65
5	33	411	29	88	58	74	369	65	16	48	28	42
6	29	392	33	89	27	48	273	59	15	50	25	35
7	27	352	34	64	31	29	153	53	9.0	49	24	99
8	28	274	34	48	34	30	145	54	9.0	44	23	61
9	27	36	40	68	35	31	310	43	9.8	41	24	40
10	28	30	60	183	36	34	357	35	11	40	24	35
11	27	29	61	239	96	54	191	35	22	38	23	37
12	26	28	60	245	128	78	147	126	57	35	20	44
13	26	29	60	236	126	62	254	310	58	34	20	487
14	24	29	59	200	153	35	190	234	53	33	20	592
15	23	27	59	135	126	36	46	122	53	33	19	104
16	23	25	58	81	96	37	106	162	95	32	20	64
17	21	22	57	80	95	38	141	22	239	30	24	53
18	21	24	56	78	65	46	239	24	94	29	30	47
19	22	25	55	79	50	62	229	29	68	31	32	43
20	22	26	55	80	52	61	153	56	64	30	23	40
21	23	30	91	223	54	75	149	124	63	27	18	45
22	23	32	124	300	56	113	147	73	61	26	23	58
23	23	25	140	291	57	111	264	122	75	25	36	42
24	23	22	187	282	57	98	199	79	88	30	25	36
25	23	24	219	198	57	86	99	103	68	31	22	34
26	23	25	417	118	65	76	93	103	73	31	36	34
27	23	26	725	119	79	61	88	102	84	30	28	33
28	25	27	421	195	78	61	84	85	66	58	21	37
29	87	29	405	219	------	61	82	70	80	40	20	46
30	114	29	387	174	------	229	78	70	76	40	20	35
31	45	------	365	170	------	441	------	36	------	32	20	------
TOTAL	1,016	2,245	4,405	5,012	2,198	2,549	6,154	2,631	1,703.8	1,204	751	2,620
MEAN	32.8	74.8	142	162	78.5	82.2	205	84.9	56.8	38.8	24.2	87.3
MAX	114	411	725	326	153	441	422	310	239	72	36	592
MIN	21	22	28	48	27	29	46	22	9.0	25	18	13
CFSM	.40	.91	1.73	1.97	.95	1.00	2.49	1.03	.69	.47	.29	1.06
IN.	.46	1.01	1.99	2.27	.99	1.15	2.78	1.19	.77	.54	.34	1.18

CAL YR 1973 TOTAL 44,472.0 MEAN 122 MAX 800 MIN 14 CFSM 1.48 IN 20.10
WTR YR 1974 TOTAL 32,488.8 MEAN 89.0 MAX 725 MIN 9.0 CFSM 1.08 IN 14.69

PEAK DISCHARGE(BASE, 1,400 CFS).--No peak above base.

01643000 Monocacy River at Jug Bridge near Frederick, Md.

LOCATION.--Lat 39°24'13", long 77°21'58", Frederick County, on right bank 0.2 mile (0.3 km) upstream from Jug Bridge on U. S. Highway 40, 0.4 mile (0.6 km) downstream from Linganore Creek, 2 miles (3.2 km) east of Frederick, and 16.9 miles (27.2 km) upstream from mouth.

DRAINAGE AREA.--817 sq mi (2,116 sq km).

PERIOD OF RECORD.--October 1929 to current year. Monthly discharge only for October, November 1929, published in WSP 1302.

GAGE.--Water-stage recorder. Nonrecording gage at site 0.2 mile (0.3 km) downstream. Datum of gage is 231.92 ft (70.689 m) above mean sea level (Corps of Engineers bench mark).

AVERAGE DISCHARGE.--45 years, 892 cfs (25.26 cu m/s), 14.83 in/yr (377 mm/yr).

EXTREMES.--Current year: Maximum discharge, 17,900 cfs (507 cu m/s) Dec. 27, gage height, 16.28 ft (4.962 m); minimum, 115 cfs (3.26 cu m/s) Aug. 16, 22, 29.
Period of record: Maximum discharge, 81,600 cfs (2.310 cu m/s) June 23, 1972, gage height, 35.9 ft (10.94 m), from floodmark; minimum daily, 19 cfs (0.54 cu m/s) Sept. 7-13, 1966.
Flood in June 1889 reached a stage of 30 ft (9.1 m), from floodmarks, discharge, 56,000 cfs (1,590 cu m/s).

REMARKS.--Records good. Water-quality records for the current water year are published in Part 2 of this report as Monocacy River at Reich's Ford Bridge near Frederick, Maryland.

REVISIONS (WATER YEARS).--WSP 711: 1930.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	472	590	258	1,960	1,080	571	4,260	620	493	499	181	153
2	408	575	223	1,720	986	610	2,750	574	678	595	166	904
3	593	446	208	1,350	1,010	630	2,210	603	770	414	151	495
4	646	425	205	2,760	961	620	3,360	642	578	332	151	726
5	404	762	235	2,300	795	566	5,270	583	459	296	246	496
6	314	746	936	1,570	698	510	3,190	544	403	306	252	276
7	265	709	693	1,370	709	481	2,090	531	360	296	181	446
8	239	590	442	1,230	735	543	1,790	502	341	264	157	629
9	229	296	1,290	1,090	661	642	4,230	553	335	244	151	388
10	226	268	3,150	1,390	600	656	3,320	725	336	226	154	279
11	217	255	1,210	2,990	722	657	2,100	622	460	210	145	245
12	211	239	840	4,910	725	616	1,700	1,040	433	196	133	241
13	205	232	693	2,520	752	568	2,920	4,100	358	187	133	1,400
14	199	235	797	1,720	806	488	5,210	1,720	325	181	130	3,500
15	184	232	856	1,520	763	463	2,590	1,120	313	178	124	820
16	178	226	656	1,660	641	467	2,110	985	396	172	134	467
17	178	217	585	2,950	605	686	1,680	739	841	169	150	361
18	178	211	440	1,980	571	735	1,550	714	624	163	187	325
19	178	208	550	1,540	537	581	1,420	712	412	160	184	282
20	178	208	600	1,450	620	547	1,230	639	356	160	148	253
21	178	208	6,950	3,740	651	685	1,120	663	348	157	130	266
22	178	211	6,840	8,210	636	1,920	1,040	580	368	148	133	321
23	178	205	2,410	3,050	1,100	1,090	1,270	942	424	145	139	290
24	178	199	1,870	2,380	806	882	1,380	797	595	157	142	227
25	181	205	1,570	2,040	651	777	951	771	537	160	139	202
26	181	214	4,800	1,700	605	687	855	641	436	166	139	195
27	181	220	15,200	1,710	566	639	792	569	428	166	236	185
28	178	239	4,890	1,720	556	607	742	526	388	184	148	190
29	295	262	2,860	1,530	------	597	709	476	441	214	124	228
30	3,080	282	2,350	1,330	------	3,150	673	494	508	201	132	236
31	913	------	1,980	1,210	------	13,500	------	471	------	213	199	------
TOTAL	11,423	9,915	66,587	68,600	20,548	36,171	64,512	25,198	13,744	7,159	4,919	15,026
MEAN	368	331	2,148	2,213	734	1,167	2,150	813	458	231	159	501
MAX	3,080	762	15,200	8,210	1,100	13,500	5,270	4,100	841	595	252	3,500
MIN	178	199	205	1,090	537	463	673	471	313	145	124	153
CFSM	.45	.41	2.63	2.71	.90	1.43	2.63	1.00	.56	.28	.19	.61
IN.	.52	.45	3.03	3.12	.94	1.65	2.94	1.15	.63	.33	.22	.68

CAL YR 1973 TOTAL 471,892 MEAN 1,293 MAX 15,200 MIN 124 CFSM 1.58 IN 21.49
WTR YR 1974 TOTAL 343,802 MEAN 942 MAX 15,200 MIN 124 CFSM 1.15 IN 15.65

PEAK DISCHARGE (BASE, 8,800 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-22	0130	13.40	12,600	1-22	0530	12.83	11,700
12-27	1130	16.28	17,900	3-31	1400	15.55	16,400

01643500 Bennett Creek at Park Mills, Md.

LOCATION.--Lat 39°17'40", long 77°24'30", Frederick County, on left bank 75 ft (23 m) downstream from highway bridge, 0.2 mile (0.3 km) south of Park Mills, 1.8 miles (2.9 km) upstream from mouth, and 3.7 miles (6.0 km) southwest of Urbana.

DRAINAGE AREA.--62.8 sq mi (162.7 sq km).

PERIOD OF RECORD.--July 1948 to September 1958. Annual maximum, water years 1960-66. August 1966 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 240 ft (73.2 m), from topographic map. Oct. 1, 1959 to July 21, 1966, crest-stage gage at same site and datum.

AVERAGE DISCHARGE.--18 years (1948-58, 1966-74), 69.1 cfs (1.957 cu m/s), 14.94 in/yr (379 mm/yr).

EXTREMES.--Current year: Maximum discharge, 1,790 cfs (50.7 cu m/s) Dec. 26, gage height, 6.04 ft (1.841 m); minimum, 14 cfs (0.40 cu m/s) Aug. 16, gage height, 1.06 ft (0.323 m).
Period of record: Maximum discharge, 32,200 cfs (912 cu m/s) June 21, 1972, gage height, 22.1 ft (6.74 m), from floodmark, from rating curve extended above 2,700 cfs (76.5 cu m/s) on basis of contracted-opening measurements at gage heights 11.15 ft (3.399 m), 14.33 ft (4.368 m), and 22.1 ft (6.74 m); minimum, 0.30 cfs (0.008 cu m/s) Sept. 8, 1966, gage height, 0.80 ft (0.244 m).

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	25	20	82	55	44	145	45	54	47	18	20
2	57	23	20	68	55	44	113	43	236	42	18	54
3	45	22	20	70	60	43	92	53	120	39	18	35
4	29	22	20	102	55	42	151	46	76	38	19	58
5	26	28	35	77	55	41	186	42	61	36	21	23
6	23	28	38	72	55	40	136	45	54	42	18	24
7	23	24	25	66	58	41	107	43	49	60	17	86
8	23	23	23	58	55	42	134	41	49	36	17	35
9	23	24	137	70	50	41	265	70	47	32	19	27
10	23	22	54	100	50	43	143	58	64	30	24	25
11	23	21	34	160	50	38	116	45	93	28	20	26
12	23	22	29	100	52	41	104	207	46	26	18	24
13	22	22	28	75	57	38	158	153	42	24	20	46
14	21	22	31	65	66	37	123	78	39	24	17	140
15	20	22	27	65	54	36	104	63	38	23	16	36
16	20	22	26	60	51	38	90	55	74	22	15	27
17	19	21	28	60	54	40	83	49	180	21	22	24
18	20	20	28	55	52	36	80	49	60	21	25	23
19	20	21	27	55	54	36	75	46	49	22	48	22
20	20	21	36	55	55	35	70	44	45	20	42	21
21	20	21	574	240	47	66	67	42	44	19	19	27
22	20	21	136	120	52	59	65	45	49	18	27	38
23	20	20	81	90	48	45	68	164	91	19	27	22
24	20	21	66	75	44	43	60	76	65	24	19	20
25	21	21	59	85	46	39	57	63	52	22	17	20
26	20	20	794	70	42	38	54	50	84	21	21	20
27	20	21	369	75	42	38	51	47	75	21	17	19
28	20	23	155	70	43	37	50	44	59	20	16	25
29	43	22	115	65	------	38	49	45	68	18	23	27
30	32	20	93	60	------	494	47	49	54	45	18	19
31	24	------	81	55	------	334	------	45	------	20	18	------
TOTAL	763	665	3,209	2,520	1,457	2,027	3,043	1,945	2,117	880	654	1,013
MEAN	24.6	22.2	104	81.3	52.0	65.4	101	62.7	70.6	28.4	21.1	33.8
MAX	57	28	794	240	66	494	265	207	236	60	48	140
MIN	19	20	20	55	42	35	47	41	38	18	15	19
CFSM	.39	.35	1.66	1.29	.83	1.04	1.61	1.00	1.12	.45	.34	.54
IN.	.45	.39	1.90	1.49	.86	1.20	1.80	1.15	1.25	.52	.39	.60

CAL YR 1973 TOTAL 29,992 MEAN 82.2 MAX 794 MIN 19 CFSM 1.31 IN 17.77
WTR YR 1974 TOTAL 20,293 MEAN 55.6 MAX 794 MIN 15 CFSM .89 IN 12.02

PEAK DISCHARGE (BASE, 1,200 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-26	1830	6.04	1,790	3-30	2200	5.37	1,490

01645000 Seneca Creek at Dawsonville, Md.

LOCATION.--Lat 39°07'41", long 77°20'13", Montgomery County, on right bank 60 ft (18 m) downstream from bridge on State Highway 28, 150 ft (46 m) downstream from mouth of Great Seneca Creek, 0.5 mile (0.8 km) east of Dawsonville, and 5.8 miles (9.3 km) upstream from mouth.
DRAINAGE AREA.--101 sq mi (262 sq km).
PERIOD OF RECORD.--September 1930 to current year.
GAGE.--Water-stage recorder. Concrete control since Mar. 3, 1934. Datum of gage is 214.15 ft (65.273 m) above mean sea level, adjustment of 1912. Sept. 26 to Nov. 9, 1930, chain gage and Nov. 10, 1930, to Apr. 6, 1934, water-stage recorder, at highway bridge 60 ft (18 m) upstream at same datum.
AVERAGE DISCHARGE.--44 years, 97.0 cfs (2.747 cu m/s), 13.05 in/yr (331 mm/yr).
EXTREMES.--Current year: Maximum discharge, 3,160 cfs (89.5 cu m/s) Dec. 26, gage height, 7.95 ft (2.423 m); minimum, 24 cfs (0.68 cu m/s) Aug. 15, 16, gage height, 1.85 ft (0.564 m).
Period of record: Maximum discharge, 26,100 cfs (739 cu m/s) June 22, 1972, gage height, 16.4 ft (5.00 m), from high-water mark in gage house, from rating curve extended above 3,000 cfs (850 cu m/s) on basis of contracted-opening and flow-over-road measurement at gage height 12.17 ft (3.709 m) at gage; and contracted-opening and flow-over-road measurement at gage height 16.32 ft (4.974 m) at site 5.0 mile (8.0 km) downstream, adjusted for flow from intervening area; minimum observed, 1.7 cfs (0.048 cu m/s) Sept. 28, 29, 1930, gage height, 0.56 ft (0.171 m).
Flood of Sept. 12, 1971, reached a stage of 16.32 ft (4.974 m), from high-water mark in gage house, discharge, 25,900 cfs (733 cu m/s), from rating curve extended as explained above.
CORRECTIONS.--The maximum discharge for water year 1970 is 2,200 cfs (62.3 cu m/s), gage height, 7.18 ft (2.188 m) July 10, 1970; the previously published figure was the maximum for the 1969 water year.
REMARKS.--Records good. Small diversion at times for irrigation above station. Water-quality records for the current water year are published in Part 2 of this report.
REVISIONS (WATER YEARS).--WSP 726: Drainage area. WSP 1232: 1930. WSP 1272: 1933. WSP 1432: 1934-35(M) 1941(M).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48	52	43	144	110	85	208	79	102	66	29	31
2	138	45	42	120	111	87	168	77	369	61	27	40
3	116	44	41	126	121	86	143	105	172	56	28	108
4	71	44	41	204	106	84	248	86	108	54	28	110
5	60	55	88	145	97	79	272	78	91	49	37	41
6	55	59	95	129	95	79	193	85	83	56	27	44
7	54	47	55	119	105	85	153	79	78	98	31	244
8	52	46	49	108	100	81	190	76	78	54	29	71
9	52	54	337	138	85	77	357	188	76	48	32	53
10	53	48	125	248	90	82	190	129	71	43	56	47
11	50	46	80	374	98	75	160	92	64	41	32	48
12	48	46	66	241	94	80	148	288	62	37	27	44
13	48	46	64	160	108	76	219	268	60	37	29	40
14	47	46	76	135	164	73	175	123	58	35	27	60
15	44	46	62	135	112	71	147	102	58	35	25	43
16	48	46	59	135	104	75	130	91	91	32	24	37
17	44	43	64	129	109	81	122	84	178	31	40	35
18	43	41	60	116	103	70	118	82	78	31	41	34
19	43	43	60	113	102	71	114	80	66	32	132	33
20	43	43	86	110	104	70	109	78	75	31	143	32
21	43	41	1,480	562	92	153	104	73	71	29	40	34
22	42	43	241	252	104	121	104	71	90	28	37	47
23	42	43	158	175	96	89	120	98	165	28	38	33
24	42	43	138	158	86	82	101	82	96	35	32	30
25	43	44	126	185	90	75	96	75	79	33	31	31
26	41	43	1,330	151	80	73	93	69	84	32	28	31
27	41	43	791	156	75	71	91	69	107	32	28	29
28	40	68	234	139	84	71	88	68	80	29	27	77
29	81	79	180	137	------	78	88	70	92	28	73	69
30	71	46	155	123	------	936	84	84	73	76	33	37
31	50	------	139	118	------	813	------	73	------	32	30	------
TOTAL	1,693	1,433	6,565	5,285	2,825	4,129	4,533	3,102	2,955	1,309	1,241	1,613
MEAN	54.6	47.8	212	170	101	133	151	100	98.5	42.2	40.0	53.8
MAX	138	79	1,480	562	164	936	357	288	369	98	143	244
MIN	40	41	41	108	75	70	84	68	58	28	24	29
CFSM	.54	.47	2.10	1.68	1.00	1.32	1.50	.99	.98	.42	.40	.53
IN.	.62	.53	2.42	1.95	1.04	1.52	1.67	1.14	1.09	.48	.46	.59

CAL YR 1973 TOTAL 54,202 MEAN 148 MAX 1,480 MIN 36 CFSM 1.47 IN 19.96
WTR YR 1974 TOTAL 36,683 MEAN 101 MAX 1,480 MIN 24 CFSM 1.00 IN 13.51

PEAK DISCHARGE (BASE, 1,300 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-21	1015	7.63	2,730	1-21	1530	5.75	1,370
12-26	1945	7.95	3,160	3-30	2230	7.50	2,570

01645200 Watts Branch at Rockville, Md.

LOCATION.--Lat 39°05'03", long 77°10'38", Montgomery County, on left bank 0.2 mile (0.3 km) south of State Highway 28, 1.3 miles (2.1 km) west of post office in Rockville, and 9.4 miles (15.0 km) upstream from mouth.

DRAINAGE AREA.--3.70 sq mi (9.58 sq km).

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 330 ft (100 m), from topographic map.

AVERAGE DISCHARGE.--17 years, 3.93 cfs (0.111 cu m/s), 14.42 in/yr (366 mm/yr).

EXTREMES.--Current year: Maximum discharge, 443 cfs (12.5 cu m/s) Sept. 28, gage height, 6.25 ft (1.905 m), from rating curve extended as explained below; minimum, 0.08 cfs (0.002 cu m/s) Sept. 27, 28, gage height, 1.10 ft (0.335 m).
Period of record: Maximum discharge, 2,900 cfs (81.1 cu m/s) June 21, 1972, gage height, 7.22 ft (2.201 m) in gage well, 7.83 ft (2.387 m) from floodmarks, from rating curve extended above 280 cfs (7.93 cu m/s) on basis of combined computation of peak flow through culvert and slope-area measurement of tributary inflow; minimum, 0.08 cfs (0.002 cu m/s) Sept. 2, 1966, Sept. 27, 28, 1974, gage height, 1.10 ft (0.335 m).

REMARKS.--Records good. Some regulation of low flow from unknown cause.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	2.1	1.2	4.9	3.2	3.0	4.0	1.8	4.1	1.4	.61	.71
2	18	1.5	1.2	3.2	4.2	4.0	3.5	2.2	26	1.2	.65	.62
3	2.3	1.4	1.2	6.9	3.2	3.1	3.2	4.9	2.6	1.2	.61	19
4	1.8	1.4	1.2	10	2.9	2.7	16	2.0	1.9	1.1	5.1	2.1
5	1.6	3.4	14	3.5	2.7	2.5	14	3.1	1.7	1.5	.97	.77
6	1.4	1.4	1.9	3.2	3.0	3.7	4.0	2.5	1.6	1.2	.63	11
7	1.4	1.4	1.5	2.9	3.7	2.8	3.6	1.9	1.5	1.1	2.1	15
8	1.4	1.5	1.7	2.7	3.1	2.6	16	1.9	1.6	1.0	.86	1.2
9	1.8	4.3	26	10	3.4	2.5	12	7.9	1.6	1.1	1.1	.97
10	1.6	1.5	2.3	16	3.1	2.7	4.0	2.2	1.4	.99	.81	.93
11	1.5	1.5	1.9	16	3.0	3.2	3.5	1.9	1.3	.96	.63	1.5
12	1.5	1.5	1.7	4.7	3.3	3.1	3.2	31	1.3	.85	.86	.88
13	1.4	1.5	3.7	3.4	6.0	2.5	9.9	3.8	1.2	.82	.69	.80
14	1.4	1.5	2.5	3.2	4.7	2.4	3.7	2.4	1.2	.82	.58	1.8
15	1.4	1.5	1.7	3.2	3.0	2.4	3.2	2.2	1.3	.85	.54	.70
16	2.0	1.4	1.9	3.2	3.3	4.2	2.8	2.0	5.7	.78	.65	.71
17	1.5	1.4	1.9	3.1	3.2	2.6	2.6	1.9	4.3	.75	4.8	.79
18	1.3	1.4	1.9	3.1	2.8	2.3	2.6	1.8	1.3	.75	.80	.85
19	1.3	1.4	2.0	3.0	3.4	2.7	2.6	1.9	1.2	.83	2.6	.71
20	1.2	1.3	19	2.7	2.9	2.4	2.5	1.9	2.7	.64	.78	.71
21	1.2	1.4	57	40	2.6	18	2.4	1.7	1.4	.55	.62	2.2
22	1.2	1.3	4.4	5.1	5.6	3.3	2.4	1.6	11	.62	.68	.83
23	1.2	1.2	3.9	4.0	2.7	2.8	4.4	3.5	9.6	.84	.77	.34
24	1.2	1.4	3.3	7.7	2.5	2.6	2.4	1.6	1.9	1.1	.49	.25
25	1.9	1.2	3.2	7.8	2.7	2.5	2.3	1.6	1.5	.71	.47	.24
26	1.2	1.2	43	4.6	2.4	2.5	2.2	1.5	7.4	.71	.66	.16
27	1.2	1.4	7.6	5.3	2.4	2.5	2.1	1.5	2.0	.68	.51	.11
28	1.2	1.9	3.8	4.2	2.5	2.4	2.1	1.4	3.5	.58	3.7	34
29	10	1.4	3.3	3.7	------	5.3	1.9	4.8	1.8	3.5	5.7	1.1
30	1.5	1.2	4.0	3.4	------	71	1.9	2.1	1.4	2.3	2.5	.61
31	1.5	------	5.2	3.2	------	7.1	------	1.7	------	.69	.96	------
TOTAL	71.1	47.9	229.1	197.9	91.5	177.4	141.0	104.2	107.0	32.12	43.43	101.59
MEAN	2.29	1.60	7.39	6.38	3.27	5.72	4.70	3.36	3.57	1.04	1.40	3.39
MAX	18	4.3	57	40	6.0	71	16	31	26	3.5	5.7	34
MIN	1.2	1.2	1.2	2.7	2.4	2.3	1.9	1.4	1.2	.55	.47	.11
CFSM	.62	.43	2.00	1.72	.88	1.55	1.27	.91	.96	.28	.38	.92
IN.	.71	.48	2.30	1.99	.92	1.78	1.42	1.05	1.08	.32	.44	1.02

CAL YR 1973 TOTAL 2,135.40 MEAN 5.85 MAX 87 MIN 1.2 CFSM 1.58 IN 21.47
WTR YR 1974 TOTAL 1,344.24 MEAN 3.68 MAX 71 MIN .11 CFSM .99 IN 13.52

PEAK DISCHARGE (BASE, 220 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
1-21	1000	5.93	287	5-12	1615	5.57	235
3-30	1615	6.05	323	9-28	1330	6.25	443

01646500 Potomac River near Washington, D. C.

LOCATION.--Lat 38°56'58", long 77°07'40", Montgomery County, Maryland, on left bank just above Little Falls Dam, 1 mile (1.6 km) upstream from District of Columbia boundary line, 1.2 miles (1.9 km) upstream from Chain Bridge, 1.8 miles (2.9 km) east of Langley, Fairfax County, Virginia, and at mile 117.4 (188.9 km).
DRAINAGE AREA.--11,560 sq mi (29,940 sq km).
PERIOD OF RECORD.--March 1930 to current year.
GAGE.--Water-stage recorder and concrete control. Datum of gage is 37.95 ft (11.567 m) above mean sea level. Prior to June 7, 1930, nonrecording gage, and June 7, 1930, to Jan. 22, 1965, water-stage recorder at site 1 mile (1.6 km) upstream on right bank at same datum.
AVERAGE DISCHARGE.--44 years, 11,100 cfs (314.4 cu m/s), 13.04 in/yr (331 mm/yr), adjusted for diversions.
EXTREMES.--Current year: Maximum discharge, 110,000 cfs (3,115 cu m/s) Dec. 28, gage height, 10.36 ft (3.158 m); minimum daily, 1,920 cfs (54.4 cu m/s) Aug. 15, 16, Sept. 30, does not include diversion for municipal use; minimum daily (adjusted), 2,390 cfs (67.7 cu m/s) Sept. 30, includes diversion of 474 cfs (13.4 cu m/s).
Period of record: Maximum discharge, 484,000 cfs (13,700 cu m/s) Mar. 19, 1936, gage height, 28.1 ft (8.56 m) site then in use; minimum daily observed at gaging station, 121 cfs (3.43 cu m/s) Sept. 9, 1966, does not include diversion of 489 cfs (13.8 cu m/s) for municipal use; minimum daily (adjusted), 601 cfs (17.0 cu m/s) Sept. 10, 1966, includes diversion of 449 cfs (12.7 cu m/s) for municipal use.
Flood of June 2, 1889, was of approximately the same magnitude as that of March 19, 1936.
REMARKS.--Records good. Diversions at Great Falls through aqueducts, and since June 1959, from gage pool at Little Falls Dam, for municiapl supply of Washington, D. C.; since October 1958, at Rockville Filtration Plant, for municipal supply of city of Rockville; since April 1961, at Potomac Filtration Plant for water supply of Washington Suburban Sanitary District; since October 1961, at Fairfax Water Treatment Plant for water supply of city of Fairfax (from Goose Creek); and since April 1964, at Violets Lock to Chesapeake and Ohio Canal. Low flow affected slightly by Stony River Reservoir (see station 01595200) and since December 1950, by Savage River Reservoir (see station 01597500). Low flow affected extensively at times by run-of-the-river hydroelectric plants.
REVISIONS.--WSP 726: Drainage area.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,520	24,500	5,510	33,900	16,200	9,340	39,100	7,700	5,660	9,610	2,970	2,410
2	3,570	16,300	7,260	27,800	14,800	9,160	30,400	7,350	7,700	9,970	3,200	2,180
3	4,660	13,800	7,180	24,000	14,000	9,340	24,700	7,180	20,400	10,100	2,800	3,320
4	5,010	12,500	6,350	22,800	13,100	9,250	21,800	7,010	48,400	9,970	2,410	3,940
5	6,930	11,100	6,040	22,700	12,300	9,970	30,700	6,840	46,800	8,410	2,470	4,330
6	8,230	9,880	5,880	21,800	11,600	11,300	41,400	6,840	28,300	6,930	2,740	4,070
7	6,840	8,690	5,810	20,300	11,000	10,900	37,300	6,930	19,700	6,430	3,320	4,940
8	5,510	8,140	5,810	18,100	10,400	10,500	30,300	6,930	15,200	6,430	2,970	4,660
9	4,800	7,790	7,700	17,000	10,200	10,100	28,400	6,680	12,500	6,430	2,630	4,270
10	4,270	6,930	10,900	16,500	9,880	9,880	27,300	7,010	10,600	5,660	2,580	4,270
11	3,880	6,430	18,000	19,300	9,970	10,400	26,200	6,760	9,520	5,150	2,520	4,940
12	3,690	5,960	18,600	36,200	9,700	10,600	23,300	7,260	8,690	4,870	2,300	5,080
13	3,820	5,730	14,800	48,400	9,430	10,300	20,900	14,000	8,140	4,330	2,020	4,530
14	4,140	5,360	12,300	38,900	9,790	9,970	25,100	21,700	7,440	3,760	1,970	5,960
15	3,820	5,010	10,800	30,300	9,790	9,790	26,700	27,000	6,430	3,440	1,920	7,610
16	3,500	4,600	10,200	25,300	9,790	9,700	23,600	22,600	6,110	3,020	1,920	4,660
17	3,320	4,530	9,610	23,300	11,600	9,430	20,200	17,200	6,930	2,910	2,130	3,880
18	3,630	4,530	9,070	21,700	11,700	9,610	17,500	13,800	8,320	2,740	2,520	3,080
19	3,440	4,330	8,510	19,400	10,700	9,700	15,700	11,900	9,160	2,580	2,800	3,140
20	2,970	4,140	8,410	17,500	10,200	9,250	14,300	10,500	7,870	2,470	3,020	3,080
21	2,800	4,140	17,300	19,100	9,790	9,340	13,100	10,500	6,930	2,300	2,520	2,800
22	2,740	4,140	33,900	30,100	9,430	9,970	12,100	9,880	6,190	2,180	2,410	2,690
23	2,630	4,200	50,200	35,000	9,610	12,600	11,400	9,160	6,510	2,070	2,350	2,630
24	2,580	4,070	38,500	33,000	9,970	13,500	11,400	9,430	6,680	2,020	2,410	2,470
25	2,520	4,010	28,000	28,500	10,200	14,000	11,100	8,880	9,790	2,020	2,580	2,180
26	2,690	4,010	26,700	24,700	10,900	12,700	10,200	8,230	20,000	2,070	2,520	2,070
27	2,630	4,010	53,000	22,400	10,300	11,600	9,700	7,440	17,100	2,070	2,520	1,970
28	2,350	4,070	100,000	22,200	9,790	10,600	9,160	6,840	13,800	2,020	2,410	2,470
29	2,350	4,140	94,000	21,300	------	9,970	8,600	6,350	11,700	2,020	2,410	2,300
30	19,400	4,140	57,100	19,700	------	13,300	8,140	5,960	9,970	2,580	2,300	1,920
31	39,500	------	40,900	17,900	------	31,200	------	5,730	------	2,740	2,410	------
TOTAL	170,740	211,180	728,340	779,100	306,140	347,270	629,800	311,590	402,540	139,300	78,050	107,850
MEAN	5,508	7,039	23,490	25,130	10,930	11,200	20,990	10,050	13,420	4,494	2,518	3,595
MAX	39,500	24,500	100,000	48,400	16,200	31,200	41,400	27,000	48,400	10,100	3,320	7,610
MIN	2,350	4,010	5,510	16,500	9,430	9,160	8,140	5,730	5,660	2,020	1,920	1,920
(ƒ)	480	439	442	445	420	423	446	462	478	566	488	480
MEANƒ	5,988	7,478	23,930	25,580	11,350	11,620	21,440	10,510	13,900	5,060	3,006	4,075
CFSMƒ	.52	.65	2.07	2.21	.98	1.01	1.85	.91	1.20	.44	.26	.35
INƒ	.60	.73	2.39	2.55	1.02	1.16	2.06	1.05	1.34	.51	.30	.39

CAL YR 1973 TOTAL 5,308,790 MEAN 14,540 MAX 100,000 MIN 2,170 MEANƒ 15,010 CFSMƒ 1.30 INƒ 17.65
WTR YR 1974 TOTAL 4,211,900 MEAN 11,540 MAX 100,000 MIN 1,920 MEANƒ 12,010 CFSMƒ 1.04 INƒ 14.12

PEAK DISCHARGE (BASE, 45,000 CFS)

DATE	TIME	G. H.	DISCHARGE
10-30	2200	6.76	45,800
12-23	1230	7.14	52,000
12-28	2000	10.36	110,000
1-13	0630	6.99	49,600
6-04	2030	7.55	59,000

ƒ Diversion, in cfs, for municipal supply of Washington, D. C., Washington Suburban Sanitary District, City of Rockville, City of Fairfax (from Goose Creek), and the Chesapeake and Ohio Canal (insignificant diversion to canal during the current water year); records furnished by Corps of Engineers, Washington Suburban Sanitary Commission, City of Rockville, and City of Fairfax.
ƒ Adjusted for diversion.

01646550 Little Falls Branch near Bethesda, Md.

LOCATION.--Lat 38°57'27", long 77°06'31", Montgomery County, on left bank at downstream side of bridge on Massachusetts Avenue, 0.3 mile (0.5 km) downstream from Willett Branch, 1.7 miles (2.7 km) upstream from mouth, and 2.0 miles (3.2 km) southwest of Bethesda.

DRAINAGE AREA.--4.1 sq mi (10.6 sq km), approximately.

PERIOD OF RECORD.--June 1944 to September 1959. Annual maximum, water years 1960-61. Occasional low-flow measurements water years 1960-62. December 1961 to current year.

GAGE.--Water-stage recorder, concrete control, and crest-stage gage. Datum of gage is 169.32 ft (51.609 m) above mean sea level (Maryland State Highway Administration bench mark). Prior to Oct. 1959, water-stage recorder and concrete control at site 50 ft (15 m) upstream at same datum. Oct. 1, 1959, to Nov. 30, 1961, crest-stage gage at present site and datum.

AVERAGE DISCHARGE.--27 years (1945-49, 1963-74), 3.28 cfs (0.0929 cu m/s), 10.86 in/yr (276 mm/yr).

EXTREMES.--Current year: Maximum discharge, 381 cfs (10.8 cu m/s) May 12, gage height, 2.90 ft (0.884 m); minimum discharge, 0.25 cfs (0.007 cu m/s) Sept. 23, gage height, 1.28 ft (0.390 m).
Period of record: Maximum discharge, 2,680 cfs (75.9 cu m/s) Sept. 14, 1966, gage height, 6.82 ft (2.079 m), from rating curve extended above 630 cfs (17.8 cu m/s) on basis of slope-area measurement at gage height 5.92 ft (1.804 m); no flow at times in 1944, 1954, 1959, minima not available Oct. 1959 to Nov. 1961.

REMARKS.--Records good. Occasional slight regulation at low flow from unknown source above station.

REVISIONS (WATER YEARS).--WSP 1171: 1945.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	1.7	.85	5.0	1.9	1.6	2.8	1.4	7.9	1.3	.95	.75
2	23	.75	.85	1.6	3.3	3.8	2.2	2.4	29	1.1	1.3	.75
3	1.6	.75	.85	6.6	1.9	1.4	1.9	8.9	2.1	.95	.95	29
4	1.2	.66	.95	13	1.7	1.6	6.6	1.6	1.6	.90	4.1	2.6
5	1.2	5.0	19	1.9	1.6	1.4	6.1	4.1	1.4	2.0	1.1	.95
6	1.1	.85	1.2	1.7	2.4	3.8	2.1	2.1	1.4	1.3	.85	23
7	1.1	.75	.95	1.6	3.3	1.6	1.9	1.4	1.6	1.1	5.0	20
8	1.1	2.1	1.9	1.7	1.7	1.4	18	1.4	1.6	1.1	1.7	1.2
9	1.3	5.7	29	14	3.0	1.4	13	7.0	1.4	1.0	12	1.2
10	1.1	.85	1.4	12	2.2	1.4	2.4	1.6	1.6	1.0	1.2	1.1
11	1.1	.75	1.2	12	1.7	2.8	2.2	1.4	1.4	.95	.85	3.5
12	.95	.85	1.1	4.7	1.9	2.4	2.1	24	1.7	.95	.85	1.1
13	.95	.85	5.0	2.2	2.4	1.4	11	2.4	1.9	.85	.75	.95
14	1.2	.95	1.4	1.9	2.0	1.4	2.2	1.6	1.6	.85	1.4	3.5
15	1.1	.85	1.1	1.7	1.7	1.4	2.1	1.6	1.3	.90	.95	.95
16	1.3	.75	1.7	1.7	1.9	6.6	1.9	1.4	5.3	.85	1.2	.85
17	.85	.66	1.3	1.6	2.0	1.6	1.9	1.4	3.0	.80	2.1	.85
18	.85	.66	1.6	1.6	1.5	1.6	1.6	1.6	1.2	.80	.75	.85
19	.85	.66	1.7	1.7	1.7	1.6	1.7	2.1	1.2	1.2	3.5	.95
20	.75	.66	36	1.4	1.6	1.4	1.6	2.1	5.0	.85	1.2	.95
21	.75	.75	48	19	1.6	17	1.6	1.7	1.4	.85	.75	1.9
22	.85	.66	3.0	2.4	5.3	1.9	1.7	1.7	9.5	.85	2.2	.85
23	.75	.75	2.8	2.1	1.6	1.6	6.1	7.0	11	2.2	1.2	.85
24	.75	.75	1.9	5.0	1.4	1.6	1.6	1.9	1.6	1.4	.66	.85
25	.75	.75	1.6	5.3	2.6	1.4	1.6	1.3	1.3	1.1	.66	.85
26	.75	.95	23	2.6	1.4	1.4	1.6	1.3	6.1	1.1	2.8	.85
27	.66	.95	3.5	2.6	1.4	1.4	1.7	1.3	1.6	.95	.75	.95
28	.66	4.4	1.7	2.8	1.6	1.6	1.4	1.7	5.3	.95	3.0	14
29	8.4	.95	1.6	2.2	------	7.9	1.4	3.5	3.5	8.4	1.6	1.1
30	.85	.85	1.9	2.0	------	50	1.4	1.9	1.4	3.0	11	.95
31	1.4	------	8.9	1.9	------	4.1	------	1.4	------	.95	1.1	------
TOTAL	61.77	38.51	206.95	137.5	58.3	131.5	105.4	96.2	115.9	42.50	68.42	118.15
MEAN	1.99	1.28	6.68	4.44	2.08	4.24	3.51	3.10	3.86	1.37	2.21	3.94
MAX	23	5.7	48	19	5.3	50	18	24	29	8.4	12	29
MIN	.66	.66	.85	1.4	1.4	1.4	1.4	1.3	1.2	.80	.66	.75
CFSM	.49	.31	1.63	1.08	.51	1.03	.86	.76	.94	.33	.54	.96
IN.	.56	.35	1.88	1.25	.53	1.19	.96	.87	1.05	.39	.62	1.07

CAL YR 1973 TOTAL 1,548.93 MEAN 4.24 MAX 90 MIN .66 CFSM 1.03 IN 14.05
WTR YR 1974 TOTAL 1,181.10 MEAN 3.24 MAX 50 MIN .66 CFSM .79 IN 10.72

PEAK DISCHARGE (BASE, 450 CFS).--No peak above base.

01647685 Williamsburg Run near Olney, Md.

LOCATION.--Lat 39°08'32", long 77°05'48", Montgomery County, on right bank 200 ft (60 m) downstream from vehicle bridge on golf course of Norbeck Country Club, 0.2 mile (0.3 km) downstream from Cashell Road, 0.5 mile (0.8 km) upstream from mouth, and 1.8 miles (2.9 km) southwest of Olney.

DRAINAGE AREA.--2.25 sq mi (5.83 sq km).

PERIOD OF RECORD.--October 1966 to September 1974 (discontinued).

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 390 ft (119 m), from topographic map.

AVERAGE DISCHARGE.--8 years, 2.80 cfs (0.0793 cu m/s), 16.90 in/yr (429 mm/yr).

EXTREMES.--Current year: Maximum discharge, 365 cfs (10.3 cu m/s) Mar. 30, gage height, 4.20 ft (1.280 m); minimum, 0.30 cfs (0.008 cu m/s) Aug. 13-14, gage height, 1.11 ft (0.338 m).
Period of record: Maximum discharge, 3,110 cfs (88.1 cu m/s) June 21, 1972, gage height, 8.26 ft (2.518 m), from high-water mark in gage house, from rating curve extended above 300 cfs (8.50 cu m/s) on basis of slope-area measurements at gage heights 5.90 ft (1.798 m) and 8.26 ft (2.518 m); minimum, 0.10 cfs (0.003 cu m/s) Sept. 26, 1968, gage height, 0.98 ft (0.299 m).

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

REVISIONS (WATER YEARS).--WRD Md. and Del. 1971: 1967(P), 1969(M), 1970(M).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.63	.71	.53	3.0	1.6	1.4	2.4	1.4	2.3	.94	.40	.45
2	6.3	.58	.53	1.7	1.8	1.5	2.1	1.3	16	.87	.37	.43
3	1.4	.58	.59	2.2	1.9	1.4	2.0	1.9	1.9	.80	.37	7.7
4	1.0	.58	.55	7.0	1.7	1.4	10	1.4	1.3	.74	.37	2.3
5	.83	.91	5.1	2.3	1.5	1.3	8.2	1.4	1.2	.74	.40	.68
6	.75	.66	1.1	1.6	1.5	1.4	2.6	1.5	1.2	.80	.32	3.1
7	.75	.58	.80	1.5	1.9	1.5	2.3	1.2	1.2	.74	.40	11
8	.73	.63	.73	1.4	1.7	1.4	9.3	1.2	1.2	.69	.34	1.2
9	.69	.95	17	3.0	1.7	1.4	9.4	1.8	1.1	.65	.43	.96
10	.69	.65	1.4	7.0	1.7	1.3	2.5	1.5	1.0	.65	.43	.87
11	.68	.63	1.1	10	1.5	1.2	2.1	1.4	1.0	.57	.34	.83
12	.69	.67	.95	3.5	1.5	1.5	2.0	13	.94	.53	.32	.78
13	.69	.65	1.2	2.0	2.5	1.3	5.3	2.4	.94	.53	.32	.72
14	.63	.64	1.4	1.7	3.5	1.2	2.4	1.5	.94	.53	.32	.78
15	.65	.63	.99	1.6	1.8	1.2	2.0	1.4	.87	.53	.37	.65
16	.68	.58	.94	1.5	1.6	1.6	1.8	1.3	1.5	.49	.43	.64
17	.59	.53	1.0	1.5	1.7	1.4	1.8	1.2	1.0	.46	1.4	.64
18	.59	.54	.99	1.4	1.6	1.2	1.7	1.2	.94	.44	.49	.62
19	.57	.63	.99	1.4	1.6	1.2	1.6	1.2	.87	.46	11	.61
20	.56	.58	16	1.4	1.6	1.2	1.6	1.2	.87	.43	.97	.68
21	.54	.60	41	13	1.5	9.2	1.6	1.3	.87	.43	.61	.74
22	.53	.58	2.8	3.0	2.3	1.8	1.6	1.2	2.4	.43	.57	.64
23	.54	.61	1.8	2.0	1.8	1.4	1.7	1.4	2.2	.40	.53	.55
24	.53	.58	1.7	2.7	1.5	1.4	1.5	1.2	1.1	.46	.45	.53
25	.57	.58	1.6	4.3	1.5	1.5	1.5	1.1	1.0	.43	.43	.53
26	.54	.62	21	2.1	1.4	1.5	1.5	1.0	1.1	.49	.47	.52
27	.53	.58	3.5	2.6	1.4	1.5	1.5	1.0	1.0	.43	.44	.49
28	.53	.63	1.9	2.1	1.4	1.5	1.5	1.0	1.4	.40	.84	13
29	3.0	.58	1.7	2.0	------	2.0	1.4	1.2	1.1	.43	1.8	1.2
30	.90	.58	1.5	1.8	------	67	1.4	1.2	1.0	.65	.48	.82
31	.68	------	1.7	1.6	------	5.1	------	1.0	------	.40	.46	------
TOTAL	28.99	18.85	134.09	93.9	48.7	120.9	88.3	53.0	51.44	17.54	26.87	54.58
MEAN	.94	.63	4.33	3.03	1.74	3.90	2.94	1.71	1.71	.57	.87	1.82
MAX	6.3	.95	41	13	3.5	67	10	13	16	.94	11	13
MIN	.53	.53	.53	1.4	1.4	1.2	1.4	1.0	.87	.40	.32	.43
CFSM	.42	.28	1.92	1.35	.77	1.73	1.31	.76	.76	.25	.39	.81
IN.	.48	.31	2.22	1.55	.81	2.00	1.46	.88	.85	.29	.44	.90

CAL YR 1973 TOTAL 1,095.54 MEAN 3.00 MAX 41 MIN .45 CFSM 1.33 IN 18.11
WTR YR 1974 TOTAL 737.16 MEAN 2.02 MAX 67 MIN .32 CFSM .90 IN 12.19

PEAK DISCHARGE (BASE, 150 CFS).--Mar. 30 (1700) 365 cfs (4.20 ft).

01647720 North Branch Rock Creek near Norbeck, Md.

LOCATION.--Lat 39°06'59", long 77°06'09", Montgomery County, on left bank 550 ft (168 m) downstream from bridge on Muncaster Mill Road (State Highway 115), 0.7 mile (1.1 km) upstream from Manor Run, 1.5 miles (2.4 km) northwest of Norbeck, and 2 miles (3.2 km) upstream from mouth.

DRAINAGE AREA.--9.73 sq mi (25.20 sq km).

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

GAGE.--Water-stage recorder. Altitude of gage is 320 ft (98 m), from topographic map.

AVERAGE DISCHARGE.--8 years, 12.1 cfs (0.343 cu m/s), 16.92 in/yr (430 mm/yr).

EXTREMES.--Current year: Maximum discharge, 850 cfs (24.1 cu m/s) Mar. 30, gage height, 5.40 ft (1.646 m); minimum daily, 0.97 cfs (0.027 cu m/s) Aug. 16.
Period of record: Maximum discharge, 10,100 cfs (286 cu m/s) June 22, 1972, gage height, 14.1 ft (4.30 m), from floodmarks, from rating curve extended above 400 cfs (11.3 cu m/s) on basis of computation of peak flow through culvert and flow over road; minimum daily, 0.40 cfs (0.011 cu m/s) July 17-18, 1969.

REMARKS.--Records good. Diversion at low flow for irrigation of golf courses above station. Water-quality records for the current water year are published in Part 2 of this report.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	4.2	4.0	13	9.6	8.2	16	6.9	8.3	3.7	1.6	1.6
2	18	4.0	4.0	9.4	10	8.2	13	6.8	51	3.4	1.5	1.4
3	7.4	4.0	4.0	12	10	8.5	11	9.8	11	3.1	1.6	18
4	5.3	4.0	4.5	30	9.9	8.4	35	7.3	6.8	2.8	1.4	9.3
5	4.2	8.0	18	15	9.2	8.0	35	6.9	5.8	2.7	1.7	2.1
6	3.7	5.0	7.1	12	8.7	7.8	15	8.1	5.3	2.9	1.5	4.9
7	3.6	4.5	4.7	10	9.0	8.4	14	7.1	5.1	3.0	1.7	36
8	3.6	4.5	4.3	9.2	9.6	8.3	50	6.7	5.2	2.7	1.6	4.9
9	3.6	7.5	58	20	9.4	7.8	60	9.6	5.0	2.5	2.2	3.2
10	3.7	5.0	8.9	30	9.6	7.7	15	8.3	4.5	2.4	2.1	2.7
11	3.6	4.5	6.4	50	9.3	7.4	12	6.9	3.9	2.2	1.6	2.6
12	3.6	4.0	5.5	30	9.0	7.7	12	59	3.7	2.0	1.5	2.5
13	3.6	4.5	5.8	13	11	7.7	24	17	3.6	2.0	1.6	2.3
14	3.4	4.0	7.3	9.8	22	7.3	14	8.8	3.4	2.0	1.5	2.5
15	3.2	4.0	5.6	10	12	7.1	12	7.5	3.3	1.8	1.3	2.1
16	3.7	4.0	5.4	9.8	9.6	7.3	10	6.8	6.4	1.7	.97	2.1
17	3.2	4.0	6.2	9.6	9.7	8.8	10	6.4	4.6	1.5	2.0	1.9
18	3.2	4.0	5.7	9.6	9.5	7.6	9.7	6.0	3.9	1.5	2.2	1.8
19	3.2	4.0	5.5	9.4	9.1	7.1	9.5	6.1	3.5	1.5	58	1.8
20	3.2	4.0	38	9.3	9.7	7.1	9.3	5.8	3.4	1.4	6.1	1.8
21	3.2	4.0	205	84	8.8	35	9.1	5.5	3.4	1.3	1.8	1.9
22	3.3	4.0	16	15	11	11	9.0	5.3	15	1.3	1.6	2.1
23	3.2	4.0	11	13	11	8.8	10	6.2	10	1.3	1.5	1.7
24	3.2	4.0	10	13	8.9	8.2	8.7	5.8	5.3	1.6	1.5	1.6
25	3.2	4.0	9.6	25	8.7	8.6	8.4	5.1	4.3	1.7	1.4	1.7
26	3.0	4.0	99	13	8.2	8.6	8.2	5.0	4.7	1.9	1.6	1.8
27	3.1	4.0	30	15	7.9	8.5	7.9	5.0	5.0	1.8	1.5	1.7
28	3.2	4.5	13	13	8.0	8.4	7.8	4.8	5.3	1.7	1.5	46
29	9.7	4.0	11	12	------	8.3	7.6	5.1	5.5	1.5	5.5	6.1
30	4.9	4.0	10	11	------	285	7.3	6.2	4.2	3.7	1.6	3.0
31	3.9	------	10	10	------	78	------	5.3	------	1.7	1.5	------
TOTAL	134.1	132.2	633.5	545.1	278.4	624.8	470.5	267.1	210.4	66.3	114.67	173.1
MEAN	4.33	4.41	20.4	17.6	9.94	20.2	15.7	8.62	7.01	2.14	3.70	5.77
MAX	18	8.0	205	84	22	285	60	59	51	3.7	58	46
MIN	3.0	4.0	4.0	9.2	7.9	7.1	7.3	4.8	3.3	1.3	.97	1.4
CFSM	.45	.45	2.10	1.81	1.02	2.08	1.61	.89	.72	.22	.38	.59
IN.	.51	.51	2.42	2.08	1.06	2.39	1.80	1.02	.80	.25	.44	.66

CAL YR 1973 TOTAL 5,542.20 MEAN 15.2 MAX 205 MIN 2.7 CFSM 1.56 IN 21.19
WTR YR 1974 TOTAL 3,650.17 MEAN 10.0 MAX 285 MIN .97 CFSM 1.03 IN 13.96

PEAK DISCHARGE (BASE, 300 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-21	0745	4.08	460	3-30	1930	5.40	850
1-21	1215	3.51	322	8-19	1815	4.10	465

01647725 Manor Run near Norbeck, Md.

LOCATION.--Lat 39°06'36", long 77°06'00", Montgomery County, on left bank 100 ft (30 m) downstream from ford on farm lane, 0.5 mile (0.8 km) upstream from mouth, and 1.2 miles (1.9 km) west of Norbeck.

DRAINAGE AREA.--1.01 sq mi (2.62 sq km).

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 330 ft (100 m), from topographic map.

AVERAGE DISCHARGE.--8 years 1.37 cfs (0.0388 cu m/s), 18.42 in/yr (468 mm/yr).

EXTREMES.--Current year: Maximum discharge, 295 cfs (8.35 cu m/s) Aug. 19, gage height, 3.90 ft (1.189 m); minimum daily, 0.19 cfs (0.005 cu m/s) Aug. 6.
Period of record: Maximum discharge, 909 cfs (25.7 cu m/s) June 21, 1972, gage height, 5.34 ft (1.628 m), from rating curve extended above 220 cfs (6.23 cu m/s) on basis of a slope-area measurement of peak flow; minimum daily, 0.17 cfs (0.005 cu m/s) Aug. 17, 1967, Sept. 30, Oct. 1-5, 1968.

REMARKS.--Records good except for periods of doubtful or no gage-height record, which are fair. Water-quality records for the current water year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WRD Md. and Del. 1973: 1967-72(P).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.37	.41	.35	1.4	.84	.64	1.2	.53	.58	.41	.21	.25
2	2.8	.39	.34	.78	1.0	.84	1.1	.58	5.1	.37	.21	.25
3	.53	.38	.34	1.5	1.0	.64	.92	1.0	.81	.37	.23	5.6
4	.46	.38	.35	3.2	.84	.64	4.3	.58	.53	.37	.23	1.0
5	.44	.60	2.0	1.0	.73	.64	3.4	.58	.49	.41	.21	.31
6	.39	.46	.65	.88	.76	.81	1.2	.64	.45	.37	.19	2.8
7	.41	.40	.47	.80	1.0	.79	1.0	.53	.45	.37	.25	6.1
8	.41	.45	.44	.70	.88	.64	5.9	.53	.45	.34	.34	.49
9	.42	.60	7.0	2.8	.84	.64	4.6	1.0	.45	.34	7.9	.45
10	.41	.39	.80	4.6	.80	.64	1.2	.64	.45	.28	.45	.49
11	.41	.38	.70	4.8	.81	.58	1.1	.53	.41	.28	.28	.41
12	.41	.38	.60	1.4	1.0	.80	1.0	12	.41	.28	.28	.41
13	.41	.36	.65	.87	1.6	.58	2.7	1.2	.41	.28	.28	.41
14	.40	.36	.70	.80	1.4	.64	1.2	.64	.41	.28	.25	.34
15	.38	.36	.55	.84	.87	.58	1.0	.64	.37	.25	.25	.31
16	.42	.36	.60	.87	.87	.85	.85	.58	1.5	.25	.25	.25
17	.37	.35	.60	.80	.92	.75	.85	.53	.45	.23	.64	.25
18	.36	.36	.60	.76	.81	.58	.81	.49	.41	.25	.28	.25
19	.35	.36	.55	.77	.84	.58	.79	.49	.37	.23	16	.25
20	.35	.35	5.0	.76	.81	.58	.78	.49	.37	.23	.58	.25
21	.36	.36	20	10	.64	5.1	.80	.53	.37	.23	.31	.31
22	.36	.37	4.5	1.4	1.6	.92	.76	.49	2.8	.21	.25	.25
23	.37	.36	1.0	1.1	.84	.78	.92	.58	1.5	.21	.25	.23
24	.37	.37	.80	1.6	.78	.76	.64	.49	.49	.25	.25	.23
25	.36	.36	.90	2.1	.78	.58	.64	.45	.45	.23	.31	.23
26	.35	.35	8.0	1.2	.64	.58	.64	.45	1.0	.23	.25	.23
27	.35	.36	.80	1.5	.64	.58	.64	.45	.49	.23	.25	.23
28	.35	.75	.92	1.1	.64	.58	.80	.45	.92	.23	.25	4.3
29	2.0	.55	.80	1.0	------	1.0	.64	.49	.53	.84	.49	.52
30	.42	.36	.77	.91	------	35	.58	.49	.45	.53	.41	.36
31	.41	------	1.2	.84	------	2.1	------	.45	------	.23	.28	------
TOTAL	16.20	12.27	62.98	53.08	25.18	61.42	42.96	29.52	23.87	9.61	32.61	27.76
MEAN	.52	.41	2.03	1.71	.90	1.98	1.43	.95	.80	.31	1.05	.93
MAX	2.8	.75	20	10	1.6	35	5.9	12	5.1	.84	16	6.1
MIN	.35	.35	.34	.70	.64	.58	.58	.45	.37	.21	.19	.23
CFSM	.51	.41	2.01	1.69	.89	1.96	1.42	.94	.79	.31	1.04	.92
IN.	.60	.45	2.32	1.96	.93	2.26	1.58	1.09	.88	.35	1.20	1.02

CAL YR 1973 TOTAL 621.47 MEAN 1.70 MAX 25 MIN .34 CFSM 1.68 IN 22.89
WTR YR 1974 TOTAL 397.46 MEAN 1.09 MAX 35 MIN .19 CFSM 1.08 IN 14.64

PEAK DISCHARGE (BASE, 150 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-30	1600	3.00	174	8-19	1730	3.90	295

NOTE.--Doubtful or no gage-height record Oct. 17 to Dec. 27.

01647740 North Branch Rock Creek near Rockville, Md.

LOCATION.--Lat 39°06'09", long 77°07'12", Montgomery County, on left bank 170 ft (52 m) downstream from outlet of Bernard Frank Lake, 370 ft (113 m) upstream from mouth, and 2.4 miles (3.9 km) northeast of Rockville.

DRAINAGE AREA.--12.5 sq mi (32.4 sq km).

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 270 ft (82 m), from topographic map.

AVERAGE DISCHARGE.--7 years, 16.8 cfs (0.476 cu m/s), 18.25 in/yr (464 mm/yr).

EXTREMES.--Current year: Maximum discharge, 93 cfs (2.63 cu m/s) Mar. 31, gage height, 2.64 ft (0.805 m); maximum gage height, 3.23 ft (0.984 m) Mar. 30 (backwater from Rock Creek); minimum discharge, 2.2 cfs (.06 cu m/s) Aug. 17, gage height, 1.09 ft (0.332 m).
Period of record: Maximum discharge, 420 cfs (11.9 cu m/s) June 22, 1972, gage height, 6.10 ft (1.859 m), from rating curve extended above 100 cfs (2.83 cu m/s) on basis of flow-through-culvert and flow-over-road measurement at gage height 5.90 ft (1.798 m); maximum gage height, 9.62 ft (2.932 m) June 22, 1972 (backwater from Rock Creek); minimum discharge, 0.01 cfs (<0.001 cu m/s) July 28-29, 1971, gage height, 0.64 ft (0.195 m), when drain valve at Bernard Frank Lake was closed.

REMARKS.--Records good. Flow regulated by dam above station. Water-quality records for the current water year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WRD Md. and Del. 1970: 1967-68(M).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.1	7.0	5.1	17	13	9.8	81	8.2	7.3	6.2	2.9	3.3
2	7.1	7.0	5.1	15	13	9.8	70	8.5	23	5.4	2.9	3.3
3	12	7.0	5.1	14	13	9.8	59	9.3	32	5.1	3.1	7.9
4	9.4	6.5	5.1	23	13	9.8	52	9.8	22	4.8	2.9	17
5	7.8	5.4	10	21	12	9.4	51	9.5	16	4.3	3.1	11
6	7.0	5.9	15	17	12	9.8	47	8.1	12	4.3	3.1	7.3
7	6.8	5.9	11	15	12	9.8	38	7.8	8.5	4.3	3.1	28
8	6.2	6.2	8.8	13	11	9.8	30	7.8	7.9	4.3	2.9	22
9	5.9	6.8	31	14	12	9.4	44	7.8	7.3	4.0	3.8	13
10	5.7	6.5	32	25	11	9.4	42	8.5	7.0	3.5	5.4	8.5
11	5.7	6.5	21	38	11	9.4	32	8.5	5.9	3.3	4.5	6.8
12	5.4	6.3	14	40	11	9.4	23	16	5.6	3.3	4.3	5.7
13	5.1	6.2	9.9	29	12	9.1	21	40	5.6	3.1	4.0	5.1
14	5.1	7.0	9.4	20	19	8.9	24	31	5.6	2.9	3.3	4.5
15	5.1	7.3	9.0	16	18	8.5	21	20	5.1	2.9	2.8	4.0
16	5.1	6.5	8.1	15	14	8.5	16	16	6.2	2.7	2.3	3.8
17	4.8	5.8	8.1	14	13	8.5	14	12	6.5	2.7	2.2	3.5
18	4.8	5.7	8.1	13	13	8.5	12	10	5.9	2.7	2.5	3.3
19	4.8	5.5	7.8	12	12	8.5	12	8.5	5.7	2.7	11	3.3
20	4.8	5.1	10	12	12	8.5	12	8.1	5.4	2.7	35	3.1
21	4.3	5.1	77	30	12	16	11	7.8	5.4	2.9	20	3.1
22	4.3	5.1	82	47	12	27	11	7.0	6.2	2.7	11	2.9
23	4.3	5.1	66	33	13	19	11	7.0	14	2.7	7.3	2.9
24	4.3	4.8	52	24	11	14	11	7.0	13	2.5	5.7	2.9
25	4.3	4.8	37	23	10	12	9.8	7.0	9.8	2.7	4.3	2.7
26	4.3	4.8	39	22	9.9	10	9.4	7.0	7.6	2.9	3.5	2.7
27	4.5	4.8	60	20	9.9	8.9	9.4	6.8	7.6	3.1	3.3	2.5
28	4.5	4.8	48	19	9.4	8.5	8.5	6.8	7.0	3.3	2.9	13
29	5.4	5.4	34	17	------	8.5	8.2	6.2	7.3	3.1	3.8	27
30	7.0	5.1	23	15	------	42	8.2	6.8	7.0	3.3	3.8	16
31	7.0	------	17	14	------	90	------	6.8	------	3.3	3.8	------
TOTAL	177.9	175.9	768.6	647	344.2	440.5	798.5	331.6	285.4	107.7	174.5	240.1
MEAN	5.74	5.86	24.8	20.9	12.3	14.2	26.6	10.7	9.51	3.47	5.63	8.00
MAX	12	7.3	82	47	19	90	81	40	32	6.2	35	28
MIN	4.3	4.8	5.1	12	9.4	8.5	8.2	6.2	5.1	2.5	2.2	2.5
CFSM	.46	.47	1.98	1.67	.98	1.14	2.13	.86	.76	.28	.45	.64
IN.	.53	.52	2.29	1.93	1.02	1.31	2.38	.99	.85	.32	.52	.71

CAL YR 1973 TOTAL 7,070.3 MEAN 19.4 MAX 82 MIN 4.3 CFSM 1.55 IN 21.04
WTR YR 1974 TOTAL 4,491.9 MEAN 12.3 MAX 90 MIN 2.2 CFSM .98 IN 13.37

01648000 Rock Creek at Sherrill Drive, Washington, D. C.

LOCATION.--Lat 38°58'21", long 77°02'25", District of Columbia, on left bank 125 ft (38 m) downstream from new Sherrill Drive Bridge in Rock Creek Park in Washington, and 7.5 miles (12 km) upstream from mouth.

DRAINAGE AREA.--62.2 sq mi (161.1 sq km).

PERIOD OF RECORD.--October 1929 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 148.87 ft (45.376 m) above mean sea level, datum of 1929.

AVERAGE DISCHARGE.--45 years, 59.6 cfs (1,688 cu m/s), 13.01 in/yr (330 mm/yr).

EXTREMES.--Current year: Maximum discharge, 1,930 cfs (54.7 cu m/s) Mar. 30, gage height, 7.66 ft (2.335 m); minimum, 11 cfs (0.31 cu m/s) Aug. 4, 6, 7, gage height, 1.25 ft (0.381 m).
Period of record: Maximum discharge, 12,500 cfs (354 cu m/s) June 22, 1972, gage height, 16.2 ft (4.94 m), from floodmark, from rating curve extended above 4,400 cfs (125 cu m/s) on basis of contracted-opening measurements at gage heights 13.19 ft (4.020 m) and 16.2 ft (4.94 m); minimum, 0.5 cfs (0.014 cu m/s) Oct. 1-7, 1930, gage height, 1.04 ft (0.317 m).

REMARKS.--Records good. Flow affected by two upstream reservoirs which control flow from about 25 sq mi (65 sq km), Needwood Lake on Rock Creek since Sept. 1966 and Bernard Frank Lake on North Branch Rock Creek since February 1968.

REVISIONS (WATER YEARS).--WSP 1432: 1933(M).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	33	24	119	56	41	189	39	86	27	17	16
2	245	24	24	64	62	59	164	37	401	26	15	17
3	63	24	24	100	66	43	141	101	98	24	14	231
4	40	25	24	202	55	41	204	41	63	23	23	130
5	34	50	194	83	51	39	187	41	49	51	22	30
6	30	28	57	67	51	45	124	59	34	31	12	75
7	28	24	37	60	69	50	101	37	30	22	34	388
8	27	24	33	54	55	40	192	37	28	22	16	57
9	26	67	401	143	55	38	312	77	28	22	159	37
10	27	27	92	196	60	39	116	47	28	21	30	28
11	25	26	63	222	54	40	96	41	27	21	16	33
12	25	26	48	136	52	54	77	401	24	19	14	22
13	24	25	55	98	58	39	150	189	23	18	15	21
14	24	24	55	78	82	37	89	86	27	19	14	34
15	23	26	37	69	63	36	73	67	24	18	13	18
16	25	25	34	63	59	55	63	55	127	17	13	17
17	22	24	36	59	63	54	59	46	34	16	71	16
18	22	24	40	55	53	37	55	41	26	16	23	16
19	22	24	38	54	52	40	53	37	24	19	55	16
20	22	24	197	51	53	36	49	36	71	17	82	16
21	22	24	937	365	48	229	49	34	31	16	41	19
22	22	25	201	158	93	85	47	33	175	16	36	28
23	22	25	164	118	65	61	80	93	187	16	28	16
24	22	25	130	112	47	53	46	37	49	21	19	16
25	22	26	102	146	48	47	44	31	34	16	16	15
26	22	26	324	91	42	44	42	30	51	16	37	15
27	22	29	241	91	41	41	41	28	59	16	16	15
28	22	78	147	78	41	40	41	28	53	15	16	222
29	125	37	119	75	------	61	41	39	49	21	42	86
30	33	25	94	65	------	873	41	59	31	111	73	44
31	27	------	96	60	------	469	------	30	------	16	41	------
TOTAL	1,140	894	4,068	3,332	1,594	2,866	2,966	1,957	1,971	729	1,023	1,694
MEAN	36.8	29.8	131	107	56.9	92.5	98.9	63.1	65.7	23.5	33.0	56.5
MAX	245	78	937	365	93	873	312	401	401	111	159	388
MIN	22	24	24	51	41	36	41	28	23	15	12	15
CFSM	.59	.48	2.11	1.72	.91	1.49	1.59	1.01	1.06	.38	.53	.91
IN.	.68	.53	2.43	1.99	.95	1.71	1.77	1.17	1.18	.44	.61	1.01

CAL YR 1973 TOTAL 34,540 MEAN 94.6 MAX 937 MIN 22 CFSM 1.52 IN 20.66
WTR YR 1974 TOTAL 24,234 MEAN 66.4 MAX 937 MIN 12 CFSM 1.07 IN 14.49

PEAK DISCHARGE (BASE, 1,200 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-21	1145	6.32	1,410	5-12	2245	5.77	1,230
3-30	2345	7.66	1,930				

01649500 Northeast Branch Anacostia River at Riverdale, Md.

LOCATION.--Lat 38°57'37", long 76°55'34", Prince Georges County, on right bank 200 ft (61 m) downstream from bridge on Riverdale Road, 1.8 miles (2.9 km) downstream from Indian Creek, and 1.8 miles (2.9 km) upstream from confluence with Northwest Branch.
DRAINAGE AREA.--72.8 sq mi (188.6 sq km).
PERIOD OF RECORD.--August 1938 to current year.
GAGE.--Water-stage recorder and concrete control. Datum of gage is 12.68 ft (3.865 m) above mean sea level (Washington Suburban Sanitary Commission bench mark). Prior to June 12, 1942, nonrecording gage; June 12, 1942, to Mar. 22, 1966, and Apr. 12, 1967, to Sept. 3, 1969, water-stage recorder, all at bridge at datum 14.00 ft (4.267 m) above mean sea level. Mar. 23, 1966, to Apr. 11, 1967, nonrecording gage 600 ft (183 m) downstream from bridge at datum 9.25 ft (2.819 m) above mean sea level.
AVERAGE DISCHARGE.--36 years, 81.3 cfs (2.30 cu m/s), 15.16 in/yr (385 mm/yr).
EXTREMES.--Current year: Maximum discharge, 3,990 cfs (113 cu m/s) Mar. 30, gage height, 6.34 ft (1.932 m); minimum daily, 14 cfs (0.40 cu m/s) July 21, 22.
Period of record: Maximum discharge, 10,600 cfs (300 cu m/s) June 22, 1972, gage height, 9.52 ft (2.902 m), from rating curve extended above 3,800 cfs (108 cu m/s) on basis of the average of contracted-opening and slope-area measurements at gage heights 9.52 ft (2.902 m); maximum gage height, 12.93 ft (3.941 m) Oct. 16, 1942; minimum daily discharge, 1.4 cfs (0.040 cu m/s) Sept. 12, 1966.
Maximum stage known, about 15.5 ft (4.724 m), at datum 14.00 ft (4.267 m) above mean sea level, Aug. 23, or 24, 1933, from floodmarks, discharge, 10,500 cfs (297 cu m/s), from rating curve extended above 3,000 cfs (85.0 cu m/s) on basis of velocity-area study.
REMARKS.--Records good except those for period of fragmentary or no gage-height record, which are fair. Some regulation at low flow by sand and gravel plants above station. Water-quality records for the current water year are published in Part 2 of this report.
REVISIONS (WATER YEARS).--WRD Md. and Del. 1969: 1967(M).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	57	35	193	54	46	174	36	48	35	23	41
2	356	33	33	91	58	62	120	42	505	29	22	30
3	130	31	31	117	70	54	85	140	209	26	34	361
4	52	31	29	332	59	49	200	60	76	26	125	313
5	37	64	321	127	51	46	220	42	61	42	71	74
6	29	46	137	86	48	57	120	55	48	44	26	130
7	25	35	59	72	78	58	90	55	41	29	59	739
8	24	33	52	62	64	46	350	70	50	25	36	141
9	23	99	542	193	70	44	600	230	48	21	203	68
10	25	48	151	281	60	39	120	75	41	19	98	52
11	23	37	74	350	57	40	90	55	40	19	36	68
12	23	35	57	178	59	59	80	700	35	19	26	53
13	23	31	79	90	75	45	200	260	33	18	47	42
14	23	29	93	70	90	38	110	90	28	18	33	61
15	22	31	59	68	65	37	90	65	27	18	28	36
16	22	31	59	66	60	72	75	48	86	17	23	30
17	22	29	55	63	68	74	65	44	41	16	100	29
18	20	29	50	54	56	48	60	40	31	16	75	26
19	23	29	50	51	53	46	60	38	27	19	237	24
20	19	29	397	52	54	44	55	38	36	18	101	22
21	20	29	1,420	351	48	354	50	38	37	14	38	28
22	20	31	271	185	65	167	55	38	126	14	65	27
23	20	29	106	99	56	75	95	140	230	16	81	18
24	22	29	81	93	44	59	90	80	78	24	94	17
25	23	29	68	159	57	48	65	50	48	20	34	17
26	24	28	320	98	50	46	46	42	75	19	116	19
27	23	31	280	93	46	43	46	38	76	21	41	20
28	23	85	111	86	46	40	44	36	90	22	29	347
29	407	64	79	85	------	82	42	42	74	43	68	144
30	111	37	71	69	------	1,490	42	60	45	175	133	34
31	50	------	106	63	------	791	------	46	------	29	129	------
TOTAL	1,691	1,179	5,276	3,977	1,661	4,199	3,539	2,793	2,390	871	2,231	3,011
MEAN	54.5	39.3	170	128	59.3	135	118	90.1	79.7	28.1	72.0	100
MAX	407	99	1,420	351	90	1,490	600	700	505	175	237	739
MIN	19	28	29	51	44	37	42	36	27	14	22	17
CFSM	.75	.54	2.34	1.76	.81	1.85	1.62	1.24	1.09	.39	.99	1.37
IN.	.86	.60	2.70	2.03	.85	2.15	1.81	1.43	1.22	.45	1.14	1.54

CAL YR 1973 TOTAL 43,553 MEAN 119 MAX 1,420 MIN 19 CFSM 1.63 IN 22.26
WTR YR 1974 TOTAL 32,818 MEAN 89.9 MAX 1,490 MIN 14 CFSM 1.23 IN 16.77

PEAK DISCHARGE (BASE, 2,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-21	0830	5.02	2,380	5-12	*	ƒ5.00	ƒ 2,370
3-30	1700	6.34	3,990				

* Unknown.
ƒ About.
NOTE.--Fragmentary or no gage-height record Apr. 2 to May 31.

01650050 Northwest Branch Anacostia River at Norwood, Md.

LOCATION.--Lat 39°07'36", long 77°01'15", Montgomery County, on left bank 20 ft (6 m) downstream from bridge on Ednor Road, 0.2 mile (0.3 km) downstream from tributary, 0.4 mile (0.6 km) east of Norwood, 1.6 miles (2.6 km) south of Sandy Spring and 19 miles (31 km) upstream from confluence with Northeast Branch.

DRAINAGE AREA.--2.45 sq mi (6.35 sq km).

PERIOD OF RECORD.--December 1966 to September 1974 (discontinued).

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 360 ft (110 m), from topographic map.

AVERAGE DISCHARGE.--8 years, 2.95 cfs (0.0835 cu m/s), 16.35 in/yr (415 mm/yr).

EXTREMES.--Current year: Maximum discharge, 330 cfs (9.35 cu m/s) Mar. 30, gage height, 3.42 ft (1.042 m); minimum daily, 0.34 cfs (0.010 cu m/s) July 22, Aug. 6.
Period of record: Maximum discharge, 3,750 cfs (106 cu m/s) June 21, 1972, gage height, 6.25 ft (1.905m), from high-water mark in gage well, from rating curve extended above 280 cfs (7.93 cu m/s) on basis of culvert and flow-over-road measurements at gage heights 5.43 ft (1.655 m) and 6.25 ft (1.905 m); minimum daily, 0.05 cfs (0.001 cu m/s) July 19, 1969.

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

REVISIONS (WATER YEARS).--WRD Md. and Del. 1968: 1967(P).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.64	.90	.85	2.9	2.1	2.1	3.5	1.7	1.9	1.0	.37	.64
2	3.8	.85	.85	2.1	2.4	2.4	2.9	1.5	16	.88	.39	.62
3	1.7	.80	.95	2.6	2.4	1.9	2.6	2.6	2.9	.82	.45	6.2
4	1.1	.85	.90	6.1	2.1	1.9	8.9	1.9	1.9	.77	.50	2.5
5	.95	1.5	4.5	2.9	1.9	2.4	6.7	1.7	1.7	.83	.52	.77
6	.95	1.1	1.9	2.4	1.9	2.2	3.8	2.1	1.5	.93	.34	3.7
7	.91	.90	1.3	2.1	2.2	1.9	2.9	1.9	1.9	.82	.57	15
8	.91	.90	1.1	1.9	2.1	1.7	11	1.7	1.5	.71	.53	1.7
9	.77	1.7	18	4.1	2.0	1.7	13	2.1	1.3	.71	1.5	1.2
10	.77	1.1	2.4	7.5	2.0	1.7	3.8	2.1	1.3	.69	1.1	1.0
11	.77	1.0	1.7	12	2.1	1.7	3.2	1.7	1.1	.66	.58	.98
12	.77	.95	1.5	3.8	2.4	1.9	2.6	20	1.0	.53	.46	.87
13	.77	.95	1.7	2.5	3.2	1.9	5.1	4.5	1.0	.48	.49	.77
14	.77	.90	1.7	2.2	3.8	1.7	3.5	2.4	1.0	.47	.43	.84
15	.77	.90	1.3	2.1	2.4	1.7	2.9	2.1	.94	.45	.38	.77
16	.91	.85	1.5	2.1	2.4	1.9	2.6	1.9	3.5	.44	.37	.77
17	.77	.90	1.5	2.1	2.4	2.1	2.4	1.5	1.5	.44	.88	.65
18	.77	.90	1.5	1.9	2.1	1.7	2.4	1.5	1.1	.44	.77	.65
19	.77	.90	1.3	1.9	2.4	1.7	2.4	1.5	.96	.43	7.7	.64
20	.77	.90	23	2.1	2.1	1.7	2.1	1.5	.95	.40	1.3	.60
21	.75	.90	55	16	2.4	9.2	2.1	1.3	.98	1.4	.61	.85
22	.75	.90	3.5	3.8	2.6	3.2	2.1	1.3	1.8	.34	.52	.75
23	.75	.90	2.4	2.9	2.4	2.4	2.9	1.7	2.8	.36	.59	.60
24	.75	.85	2.1	2.9	2.4	2.1	2.1	1.5	1.5	.49	.52	.54
25	.75	.85	2.1	4.5	2.1	2.1	2.1	1.3	1.2	.50	.52	.54
26	.75	.85	22	2.9	2.1	1.9	2.1	1.3	1.3	.51	3.5	.54
27	.75	.85	5.2	3.5	1.9	1.9	1.9	1.3	1.3	.49	.82	.54
28	.75	1.0	2.6	2.9	1.9	1.9	1.9	1.3	1.8	.42	.59	2.8
29	2.9	.90	2.4	2.9	------	2.4	1.9	1.5	1.6	.42	1.7	.95
30	1.5	.85	2.1	2.4	------	76	1.7	1.5	1.2	1.1	.64	.72
31	.95	------	2.4	2.4	------	7.9	------	1.3	------	.39	.64	------
TOTAL	31.69	28.60	171.25	114.4	64.2	148.9	109.1	73.2	60.43	19.32	30.28	49.70
MEAN	1.02	.95	5.52	3.69	2.29	4.80	3.64	2.36	2.01	.62	.98	1.66
MAX	3.8	1.7	55	16	3.8	76	13	20	16	1.4	7.7	15
MIN	.64	.80	.85	1.9	1.9	1.7	1.7	1.3	.94	.34	.34	.54
CFSM	.42	.39	2.25	1.51	.93	1.96	1.49	.96	.82	.25	.40	.68
IN.	.48	.43	2.60	1.74	.97	2.26	1.66	1.11	.92	.29	.46	.75

CAL YR 1973 TOTAL 1,302.65 MEAN 3.57 MAX 78 MIN .64 CFSM 1.46 IN 19.78
WTR YR 1974 TOTAL 901.07 MEAN 2.47 MAX 76 MIN .34 CFSM 1.01 IN 13.68

PEAK DISCHARGE (BASE, 150 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-21	0445	2.13	168	3-30	1630	3.42	330

01650085 Nursery Run at Cloverly, Md.

LOCATION.--Lat 39°07'05", long 77°00'24", Montgomery County, on left bank 300 ft (90 m) upstream from culvert on Bryants Nursery Road, 350 ft (110 m) upstream from mouth, 0.8 mile (1.3 km) northwest of Cloverly, and 2.4 miles (3.9 km) southeast of Sandy Spring.

DRAINAGE AREA.--0.35 sq mi (0.91 sq km).

PERIOD OF RECORD.--November 1966 to September 1974 (discontinued).

AVERAGE DISCHARGE.--8 years, 0.47 cfs (0.0133 cu m/s), 18.24 in/yr (463 mm/yr).

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 400 ft (120 m), from topographic map.

EXTREMES.--Current year: Maximum discharge, 31 cfs (0.88 cu m/s) Mar. 30, gage height, 2.41 ft (0.735 m); minimum, 0.10 cfs (0.003 cu m/s) July 29, gage height, 1.56 ft (0.475 m).
Period of record: Maximum discharge, 695 cfs (19.7 cu m/s) June 21, 1972, gage height, 4.85 ft (1.478 m), from rating curve extended above 30 cfs (0.85 cu m/s) on the basis of flow-through-culvert computation at gage height 3.56 ft (1.085 m) and slope-area measurement at gage height 4.85 ft (1.478 m); minimum, 0.07 cfs (0.002 cu m/s) Aug. 30, 31, Oct. 2-5, 1968, Jan. 16, and July 16-18, 1969.

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

REVISIONS (WATER YEARS).--WRD Md. and Del. 1971: 1967(P), 1968(M), 1969(P).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.22	.28	.23	.46	.38	.33	.53	.31	.39	.20	.12	.14
2	.81	.26	.22	.39	.42	.38	.46	.30	1.3	.19	.12	.14
3	.33	.25	.22	.44	.41	.35	.42	.49	.41	.18	.12	.53
4	.27	.22	.22	.70	.38	.35	.66	.35	.33	.17	.14	.27
5	.23	.33	.82	.42	.35	.35	.61	.34	.29	.17	.14	.16
6	.22	.25	.34	.42	.36	.38	.46	.39	.29	.18	.11	.42
7	.22	.24	.27	.39	.45	.36	.42	.34	.26	.17	.16	.90
8	.22	.24	.26	.36	.39	.34	.97	.32	.27	.16	.19	.24
9	.22	.35	2.0	.55	.38	.32	1.2	.43	.26	.15	.42	.21
10	.22	.24	.44	.80	.38	.32	.54	.36	.25	.15	.19	.18
11	.22	.23	.34	1.2	.37	.32	.47	.32	.23	.15	.15	.19
12	.22	.22	.30	.55	.38	.37	.44	1.3	.23	.14	.14	.17
13	.22	.22	.35	.42	.44	.33	.68	.58	.23	.14	.14	.16
14	.21	.22	.34	.40	.44	.31	.51	.38	.22	.12	.12	.20
15	.20	.22	.29	.40	.39	.31	.44	.34	.21	.13	.11	.15
16	.25	.22	.30	.42	.38	.42	.45	.31	.37	.12	.11	.14
17	.22	.22	.32	.39	.41	.35	.42	.30	.29	.12	.19	.14
18	.22	.22	.29	.38	.37	.32	.42	.30	.23	.12	.16	.14
19	.20	.22	.29	.38	.38	.32	.42	.30	.20	.12	.69	.14
20	.21	.22	1.8	.37	.36	.32	.39	.29	.20	.12	.22	.14
21	.20	.22	3.9	1.1	.35	.89	.38	.27	.20	.11	.15	.15
22	.20	.22	.53	.48	.45	.41	.38	.26	.29	.11	.15	.15
23	.21	.22	.42	.42	.39	.38	.46	.36	.38	.11	.17	.13
24	.22	.22	.40	.46	.37	.36	.38	.30	.26	.14	.14	.13
25	.22	.22	.38	.55	.36	.35	.37	.26	.24	.14	.12	.14
26	.21	.22	1.6	.43	.34	.35	.35	.26	.23	.14	.16	.13
27	.20	.23	.66	.45	.33	.33	.35	.32	.23	.14	.15	.12
28	.20	.47	.44	.43	.35	.32	.35	.29	.37	.12	.19	.24
29	.75	.27	.43	.40	------	.42	.34	.34	.27	.12	.25	.18
30	.28	.24	.40	.40	------	5.6	.32	.35	.23	.26	.17	.14
31	.24	------	.43	.40	------	.82	------	.30	------	.12	.16	------
TOTAL	8.06	7.40	19.23	15.36	10.76	17.08	14.59	11.28	9.16	4.51	5.55	6.27
MEAN	.26	.25	.62	.50	.38	.55	.49	.36	.31	.15	.18	.21
MAX	.81	.47	3.9	1.2	.45	5.6	1.2	1.3	1.3	.26	.69	.90
MIN	.20	.22	.22	.36	.33	.31	.32	.26	.20	.11	.11	.12
CFSM	.74	.71	1.77	1.43	1.09	1.57	1.40	1.03	.89	.43	.51	.60
IN.	.86	.79	2.04	1.63	1.14	1.82	1.55	1.20	.97	.48	.59	.67

CAL YR 1973 TOTAL 196.50 MEAN .54 MAX 3.9 MIN .18 CFSM 1.54 IN 20.89
WTR YR 1974 TOTAL 129.25 MEAN .35 MAX 5.6 MIN .11 CFSM 1.00 IN 13.74

PEAK DISCHARGE (BASE, 30 CFS).--Mar. 30 (1600) 31 cfs (2.41 ft).

01650450 Bel Pre Creek at Layhill, Md.

LOCATION.--Lat 39°05'27", long 77°03'11", Montgomery County, on right bank 130 ft (40 m) upstream from bridge on Bel Pre Road, 0.5 mile (0.8 km) west of Layhill, 1.2 miles (1.9 km) upstream from Lutes Run, 1.8 miles (2.9 km) southeast of Norbeck, and 2.9 miles (4.7 km) upstream from mouth.
DRAINAGE AREA.--1.69 sq mi (4.38 sq km).
PERIOD OF RECORD.--November 1966 to current year.
GAGE.--Water-stage recorder and concrete control. Altitude of gage is 350 ft (107 m), from topographic map.
AVERAGE DISCHARGE.--8 years, 2.16 cfs (0.0612 cu m/s), 17.36 in/yr (441 mm/yr).
EXTREMES.--Current year: Maximum discharge, 244 cfs (6.91 cu m/s) March 30, gage height, 5.67 ft (1.728 m); minimum daily, 0.11 cfs (0.003 cu m/s) July 26, 28, Aug. 6.
Period of record: Maximum discharge, 1,930 cfs (54.7 cu m/s) June 21, 1972, gage height, 10.47 ft (3.191 m), from high-water mark in gage house, from rating curve extended above 210 cfs (5.95 cu m/s) on basis of culvert measurements at gage heights 8.49 ft (2.588 m) and 10.47 ft (3.191 m); minimum daily, 0.04 cfs (0.001 cu m/s) Aug. 25-26, Sept. 1, 1968.
REMARKS.--Records good, except for periods of doubtful or no gage-height record, which are fair. Diversions at low flow for irrigation of golf courses above station. Some regulation at low flow from unknown source. Water-quality records for the current water year are published in Part 2 of this report.
REVISIONS (WATER YEARS).--WRD Md. and Del. 1968: 1967. WRD Md. and Del. 1970: 1967(P), 1968(P), 1969(P). Revised figures of discharge per square mile and runoff in inches for water year 1968, superseding figures published in WRD Md. and Del., 1968, are given below:

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
TOTAL	24.74	18.56	114.32	69.95	18.36	87.97	21.35	59.00	72.44	23.68	10.43	16.69
MEAN	.80	.62	3.75	2.26	.63	2.84	.71	1.90	2.41	.76	.34	.56
MAX	11	8.4	27	45	4.3	24	4.2	32	14	11	2.5	9.2
MIN	.23	.28	.41	.30	.30	.40	.36	.28	.22	.07	.04	.04
CFSM	.47	.37	2.22	1.34	.37	1.68	.42	1.12	1.43	.45	.20	.33
IN.	.54	.41	2.56	1.54	.40	1.94	.47	1.30	1.59	.52	.23	.37

CAL YR 1967 TOTAL 614.45 MEAN 1.68 MAX 48 MIN .15 CFSM .99 IN 13.53
WTR YR 1968 TOTAL 539.49 MEAN 1.47 MAX 45 MIN .04 CFSM .87 IN 11.88

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.31	.38	.23	1.3	1.0	.63	2.1	.72	.81	.37	.37	.30
2	7.5	.29	.23	.72	1.2	.80	1.7	.81	9.7	.37	.45	.25
3	.41	.29	.23	2.0	.95	.63	1.4	1.3	1.2	.29	.37	13
4	.23	.37	.24	5.7	.90	.63	5.7	.63	.72	.30	.45	1.9
5	.23	.72	5.9	.90	.90	.56	5.7	.81	.54	.40	.45	.40
6	.23	.28	.75	.81	1.1	.79	2.0	.72	.54	.38	.11	8.3
7	.24	.31	.63	.72	1.0	.66	1.3	.72	.45	.37	.72	14
8	.23	.33	.86	.63	1.0	.62	10	.63	.45	.35	1.0	.81
9	.28	.87	19	4.6	1.0	.54	9.6	1.1	.45	.35	11	.45
10	.29	.26	1.0	9.3	1.0	.60	2.0	.72	.45	.30	1.2	.37
11	.24	.28	.74	9.6	.90	.64	1.3	.63	.37	.30	.45	.54
12	.23	.29	.63	1.5	1.0	.68	1.2	24	.63	.30	.40	.29
13	.23	.29	1.0	1.0	2.5	.54	3.0	3.0	.29	.30	.30	.29
14	.20	.29	.74	.90	1.7	.54	1.5	1.2	.63	.28	.25	.45
15	.26	.30	.64	.93	.81	.54	1.1	.90	.63	.25	.25	.29
16	.24	.28	.73	.96	.72	.89	.90	.72	2.8	.25	.45	.29
17	.14	.29	.72	.98	.72	.56	.90	.63	.72	.25	1.0	.23
18	.17	.29	.76	.90	.63	.54	.90	.54	.37	.23	.40	.23
19	.17	.27	.76	1.0	.72	.60	.90	.54	.26	.23	12	.23
20	.19	.29	21	1.0	.63	.54	.90	.54	.23	.20	1.4	.29
21	.17	.29	44	19	.63	8.9	.81	.54	.23	.20	.40	.54
22	.26	.24	2.0	1.8	1.7	1.1	.81	.54	4.8	.15	.30	.23
23	.20	.26	1.1	1.2	.69	.67	1.1	1.0	2.9	.15	.25	.23
24	.26	.31	.90	2.1	.63	.56	.72	.63	.90	.35	.20	.23
25	.32	.23	.81	3.0	.65	.55	.72	.54	.63	.12	.20	.23
26	.37	.27	18	1.3	.60	.55	.72	.45	.81	.11	.72	.23
27	.37	.32	3.0	1.5	.64	.55	.72	.54	.72	.17	.45	.23
28	.43	.85	1.2	1.3	.64	.54	.81	.63	1.0	.11	.40	7.7
29	3.5	.24	.72	1.1	------	1.3	.81	.72	.72	4.6	1.1	.54
30	.30	.23	.72	1.0	------	65	.72	.63	.54	1.7	.90	.29
31	.32	------	1.8	.95	------	5.7	------	.54	------	.63	.50	------
TOTAL	18.52	10.21	131.04	79.70	26.56	97.95	62.04	47.62	35.49	14.36	38.44	53.36
MEAN	.60	.34	4.23	2.57	.95	3.16	2.07	1.54	1.18	.46	1.24	1.78
MAX	7.5	.87	44	19	2.5	65	10	24	9.7	4.6	12	14
MIN	.14	.23	.23	.63	.60	.54	.72	.45	.23	.11	.11	.23
CFSM	.36	.20	2.50	1.52	.56	1.87	1.22	.91	.70	.27	.73	1.05
IN.	.41	.22	2.88	1.75	.58	2.16	1.37	1.05	.78	.32	.85	1.17

CAL YR 1973 TOTAL 904.03 MEAN 2.48 MAX 44 MIN .14 CFSM 1.47 IN 19.90
WTR YR 1974 TOTAL 615.29 MEAN 1.69 MAX 65 MIN .11 CFSM 1.00 IN 13.54

PEAK DISCHARGE (BASE, 140 CFS).--May 12 (1645) 198 cfs (5.28 ft).

NOTE.--Doubtful or no gage-height record July 4 to Sept. 2.

01650500 Northwest Branch Anacostia River near Colesville, Md.

LOCATION.--Lat 39°03'55", long 77°01'48", Montgomery County, on right bank 400 ft (120 m) upstream from bridge on State Highway 183, 1.5 miles (2.4 km) southwest of Colesville, 3 miles (4.8 km) upstream from Burnt Mills, 10 miles (16.1 km) upstream from Sligo Creek and 12.5 miles (20.1 km) upstream from confluence with Northeast Branch.
DRAINAGE AREA.--21.1 sq mi (54.6 sq km).
PERIOD OF RECORD.--October 1923 to current year. Monthly discharge only for some periods, published in WSP 1302.
GAGE.--Water-stage recorder and concrete control. Datum of gage is 264.85 ft (80.726 m) above mean sea level, adjustment of 1912. Prior to Apr. 22, 1932, nonrecording gages in same general vicinity at different datums. Apr. 22, 1932, to Apr. 11, 1934, nonrecording gages at present site and datum.
AVERAGE DISCHARGE (UNADJUSTED).--51 years, 22.1 cfs (0.626 cu m/s), 14.24 in/yr (362 mm/yr).
EXTREMES.--Current year: Maximum discharge, 1,230 cfs (34.8 cu m/s) Mar. 30, gage height, 8.21 ft (2.502 m); minimum, 2.4 cfs (0.068 cu m/s) July 22, gage height, 1.56 ft (0.475 m).
Period of record: Maximum discharge, 11,000 cfs (312 cu m/s) June 22, 1972, gage height, 15.89 ft (4.843 m), from high-water mark in gage house, from rating curve extended above 1,200 cfs (34.0 cu m/s) on basis of contracted-opening and flow-over-road measurement at gage height 10.99 ft (3.350 m) and computation of flow over Burnt Mills Dam, 3 miles (4.8 km) downstream, adjusted for flow from intervening area, at gage height 15.89 ft (4.843 m); no flow several days during August and September 1966.
REMARKS.--Records good. Inflow pumped from Patuxent River to augment water supply for Washington Suburban Sanitary District August 1939 to August 1960. Diversions at low flow since 1962 for irrigation of golf courses above station. Water-quality records for the current water year are published in Part 2 of this report.
REVISIONS (WATER YEARS).--WSP 1432: 1924(M), 1925-26, 1929-30(M), 1933(M), 1939(P), 1940(M), 1943-46, 1948-49(P). WSP 1903: Drainage area.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.0	8.8	7.9	31	17	15	32	13	15	8.7	3.8	5.1
2	53	7.5	7.6	19	18	17	26	13	99	7.9	3.8	5.1
3	16	7.4	7.7	29	20	16	23	22	26	7.2	3.8	54
4	12	7.3	7.7	69	17	16	59	14	15	6.5	3.8	32
5	8.8	12	52	24	16	15	59	14	13	7.6	4.4	7.6
6	8.0	8.8	18	21	16	16	31	16	12	7.6	3.2	22
7	7.6	7.7	11	19	20	17	23	13	11	6.5	6.0	116
8	7.6	7.6	9.9	17	18	15	64	12	11	6.2	5.6	15
9	7.6	14	142	44	18	14	117	18	11	5.8	42	10
10	7.6	8.5	22	82	18	14	33	15	9.8	5.4	13	8.8
11	7.6	8.0	15	101	17	14	25	13	9.2	5.1	5.8	8.9
12	7.2	8.0	12	38	17	16	23	126	8.6	4.4	4.8	7.9
13	7.2	8.0	14	22	25	14	47	44	8.2	4.1	5.1	6.5
14	7.2	8.0	15	20	32	13	30	20	8.2	4.1	4.4	8.2
15	6.8	8.0	12	18	19	13	24	16	8.2	4.4	3.8	6.2
16	7.6	7.9	12	19	18	17	21	14	30	3.5	4.4	5.8
17	6.8	7.7	13	19	19	17	19	13	12	3.2	8.5	5.4
18	6.5	7.9	12	17	17	14	19	12	9.0	3.2	7.2	5.4
19	6.5	8.0	12	17	17	14	18	12	8.3	3.8	51	5.4
20	6.5	8.0	97	17	17	13	17	11	8.0	4.1	18	5.4
21	6.5	8.0	386	108	15	71	17	11	7.8	4.1	6.5	7.2
22	6.5	8.4	37	36	24	27	17	10	22	3.2	5.8	6.2
23	6.7	8.0	24	24	18	19	21	15	29	3.0	6.2	4.8
24	6.8	8.0	21	24	16	17	16	12	13	3.8	5.1	4.4
25	6.8	8.0	19	42	16	15	16	10	9.9	4.0	4.4	4.8
26	6.5	7.6	128	25	14	15	15	9.8	11	3.8	11	4.8
27	6.6	8.0	59	28	15	14	14	10	11	3.8	6.2	4.4
28	6.5	17	25	24	15	14	14	11	15	3.5	5.0	33
29	35	11	20	23	------	18	14	13	14	8.3	14	10
30	12	8.0	19	20	------	488	13	14	9.9	21	11	5.4
31	8.7	------	23	19	------	90	------	11	------	4.4	6.5	------
TOTAL	314.7	261.1	1,260.8	1,016	509	1,088	867	557.8	475.1	172.2	284.1	425.7
MEAN	10.2	8.70	40.7	32.8	18.2	35.1	28.9	18.0	15.8	5.55	9.16	14.2
MAX	53	17	386	108	32	488	117	126	99	21	51	116
MIN	6.5	7.3	7.6	17	14	13	13	9.8	7.8	3.0	3.2	4.4
CFSM	.48	.41	1.93	1.55	.86	1.66	1.37	.85	.75	.26	.43	.67
IN.	.55	.46	2.22	1.79	.90	1.92	1.53	.98	.84	.30	.50	.75

CAL YR 1973 TOTAL 10,693.8 MEAN 29.3 MAX 386 MIN 5.3 CFSM 1.39 IN 18.85
WTR YR 1974 TOTAL 7,231.5 MEAN 19.8 MAX 488 MIN 3.0 CFSM .94 IN 12.75

PEAK DISCHARGE (BASE, 600 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-21	0830	6.75	810	3-30	1830	8.21	1,230

01651000 Northwest Branch Anacostia River near Hyattsville, Md.

LOCATION.--Lat 38°57'09", long 76°58'00", Prince Georges County, on right bank at downstream side of bridge on Queens Chapel Road (State Highway 500), 0.8 mile (1.3 km) downstream from Sligo Branch, 1 mile (1.6 km) west of Hyattsville, and 1.6 miles (2.6 km) upstream from mouth.

DRAINAGE AREA.--49.4 sq mi (127.9 sq km).

PERIOD OF RECORD.--July 1938 to current year. Monthly discharge only for July 1938 published in WSP 1302.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 17.30 ft (5.273 m) above mean sea level, adjustment of 1912. Prior to Oct. 22, 1938, nonrecording gage; Oct. 22, 1938, to Sept. 17, 1951, water-stage recorder; Sept. 17, 1951, to Aug. 29, 1952, nonrecording gage and crest-stage gage.

AVERAGE DISCHARGE.--36 years, 43.2 cfs (1.223 cu m/s), 11.88 in/yr (302 mm/yr) unadjusted.

EXTREMES.--Current year: Maximum discharge, 2,640 cfs (74.8 cu m/s) Mar. 30, gage height, 6.22 ft (1.896 m); minimum, 4.7 cfs (0.13 cu m/s) July 23, gage height, 2.25 ft (0.686 m).
Period of record: Maximum discharge, 18,000 cfs (510 cu m/s) June 22, 1972, gage height, 14.47 ft (4.410 m), from rating curve extended above 4,000 cfs (113 cu m/s) on the basis of the average of slope-area and step-back-water measurements at gage height 14.47 ft (4.410 m); minimum, 0.2 cfs (0.006 cu m/s) Sept. 11, 1966.

REMARKS.--Records good. Prior to June 1961 low flow regulated by storage at Burnt Mills Dam, 7 miles (11.2 km) above station. Inflow pumped from Patuxent River to augment water supply for Washington Suburban Sanitary District, August 1939 to August 1960. Small diversion since 1962 for irrigation of golf courses above station. Water-quality records for the current water year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 971: 1942(M).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	24	17	89	26	26	73	25	78	17	8.2	12
2	341	14	17	32	34	41	57	26	401	15	10	10
3	53	14	18	62	34	29	48	96	64	14	16	213
4	21	13	19	168	27	26	115	29	33	13	70	95
5	17	38	196	44	24	25	129	30	27	29	19	18
6	15	21	48	34	22	34	67	41	24	22	8.5	81
7	14	20	22	30	44	35	49	26	23	15	32	368
8	14	15	20	27	24	28	211	25	24	13	15	32
9	14	62	380	115	30	26	347	69	22	12	135	21
10	14	18	52	158	31	27	67	33	21	12	47	17
11	14	16	27	186	29	27	50	26	23	10	14	23
12	13	15	22	74	29	42	43	346	17	8.7	11	14
13	13	16	42	38	34	27	125	136	17	8.1	11	13
14	14	16	36	31	51	25	61	41	19	7.7	10	24
15	12	16	20	31	31	25	46	32	16	8.4	8.7	13
16	13	15	25	30	34	55	38	29	89	7.4	7.7	12
17	15	15	20	29	37	35	36	27	28	6.5	42	12
18	12	15	20	26	29	24	35	25	19	6.1	18	11
19	12	16	20	27	30	26	34	25	16	11	73	11
20	12	18	218	26	33	24	32	25	36	9.6	80	10
21	12	18	778	217	29	199	31	23	21	7.5	15	13
22	12	18	79	68	57	60	31	23	132	6.3	29	17
23	12	17	42	39	37	38	66	76	143	6.7	31	9.6
24	12	18	35	48	28	30	31	33	31	11	11	8.5
25	12	18	29	96	36	26	29	23	21	7.5	9.0	8.9
26	12	18	213	44	27	25	30	21	33	7.7	17	9.1
27	11	20	148	47	26	26	29	21	27	7.3	15	9.0
28	11	67	44	44	27	25	29	22	46	6.2	10	113
29	125	35	32	38	------	64	28	43	34	24	32	31
30	31	18	32	30	------	954	27	83	22	107	96	12
31	17	------	59	29	------	371	------	25	------	12	30	------
TOTAL	913	644	2,730	1,957	900	2,425	1,994	1,505	1,507	448.7	931.1	1,241.1
MEAN	29.5	21.5	88.1	63.1	32.1	78.2	66.5	48.5	50.2	14.5	30.0	41.4
MAX	341	67	778	217	57	954	347	346	401	107	135	368
MIN	11	13	17	26	22	24	27	21	16	6.1	7.7	8.5
CFSM	.60	.44	1.78	1.28	.65	1.58	1.35	.98	1.02	.29	.61	.84
IN.	.69	.48	2.06	1.47	.68	1.83	1.50	1.13	1.13	.34	.70	.93

CAL YR 1973 TOTAL 25,055.6 MEAN 68.6 MAX 778 MIN 9.6 CFSM 1.39 IN 18.87
WTR YR 1974 TOTAL 17,195.9 MEAN 47.1 MAX 954 MIN 6.1 CFSM .95 IN 12.95

PEAK DISCHARGE (BASE, 1,700 CFS).--Mar. 30 (1645) 2,640 cfs (6.22 ft).

01653500 Henson Creek at Oxon Hill, Md.

LOCATION.--Lat 38°47'16", long 76°58'42", Prince Georges County, on left bank 100 ft (30 m) downstream from bridge on Tucker Road, 1.0 mile (1.6 km) south of Oxon Hill, and 1.4 miles (2.3 km) upstream from Carey Branch and mouth.

DRAINAGE AREA.--16.7 sq mi (43.3 sq km).

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 62 ft (18.9 m), from topographic map.

AVERAGE DISCHARGE.--26 years, 19.3 cfs (0.547 cu m/s), 15.69 in/yr (399 mm/yr).

EXTREMES.--Current year: Maximum discharge, 1,140 cfs (32.3 cu m/s) Mar. 30, gage height, 5.03 ft (1.533 m); minimum, 0.80 cfs (0.023 cu m/s) July 18, 22, 23, gage height, 0.42 ft (0.128 m).
Period of record: Maximum discharge, 3,440 cfs (97.4 cu m/s) Aug. 4, 1971, gage height, 7.63 ft (2.326 m), from rating curve extended above 520 cfs (14.7 cu m/s) on basis of slope-area measurement at gage heights 6.63 ft (2.021 m) and 7.27 ft (2.216 m); no flow at times during some summer months in 1954, 1955, 1957, 1962-64, and 1966.

REMARKS.--Records good. Some diversion above station for irrigation of truck farm. Some regulation at low flow by sand and gravel plant above station.

REVISIONS (WATER YEARS).--WSP 1232: 1949(M), 1950.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.1	9.4	6.6	58	13	10	35	7.9	19	8.9	1.7	7.0
2	142	5.6	5.7	18	14	16	30	8.2	175	7.2	1.4	4.8
3	23	5.8	5.0	25	18	11	26	26	27	4.7	2.7	135
4	8.7	5.6	5.1	76	15	9.7	27	11	14	4.6	47	68
5	7.0	16	87	23	12	9.8	53	10	10	3.3	20	10
6	6.2	6.2	28	18	12	17	28	16	7.6	4.0	3.8	41
7	5.8	4.9	9.8	15	28	16	22	10	7.1	3.8	13	153
8	5.0	5.1	9.3	13	16	12	90	8.5	9.3	3.0	13	17
9	4.9	27	157	46	17	10	163	31	7.1	2.6	14	11
10	4.6	6.6	21	61	16	9.6	30	14	5.6	2.8	7.8	8.6
11	4.3	4.9	12	78	14	9.2	24	10	5.2	2.6	3.8	21
12	3.9	4.3	9.9	31	14	16	21	127	4.8	2.0	2.6	9.0
13	3.5	3.9	19	19	17	9.6	32	32	5.0	1.6	2.2	7.8
14	3.2	4.3	19	16	16	8.9	23	15	4.4	1.9	2.5	6.4
15	1.9	4.3	10	16	13	8.9	18	11	5.2	1.7	1.8	5.3
16	1.9	3.9	13	16	15	40	16	9.4	23	1.3	1.6	4.4
17	1.7	4.3	15	14	18	20	15	8.3	7.5	1.3	4.2	4.2
18	1.7	4.6	17	13	13	11	14	8.3	5.1	1.3	3.1	4.4
19	2.1	4.3	13	14	13	10	14	8.1	4.4	1.7	14	4.0
20	2.6	3.5	91	12	12	9.9	14	7.0	4.7	1.5	7.7	3.9
21	2.6	4.3	278	59	12	104	13	6.5	8.4	1.3	2.7	4.8
22	2.6	4.9	35	25	18	25	12	6.3	16	1.3	14	4.8
23	2.6	3.9	22	17	12	17	26	27	32	1.5	8.8	2.9
24	2.6	4.9	18	24	11	14	13	27	9.8	3.4	3.3	2.7
25	2.9	4.6	16	60	11	11	12	10	6.0	2.0	2.3	3.0
26	3.2	3.2	51	25	11	11	11	7.1	24	2.3	14	3.2
27	3.9	3.9	37	23	9.8	11	11	7.4	19	2.4	6.9	3.1
28	4.3	64	18	19	10	11	11	6.0	23	1.9	3.5	58
29	49	16	16	19	------	26	9.2	7.6	14	2.7	6.8	13
30	11	7.2	16	15	------	435	9.0	16	7.6	19	100	5.4
31	6.3	------	43	14	------	77	------	8.1	------	2.5	35	------
TOTAL	328.1	251.4	1,103.4	882	400.8	1,006.6	822.2	507.7	510.8	102.1	365.2	626.7
MEAN	10.6	8.38	35.6	28.5	14.3	32.5	27.4	16.4	17.0	3.29	11.8	20.9
MAX	142	64	278	78	28	435	163	127	175	19	100	153
MIN	1.7	3.2	5.0	12	9.8	8.9	9.0	6.0	4.4	1.3	1.4	2.7
CFSM	.63	.50	2.13	1.71	.86	1.95	1.64	.98	1.02	.20	.71	1.25
IN.	.73	.56	2.46	1.96	.89	2.24	1.83	1.13	1.14	.23	.81	1.40

CAL YR 1973 TOTAL 7,667.0 MEAN 21.0 MAX 278 MIN 1.7 CFSM 1.26 IN 17.08
WTR YR 1974 TOTAL 6,907.0 MEAN 18.9 MAX 435 MIN 1.3 CFSM 1.13 IN 15.39

PEAK DISCHARGE (BASE, 450 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-02	1915	3.16	454	5-12	1900	3.52	557
12-21	0730	3.34	503	6-02	1315	3.31	497
3-30	1800	5.03	1,140	8-30	2015	3.55	566
4-09	0200	3.40	523	9-03	2100	3.64	593

01653600 Piscataway Creek at Piscataway, Md.

LOCATION.--Lat 38°42'20", long 76°58'00", Prince Georges County, on left bank 70 ft (21 m) upstream from bridge on State Highway 223, at Piscataway, 0.4 mile (0.6 km) upstream from Tinker Creek, and 4.8 miles (7.7 km) upstream from mouth.

DRAINAGE AREA.--39.5 sq mi (102.3 sq km).

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 10 ft (3 m), from topographic map.

AVERAGE DISCHARGE.--9 years (1966-74), 46.7 cfs (1.323 cu m/s), 16.06 in/yr (408 mm/yr).

EXTREMES.--Current year: Maximum discharge, 915 cfs (25.9 cu m/s) Mar. 30, gage height, 7.45 ft (2.271 m), from rating curve extended as explained below; minimum, 0.06 cfs (0.002 cu m/s) July 23, gage height, 1.71 ft (0.521 m).
Period of record: Maximum discharge, 4,900 cfs (139 cu m/s) June 22, 1972, gage height, 9.80 ft (2.987 m), from rating curve extended above 600 cfs (17.0 cu m/s) on basis of contracted-opening and flow-over-road measurement of peak flow at bridge 0.5 mile (0.8 km) downstream, adjusted for flow from intervening area; no flow at times in 1966 and 1970.
CORRECTIONS.--The minimum gage height for water year 1973 is 2.17 ft (0.661 m) Aug. 11, 12, 13, 1973, discharge, 1.2 cfs (0.034 cu m/s); the previously published gage height was in error.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.8	17	9.1	151	46	30	144	27	47	12	1.1	8.3
2	246	12	9.4	67	45	36	102	25	191	23	.86	4.8
3	428	10	9.9	68	49	35	87	49	186	9.5	1.4	23
4	43	9.5	9.9	116	53	32	84	34	71	7.3	2.8	121
5	18	21	60	74	42	30	157	29	48	5.7	10	19
6	13	20	172	62	41	30	134	41	34	5.5	2.4	21
7	12	12	47	56	63	40	74	33	30	5.7	6.4	211
8	12	11	29	48	50	40	95	29	37	4.8	4.9	42
9	11	53	262	109	48	32	406	65	31	3.7	7.6	23
10	12	28	132	169	46	33	106	62	20	3.2	4.7	16
11	13	17	58	194	44	30	73	37	16	2.8	3.1	28
12	12	15	40	111	43	40	65	98	13	2.0	2.1	19
13	11	13	36	73	50	33	69	228	12	1.6	2.1	12
14	11	12	61	63	47	30	61	94	11	1.5	2.2	9.4
15	10	12	31	62	40	28	54	50	10	1.4	1.0	7.6
16	9.3	12	30	59	39	60	48	40	29	1.1	.79	7.1
17	7.9	10	41	54	46	93	46	32	24	.76	3.6	6.1
18	8.5	10	38	49	39	47	44	27	11	.55	5.9	5.7
19	8.2	12	28	50	38	41	42	28	9.1	.59	3.5	5.1
20	7.6	11	47	47	37	40	39	26	8.0	.82	3.2	4.7
21	7.3	11	576	96	32	159	37	21	10	.50	1.6	4.6
22	5.8	11	345	80	44	167	36	18	38	.28	5.0	4.7
23	4.9	11	95	58	42	76	55	57	48	.17	11	3.8
24	5.5	11	76	58	34	65	40	40	25	.67	3.0	3.0
25	5.5	12	65	105	35	56	35	23	14	1.6	1.5	3.1
26	5.2	11	72	75	31	51	33	17	12	1.8	55	3.4
27	4.9	11	103	71	30	45	31	17	33	2.4	56	2.9
28	5.2	13	58	60	31	42	29	16	25	1.5	8.6	21
29	47	26	49	61	------	46	29	15	35	.99	8.0	27
30	89	12	47	52	------	402	28	49	17	12	6.3	7.4
31	18	------	51	49	------	668	------	23	------	2.7	48	------
TOTAL	1,096.6	446.5	2,687.3	2,447	1,185	2,557	2,283	1,350	1,095.1	118.13	273.65	674.7
MEAN	35.4	14.9	86.7	78.9	42.3	82.5	76.1	43.5	36.5	3.81	8.83	22.5
MAX	428	53	576	194	63	668	406	228	191	23	56	211
MIN	4.8	9.5	9.1	47	30	28	28	15	8.0	.17	.79	2.9
CFSM	.90	.38	2.19	2.00	1.07	2.09	1.93	1.10	.92	.10	.22	.57
IN.	1.03	.42	2.53	2.30	1.12	2.41	2.15	1.27	1.03	.11	.26	.64

CAL YR 1973 TOTAL 19,567.10 MEAN 53.6 MAX 667 MIN 1.2 CFSM 1.36 IN 18.43
WTR YR 1974 TOTAL 16,213.98 MEAN 44.4 MAX 668 MIN .17 CFSM 1.12 IN 15.27

PEAK DISCHARGE (BASE, 450 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-02	2330	7.05	745	3-30	2330	7.45	915
12-21	1630	7.07	752	4-09	0930	6.21	483

01661050 St. Clement Creek near Clements, Md.

LOCATION.--Lat 38°28'00", long 76°43'31", St. Marys County, on left bank 60 ft (18 m) downstream from bridge on State Highway 242, 0.5 mile (0.8 km) north of Clements, 2.3 miles (3.7 km) upstream from mouth, and 5.7 miles (9.2 km) northwest of Leonardtown.

DRAINAGE AREA.--18.5 sq mi (47.9 sq km).

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 8 ft (2.4 m), from topographic map. Prior to Jan. 3, 1969, water-stage recorder 140 ft downstream at different datum.

AVERAGE DISCHARGE.--6 years, 20.0 cfs (0.566 cu m/s), 14.68 in/yr (373 mm/yr).

EXTREMES.--Current year: Maximum discharge, 447 cfs (12.7 cu m/s) Mar. 30, gage height, 4.36 ft (1.329 m); minimum, 1.1 cfs (0.031 cu m/s) July 23, 24, gage height, 0.88 ft (0.268 m).
Period of record: Maximum discharge, 4,350 cfs (123 cu m/s) June 22, 1972, gage height, 6.55 ft (1.996 m), from rating curve extended above 420 cfs (11.9 cu m/s) on basis of contracted-opening and flow-over-road measurement of peak flow; minimum, 0.07 cfs (0.002 cu m/s) Sept. 7, 8, 1970, gage height, 0.69 ft (0.210 m).

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WRD Md. and Del. 1971: 1969(M).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	7.0	5.6	91	13	10	45	10	13	6.1	2.0	1.3
2	65	5.9	5.6	28	13	10	35	9.3	58	5.6	7.4	1.5
3	60	5.1	5.6	24	14	11	30	44	63	4.5	12	3.3
4	8.4	4.8	5.7	38	16	11	27	22	17	3.8	7.3	39
5	5.5	12	6.6	25	12	10	30	12	11	3.2	6.8	7.7
6	4.0	13	12	19	12	9.5	29	16	8.5	19	3.8	17
7	3.7	7.4	7.4	18	32	9.9	21	13	7.8	44	52	86
8	3.7	6.5	6.8	15	17	12	25	9.9	10	6.7	17	19
9	3.7	15	62	32	15	10	141	18	9.8	4.5	8.7	7.9
10	3.7	10	31	27	14	10	46	22	7.6	17	10	5.9
11	3.9	6.8	13	23	15	9.5	29	13	5.9	44	6.1	6.7
12	3.9	6.5	11	24	15	24	26	26	5.7	6.8	4.1	6.3
13	3.9	6.5	15	16	18	14	25	49	7.9	4.2	3.5	4.5
14	3.4	6.5	27	14	16	11	25	16	5.7	3.5	3.4	3.6
15	3.1	6.5	13	15	13	9.2	23	12	5.5	2.9	2.8	3.1
16	2.9	6.5	14	16	12	40	19	10	4.7	4.0	2.4	2.9
17	2.7	5.9	18	15	17	66	18	8.9	4.5	3.2	2.7	2.7
18	2.6	5.6	15	13	12	22	18	8.1	4.2	2.4	4.3	2.6
19	2.6	6.2	11	13	12	18	18	8.0	3.7	2.1	3.2	2.5
20	2.7	6.8	28	13	12	27	16	8.4	3.6	2.0	3.7	2.2
21	2.8	6.5	287	30	10	61	16	7.8	3.4	1.5	2.4	1.9
22	2.8	6.5	105	31	16	43	16	7.2	3.5	1.3	2.1	1.8
23	3.0	6.5	29	19	16	22	20	7.6	45	1.1	2.0	1.5
24	3.2	6.8	22	16	12	19	17	9.2	17	1.2	2.0	1.4
25	3.2	6.6	20	20	11	15	16	16	8.0	1.6	1.8	1.3
26	3.2	6.5	20	19	9.6	15	14	8.5	6.8	2.9	1.8	1.6
27	3.2	6.6	19	22	9.2	14	14	13	11	5.6	1.7	1.7
28	3.2	6.8	16	18	10	14	13	11	13	3.1	1.6	15
29	9.3	6.7	14	16	------	23	13	7.6	15	2.3	1.4	50
30	9.9	5.8	14	15	------	236	11	20	8.1	5.1	2.4	18
31	6.6	------	23	14	------	197	------	15	------	3.5	1.8	------
TOTAL	241.5	215.8	882.3	699	393.8	1,003.1	796	458.5	387.9	218.7	184.2	319.9
MEAN	7.79	7.19	28.5	22.5	14.1	32.4	26.5	14.8	12.9	7.05	5.94	10.7
MAX	65	15	287	91	32	236	141	49	63	44	52	86
MIN	1.7	4.8	5.6	13	9.2	9.2	11	7.2	3.4	1.1	1.4	1.3
CFSM	.42	.39	1.54	1.22	.76	1.75	1.43	.80	.70	.38	.32	.58
IN.	.49	.43	1.77	1.41	.79	2.02	1.60	.92	.78	.44	.37	.64

CAL YR 1973 TOTAL 7,860.1 MEAN 21.5 MAX 524 MIN 1.2 CFSM 1.16 IN 15.81
WTR YR 1974 TOTAL 5,800.7 MEAN 15.9 MAX 287 MIN 1.1 CFSM .86 IN 11.66

PEAK DISCHARGE (BASE, 150 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-02	2100	3.30	205	4-09	0800	3.30	205
12-21	1430	4.19	394	7-07	0030	3.08	108
3-30	2200	4.36	447				

01661500 St. Marys River at Great Mills, Md.

LOCATION.--Lat 38°14'36", long 76°30'13", St. Marys County, on left bank at downstream side of bridge on State Highway 471 in Great Mills, 0.3 mile (0.5 km) downstream from Western Branch, and 12.0 miles (19.3 km) upstream from mouth.

DRAINAGE AREA.--24.0 sq mi (62.2 sq km).

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 10 ft (3 m), from topographic map.

AVERAGE DISCHARGE.--28 years, 22.8 cfs (0.646 cu m/s), 12.90 in/yr (328 mm/yr).

EXTREMES.--Current year: Maximum discharge, 559 cfs (15.8 cu m/s) Mar. 31, gage height, 5.98 ft (1.823 m); minimum, 1.9 cfs (0.054 cu m/s) July 21-24, gage height, 1.29 ft (0.393 m).
Period of record: Maximum discharge, 7,950 cfs (225 cu m/s) Aug. 20, 1969, gage height, 13.34 ft (4.066 m), from rating curve extended above 1,500 cfs (42.5 cu m/s) on basis of contracted-opening measurement at gage height 12.08 ft (3.682 m); minimum, 0.2 cfs (0.006 cu m/s) Sept. 7, 1966, gage height, 1.13 ft (0.344 m).

REMARKS.--Records good.

REVISIONS (WATER YEARS).--WSP 1702: 1946, 1948-49, 1955, 1957-58.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.1	7.0	5.5	109	14	10	89	8.1	10	5.4	2.6	2.7
2	48	5.7	5.3	44	14	10	51	7.4	37	4.4	2.8	2.7
3	34	5.2	5.4	29	14	10	33	65	52	3.7	5.2	3.1
4	10	4.8	5.5	69	15	10	32	34	17	3.3	6.8	15
5	6.2	11	6.2	47	13	10	32	17	11	2.8	6.1	8.3
6	4.6	11	8.1	26	12	9.5	30	18	8.3	3.6	4.2	14
7	4.0	7.6	7.2	20	23	9.7	22	15	9.0	3.2	231	69
8	4.2	6.3	6.5	17	19	9.9	21	12	11	2.9	48	20
9	4.3	12	61	38	17	9.1	63	17	9.8	2.6	16	9.4
10	4.3	10	24	38	15	9.3	45	21	7.7	3.5	17	6.1
11	4.3	7.6	12	26	15	8.8	27	14	6.0	12	10	7.5
12	4.1	6.6	9.5	21	14	22	22	24	4.9	5.2	6.9	7.1
13	4.1	6.3	10	16	16	15	21	62	4.6	3.4	5.6	5.2
14	4.0	6.1	18	14	15	11	20	24	5.1	2.8	5.2	4.4
15	3.6	6.1	12	14	13	9.9	19	16	4.8	2.5	5.1	3.8
16	3.5	6.0	16	14	13	36	16	12	5.3	11	4.3	3.5
17	3.4	5.6	21	13	21	100	15	9.6	5.9	6.1	4.3	3.5
18	3.4	5.4	16	12	16	39	14	8.4	4.7	3.6	4.7	3.5
19	3.6	6.5	10	12	15	24	14	7.7	4.1	2.9	4.0	3.3
20	3.9	6.4	21	11	14	21	13	7.7	3.7	2.5	4.1	3.1
21	4.0	6.1	210	31	12	92	13	7.2	3.3	2.1	3.7	3.1
22	3.9	6.2	77	38	15	100	13	6.6	3.6	2.0	3.6	2.8
23	4.0	6.0	28	23	15	42	18	6.8	5.8	1.9	3.8	2.7
24	4.2	6.0	19	18	12	27	15	7.3	9.1	2.1	3.9	2.5
25	4.2	6.1	16	21	12	20	13	6.6	7.1	2.3	3.5	2.7
26	4.3	6.1	16	23	11	17	12	5.6	5.3	2.9	3.4	2.8
27	4.1	6.4	16	32	10	16	11	10	4.9	4.5	3.3	2.7
28	3.9	6.5	14	24	11	15	11	9.7	7.0	3.6	3.1	14
29	9.8	6.4	12	26	------	22	12	7.3	11	2.9	2.8	44
30	9.8	5.7	12	20	------	342	8.9	19	7.4	4.1	2.5	11
31	7.7	------	19	17	------	278	------	14	------	3.3	2.4	------
TOTAL	221.5	204.7	719.2	863	406	1,355.2	725.9	500.0	286.4	119.1	429.9	283.5
MEAN	7.15	6.82	23.2	27.8	14.5	43.7	24.2	16.1	9.55	3.84	13.9	9.45
MAX	48	12	210	109	23	342	89	65	52	12	231	69
MIN	3.4	4.8	5.3	11	10	8.8	8.9	5.6	3.3	1.9	2.4	2.5
CFSM	.30	.28	.97	1.16	.60	1.82	1.01	.67	.40	.16	.58	.39
IN.	.34	.32	1.11	1.34	.63	2.10	1.13	.78	.44	.18	.67	.44

CAL YR 1973 TOTAL 7,192.6 MEAN 19.7 MAX 328 MIN 2.3 CFSM .82 IN 11.15
WTR YR 1974 TOTAL 6,114.4 MEAN 16.8 MAX 342 MIN 1.9 CFSM .70 IN 9.48

PEAK DISCHARGE (BASE, 400 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
3-31	0100	5.98	559	8-07	1500	5.22	452

03075500 Youghiogheny River near Oakland, Md.

LOCATION.--Lat 39°25'19", long 79°25'32", Garrett County, on left bank 200 ft (61 m) downstream from Baltimore & Ohio Railroad bridge, 250 ft (76 m) downstream from Little Youghiogheny River, 1.2 miles (1.9 km) northwest of Oakland, and 1.5 miles (2.4 km) upstream from Dunkard Lick Run.

DRAINAGE AREA.--134 sq mi (347 sq km).

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

GAGE.--Water-stage recorder and concrete control. Datum of gage is 2,353.11 ft (717.228 m) above mean sea level, unadjusted. Prior to Aug. 1, 1946, nonrecording gage at bridge 200 ft (61 m) upstream at same datum.

AVERAGE DISCHARGE.--33 years, 290 cfs (8.213 cu m/s), 29.39 in/yr (747 mm/yr).

EXTREMES.--Current year: Maximum discharge, 4,430 cfs (125 cu m/s) Jan. 11, gage height, 7.60 ft (2.316 m); minimum, 18 cfs (0.51 cu m/s) Aug. 27, gage height, 1.96 ft (0.597 m).
Period of record: Maximum discharge, 11,800 cfs (334 cu m/s) Oct. 16, 1954, gage height, 12.16 ft (3.706 m); minimum daily, 2.5 cfs (0.071 cu m/s) Oct. 4, 1953.
Flood in March 1936 reached a stage of 15.3 ft (4.66 m), from floodmarks.

REMARKS.--Records good. Town of Oakland diverted an average of 0.4 cfs (0.011 cu m/s) for water supply. The diversion is returned above station as sewage.

REVISIONS (WATER YEARS).--WSP 1113: 1947(M).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	126	657	536	824	235	651	304	94	1,650	352	30	79
2	243	525	412	630	230	890	528	89	2,330	257	27	77
3	186	380	344	671	273	850	491	294	1,560	180	28	98
4	141	286	294	1,610	218	617	1,590	317	882	145	31	127
5	122	247	323	1,010	190	530	1,250	229	586	198	39	89
6	94	229	389	707	190	471	746	204	412	159	29	77
7	74	176	285	530	746	507	544	174	309	118	25	274
8	71	157	244	394	628	461	562	147	242	95	24	153
9	86	231	256	521	473	399	864	171	247	82	25	106
10	92	198	245	1,660	372	410	701	140	171	75	26	83
11	68	172	211	4,150	314	347	562	114	138	71	23	72
12	58	170	192	2,720	286	339	452	212	125	61	59	66
13	51	205	232	1,140	311	293	720	290	107	53	93	70
14	49	230	561	742	514	245	714	204	88	48	50	260
15	48	209	457	579	395	220	592	174	86	50	32	156
16	255	326	389	459	326	240	440	150	181	57	27	105
17	163	318	341	361	287	248	350	160	161	48	167	85
18	104	269	331	297	235	207	286	834	105	40	78	71
19	84	318	294	299	257	301	241	455	80	39	54	64
20	73	295	283	408	634	313	204	337	105	40	42	56
21	66	262	1,090	633	460	484	171	262	316	35	32	51
22	58	244	791	719	528	595	153	217	959	31	28	65
23	54	205	584	566	498	475	197	287	1,240	35	27	53
24	52	199	468	493	403	392	164	286	1,690	58	24	43
25	48	211	405	452	380	306	157	227	1,130	45	22	38
26	43	221	1,520	381	306	267	127	190	763	36	22	37
27	41	379	2,940	354	279	228	111	166	505	35	20	36
28	43	1,140	1,500	327	273	196	102	142	374	31	21	33
29	613	1,020	884	366	------	175	94	392	335	30	32	36
30	553	692	961	300	------	232	86	1,460	246	60	118	34
31	460	------	860	269	------	350	------	869	------	44	161	------
TOTAL	4,219	10,171	18,622	24,572	10,241	12,239	13,503	9,287	17,123	2,608	1,416	2,594
MEAN	136	339	601	793	366	395	450	300	571	84.1	45.7	86.5
MAX	613	1,140	2,940	4,150	746	890	1,590	1,460	2,330	352	167	274
MIN	41	157	192	269	190	175	86	89	80	30	20	33
CFSM	1.01	2.53	4.49	5.92	2.73	2.95	3.36	2.24	4.26	.63	.34	.65
IN.	1.17	2.82	5.17	6.82	2.84	3.40	3.75	2.58	4.75	.72	.39	.72

CAL YR 1973 TOTAL 112,641 MEAN 309 MAX 2,940 MIN 14 CFSM 2.31 IN 31.27
WTR YR 1974 TOTAL 126,595 MEAN 347 MAX 4,150 MIN 20 CFSM 2.59 IN 35.14

PEAK DISCHARGE (BASE, 2,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-27	0500	6.70	3,300	6-02	1445	6.15	2,680
1-11	1730	7.60	4,430	6-24	0045	5.65	2,180
4-04	1600	5.79	2,310				

03076000 Deep Creek Reservoir near Oakland, Md.

LOCATION.--Lat 39°30'34", long 79°23'28", Garrett County, on Deep Creek at Dam, 1.8 miles (2.9 km) upstream from mouth and 7 miles (11.3 km) north of Oakland, Md.

DRAINAGE AREA.--64.7 sq mi (167.6 sq km).

PERIOD OF RECORD.--July 1925 to current year. Prior to October 1950, month-end contents published in WSP 1305, and October 1950 to September 1955, month-end contents published in WSP 1385.

GAGE.--Water-stage recorder at right end of spillway. Datum of gage is at mean sea level, unadjusted.

EXTREMES.--Maximum contents during year, 91,100 acre-ft (112 cu hm) June 25, 26, elevation, 2,461.50 ft (750.265 m); minimum, 65,700 acre-ft (81.0 cu hm) Oct. 27, 28, elevation, 2,454.40 ft (748.101 m).
Period of record: Maximum contents, 93,258 acre-ft (115 cu hm) July 24, 25, 1949, elevation, 2,462.075 ft (750.440 m); minimum observed, 11,763 acre-ft (14.5 cu hm) Sept. 30, 1925, elevation, 2,433.45 ft (741.716 m).

REMARKS.--Reservoir is formed by an earthfill dam completed January 1925. Usable capacity, 92,975 acre-ft (115 cu hm) between elevations 2,425 ft (739.1 m), top of intake to outlet tunnel, and 2,462 ft (750.4 m), crest of spillway. Dead storage, 13,085 acre-ft (16.1 cu hm). Figures given herein represent usable contents. Reservoir is used for hydroelectric power. Records furnished by Pennsylvania Electric Co.

MONTH-END ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1973 TO SEPTEMBER 1974

	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	2,455.10	68,000	-
Oct. 31	2,454.90	67,400	- 600
Nov. 30	2,455.70	70,100	+ 2,700
Dec. 31	2,458.20	78,900	+ 8,800
CAL YR 1973	-	-	- 2,200
Jan. 31	2,459.90	85,200	+ 6,300
Feb. 28	2,458.10	78,600	- 6,600
Mar. 31	2,458.00	78,200	- 400
Apr. 30	2,459.50	83,700	+ 5,500
May 31	2,460.40	87,000	+ 3,300
June 30	2,461.30	90,400	+ 3,400
July 31	2,458.90	81,500	- 8,900
Aug. 31	2,457.00	74,700	- 6,800
Sept. 30	2,455.30	68,700	- 6,000
WTR YR 1974	-	-	+ 700

03076500 Youghiogheny River at Friendsville, Md.

LOCATION.--Lat 39°39'13", long 79°24'31", Garrett County, on left bank 0.7 mile (1.1 km) upstream from bridge on State Highway 42 at Friendsville, and 1.5 miles (2.4 km) upstream from Bear Creek.

DRAINAGE AREA.--295 sq mi (764 sq km).

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 (453.338 m) 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 (1.1 km) downstream at datum 16.24 ft (4.950 m) and 16.29 ft (4.965 m) lower, respectively.

AVERAGE DISCHARGE.--40 years (1898-1904, 1940-1974), 637 cfs (18.04 cu m/s), 29.32 in/yr (745 mm/yr), adjusted for storage since 1940.

EXTREMES.--Current year: Maximum discharge, 7,830 cfs (222 cu m/s) Jan. 11, gage height, 6.97 ft (2.124 m); minimum, 30 cfs (0.85 cu m/s) Aug. 25, 26, gage height, 1.92 ft (0.585 m).
Period of record: Maximum discharge, 13,000 cfs (368 cu m/s) Oct. 16, 1954, gage height, 8.99 ft (2.740 m), from rating curve extended above 5,800 cfs (164 cu m/s) on basis of slope-area measurement of peak flow; minimum daily, 8.2 cfs (0.23 cu m/s) Sept. 11, 1966.
Maximum stage since 1898, 14.2 ft (4.33 m) Mar. 29, 1924, from floodmarks, site and datum then in use or 10.2 ft (3.11 m), present site and datum; discharge, about 15,600 cfs or about 440 cu m/s, from rating curve extended as explained above.

REMARKS.--Records good. Low and medium flow regulated since 1925 by Deep Creek Reservoir (see station 03076000). Water-quality records for the current water year are published in Part 2 of this report.

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 1973 TO SEPTEMBER 1974

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	293	995	1,100	1,470	830	1,190	577	290	2,490	864	233	168
2	350	1,050	748	1,270	474	1,290	817	270	3,170	768	233	138
3	392	696	732	1,350	453	1,570	915	585	2,750	620	72	288
4	293	488	639	3,010	725	1,300	1,970	729	1,620	315	71	331
5	271	459	678	1,900	700	1,140	2,460	508	1,120	559	196	315
6	191	493	896	1,260	693	1,080	1,300	493	849	347	200	268
7	134	466	669	1,110	1,180	1,070	946	446	690	232	112	251
8	168	376	483	872	1,390	1,010	912	392	420	425	191	250
9	224	445	486	999	755	699	1,540	414	394	468	64	325
10	224	338	567	3,020	573	703	1,310	389	472	446	40	281
11	205	293	510	6,910	801	848	1,100	285	388	445	35	254
12	191	376	450	4,470	756	848	804	367	367	426	183	298
13	147	416	487	2,440	755	756	1,020	677	345	176	276	292
14	90	470	959	1,770	970	664	1,350	496	313	94	254	314
15	124	452	784	1,440	874	622	1,170	433	176	306	219	289
16	240	657	654	1,150	520	467	940	397	284	293	187	282
17	328	573	701	1,050	448	481	777	420	463	318	102	288
18	226	469	626	922	621	583	656	1,430	356	343	164	267
19	210	616	569	556	651	706	580	951	297	282	233	251
20	153	606	628	700	1,080	802	434	773	323	90	224	239
21	104	549	1,840	1,310	1,000	1,060	359	629	452	67	200	137
22	138	434	1,410	1,670	1,040	1,440	408	544	1,430	224	187	88
23	172	479	1,000	1,350	867	901	476	598	2,060	233	187	202
24	168	382	893	1,230	667	736	457	656	3,110	260	55	233
25	164	406	676	1,150	886	783	435	455	2,200	266	39	214
26	161	527	2,310	687	798	719	390	376	1,610	233	157	208
27	117	751	4,740	596	720	652	282	335	1,170	86	205	209
28	71	2,170	2,980	909	748	592	238	391	951	61	191	109
29	596	2,060	1,850	1,080	------	558	300	533	640	205	191	52
30	1,100	1,400	1,850	950	------	395	306	2,180	495	260	260	129
31	730	------	1,680	890	------	567	------	1,400	------	266	266	------
TOTAL	7,975	19,892	34,595	49,491	21,975	26,232	25,229	18,842	31,405	9,978	5,227	6,970
MEAN	257	663	1,116	1,596	785	846	841	608	1,047	322	169	232
MAX	1,100	2,170	4,740	6,910	1,390	1,570	2,460	2,180	3,170	864	276	331
MIN	71	293	450	556	448	395	238	270	176	61	35	52
(+)	-9.8	+45.4	+143	+102	-119	-6.5	+92.3	+53.4	+57.0	-145	-110	-101
MEAN≠	247	708	1,259	1,698	666	840	933	661	1,104	177	59	131
CFSM≠	.84	2.40	4.27	5.76	2.26	2.85	3.16	2.24	3.74	.60	.20	.44
IN≠	.97	2.68	4.92	6.64	2.35	3.28	3.53	2.58	4.18	.69	.23	.49

CAL YR 1973 TOTAL 240,524 MEAN 659 MAX 4,740 MIN 40 MEAN≠ 656 CFSM≠ 2.22 IN≠ 30.19
WTR YR 1974 TOTAL 257,811 MEAN 706 MAX 6,910 MIN 35 MEAN≠ 707 CFSM≠ 2.40 IN≠ 32.53

\+ Change in contents, equivalent in cubic feet per second, in Deep Creek Reservoir, furnished by Pennsylvania Electric Co.
≠ Adjusted for change in contents.

03076600 Bear Creek at Friendsville, Md.

LOCATION.--Lat 39°39'22", long 79°23'41", Garrett County, on right bank 0.2 mile (0.3 km) downstream from bridge on Accident-Friendsville Road, 0.6 mile (1.0 km) downstream from South Branch Bear Creek, 0.8 mile (1.3 km) southeast of Friendsville, and 1.2 miles (1.9 km) upstream from mouth.

DRAINAGE AREA.--48.9 sq mi (126.7 sq km).

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

GAGE.--Water-stage recorder. Altitude of gage is 1,555 ft (474 m), from topographic map.

AVERAGE DISCHARGE.--10 years, 80.6 cfs (2.283 cu m/s), 22.38 in/yr (568 mm/yr).

EXTREMES.--Current year: Maximum discharge, 1,440 cfs (40.8 cu m/s) Jan. 11, gage height, 5.48 ft (1.670 m); minimum, 4.9 cfs (0.14 cu m/s) Aug. 26, gage height, 0.67 ft (0.204 m).
Period of record: Maximum discharge, 4,650 cfs (132 cu m/s) Sept. 14, 1971, gage height, 9.6 ft (2.93 m), from floodmarks, from rating curve extended above 2,000 cfs (56.6 cu m/s) on basis of slope-area measurement of peak flow; minimum, 1.5 cfs (0.042 cu m/s) Sept. 12, 1966, gage height, 0.42 ft (0.128 m).

REMARKS.--Records poor.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	121	162	187	102	117	97	36	205	80	11	11
2	49	115	130	159	96	138	127	34	239	59	10	13
3	43	98	113	194	89	152	137	75	217	51	10	11
4	36	80	100	292	77	145	261	70	170	51	10	11
5	36	73	135	242	67	142	245	62	133	76	10	8.7
6	27	63	158	194	67	130	190	60	105	56	9.3	7.8
7	23	53	136	156	87	134	149	55	86	48	8.9	20
8	34	49	122	126	81	131	136	49	72	41	9.1	12
9	83	53	121	136	78	130	160	54	63	36	10	8.5
10	58	45	104	351	79	158	153	46	55	34	9.6	8.0
11	45	40	90	1,030	72	147	149	41	48	34	8.7	7.4
12	38	41	81	436	69	146	134	85	45	26	11	7.4
13	31	45	84	281	73	126	169	107	39	22	11	12
14	29	49	105	219	81	109	183	91	34	20	8.3	31
15	24	51	102	182	73	98	174	79	36	21	7.8	13
16	27	104	100	153	69	99	149	67	66	20	7.6	10
17	21	100	92	128	69	92	124	61	61	17	14	8.5
18	19	94	89	109	64	82	104	158	38	16	9.6	7.6
19	17	93	81	120	68	95	89	124	31	24	7.8	7.2
20	16	81	125	121	106	93	76	106	43	19	7.0	6.6
21	16	74	280	166	98	168	66	91	64	15	6.8	7.6
22	15	71	224	186	149	209	61	79	82	13	7.2	9.8
23	14	64	178	173	167	177	61	94	333	18	7.2	7.2
24	14	82	147	151	148	148	54	75	308	27	6.2	6.4
25	13	91	131	131	133	120	50	65	213	16	5.8	5.8
26	13	108	402	116	109	106	45	58	158	14	5.8	5.8
27	13	149	552	110	101	93	41	53	123	13	5.6	6.0
28	13	366	322	114	92	84	38	47	102	12	12	6.0
29	192	268	257	127	------	81	36	62	91	12	9.6	5.8
30	144	207	238	120	------	87	34	71	73	20	22	5.6
31	114	------	211	114	------	102	------	82	------	12	15	------
TOTAL	1,254	2,928	5,172	6,324	2,564	3,839	3,492	2,237	3,333	923	293.9	287.7
MEAN	40.5	97.6	167	204	91.6	124	116	72.2	111	29.8	9.48	9.59
MAX	192	366	552	1,030	167	209	261	158	333	80	22	31
MIN	13	40	81	109	64	81	34	34	31	12	5.6	5.6
CFSM	.83	2.00	3.42	4.17	1.87	2.54	2.37	1.48	2.27	.61	.19	.20
IN.	.95	2.23	3.93	4.81	1.95	2.92	2.66	1.70	2.54	.70	.22	.22

CAL YR 1973 TOTAL 32,708.4 MEAN 89.6 MAX 552 MIN 6.8 CFSM 1.83 IN 24.88
WTR YR 1974 TOTAL 32,647.6 MEAN 89.4 MAX 1,030 MIN 5.6 CFSM 1.83 IN 24.84

PEAK DISCHARGE (BASE, 600 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
12-26	2400	4.29	776	1-11	0945	5.48	1,440

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 (0.5 km) upstream from Slaubaugh Run, 0.7 mile (1.1 km) downstream from U. S. Highway 40, and 1.0 mile (1.6 km) northeast of Grantsville.

DRAINAGE AREA.--62.5 sq mi (161.9 sq km).

PERIOD OF RECORD.--July 1947 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 2,089.03 ft (636.736 m) above mean sea level (levels by Corps of Engineers).

AVERAGE DISCHARGE.--27 years, 117 cfs (3.313 cu m/s), 25.42 in/yr (646 mm/yr).

EXTREMES.--Current year: Maximum discharge, 2,160 cfs (61.2 cu m/s) Jan. 11, gage height, 5.18 ft (1.579 m); minimum, 3.6 cfs (0.10 cu m/s) Sept. 30, gage height, 1.07 ft (0.326 m).
Period of record: Maximum discharge, 8,400 cfs (238 cu m/s) Oct. 15, 1954, gage height, 10.70 ft (3.261 m), from rating curve extended above 1,600 cfs (73.6 cu m/s) on basis of contracted-opening measurement at gage height 8.13 ft (2.478 m); 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 water year are published in Part 2 of this report.

REVISIONS (WATER YEARS).--WSP 1143: 1948.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	231	184	280	105	164	158	47	375	132	13	16
2	106	169	150	209	104	198	216	44	395	82	10	16
3	72	124	132	261	107	195	175	124	272	63	10	14
4	47	101	120	482	90	152	390	112	175	57	10	15
5	38	97	235	261	80	149	300	75	132	108	10	12
6	32	90	280	206	103	148	214	68	103	70	9.0	11
7	27	77	166	171	127	174	174	62	86	54	8.3	33
8	39	74	134	138	120	157	181	57	77	46	8.5	24
9	108	85	137	174	93	137	317	66	69	39	9.2	14
10	69	74	129	584	87	225	222	62	58	36	8.8	11
11	49	68	112	1,680	81	167	191	53	54	38	8.3	9.2
12	42	66	106	738	97	152	160	147	49	30	8.3	8.1
13	36	75	102	383	98	136	264	181	44	26	10	8.6
14	33	78	124	269	129	114	249	103	38	22	8.2	18
15	31	70	108	246	96	104	214	83	38	22	6.1	14
16	38	168	96	242	83	110	160	74	56	22	9.9	9.2
17	36	127	73	210	80	109	134	124	64	19	63	7.6
18	30	100	99	170	79	95	115	517	43	17	25	6.6
19	27	109	111	220	77	127	103	242	33	17	16	5.7
20	25	100	113	245	167	118	90	172	43	29	11	5.2
21	25	87	291	385	129	213	82	132	69	17	8.6	5.7
22	21	85	193	326	233	218	74	110	127	13	8.6	7.2
23	20	78	184	235	218	155	78	132	594	18	9.8	6.6
24	19	114	128	201	152	134	75	120	460	58	8.1	5.2
25	17	134	121	178	138	110	72	92	246	30	6.6	4.8
26	17	136	540	155	118	103	63	78	181	21	6.2	4.8
27	16	198	1,080	149	118	95	56	69	124	18	5.7	4.4
28	22	644	545	147	108	86	51	62	103	15	7.7	4.4
29	660	370	345	183	------	89	47	110	103	15	9.9	4.8
30	355	231	415	140	------	135	44	157	82	27	19	4.4
31	190	------	305	122	------	219	------	139	------	18	26	------
TOTAL	2,289	4,160	6,858	9,390	3,217	4,488	4,669	3,614	4,293	1,179	378.8	310.5
MEAN	73.8	139	221	303	115	145	156	117	143	38.0	12.2	10.4
MAX	660	644	1,080	1,680	233	225	390	517	594	132	63	33
MIN	16	66	73	122	77	86	44	44	33	13	5.7	4.4
CFSM	1.18	2.22	3.54	4.85	1.84	2.32	2.50	1.87	2.29	.61	.20	.17
IN.	1.36	2.48	4.08	5.59	1.91	2.67	2.78	2.15	2.56	.70	.23	.18

CAL YR 1973 TOTAL 46,068.0 MEAN 126 MAX 1,080 MIN 5.2 CFSM 2.02 IN 27.42
WTR YR 1974 TOTAL 44,846.3 MEAN 123 MAX 1,680 MIN 4.4 CFSM 1.97 IN 26.69

PEAK DISCHARGE (BASE, 1,000 CFS)

DATE	TIME	G. H.	DISCHARGE	DATE	TIME	G. H.	DISCHARGE
10-29	1430	3.75	1,000	1-11	1245	5.18	2,160
12-26	2300	4.25	1,380				

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or floodflow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at partial-record stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations and the second is a table of annual maximum stage and discharge at crest-stage stations. Discharge measurements made at miscellaneous sites for both low flow and high flow are given in a third table.

Low-flow partial-record stations

Measurements of streamflow in the area covered by this report made at low-flow partial-record stations are given in the following table. These measurements were made during periods of base flow when streamflow is primarily from ground-water storage. These measurements, when correlated with the simultaneous discharge of a nearby stream 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 1974

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Measurements Date	Measurements Discharge (cfs)
		Choptank River basin				
01491180	Watts Creek near Denton, Md.	Lat 38°52'29", long 75°47'38", Caroline County, at bridge on State Highway 474, 1.6 miles southeast of Denton.	[a]11	1964-74	4-25-74	7.10
		Chester River basin				
01492980	Cypress Branch at Millington, Md.	Lat 39°15'28", long 75°50'01", Kent County, at bridge on State Highway 291, 0.04 mile east of Millington.	[a]38	1964-66, 1968-74	4-25-74	33.1
		Elk River basin				
01495550	Perch Creek near Elkton, Md.	Lat 39°34'16", long 75°48'53", Cecil County, at bridge on U.S. Highway 213, 2.5 miles south of Elkton.	[a]6.0	1964-74	4-25-74	5.13
		Northeast River basin				
01496050	Little Northeast Creek at Mechanic Valley, Md.	Lat 39°38'26", long 75°55'49", Cecil County, at highway bridge, 0.8 mile northwest of Mechanic Valley.	[a]14	1964-74	4-25-74	12.6
		Potomac River basin				
01601300	North Branch Jennings Run at Barrelville, Md.	Lat 39°42'13", long 78°50'38", Allegany County, at bridge on State Highway 47, at Barrelville.	[a]12	1964-74	8-16-74 9-30-74	2.07 .67
01604150	Collier Run at Spring Gap, Md.	Lat 39°34'03", long 78°43'23", Allegany County, at culvert on State Highway 51, 0.6 mile west of Spring Gap.	[a]11	1964-74	8-15-74 9-23-74	.24 .30
01619150	Marsh Run at Fiddlesburg, Md.	Lat 39°39'29", long 77°41'16", Washington County, at bridge on Old Forge Road, at Fiddlesburg, 0.6 mile above mouth, and 0.5 mile east of Hagerstown city limits.	[a]31	1965-74	8-15-74 9-23-74	5.90 5.83
		Monongahela River basin				
03075400	Laurel Run at Crellin, Md.	Lat 39°23'04", long 79°28'25", Garrett County, 800 ft above mouth, 0.5 mile southwest of Crellin.	10.9	1964-74	8-16-74 9-30-74	1.90 2.95
03076580	South Branch Bear Creek near Accident, Md.	Lat 39°36'39", long 79°20'02", Garrett County, at culvert on U.S. Highway 219, 1.5 miles southwest of Accident.	6.01	1964-74	8-16-74 9-30-74	.62 .44

[a] Approximately.

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 during water year 1974

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum Date	Gage height (feet)	Discharge (cfs)
		Delaware River basin					
01478950	Pike Creek near Newark, Del.	Lat 39°42'11", long 75°41'41", New Castle County, on right upstream wingwall of bridge on State Highway 2, 0.4 mile upstream from mouth, and 2.6 miles northeast of Newark.	6.04	1969-74	8-26-74	5.40	494
01479200	Mill Creek at Hockessin, Del.	Lat 39°46'31", long 75°41'26", New Castle County, 20 ft above bridge on Brackenville Road, and 0.9 mile southeast of Hockessin, and about 7.0 miles upstream from mouth.	*4.19	1966-74	12-21-73	5.26	372
01479950	Red Clay Creek tributary near Yorklyn, Del.	Lat 39°47'50", long 75°39'33", New Castle County, 8 ft above culvert, 400 ft upstream from mouth, and 1.1 miles southeast of Yorklyn.	.38	1966-74	8-26-74	4.15	23
01481200	Brandywine Creek tributary near Centerville, Del.	Lat 39°50'08", long 75°35'57", New Castle County, 30 ft above culvert on State Highway 100, 1,000 ft upstream from mouth, and 1.4 miles northeast of Centerville.	.97	1966-74	8-26-74	4.57	78
01481450	Willow Run at Rockland, Del.	Lat 39°47'32", long 75°33'16", New Castle County, 15 ft above culvert on Country Club Drive, 0.5 mile upstream from mouth, and 1.0 mile east of Rockland.	.37	1966-74	10-29-73	8.92	296
01482310	Doll Run at Red Lion, Del.	Lat 39°35'53", long 75°39'43", New Castle County, 10 ft above culvert on secondary road, 0.7 mile upstream from mouth, and 0.7 mile south of Red Lion.	[a]1.2	1966-74	12-21-73	4.00	79
		Smyrna River basin					
01483290	Paw Paw Branch tributary near Clayton, Del.	Lat 39°18'41", long 75°40'08", New Castle County, 6 ft above culverts on road No. 483, 1,000 ft upstream from mouth, and 2.4 miles northwest of Clayton.	[a]1.3	1966-74	9-03-74	5.29	89
01483400	Sawmill Branch tributary near Blackbird, Del.	Lat 39°20'57", long 75°38'31", New Castle County, 10 ft above culvert on U.S. Highway 13, 1.3 miles upstream from mouth, and 1.8 miles southeast of Blackbird.	[a].6	1966-74	9-03-74	3.77	18
		Leipsic River basin					
01483500	Leipsic River near Cheswold, Del.	Lat 39°13'58", long 75°37'57", Kent County, 75 ft below highway bridge on road No. 91, 0.4 mile downstream from confluence of Taylor and Pinks Branches, and 2.6 miles northwest of Cheswold.	9.35	1931-33≠ 1943-57≠ 1958-74	9-04-74	3.45	181
		St. Jones River basin					
01483720	Puncheon Branch at Dover, Del.	Lat 39°08'25", long 75°32'20", Kent County, 10 ft above bridge on New Burton Road, 1.5 miles upstream from mouth, and at Dover.	[a]2.3	1966-74	6-16-74	3.63	99

See footnotes at end of table, p. 129.

Annual maximum discharge at crest-stage partial-record stations during water year 1974

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum Date	Annual maximum Gage height (feet)	Annual maximum Discharge (cfs)
		Murderkill River basin					
01484002	Murderkill River tributary near Felton, Del.	Lat 38°58'19", long 75°33'31", Kent County, 6 ft above culvert on road No. 426, 0.5 mile upstream from mouth, and 2.9 miles south of Felton.	[a]1.0	1966-74	8-07-74	4.17	19
01484050	Pratt Branch near Felton, Del.	Lat 39°00'37", long 75°31'46", Kent County, 20 ft upstream from bridge on road No. 33, 2.3 miles upstream from mouth, and 2.6 miles east of Felton.	3.29	1966-74	8-07-74	8.18	60
		Broadkill River basin					
01484270	Beaverdam Creek near Milton, Del.	Lat 38°45'41", long 75°16'03", Sussex County, 10 ft upstream from culvert on road No. 88, 2.5 miles east of Milton, and 3.2 miles upstream from mouth.	6.10	1966-74	6-02-74	3.90	23
		Indian River basin					
01484550	Pepper Creek at Dagsboro, Del.	Lat 38°32'50", long 75°14'39", Sussex County, at downstream side of bridge on State Highway 26, 3.5 miles upstream from Vines Creek, and at Dagsboro.	8.78	1960-74	8-09-74	5.09	303
		Wicomico River basin					
01486100	Andrews Branch near Delmar, Md.	Lat 38°26'15", long 75°31'46", Wicomico County, at culvert on Rum Ridge Road, 1.2 miles above Williams Pond, and 2.8 miles southeast of Delmar.	[a]4.1	1967-74	12-21-73	5.8	[b]58
		Nanticoke River basin					
01486980	Toms Dam Branch near Greenwood, Del.	Lat 38°48'04", long 75°33'28", Sussex County, 16 ft above bridge on State Highway 16, 1.5 miles east of Greenwood, and 3.7 miles upstream from mouth.	[a]6.4	1966-74	12-21-73	3.71	14
01487900	Meadow Branch near Delmar, Del.	Lat 38°29'05", long 75°35'16", Sussex County, 14 ft above culverts on road No. 503B, 2.1 miles northwest of Delmar, and 3.1 miles upstream from confluence with Holly Branch.	[a]3.9	1967-74	9-04-74	4.91	68
01488000	Holly Ditch near Laurel, Del.	Lat 38°32'20", long 75°35'55", Sussex County, 10 ft above culverts on road No. 494, 1.5 miles southwest of Laurel, and 2.6 miles upstream from mouth.	2.19	1951-56≠ 1959-74	1-01-74	2.00	3.5
		Choptank River basin					
01490490	Beachy Neidig Ditch near Willow Grove, Del.	Lat 39°04'57", long 75°39'27", Kent County, 10 ft above culverts on road No. 226, 1,000 ft upstream from mouth, and 1.8 miles northwest of Willow Grove.	[a]2.3	1966-74	Unknown	<3.20	<31
01490600	Meredith Branch near Sandtown, Del.	Lat 39°02'23", long 75°41'52", Kent County, at downstream side of bridge on State Highway 10, 0.7 mile upstream from mouth, and 1.2 miles east of Sandtown.	[a]8.4	1966-74	6-03-74	3.29	169
01490800	Oldtown Branch at Goldsboro, Md.	Lat 39°01'23", long 75°47'16", Caroline County, at upstream side of culvert on State Highway 313, 0.7 mile upstream from mouth, and 0.7 mile south of Goldsboro.	3.9	1967-74	3-30-74	4.05	64

See footnotes at end of table, p. 129.

Annual maximum discharge at crest-stage partial-record stations during water year 1974

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum Date	Gage height (feet)	Discharge (cfs)
		Choptank River basin--Continued					
01491010	Sangston Prong near Whiteleysburg, Del.	Lat 38°58'25", long 75°43'32", Kent County, 10 ft above culvert on road No. 269, 0.7 mile upstream from mouth, and 1.2 miles north of Whiteleysburg.	[a]1.9	1966-74	6-02-74	4.52	36
01491050	Spring Branch near Greensboro, Md.	Lat 38°56'34", long 75°47'25", Caroline County, at culvert on Knife Box Road, 2.0 miles above mouth, and 2.2 miles southeast of Greensboro.	[a]3.8	1967-74	6-02-74	4.77	44
01492050	Gravel Run at Beulah, Md.	Lat 38°40'54", long 75°53'53", Dorchester County, at upstream side of culvert on State Highway 16, 0.3 mile north of Beulah, and 0.6 mile upstream from mouth.	8.4	1966-74	10-29-73	4.68	71
		Wye River basin					
01492500	Sallie Harris Creek near Carmichael, Md.	Lat 38°57'55", long 76°06'30", Queen Annes County, at upstream side of bridge on U.S. Highway 50, 2.0 miles northeast of Carmichael, and 2.4 miles upstream from mouth.	8.09	1952-56, 1957-74	12-21-73	4.25	202
01492550	Mill Creek near Skipton, Md.	Lat 38°55'00", long 76°03'42", Talbot County, at upstream side of culvert on U.S. Route 50, 1.5 miles north of Skipton, and 2.7 miles upstream from mouth.	[a]4.6	1966-74	12-21-73	4.46	59
		Chester River basin					
01494020	Browns Branch tributary near Church Hill, Md.	Lat 39°10'05", long 75°58'41", Queen Annes County, at upstream side of culvert on John Powell Road, 0.6 mile upstream from mouth, and 1.8 miles north of Church Hill.	[a]1.7	1971-74	8-09-74	8.80	255
		Susquehanna River basin					
01577940	Broad Creek tributary at Whiteford, Md.	Lat 39°42'30", long 76°21'49", Harford County, at upstream side of culvert on State Highway 165, 0.8 mile upstream from mouth, and 1.0 mile southwest of Whiteford.	.77	1971-74	12-20-73	5.96	123
01579000	Basin Run at Liberty Grove, Md.	Lat 39°39'30", long 76°06'10", Cecil County, on left bank 100 ft upstream from highway bridge, 0.9 mile east of Liberty Grove, and 3.0 miles upstream from mouth.	5.31	1948-58, 1965-74	12-21-73	3.17	460
		Gunpowder River basin					
01582510	Piney Creek near Hereford, Md.	Lat 39°34'38", long 76°40'39", Baltimore County, at upstream side of culvert on Interstate Route 83, 1.1 miles southwest of Hereford, 5.3 miles upstream from mouth.	[a]1.5	1962-74	[c]9/13/74	7.27	[d]60
01583495	Western Run tributary at Western Run, Md.	Lat 39°31'01", long 76°41'04", Baltimore County, at upstream side of culvert on Western Run Road, 0.05 mile above mouth, and 0.3 mile northwest of Western Run.	.26	1966-74	9/28/74	3.67	32
01583580	Baisman Run at Broadmoor, Md.	Lat 39°28'45", long 76°40'42", Baltimore County, at upstream side of bridge on Ivy Hill Road, 0.3 mile upstream from mouth, and 1.8 miles west of Cockeysville.	1.47	1965-69, 1970-74	9-13-74	2.94	116

See footnotes at end of table, p. 129.

Annual maximum discharge at crest-stage partial-record stations during water year 1974

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum Date	Gage height (feet)	Discharge (cfs)
		Gunpowder River basin--Continued					
01584500	Little Gunpowder Falls at Laurel Brook, Md.	Lat 39°30'18", long 76°25'56", Baltimore County, 750 ft upstream from bridge on Bottom Road, 5 miles southwest of Bel Air, and 10.5 miles upstream from mouth.	36.1	1927-70≠ 1971-74	Unknown	e	<1,800
		Patapsco River basin					
01587050	Hay Meadow Branch tributary at Poplar Springs, Md.	Lat 39°20'55", long 77°06'02", Howard County, at upstream side of culvert on U.S. Route 40, 0.4 mile northwest of Poplar Springs, and 0.5 mile above mouth.	.54	1966-74	8-19-74	5.10	65
01588000	Piney Run near Sykesville, Md.	Lat 39°22'55", long 76°58'00", Carroll County, 75 ft below bridge on State Highway 32, 1.2 miles north of Sykesville, and 5.2 miles above mouth.	11.4	1932-58≠ 1959-74	3-30-74	3.57	136
01589240	Gwynns Falls at McDonogh, Md.	Lat 39°23'28", long 76°45'56", Baltimore County, at bridge on McDonogh Road, 0.3 mile upstream from Horsehead Branch, at McDonogh.	19.3	1958-74	3-30-74	6.33	619
		South River basin					
01590500	Bacon Ridge Branch at Chesterfield, Md.	Lat 39°00'07", long 76°36'53", Anne Arundel County, on left bank 50 ft downstream from highway bridge, 0.5 mile east of Chesterfield, and 1.4 miles upstream from confluence with North River.	6.92	1942-52≠ 1965-74	10-02-73	3.62	201
		Patuxent River basin					
01593350	Little Patuxent River tributary at Guilford Downs, Md.	Lat 39°13'39", long 76°50'41", Howard County, at upstream side of culvert on U.S. Route 29 at Guilford Downs, 0.3 mile above mouth, and 4.1 miles north of Guilford.	.95	1966-74	9-04-69 3-30-74	5.51 9.52	f115 68
		Potomac River basin					
01601000	Wills Creek below Hyndman, Pa.	Lat 39°48'43", long 78°43'00", Bedford County, 150 ft above county highway bridge, 150 ft downstream from Pennsylvania Railroad bridge, 0.35 mile downstream from Little Wills Creek and 0.5 mile south of Hyndman.	146	1951-67≠ 1968-74	10-29-73	6.83	4,190
01610105	Pratt Hollow Tributary at Pratt, Md.	Lat 39°41'35", long 78°30'18", Allegany County, at upstream side of culvert on U.S. Highway 40, 0.2 mile northeast of Pratt, and 1.0 mile upstream from Kifer Hollow.	.70	1971-74	7-26-74	12.16	72
01610150	Bear Creek at Forest Park, Md.	Lat 39°42'07", long 78°19'02", Washington County, at upstream side of culvert on U.S. Highway 40, 0.2 mile upstream from mouth, and 0.9 mile west of Forest Park.	10.4	1965-69 1971-74	6-06-66 3-13-68 3-25-69 10-29-73	f4.10 4.37 4.03 9.10	f125 f215 f110 970
01613150	Ditch Run near Hancock, Md.	Lat 39°41'30", long 78°07'57", Washington County, at upstream side of culvert on U.S. Route 40, 0.3 mile above mouth, and 2.7 miles east of Hancock.	a4.8	1965-74	10-29-73	8.39	470

See footnotes at end of table, p. 129.

Annual maximum discharge at crest-stage partial-record stations during water year 1974

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum Date	Gage height (feet)	Discharge (cfs)
		Potomac River basin--Continued					
01613160	Potomac River tributary near Hancock, Md.	Lat 39°41'27", long 78°07'38", Washington County, at upstream side of culvert on Md. Route 615, 0.3 mile upstream from mouth, and 3.0 mile east of Hancock.	[a]1.2	1965-74	3-05-65	4.75	[f]130
					2-13-66	4.90	[fb]100
					3-07-67	4.85	[fb] 90
					10-25-67	4.07	[f] 70
					Unknown	[e]	<40
					7-09-70	4.63	[f]120
					12-23-70	4.52	[f]110
					6-22-72	5.10	174
					4-04-73	3.54	35
					10-29-73	6.52	250
01619475	Dog Creek tributary near Locust Grove, Md.	Lat 39°27'57", long 77°39'31", Washington County, at upstream side of culvert on Md. Route 67, 0.4 mile upstream from mouth, and 1.3 miles north of Locust Grove.	.10	1966-74	7-29-74	4.32	10
01637000	Little Catoctin Creek at Harmony, Md.	Lat 39°28'54", long 77°32'17", Frederick County, at upstream side of bridge on county road, 0.9 mile southwest of Harmony, and 2.8 miles upstream from mouth.	8.8	1948-58≠ 1959-74	3-30-74	3.39	350
01637600	Hollow Road Creek near Middletown, Md.	Lat 39°26'07", long 77°31'15", Frederick County, at upstream side of culvert on Alternate U. S. Route 40, 1.4 miles southeast of Middletown, and 2.0 miles upstream from mouth.	[a]2.3	1965-74	9-13-74	4.93	255
01639095	Piney Creek tributary at Taneytown, Md.	Lat 39°39'53", long 77°09'59", Carroll County, at upstream side of culvert under Pennsylvania Railroad, 0.1 mile upstream from mouth, and 0.6 mile northeast of Taneytown.	.62	1967-74	[c]3-30-74	[g]6.95	[b] 80
01640000	Little Pipe Creek at Avondale, Md.	Lat 39°33'40", long 77°02'38", Carroll County, at private bridge 0.1 mile below copps Branch, and 0.5 mile northwest of Avondale.	8.10	1948-56≠ 1959-64 1967-74	1-21-74	3.47	226
01640700	Owens Creek tributary near Rocky Ridge, Md.	Lat 39°37'16", long 77°20'26", Frederick County, at upstream side of culvert on Appolds Crossing Road, 0.8 mile upstream from mouth, and 1.6 miles northwest of Rocky Ridge.	[a]1.2	1967-74	3-30-74	6.46	170
01642400	Dollyhyde Creek at Libertytown, Md.	Lat 39°28'55", long 77°13'38", Frederick County, at upstream side of culvert on State Highway 26, 0.9 mile east of Libertytown, and 2.7 miles upstream from mouth.	[a]2.7	1967-74	9-01-74	[b]10.9	[b]1,100
01644420	Bucklodge Branch tributary near Barnesville, Md.	Lat 39°12'42", long 77°21'02", Montgomery County, at upstream side of culvert on Barnesville Road, 0.6 mile upstream from mouth, and 1.6 miles southeast of Barnesville.	.27	1967-74	12-26-73	4.64	30
01658000	Mattawoman Creek near Pomonkey, Md.	Lat 38°35'45", long 77°03'25", Charles County, at downstream side of bridge on State Highway 227, 1.2 miles southeast of Pomonkey, and 12.6 miles upstream from mouth.	57.7	1949-72≠ 1973-74	3-31-74	5.63	2,320

See footnotes at end of table, p. 129.

Annual maximum discharge at crest-stage partial-record stations during water year 1974

Station No.	Station name	Location	Drainage area (sq mi)	Period of record	Annual maximum Date	Gage height (feet)	Discharge (cfs)
		Potomac River basin--Continued					
01660900	Wolf Den Branch near Cedarville, Md.	Lat 38°38'29", long 76°49'02", Charles County, at upstream side of culvert on Forest Road, 1.5 miles upstream from mouth, and 1.6 miles southwest of Cedarville.	a2.3	1966-74	3-30-74	5.35	135
01660930	Clark Run near Bel Alton, Md.	Lat 38°28'21", long 76°57'22", Charles County, at downstream side of bridge on Newtown Road, 1.5 miles northeast of Bel Alton, and 1.8 miles upstream from mouth.	10.4	1966-74	3-30-74	6.89	b360
01661430	Glebe Branch at Valley Lee, Md.	Lat 38°11'40", long 76°31'13", St. Marys County, at upstream side of culvert on private road, 200 ft downstream from culvert on Md. State Highway 244, 0.2 mile upstream from mouth, and 0.3 mile west of Valley Lee.	a0.3	1968-74	8-20-69 10-02-73	8.66 4.88	f110 35
		Monongahela River basin					
03075450	Little Youghiogheny River tributary near Deer Park, Md.	Lat 39°24'37", long 79°21'00", Garrett County, at upstream side of culvert on Md. Route 135, 0.7 mile upstream from mouth, and 1.6 miles southwest of Deer Park.	.57	1965-74	1-11-74	4.89	28
03075600	Toliver Run tributary near Hoyes Run, Md.	Lat 39°29'39", long 79°25'14", Garrett County, at upstream side of culvert on Swallow Falls Road, 100 feet upstream from mouth, and 2.4 miles south of Hoyes Run.	.53	1965-74	1-11-74	4.78	29
03076505	Youghiogheny River tributary near Friendsville, Md.	Lat 39°39'48", long 79°25'42", Garrett County, at culvert on Md. Route 42, 1.3 miles west of Friendsville, and 0.1 mile upstream from mouth.	.22	1965-74	c5-18-74	3.75	18
03077700	North Branch Casselman River tributary at Foxtown, Md.	Lat 39°37'58", long 79°14'36", Garrett County, at upstream side of culvert on Dunghill Road, at Foxtown, and 2.0 miles upstream from mouth.	a1.0	1965-74	1-11-74	4.54	36
03078500	Big Piney Run near Salisbury, Pa.	Lat 39°43'34", long 79°02'55", Somerset County, 660 ft upstream from Little Piney Run, and 2.5 miles southeast of Salisbury.	24.5	1932-70, 1974	1-11-74	3.91	742

* 0.15 sq mi is probably noncontributing.
< Less than.
, Not determined.
, Operated as a continuous-record station.
a Approximately
b About
c Probably occurred this date.
d Estimated.
e Peak stage did not reach bottom of gage.
f Revised
g Affected by backwater from debris.

Measurements at miscellaneous sites

Measurements of streamflow at points other than gaging stations or partial-record stations are given in the following table. All measurements in this table were made during periods of base flow, except as otherwise noted.

Discharge measurements made at miscellaneous sites during water year 1974

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Date	Discharge (cfs)
		Delaware River basin				
Mill Creek	White Clay Creek	Lat 39°46'49", long 75°41'50", New Castle County, at downstream side of bridge on Mill Creek Road, 0.5 miles south of Hockessin, Del.	*3.69	--	4-03-74	4.19
					4-15-74	4.64
					5-06-74	2.66
					5-27-74	1.76
					6-18-74	1.40
					7-08-74	1.13
					7-29-74	.38
					8-19-74	.41
					9-09-74	1.05
					9-30-74	.80
Deep Creek	Appoquinimink River	Lat 39°26'14", long 75°42'50", New Castle County, at bridge on State Route No. 896, 0.4 mile south of Middletown, Del.	3.56	--	†8-13-73	4.01
					†8-29-73	4.29
					10-15-73	3.20
Unnamed Tributary	Silver Lake	Lat 39°25'50", long 75°42'35", New Castle County, at bridge on State Route No. 896, 0.9 mile south of Middletown, Del.	1.96	--	†8-13-73	2.20
					†8-29-73	1.99
					10-15-73	1.88
Deep Creek	Appoquinimink River	Lat 39°26'16", long 75°41'38", New Castle County, at bridge on secondary road (State Maintenance No. 442), 1.1 miles southeast of Middletown, Del.	7.51	--	†8-13-73	5.96
					†8-29-73	10.4
					10-15-73	7.73
Appoquinimink River	Delaware River	Lat 39°24'29", long 75°41'57", New Castle County, at bridge on State Highway 896, 0.8 mile north of Townsend, Del.	4.28	--	†8-13-73	4.18
					†8-29-73	3.34
					10-15-73	2.90
Unnamed Tributary	Noxontown Pond	Lat 39°25'00", long 79°40'31", New Castle County, at bridge on Money Road (State Maintenance No. 457) 1.6 miles northeast of Townsend, Del.	0.87	--	†8-03-73	0.18
					†8-29-73	.04
					10-15-73	.03
		St. Jones River basin				
Isaac Branch	St. Jones River	Lat 39°07'25", long 75°31'57", Kent County, at bridge on U. S. Highway 13, 1.1 miles south of Dover, Del.	12.8	--	†8-27-73	12.1
					†9-20-73	7.76
					10-16-73	8.35
					11-12-73	14.3
Isaac Branch	St. Jones River	Lat 39°07'37", long 75°31'06", Kent County, at footbridge at main spillway from Moores Lake, 0.9 miles south of Dover, Del.	13.6	--	†9-20-73	10.1
					10-15-73	10.2
					11-12-73	14.9
		Murderkill River basin				
Murderkill River	Delaware Bay	Lat 38°58'53", long 75°31'47", Kent County, at bridge on secondary road (State Maintenance No. 384) below Killen Pond Dam, 2.8 miles southeast of Felton, Del.	17.9	--	†8-29-73	7.90
					†9-11-73	7.98
					10-16-73	9.04
		Mispillion River basin				
Haven Lake Outlet	Silver Lake	Lat 38°54'46", long 75°26'41", Kent-Sussex County line, at bridge on U. S. Highway 113 at Milford, Del.	[a]29	--	3-26-74	34.7
					4-19-74	31.9
					5-17-74	30.3
					6-04-74	56.8
					7-17-74	13.8
					7-31-74	11.7
					8-20-74	14.2

See footnotes at end of table, p. 133.

Discharge measurements made at miscellaneous sites during water year 1974--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Date	Discharge (cfs)
		Mispillion River basin--Continued				
Presbyterian Branch	Silver Lake	Lat 38°54'37", long 75°26'20", Sussex County, at bridge on Kings Highway, at Milford, Del.	[a]0.8	--	3-26-74 4-19-74 5-17-74 6-04-74 7-17-74 7-31-74 8-20-74	0.59 .63 .43 .53 .18 .10 .12
		Wicomico River basin				
North Prong Wicomico River	Wicomico River	Lat 38°24'32", long 75°35'42", Wicomico County, at bridge on Naylors Mill Road, 1.9 miles north of Salisbury, Md.	24.8	1963-65 1967-71	†8-29-73 10-17-73	57.2 26.4
Brewington Branch	Johnson Pond	Lat 38°23'36", long 75°34'32", Wicomico County, at bridge on U. S. Highway 13, 0.8 mile north of Salisbury, Md.	2.89	--	†8-29-73 10-17-73	0.91 .39
Middle Neck Branch	Johnson Pond	Lat 38°23'02", long 75°34'59", Wicomico County, at bridge on U. S. Highway 13, at Salisbury, Md.	5.50	--	†8-29-73 10-17-73	8.25 7.05
		Nanticoke River basin				
Clear Brook	Nanticoke River	Lat 38°40'45", long 75°35'37", Sussex County, at bridge on U. S. Highway 13A, 2.1 miles north of Seaford, Del.	14.1	--	†8-28-73 10-17-73	31.8 24.0
William H. Newton Ditch	Clear Brook	Lat 38°40'32", long 75°34'39", Sussex County, at bridge on secondary road (State Maintenance No. 46), 2.3 miles northeast of Seaford, Del.	1.84	--	†8-28-73 10-17-73	0.23 0
Herring Run	Williams Pond	Lat 38°39'23", long 75°36'09", Sussex County, at bridge on U. S. Highway 13A, 0.4 mile north of Seaford, Del.	2.83	--	†8-28-73 10-17-73	7.01 2.25
James Branch	Records Pond	Lat 38°30'27", long 75°30'27", Sussex County, at bridge on secondary road (State Maintenance No. 45), 4.2 miles southeast of Laurel, Del.	13.8	--	†8-29-73 10-17-73	15.1 4.94
James Branch	Records Pond	Lat 38°31'33", long 75°30'44", Sussex County, at bridge on secondary road (State Maintenance No. 72), 3.2 miles southeast of Laurel, Del.	14.9	--	†8-29-73 10-17-73	19.3 5.58
		Elk River basin				
Little Elk Creek	Elk River	Lat 39°38'30", long 75°52'00", Cecil County, at bridge on State Highway 545, 0.2 mile southeast of Childs, Md.	26.8	1949-58 1963, 1966, 1968, 1969	4-17-74 5-06-74 5-27-74 6-18-74 7-08-74 8-22-74 9-09-74 9-30-74	38.2 27.2 27.7 18.3 17.4 15.2 22.9 23.7
		Gunpowder River basin				
Gunpowder Falls	Gunpowder River	Lat 39°31'23", long 76°37'28", Baltimore County, at bridge on Phoenix Road, 0.6 mile northwest of Phoenix, Md., and 1.8 miles upstream from Greene Branch.	180	1973	†6-14-73 †8-10-73 †9-06-73	329 150 108
Greene Branch	Gunpowder Falls	Lat 39°30'22", long 76°36'50", Baltimore County, at bridge on Phoenix Road, 0.4 mile upstream from mouth, and 0.7 mile south of Phoenix, Md.	4.45	1973	†6-14-73 †8-09-73 †9-06-73	7.94 4.49 3.12

See footnotes at end of table, p. 133.

Discharge measurements made at miscellaneous sites during water year 1974--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Date	Discharge (cfs)
		Gunpowder River basin--Continued				
Western Run	Gunpowder Falls	Lat 39°29'35", long 76°38'40", Baltimore County, at bridge on Paper Mill Road, 0.8 mile north of Cockeysville, Md., and 1.6 miles upstream from mouth.	63.2	1973	†6-14-73 †8-09-73 †9-06-73	105 57.3 42.5
Beaverdam Run	Gunpowder Falls	Lat 39°29'08", long 76°38'45", Baltimore County, at bridge on State Highway 45, at Cockeysville, Md., and 0.6 mile upstream from mouth.	20.8	1955-59 1962-63 1966 1973	†6-14-73 †8-09-73 †9-06-73	33.9 19.6 15.0
Fitzhugh Run	Gunpowder Falls	Lat 39°27'52", long 76°34'21", Baltimore County, at bridge on Dulaney Valley Road, at mouth, 2.7 miles west of Long Green, Md.	1.60	1973	†7-03-73 †8-09-73 †9-06-73	3.17 1.96 1.58
Dulaney Valley Branch	Gunpowder Falls	Lat 39°27'58", long 76°32'45", Baltimore County, at bridge on Loch Raven Road, 0.1 mile upstream from mouth, and 1.3 miles west of Long Green, Md.	3.22	1973	†7-03-73 †8-09-73 †9-06-73	6.24 4.48 3.16
Gunpowder Falls Tributary	Gunpowder Falls	Lat 39°26'45", long 76°35'45", Baltimore County, at bridge on Dulaney Valley Road, at Wakefield, Md., 0.5 mile upstream from mouth, and 1.6 miles northeast of Timonium, Md.	1.02	1973	†7-03-73 †8-09-73 †9-06-73	1.40 .98 1.97
Spring Branch	Gunpowder Falls	Lat 39°26'24", long 76°35'50", Baltimore County, at bridge on Dulaney Valley Road, 0.2 mile upstream from mouth, and 1.4 miles east of Timonium, Md.	1.67	1973	†7-03-73 †8-09-73 †9-06-73	1.77 1.21 .85
Minebank Branch	Gunpowder Falls	Lat 39°25'20", long 76°32'20", Baltimore County, at bridge on Loch Raven Drive, at mouth, 0.1 mile northwest of Loch Raven, Md., and 0.7 mile downstream from Loch Raven Dam.	3.35	1973	†7-03-73 †8-10-73 †9-06-73	2.68 1.74 1.21
		Patapsco River basin				
Beaver Run	North Branch Patapsco River	Lat 39°29'14", long 76°54'05", Carroll County, at bridge on State Highway 91, 0.3 mile upstream from mouth, and 0.7 mile southwest of Finksburg, Md.	14.2	1973	†6-15-73 †8-10-73 †9-07-73	21.9 9.33 7.43
Middle Run	North Branch Patapsco River	Lat 39°27'44", long 76°54'30", Carroll County, at bridge on Louisville Road, 1.5 miles east of Gamber, Md., and 1.7 miles upstream from mouth.	6.18	1973	†6-15-73 †8-10-73 †9-07-73	9.36 4.92 4.11
Morgan Run	North Branch Patapsco River	Lat 39°27'07", long 76°57'20", Carroll County, at bridge on London Bridge Road, 0.5 mile upstream from mouth, and 1.5 miles southwest of Gamber, Md.	28.1	1973	†6-15-73 †8-10-73 †9-07-73	39.8 16.8 13.9
Little Morgan Run	North Branch Patapsco River	Lat 39°25'35", long 76°57'40", Carroll County, at bridge on Bartholow Road, 0.7 mile north of Johnsville, Md., and 0.9 mile upstream from mouth.	7.13	1973	†6-15-73 †8-13-73 †9-07-73	9.49 6.56 4.62
North Branch Patapsco River	Patapsco River	Lat 39°21'55", long 76°53'10", Carroll County, at bridge on county road, 1.3 miles northeast of Marriottsville, Md., and 2.6 miles upstream from confluence with South Branch.	164	1973	†6-15-73 †8-13-73 †9-07-73	25.3 .84 .38
		Potomac River basin				
Potomac Blue Spring	North Branch Potomac	Lat 39°34'26", long 78°43'50", Allegany County, 200 ft below abandoned C&O Canal Lock, 1.1 miles northwest of Spring Gap, Md.	--	1958-73	8-15-74 9-23-74	10.9 8.28

See footnotes at end of table, p. 133.

Discharge measurements made at miscellaneous sites during water year 1974--Continued

Stream	Tributary to	Location	Drainage area (sq mi)	Measured previously (water years)	Date	Discharge (cfs)
		Potomac River basin--Continued				
Murley Branch	Murley Branch	Lat 39°39'38", long 78°37'08", Allegany County, below dam at spring house of farm on Williams Road, 4.0 miles southwest of Flintstone, Md.	--	1958-73	8-15-74 9-23-74	1.23 1.01
Hoffman Drainage Tunnel	Braddock Run	Lat 39°38', long 78°54', Allegany County, upstream from Highway 55, 0.5 mile southwest of Clarysville, Md., and 2.1 miles southeast of Frostburg, Md.	--	1944, ‡1958-59, 1964, 1965, 1967-73	†9-25-64 †9-20-67 †10-17-67 †10-31-67 †5-05-69 †5-13-69 †9-30-69 †9-01-70 †7-08-71 †9-13-72 †7-12-73 †9-13-73 8-16-74 9-30-74	10.3 10.5 8.98 8.97 16.0 12.0 10.4 12.6 20.8 16.0 22.7 17.2 18.5 13.4
		Monongahela River basin				
Pawn Run	Deep Creek	Lat 39°28'22", long 79°19'45", Garrett County, 0.2 mile downstream from bridge on Boy Scout Road, 0.6 mile upstream from mouth, and 3.4 miles north of Deer Park, Md.	1.75	1973	†6-12-73 †7-10-73 †8-29-73 †8-30-73	1.17 .49 .21 .21
North Glade Run	Deep Creek	Lat 39°30'25", long 79°15'07", Garrett County, 200 ft downstream from unnamed tributary, 300 ft south of North Glade Road, 0.5 mile upstream from mouth, and 0.8 mile northwest of North Glade, Md.	3.58	1973	†6-12-73 †7-10-73 †8-30-73	1.47 .74 .36
Meadow Mountain Run	Deep Creek	Lat 39°30'58", long 79°17'15", Garrett County, 800 ft upstream from mouth, and 2.3 miles northeast of Thayerville, Md.	2.75	1973	†6-12-73 †7-10-73 †8-30-73	2.20 .93 .60
Cherry Creek	Deep Creek	Lat 39°32'20", long 77°18'55", Garrett County, 200 ft east of Rock Lodge Road, 0.2 mile upstream from mouth, and 2.4 miles southeast of McHenry, Md.	12.3	1973	†6-12-73 †7-10-73 †8-30-73	5.73 1.97 3.16
Deep Creek	Youghiogheny River	Lat 39°30'31", long 79°24'20", Garrett County, at bridge on county road, 0.6 mile upstream from mouth, 1.1 miles downstream from Deep Creek Dam, and 1.4 miles south of Hoys Run, Md.	[b]66.2	1973	†6-12-73 †7-10-73 †8-30-73	[c]1.62 [c] .62 [c] .43

* 0.15 sq mi is probably noncontributing.
† Not previously published.
‡ Measured by Maryland Geological Survey.
a Approximately.
b 64.7 sq mi is noncontributing.
c Regulated.

The following table contains annual maximum stages for tidal crest-stage stations. The information is obtained from a crest-stage gage or a water-stage recorder located at each site. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. All stages are elevations above mean sea level, datum of 1929. Only the maximum stage is given. Information on some other high stages 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 stages at tidal crest-stage partial-record stations

Station No.	Station Name	Location	Period of Record	Annual Maximum Date	Annual Maximum Elevation above mean sea level (feet)
01483335	Duck Creek at Smyrna, Del.	Lat 39°18'31", long 75°36'34", Kent County, at bridge, on U.S. Highway 13, on north edge of Smyrna, about 1,000 ft (305 m) north of traffic light at junction of Route 300 and U.S. Highway 13, on downstream right wingwall of bridge.	1966-74	12-09-73	4.30
01484085	Murderkill River at Bowers, Del.	Lat 39°03'30", long 75°23'51", Kent County, at Faulkner's Landing in Bowers, on left bank, 10 ft (3 m) southeast of southeast corner of restaurant on Faulkner's Pier.	1966-74	12-09-73	6.68
01484235	Cedar Creek near Slaughter Beach, Del.	Lat 38°56'06", long 75°19'26", Sussex County, at bridge No. S-164 on State Highway 36, 1.79 miles (2.88 km) northwest of Slaughter Beach, and 6 miles (10 km) from traffic light at junction of state routes 14 and 36 in Milford, Del.	1966-74	12-09-73	4.46
01484595	Indian River at Oak Orchard, Del.	Lat 38°35'45", long 75°10'24", Sussex County, at Hanes Landing, 2.05 miles (3.30 km) southeast of junction of state routes 24 and 5, at Oak Orchard.	1966-74	12-09-73	3.96

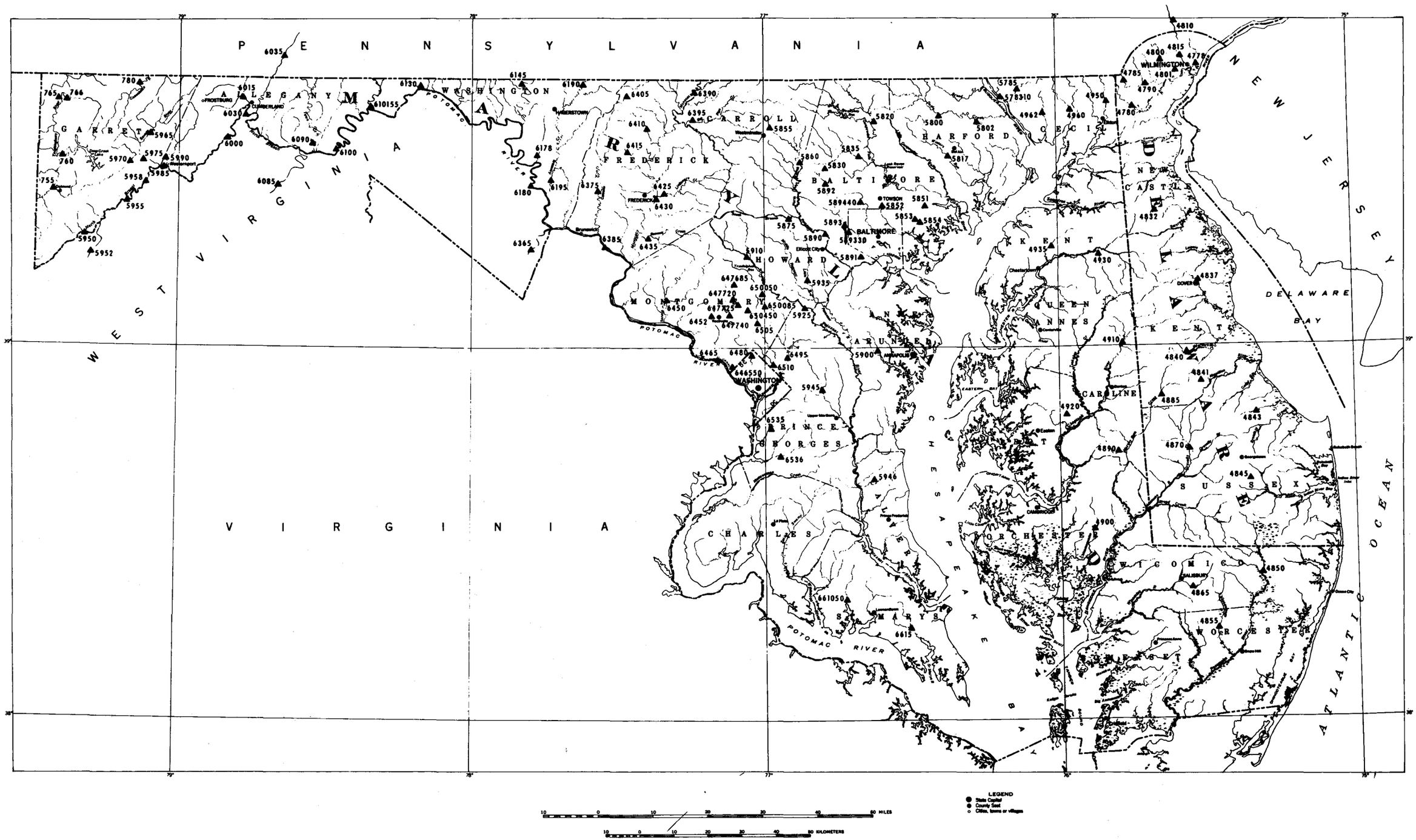

Figure 2.-- Map showing location of gaging stations.

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