

ANNUAL MAXIMUM STAGES AND DISCHARGES OF
SELECTED STREAMS IN VIRGINIA THROUGH 1990

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CONVERSION FACTORS AND ABBREVIATIONS

For the convenience of readers who may prefer to use metric (International System) units rather than the inch-pound units used in this report, values may be converted by using the following factors:

<u>Multiply inch-pound unit</u>	<u>By</u>	<u>To obtain metric unit</u>
<u>Length</u>		
inch (in.)	25.4	millimeter (mm)
foot (ft)	0.3048	meter (m)
mile (mi)	1.609	kilometer (km)
<u>Area</u>		
square mile (mi ²)	2.590	square kilometer (km ²)
<u>Flow</u>		
cubic foot per second (ft ³ /s)	0.02832	cubic meter per second (m ³ /s)
gallon per minute (gal/min)	0.06308	liter per second (L/s)
cubic foot per second per square mile [(ft ³ /s)/mi ²]	0.01093	cubic meter per second per square kilometer [(m ³ /s)/km ²]

Sea Level: In this report "sea level" refers to the National Geodetic Vertical Datum of 1929 (NGVD of 1929)--a geodetic datum derived from a general adjustment of the first order level nets of both the United States and Canada, formerly called Sea Level Datum of 1929.

GLOSSARY

Terms related to streamflow characteristics described in this report are defined below:

Bankfull stage is the elevation of a stream above which one or both banks are flooded in the vicinity of the gage.

Cubic foot per second (ft^3/s) is a measure of the rate of discharge representing a volume of 1 cubic foot passing a given point in 1 second and is equivalent to approximately 7.48 gallons per second.

Discharge is the volume of water that passes a given point within a given period of time.

Drainage area of a stream at a specified location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the stream upstream from the specified location.

Gage is an installation at a particular site on a stream, canal, lake or reservoir where systematic observations of gage heights and discharges are determined.

Gage height is the water-surface elevation referenced to an 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.

Hydrologic unit is a geographic area representing part or all of a surface-water drainage basin or distinct hydrologic feature as delineated by the U.S. Geological Survey, Office of Water Data Coordination, on the State Hydrologic Unit Map.

Stage-discharge relation is the relation between gage height and the rate at which water flows in a stream. It is defined by measurements of stage and discharge, by theoretical assumptions based on hydraulic properties of the stream channel or man-made flow-confining structures, or by a combination of both.

Water year is the 12-month period from October 1 through September 30. The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. Thus, the water year ending September 30, 1990, is called the "1990 water year."

ANNUAL MAXIMUM STAGES AND DISCHARGES OF SELECTED STREAMS IN VIRGINIA THROUGH 1990

By Byron J. Prugh, Jr., Edward H. Nuckels, and Clairiece G. Humphrey

ABSTRACT

Annual maximum stages and discharges for continuous- and partial-record streamflow-gaging stations in Virginia are summarized through the 1990 water year. Data are included for which 2 or more years of record are available for 538 active and discontinued stations operated by the U.S. Geological Survey, the Virginia Water Control Board, and other agencies. Additional information for each station includes a brief description of gage location, drainage area, type of gage, method of development of the stage-discharge relation, bankfull stage, and pertinent remarks on historical data or local conditions that may affect peak flows.

INTRODUCTION

The U.S. Geological Survey (USGS) began collecting streamflow records in Virginia in 1895, and, by the end of 1896, streamflow-gaging stations were operating in the Shenandoah, James, and Roanoke River basins. Gaging-station installation continued through the years as Federal, State, and local interest in surface water increased and funds became available to install and operate additional gaging stations. Cooperative agreements between the USGS and Federal, State, and local agencies have provided funds to operate systematic streamflow-gaging programs. The number of streamflow-gaging stations operated by the USGS and the Virginia Water Control Board (VWCB) under these programs has fluctuated over the years and reached a maximum of 211 stations during the 1981 water year. Through the years, many stations have been discontinued while others have been added to the network. A partial-record peak-stage network was started in 1949, and by 1967, peak-stage gages were operated at approximately 180 sites. Records from these networks span a period of more than 95 years at some streamflow-gaging stations in Virginia. In addition to USGS and VWCB streamflow-gaging programs, other agencies have collected streamflow records on Virginia streams. Together these sources provide flood-peak data with periods of record of 2 years or longer for 538 continuous- and partial-record stations. Such records of flooding on streams are necessary to provide data for engineering projects and scientific studies.

Purpose and Scope

This report provides a list of annual maximum stages and discharges at streamflow-gaging stations in Virginia operated by the USGS, the VWCB (and its predecessors), and other agencies. This information is needed by hydrologists and engineers for the design of hydraulic structures, defining flood-prone areas, and studying floods and potential flooding along streams in the Commonwealth. This report contains records for 538 continuous- and partial-record streamflow-gaging stations with 2 or more years of record as of September 30, 1990, and updates USGS Open-File Report 77-720 titled "Annual Maximum Stages and Discharges of Virginia Streams" (U.S. Geological Survey, 1977). Open-File Report 77-720 contains records for 288 gaging stations with 10 or more years of record of unregulated flow or flow unaffected by urbanization. This report includes data from stations in rural and urban environments and on regulated and unregulated streams. For each station, annual maximum values of stage and discharge are listed by water year. Data on floods that occurred prior to the establishment of the gaging station and data on local conditions, such as regulation that may affect the magnitude of the flood peak, also are presented. An index of the gaging stations is included to assist the user in quickly locating data for a specific site or stream.

Acknowledgments

This report was prepared in cooperation with the Virginia Department of Transportation, which provides continuing assistance in the collection and compilation of annual peak stages and discharges on Virginia streams.

EXPLANATION OF DATA

The USGS has assigned permanent, downstream-order station identification numbers to each streamflow-gaging station listed in the report. The numbers appear to the left of the station name in the station description and in abbreviated form adjacent to the station location in figures 1 through 4. The number consists of an 8-digit downstream-order number; the lowest number represents the most upstream station within a given basin. The first two digits of the number refer to the major drainage basin in which the site is located: 01 is the North Atlantic, 02 is the South Atlantic, and 03 is the Ohio River. The rightmost 6 digits is an arbitrary number assigned to make each station identification number unique.

The information for each site includes a brief station description and a table of annual maximum stages and discharges. The station description includes the gage location, drainage area, type of gage, the method by which the stage-discharge relation was determined, bankfull stage, remarks on historical flood peaks, and remarks on conditions that might affect stages and discharges and require qualification for their interpretation. Data for each station are listed sequentially by water year. Each entry contains the date of the peak, the instantaneous peak gage height, and the instantaneous peak discharge. The annual maximum gage height and annual maximum discharge can occur at different times because of changes in the stage-discharge relation. The summary tables for each station show the annual instantaneous maximum discharge and its corresponding gage height unless otherwise noted.

In some cases, the annual maximum stage at continuous-record stations was not recorded because of mechanical failure of the recorder, the timing of observer readings, or the loss of record from high-water conditions or vandalism. In these situations, the mean daily discharge for the day of the peak, which was estimated by correlation with other nearby stations, has been substituted. This value will always be less than the peak discharge; this fact is footnoted. The annual maximum stage and discharge also may occur at the beginning or end of the water year as a result of a rising or falling stage associated with a peak that occurred just prior to the beginning or subsequent to the end of the water year. By definition, this is the maximum stage and discharge for the water year. However, the maximum independent peak occurring during the water year also is footnoted.

At partial-record stations, the date of the maximum stage is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Historical peaks, as well as peaks observed during the period of record, are listed in the tables. The source and reliability of historical peaks are footnoted. Some gage heights also are footnoted to alert the user to a change in datum or other factors that would cause stages and corresponding discharges to deviate significantly from the present stage-discharge relation.

At some stations, sufficient field data are not currently available to define the stage-discharge relation. At these stations, only peak gage heights are listed. These data will allow interim interpretation of flood characteristics of the site until sufficient data are collected to compute peak discharges.

Data contained in this report are also available in computer readable form in the Peak Flow File of the Water Data Storage and Retrieval System (WATSTORE) at the USGS National Center at Reston, Virginia. Information about the Peak Flow File and instructions on input and output to the file is contained in the "WATSTORE Users Guide, Volume 4" (U.S. Geological Survey, 1981).

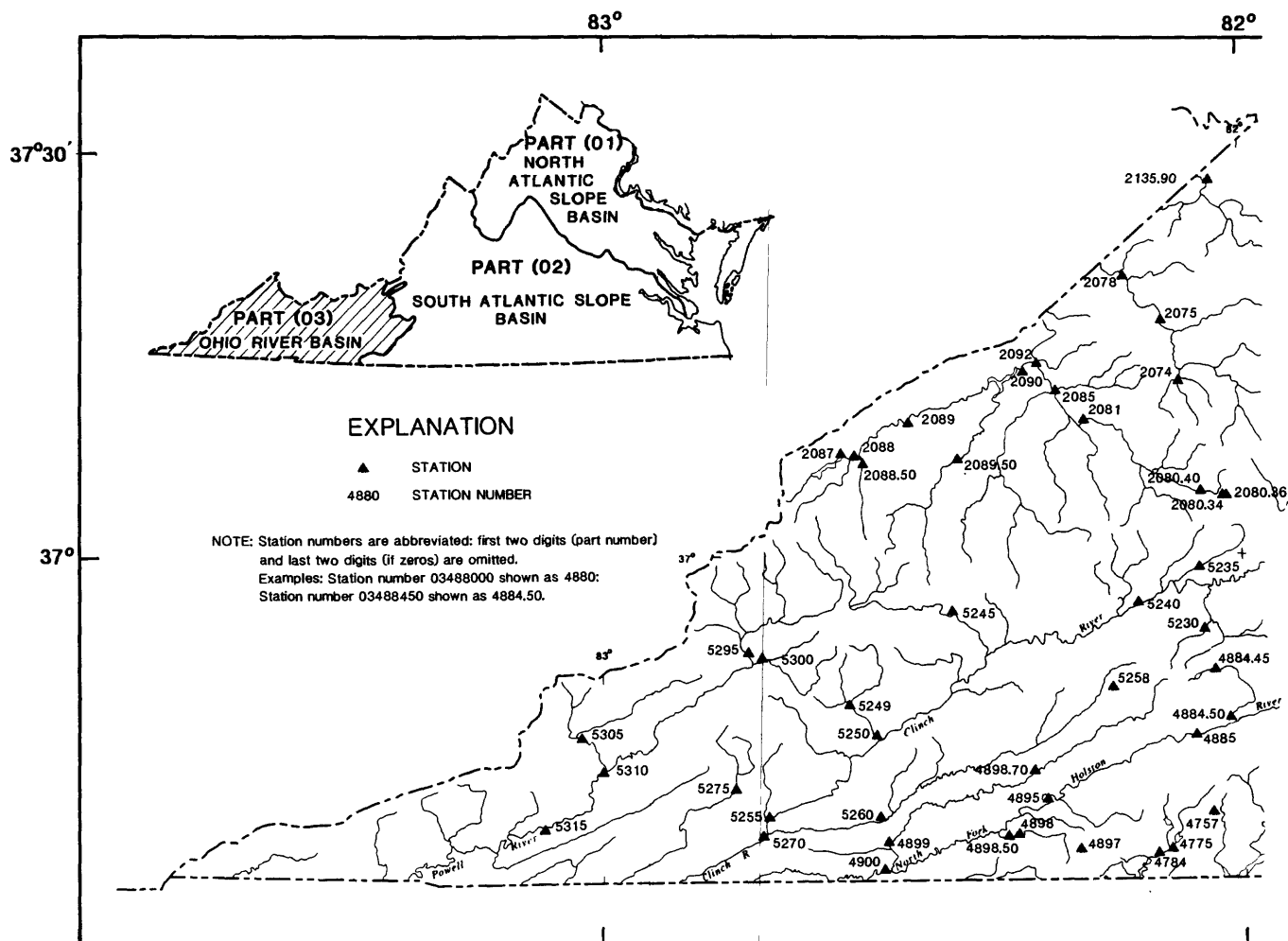
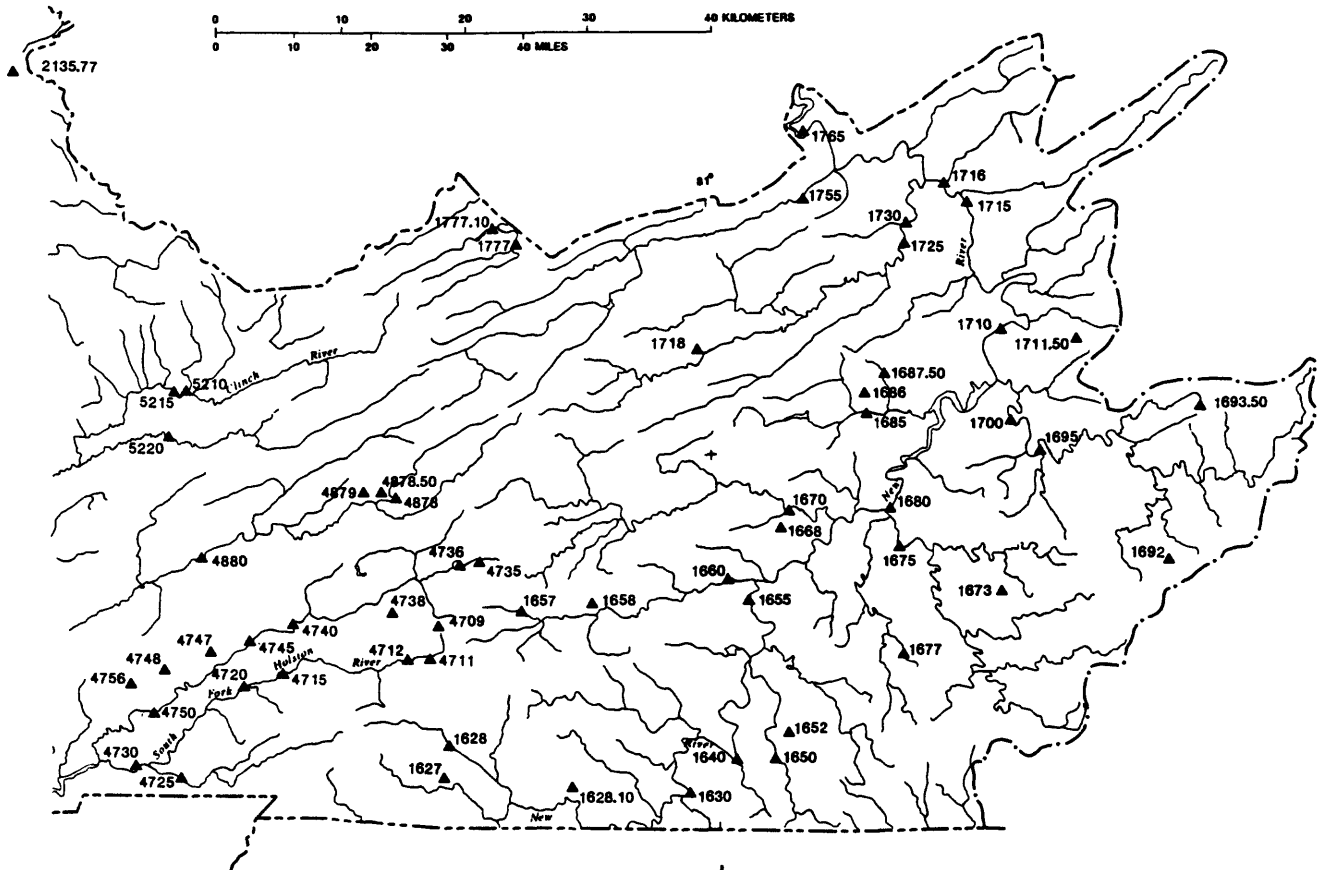


Figure 1.—Location of gaging stations in the Ohio River Basin in Virginia.

81°



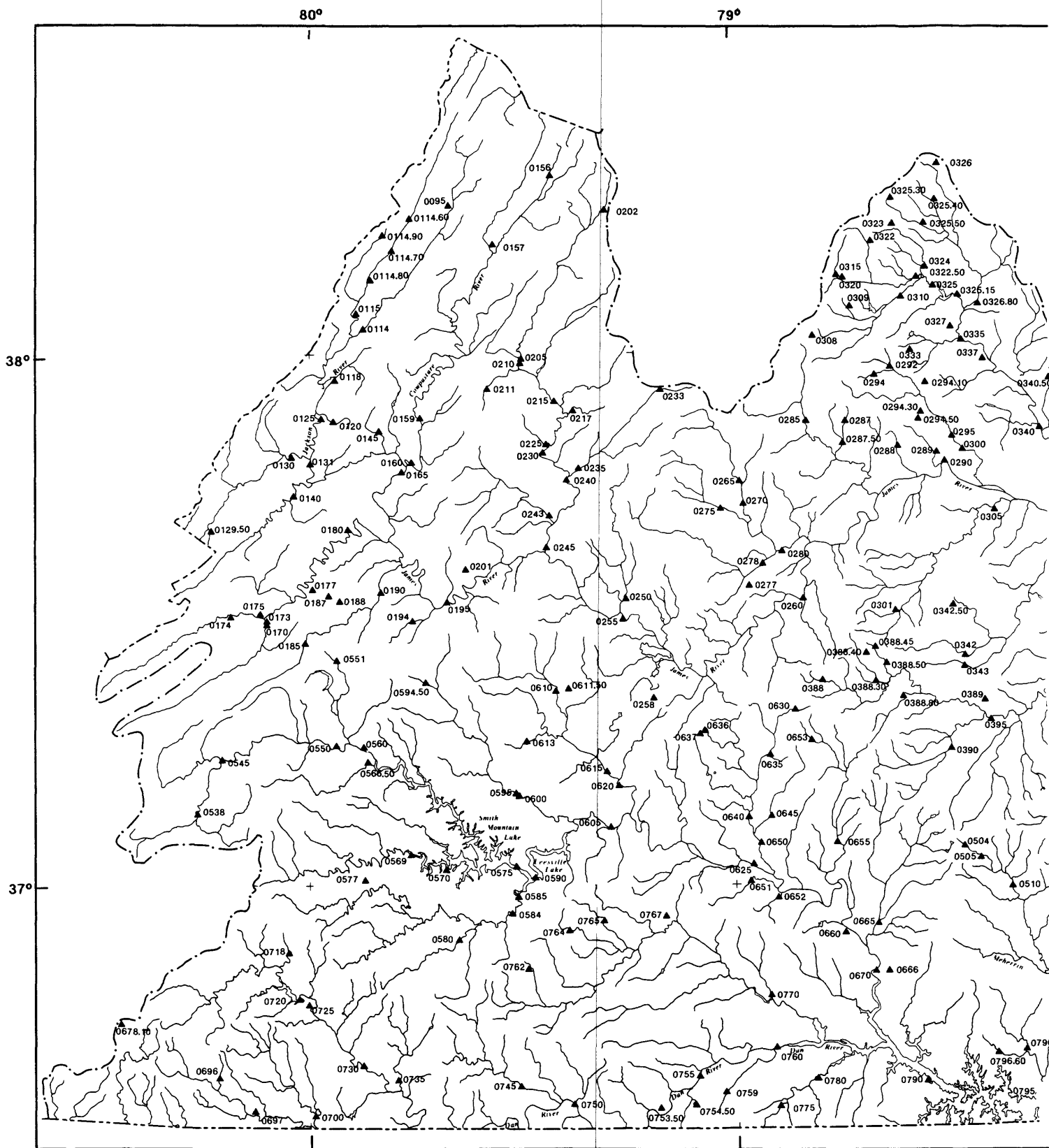
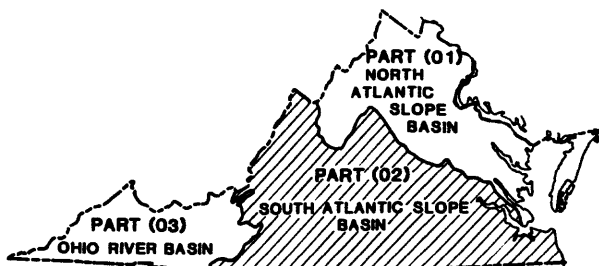


Figure 2.--Location of gaging stations in the South Atlantic Slope basins in Virginia.

78°

77°

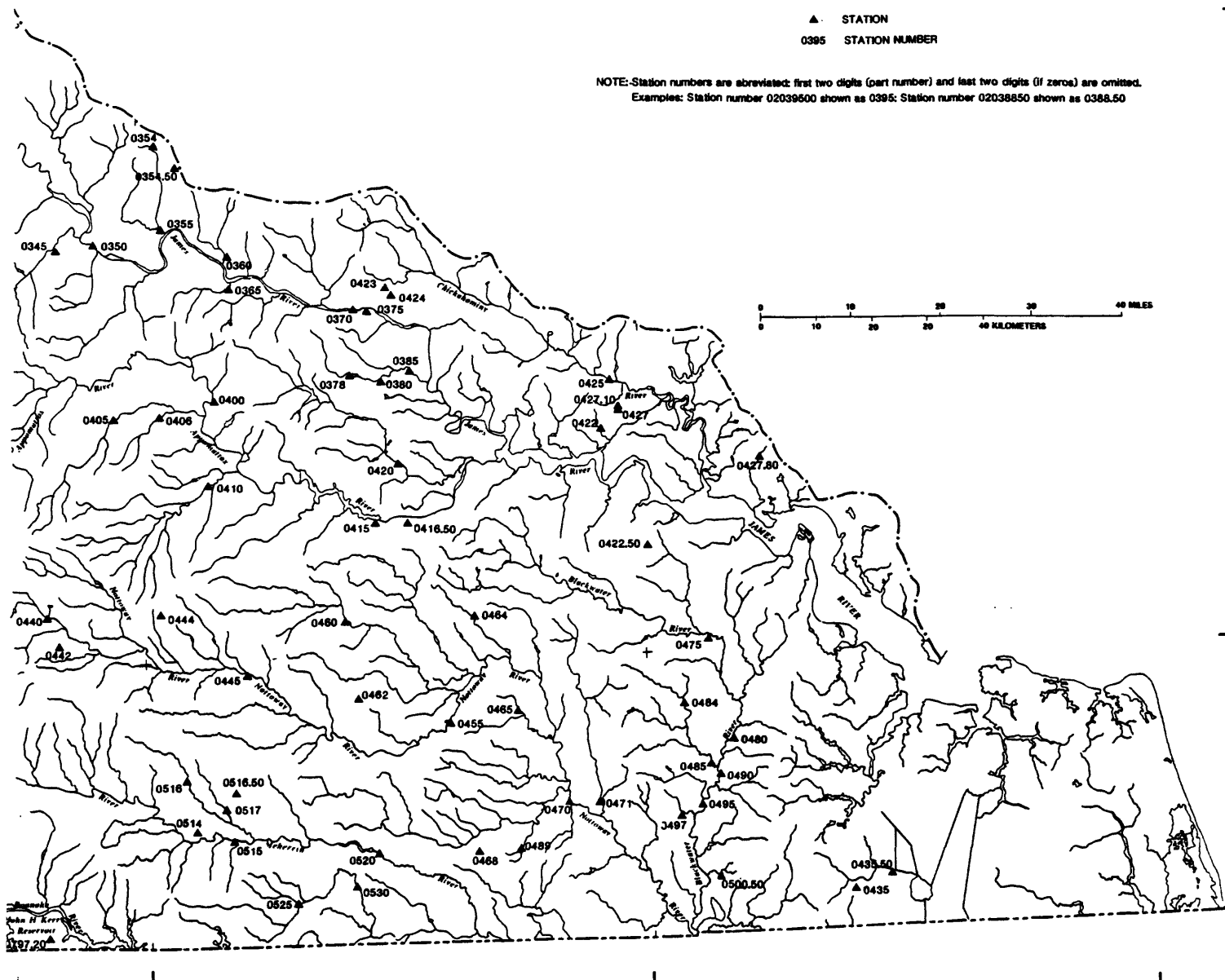
76°



EXPLANATION

- ▲ STATION
0395 STATION NUMBER

NOTE: Station numbers are abbreviated: first two digits (part number) and last two digits (if zeros) are omitted.
Examples: Station number 02039500 shown as 0395; Station number 02038850 shown as 0388.50



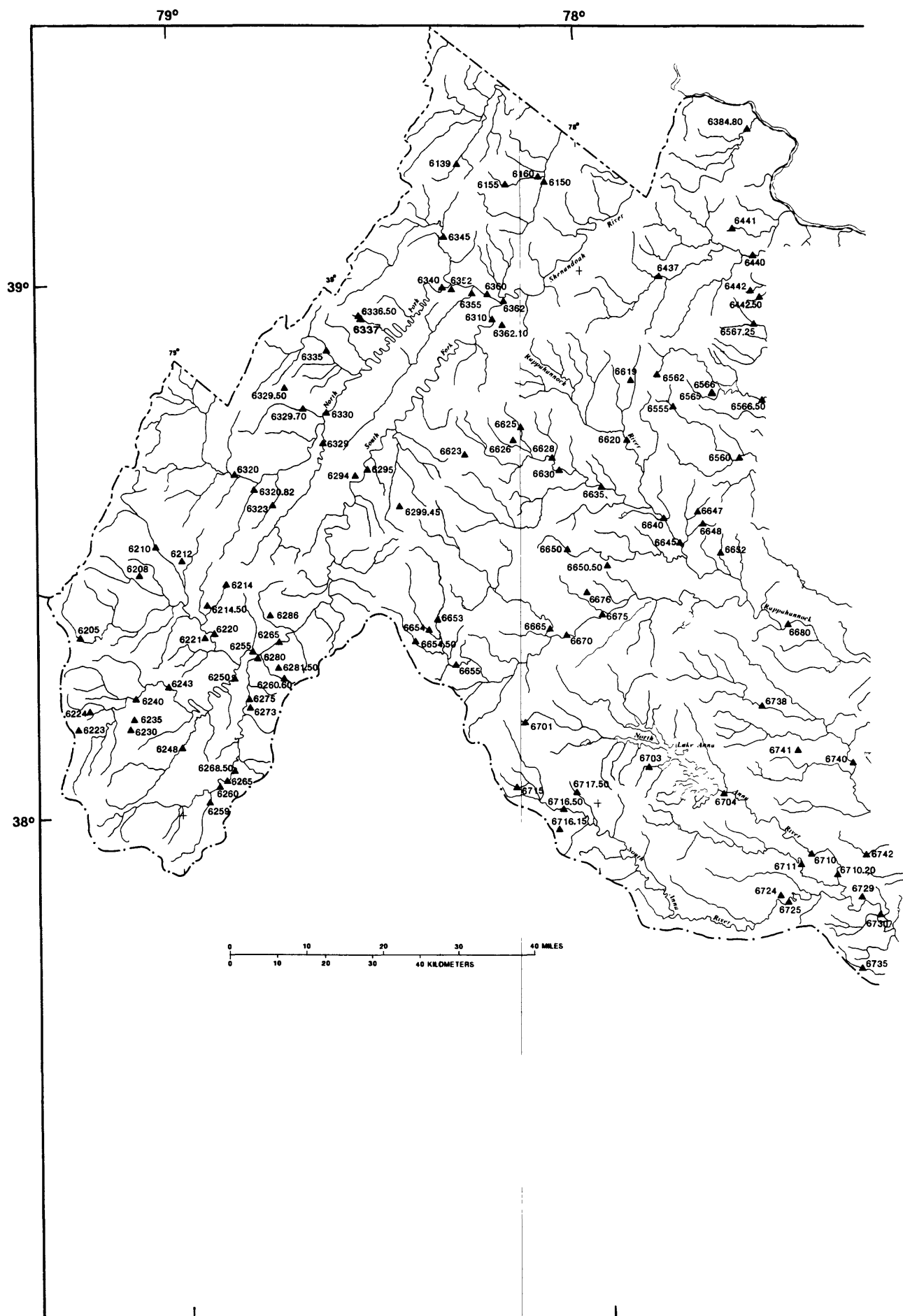
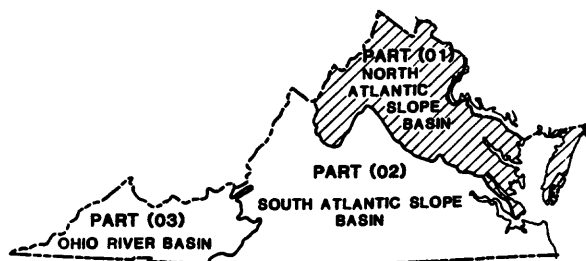


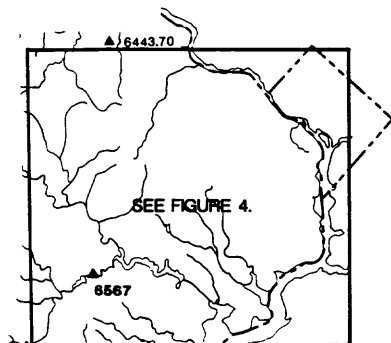
Figure 3.—Location of gaging stations in the North Atlantic Slope basins in Virginia.



EXPLANATION

- ▲ STATION
6680 STATION NUMBER

NOTE: Station numbers abbreviated: first two digits (part number) and last two digits (if zero) are omitted.
Examples: Station number 0166800 shown as 6680; Station number 01665050 shown as 6650.50



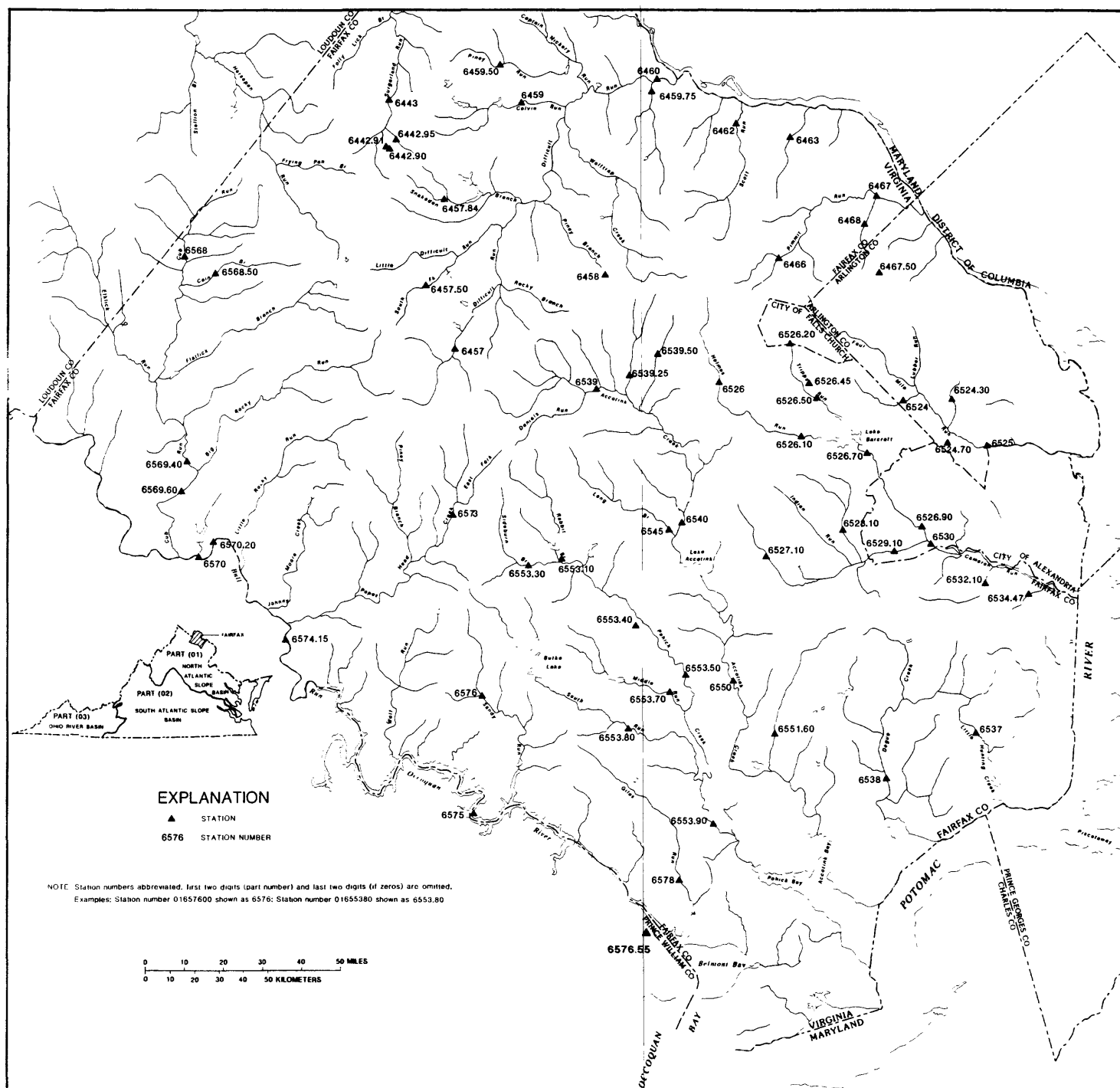


Figure 4.—Location of gaging stations in Fairfax County and vicinity in Virginia.

ANNUAL MAXIMUM STAGES AND DISCHARGES

NASSAWADOX CREEK BASIN

01484800 GUY CREEK NEAR NASSAWADOX, VA

LOCATION.--Lat 37°30'08", long 75°52'22", Northampton County, Hydrologic Unit 02080109, on left bank 25 ft upstream from bridge on State Highway 606, 1.9 mi northwest of Nassawadox, and 2.1 mi upstream from mouth.

DRAINAGE AREA.--1.72 mi².

GAGE.--Water-stage recorder. Datum of gage is 11.67 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 20 ft³/s and extended above.

BANKFULL STAGE.--3 ft.

REMARKS.--Records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1963a	-	b6.2	-	1977	Feb. 27, 1977	2.74	13
1964	Feb. 16, 1964	3.35	27	1978	Mar. 10, 1978	3.63	31
1965	July 10, 1965	3.67	32	1979	July 31, 1979	5.28	78
1966	Feb. 13, 1966	2.78	15	1980	Nov. 12, 1979	3.64	31
1967	June 19, 1967	3.60	31	1981	June 19, 1981	5.12	71
1968	Jan. 14, 1968	3.63	32	1982	Aug. 11, 1982	4.19	42
1969	Aug. 20, 1969	3.30	25	1983	Apr. 24, 1983	3.50	28
1970	July 10, 1970	4.81	60	1984	Feb. 15, 1984	4.22	43
1971	Aug. 27, 1971	3.17	20	1985	Sept. 27, 1985	2.82	13
1972	June 14, 1972	3.85	29	1986	Nov. 30, 1985	2.09	3.7
1973	Feb. 2, 1973	4.47	50	1987	Jan. 19, 1987	3.29	22
1974	Mar. 17, 1974	3.17	19	1988	Apr. 7, 1988	2.07	6.7
1975	Mar. 19, 1975	4.35	46	1989	Aug. 18, 1989	4.55	52
1976	Feb. 2, 1976	3.33	23	1990	Aug. 22, 1990	6.84	171

a Partial year, November through September.

b From information by local residents.

01613900 HOGUE CREEK NEAR HAYFIELD, VA

LOCATION.--Lat 39°12'52", long 78°17'18", Frederick County, Hydrologic Unit 02070004, on right bank 15 ft upstream from bridge on State Highway 614, 0.8 mi upstream from Gap Run, and 1.3 mi southeast of Hayfield.

DRAINAGE AREA.--15.0 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 668.60 ft above National Geodetic Vertical Datum of 1929. Prior to January 1987, water-stage recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 870 ft³/s and extended above.

BANKFULL STAGE.--5 ft.

REMARKS.--Prior to Jan. 1, 1987, records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1961	Apr. 13, 1961	4.34	502	1976	Jan. 1, 1976	6.16	1,110
1962	Mar. 21, 1962	5.01	780	1977	Oct. 9, 1976	7.67	1,880
1963	Mar. 19, 1963	5.27	720	1978	Aug. 6, 1978	8.55	2,680
1964	Nov. 7, 1963	4.18	392	1979	Feb. 25, 1979	5.24	1,060
1965	Mar. 5, 1965	5.32	737	1980	Oct. 2, 1979	5.28	1,100
1966	Sept. 21, 1966	5.87	984	1981	Apr. 13, 1981	2.05	128
1967	Mar. 7, 1967	6.14	1,110	1982	June 13, 1982	6.03	1,380
1968	Mar. 17, 1968	4.67	512	1983	Apr. 24, 1983	4.40	780
1969	July 27, 1969	1.96	41	1984	Feb. 14, 1984	7.62	1,810
1970	July 9, 1970	7.43	1,950	1985	Nov. 28, 1984	5.76	1,010
1971	Nov. 13, 1970	7.18	1,810	1986	Nov. 4, 1985	4.88	709
1972	June 22, 1972	8.85	2,760	1987	Apr. 17, 1987	5.43	896
1973	Dec. 8, 1972	3.83	386	1988	May 6, 1988	5.79	1,020
1974	Dec. 26, 1973	3.97	412	1989	Mar. 6, 1989	3.67	378
1975	Mar. 19, 1975	6.06	1,070	1990	July 13, 1990	2.57	172

POTOMAC RIVER BASIN

01615000 OPEQUON CREEK NEAR BERRYVILLE, VA

LOCATION.--Lat 39°10'40", long 78°04'20", Frederick County, Hydrologic Unit 02070004, on left bank between the bridges on State Highway 7, 0.2 mi upstream from Abrams Creek, and 5.0 mi west of Berryville.

DRAINAGE AREA.--57.4 mi².

GAGE.--Water-stage recorder. Datum of gage is 503.24 ft above National Geodetic Vertical Datum of 1929. Prior to July 26, 1949, nonrecording gage at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 4,990 ft³/s and extended above by logarithmic plotting.

BANKFULL STAGE.--Not determined.

REMARKS.--Subsequent to Sept. 30, 1974, records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1943	October 1942	18.4	-	1967	Mar. 7, 1967	8.97	3,010
1944	May 7, 1944	5.58	995	1968	Dec. 11, 1967	6.62	1,600
1945	Sept. 18, 1945	10.00	3,630	1969	Nov. 18, 1968	4.05	544
1946	Aug. 2, 1946	7.47	1,890	1970	July 9, 1970	5.76	1,040
1947	July 22, 1947	3.43	330	1971	Nov. 13, 1970	12.82	10,600
1948	Aug. 12, 1948	5.53	958	1972	June 22, 1972	12.59	9,870
1949	Dec. 30, 1948	7.87	2,250	1973	Dec. 9, 1972	7.91	2,190
1950	May 18, 1950	9.67	3,470	1974	Dec. 26, 1973	8.08	2,310
1951	Dec. 4, 1950	10.03	3,710	1975	July 21, 1975	10.64	5,270
1952	Apr. 27, 1952	8.48	2,610	1976	Jan. 1, 1976	9.04	3,140
1953	Nov. 21, 1952	9.36	3,230	1977	Oct. 9, 1976	10.88	5,690
1954	Mar. 1, 1954	7.87	2,250	1978	Aug. 7, 1978	9.17	3,300
1955	Aug. 18, 1955	8.61	2,670	1979	Jan. 24, 1979	8.72	2,830
1956	Mar. 14, 1956	5.75	1,140	1980	May 21, 1980	8.27	2,490
1957	Apr. 6, 1957	7.98	2,310	1981	June 3, 1981	5.42	973
1958	Dec. 26, 1957	6.06	1,280	1982	June 13, 1982	8.35	2,530
1959	June 2, 1959	7.47	2,010	1983	Apr. 10, 1983	6.74	1,540
1960	June 3, 1960	8.52	2,610	1984	Feb. 14, 1984	10.56	5,150
1961	Feb. 19, 1961	6.50	1,480	1985	Feb. 12, 1985	9.51	3,610
1962	Mar. 12, 1962	6.44	1,430	1986	Mar. 15, 1986	7.27	1,800
1963	Mar. 20, 1963	7.99	2,310	1987	Apr. 17, 1987	7.82	2,120
1964	Mar. 3, 1964	6.57	1,530	1988	May 18, 1988	13.49	12,600
1965	Mar. 5, 1965	7.62	2,070	1989	May 16, 1989	5.71	1,090
1966	Feb. 13, 1966	7.03	1,830	1990	July 15, 1990	4.45	627

POTOMAC RIVER BASIN

15

01615500 ABRAMS CREEK AT WINCHESTER, VA

LOCATION.--Lat 39°09'50", long 78°10'15", Frederick County, Hydrologic Unit 02070004, at culvert under railroad siding, 400 ft downstream from Loudoun Street, 0.5 mi south of Winchester, and 6.3 mi upstream from mouth.

DRAINAGE AREA.--5.6 mi², approximately.

GAGE.--Nonrecording gage (staff gage). Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 11 ft³/s and extended above.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1946	Oct. 25, 1945	1.10	9.4	1948	Apr. 28, 1948	0.94	5.8
	June 2, 1946	1.10	9.4		May 13, 1948	.94	5.8
1947	Nov. 23, 1946	1.16	5.2	1949	May 10, 1949	1.50	25
	Nov. 26, 1946	1.16	5.2		June 18, 1949	1.50	25
	July 17, 1947	1.16	5.2				
	Aug. 17, 1947	1.16	5.2				

POTOMAC RIVER BASIN

01616000 ABRAMS CREEK NEAR WINCHESTER, VA

LOCATION.--Lat 39°10'40", long 78°05'10", Frederick County, Hydrologic Unit 02070004, on right bank 1,000 ft upstream from bridge on State Highway 659, 0.9 mi upstream from mouth, and 4.4 mi east of Winchester.

DRAINAGE AREA.--16.5 mi².

GAGE.--Water-stage recorder. Datum of gage is 526.46 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 894 ft³/s and extended above by logarithmic plotting.

BANKFULL STAGE.--4 ft.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1950	May 5, 1950	3.20	216	1979	July 20, 1979	4.28	509
1951	Dec. 4, 1950	6.16	962	1980	May 21, 1980	4.18	487
1952	Apr. 27, 1952	4.20	458	1981	July 28, 1981	3.94	435
1953	Nov. 21, 1952	4.74	590	1982	June 13, 1982	4.63	582
1954	Mar. 1, 1954	3.87	379	1983	Apr. 3, 1983	3.48	347
1955	Aug. 18, 1955	4.96	650	1984	Feb. 14, 1984	5.34	982
1956	July 5, 1956	2.96	192	1985	Feb. 12, 1985	4.83	829
1957	Apr. 6, 1957	2.83	168	1986	Aug. 17, 1986	4.22	658
1958	Feb. 27, 1958	2.85	182	1987	Sept. 8, 1987	5.72	1,100
1959	June 2, 1959	4.57	542	1988	May 18, 1988	6.14	1,220
1960	June 3, 1960	3.26	256	1989	Mar. 6, 1989	3.41	433
1979	July 20, 1979	4.28	509	1990	Aug. 5, 1990	3.01	329

01620500 NORTH RIVER NEAR STOKESVILLE, VA

LOCATION.--Lat 38°20'15", long 79°14'25", Augusta County, Hydrologic Unit 02070005, George Washington National Forest, on left bank 575 ft upstream from highway bridge, 2.8 mi upstream from city of Staunton dam, 3.8 mi upstream from Broad Run, 5.0 mi west of Stokesville, and 7.8 mi upstream from Skidmore Fork.

DRAINAGE AREA.--17.2 mi².

GAGE.--Water-stage recorder. Datum of gage is 2,054.57 ft above National Geodetic Vertical Datum of 1929. Prior to June 10, 1958, at site 575 ft downstream at datum 6.0 ft lower.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 900 ft³/s and extended above on basis of flow-over-dam measurement of 11,000 ft³/s at Staunton Dam, 2.8 mi downstream. Peak flow for flood of November 1985 determined from slope-area measurement of 5,030 ft³/s made 3.8 mi upstream and adjusted for drainage area difference.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1942	October 1942	a8.4	-	1969	Nov. 18, 1968	3.13	227
1947	Mar. 14, 1947	4.07	326	1970	Dec. 31, 1969	3.65	465
1948	Feb. 14, 1948	3.65	299	1971	May 30, 1971	6.58	1,700
1949	June 17, 1949	10.9	9,530	1972	June 21, 1972	5.86	1,650
1950	Sept. 13, 1950	2.68	908	1973	Oct. 5, 1972	6.58	2,400
1951	Dec. 7, 1950	5.6	1,650	1974	Dec. 26, 1973	5.82	1,640
1952	Mar. 11, 1952	4.30	685	1975	Mar. 19, 1975	5.42	1,290
1953	Feb. 21, 1953	4.32	697	1976	Jan. 1, 1976	3.58	275
1954	Mar. 1, 1954	6.78	1,850	1977	Oct. 9, 1976	4.97	939
1955	Aug. 18, 1955	4.64	888	1978	Jan. 26, 1978	5.36	1,230
1956	Mar. 15, 1956	3.37	179	1979	Sept. 5, 1979	6.74	3,060
1957	Apr. 5, 1957	4.68	930	1980	Apr. 9, 1980	-	390
1958	Apr. 7, 1958	3.87	404	1981	May 20, 1981	3.63	210
1959	June 2, 1959	4.12	712	1982	Mar. 20, 1982	4.26	496
1960	May 28, 1960	4.87	1,250	1983	Apr. 15, 1983	3.90	373
1961	Feb. 25, 1961	3.79	386	1984	Feb. 14, 1984	4.20	528
1962	Mar. 21, 1962	3.81	395	1985	Nov. 28, 1984	3.42	229
1963	Mar. 12, 1963	3.88	441	1986	Nov. 5, 1985	b19.80	7,600
1964	Mar. 5, 1964	4.04	662	1987	Apr. 17, 1987	6.66	2,440
1965	Feb. 7, 1965	3.60	440	1988	May 7, 1988	4.83	315
1966	Feb. 13, 1966	3.92	600	1989	June 20, 1989	5.31	657
1967	Mar. 7, 1967	4.69	1,110	1990	May 29, 1990	4.97	374
1968	May 28, 1968	3.80	540				

a From information by local resident.

b Affected by backwater from Elkhorn Lake 0.6 mi downstream.

01620800 BRIERY BRANCH TRIBUTARY NEAR SPRING CREEK, VA

LOCATION.--Lat 38°26'45", long 79°06'15", Rockingham County, Hydrologic Unit 02070005, at culvert on State Highway 257, 4.9 mi northwest of Spring Creek.

DRAINAGE AREA.--0.084 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined. Prior to Nov. 5, 1969, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Not developed.

BANKFULL STAGE.--1.5 ft.

REMARKS.--Insufficient field data available to develop stage-discharge rating.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1966	Feb. 28, 1966	4.70	-	1970	-	<2.27	-
1967	Mar. 7, 1967	4.61	-	1971	May 30, 1971	2.97	-
1968	-	<3.00	-	1972	-	<2.27	-
1969	-	<2.77	-				

< Less than.

01621000 DRY RIVER AT RAWLEY SPRINGS, VA

LOCATION.--Lat 38°30'10", long 79°03'14", Rockingham County, Hydrologic Unit 02070005, at downstream side of bridge at Rawley Springs, 1.25 mi downstream from Rock Run, 9.0 mi upstream from North River, and 11 mi west of Harrisonburg.

DRAINAGE AREA.--72.6 mi², approximately.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,606.42 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,000 ft³/s and extended above on basis of slope-area measurements at 4,670 ft³/s and 6,900 ft³/s.

BANKFULL STAGE.--6 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1943	October 1942	a10.5	13,000	1962	Mar. 21, 1962	4.07	1,700
1947	Mar. 14, 1947	3.90	1,560	1963	Mar. 12, 1963	4.18	1,850
1948	Feb. 14, 1948	3.74	1,290	1964	Mar. 3, 1964	4.47	2,100
1949	June 17, 1949	6.5	4,670	1965	Feb. 7, 1965	4.30	1,950
1950	Sept. 13, 1950	4.96	2,650	1966	Feb. 13, 1966	3.95	1,650
1951	Dec. 7, 1950	6.2	4,250	1967	Mar. 7, 1967	4.71	2,370
1952	Mar. 10, 1952	5.16	2,900	1968	May 28, 1968	4.24	1,850
1953	Mar. 23, 1953	4.73	2,400	1969	July 21, 1969	3.29	1,030
1954	Mar. 1, 1954	5.28	3,100	1970	Dec. 31, 1969	3.85	1,520
1955	Aug. 18, 1955	7.76	6,900	1971	May 30, 1971	5.05	2,760
1956	Mar. 15, 1956	3.87	1,470	1972	Oct. 24, 1971	3.62	1,310
1957	Apr. 5, 1957	4.88	2,580	1973	Oct. 5, 1972	6.60	4,900
1958	Apr. 23, 1958	3.48	900	1974	Dec. 26, 1973	5.05	2,760
1959	June 2, 1959	4.77	2,400	1975	Mar. 19, 1975	5.06	2,770
1960	May 8, 1960	5.44	3,200	1986	Nov. 4, 1985	b12.3	20,000
1961	Feb. 25, 1961	4.22	1,850				

a From information by local residents.

b From information by Virginia Department of Transportation.

01621200 WAR BRANCH NEAR HINTON, VA

LOCATION.--Lat 38°28'28", long 78°59'14", Rockingham County, Hydrologic Unit 02070005, at bridge on U.S. Highway 33, 100 ft upstream from Buttermilk Run, and 1.0 mi northwest of Hinton.

DRAINAGE AREA.--9.45 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,349.09 ft above National Geodetic Vertical Datum of 1929. July 26, 1965, to Nov. 2, 1973, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 125 ft³/s and extended above on basis of slope-area measurement at 570 ft³/s and contracted-opening measurement at 2,290 ft³/s.

BANKFULL STAGE.--4 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1949	Aug. 15, 1949	6.7	2,500	1963	Mar. 12, 1963	2.82	395
1950	Sept. 13, 1950	4.05	850	1964	Mar. 3, 1964	2.40	285
1951	Dec. 7, 1950	3.1	490	1965	Feb. 7, 1965	3.46	620
1952	May 12, 1952	4.05	850	1966	Aug. 9, 1966	3.98	820
1953	Mar. 23, 1953	2.88	420	1967	Aug. 7, 1967	3.93	780
1954	Mar. 1, 1954	2.18	235	1968	Mar. 12, 1968	2.82	390
1955	Aug. 18, 1955	6.44	2,290	1969	July 20, 1969	5.00	1,370
1956	Mar. 15, 1956	1.91	175	1970	-	<1.70	<140
1957	Apr. 5, 1957	2.74	380	1971	June 23, 1971	4.03	835
1958	July 27, 1958	3.45	600	1972	June 21, 1972	3.70	700
1959	June 2, 1959	3.35	570	1973	May 28, 1973	3.63	672
1960	May 8, 1960	3.50	625	1974	Dec. 26, 1973	3.58	652
1961	Feb. 25, 1961	2.45	295	1975	Mar. 19, 1975	4.04	840
1962	Mar. 21, 1962	2.47	300	1976	Dec. 31, 1975	3.29	546

< Less than.

POTOMAC RIVER BASIN

01621400 BLACKS RUN AT HARRISONBURG, VA

LOCATION.--Lat 38°25'52", long 79°53'02", Rockingham County, Hydrologic Unit 02070005, at bridge on U.S. Highway 11 at south edge of Harrisonburg.

DRAINAGE AREA.--5.52 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,260 ft above National Geodetic Vertical Datum of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 75 ft³/s and extended above on basis of slope-area measurement at 430 ft³/s and contracted-opening measurement at 1,000 ft³/s.

BANKFULL STAGE.--6 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1949	Aug. 15, 1949	11.20	1,920	1956	Mar. 15, 1956	4.00	320
1950	Sept. 13, 1950	6.06	710	1957	Apr. 5, 1957	3.65	235
1951	Dec. 7, 1950	5.3	570	1958	July 28, 1958	4.30	385
1952	Dec. 21, 1951	4.85	490	1959	Sept. 30, 1959	4.89	500
1953	Mar. 23, 1953	4.80	485	1960	May 8, 1960	5.20	555
1954	Mar. 1, 1954	4.04	325	1961	Feb. 25, 1961	4.96	515
1955	Oct. 15, 1954	8.05	990				

POTOMAC RIVER BASIN

01621450 BLACKS RUN TRIBUTARY NO. 1 NEAR HARRISONBURG, VA

LOCATION.--Lat 38°23'30", long 78°55'05", Rockingham County, Hydrologic Unit 02070005, at culvert on U.S. Highway 11, 4.9 mi southwest of Harrisonburg.

DRAINAGE AREA.--0.72 mi².

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is 1,189.31 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert and flow over road.

BANKFULL STAGE.--5 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1966	Feb. 28, 1966	5.13	30	1971	Feb. 13, 1971	5.95	38
1967	Mar. 7, 1967	5.65	35	1972	June 22, 1972	6.80	114
1968	Mar. 12, 1968	4.13	20	1973	Oct. 5, 1972	5.75	37
1969	July 6, 1969	7.30	230	1974	Dec. 26, 1973	5.21	31
1970	May 23, 1970	6.50	59	1975	Mar. 19, 1975	6.48	55

01622000 NORTH RIVER NEAR BURKETOWN, VA

LOCATION.--Lat 38°20'25", long 78°54'50", Rockingham County, Hydrologic Unit 02070005, on right bank 0.8 mi downstream from Pleasant Run, 2.8 mi northeast of Burkettown, and 8.5 mi upstream from Middle River.

DRAINAGE AREA.--379 mi².

GAGE.--Water-stage recorder. Datum of gage is 1,103.49 ft above National Geodetic Vertical Datum of 1929.

Prior to Dec. 12, 1938, nonrecording gage at site 3.0 mi downstream at different datum.

STAGE-DISCHARGE RELATION.--Prior to Dec. 13, 1938, defined by current-meter measurements below 5,100 ft³/s and extended on basis of comparative records at recording site. Defined by current-meter measurements below 15,900 ft³/s and extended above on basis of slope-area measurement at gage heights 32.4 ft and 36.3 ft, and contracted-opening measurements at gage heights 35.85 ft and 36.3 ft.

BANKFULL STAGE.--7 ft.

REMARKS.--Peaks are from graphs based on gage readings prior to Dec. 12, 1938, unless otherwise noted. Maximum stage since at least 1852, that of June 18, 1949. Subsequent to May 31, 1975, records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1924	May 1924	a22.5	26,000	1957	Apr. 5, 1957	12.67	8,320
1927	Nov. 16, 1926	10.3	7,440	1958	May 25, 1958	6.94	2,900
1928	Aug. 16, 1928	9.5	6,730	1959	June 2, 1959	14.60	10,600
1929	Apr. 16, 1929	10.0	7,170	1960	May 28, 1960	14.83	10,800
1930	Oct. 22, 1929	9.80	7,010	1961	Feb. 26, 1961	8.61	4,320
1931	July 23, 1931	7.58	5,090	1962	Mar. 21, 1962	8.80	4,500
1932	Mar. 28, 1932	7.5	4,980	1963	Mar. 12, 1963	11.40	6,900
1933	Apr. 17, 1933	11.5	8,550	1964	Mar. 5, 1964	10.32	5,850
1934	Sept. 16, 1934	8.5	5,850	1965	Feb. 7, 1965	11.60	7,110
1935	Dec. 1, 1934	19.5	19,100	1966	Feb. 13, 1966	8.20	3,960
1936	Mar. 17, 1936	26.70	37,000	1967	Mar. 7, 1967	13.90	9,720
1937	Apr. 26, 1937	15.0	12,600	1968	May 28, 1968	8.64	4,410
1938	Oct. 19, 1937	12.0	9,050	1969	Aug. 1, 1969	10.35	5,900
1939	July 30, 1939	15.2	10,500	1970	May 24, 1970	10.24	5,800
1940	June 14, 1940	16.07	11,500	1971	May 30, 1971	14.26	10,200
1941	Apr. 5, 1941	7.76	3,390	1972	June 22, 1972	16.58	12,900
1942	May 22, 1942	23.37	22,600	1976	Jan. 1, 1976	10.02	5,580
1943	Oct. 15, 1942	32.4	43,000	1977	Oct. 9, 1976	-	9,000
1944	May 7, 1944	9.77	5,100	1978	Jan. 26, 1978	14.89	10,900
1945	Sept. 18, 1945	15.38	10,700	1979	Sept. 6, 1979	14.27	10,200
1946	May 4, 1946	6.65	2,510	1980	Oct. 3, 1979	13.00	8,650
1947	July 17, 1947	8.48	3,950	1981	July 5, 1981	7.37	3,280
1948	Feb. 14, 1948	9.40	4,740	1982	June 13, 1982	11.98	7,530
1949	June 18, 1949	36.3	62,600	1983	Apr. 15, 1983	10.36	5,900
1950	Sept. 13, 1950	13.35	8,650	1984	Mar. 29, 1984	11.94	7,480
1951	Dec. 7, 1950	16.56	12,100	1985	Feb. 12, 1985	9.23	4,890
1952	Mar. 11, 1952	14.73	9,970	1986	Nov. 5, 1985	35.85	65,000
1953	Mar. 24, 1953	13.16	8,450	1987	Apr. 17, 1987	14.36	10,300
1954	Mar. 1, 1954	14.30	9,550	1988	May 6, 1988	7.13	3,080
1955	Aug. 18, 1955	21.04	18,600	1989	Aug. 25, 1989	8.83	4,530
1956	Mar. 15, 1956	5.28	1,760	1990	May 29, 1990	6.68	2,720

a From information by local residents.

POTOMAC RIVER BASIN

01622100 NORTH RIVER TRIBUTARY NEAR MOUNT CRAWFORD, VA

LOCATION.--Lat 38°19'55", long 78°56'20", Rockingham County, Hydrologic Unit 02070005, at culvert on U.S. Highway 11, 1.7 mi south of Mount Crawford.

DRAINAGE AREA.--1.55 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,132.55 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 27, 1974, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--5 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1966	Feb. 28, 1966	2.75	21	1971	Feb. 13, 1971	4.47	74
1967	Aug. 7, 1967	3.68	46	1972	June 22, 1972	3.70	52
1968	Mar. 12, 1968	3.12	34	1973	Oct. 5, 1972	5.72	146
1969	July 6, 1969	5.13	115	1974	Dec. 26, 1973	4.45	82
1970	Dec. 30, 1969	3.20	31	1975	Mar. 19, 1975	5.04	112

POTOMAC RIVER BASIN

01622300 BUFFALO BRANCH TRIBUTARY NO. 1 NEAR AUGUSTA SPRINGS, VA

LOCATION.--Lat 38°09'42", long 79°16'08", Augusta County, Hydrologic Unit 02070005, at culvert on State Highway 42, 5.0 mi northeast of Augusta Springs.

DRAINAGE AREA.--0.55 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 2,020 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Nov. 1, 1973, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--8 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1967	Mar. 7, 1967	3.33	36	1972	June 21, 1972	3.92	62
1968	May 27, 1968	3.37	38	1973	Oct. 5, 1972	4.50	91
1969	Aug. 20, 1969	4.40	86	1974	Dec. 26, 1973	4.35	84
1970	Dec. 31, 1969	3.30	35	1975	Mar. 19, 1975	3.84	58
1971	May 30, 1971	3.60	47	1976	Dec. 31, 1975	3.42	40

01622400 BUFFALO BRANCH TRIBUTARY NO. 2 NEAR CHRISTIAN, VA

LOCATION.--Lat 38°11'55", long 79°13'10", Augusta County, Hydrologic Unit 02070005, at culvert on State Highway 42, 1.3 mi north of Christian.

DRAINAGE AREA.--0.49 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,622.53 ft above National Geodetic Vertical Datum of 1929. Prior to Aug. 17, 1978, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--5 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1967	Aug. 23, 1967	4.08	70	1979	Sept. 22, 1979	>5.55	-
1968	Aug. 15, 1968	3.32	40	1980	Oct. 10, 1979	4.81	104
1969	-	<3.0	<30	1981	Feb. 20, 1981	3.18	35
1970	Dec. 31, 1969	3.60	51	1982	Mar. 20, 1982	4.36	81
1971	May 30, 1971	3.45	45	1983	Mar. 19, 1983	2.92	28
1972	June 21, 1972	3.37	42	1984	Mar. 29, 1984	2.94	28
1973	May 28, 1973	4.25	77	1985	-	<2.78	<23
1974	May 12, 1974	4.80	103	1986	Nov. 4, 1985	6.96	211
1975	Mar. 19, 1975	5.18	122	1987	Apr. 16, 1987	3.94	65
1976	Dec. 31, 1975	3.35	41	1988	-	<2.78	<23
1977	Oct. 9, 1976	3.65	53	1989	May 2, 1989	3.26	33
1978	Jan. 26, 1978	3.92	64	1990	Oct. 19, 1989	3.57	50

< Less than.

> Greater than.

POTOMAC RIVER BASIN

01623000 BELL CREEK AT ST. PAULS CHAPEL, NEAR STAUNTON, VA

LOCATION.--Lat 38°10'00", long 79°07'35", Augusta County, Hydrologic Unit 02070005, on right bank 400 ft upstream from culvert on State Highway 720, 500 ft southwest of St. Pauls Chapel, and 3.0 mi west of Staunton.

DRAINAGE AREA.--0.61 mi².

GAGE.--Water-stage recorder and V-notch sharp-crested weir. Datum of gage is 1,520 ft above National Geodetic Vertical Datum of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter and volumetric measurements below 7.34 ft³/s and extended above on basis of slope-area measurement at 193 ft³/s.

BANKFULL STAGE.--Not determined.

REMARKS.--Records of daily discharge were provided by the U.S. Department of Agriculture, Soil Conservation Service. Discharge measurements were made, stage-discharge relations determined, and discharge records reviewed by the U.S. Geological Survey.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1948a	June 22, 1948	1.23	6.0	1952	Mar. 11, 1952	1.27	7.7
1949	Apr. 13, 1949	1.86	193	1953	Mar. 25, 1953	.91	.61
1950	Nov. 1, 1949	1.37	13	1954	June 8, 1954	1.05	1.9
1951	Apr. 12, 1951	1.10	2.6	1955	Oct. 15, 1954	2.12	306

a Partial year, May through September.

POTOMAC RIVER BASIN

01623500 BELL CREEK NEAR STAUNTON, VA

LOCATION.--Lat 38°11'00", long 79°07'05", Augusta County, Hydrologic Unit 02070005, on left bank 1.2 mi upstream from bridge on U.S. Highway 250 and 3.2 mi northwest of Staunton.

DRAINAGE AREA.--3.8 mi².

GAGE.--Water-stage recorder and V-notch sharp-crested weir. Datum of gage is 1,470 ft above National Geodetic Vertical Datum of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter and volumetric measurements below 8.87 ft³/s and extended above on basis of slope-area measurement at 630 ft³/s.

BANKFULL STAGE.--Not determined.

REMARKS.--Records of daily discharge were provided by the U.S. Department of Agriculture, Soil Conservation Service. Discharge measurements were made, stage-discharge relations determined, and discharge records reviewed by the U.S. Geological Survey.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1948a	May 14, 1948	0.87	0.21	1952	Mar. 11, 1952	1.55	21
1949	June 20, 1949	2.74	722	1953	Mar. 25, 1953	1.47	14
1950	Nov. 1, 1949	1.78	52	1954	Mar. 1, 1954	1.38	8.2
1951	July 25, 1951	1.69	37	1955	Feb. 6, 1955	2.05	132

a Partial year, May through September.

POTOMAC RIVER BASIN

25

01624000 BELL CREEK AT FRANKS MILL, NEAR STAUNTON, VA

LOCATION.--Lat 38°13'10", long 79°06'35", Augusta County, Hydrologic Unit 02070005, on right bank 0.3 mi southwest of Franks Mill, 0.4 mi upstream from mouth, and 5.0 mi northwest of Staunton.

DRAINAGE AREA.--9.6 mi², approximately.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,350 ft above National Geodetic Vertical Datum of 1929, by barometer.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 157 ft³/s and extended above on basis of slope-area measurement at 840 ft³/s.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1948a	June 22, 1948	1.49	34	1953	Mar. 25, 1953	2.34	123
1949	June 28, 1949	4.86	912	1954	Mar. 1, 1954	1.96	76
1950	Nov. 1, 1949	2.26	112	1955	Aug. 18, 1955	3.77	602
1951	July 25, 1951	4.10	840	1956	Mar. 15, 1956	1.21	18
1952	Mar. 11, 1952	2.64	169				

a Partial year, May through September.

POTOMAC RIVER BASIN

01624300 MIDDLE RIVER NEAR VERONA, VA

LOCATION.--Lat 38°14'36", long 79°02'08", Augusta County, Hydrologic Unit 02070005, on right bank at downstream side of bridge on State Highway 742, 2.7 mi downstream from Moffett Creek, and 3.2 mi northwest of Verona.

DRAINAGE AREA.--178 mi².

GAGE.--Water-stage recorder. Datum of gage is 1,260.78 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 6,410 ft³/s and extended above on basis of slope-area measurement at 45,000 ft³/s.

BANKFULL STAGE.--Not determined.

REMARKS.--Records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1968	May 27, 1968	6.71	2,120	1978	Jan. 26, 1978	12.27	6,630
1969	Aug. 20, 1969	9.42	3,790	1979	Sept. 6, 1979	14.17	8,650
1970	Dec. 31, 1969	8.74	3,300	1980	Oct. 2, 1979	11.65	5,980
1971	May 30, 1971	13.79	7,220	1981	Feb. 11, 1981	4.67	1,130
1972	June 21, 1972	13.10	6,590	1982	June 13, 1982	11.49	5,820
1973	Oct. 5, 1972	13.26	6,770	1983	Apr. 24, 1983	8.45	3,300
1974	Dec. 26, 1973	10.50	4,560	1984	Mar. 29, 1984	7.81	2,850
1975	Mar. 19, 1975	13.11	7,440	1985	Aug. 18, 1985	7.39	2,560
1976	Jan. 1, 1976	8.47	3,160	1986	Nov. 5, 1985	24.29	45,000
1977	Oct. 9, 1976	11.35	5,740				

01624800 CHRISTIANS CREEK NEAR FISHERSVILLE, VA

LOCATION.--Lat 38°07'42", long 78°59'41", Augusta County, Hydrologic Unit 02070005, on right bank at upstream side of bridge on State Highway 794, 2.2 mi northwest of Fishersville, and 12 mi upstream from mouth.

DRAINAGE AREA.--70.1 mi².

GAGE.--Water-stage recorder. Datum of gage is 1,230 ft above National Geodetic Vertical Datum of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 2,360 ft³/s and extended above.

BANKFULL STAGE.--Not determined.

REMARKS.--Records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1968	Mar. 12, 1968	6.22	685	1980	Oct. 1, 1979	10.50	2,880
1969	Aug. 20, 1969	12.78	3,800	1981	Sept. 6, 1981	4.25	618
1970	Dec. 31, 1969	8.72	1,790	1982	Mar. 20, 1982	7.79	1,830
1971	May 30, 1971	11.79	3,240	1983	Mar. 19, 1983	10.82	3,030
1972	June 21, 1972	12.50	3,630	1984	Mar. 29, 1984	10.87	3,060
1973	Oct. 5, 1972	12.91	3,850	1985	Feb. 12, 1985	6.77	1,490
1974	Dec. 26, 1973	9.65	2,180	1986	Nov. 4, 1985	13.58	4,520
1975	Mar. 19, 1975	11.45	3,020	1987	Apr. 17, 1987	11.10	3,170
1976	Dec. 31, 1975	9.12	2,180	1988	Jan. 20, 1988	4.41	742
1977	Oct. 9, 1976	12.14	3,680	1989	May 1, 1989	10.80	3,020
1978	Jan. 26, 1978	10.76	3,020	1990	Oct. 17, 1989	11.35	3,290
1979	Sept. 21, 1979	10.92	3,070				

01625000 MIDDLE RIVER NEAR GROTTOS, VA

LOCATION.--Lat 38°15'42", long 78°51'44", Augusta County, Hydrologic Unit 02070005, on left bank at upstream side of bridge on State Highway 769 at Mount Meridian, 1.8 mi upstream from mouth, and 2.0 mi west of Grottoes.

DRAINAGE AREA.--375 mi².

GAGE.--Water-stage recorder. Datum of gage is 1,061.51 ft above National Geodetic Vertical Datum of 1929.

Prior to Sept. 1, 1938, nonrecording gage at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 14,500 ft³/s and extended above on basis of slope-area measurement at 38,500 ft³/s.

BANKFULL STAGE.--8 ft.

REMARKS.--Peaks are from graphs based on gage readings prior to Sept. 1, 1938. Flood of Mar. 18, 1936, was considered by local opinion to have been the highest since 1877. However, flood of Nov. 5, 1985, is now the highest on record. Subsequent to Sept. 30, 1981, records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1924	May 1924	22.8	16,200	1959	June 3, 1959	9.68	3,230
1928	Aug. 17, 1928	12.9	5,740	1960	May 28, 1960	12.67	5,580
1929	Apr. 16, 1929	13.3	6,090	1961	Apr. 13, 1961	9.52	3,090
1930	Oct. 2, 1929	9.3	2,950	1962	Oct. 21, 1961	16.98	9,560
1931	Aug. 23, 1931	8.7	2,530	1963	Mar. 12, 1963	14.53	7,170
1932	Mar. 28, 1932	11.0	4,220	1964	Jan. 25, 1964	8.98	2,800
1933	Oct. 18, 1932	17.0	9,560	1965	Feb. 8, 1965	9.71	3,230
1934	Mar. 3, 1934	11.0	4,220	1966	Feb. 14, 1966	8.20	2,320
1935	Dec. 1, 1934	20.6	13,500	1967	Mar. 7, 1967	15.24	7,840
1936	Mar. 18, 1936	28.57	24,500	1968	Dec. 11, 1967	9.49	2,520
1937	Apr. 26, 1937	17.13	9,660	1969	Aug. 20, 1969	13.04	5,860
1938	Oct. 20, 1937	16.1	8,660	1970	Dec. 31, 1969	12.76	5,600
1939	Feb. 4, 1939	12.15	5,310	1971	May 30, 1971	18.70	11,200
1940	Aug. 16, 1940	19.81	12,500	1972	June 22, 1972	21.51	16,300
1941	Apr. 5, 1941	8.14	2,090	1973	Oct. 6, 1972	21.08	15,600
1942	May 22, 1942	19.08	11,800	1974	Dec. 27, 1973	15.99	8,590
1943	Oct. 15, 1942	26.30	21,000	1975	Mar. 19, 1975	18.63	12,000
1944	Sept. 19, 1944	14.10	6,810	1976	Jan. 1, 1976	12.66	5,090
1945	Sept. 18, 1945	20.5	13,400	1977	Oct. 9, 1976	17.40	10,300
1946	Dec. 31, 1945	7.18	1,700	1978	Jan. 26, 1978	17.18	10,000
1947	Mar. 14, 1947	10.50	3,820	1979	Feb. 25, 1979	15.15	7,660
1948	Feb. 14, 1948	16.40	8,960	1980	Oct. 3, 1979	11.78	4,330
1949	June 18, 1949	22.74	16,100	1981	May 20, 1981	5.79	707
1950	Feb. 2, 1950	9.07	2,810	1982	June 14, 1982	14.51	6,930
1951	Dec. 8, 1950	12.53	5,420	1983	Mar. 19, 1983	14.20	6,610
1952	Feb. 4, 1952	11.47	4,620	1984	Mar. 29, 1984	14.70	7,140
1953	Mar. 25, 1953	13.70	6,450	1985	Aug. 19, 1985	9.43	2,630
1954	Mar. 1, 1954	11.86	4,940	1986	Nov. 5, 1985	33.09	38,500
1955	Aug. 18, 1955	19.93	12,700	1987	Apr. 17, 1987	18.80	12,200
1956	Mar. 15, 1956	6.62	1,400	1988	Jan. 20, 1988	7.19	1,510
1957	Apr. 6, 1957	11.58	4,700	1989	May 2, 1989	12.03	4,580
1958	Apr. 23, 1958	10.97	4,220	1990	Jan. 1, 1990	12.31	4,820

POTOMAC RIVER BASIN

01625500 NORTH RIVER AT PORT REPUBLIC, VA

LOCATION.--Lat 38°17'50", long 78°48'37", Rockingham County, Hydrologic Unit 02070005, at highway bridge 500 ft upstream from confluence with South River, at Port Republic.

DRAINAGE AREA.--804 mi².

GAGE.--Nonrecording gage (staff gage). Datum of gage is 1,040 ft above National Geodetic Vertical Datum of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 3,500 ft³/s and extended above on basis of logarithmic plotting and flows at other sites in the Potomac River basin.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1896	Sept. 30, 1896	-	24,000	1898	Aug. 10, 1898	-	11,400
1897	May 2, 1897	-	16,400				

POTOMAC RIVER BASIN

01625900 BACK CREEK AT LYNTHURST, VA

LOCATION.--Lat 38°01'44", long 78°55'58", Augusta County, Hydrologic Unit 02070005, on left bank at downstream side of bridge on State Highway 624, 0.7 mi east of Lynthurst, 0.7 mi downstream from Inch Branch, and 0.7 mi upstream from mouth.

DRAINAGE AREA.--41.2 mi².

GAGE.--Water-stage recorder. Datum of gage is 1,338.83 ft above National Geodetic Vertical Datum of 1929 (levels by Higgs and Shumate Engineers).

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 3,870 ft³/s and extended above on basis of logarithmic plotting.

BANKFULL STAGE.--Not determined.

REMARKS.--Records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1975	Mar. 19, 1975	7.13	4,000	1977	Oct. 9, 1977	-	21,300
1976	Jan. 1, 1976	4.36	968				

a Mean daily discharge.

01626000 SOUTH RIVER NEAR WAYNESBORO, VA

LOCATION.--Lat 38°03'27", long 78°54'30", Waynesboro City, Hydrologic Unit 02070005, on right bank 80 ft downstream from bridge on State Highway 664, 1.3 mi southwest of Waynesboro post office, and 2.4 mi downstream from Back Creek.

DRAINAGE AREA.--127 mi², of which 41 mi² are above flood-detention structures.

GAGE.--Water-stage recorder. Datum of gage is 1,296.20 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 4,150 ft³/s and extended above on basis of contracted-opening measurement at 13,700 ft³/s.

BANKFULL STAGE.--5 ft.

REMARKS.--Subsequent to Sept. 30, 1982, records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1943	October 1942	14.3	14,500	1972	June 21, 1972	14.25	14,400
1953	Mar. 25, 1953	7.20	2,410	1973	Oct. 5, 1972	11.41	8,040
1954	Mar. 1, 1954	6.56	1,680	1974	Dec. 27, 1973	6.84	2,010
1955	Aug. 18, 1955	13.95	13,500	1975	Mar. 19, 1975	10.30	6,180
1956	Sept. 27, 1956	5.73	1,160	1976	Oct. 18, 1975	6.02	1,340
1957	Oct. 31, 1956	7.46	2,550	1977	Oct. 9, 1976	9.33	4,780
1958	Apr. 23, 1958	7.42	2,450	1978	May 13, 1978	8.52	3,780
1959	Sept. 30, 1959	7.18	2,270	1979	Sept. 5, 1979	11.37	7,970
1960	Oct. 24, 1959	7.92	3,090	1980	Apr. 14, 1980	7.47	2,620
1961	Apr. 13, 1961	6.17	1,380	1981	Feb. 11, 1981	3.87	419
1962	Oct. 21, 1961	8.76	4,110	1982	June 14, 1982	5.60	1,120
1963	Mar. 12, 1963	6.12	1,340	1983	Mar. 19, 1983	8.46	3,700
1964	Jan. 25, 1964	6.21	1,470	1984	Feb. 14, 1984	8.07	3,270
1965	Feb. 7, 1965	6.69	1,880	1985	Aug. 18, 1985	8.24	3,450
1966	Feb. 13, 1966	5.38	1,000	1986	Nov. 4, 1985	15.30	17,500
1967	Mar. 7, 1967	7.17	2,320	1987	Apr. 17, 1987	9.58	5,110
1968	May 27, 1968	5.76	1,140	1988	May 18, 1988	5.58	1,310
1969	Aug. 20, 1969	15.27	17,400	1989	May 6, 1989	6.80	2,040
1970	Dec. 31, 1969	5.38	990	1990	Oct. 19, 1989	5.52	1,250
1971	May 30, 1971	9.99	5,690				

a From high-water marks.

POTOMAC RIVER BASIN

01626500 SOUTH RIVER AT WAYNESBORO, VA

LOCATION.--Lat 38°03'40", long 78°53'50", Augusta County, Hydrologic Unit 02070005, on left bank 50 ft downstream from highway bridge in Waynesboro, 4.2 mi downstream from Back Creek.

DRAINAGE AREA.--144 mi². At site used June 1905 to July 1906, 152 mi².

GAGE.--Water-stage recorder. Concrete control since Mar. 11, 1941. Datum of gage is 1,277.13 ft above National Geodetic Vertical Datum of 1929. June 1905 to July 1906, chain gage at site 2 mi downstream at different datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 5,000 ft³/s and extended above by logarithmic plotting.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1928a	Sept. 19, 1928	11.02	6,140	1941	Dec. 29, 1940	4.63	1,010
1929	May 2, 1929	7.52	2,530	1942	May 16, 1942	10.77	5,920
1930	Oct. 22, 1929	7.90	2,770	1943	Oct. 15, 1942	14.8	12,000
1931	Aug. 22, 1931	5.32	1,350	1944	Sept. 19, 1944	11.06	6,290
1932	Mar. 28, 1932	4.26	870	1945	Sept. 18, 1945	13.6	9,970
1933	Oct. 17, 1932	10.98	6,140	1946	May 5, 1946	4.34	715
1934	Sept. 16, 1934	7.39	2,470	1947	Mar. 14, 1947	6.19	1,780
1935	Dec. 1, 1934	10.92	6,020	1948	Apr. 1, 1948	6.71	2,140
1936	Mar. 17, 1936	13.90	10,500	1949	June 18, 1949	10.42	8,580
1937	Apr. 26, 1937	10.88	6,020	1950	Sept. 10, 1950	6.77	2,510
1938	Oct. 19, 1937	6.18	1,800	1951	Dec. 4, 1950	8.60	4,340
1939	Aug. 19, 1939	4.40	945	1952	Mar. 11, 1952	9.01	5,420
1940	Aug. 16, 1940	13.90	10,500				

a Partial year, August to September.

POTOMAC RIVER BASIN

31

01626850 SOUTH RIVER NEAR DOOMS, VA

LOCATION.--Lat 38°05'19", long 78°52'38", Augusta County, Hydrologic Unit 02070005, on left bank at downstream side of Hopeman Parkway Road bridge, 1.1 mi downstream from Steele Run, and 1.6 mi southwest of Doms.

DRAINAGE AREA.--149 mi².

GAGE.--Water-stage recorder. Datum of gage is 1,247.04 ft above National Geodetic Vertical Datum of 1929 (Norfolk Southern Railway bench mark). Prior to Sept. 18, 1980, nonrecording gage at site 30 ft upstream at same datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 8,100 ft³/s and extended above.

BANKFULL STAGE.--10 ft.

REMARKS.--Records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1975	Mar. 19, 1975	12.02	8,000	1983	Mar. 19, 1983	11.07	5,570
1976	Oct. 18, 1975	6.31	1,620	1984	Aug. 12, 1984	8.06	2,560
1977	Oct. 9, 1976	11.31	6,040	1985	Aug. 18, 1985	10.20	4,260
1978	Jan. 26, 1978	10.86	5,260	1986	Nov. 4, 1985	14.03	19,100
1979	Sept. 5, 1979	11.09	5,630	1987	Apr. 17, 1987	11.64	6,120
1980	Apr. 14, 1980	9.46	3,510	1988	May 18, 1988	7.34	1,990
1981	Feb. 11, 1981	4.00	630	1989	May 6, 1989	8.84	2,600
1982	June 13, 1982	6.65	1,780	1990	Oct. 19, 1989	7.35	1,800

POTOMAC RIVER BASIN

01627300 SOUTH RIVER TRIBUTARY NEAR HARRISTON, VA

LOCATION.--Lat 38°12'10", long 78°50'10", Augusta County, Hydrologic Unit 02070005, at culvert on U.S. Highway 340, 1.1 mi south of Harriston.

DRAINAGE AREA.--2.41 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,176.67 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 21, 1969, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--5 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1966	-	<3.10	<70	1971	May 30, 1971	5.79	280
1967	Mar. 7, 1967	2.63	44	1972	June 21, 1972	5.57	253
1968	-	<3.08	<67	1973	Oct. 6, 1972	6.09	318
1969	Aug. 10, 1969	2.40	33	1974	-	<3.10	<70
1970	Dec. 31, 1969	2.00	15	1975	May 19, 1975	6.10	319

< Less than.

POTOMAC RIVER BASIN

01627500 SOUTH RIVER AT HARRISTON, VA

LOCATION.--Lat 38°13'07", long 78°50'13", Augusta County, Hydrologic Unit 02070005, on left bank 100 ft downstream from bridge on State Highway 778, 0.3 mi northwest of Harriston, 0.6 mi downstream from Paine Run, and 7.2 mi upstream from confluence with North River.

DRAINAGE AREA.--212 mi².

GAGE.--Water-stage recorder. Datum of gage is 1,129.87 ft above National Geodetic Vertical Datum of 1929. Prior to Sept. 1, 1938, nonrecording gage at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 10,200 ft³/s and extended above on basis of slope-area measurement at 28,500 ft³/s.

BANKFULL STAGE.--8 ft.

REMARKS.--Peaks are from graph based on gage readings prior to Sept. 1, 1938, unless otherwise noted. Subsequent to Sept. 30, 1968, records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1870	September 1870	a18.8	-	1949	June 18, 1949	11.06	7,980
1878	November 1877	a18.8	-	1950	Sept. 10, 1950	8.52	3,960
1924	May 1924	a16.6	21,000	1951	Dec. 4, 1950	10.64	7,100
1926	June 18, 1926	7.5	2,770	1969	Aug. 20, 1969	12.72	11,100
1927	Nov. 16, 1926	10.0	6,100	1970	Dec. 31, 1969	5.78	1,720
1928	Sept. 20, 1928	11.9	10,100	1971	May 30, 1971	11.93	9,460
1929	May 3, 1929	10.0	6,100	1972	June 21, 1972	15.25	21,300
1930	Oct. 22, 1929	10.0	6,100	1973	Oct. 5, 1972	13.24	15,300
1931	Aug. 22, 1931	7.3	2,550	1974	Dec. 21, 1973	8.00	3,660
1932	Mar. 28, 1932	5.9	1,430	1975	Mar. 19, 1975	12.20	12,400
1933	Oct. 17, 1932	11.5	8,700	1976	Jan. 1, 1976	6.82	12,400
1934	Sept. 16, 1934	8.5	3,960	1977	Oct. 9, 1976	10.62	8,250
1935	Dec. 1, 1934	11.3	8,340	1978	Jan. 26, 1978	10.38	7,800
1936	Mar. 18, 1936	b13.07	12,600	1979	Sept. 6, 1979	13.47	16,200
1937	Apr. 26, 1937	13.0	11,700	1980	Apr. 15, 1980	8.45	4,260
1938	Nov. 13, 1937	8.2	3,590	1981	Feb. 11, 1981	4.28	694
1939	Aug. 19, 1939	5.64	1,260	1982	June 13, 1982	6.90	2,480
1940	Aug. 16, 1940	12.91	12,100	1983	Mar. 19, 1983	11.44	10,300
1941	Apr. 5, 1941	6.00	1,540	1984	Feb. 14, 1984	10.60	8,250
1942	May 16, 1942	10.21	6,420	1985	Aug. 19, 1985	7.91	3,550
1943	Oct. 15, 1942	17.2	23,100	1986	Nov. 4, 1985	15.47	28,100
1944	Sept. 19, 1944	11.33	8,340	1987	Apr. 17, 1987	11.08	8,120
1945	Sept. 18, 1945	12.80	11,300	1988	May 18, 1988	6.86	2,300
1946	May 5, 1946	5.26	998	1989	May 6, 1989	7.89	3,360
1947	Mar. 14, 1947	7.53	2,660	1990	Oct. 19, 1989	7.31	2,870
1948	Feb. 14, 1948	8.52	3,960				

a From information by local residents.

b From information by observer.

01628000 SOUTH RIVER AT PORT REPUBLIC, VA

LOCATION.--Lat 38°17'42", long 78°48'36", Rockingham County, Hydrologic Unit 02070005, at highway bridge just east of Port Republic, 300 ft upstream from confluence with North River.

DRAINAGE AREA.--248 mi².

GAGE.--Nonrecording gage (staff gage). Datum of gage is 1,040 ft above National Geodetic Vertical Datum of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,600 ft³/s and extended above on basis of logarithmic plotting of flows at other sites in the Potomac River basin.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1896	Sept. 29, 1896	-	9,700	1898	Aug. 10, 1898	-	5,600
1897	May 2, 1897	-	5,800	1899	Mar. 5, 1899	-	a7,700

a Maximum daily discharge.

POTOMAC RIVER BASIN

01628060 WHITE OAK RUN NEAR GROTTOS, VA

LOCATION.--Lat 38°15'01", long 78°44'57", Rockingham County, Hydrologic Unit 02070005, Shenandoah National Park, on left bank 700 ft upstream from Madison Run, 0.2 mi south of Madison Run Forest Trail, 1.4 mi upstream from southwest boundary of Shenandoah National Park, and 4.3 mi southeast of Grottoes.

DRAINAGE AREA.--1.94 mi².

GAGE.--Water-stage recorder. Datum of gage is 1,480 ft above National Geodetic Vertical Datum of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Based on current-meter measurements below 33 ft³/s and extended above by slope-area measurements of 200 ft³/s and 515 ft³/s.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1980	Nov. 26, 1979	2.59	150	1986	Nov. 4, 1985	6.17	515
1981	Feb. 20, 1981	1.77	16	1987	Apr. 16, 1987	3.34	136
1982	June 13, 1982	a2.85	255	1988	May 18, 1988	3.38	140
1983	Mar. 18, 1983	3.90	200	1989	May 1, 1989	3.09	111
1984	Feb. 14, 1984	3.87	197	1990	Oct. 17, 1989	3.04	106
1985	Nov. 28, 1984	2.14	33				

a Stage affected by drawdown in stilling well.

POTOMAC RIVER BASIN

01628150 DEEP RUN NEAR GROTTOS, VA

LOCATION.--Lat 38°16'23", long 78°45'36", Rockingham County, Hydrologic Unit 02070005, Shenandoah National Park, on right bank, 0.2 mi southeast of boundary of Shenandoah National Park, 0.5 mi upstream from culvert on State Highway 708, and 3.7 mi east of Grottoes.

DRAINAGE AREA.--1.17 mi².

GAGE.--Water-stage recorder. Datum of gage is 1,480 ft above National Geodetic Vertical Datum of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 11 ft³/s and extended above by logarithmic plotting.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1980	Apr. 30, 1980	2.10	43	1982	Mar. 21, 1982	2.15	48
1981	June 3, 1981	1.31	5.5				

01628500 SOUTH FORK SHENANDOAH RIVER NEAR LYNNWOOD, VA

LOCATION.--Lat 38°19'21", long 78°45'18", Rockingham County, Hydrologic Unit 02070005, on left bank 1.2 mi northeast of Lynnwood and 3.3 mi downstream from confluence of North and South Rivers.

DRAINAGE AREA.--1,084 mi².

GAGE.--Water-stage recorder. Datum of gage is 1,013.17 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 34,000 ft³/s and extended above on basis of computations of flow over dam at 49,300 ft³/s and 77,000 ft³/s.

BANKFULL STAGE.--10 ft.

REMARKS.--Maximum stage known since at least 1870, that of Nov. 5, 1985. Subsequent to Sept. 30, 1981, records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1931	Aug. 23, 1931	7.80	5,220	1961	Apr. 13, 1961	11.69	10,900
1932	Mar. 28, 1932	10.62	8,990	1962	Oct. 21, 1961	13.45	14,200
1933	Apr. 17, 1933	14.73	17,300	1963	Mar. 13, 1963	14.30	16,200
1934	Sept. 17, 1934	10.18	8,430	1964	Mar. 6, 1964	11.02	9,700
1935	Dec. 1, 1934	21.62	45,600	1965	Feb. 8, 1965	12.48	12,400
1936	Mar. 18, 1936	26.57	77,000	1966	Feb. 14, 1966	9.76	7,900
1937	Apr. 26, 1937	20.48	39,800	1967	Mar. 7, 1967	14.37	16,400
1938	Oct. 20, 1937	14.72	18,600	1968	May 28, 1968	9.99	8,120
1939	Feb. 4, 1939	13.20	14,900	1969	Aug. 20, 1969	14.32	16,300
1940	Aug. 17, 1940	19.86	33,100	1970	Dec. 31, 1969	11.66	10,800
1941	Apr. 5, 1941	9.30	7,520	1971	May 30, 1971	19.43	31,700
1942	May 22, 1942	20.37	36,300	1972	June 22, 1972	23.45	50,700
1943	Oct. 15, 1942	27.2	80,000	1973	Oct. 6, 1972	21.92	42,600
1944	Sept. 19, 1944	13.98	15,800	1974	Dec. 27, 1973	15.73	19,800
1945	Sept. 18, 1945	21.7	42,800	1975	Mar. 19, 1975	20.44	35,800
1946	May 5, 1946	8.00	5,530	1976	Jan. 1, 1976	12.76	12,800
1947	Mar. 15, 1947	11.44	10,600	1977	Oct. 9, 1976	17.99	26,500
1948	Feb. 14, 1948	15.2	18,500	1978	Jan. 26, 1978	16.74	22,700
1949	June 18, 1949	23.60	53,600	1979	Sept. 6, 1979	17.89	26,200
1950	Sept. 13, 1950	12.25	12,100	1980	Apr. 15, 1980	12.06	11,600
1951	Dec. 8, 1950	16.88	22,900	1981	July 5, 1981	7.59	5,010
1952	Mar. 11, 1952	15.36	18,100	1982	June 13, 1982	13.52	14,500
1953	Mar. 25, 1953	15.17	17,500	1983	Mar. 19, 1983	14.87	17,600
1954	Mar. 1, 1954	14.12	15,000	1984	Feb. 14, 1984	15.21	18,400
1955	Aug. 18, 1955	22.94	46,800	1985	Feb. 12, 1985	10.84	9,450
1956	Mar. 15, 1956	6.38	3,560	1986	Nov. 5, 1985	29.46	95,100
1957	Apr. 6, 1957	13.31	13,400	1987	Apr. 17, 1987	19.29	33,900
1958	Apr. 23, 1958	12.05	11,400	1988	May 19, 1988	7.41	5,050
1959	June 3, 1959	13.13	13,500	1989	May 2, 1989	11.57	11,100
1960	May 8, 1960	14.55	17,000	1990	Oct. 19, 1989	10.05	8,480

POTOMAC RIVER BASIN

01628600 CUB RUN TRIBUTARY AT MONTEVIDEO, VA

LOCATION.--Lat 38°22'15", long 78°47'00", Rockingham County, Hydrologic Unit 02070005, at culvert on U.S. Highway 33, 1.0 mi northwest of Montevideo.

DRAINAGE AREA.--0.42 mi².

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is 1,189.68 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--2 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1966	Feb. 28, 1966	3.30	35	1971	May 30, 1971	4.40	66
1967	Mar. 7, 1967	4.17	60	1972	June 21, 1972	5.12	91
1968	Mar. 12, 1968	2.8	22	1973	Oct. 5, 1972	5.23	95
1969	July 12, 1969	5.15	92	1974	Dec. 26, 1973	3.40	36
1970	-	<3.0	<27	1975	July 25, 1975	4.70	75

< Less than.

POTOMAC RIVER BASIN

01629400 SOUTH FORK SHENANDOAH RIVER TRIBUTARY NEAR LURAY, VA

LOCATION.--Lat 38°38'35", long 78°33'20", Page County, Hydrologic Unit 02070005, at culvert on U.S. Highway 211, 5.5 mi southwest of Luray.

DRAINAGE AREA.--0.54 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 776.14 ft above National Geodetic Vertical Datum of 1929. Prior to Apr. 3, 1975, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--5 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1966	Feb. 28, 1966	3.8	20	1971	Feb. 13, 1971	4.45	36
1967	July 2, 1967	6.60	102	1972	June 22, 1972	6.48	99
1968	Mar. 13, 1968	4.30	33	1973	Oct. 5, 1972	8.10	164
1969	Sept. 20, 1969	5.40	62	1974	Dec. 21, 1973	5.05	52
1970	-	<4.0	<25	1975	Mar. 19, 1975	5.78	73

< Less than.

01629500 SOUTH FORK SHENANDOAH RIVER NEAR LURAY, VA

LOCATION.--Lat 38°38'46", long 78°32'06", Page County, Hydrologic Unit 02070005, on right bank between bridges on U.S. Highway 211, 1.2 mi downstream from Big Run, 2.2 mi upstream from Mill Creek, and 4.1 mi west of Luray.

DRAINAGE AREA.--1,377 mi².

GAGE.--Water-stage recorder. Datum of gage is 721.76 ft above National Geodetic Vertical Datum of 1929. April 1925 to September 1930, nonrecording gage at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 86,300 ft³/s and extended above by logarithmic plotting.

BANKFULL STAGE.--Not determined.

REMARKS.--Peaks are from graphs based on gage readings prior to Oct. 1, 1930, unless otherwise noted. Subsequent to May 31, 1979, records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1897	October 1896	a25.4	-	1948	Feb. 15, 1948	12.66	18,600
1924	May 1924	a22.5	72,800	1949	June 18, 1949	20.46	58,100
1926	Jan. 19, 1926	7.8	7,420	1950	Sept. 13, 1950	9.96	11,200
1927	Nov. 17, 1926	11.11	15,100	1951	Dec. 8, 1950	15.18	26,900
1928	Sept. 20, 1928	11.10	15,100	1979	Sept. 6, 1979	15.73	32,700
1929	Apr. 17, 1929	13.20	20,300	1980	Oct. 6, 1979	10.51	14,900
1930	Oct. 23, 1929	12.0	17,300	1981	July 6, 1981	6.93	5,470
1936	Mar. 18, 1936	23.6	81,600	1982	June 14, 1982	12.18	19,600
1939	Feb. 4, 1939	11.90	17,000	1983	Mar. 19, 1983	13.99	25,800
1940	Aug. 17, 1940	17.87	41,100	1984	Feb. 14, 1984	15.62	32,300
1941	Apr. 6, 1941	8.34	8,260	1985	Feb. 13, 1985	9.98	13,400
1942	May 23, 1942	17.82	40,500	1986	Nov. 5, 1985	26.72	110,000
1943	Oct. 16, 1942	25.7	100,000	1987	Apr. 17, 1987	18.50	47,000
1944	Sept. 19, 1944	11.77	16,100	1988	May 19, 1988	7.69	7,870
1945	Sept. 19, 1945	18.36	44,100	1989	May 2, 1989	11.40	17,300
1946	May 5, 1946	7.36	6,320	1990b	Oct. 19, 1989	9.31	11,700
1947	Mar. 15, 1947	9.75	11,200				

a From information by local residents.

b Maximum annual stage, 11.50 ft, Jan. 1, due to backwater from ice jam.

01629945 CHUB RUN NEAR STANLEY, VA

LOCATION.--Lat 38°34'31", long 78°27'32", Page County, Hydrologic Unit 02070005, at culvert on State Highway 689, 2.2 mi east of Stanley, and 3.1 mi upstream from mouth.

DRAINAGE AREA.--3.16 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,023.05 ft above National Geodetic Vertical Datum of 1929. Prior to 1970, recording gage with concrete control at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow over V-notched weir.

BANKFULL STAGE.--Not determined.

REMARKS.--Prior to 1970, records were provided by the U.S. Department of Agriculture, Soil Conservation Service.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1959	Sept. 30, 1959	4.13	422	1975	Mar. 19, 1975	5.23	584
1960	Feb. 18, 1960	1.43	95	1976	Dec. 31, 1975	2.03	164
1961	Apr. 12, 1961	1.57	117	1977	Oct. 9, 1976	4.11	416
1962	June 19, 1962	2.29	190	1978	Nov. 7, 1977	6.26	752
1963	Nov. 9, 1962	1.89	148	1979	Sept. 6, 1979	4.28	442
1964	Jan. 9, 1964	1.31	71	1980	Oct. 5, 1979	2.49	219
1965	Mar. 5, 1965	1.21	56	1981	June 4, 1981	1.43	95
1966	July 5, 1966	1.17	50	1982	June 13, 1982	1.52	110
1967	Mar. 7, 1967	1.47	103	1983	May 16, 1983	1.97	156
1968	Jan. 14, 1968	1.14	46	1984	Feb. 14, 1984	3.94	393
1969a	Jan. 24, 1969	.88	20	1985	Feb. 4, 1985	4.19	428
1970b	July 9, 1970	4.13	422	1986	Nov. 4, 1985	9.66	-
1971	Feb. 13, 1971	1.08	41	1987	Apr. 16, 1987	2.65	238
1972	June 22, 1972	4.48	473	1988	Nov. 29, 1987	2.42	210
1973	Oct. 5, 1972	5.98	705	1989	May 2, 1989	2.28	194
1974	Oct. 29, 1973	2.26	191	1990	Oct. 19, 1989	1.81	139

a Partial year, October through April

b Partial year, April through September.

01631000 SOUTH FORK SHENANDOAH RIVER AT FRONT ROYAL, VA

LOCATION.--Lat 38°54'50", long 78°12'40", Warren County, Hydrologic Unit 02070005, on left bank 0.7 mi downstream from bridge on State Highway 619, 1.0 mi west of Front Royal, and 3.5 mi upstream from confluence with North Fork.

DRAINAGE AREA.--1,642 mi².

GAGE.--Water-stage recorder. Datum of gage is 469.38 ft above National Geodetic Vertical Datum of 1929. June 1899 to July 1906, nonrecording gage at site 1.0 mi upstream at different datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 5,700 ft³/s at 1899-1906 site. Defined by current-meter measurements below 92,000 ft³/s and extended above on basis of slope-area measurement at 130,000 ft³/s at present site.

BANKFULL STAGE.--7 ft.

REMARKS.--Peaks are from graphs based on gage readings prior to September 1930, unless otherwise noted. Until November 1985, the flood peak of March 1936 was the highest known since at least 1870, from information by local residents.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1900	Jan. 21, 1900	-	a12,800	1958	Apr. 24, 1958	8.87	14,200
1901	Apr. 21, 1901	-	a46,200	1959	June 3, 1959	9.50	16,000
1902	Mar. 1, 1902	23.5	76,800	1960	May 9, 1960	11.75	23,700
1903	Mar. 1, 1903	13.7	22,800	1961	Apr. 14, 1961	9.12	14,800
1904	July 11, 1904	10.2	11,400	1962	Mar. 22, 1962	9.51	16,000
1905	June 25, 1905	9.8	10,400	1963	Mar. 13, 1963	11.07	21,200
1931	Aug. 24, 1931	5.12	5,550	1964	Mar. 6, 1964	7.74	11,000
1932	May 13, 1932	8.23	12,100	1965	Feb. 9, 1965	8.90	14,200
1933	Apr. 18, 1933	11.65	21,600	1966	Feb. 15, 1966	6.65	8,700
1934	Sept. 18, 1934	7.18	9,620	1967	Mar. 8, 1967	11.78	23,400
1935	Dec. 2, 1934	17.99	47,400	1968	May 29, 1968	7.40	10,400
1936	Mar. 18, 1936	26.01	98,000	1969	Aug. 21, 1969	9.35	15,500
1937	Apr. 27, 1937	18.94	51,500	1970	Jan. 1, 1970	8.58	13,300
1938	Oct. 21, 1937	11.65	23,600	1971	May 31, 1971	17.86	46,600
1939	Feb. 5, 1939	9.90	17,400	1972	June 22, 1972	23.98	75,100
1940	Aug. 17, 1940	15.86	40,400	1973	Oct. 7, 1972	21.35	62,500
1941	Apr. 6, 1941	6.96	9,220	1974	Dec. 27, 1973	13.32	29,000
1942	May 23, 1942	16.20	41,400	1975	Mar. 20, 1975	18.74	50,500
1943	Oct. 16, 1942	34.8	130,000	1976	Jan. 2, 1976	9.87	17,200
1944	Sept. 20, 1944	10.00	17,600	1977	Oct. 10, 1976	14.12	31,900
1945	Sept. 19, 1945	17.8	49,200	1978	Jan. 27, 1978	14.13	32,000
1946	May 5, 1946	5.94	6,930	1979	Feb. 26, 1979	14.43	33,100
1947	Mar. 15, 1947	8.12	12,000	1980	Oct. 6, 1979	9.35	15,500
1948	Feb. 15, 1948	10.70	19,900	1981	July 6, 1981	4.90	5,420
1949	June 19, 1949	19.20	52,900	1982	June 14, 1982	10.38	18,900
1950	Sept. 14, 1950	7.89	11,400	1983	Mar. 20, 1983	12.60	26,500
1951	Dec. 5, 1950	13.64	30,000	1984	Feb. 15, 1984	15.85	38,500
1952	Mar. 12, 1952	11.20	21,600	1985	Feb. 13, 1985	8.39	13,000
1953	Mar. 26, 1953	12.44	25,800	1986	Nov. 6, 1985	32.43	120,000
1954	Mar. 2, 1954	10.74	19,900	1987	Apr. 18, 1987	18.51	49,400
1955	Aug. 19, 1955	22.54	68,200	1988	May 7, 1988	6.18	7,850
1956	Mar. 16, 1956	4.69	4,950	1989	May 7, 1989	10.16	18,200
1957	Apr. 6, 1957	10.16	18,200	1990b	Oct. 20, 1989	7.72	11,300

a Mean daily discharge; peak discharge is greater than the value shown.

b Maximum annual stage, 7.87 ft, Jan. 2, due to backwater from ice jam.

POTOMAC RIVER BASIN

01632000 NORTH FORK SHENANDOAH RIVER AT COOTES STORE, VA

LOCATION.--Lat 38°38'13", long 78°51'11", Rockingham County, Hydrologic Unit 02070006, on right bank at Cootes Store, 300 ft upstream from bridge on State Highway 259, and 3.7 mi upstream from Linville Creek.

DRAINAGE AREA.--210 mi².

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,051.8 ft above National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark). Prior to Nov. 15, 1937, nonrecording gage at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 9,000 ft³/s and extended above on basis of contracted-opening measurement at 50,000 ft³/s. A change in relation below gage height 15 ft occurred in October 1942.

BANKFULL STAGE.--6 ft.

REMARKS.--Peaks are from graphs based on gage readings prior to Nov. 15, 1957, unless otherwise noted. Flood peak of October 1942 is highest known since at least 1836, from information by local residents.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1878	November 1877	a20.9	-	1957	Apr. 5, 1957	10.59	6,440
1889	June 1889	a18.8	-	1958	July 27, 1958	7.54	2,770
1924	May 1924	a16.7	17,800	1959	June 2, 1959	13.91	11,800
1926	Aug. 25, 1926	9.6	4,230	1960	May 8, 1960	14.25	12,400
1927	Nov. 16, 1926	14.0	11,400	1961	Feb. 19, 1961	9.37	4,900
1928	Apr. 30, 1928	11.0	6,000	1962	Mar. 21, 1962	10.33	6,040
1929	Apr. 16, 1929	15.4	14,600	1963	Mar. 19, 1963	13.80	11,600
1930	Oct. 22, 1929	12.0	7,600	1964	Mar. 3, 1964	9.85	5,390
1931	Aug. 23, 1931	7.0	1,600	1965	Feb. 7, 1965	11.02	7,000
1932	Feb. 4, 1932	10.20	4,880	1966	Feb. 28, 1966	7.31	2,690
1933	Apr. 17, 1933	11.7	7,120	1967	Mar. 7, 1967	13.70	11,500
1934	Sept. 16, 1934	8.5	2,860	1968	Dec. 11, 1967	9.16	4,610
1935	Dec. 1, 1934	19.0	24,600	1969	Aug. 1, 1969	10.20	5,910
1936	Mar. 17, 1936	23.25	40,500	1970	July 9, 1970	16.55	17,400
1937	Apr. 25, 1937	17.0	18,600	1971	May 30, 1971	13.63	11,300
1938	Oct. 28, 1937	10.0	4,600	1972	June 22, 1972	14.98	13,900
1939	Feb. 3, 1939	12.84	9,040	1973	Oct. 5, 1972	19.50	26,400
1940	May 31, 1940	11.7	6,800	1974	June 2, 1974	14.47	12,800
1941	Apr. 5, 1941	10.26	5,040	1975	Mar. 19, 1975	17.29	19,500
1942	May 22, 1942	16.93	18,300	1976	Jan. 1, 1976	12.75	9,800
1943	Oct. 15, 1942	25.3	50,000	1977	Oct. 9, 1976	16.98	18,500
1944	May 24, 1944	11.45	7,640	1978	Nov. 7, 1977	14.81	13,500
1945	Sept. 18, 1945	15.9	15,800	1979	Sept. 5, 1979	15.69	15,500
1946	May 4, 1946	9.73	5,260	1980	Oct. 2, 1979	15.25	14,600
1947	Mar. 14, 1947	7.28	2,800	1981	May 28, 1981	6.08	1,770
1948	Aug. 11, 1948	9.35	4,900	1982	June 13, 1982	10.56	6,470
1949	June 28, 1949	14.84	13,500	1983	Mar. 19, 1983	10.56	6,470
1950	Sept. 13, 1950	14.36	12,700	1984	Dec. 12, 1983	11.54	7,880
1951	Dec. 4, 1950	13.89	11,800	1985	May 31, 1985	9.01	4,850
1952	Mar. 11, 1952	13.01	10,200	1986	Nov. 4, 1985	25.13	49,200
1953	Mar. 24, 1953	11.93	8,440	1987	Apr. 16, 1987	13.72	12,000
1954	Mar. 1, 1954	11.88	8,440	1988	May 6, 1988	10.94	7,580
1955	Aug. 18, 1955	16.60	17,500	1989	May 2, 1989	7.26	3,330
1956	Aug. 6, 1956	7.86	3,170	1990	May 29, 1990	7.16	3,240

a From information by local residents.

POTOMAC RIVER BASIN

41

01632082 LINVILLE CREEK AT BROADWAY, VA

LOCATION.--Lat 38°36'24", long 78°48'13", Rockingham County, Hydrologic Unit 02070006, on left bank at Linville, 170 ft downstream from bridge on State Highway 1421, and 1.1 mi upstream from mouth.

DRAINAGE AREA.--45.5 mi².

GAGE.--Water-stage recorder. Datum of gage is 1,029.90 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 3,100 ft³/s and extended above by logarithmic plotting.

BANKFULL STAGE.--Not determined.

REMARKS.--Records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1986	Nov. 4, 1985	6.22	3,160	1989	May 16, 1989	3.90	970
1987	Apr. 16, 1987	5.07	1,950	1990a	Aug. 25, 1990	3.71	846
1988	Jan. 20, 1988	2.89	421				

a Maximum annual stage, 4.80 ft, Jan. 1, due to backwater from ice jam.

POTOMAC RIVER BASIN

01632300 LONG MEADOW RUN NEAR BROADWAY, VA
(Formerly published as Long Glade Run near Broadway)

LOCATION.--Lat 38°34'43", long 78°45'40", Rockingham County, Hydrologic Unit 02070006, at bridge on State Highway 259, 3.2 mi southeast of Broadway.

DRAINAGE AREA.--8.15 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,080 ft above National Geodetic Vertical Datum of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by step-backwater computations and contracted-opening and flow-over-road measurements at 195 ft³/s and 1,260 ft³/s.

BANKFULL STAGE.--3 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1950	Sept. 13, 1950	3.80	250	1965	Feb. 27, 1965	2.06	18
1951	Dec. 7, 1950	2.60	53	1967	Aug. 24, 1967	2.88	82
1952	August 1952	2.98	97	1968	Mar. 12, 1968	2.44	40
1953	May 15, 1953	3.35	152	1969	Sept. 3, 1969	3.48	176
1954	Mar. 1, 1954	2.45	34	1970	June 4, 1970	2.61	54
1955	Oct. 15, 1954	4.03	309	1971	Feb. 13, 1971	4.66	586
1958	July 27, 1958	3.87	266	1972	June 22, 1972	3.75	238
1959	Sept. 30, 1959	3.98	295	1973	Oct. 5, 1972	5.43	1,410
1960	May 8, 1960	3.00	100	1974	Oct. 29, 1973	3.45	170
1961	July 22, 1961	3.00	100	1975	Sept. 26, 1975	2.89	89
1962	May 27, 1962	4.03	315	1976	-	<2.30	<31
1963	Mar. 19, 1963	3.18	127	1977	Oct. 9, 1976	2.89	84
1964	Mar. 3, 1964	4.09	327				

< Less than.

POTOMAC RIVER BASIN

01632900 SMITH CREEK NEAR NEW MARKET, VA

LOCATION.--Lat 38°41'36", long 78°38'35", Shenandoah County, Hydrologic Unit 02070006, on left bank 25 ft upstream from bridge on State Highway 616, 3.6 mi north of New Market, and 4.4 mi upstream from mouth.

DRAINAGE AREA.--93.2 mi².

GAGE.--Water-stage recorder. Datum of gage is 881.50 ft above National Geodetic Vertical Datum of 1929. Prior to Aug. 2, 1963, on right bank a short distance downstream at datum 0.71 ft higher.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 2,230 ft³/s and extended above on basis of contracted-opening measurement at 10,600 ft³/s.

BANKFULL STAGE.--6 ft.

REMARKS.--Records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1960	Oct. 1, 1959	a10.7	-	1976	Jan. 1, 1976	8.35	1,660
1961	Apr. 13, 1961	7.06	1,210	1977	Oct. 9, 1976	11.90	4,760
1962	Mar. 21, 1962	8.00	1,680	1978	Mar. 14, 1978	10.62	3,400
1963	Mar. 19, 1963	9.10	2,700	1979	Feb. 26, 1979	9.30	2,260
1964	Jan. 21, 1964	7.55	1,300	1980	Oct. 5, 1979	8.07	1,500
1965	Feb. 8, 1965	7.78	1,380	1981	Feb. 11, 1981	3.25	229
1966	Feb. 28, 1966	5.82	722	1982	Mar. 20, 1982	8.43	1,680
1967	Mar. 7, 1967	9.93	2,770	1983	May 16, 1983	8.36	1,640
1968	Mar. 13, 1968	7.22	1,100	1984	Feb. 14, 1984	11.93	4,790
1969	Aug. 10, 1969	6.66	935	1985	Feb. 12, 1985	10.11	2,950
1970	Apr. 23, 1970	6.03	745	1986	Nov. 5, 1985	13.01	6,050
1971	Feb. 13, 1971	9.96	2,860	1987	Apr. 17, 1987	11.20	4,020
1972	June 22, 1972	13.22	6,280	1988	May 19, 1988	10.06	2,910
1973	Oct. 6, 1972	16.38	10,600	1989	July 12, 1989	6.25	1,030
1974	Dec. 26, 1973	11.08	3,920	1990b	May 29, 1990	4.90	630
1975	Mar. 19, 1975	11.48	4,340				

a From information by local resident.

b Maximum annual stage, 7.22 ft, Jan. 1, due to backwater from ice jam.

POTOMAC RIVER BASIN

43

01632950 CROOKED RUN TRIBUTARY NEAR CONICVILLE, VA

LOCATION.--Lat 38°47'55", long 78°43'25", Shenandoah County, Hydrologic Unit 02070006, at culvert on State Highway 42, 2.7 mi southwest of Conicville.

DRAINAGE AREA.--0.31 mi².

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is 1,207.56 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--4 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1966	Feb. 28, 1966	3.82	15	1971	Feb. 13, 1971	4.10	22
1967	Mar. 7, 1967	4.32	26	1972	June 22, 1972	4.72	34
1968	Dec. 10, 1967	3.65	12	1973	Oct. 5, 1972	4.37	27
1969	July 21, 1969	4.13	23	1974	June 2, 1974	5.15	44
1970	June 16, 1970	3.62	12	1975	Mar. 19, 1975	4.83	37

POTOMAC RIVER BASIN

01632970 CROOKED RUN NEAR MOUNT JACKSON, VA

LOCATION.--Lat 38°45'44", long 78°41'06", Shenandoah County, Hydrologic Unit 02070006, on right upstream wingwall of culvert on State Highway 263, 0.4 mi upstream from mouth, and 2.3 mi west of Mount Jackson.

DRAINAGE AREA.--6.49 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 962.84 ft above National Geodetic Vertical Datum of 1929. Prior to Aug. 18, 1978, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--3 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1972	June 22, 1972	5.17	834	1982	Feb. 3, 1982	3.94	435
1973	June 4, 1973	5.65	1,010	1983	May 17, 1983	4.04	462
1974	June 2, 1974	5.25	862	1984	Feb. 14, 1984	4.59	632
1975	July 25, 1975	7.20	1,600	1985	Feb. 12, 1985	5.80	1,070
1976	Dec. 31, 1975	5.17	834	1986	Nov. 4, 1985	7.24	1,620
1977	Oct. 9, 1976	7.25	1,620	1987	Sept. 8, 1987	3.53	333
1978	Aug. 7, 1978	8.90	2,600	1988	May 6, 1988	3.38	295
1979	Mar. 9, 1979	>7.14	-	1989	July 12, 1989	5.65	1,010
1980	Oct. 5, 1979	4.29	537	1990	Apr. 7, 1990	3.83	408
1981	July 14, 1981	3.03	216				

> Greater than.

POTOMAC RIVER BASIN

01633000 NORTH FORK SHENANDOAH RIVER AT MOUNT JACKSON, VA

LOCATION.--Lat 38°44'43", long 78°38'21", Shenandoah County, Hydrologic Unit 02070006, on right bank at upstream side of bridge on State Highway 698 at Mount Jackson and 0.4 mi downstream from Mill Creek.

DRAINAGE AREA.--506 mi².

GAGE.--Water-stage recorder. Datum of gage is 838.55 ft above National Geodetic Vertical Datum of 1929. Prior to July 1, 1976, nonrecording gage, and July 1, 1976, to Oct. 23, 1981, water-stage recorder, at site 400 ft upstream at same datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 18,000 ft³/s and extended above on basis of peak runoff for flood in October 1942 for stations at Cootes Store and near Strasburg.

BANKFULL STAGE.--9 ft.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1943	October 1942	a20.2	80,000	1967	Mar. 7, 1967	14.30	14,600
1944	May 7, 1944	11.35	8,100	1968	Mar. 17, 1968	11.21	7,920
1945	Sept. 18, 1945	16.0	19,000	1969	Aug. 2, 1969	9.29	5,460
1946	May 4, 1946	10.02	6,800	1970	July 10, 1970	9.90	6,180
1947	Mar. 14, 1947	8.0	3,800	1971	Feb. 13, 1971	14.30	14,600
1948	Feb. 14, 1948	11.30	8,050	1972	June 22, 1972	16.08	21,200
1949	June 28, 1949	12.6	10,000	1973	Oct. 6, 1972	18.10	40,500
1950	Sept. 13, 1950	13.0	10,600	1974	Dec. 26, 1973	14.85	16,100
1951	Dec. 4, 1950	15.2	15,600	1975	Mar. 19, 1975	17.00	14,000
1952	Mar. 11, 1952	13.95	12,500	1976	Jan. 1, 1976	12.29	9,800
1953	Nov. 21, 1952	13.50	11,600	1977	Oct. 9, 1976	16.00	20,700
1954	Mar. 1, 1954	13.60	11,800	1978	Jan. 26, 1978	14.78	16,100
1955	Aug. 18, 1955	17.32	30,000	1979	Sept. 6, 1979	14.63	15,500
1956	Aug. 6, 1956	7.30	3,300	1980	Oct. 3, 1979	14.22	14,300
1957	Apr. 5, 1957	11.40	8,200	1981	May 29, 1981	5.97	1,740
1958	Aug. 13, 1958	9.23	5,340	1982	July 13, 1982	11.15	7,840
1959	June 2, 1959	13.98	12,600	1983	Apr. 15, 1983	11.51	8,420
1960	Oct. 1, 1959	14.95	15,000	1984	Feb. 14, 1984	14.06	15,500
1961	Apr. 13, 1961	10.83	7,340	1985	Feb. 12, 1985	9.90	6,960
1962	Mar. 21, 1962	11.27	8,050	1986	Nov. 5, 1985	17.79	50,800
1963	Mar. 20, 1963	14.65	13,800	1987	Apr. 17, 1987	15.08	19,600
1964	Mar. 3, 1964	10.61	7,080	1988	May 6, 1988	12.74	12,500
1965	Feb. 8, 1965	12.09	9,250	1989	May 2, 1989	8.95	5,570
1966	Mar. 1, 1966	8.08	4,110	1990	May 29, 1990	8.79	5,350

a From high-water marks.

01633500 STONY CREEK AT COLUMBIA FURNACE, VA

LOCATION.--Lat 38°51'55", long 78°37'45", Shenandoah County, Hydrologic Unit 02070006, at footbridge 0.8 mi south of Columbia Furnace, 3.6 mi downstream from Little Stony Creek, and 6.4 mi upstream from mouth.

DRAINAGE AREA.--79.4 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 895.29 ft above National Geodetic Vertical Datum of 1929. Prior to Nov. 21, 1950, nonrecording staff gage, and since September 1955, crest-stage gage only at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,200 ft³/s and extended above on basis of slope-area measurement at 4,290 ft³/s.

BANKFULL STAGE.--4 ft.

REMARKS.--Peaks are from graphs based on gage readings prior to Nov. 21, 1950, and from crest-stage gage thereafter. Flood peak of October 1942 is highest known for at least prior 30 years, from information by local resident.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1936	March 1936	a7.5	-	1961	Apr. 13, 1961	5.03	1,670
1943	October 1942	b11.5	13,000	1962	Mar. 6, 1962	4.22	1,110
1945	September 1945	a5.0	-	1963	Mar. 19, 1963	6.23	2,800
1947	Mar. 14, 1947	3.30	670	1964	Mar. 3, 1964	3.5	810
1948	Apr. 14, 1948	5.3	1,920	1965	Feb. 7, 1965	4.75	1,510
1949	May 2, 1949	6.6	3,250	1966	-	<3.6	<850
1950	May 28, 1950	4.40	1,160	1967	Mar. 7, 1967	4.25	1,110
1951	Dec. 4, 1950	6.80	3,490	1968	Jan. 14, 1968	3.85	930
1952	Mar. 11, 1952	5.97	2,590	1969	Aug. 4, 1969	4.30	1,170
1953	Mar. 24, 1953	6.17	2,530	1970	July 9, 1970	4.50	1,300
1954	Mar. 1, 1954	6.66	3,370	1971	Feb. 13, 1971	5.55	2,140
1955	Aug. 18, 1955	7.97	4,990	1972	June 22, 1972	9.17	6,850
1956	Mar. 14, 1956	3.65	850	1973	Oct. 6, 1972	7.85	4,840
1957	Apr. 5, 1957	4.80	1,510	1974	Oct. 29, 1973	5.96	2,550
1958	July 27, 1958	4.88	1,590	1975	Sept. 26, 1975	6.48	3,110
1959	Sept. 30, 1959	9.20	6,900	1976	Jan. 1, 1976	6.52	3,150
1960	May 8, 1960	7.04	3,700				

< Less than.

a From information by local residents; approximate gage height.

b From information by local residents.

POTOMAC RIVER BASIN

01633650 PUGHS RUN NEAR WOODSTOCK, VA

LOCATION.--Lat 38°55'48", long 78°32'43", Shenandoah County, Hydrologic Unit 02070006, 4.0 mi northwest of Woodstock and 5.4 mi upstream from mouth.

DRAINAGE AREA.--3.66 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,027.27 ft above National Geodetic Vertical Datum of 1929. Prior to Aug. 18, 1978, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--4 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1971	Oct. 1, 1970	5.20	141	1981	May 21, 1981	3.79	50
1972	June 22, 1972	9.30	543	1982	Mar. 30, 1982	3.51	36
1973	July 26, 1973	4.80	111	1983	May 17, 1983	4.11	67
1974	Dec. 26, 1973	4.60	97	1984	July 1, 1984	5.39	156
1975	Sept. 26, 1975	6.10	219	1985	Feb. 12, 1985	5.37	155
1976	Dec. 31, 1975	5.70	183	1986	Nov. 4, 1985	5.08	131
1977	Oct. 9, 1976	7.85	385	1987	Sept. 8, 1987	4.11	67
1978	Jan. 26, 1978	4.45	87	1988	May 6, 1988	4.14	68
1979	June 3, 1979	8.87	497	1989	May 2, 1989	3.58	39
1980	Oct. 1, 1979	5.20	141	1990	July 13, 1990	3.65	42

POTOMAC RIVER BASIN

01633700 PUGHS RUN TRIBUTARY NEAR COLUMBIA FURNACE, VA

LOCATION.--Lat 38°56'17", long 78°31'22", Shenandoah County, Hydrologic Unit 02070006, at culvert on State Highway 623, 7.0 mi northeast of Columbia Furnace.

DRAINAGE AREA.--0.56 mi².

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is 1,025 ft above National Geodetic Vertical Datum of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--5 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1966	Feb. 28, 1966	2.80	24	1971	July 29, 1971	4.54	84
1967	Mar. 7, 1967	3.15	38	1972	June 22, 1972	4.96	98
1968	Jan. 14, 1968	2.90	27	1973	July 26, 1973	6.70	180
1969	-	<2.8	<24	1974	Dec. 26, 1973	3.21	35
1970	-	<2.8	<24	1975	Mar. 19, 1975	3.73	51

< Less than.

01634000 NORTH FORK SHENANDOAH RIVER NEAR STRASBURG, VA

LOCATION.--Lat 38°58'36", long 78°20'11", Warren County, Hydrologic Unit 02070006, on right bank at downstream side of bridge on State Highway 55, 1.5 mi southeast of Strasburg, 2.2 mi upstream from Cedar Creek, and 10 mi upstream from confluence with South Fork.

DRAINAGE AREA.--768 mi².

GAGE.--Water-stage recorder. Datum of gage is 494.03 ft above National Geodetic Vertical Datum of 1929. Prior to Sept. 21, 1930, nonrecording gage at same site and datum.

STAGE-DISCHARGE.--Defined by current-meter measurements below 46,000 ft³/s and extended above.

BANKFULL STAGE.--11 ft.

REMARKS.--Peaks are from graphs based on gage readings prior to Sept. 21, 1930. Flood peak of October 1942 is highest known since at least 1870.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1926	Aug. 26, 1926	9.74	7,190	1959	June 3, 1959	14.89	13,400
1927	Nov. 17, 1926	12.11	10,100	1960	Oct. 1, 1959	15.31	14,100
1928	May 1, 1928	15.5	14,200	1961	Apr. 13, 1961	11.26	8,890
1929	Apr. 17, 1929	16.3	15,600	1962	Mar. 22, 1962	11.93	9,670
1930	Nov. 19, 1929	9.9	7,170	1963	Mar. 20, 1963	16.44	16,400
1931	Aug. 23, 1931	5.50	2,780	1964	Mar. 4, 1964	10.77	8,260
1932	May 13, 1932	12.72	9,600	1965	Feb. 8, 1965	11.58	9,280
1933	Apr. 21, 1933	16.65	16,200	1966	Mar. 1, 1966	7.06	4,100
1934	Sept. 17, 1934	9.32	6,200	1967	Mar. 8, 1967	15.56	15,000
1935	Dec. 2, 1934	18.99	20,500	1968	Mar. 17, 1968	9.39	6,530
1936	Mar. 18, 1936	30.21	89,000	1969	Aug. 2, 1969	10.62	8,040
1937	Apr. 26, 1937	20.93	24,900	1970	July 10, 1970	11.31	8,900
1938	Oct. 29, 1937	13.48	10,900	1971	Feb. 14, 1971	16.13	15,900
1939	Feb. 4, 1939	15.65	14,200	1972	June 22, 1972	20.88	25,100
1940	June 1, 1940	10.02	6,740	1973	Oct. 6, 1972	23.48	35,700
1941	Apr. 6, 1941	10.42	7,160	1974	Dec. 27, 1973	17.33	18,000
1942	May 23, 1942	19.28	21,400	1975	Mar. 20, 1975	21.22	26,100
1943	Oct. 16, 1942	31.2	100,000	1976	Jan. 1, 1976	15.19	14,400
1944	May 7, 1944	11.80	8,810	1977	Oct. 10, 1976	19.33	21,800
1945	Sept. 19, 1945	20.4	24,000	1978	Jan. 27, 1978	17.21	17,800
1946	May 5, 1946	10.02	6,740	1979	Feb. 26, 1979	15.42	14,800
1947	Mar. 15, 1947	7.29	4,040	1980	Oct. 3, 1979	14.67	13,600
1948	Feb. 15, 1948	9.96	6,740	1981	May 21, 1981	4.71	1,930
1949	Oct. 6, 1948	12.50	9,720	1982	June 14, 1982	11.90	9,670
1950	Sept. 14, 1950	10.96	7,820	1983	Apr. 16, 1983	12.04	9,860
1951	Dec. 5, 1950	16.91	16,700	1984	Feb. 15, 1984	16.86	17,200
1952	Apr. 28, 1952	16.24	15,500	1985	Feb. 13, 1985	10.36	7,720
1953	Nov. 22, 1952	14.20	12,100	1986	Nov. 5, 1985	27.37	62,600
1954	Mar. 2, 1954	13.63	11,500	1987	Apr. 17, 1987	18.27	19,800
1955	Aug. 18, 1955	23.55	36,100	1988	May 7, 1988	13.03	11,200
1956	Mar. 15, 1956	6.84	3,720	1989	May 2, 1989	8.30	5,330
1957	Apr. 6, 1957	11.47	8,760	1990a	May 30, 1990	8.10	5,120
1958	July 28, 1958	7.44	4,320				

a Maximum annual stage, 8.66 ft, Jan. 3, due to backwater from ice jam.

01634500 CEDAR CREEK NEAR WINCHESTER, VA

LOCATION.--Lat 39°04'52", long 78°19'47", Frederick County, Hydrologic Unit 02070006, on left bank 0.2 mi upstream from Fawcett Run, 0.3 mi upstream from bridge on State Highway 628, 1.3 mi downstream from Froman Run, and 11.4 mi southwest of Winchester.

DRAINAGE AREA.--103 mi².

GAGE.--Water-stage recorder. Datum of gage is 647.09 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 2,960 ft³/s and extended above on basis of slope-area measurement at 20,300 ft³/s.

BANKFULL STAGE.--Not determined.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1936	Mar. 17, 1936	a25	18,000	1964	Mar. 3, 1964	6.61	1,470
1938	Oct. 28, 1937	11.32	3,660	1965	Mar. 5, 1965	8.89	2,310
1939	Feb. 3, 1939	10.38	3,250	1966	Sept. 21, 1966	7.55	1,810
1940	June 12, 1940	9.81	2,980	1967	Mar. 7, 1967	10.86	3,170
1941	Apr. 5, 1941	8.80	2,530	1968	Mar. 17, 1968	8.08	1,990
1942	May 22, 1942	10.45	2,950	1969	Aug. 4, 1969	2.97	245
1943	Oct. 15, 1942	27.0	22,000	1970	June 25, 1970	7.52	1,780
1944	May 7, 1944	7.33	1,680	1971	May 30, 1971	9.18	3,560
1945	Sept. 18, 1945	13.37	4,290	1972	June 22, 1972	23.19	20,300
1946	June 2, 1946	8.73	2,230	1973	Apr. 2, 1973	7.40	2,280
1947	May 18, 1947	3.95	526	1974	June 2, 1974	8.80	3,320
1948	Apr. 14, 1948	6.14	1,240	1975	Mar. 19, 1975	12.60	5,840
1949	Dec. 30, 1948	7.51	1,750	1976	Jan. 1, 1976	11.68	5,160
1950	May 18, 1950	6.25	1,270	1977	Oct. 9, 1976	17.00	10,000
1951	May 11, 1951	15.11	5,470	1978	Aug. 6, 1978	22.14	17,800
1952	Apr. 28, 1952	10.88	3,170	1979	Feb. 26, 1979	11.16	4,790
1953	Nov. 21, 1952	10.1	2,820	1980	Nov. 2, 1979	11.08	4,720
1954	Mar. 1, 1954	13.30	4,340	1981	June 13, 1981	b9.17	3,540
1955	Aug. 18, 1955	20.49	11,100	1982	June 13, 1982	10.92	4,600
1956	Mar. 14, 1956	6.04	1,260	1983	Apr. 24, 1983	9.07	3,480
1957	Apr. 5, 1957	7.22	1,650	1984	Feb. 14, 1984	14.28	7,240
1958	Mar. 27, 1958	5.32	1,040	1985	Nov. 28, 1984	10.35	4,240
1959	June 2, 1959	11.68	3,540	1986	Nov. 5, 1985	16.05	8,980
1960	May 8, 1960	8.23	2,030	1987	Apr. 17, 1987	11.06	4,690
1961	Feb. 19, 1961	7.17	1,670	1988	May 6, 1988	10.24	4,180
1962	Mar. 21, 1962	8.04	1,950	1989	June 23, 1989	9.53	3,750
1963	Mar. 19, 1963	10.96	3,220	1990	Jan. 30, 1990	3.93	703

a From information by local residents.

b From high-water mark.

01635200 NORTH FORK SHENANDOAH RIVER TRIBUTARY NEAR WATERLICK, VA

LOCATION.--Lat 38°58'25", long 78°18'30", Warren County, Hydrologic Unit 02070006, at culvert on State Highway 55, 1.3 mi west of Waterlick.

DRAINAGE AREA.--0.48 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 568.11 ft above National Geodetic Vertical Datum of 1929. Prior to Apr. 24, 1967, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--4 ft.

REMARKS.--Annual peak stage did not reach lowest point on crest-stage gage during many years.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1966	Sept. 21, 1966	3.47	16	1972	June 21, 1972	4.86	63
1967	Mar. 7, 1967	3.68	22	1973	-	<3.60	<20
1968	-	<3.60	<20	1974	Oct. 29, 1973	4.11	35
1969	-	<3.60	<20	1975	Sept. 26, 1975	4.58	52
1970	-	<3.60	<20	1976	Oct. 17, 1975	4.14	36
1971	May 30, 1971	3.89	29				

< Less than.

01635500 PASSAGE CREEK NEAR BUCKTON, VA

LOCATION.--Lat 38°57'29", long 78°16'01", Warren County, Hydrologic Unit 02070006, on right bank 350 ft upstream from bridge on State Highway 55, 1.2 mi south of Buckton railroad station, 1.4 mi upstream from mouth, and 4.2 mi west of Riverton.

DRAINAGE AREA.--87.8 mi².

GAGE.--Water-stage recorder and concrete control. Datum of gage is 525.14 ft above National Geodetic Vertical Datum of 1929. October 1905 to July 1906, nonrecording gage at site 1 mi downstream at different datum. Apr. 4, 1932, to Oct. 7, 1937, nonrecording gage at site 350 ft downstream at different datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 3,000 ft³/s and extended above 5,000 ft³/s on basis of gage-height relation curve prior to 1938. Defined by current-meter measurements below 5,200 ft³/s and extended above since 1938.

BANKFULL STAGE.--Not determined.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1933	Apr. 21, 1933	8.0	3,860	1962	Mar. 21, 1962	7.52	1,890
1934	Mar. 3, 1934	4.5	588	1963	Mar. 20, 1963	8.66	2,870
1935	Dec. 1, 1934	10.0	6,800	1964	Mar. 3, 1964	6.69	1,340
1936	Mar. 17, 1936	14.29	17,000	1965	Feb. 8, 1965	7.09	1,590
1937	Apr. 26, 1937	9.0	5,060	1966	Feb. 13, 1966	7.86	2,210
1938	Oct. 28, 1937	7.39	1,810	1967	Mar. 7, 1967	10.20	4,330
1939	Feb. 4, 1939	8.37	2,610	1968	Mar. 17, 1968	6.61	1,240
1940	June 12, 1940	8.00	2,290	1969	Aug. 2, 1969	5.96	838
1941	Apr. 5, 1941	6.85	1,400	1970	July 10, 1970	5.98	865
1942	May 22, 1942	7.76	2,130	1971	May 31, 1971	9.13	3,230
1943	Oct. 15, 1942	15.5	21,000	1972	June 22, 1972	13.56	13,100
1944	May 7, 1944	7.27	1,690	1973	Nov. 14, 1972	7.78	2,130
1945	Sept. 18, 1945	9.80	3,900	1974	June 2, 1974	10.06	4,220
1946	May 4, 1946	7.22	1,650	1975	Mar. 20, 1975	9.32	3,410
1947	May 1, 1947	5.50	576	1976	Jan. 1, 1976	8.65	2,780
1948	Feb. 14, 1948	-	1,440	1977	Oct. 9, 1976	9.21	3,320
1949	July 8, 1949	7.42	1,810	1978	Jan. 26, 1978	9.40	3,500
1950	May 29, 1950	6.68	1,290	1979	Feb. 25, 1979	7.67	2,110
1951	Dec. 4, 1950	9.60	3,700	1980	Oct. 6, 1979	7.52	1,970
1952	Apr. 28, 1952	9.12	3,230	1981	Feb. 21, 1981	5.32	586
1953	Mar. 24, 1953	7.62	1,970	1982	June 13, 1982	7.73	2,130
1954	Mar. 1, 1954	8.80	2,960	1983	May 17, 1983	8.01	2,330
1955	Aug. 18, 1955	14.02	14,700	1984	Feb. 14, 1984	10.69	4,980
1956	Mar. 14, 1956	6.58	1,230	1985	Feb. 12, 1985	7.95	2,280
1957	June 5, 1957	6.52	1,160	1986	Nov. 5, 1985	10.45	4,640
1958	Apr. 23, 1958	8.37	2,610	1987	Apr. 17, 1987	7.60	2,040
1959	June 3, 1959	7.36	1,850	1988	May 6, 1988	7.35	1,860
1960	Apr. 5, 1960	8.17	2,450	1989	May 17, 1989	6.74	1,450
1961	Feb. 19, 1961	7.36	1,810	1990	May 29, 1990	5.82	872

01636000 NORTH FORK SHENANDOAH RIVER NEAR RIVERTON, VA

LOCATION.--Lat 36°57'30", long 78°13'25", Warren County, Hydrologic Unit 02070006, 2 mi northwest of Riverton and 2 mi upstream from confluence with South Fork Shenandoah River.

DRAINAGE AREA.--1,040 mi².

GAGE.--Nonrecording gage (staff gage). Datum of gage is 470 ft above National Geodetic Vertical Datum of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 3,000 ft³/s and extended above by logarithmic plotting on basis of records at other sites on the Shenandoah River.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1900	Mar. 20, 1900	-	7,000	1904	Apr. 29, 1904	-	2,880
1901	Apr. 21, 1901	-	34,000	1905	June 25, 1905	-	9,800
1902a	Nov. 24, 1901	-	b14,580	1906c	Dec. 22, 1905	-	7,000
1903	June 10, 1903	-	19,300				

a Partial year, October through February, September.

b Mean daily discharge; peak flow is greater than value shown.

c Partial year, October through July.

01636200 SHENANDOAH RIVER AT RIVERTON, VA

LOCATION.--Lat 38°56'54", long 78°11'18", Warren County, Hydrologic Unit 02070007, at Norfolk Southern Railroad bridge just downstream from junction of North and South Fork Shenandoah River, at Riverton.

DRAINAGE AREA.--2,694 mi².

GAGE.--Nonrecording gage (wire-weight gage). Datum of gage is 455.67 ft above National Geodetic Vertical Datum of 1929. Prior to April 1931, nonrecording staff gage at site.

STAGE-DISCHARGE RELATION.--Not developed.

BANKFULL STAGE.--22 ft.

REMARKS.--Water-stage readings were provided by the National Weather Service. Lower stage readings affected by backwater from dam about 2 mi downstream.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1870	Sept. 30, 1870	a47	-	1933	Apr. 21, 1933	16.8	-
1878	Nov. 24, 1877	a41	-	1934	Aug. 18, 1934	7.2	-
1889	June 1, 1889	a36	-	1935	Dec. 2, 1934	23.7	-
1893	May 5, 1893	15.8	-	1936	Mar. 18, 1936	37.5	-
1894	Oct. 14, 1893	16.7	-	1937	Apr. 27, 1937	27	-
1896	Jan. 25, 1896	a34.2	-	1938	Oct. 29, 1937	14.4	-
1897	Oct. 1, 1896	a33.3	-	1939	Feb. 4, 1939	13.9	-
1902	Mar. 1, 1902	27.6	-	1940	Aug. 17, 1940	15.6	-
1903	June 10, 1903	10	-	1941	Apr. 6, 1941	8.0	-
1904	March 1904	11	-	1942	May 23, 1942	20.9	-
1907	Oct. 20, 1906	16	-	1943	Oct. 16, 1942	46.00	-
1908	Jan. 13, 1908	18	-	1944	May 8, 1944	10.5	-
1909	Apr. 15, 1909	9.9	-	1945	Sept. 19, 1945	22	-
1910	June 17, 1910	24.8	-	1946	May 5, 1946	7.6	-
1911	Aug. 31, 1911	6.0	-	1947	Mar. 16, 1947	8.2	-
1912	May 13, 1912	14.6	-	1948	Feb. 15, 1948	12.1	-
1913	Mar. 28, 1913	14.6	-	1949	June 19, 1949	20.4	-
1914	Nov. 10, 1913	10.6	-	1950	Sept. 14, 1950	10	-
1915	Jan. 8, 1915	13.6	-	1951	Dec. 5, 1950	18.1	-
1916	Mar. 29, 1916	10.2	-	1952	Apr. 29, 1952	18	-
1917	Mar. 14, 1917	8.6	-	1953	Mar. 26, 1953	15	-
1924	May 12, 1924	34	-	1954	Mar. 2, 1954	14.5	-
1925	Feb. 12, 1925	12.6	-	1955	Aug. 19, 1955	29	-
1926	Sept. 24, 1926	7.2	-	1956	Mar. 16, 1956	6.5	-
1927	Nov. 17, 1926	12	-	1957	Apr. 5, 1957	12.2	-
1928	May 1, 1928	13.6	-	1958	Apr. 24, 1958	10.3	-
1929	Apr. 17, 1929	16.9	-	1959	June 3, 1959	12.85	-
1931	Jan. 7, 1931	6.7	-	1960	May 9, 1960	17.9	-
1932	May 13, 1932	14.5	-	1961	Feb. 20, 1961	14.61	-

a From information by local residents.

01636210 HAPPY CREEK AT FRONT ROYAL, VA

LOCATION.--Lat 38°54'20", long 78°11'10", Warren County, Hydrologic Unit 02070007, on left bank 30 ft upstream from highway bridge, 1.0 mi south of Front Royal, 2.3 mi upstream from Leach Run, and 2.9 mi upstream from mouth.

DRAINAGE AREA.--14.0 mi².

GAGE.--Water-stage recorder. Datum of gage is 248.93 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1949, at site 0.3 mi downstream at different datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 120 ft³/s and extended above by logarithmic plotting at 1949 site. Defined by current-meter measurements below 460 ft³/s and extended above on basis of slope-area measurement at 1,490 ft³/s.

BANKFULL STAGE.--7 ft.

REMARKS.--Subsequent to Sept. 30, 1976, records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1949	Oct. 5, 1948	6.40	2,490	1964	Nov. 7, 1963	3.73	432
1950	June 10, 1950	3.59	356	1965	May 19, 1965	4.49	a780
1951	Dec. 4, 1950	7.00	1,920	1966	Sept. 21, 1966	3.72	424
1952	Apr. 27, 1952	5.10	1,080	1967	Mar. 7, 1967	4.46	760
1953	Nov. 21, 1952	5.14	1,100	1968	Sept. 10, 1968	4.17	631
1954	Mar. 1, 1954	4.84	955	1969	Nov. 29, 1968	4.37	716
1955	Aug. 18, 1955	6.48	1,750	1970	Dec. 10, 1969	4.08	586
1956	July 20, 1956	3.26	253	1971	May 31, 1971	4.24	658
1957	June 6, 1957	4.00	550	1972	June 22, 1972	6.13	1,600
1958	Jan. 14, 1958	4.04	568	1973	Oct. 11, 1972	3.89	500
1959	June 3, 1959	4.32	685	1974	Oct. 29, 1973	4.93	995
1960	June 13, 1960	5.62	1,330	1975	Mar. 19, 1975	6.01	1,540
1961	Apr. 13, 1961	4.16	618	1976	Dec. 31, 1975	3.61	374
1962	July 30, 1962	3.74	436	1977	Oct. 9, 1976	6.43	1,730
1963	Nov. 10, 1962	3.81	464				

a Caused by draining reservoir above gage.

01638480 CATOCTIN CREEK AT TAYLORSTOWN, VA

LOCATION.--Lat 39°15'18", long 77°34'36", Loudoun County, Hydrologic Unit 02070008, on left bank at downstream side of bridge on State Highway 663 at Taylorstown and 3.2 mi downstream from Milltown Creek.

DRAINAGE AREA.--89.6 mi².

GAGE.--Water-stage recorder. Datum of gage is 247.37 ft above National Geodetic Vertical Datum of 1929. Prior to Nov. 3, 1983, at site 60 ft upstream at datum 1.78 ft higher.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 7,400 ft³/s and extended above on basis of contracted-opening measurement at 23,800 ft³/s.

BANKFULL STAGE.--11 ft.

REMARKS.--Records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1971	Sept. 12, 1971	11.03	4,600	1981	Feb. 11, 1981	4.39	1,090
1972	June 22, 1972	23.83	23,800	1982	June 17, 1982	8.45	3,000
1973	May 28, 1973	7.90	2,640	1983	Apr. 10, 1983	10.77	4,440
1974	Dec. 26, 1973	6.48	1,920	1984	Aug. 13, 1984	15.32	7,320
1975	Sept. 25, 1975	11.43	4,920	1985	Feb. 12, 1985	13.08	5,440
1976	Jan. 1, 1976	12.23	3,620	1986	Mar. 15, 1986	7.00	1,640
1977	Oct. 9, 1976	19.92	15,900	1987	July 1, 1987	17.99	13,200
1978	Jan. 26, 1978	10.43	4,180	1988	May 18, 1988	12.98	5,370
1979	Sept. 6, 1979	12.47	5,850	1989	May 16, 1989	10.39	3,670
1980	Oct. 1, 1979	10.15	4,040	1990	May 29, 1990	5.48	856

01643700 GOOSE CREEK NEAR MIDDLEBURG, VA

LOCATION.--Lat 38°59'11", long 77°47'49", Loudoun County, Hydrologic Unit 02070008, on right bank 250 ft upstream from bridge on State Highway 611, 2.0 mi downstream from Panther Skin Creek, and 3.4 mi northwest of Middleburg.

DRAINAGE AREA.--123 mi².

GAGE.--Water-stage recorder. Datum of gage is 329.80 ft above National Geodetic Vertical Datum of 1929. October 1965 to September 1967, at site 300 ft downstream at datum 0.73 ft lower.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 3,130 ft³/s and extended above on basis of slope-area measurements at 7,000 ft³/s and 19,000 ft³/s.

BANKFULL STAGE.--Not determined.

REMARKS.--Records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1966	Feb. 13, 1966	8.96	2,350	1980	Mar. 21, 1980	11.40	3,300
1967	Aug. 25, 1967	14.44	6,920	1981	Aug. 31, 1981	5.68	924
1970	July 10, 1970	8.31	3,020	1982	June 13, 1982	10.19	2,700
1971	Feb. 13, 1971	11.92	6,170	1983	Apr. 10, 1983	13.30	4,400
1972	June 22, 1972	27.46	19,200	1984	Feb. 14, 1984	16.66	6,810
1973	May 28, 1973	8.75	1,820	1985	Feb. 12, 1985	16.72	6,860
1974	Dec. 26, 1973	8.00	1,510	1986	Mar. 15, 1986	7.27	1,630
1975	Dec. 1, 1974	17.08	7,190	1987	Apr. 17, 1987	9.16	2,340
1976	Jan. 1, 1976	12.23	3,620	1988	May 18, 1988	8.88	2,240
1977	Oct. 9, 1976	25.50	16,600	1989	July 20, 1989	17.36	7,330
1978	Jan. 26, 1978	14.17	4,890	1990	July 16, 1990	7.23	1,470
1979	Aug. 24, 1979	16.26	6,500				

01644000 GOOSE CREEK NEAR LEESBURG, VA

LOCATION.--Lat 39°01'10", long 77°34'40", Loudoun County, Hydrologic Unit 02070008, on left bank 400 ft upstream from bridge on State Highway 621 at Evergreen Mills, 1.4 mi downstream from Little River, 6.7 mi south of Leesburg, and 10.9 mi upstream from mouth.

DRAINAGE AREA.--332 mi².

GAGE.--Water-stage recorder. Datum of gage is 248.93 ft above National Geodetic Vertical Datum of 1929. July 12, 1909, to Dec. 31, 1912, nonrecording gage at site 1,000 ft downstream at different datum. Jan. 21, 1930, to Nov. 28, 1938, nonrecording gage at site 400 ft downstream at datum 4.20 ft lower than present datum.

STAGE-DISCHARGE RELATION.--Prior to 1938, defined by current-meter measurements below 7,400 ft³/s and extended above. After 1938, defined by current-meter measurements below 13,600 ft³/s and extended above on basis of slope-area measurements at 48,000 ft³/s and 78,000 ft³/s.

BANKFULL STAGE.--8 ft.

REMARKS.--Peak discharges for 1937, 1943, 1951, and 1956 water years were revised in 1972 based on a slope-area measurement of the June 22, 1972, flood of 78,000 ft³/s. Subsequent to Sept. 30, 1981, records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1889	June 1889	a29	45,000	1959	June 3, 1959	9.81	6,600
1910	Jan. 18, 1910	b11.0	4,000	1960	Apr. 5, 1960	8.95	5,880
1911	Sept. 6, 1911	b4.0	1,150	1961	Apr. 13, 1961	9.41	6,240
1912	Sept. 24, 1912	b20	13,000	1962	Mar. 12, 1962	-	-
1930	Mar. 8, 1930	b11.82	4,800	1963	Mar. 20, 1963	6.67	4,070
1931	Jan. 6, 1931	b5.6	1,300	1964	Jan. 9, 1964	10.78	6,580
1932	May 13, 1932	b18.45	9,650	1965	Mar. 5, 1965	12.48	8,600
1933	Aug. 23, 1933	b21.60	17,000	1966	Feb. 14, 1966	8.35	5,210
1934	Sept. 16, 1934	b11.0	4,270	1967	Aug. 25, 1967	14.00	10,300
1935	Dec. 1, 1934	b15.0	7,010	1968	Jan. 14, 1968	12.35	8,470
1936	Mar. 17, 1936	b13.61	6,010	1969	Aug. 3, 1969	4.34	1,960
1937	Aug. 26, 1937	b26.86	35,600	1970	Apr. 14, 1970	6.43	3,790
1938	Oct. 28, 1937	b17.0	8,530	1971	Nov. 13, 1970	12.26	8,380
1939	Feb. 4, 1939	7.85	4,660	1972	June 22, 1972	30.59	78,100
1940	Feb. 19, 1940	7.53	4,450	1973	Dec. 22, 1972	8.94	5,620
1941	Apr. 5, 1941	7.70	4,590	1974	Dec. 27, 1973	9.10	5,750
1942	Aug. 9, 1942	6.43	3,560	1975	Dec. 2, 1974	18.84	20,300
1943	Oct. 16, 1942	22.90	35,600	1976	Jan. 1, 1976	13.32	9,490
1944	Jan. 4, 1944	8.00	4,820	1977	Oct. 9, 1976	25.74	48,700
1945	Sept. 18, 1945	18.0	18,500	1978	Jan. 26, 1978	14.94	11,700
1946	May 27, 1946	11.53	7,440	1979	Feb. 26, 1979	16.36	14,300
1947	Aug. 4, 1947	7.23	4,220	1980	Oct. 1, 1979	10.14	6,580
1948	Feb. 14, 1948	8.49	5,170	1981	Feb. 11, 1981	6.56	3,950
1949	Dec. 30, 1948	9.21	5,700	1982	July 13, 1982	10.21	6,640
1950	May 19, 1950	10.82	6,880	1983	Apr. 10, 1983	14.86	11,500
1951	Dec. 4, 1950	18.25	18,600	1984	Feb. 15, 1984	16.36	14,000
1952	Apr. 28, 1952	14.3	11,700	1985	Feb. 12, 1985	15.88	13,100
1953	Nov. 22, 1952	12.13	8,840	1986	Mar. 15, 1986	6.44	3,870
1954	Apr. 28, 1954	4.82	2,320	1987	Apr. 4, 1987	8.72	5,460
1955	Aug. 19, 1955	11.58	8,320	1988	Nov. 29, 1987	9.37	5,970
1956	July 21, 1956	20.9	27,600	1989	May 6, 1989	8.71	5,460
1957	Nov. 1, 1956	7.03	4,220	1990	Aug. 20, 1990	4.46	2,340
1958	Jan. 14, 1958	12.50	9,280				

a From information by local residents, site and datum in use 1930-38.

b At datum then in use.

01644100 SOUTH FORK SYCOLIN CREEK NEAR LEESBURG, VA

LOCATION.--Lat 39°04'15", long 77°36'35", Loudoun County, Hydrologic Unit 02070008, at culvert on U.S. Highway 15, 3.9 mi southwest of Leesburg.

DRAINAGE AREA.--2.05 mi².

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is 380.47 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--6 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1966	Feb. 13, 1966	4.35	175	1972	June 21, 1972	12.33	1,130
1967	Aug. 7, 1967	7.60	505	1973	Apr. 27, 1973	4.22	165
1968	June 12, 1968	7.60	505	1974	June 20, 1974	4.45	186
1969	July 22, 1969	8.00	550	1975	Sept. 26, 1975	6.16	348
1970	July 9, 1970	5.10	244	1976	July 29, 1976	8.32	588
1971	Sept. 11, 1971	6.25	358	1977	Oct. 9, 1976	11.50	1,010

POTOMAC RIVER BASIN

01644200 LENA RUN AT LENA, VA
(Formerly published as Broad Run at Lenah)

LOCATION.--Lat 38°57'06", long 77°34'37", Loudoun County, Hydrologic Unit 02070008, at bridge on U.S. Highway 50, at Lenah.

DRAINAGE AREA.--1.09 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Not developed.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1962	-	<2.56	-	1970	Apr. 14, 1970	2.31	-
1963	-	<2.56	-	1971	May 30, 1971	3.01	-
1964	Apr. 29, 1964	2.23	-	1972	June 21, 1972	8.46	-
1965	Mar. 5, 1965	3.18	-	1973	Oct. 28, 1972	2.92	-
1966	Sept. 14, 1966	2.26	-	1974	-	<2.57	-
1967	Aug. 24, 1967	4.20	-	1975	Sept. 26, 1975	4.21	-
1968	June 12, 1968	4.10	-	1976	Jan. 1, 1976	2.92	-
1969	Sept. 3, 1969	4.34	-	1977	Oct. 9, 1976	3.88	-

< Less than.

POTOMAC RIVER BASIN

01644250 SOUTH FORK BROAD RUN NEAR ARCOLA, VA

LOCATION.--Lat 38°56'30", long 77°33'05", Loudoun County, Hydrologic Unit 02070008, at culvert on U.S. Highway 50, 1.2 mi southwest of Arcola.

DRAINAGE AREA.--4.12 mi².

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--6 ft.

REMARKS.--Local resident reported flow about 2 ft deep over road shortly after the present culvert was installed in the early 1950's. Low point in highway is about 12.4 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1966	Feb. 13, 1966	6.53	286	1970	Dec. 10, 1969	5.80	180
1967	Aug. 24, 1967	10.80	1,070	1971	Nov. 4, 1970	6.60	295
1968	June 12, 1968	6.51	282	1972	June 21, 1972	16.80	4,180
1969	Sept. 3, 1969	10.60	1,040	1973	Apr. 27, 1973	6.25	240

POTOMAC RIVER BASIN

01644290 STAVE RUN AT RESTON, VA

LOCATION.--Lat 38°56'57", long 77°22'18", Fairfax County, Hydrologic Unit 02070008, on left bank 0.28 mi upstream from mouth, and 1.9 mi southwest of Reston.

DRAINAGE AREA.--0.05 mi².

GAGE.--Water-stage recorder and V-notch sharp-crested weir. Datum of gage is 380.87 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements and volumetric measurements below 1.85 ft³/s and extended above.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1967	Mar. 7, 1967	1.12	4.0	1970	Sept. 30, 1970	1.93	39
1968	May 28, 1968	.99	2.0	1971	July 29, 1971	2.07	50
1969	Aug. 10, 1969	.97	2.0				

01644291 STAVE RUN NEAR RESTON, VA

LOCATION.--Lat 38°56'56", long 77°22'16", Fairfax County, Hydrologic Unit 02070008, on left bank 450 ft downstream from the western boundary line of the U.S. Geological Survey National Center property, 0.31 mi upstream from mouth, and 1.4 mi southwest of Sunset Hills in Reston.

DRAINAGE AREA.--0.08 mi².

GAGE.--Water-stage recorder, trapezoidal flume, and crest-stage gage. Datum of gage is 367.25 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 67 ft³/s and extended above.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1972	June 21, 1972	1.84	87	1977	Aug. 24, 1977	2.84	170
1973	Sept. 14, 1973	2.09	75	1978	Aug. 13, 1978	3.43	281
1974	Aug. 4, 1974	2.04	71	1979	Aug. 2, 1979	2.89	178
1975	Sept. 25, 1975	2.79	170	1980	Oct. 1, 1979	1.99	63
1976	June 16, 1976	2.05	72	1981	June 13, 1981	2.16	80

POTOMAC RIVER BASIN

01644295 SMILAX BRANCH AT RESTON, VA

LOCATION.--Lat 38°57'10", long 77°22'04", Fairfax County, Hydrologic Unit 02070008, on right bank 100 ft upstream from Dulles Airport Road, 0.4 mi upstream from mouth, 1.0 mi west of Sunset Hills in Reston, and 4.3 mi east of Dulles International Airport.

DRAINAGE AREA.--0.32 mi².

GAGE.--Water-stage recorder and concrete control. Datum of gage is 356.59 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 79 ft³/s and extended above on basis of computation of peak-flow-through-culvert measurement at 230 ft³/s.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1968	June 12, 1968	3.80	23	1974	June 17, 1974	4.50	88
1969	Aug. 9, 1969	4.10	39	1975	Sept. 26, 1975	5.16	160
1970	Apr. 14, 1970	4.01	30	1976	Apr. 1, 1976	4.35	67
1971	May 13, 1971	4.38	70	1977	Aug. 24, 1977	4.92	126
1972	June 21, 1972	5.79	230	1978	Aug. 13, 1978	6.37	301
1973	Sept. 14, 1973	4.89	129				

POTOMAC RIVER BASIN

01644300 SUGARLAND RUN AT HERNDON, VA

LOCATION.--Lat 38°58'00", long 77°22'17", Fairfax County, Hydrologic Unit 02070008, at bridge at State Highway 606 in Herndon, 2.6 mi upstream from Folly Lick Branch.

DRAINAGE AREA.--3.36 mi².

GAGE.--Water-stage recorder. Datum of gage is 309.26 ft above National Geodetic Vertical Datum of 1929. Prior to Mar. 13, 1970, datum of gage was 0.14 ft higher.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 188 ft³/s and extended above on basis of computation of peak-flow-through-culvert measurements at 325 ft³/s, 450 ft³/s, and 530 ft³/s.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1965	Mar. 5, 1965	6.56	480	1968	Jan. 14, 1968	5.55	250
1966	Sept. 14, 1966	5.85	320		May 28, 1968	5.55	250
1967	Aug. 24, 1967	6.98	565	1970	Apr. 14, 1970	a6.50	240

a At different datum resulting from bridge reconstruction in 1968.

POTOMAC RIVER BASIN

01644370 SUGARLAND RUN NEAR DRANESVILLE, VA

LOCATION.--Lat 39°00'47", long 77°22'12", Fairfax County, Hydrologic Unit 02070008, at Leesburg Turnpike (State Highway 7), 1.5 mi northwest of Dranesville.

DRAINAGE AREA.--13.4 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Not developed. Flood peak for June 1972 determined from slope-area measurement.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1961	Apr. 13, 1961	3.98	-	1967	Aug. 24, 1967	4.24	-
1962	Mar. 12, 1962	2.23	-	1968	May 28, 1968	3.68	-
1963	Aug. 20, 1963	3.48	-	1969	July 22, 1969	4.68	-
1964	May 13, 1964	3.07	-	1970	Apr. 14, 1970	3.59	-
1965	July 18, 1965	3.68	-	1971	Sept. 11, 1971	4.62	-
1966	Sept. 14, 1966	2.87	-	1972	June 21, 1972	8.69	8,800

01645700 DIFFICULT RUN NEAR FAIRFAX, VA

LOCATION.--Lat 38°52'29", long 77°20'18", Fairfax County, Hydrologic Unit 02070008, at bridge on State Highway 665, 2.5 mi northwest of Fairfax.

DRAINAGE AREA.--4.29 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 310 ft above National Geodetic Vertical Datum of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by contracted-opening measurements at 470 ft³/s and 783 ft³/s.

BANKFULL STAGE.--6 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1950	July 16, 1950	7.05	705	1961	Apr. 13, 1961	5.6	420
1951	Dec. 4, 1950	6.21	530	1962	Mar. 12, 1962	7.9	900
1952	Sept. 1, 1952	7.40	783	1963	June 30, 1963	6.5	590
1953	Nov. 21, 1952	5.90	470	1964	May 13, 1964	4.3	225
1954	Dec. 14, 1953	4.10	205	1965	Mar. 5, 1965	6.9	670
1955	Aug. 22, 1955	6.96	690	1966	Sept. 14, 1966	6.8	650
1956	Dec. 14, 1955	6.2	530	1967	Aug. 24, 1967	7.8	1,180
1957	Oct. 22, 1956	6.49	590	1968	Sept. 10, 1968	5.05	330
1958	Dec. 21, 1957	6.98	700	1969	July 22, 1969	8.7	-
1959	Sept. 2, 1959	4.6	270	1970	Aug. 14, 1970	4.4	240
1960	Apr. 5, 1960	5.00	320				

POTOMAC RIVER BASIN

01645750 SOUTH FORK LITTLE DIFFICULT RUN NEAR FAIRFAX, VA

LOCATION.--Lat 38°53'52", long 77°21'12", Fairfax County, Hydrologic Unit 02070008, at bridge on Fox Mill Road, 1.2 mi upstream from its confluence with Little Difficult Run, and 3.2 mi northwest of Fairfax.

DRAINAGE AREA.--1.59 mi².

GAGE.--Water-stage recorder. Datum of gage is 317.09 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 40 ft³/s and extended above on basis of slope-area measurements at 81 ft³/s and 200 ft³/s.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1966a	Sept. 14, 1966	6.37	80	1969	June 3, 1969	8.37	210
1967	Aug. 24, 1967	8.31	200	1970	Aug. 14, 1970	6.50	80
1968	Jan. 14, 1968	5.66	60				

a Partial year, August through September.

POTOMAC RIVER BASIN

01645784 SNAKEDEN BRANCH AT RESTON, VA

LOCATION.--Lat 38°55'48", long 77°20'43", Fairfax County, Hydrologic Unit 02070008, on right bank at upstream side of culvert on Soapstone Drive, 1.1 mi upstream from Lake Elsa Dam, and 1.7 mi south of Sunset Hills in Reston.

DRAINAGE AREA.--0.79 mi².

GAGE.--Water-stage recorder. Datum of gage is 320.15 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 100 ft³/s and extended above.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1972	June 21, 1972	a6.4	760	1985	Feb. 12, 1985	2.29	141
1973	Sept. 14, 1973	5.04	523	1986	Aug. 8, 1986	2.75	196
1974	June 17, 1974	3.61	308	1987	June 4, 1987	4.50	447
1975	Sept. 26, 1975	4.91	516	1988	May 18, 1988	5.44	-
1976	Apr. 1, 1976	3.28	262	1989	May 5, 1989	4.90	-
1977	Aug. 24, 1977	4.28	412	1990	Aug. 20, 1990	3.85	340
1978	May 14, 1978	3.91	354				

a From high-water marks.

POTOMAC RIVER BASIN

01645800 PINEY BRANCH AT VIENNA, VA

LOCATION.--Lat 38°54'06", long 77°15'57", Fairfax County, Hydrologic Unit 02070008, on right bank 30 ft downstream from North Center Street at Vienna, 400 ft upstream from the Washington and Old Dominion Railroad.

DRAINAGE AREA.--0.29 mi², approximately.

GAGE.--Water-stage recorder. Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 100 ft³/s and extended above on basis of computation of peak-flow-through-culvert measurements at 200 ft³/s, 250 ft³/s, and 280 ft³/s.

BANKFULL STAGE.--4 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1963	June 30, 1963	5.00	194	1967	Aug. 24, 1967	6.20	280
1964	May 13, 1964	4.88	182	1968	Sept. 10, 1968	7.20	200
1965	Aug. 18, 1965	5.40	235	1969	July 22, 1969	-	250
1966	Sept. 14, 1966	5.64	261				

POTOMAC RIVER BASIN

63

01645900 COLVIN RUN AT RESTON, VA
(Formerly published as Colvin Run near Herndon)

LOCATION.--Lat 38°57'56", long 77°18'36", Fairfax County, Hydrologic Unit 02070008, on right bank 10 ft downstream from highway bridge, 1.2 mi upstream from Leesburg Pike, and 4.1 mi northeast of Reston.

DRAINAGE AREA.--5.09 mi².

GAGE.--Water-stage recorder. Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 170 ft³/s and extended above on basis of slope-area measurement at 400 ft³/s.

BANKFULL STAGE.--Not determined.

REMARKS.--Some regulation by Lake Fairfax 0.5 mi upstream.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1961	June 10, 1961	3.39	320	1964	Jan. 9, 1964	3.13	268
1962	Mar. 12, 1962	2.64	176	1966	Sept. 14, 1966	5.82	420
1963	June 30, 1963	5.13	790	1967	Aug. 24, 1967	6.37	600

POTOMAC RIVER BASIN

01645950 PINEY RUN AT RESTON, VA

LOCATION.--Lat 38°58'49", long 77°19'09", Fairfax County, Hydrologic Unit 02070008, at downstream end of culvert on Leesburg Pike, 1 mi northeast of Reston.

DRAINAGE AREA.--2.06 mi².

GAGE.--Water-stage recorder. Datum of gage is 289.35 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 45 ft³/s and extended above on basis of slope-area measurement at 200 ft³/s.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1965	Mar. 5, 1965	9.44	150	1967	Aug. 24, 1967	10.0	220
1966	Sept. 14, 1966	9.83	195				

01645975 ROCKY RUN NEAR GREAT FALLS, VA

LOCATION.--Lat 38°58'16", long 77°14'49", Fairfax County, Hydrologic Unit 02070008, on right downstream end of bridge at Towlston Road, 1.9 mi southeast of Great Falls.

DRAINAGE AREA.--3.22 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Not fully developed.

BANKFULL STAGE.--Not determined.

REMARKS.--Insufficient field data to define lower portion of stage-discharge rating.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1961	Apr. 13, 1961	1.43	-	1967	Aug. 24, 1967	5.0	1,150
1962	Mar. 12, 1962	1.72	-	1968	Sept. 10, 1968	5.24	1,200
1963	June 3, 1963	1.58	-	1969	Aug. 10, 1969	3.63	-
1964	May 13, 1964	1.97	-	1971	Feb. 13, 1971	1.50	-
1965	Aug. 18, 1965	2.45	-	1972	June 21, 1972	5.9	1,360
1966	Sept. 14, 1966	3.83	-				

01646000 DIFFICULT RUN NEAR GREAT FALLS, VA

LOCATION.--Lat 38°58'33", long 77°14'46", Fairfax County, Hydrologic Unit 02070008, on right bank 250 ft downstream from bridge on State Highway 193, 300 ft downstream from Rocky Run, 0.7 mi upstream from mouth, and 1.5 mi southeast of Great Falls.

DRAINAGE AREA.--57.9 mi².

GAGE.--Water-stage recorder. Datum of gage is 151.30 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,560 ft³/s and extended above on basis of contracted-opening measurement at 6,600 ft³/s and slope-area measurement at 32,000 ft³/s.

BANKFULL STAGE.--8 ft.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1935	Sept. 6, 1935	7.03	810	1963	June 30, 1963	8.08	1,350
1936	June 13, 1936	10.58	2,890	1964	Jan. 9, 1964	7.59	1,120
1937	Apr. 26, 1937	8.88	1,760	1965	Mar. 5, 1965	7.82	1,220
1938	Oct. 28, 1937	10.64	2,890	1966	Sept. 14, 1966	8.84	1,710
1939	Jan. 30, 1939	7.36	1,040	1967	Aug. 25, 1967	13.18	6,610
1940	Apr. 20, 1940	7.71	1,170	1968	Sept. 10, 1968	9.37	2,030
1941	Apr. 5, 1941	6.49	685	1969	July 23, 1969	10.97	3,360
1942	Mar. 31, 1942	6.24	634	1970	Apr. 14, 1970	8.30	1,440
1943	Oct. 16, 1942	10.5	2,820	1971	Feb. 14, 1971	9.07	1,850
1944	Nov. 9, 1943	8.5	1,550	1972	June 22, 1972	21.40	32,200
1945	Aug. 1, 1945	8.26	1,450	1973	Apr. 27, 1973	8.86	1,740
1946	May 18, 1946	7.68	1,170	1974	Dec. 21, 1973	7.59	1,120
1947	Aug. 21, 1947	6.42	682	1975	Sept. 26, 1975	13.82	7,770
1948	June 20, 1948	8.05	1,300	1976	Jan. 1, 1976	9.59	2,160
1949	Dec. 4, 1948	7.30	1,000	1977	Oct. 9, 1976	7.46	1,080
1950	July 16, 1950	8.90	1,760	1978	Jan. 26, 1978	11.11	3,480
1951	June 14, 1951	8.88	1,660	1979	Sept. 6, 1979	11.54	3,960
1952	Sept. 1, 1952	9.17	1,940	1980	Oct. 1, 1979	-	a3,000
1953	Nov. 21, 1952	8.90	1,760	1981	July 4, 1981	7.80	1,200
1954	Dec. 14, 1953	6.59	748	1982	June 13, 1982	8.41	1,500
1955	Aug. 13, 1955	10.70	2,960	1983	Apr. 15, 1983	9.21	1,920
1956	July 21, 1956	10.96	3,190	1984	Mar. 29, 1984	8.96	1,770
1957	May 14, 1957	7.85	1,220	1985	Feb. 12, 1985	9.33	1,990
1958	Dec. 21, 1957	9.05	1,820	1986	Apr. 16, 1986	6.42	689
1959	Sept. 2, 1959	7.54	1,080	1987	Sept. 8, 1987	8.41	1,490
1960	Aug. 5, 1960	8.49	1,550	1988	May 19, 1988	11.75	4,310
1961	Apr. 13, 1961	7.60	1,120	1989	May 6, 1989	13.31	6,810
1962	Mar. 12, 1962	7.69	1,170	1990	Nov. 16, 1989	7.31	1,000

a Maximum daily discharge during period of no gage-height record; peak discharge is known to be greater than the value shown.

POTOMAC RIVER BASIN

01646200 SCOTT RUN NEAR MCLEAN, VA

LOCATION.--Lat 38°57'32", long 77°12'21", Fairfax County, Hydrologic Unit 02070010, on left bank at bridge on Old Georgetown Pike, 0.8 mi upstream from mouth, and 2.3 mi northwest of McLean.

DRAINAGE AREA.--4.69 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 145.75 ft above National Geodetic Vertical Datum of 1929. Prior to Sept. 6, 1961, datum of gage was 161.76 ft above National Geodetic Vertical Datum of 1929. Prior to Sept. 18, 1973, water-stage recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 280 ft³/s and extended above on basis of seven slope-area measurements between 500 ft³/s and 3,600 ft³/s.

BANKFULL STAGE.--9 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1961	June 10, 1961	19.63	810	1968	Sept. 10, 1968	23.32	2,620
1962	May 1, 1962	19.17	485	1969	Aug. 9, 1969	21.92	1,450
1963	Nov. 10, 1962	19.01	444	1970	July 9, 1970	21.59	1,200
1964	Nov. 7, 1963	19.07	472	1971	July 29, 1971	23.20	1,740
1965	Mar. 5, 1965	19.90	571	1972	June 21, 1972	25.00	2,800
1966	Sept. 14, 1966	23.30	3,560	1973	Aug. 20, 1973	20.40	700
1967	Aug. 24, 1967	22.75	2,900				

POTOMAC RIVER BASIN

01646300 DEAD RUN NEAR MCLEAN, VA

LOCATION.--Lat 38°51'19", long 77°10'51", Fairfax County, Hydrologic Unit 02070010, at culvert on Benjamin Street, 1.5 mi north of McLean.

DRAINAGE AREA.--1.94 mi².

GAGE.--Water-stage recorder. Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 17 ft³/s and extended above.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1961	Sept. 4, 1961	5.31	200	1962	June 2, 1962	5.48	232

POTOMAC RIVER BASIN

67

01646600 PIMMIT RUN NEAR FALLS CHURCH, VA

LOCATION.--Lat 38°54'41", long 77°11'05", Fairfax County, Hydrologic Unit 02070010, at bridge at Great Falls Road, 1.1 mi north of city boundary of Falls Church.

DRAINAGE AREA.--2.87 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 269.55 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 500 ft³/s and extended above on basis of slope-area measurement at 1,100 ft³/s.

BANKFULL STAGE.--5 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1961	June 10, 1961	5.53	622	1966	Sept. 14, 1966	6.58	1,120
1962	May 1, 1962	3.82	330	1967	Aug. 24, 1967	6.34	1,000
1963	June 20, 1963	3.58	291	1968	Sept. 10, 1968	6.00	860
1964	May 13, 1964	4.70	485	1969	July 22, 1969	6.20	940
1965	Aug. 18, 1965	4.79	510	1970	July 9, 1970	5.50	760

POTOMAC RIVER BASIN

01646700 PIMMIT RUN AT ARLINGTON, VA

LOCATION.--Lat 38°56'10", long 77°08'22", Fairfax County, Hydrologic Unit 02070010, on right bank 150 ft downstream from bridge on Kirby Road, 150 ft upstream from Little Pimmit Run, and 0.8 mi northwest of Arlington County line.

DRAINAGE AREA.--8.12 mi².

GAGE.--Water-stage recorder. Datum of gage is 129.12 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 800 ft³/s and extended above on basis of indirect measurements at 1,900 ft³/s and 2,700 ft³/s.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1961	Aug. 26, 1961	4.28	1,070	1965	Mar. 5, 1965	5.13	1,540
1962	May 2, 1962	3.24	546	1966	Sept. 14, 1966	8.79	2,700
1963	Aug. 20, 1963	3.70	750	1967	Aug. 24, 1967	8.80	2,700
1964	May 13, 1964	5.20	935	1968	Sept. 10, 1968	7.20	1,880

POTOMAC RIVER BASIN

01646750 LITTLE PIMMIT RUN TRIBUTARY AT ARLINGTON, VA

LOCATION.--Lat 38°54'18", long 77°08'17", Arlington County, Hydrologic Unit 02070010, on left bank at 30th Street, 0.2 mi northeast of Yorktown High School, and 0.9 mi upstream from junction with Little Pimmit Run.

DRAINAGE AREA.--0.41 mi².

GAGE.--Water-stage recorder. Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 20 ft³/s and extended above on basis of computations of peak flow through culverts at 300 ft³/s and 700 ft³/s and slope-area measurement at 500 ft³/s.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1962	June 19, 1962	3.63	119	1965	July 18, 1965	6.24	692
1963	June 20, 1963	4.73	307	1966	Sept. 14, 1966	4.48	295
1964	May 13, 1964	4.82	325				

POTOMAC RIVER BASIN

01646800 LITTLE PIMMIT RUN AT ARLINGTON, VA

LOCATION.--Lat 38°55'22", long 77°08'43", Fairfax County, Hydrologic Unit 02070010, at bridge on State Highway 689, 0.4 mi northwest of Arlington County line.

DRAINAGE AREA.--2.31 mi².

GAGE.--Water-stage recorder. Datum of gage is 186.30 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 160 ft³/s and extended above on basis of contracted-opening measurements at 740 ft³/s, 1,000 ft³/s, 1,200 ft³/s, and 2,600 ft³/s.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1961	June 8, 1961	7.67	1,040	1964	May 13, 1964	9.10	1,160
1962	June 19, 1962	4.60	461	1965	July 18, 1965	10.54	2,600
1963	Aug. 20, 1963	7.56	855	1966	Sept. 14, 1966	-	890

01652400 LONG BRANCH AT ARLINGTON, VA

LOCATION.--Lat 38°51'31", long 77°07'37", Arlington County, Hydrologic Unit 02070010, on right bank at South Carlyn Springs Road, 500 ft downstream from Arlington County line, and 1.8 mi southeast of Seven Corners.

DRAINAGE AREA.--0.94 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 184 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Aug. 1, 1964, water-stage recorder at site 100 ft downstream and same datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 30 ft³/s and extended above on basis of computations of peak flow through culverts at 260 ft³/s, 575 ft³/s, 674 ft³/s, and 932 ft³/s.

BANKFULL STAGE.--6 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1961	June 10, 1961	7.02	930	1969	July 22, 1969	26.90	1,280
1962	May 13, 1962	7.43	490	1970	July 9, 1970	22.68	740
1963	Aug. 20, 1963	7.92	830	1971	May 13, 1971	21.31	575
1964	May 13, 1964	7.44	575	1972	June 21, 1972	24.68	980
1965	Aug. 18, 1965	20.93	530	1973	Aug. 20, 1973	23.89	880
1966	Sept. 14, 1966	22.18	680	1974	May 12, 1974	20.75	510
1967	Aug. 24, 1967	21.14	555	1975	Sept. 26, 1975	25.34	1,060
1968	June 27, 1968	20.32	456				

POTOMAC RIVER BASIN

01652430 DOCTORS RUN AT ARLINGTON, VA

LOCATION.--Lat 38°51'42", long 77°06'09", Arlington County, Hydrologic Unit 02070010, at 8th Street, 0.6 mi west of Glebe Road in Arlington.

DRAINAGE AREA.--0.90 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 137 ft above National Geodetic Vertical Datum of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1966	Sept. 14, 1966	3.59	420	1971	May 13, 1971	3.81	460
1967	Aug. 24, 1967	3.81	460	1972	June 21, 1972	5.44	700
1968	June 27, 1968	5.12	650	1973	Aug. 20, 1973	5.67	730
1969	July 22, 1969	8.6	1,600	1974	Aug. 30, 1974	3.49	400
1970	July 9, 1970	7.48	1,050	1975	Sept. 26, 1975	8.30	1,400

POTOMAC RIVER BASIN

01652470 LUCKY RUN AT ARLINGTON, VA

LOCATION.--Lat 38°50'33", long 77°06'16", Arlington County, Hydrologic Unit 02070010, at Dinwiddie Street and Walter Reed Drive in Arlington.

DRAINAGE AREA.--1.22 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1966	Sept. 14, 1966	3.7	345	1970	July 9, 1970	9.0	1,600
1967	Aug. 24, 1967	6.0	620	1971	July 29, 1971	3.60	340
1968	June 27, 1968	6.2	670	1972	June 21, 1972	8.22	1,250
1969	July 22, 1969	9.5	1,900				

01652500 FOURMILE RUN AT ALEXANDRIA, VA

LOCATION.--Lat 38°50'35", long 77°05'09", Alexandria City, Hydrologic Unit 02070010, on left upstream wingwall of bridge on Shirlington Road, at Arlington County-Alexandria City line, 0.1 mi upstream from Interstate Highway 395, and 2.5 mi upstream from mouth.

DRAINAGE AREA.--13.8 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 28.57 ft above National Geodetic Vertical Datum of 1929. May 4, 1951, to Sept. 30, 1969, water-stage recorder, and Oct. 1, 1969, to Sept. 27, 1973, nonrecording gage at site 0.4 mi downstream at datum 6.02 ft lower. Sept. 28, 1973, to Sept. 26, 1975, water-stage recorder, and Sept. 27, 1975, to Sept. 30, 1977, nonrecording gage at present site and datum. July 1979 to September 1982, water-stage recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 200 ft³/s and extended above on basis of slope-area measurements at 4,900 ft³/s and 10,000 ft³/s.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1947	June 7, 1947	7.20	2,250	1971	July 29, 1971	a6.90	4,300
1952	July 9, 1952	5.60	1,600	1972	June 21, 1972	a12.40	10,000
1953	May 5, 1953	8.50	3,450	1973	Aug. 20, 1973	a9.20	4,900
1954	May 3, 1954	4.22	854	1974	Aug. 30, 1974	8.55	2,930
1955	July 8, 1955	6.91	2,120	1975	Sept. 26, 1975	13.07	6,350
1956	July 22, 1956	5.10	1,350	1976	Sept. 16, 1976	-	2,200
1957	Jan. 23, 1957	4.12	810	1977	July 12, 1977	9.28	3,600
1958	July 8, 1958	5.27	1,450	1979	Sept. 5, 1979	8.36	3,080
1959	June 13, 1959	4.90	1,250	1980	Oct. 1, 1979	7.49	2,470
1960	June 13, 1960	4.08	810	1981	July 4, 1981	7.96	2,800
1961	Aug. 26, 1961	7.00	3,600	1982	June 1, 1982	8.20	2,960
1962	May 31, 1962	5.41	1,800	1983	June 21, 1983	7.92	2,770
1963	Aug. 20, 1963	9.89	11,700	1984	Mar. 29, 1984	7.90	2,760
1964	May 13, 1964	5.41	1,800	1985	Sept. 10, 1985	10.36	4,480
1965	July 18, 1965	6.15	2,560	1986	July 20, 1986	8.15	2,930
1966	Sept. 14, 1966	7.83	6,900	1987	June 26, 1987	10.12	4,310
1967	Aug. 24, 1967	7.93	6,290	1988	May 6, 1988	7.87	2,740
1968	June 27, 1968	7.28	5,040	1989	May 5, 1989	8.25	3,000
1969	July 22, 1969	a11.60	14,600	1990	May 9, 1990	8.38	3,090
1970	July 9, 1970	a10.70	8,800				

a At different site and datum 6.02 feet lower.

POTOMAC RIVER BASIN

01652600 HOLMES RUN AT MERRIFIELD, VA

LOCATION.--Lat 38°51'57", long 77°12'45", Fairfax County, Hydrologic Unit 02070010, on left bank 100 ft downstream from U.S. Highway 50, at Merrifield.

DRAINAGE AREA.--2.70 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 285.65 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 23, 1962, at present site and datum 2.00 ft lower.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 200 ft³/s and extended above on basis of eight computations of peak flow through culverts between 340 ft³/s and 2,330 ft³/s.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1960	Feb. 18, 1960	6.16	185	1966	Sept. 14, 1966	5.11	1,220
1961	June 10, 1961	6.75	430	1967	Aug. 24, 1967	5.40	2,330
1962	Feb. 28, 1962	5.35	133	1968	Sept. 10, 1968	5.07	1,040
1963	June 29, 1963	4.68	474	1969	July 22, 1969	5.90	1,130
1964	May 13, 1964	4.81	661	1970	Apr. 14, 1970	4.73	570
1965	Mar. 5, 1965	4.48	337	1972	June 21, 1972	6.10	2,250

POTOMAC RIVER BASIN

01652610 HOLMES RUN NEAR ANNANDALE, VA

LOCATION.--Lat 38°50'47", long 77°10'28", Fairfax County, Hydrologic Unit 02070010, on left bank 150 ft downstream from Sleepy Hollow Road, 0.5 mi upstream from Lake Barcroft, and 1.6 mi northeast of Annandale.

DRAINAGE AREA.--7.10 mi².

GAGE.--Water-stage recorder. Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 600 ft³/s and extended above on basis of slope-area measurement at 2,700 ft³/s.

BANKFULL STAGE.--4 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1960	May 30, 1960	5.22	446	1966	Sept. 14, 1966	7.93	1,400
1961	Aug. 26, 1961	7.14	715	1967	Aug. 26, 1967	8.70	2,700
1962	June 19, 1962	4.22	306	1968	Sept. 10, 1968	7.35	955
1963	June 30, 1963	7.61	780	1969	July 22, 1969	7.57	1,080
1964	May 13, 1964	6.26	591	1970	July 9, 1970	5.43	490
1965	Mar. 5, 1965	5.69	512	1972	June 21, 1972	9.20	4,600

POTOMAC RIVER BASIN

73

01652620 TRIPPS RUN AT FALLS CHURCH, VA

LOCATION.--Lat 38°52'46", long 77°08'14", Fairfax County, Hydrologic Unit 02070010, on right bank 200 ft upstream from South Washington Street at Falls Church.

DRAINAGE AREA.--1.78 mi².

GAGE.--Water-stage recorder. Datum of gage is 273.09 ft above National Geodetic Vertical Datum of 1929. Prior to July 27, 1963, at same site and datum 1.86 ft higher.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 325 ft³/s and extended above on basis of slope-area measurement at 1,100 ft³/s.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1960	July 27, 1960	3.62	260	1965	July 18, 1965	6.08	670
1961	June 10, 1961	6.50	736	1966	Sept. 14, 1966	8.64	1,500
1962	Oct. 21, 1961	5.06	292	1967	Aug. 24, 1967	8.50	1,150
1963	June 20, 1963	7.37	687	1968	Sept. 10, 1968	8.22	1,050
1964	May 13, 1964	7.43	699				

POTOMAC RIVER BASIN

01652645 TRIPPS RUN TRIBUTARY NEAR FALLS CHURCH, VA

LOCATION.--Lat 38°51'54", long 77°10'16", Fairfax County, Hydrologic Unit 02070010, on left bank 10 ft upstream from Holmes Run Drive, 1.1 mi south of Falls Church.

DRAINAGE AREA.--0.50 mi².

GAGE.--Water-stage recorder. Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 55 ft³/s and extended above on basis of computation of peak flow through culvert at 300 ft³/s.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1963	Aug. 20, 1963	6.28	285	1966	Sept. 14, 1966	6.52	318
1964	May 13, 1964	6.41	302	1967	Aug. 24, 1967	6.48	315
1965	July 18, 1965	6.20	275				

POTOMAC RIVER BASIN

01652650 TRIPPS RUN NEAR FALLS CHURCH, VA

LOCATION.--Lat 38°51'37", long 77°09'57", Fairfax County, Hydrologic Unit 02070010, at Sleepy Hollow Road, 0.7 mi upstream from Lake Barcroft, and 1.0 mi southwest of Falls Church.

DRAINAGE AREA.--4.55 mi².

GAGE.--Water-stage recorder. Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,900 ft³/s and extended above on basis of contracted-opening measurement at 3,000 ft³/s.

BANKFULL STAGE.--3 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1960	July 27, 1960	4.58	590	1964	May 13, 1964	19.64	1,100
1961	June 10, 1961	21.41	2,610	1965	July 18, 1965	19.63	594
1962	June 19, 1962	18.38	383	1966	Sept. 14, 1966	22.20	3,040
1963	June 29, 1963	19.60	1,070	1967	Aug. 24, 1967	-	1,700

POTOMAC RIVER BASIN

01652670 HOLMES RUN BELOW LAKE BARCROFT, NEAR ALEXANDRIA, VA

LOCATION.--Lat 38°50'27", long 77°08'39", Fairfax County, Hydrologic Unit 02070010, on left bank 1,200 ft downstream from Columbia Pike, 0.8 mi northwest of Alexandria.

DRAINAGE AREA.--14.7 mi².

GAGE.--Water-stage recorder. Datum of gage is 132.10 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 300 ft³/s.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1959	July 12, 1959	3.76	875	1961	Apr. 13, 1961	3.29	688
1960	Apr. 5, 1960	3.71	854				

POTOMAC RIVER BASIN

75

01652690 HOLMES RUN AT ALEXANDRIA, VA

LOCATION.--Lat 38°48'44", long 77°06'51", Alexandria City, Hydrologic Unit 02070010, on left bank 300 ft upstream from Duke Street at Alexandria and 2,000 ft upstream from confluence of Holmes Run and Back Lick Run.

DRAINAGE AREA.--18.9 mi².

GAGE.--Water-stage recorder. Datum of gage is 52.69 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,200 ft³/s and extended above.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1959	July 12, 1959	3.62	692	1961	Aug. 26, 1961	5.24	1,440
1960	May 30, 1960	4.68	1,170				

POTOMAC RIVER BASIN

01652710 BACK LICK RUN AT SPRINGFIELD, VA

LOCATION.--Lat 38°48'05", long 77°11'14", Fairfax County, Hydrologic Unit 02070010, on right bank 10 ft downstream from Leesville Boulevard at Springfield.

DRAINAGE AREA.--2.02 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 206.94 ft above National Geodetic Vertical Datum of 1929. Prior to Sept. 16, 1968, water-stage recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 200 ft³/s and extended above on basis of computation of peak flow through culvert at 1,000 ft³/s.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1960	Feb. 18, 1960	3.28	271	1965	Mar. 5, 1965	3.99	442
1961	Sept. 3, 1961	5.50	810	1966	Sept. 14, 1966	6.10	1,050
1962	Mar. 12, 1962	2.55	95	1967	Aug. 24, 1967	5.50	810
1963	Aug. 20, 1963	5.53	932	1968	Sept. 10, 1968	5.02	629
1964	May 13, 1964	3.74	380				

POTOMAC RIVER BASIN

01652810 TURKEYCOCK RUN AT ALEXANDRIA, VA

LOCATION.--Lat 38°48'36", long 77°09'06", Fairfax County, Hydrologic Unit 02070010, at upstream end of culvert at Shirley Highway at Alexandria.

DRAINAGE AREA.--2.26 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 141.48 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 160 ft³/s and extended above on basis of computation of peak flow through culvert at 390 ft³/s.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1959	Sept. 1, 1959	2.98	339	1962	Mar. 12, 1962	1.91	205
1960	May 30, 1960	3.37	385	1963	-	6.58	827
1961	Aug. 26, 1961	4.16	485	1964	May 13, 1964	2.60	297

POTOMAC RIVER BASIN

01652910 BACK LICK RUN AT ALEXANDRIA, VA

LOCATION.--Lat 38°48'11", long 77°07'41", Alexandria City, Hydrologic Unit 02070010, 0.9 mi upstream from confluence of Back Lick Run and Holmes Run at Alexandria.

DRAINAGE AREA.--13.4 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 69.97 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 525 ft³/s and extended above on basis of critical-flow computations.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1960	May 30, 1960	3.54	990	1966	Sept. 14, 1966	9.18	4,960
1961	Aug. 26, 1961	5.62	2,160	1967	Aug. 24, 1967	6.76	2,970
1962	Mar. 12, 1962	2.56	566	1968	Sept. 10, 1968	6.08	2,480
1963	Aug. 20, 1963	7.15	3,230	1969	Sept. 7, 1969	6.14	2,510
1964	May 13, 1964	4.62	1,560	1970	July 9, 1970	9.20	4,980
1965	Mar. 5, 1965	4.66	1,590				

01653000 CAMERON RUN AT ALEXANDRIA, VA

LOCATION.--Lat 38°48'23", long 77°06'36", Fairfax County, Hydrologic Unit 02070010, on left downstream side of Norfolk Southern Railway bridge at Alexandria, 800 ft downstream from confluence of Holmes Run and Backlick Run, 0.5 mi east of the U.S. Army Quartermaster Depot, and 3.4 mi upstream from mouth.

DRAINAGE AREA.--33.7 mi².

GAGE.--Water-stage recorder. Datum of gage is 31.07 ft above National Geodetic Vertical Datum of 1929. Prior to Sept. 20, 1965, at present site at datum 7.78 ft higher. Sept. 20, 1965, to Jan. 19, 1976, at present site at datum 5.44 ft higher. Jan. 20, 1976, to Nov. 8, 1976, at site 1,200 ft downstream at datum 10.00 ft lower. Nov. 9, 1976, to Mar. 31, 1979, at site 0.5 mi downstream at datum 7.22 ft lower.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,100 ft³/s and extended above on basis of slope-area measurement at 5,700 ft³/s.

BANKFULL STAGE.--Not determined.

REMARKS.--Some regulation by Lake Barcroft, formerly Alexandria Reservoir, on Holmes Run 3.6 mi upstream.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1953	May 5, 1953	11.90	-	1973	July 10, 1973	9.94	4,730
1956	July 20, 1956	8.62	3,950	1974	Aug. 30, 1974	8.39	3,860
1957	Apr. 5, 1957	5.50	865	1975	Sept. 26, 1975	16.73	14,900
1958	July 8, 1958	7.93	2,600	1976	Dec. 31, 1975	8.10	3,700
1959	June 12, 1959	7.93	2,900	1977	July 12, 1977	8.20	5,040
1960	Apr. 5, 1960	5.68	1,300	1978	Jan. 26, 1978	8.93	6,200
1961	Aug. 26, 1961	7.35	3,820	1979	Feb. 25, 1979	7.30	4,300
1962	Mar. 12, 1962	4.84	1,230	1980	Mar. 13, 1980	4.74	1,900
1963	Aug. 20, 1963	10.48	6,480	1981	July 4, 1981	8.45	6,920
1964	May 13, 1964	5.78	2,550	1982	May 30, 1982	5.95	3,720
1965	Mar. 5, 1965	6.92	3,330	1983	June 21, 1983	9.03	5,710
1966	Sept. 14, 1966	14.14	9,300	1984	Mar. 29, 1984	6.95	4,460
1967	Aug. 25, 1967	12.72	6,950	1985	Nov. 5, 1984	6.40	3,950
1968	Sept. 10, 1968	10.65	4,780	1986	Aug. 2, 1986	6.04	3,630
1969	Sept. 8, 1969	9.66	4,030	1987	Dec. 24, 1986	6.34	3,890
1970	July 9, 1970	13.11	6,910	1988	May 18, 1988	5.33	2,980
1971	Aug. 27, 1971	9.32	4,320	1989	May 6, 1989	9.50	6,960
1972	June 22, 1972	18.14	19,900	1990	July 5, 1990	5.67	3,510

POTOMAC RIVER BASIN

01653210 PIKE BRANCH AT ALEXANDRIA, VA

LOCATION.--Lat 38°47'35", long 77°05'02", Fairfax County, Hydrologic Unit 02070010, on right bank 50 ft upstream from Telegraph Road, 0.5 mi south of Alexandria.

DRAINAGE AREA.--2.65 mi².

GAGE.--Water-stage recorder. Datum of gage is 33.17 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 150 ft³/s and extended above.

BANKFULL STAGE.--6 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1960	May 30, 1960	6.42	770	1963	June 29, 1963	5.83	676
1961	July 13, 1961	7.50	970	1964	May 13, 1964	4.41	411
1962	May 31, 1962	4.41	348				

POTOMAC RIVER BASIN

01653447 PENN DAW OUTFALL AT ALEXANDRIA, VA
(Formerly published as "01653600")

LOCATION.--Lat 38°47'19", long 77°03'54", Fairfax County, Hydrologic Unit 02070010, on left bank at Huntington Avenue, 0.35 mi upstream from Hunting Creek, and 0.5 mi southwest of Alexandria.

DRAINAGE AREA.--0.82 mi².

GAGE.--Water-stage recorder. Datum of gage is 13.54 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 110 ft³/s and extended above on basis of slope-area measurement at 340 ft³/s.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1961	July 13, 1961	6.02	406	1966	Sept. 14, 1966	5.61	340
1963	Aug. 20, 1963	4.57	188	1967	July 8, 1967	4.46	175
1964	Apr. 30, 1964	4.04	122	1968	June 27, 1968	5.38	304
1965	Aug. 26, 1965	5.13	266				

POTOMAC RIVER BASIN

79

01653700 LITTLE HUNTING CREEK AT GUM SPRINGS, VA

LOCATION.--Lat 38°44'21", long 77°05'20", Fairfax County, Hydrologic Unit 02070010, on right bank 50 ft downstream from U.S. Highway 1 at Gum Springs, 1.0 mi upstream from North Branch, and 2.3 mi upstream from mouth.

DRAINAGE AREA.--1.78 mi².

GAGE.--Water-stage recorder. Datum of gage is 7.17 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 65 ft³/s and extended above.

BANKFULL STAGE.--5 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1961	Sept. 26, 1961	2.58	90	1963	May 12, 1963	3.10	166
1962	May 31, 1962	2.69	90				

POTOMAC RIVER BASIN

01653800 DOGUE CREEK NEAR ACCOTINK, VA

LOCATION.--Lat 38°43'08", long 77°07'44", Fairfax County, Hydrologic Unit 02070010, at bridge at U.S. Highway 1, 1.8 mi northeast of Accotink.

DRAINAGE AREA.--10.6 mi².

GAGE.--Water-stage recorder. Datum of gage is 2.67 ft above National Geodetic Vertical Datum of 1929. Prior to Mar. 8, 1961, at same site and datum 0.23 ft lower.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 300 ft³/s and extended above.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1961	Apr. 13, 1961	6.87	305	1963	Mar. 12, 1963	7.53	385
1962	Mar. 13, 1962	5.23	139				

POTOMAC RIVER BASIN

01653900 ACCOTINK CREEK AT FAIRFAX, VA

LOCATION.--Lat 38°51'39", long 77°16'17", Fairfax County, Hydrologic Unit 02070010, at bridge at Pickett Street in Fairfax.

DRAINAGE AREA.--6.80 mi².

GAGE.--Water-stage recorder. Datum of gage is 278.72 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 415 ft³/s and extended above on basis of step-backwater computations.

BANKFULL STAGE.--6 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1961	Aug. 26, 1961	6.77	772	1966	Sept. 14, 1966	7.69	1,720
1962	June 23, 1962	5.45	475	1967	Aug. 24, 1967	8.98	3,900
1963	June 30, 1963	7.53	1,350	1968	Sept. 10, 1968	7.64	1,480
1964	May 13, 1964	7.74	1,600	1969	July 22, 1969	9.90	6,350
1965	Mar. 5, 1965	6.74	816	1970	July 9, 1970	6.75	660

POTOMAC RIVER BASIN

01653925 BEAR BRANCH NEAR VIENNA, VA

LOCATION.--Lat 38°51'54", long 77°15'20", Fairfax County, Hydrologic Unit 02070010, at Arlington Boulevard, 1.1 mi south of Vienna.

DRAINAGE AREA.--2.04 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 276.18 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Not fully developed.

BANKFULL STAGE.--5 ft.

REMARKS.--Insufficient field data to develop lower portion of stage-discharge rating.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1961	Aug. 26, 1961	3.70	-	1967	Aug. 24, 1967	5.38	1,660
1962	June 5, 1962	3.36	-	1968	Sept. 10, 1968	3.55	-
1963	June 29, 1963	3.95	-	1969	July 22, 1969	6.9	3,500
1964	Sept. 30, 1964	3.22	-	1970	Apr. 14, 1970	3.56	-
1965	Aug. 18, 1965	3.24	-	1971	July 30, 1971	3.75	-
1966	Sept. 14, 1966	3.58	-				

01653950 LONG BRANCH AT VIENNA, VA

LOCATION.--Lat 38°52'23", long 77°14'34", Fairfax County, Hydrologic Unit 02070010, on right bank at Lee Highway, 0.5 mi upstream from Arlington Boulevard, and 0.5 mi southeast of Vienna.

DRAINAGE AREA.--1.18 mi².

GAGE.--Water-stage recorder. Datum of gage is 298.54 ft above National Geodetic Vertical Datum of 1929. Prior to Aug. 30, 1963, crest-stage gage at same site and datum 1.59 ft higher.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 55 ft³/s and extended above on basis of computations of peak flow through culverts at 1,100 ft³/s, 1,150 ft³/s, and 1,650 ft³/s.

BANKFULL STAGE.--6 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1961	Aug. 26, 1961	4.19	-	1966	Sept. 14, 1966	5.11	1,160
1962	June 5, 1962	1.91	-	1967	Aug. 24, 1967	5.18	1,640
1963	June 29, 1963	5.06	744	1968	Sept. 10, 1968	a5.45	1,130
1964	May 13, 1964	4.02	<700	1969	July 22, 1969	a10.3	2,000
1965	Aug. 18, 1965	4.43	<700	1972	June 21, 1972	a5.85	1,280

< Less than.

a Subsequent to reconstruction of bridge 75 ft downstream.

01654000 ACCOTINK CREEK NEAR ANNANDALE, VA

LOCATION.--Lat 38°48'46", long 77°13'43", Fairfax County, Hydrologic Unit 02070010, on left bank 800 ft upstream from bridge on State Highway 620, 0.2 mi upstream from Long Branch, and 2.3 mi southwest of Annandale.

DRAINAGE AREA.--23.5 mi².

GAGE.--Water-stage recorder. Datum of gage is 191.24 ft above National Geodetic Vertical Datum of 1929 (levels by Stone and Webster Engineering Corporation). Prior to May 12, 1949, nonrecording gage at site 800 ft downstream at datum 0.33 ft lower; May 12, 1949, to June 4, 1970, water-stage recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 6,600 ft³/s and extended above on basis of contracted-opening measurement at 12,000 ft³/s.

BANKFULL STAGE.--7.5 ft.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1953	May 5, 1953	11.90	-	1973	July 10, 1973	9.94	4,730
1956	July 20, 1956	8.62	3,950	1974	Aug. 30, 1974	8.39	3,860
1957	Apr. 5, 1957	5.50	865	1975	Sept. 26, 1975	16.73	14,900
1958	July 8, 1958	7.93	2,600	1976	Dec. 31, 1975	8.10	3,700
1959	June 12, 1959	7.93	2,900	1977	July 12, 1977	8.20	5,040
1960	Apr. 5, 1960	5.68	1,300	1978	Jan. 26, 1978	8.93	6,200
1961	Aug. 26, 1961	7.35	3,820	1979	Feb. 25, 1979	7.30	4,300
1962	Mar. 12, 1962	4.84	1,230	1980	Mar. 13, 1980	4.74	1,900
1963	Aug. 20, 1963	10.48	6,480	1981	July 4, 1981	8.45	6,920
1964	May 13, 1964	5.78	2,550	1982	May 30, 1982	5.95	3,720
1965	Mar. 5, 1965	6.92	3,330	1983	June 21, 1983	9.03	5,710
1966	Sept. 14, 1966	14.14	9,300	1984	Mar. 29, 1984	6.95	4,460
1967	Aug. 25, 1967	12.72	6,950	1985	Nov. 5, 1984	6.40	3,950
1968	Sept. 10, 1968	10.65	4,780	1986	Aug. 2, 1986	6.04	3,630
1969	Sept. 8, 1969	9.66	4,030	1987	Dec. 24, 1986	6.34	3,890
1970	July 9, 1970	13.11	6,910	1988	May 18, 1988	5.33	2,980
1971	Aug. 27, 1971	9.32	4,320	1989	May 6, 1989	9.50	6,950
1972	June 22, 1972	18.14	19,900	1990	July 5, 1990	5.67	3,510

POTOMAC RIVER BASIN

83

01654500 LONG BRANCH NEAR ANNANDALE, VA

LOCATION.--Lat 38°48'39", long 77°14'07", Fairfax County, Hydrologic Unit 02070010, on left bank at downstream side of bridge on State Highway 620, 0.3 mi upstream from mouth, and 2.5 mi southwest of Annandale.

DRAINAGE AREA.--3.71 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 198.15 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 15, 1947, staff gage at same site and datum 0.06 ft higher than present datum. Oct. 15, 1947, to May 27, 1949, staff gage 150 ft downstream at datum 1.46 ft lower than present datum. May 28, 1949, to May 10, 1957, staff gage, crest-stage gage, and V-notch weir at downstream side of bridge at present datum. Aug. 3, 1959, to June 15, 1970, water-stage recorder at present site and datum 0.10 ft lower.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurement below 500 ft³/s and extended above on basis of computations of peak flow through culvert at 1,250 ft³/s, 2,300 ft³/s, and 3,300 ft³/s.

BANKFULL STAGE.--6 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1947	June 8, 1947	7.70	1,100	1959	Sept. 2, 1959	4.54	523
1948	May 30, 1948	4.60	328	1960	Feb. 18, 1960	2.88	161
1949	May 15, 1949	4.00	250	1961	Aug. 26, 1961	5.68	732
1950	Sept. 11, 1950	3.48	310	1962	Mar. 12, 1962	3.16	222
1951	June 13, 1951	5.20	680	1963	Aug. 20, 1963	4.84	581
1952	Sept. 1, 1952	4.80	590	1964	May 13, 1964	3.12	186
1953	May 5, 1953	4.40	510	1965	Mar. 5, 1965	3.83	382
1954	June 15, 1954	2.67	85	1966	Sept. 14, 1966	5.10	2,330
1955	Aug. 18, 1955	3.41	288	1967	Aug. 24, 1967	6.30	3,300
1956	July 21, 1956	3.5	310	1968	Sept. 10, 1968	4.50	500
1957	Apr. 5, 1957	3.22	230	1969	July 20, 1969	6.00	3,100

POTOMAC RIVER BASIN

01655000 ACCOTINK CREEK NEAR ACCOTINK STATION, VA

LOCATION.--Lat 38°45'15", long 77°12'09", Fairfax County, Hydrologic Unit 02070010, at bridge 1.4 mi northwest of Accotink Station.

DRAINAGE AREA.--37.0 mi².

GAGE.--Water-stage recorder. Datum of gage is 119.48 ft above National Geodetic Vertical Datum of 1929. Prior to July 29, 1960, at same site and datum 5.87 ft higher.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 900 ft³/s and extended above.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1949	May 16, 1949	8.89	875	1954	May 4, 1954	9.84	1,220
1950	Mar. 23, 1950	9.33	1,000	1955	Aug. 13, 1955	14.21	3,120
1951	June 14, 1951	10.32	1,320	1957	Apr. 6, 1957	10.22	1,380
1952	Sept. 1, 1952	12.74	2,060	1961	Aug. 26, 1961	11.83	1,830
1953	May 6, 1953	11.87	1,760				

POTOMAC RIVER BASIN

01655160 LONG BRANCH AT NEWINGTON ROAD, NEAR ACCOTINK, VA

LOCATION.--Lat 38°44'03", long 77°11'02", Fairfax County, Hydrologic Unit 02070010, on left downstream wingwall of bridge on Newington Road, 900 ft upstream from Fort Belvoir Military Railroad, and 2.2 mi northwest of Accotink.

DRAINAGE AREA.--4.06 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 0.00 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Not developed.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1961	Aug. 26, 1961	1.41	-	1967	Aug. 24, 1967	1.48	-
1962	Mar. 12, 1962	1.47	-	1968	Sept. 10, 1968	1.63	-
1963	Mar. 12, 1963	.92	-	1969	Sept. 8, 1969	1.64	-
1964	May 13, 1964	2.74	-	1970	Apr. 14, 1970	1.77	-
1965	Aug. 18, 1965	1.43	-	1971	July 30, 1971	1.52	-
1966	Feb. 13, 1966	1.86	-				

POTOMAC RIVER BASIN

01655310 RABBIT BRANCH NEAR BURKE, VA

LOCATION.--Lat 38°48'06", long 77°17'19", Fairfax County, Hydrologic Unit 02070010, at bridge on Guinea Road, 1.1 mi northwest of Burke.

DRAINAGE AREA.--3.81 mi².

GAGE.--Water-stage recorder. Datum of gage is 267.66 ft above National Geodetic Vertical Datum of 1929. Prior to Sept. 13, 1962, water-stage recorder at present site and datum 0.20 ft higher than present datum. July 17, 1964, to June 24, 1966, water-stage recorder at present site and datum. June 25, 1966, to July 24, 1967, water-stage recorder at present site and datum 0.10 ft higher than present datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 90 ft³/s and extended above on basis of contracted-opening measurements at 400 ft³/s and 2,500 ft³/s.

BANKFULL STAGE.--2 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1961	Aug. 26, 1961	6.07	586	1966	Sept. 14, 1966	5.97	494
1962	Mar. 12, 1962	4.29	175	1967	Aug. 24, 1967	7.70	2,500
1964	May 13, 1964	5.29	291	1968	Sept. 10, 1968	6.03	480
1965	Mar. 5, 1965	5.75	390				

POTOMAC RIVER BASIN

85

01655330 SIDEBURN BRANCH NEAR FAIRFAX STATION, VA

LOCATION.--Lat 38°47'46", long 77°18'07", Fairfax County, Hydrologic Unit 02070010, on left bank 20 ft downstream from New Cut Road, 1.3 mi east of Fairfax Station.

DRAINAGE AREA.--2.79 mi².

GAGE.--Water-stage recorder. Datum of gage is 287.68 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 60 ft³/s and extended above.

BANKFULL STAGE.--5 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1961	Aug. 26, 1961	5.78	346	1962	Mar. 12, 1962	3.75	121

POTOMAC RIVER BASIN

01655340 POHICK CREEK TRIBUTARY NEAR BURKE, VA

LOCATION.--Lat 38°46'24", long 77°15'07", Fairfax County, Hydrologic Unit 02070010, at gaging station on Keene Mill Road, 1.8 mi southeast of Burke.

DRAINAGE AREA.--0.34 mi².

GAGE.--Water-stage recorder. Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 30 ft³/s and extended above on basis of computations of peak flow through culverts at 70 ft³/s, 180 ft³/s and 420 ft³/s.

BANKFULL STAGE.--4 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1964	May 13, 1964	6.06	70	1966	Sept. 14, 1966	7.26	175
1965	Mar. 5, 1965	5.16	36	1967	Aug. 24, 1967	8.0	400

POTOMAC RIVER BASIN

01655350 POBICK CREEK NEAR SPRINGFIELD, VA

LOCATION.--Lat 38°45'26", long 77°13'37", Fairfax County, Hydrologic Unit 02070010, at bridge on Hooes Road, 2.9 mi southwest of Springfield.

DRAINAGE AREA.--15.0 mi².

GAGE.--Water-stage recorder. Datum of gage is 164.14 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurement below 1,250 ft³/s and extended above.

BANKFULL STAGE.--6 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1961	Aug. 26, 1961	7.52	1,320	1966	Sept. 14, 1966	6.74	1,000
1962	Mar. 11, 1962	4.99	615	1967	Aug. 25, 1967	10.36	3,510
1963	Mar. 12, 1963	5.97	750	1968	Jan. 14, 1968	5.93	744
1964	May 13, 1964	5.02	514	1969	July 21, 1969	7.22	1,200
1965	Mar. 5, 1965	6.07	781	1970	July 9, 1970	5.93	740

POTOMAC RIVER BASIN

01655370 MIDDLE RUN NEAR LORTON, VA

LOCATION.--Lat 38°45'01", long 77°14'03", Fairfax County, Hydrologic Unit 02070010, at bridge 0.7 mi upstream from mouth, 3.2 mi north of Lorton.

DRAINAGE AREA.--3.56 mi².

GAGE.--Water-stage recorder. Datum of gage is 169.55 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 140 ft³/s and extended above on basis of contracted-opening measurements at 1,100 ft³/s and 1,500 ft³/s.

BANKFULL STAGE.--3 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1961	Aug. 26, 1961	4.47	798	1965	Mar. 5, 1965	3.40	430
1962	Mar. 12, 1962	1.85	139	1966	Sept. 14, 1966	5.22	1,100
1963	Mar. 12, 1963	3.45	470	1967	Aug. 24, 1967	5.70	1,430
1964	May 12, 1964	3.08	350	1968	June 27, 1968	3.40	412

POTOMAC RIVER BASIN

87

01655380 SOUTH RUN NEAR LORTON, VA

LOCATION.--Lat 38°44'11", long 77°15'10", Fairfax County, Hydrologic Unit 02070010, on left bank at bridge at Hooes Road, 0.8 mi upstream from telephone line, and 2.7 mi northwest of Lorton.

DRAINAGE AREA.--6.54 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 189.48 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 110 ft³/s and extended above on basis of contracted-opening measurement at 1,300 ft³/s.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1961	Aug. 26, 1961	4.53	666	1965	Mar. 5, 1965	3.60	397
1962	Mar. 12, 1962	2.50	173	1966	Sept. 14, 1966	6.03	1,300
1963	Mar. 12, 1963	4.05	501	1967	Aug. 24, 1967	5.92	1,240
1964	May 13, 1964	2.86	239	1968	Jan. 14, 1968	3.38	333

POTOMAC RIVER BASIN

01655390 POHICK CREEK AT LORTON, VA

LOCATION.--Lat 28°42'14", long 77°12'52", Fairfax County, Hydrologic Unit 02070010, at bridge on Telegraph Road, 0.6 mi east of Lorton.

DRAINAGE AREA.--31.0 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 23.74 ft above National Geodetic Vertical Datum of 1929. Aug. 26, 1961, to Oct. 30, 1967, water-stage recorder at same site and datum. Prior to Aug. 26, 1961 (arbitrary), water-stage recorder at same site and datum 0.10 ft higher.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,000 ft³/s and extended above.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1961	Aug. 26, 1961	4.85	1,420	1965	Mar. 5, 1965	4.36	1,200
1962	Mar. 12, 1962	3.45	820	1966	Sept. 14, 1966	6.15	2,340
1963	Mar. 12, 1963	4.82	1,420	1967	Aug. 25, 1967	9.1	5,500
1964	May 13, 1964	3.81	964	1968	Jan. 14, 1968	6.5	2,600

01655500 CEDAR RUN NEAR WARRENTON, VA

LOCATION.--Lat 38°44'25", long 77°47'16", Fauquier County, Hydrologic Unit 02070010, on right bank at downstream side of bridge on State Highway 672, 1.9 mi north of Warrenton, and 14.5 mi upstream from Licking Run.

DRAINAGE AREA.--12.3 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 419.40 ft above National Geodetic Vertical Datum of 1929. Prior to June 1, 1987, water-stage recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 513 ft³/s and extended above on basis of contracted-opening measurement at 2,200 ft³/s.

BANKFULL STAGE.--5 ft.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1943	October 1942	a13	-	1971	Feb. 13, 1971	7.62	1,000
1951	Dec. 4, 1950	8.42	1,800	1972	June 21, 1972	12.87	7,840
1952	Sept. 1, 1952	7.00	560	1973	Aug. 21, 1973	6.63	462
1953	Nov. 21, 1952	8.11	1,500	1974	Dec. 21, 1973	12.87	304
1954	Aug. 20, 1954	5.74	302	1975	Dec. 1, 1974	8.48	1,900
1955	June 8, 1955	9.59	3,100	1976	Apr. 1, 1976	7.30	720
1956	July 20, 1956	8.84	2,200	1977	Oct. 9, 1976	10.93	4,770
1957	Nov. 1, 1956	7.67	1,050	1978	Jan. 26, 1978	8.20	1,600
1958	Jan. 14, 1958	7.32	720	1979	Sept. 21, 1979	10.06	3,730
1959	June 2, 1959	5.10	184	1980	Mar. 21, 1980	6.37	508
1960	Sept. 12, 1960	9.16	2,580	1981	Aug. 30, 1981	8.22	1,620
1961	Sept. 8, 1961	8.57	1,950	1982	June 13, 1982	5.72	371
1962	Mar. 12, 1962	7.06	580	1983	Apr. 10, 1983	8.88	2,280
1963	Mar. 12, 1963	6.42	400	1984	Feb. 14, 1984	7.97	1,370
1964	Apr. 29, 1964	8.03	1,450	1985	Feb. 12, 1985	8.01	1,410
1965	Mar. 5, 1965	8.12	1,500	1986	Mar. 14, 1986	4.11	144
1966	Feb. 13, 1966	7.14	580	1987	Sept. 8, 1987	6.62	576
1967	Aug. 24, 1967	9.29	2,760	1988	Nov. 29, 1987	6.88	643
1968	Jan. 14, 1968	7.97	1,350	1989	May 5, 1989	8.26	1,660
1969	Aug. 2, 1969	5.37	232	1990	May 29, 1990	5.61	365
1970	July 9, 1970	7.00	560				

a From information by local residents.

01656000 CEDAR RUN NEAR CATLETT, VA

LOCATION.--Lat 38°38'12", long 77°37'31", Fauquier County, Hydrologic Unit 02070010, on right bank 100 ft downstream from bridge on State Highway 806, 0.9 mi downstream from Licking Run, and 1.4 mi southeast of Catlett.

DRAINAGE AREA.--93.4 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 199.15 ft above National Geodetic Vertical Datum of 1929. Prior to June 1, 1987, water-stage recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 6,540 ft³/s and extended above on basis of contracted-opening measurement at 36,800 ft³/s.

BANKFULL STAGE.--Not determined.

REMARKS.--Records were provided by the Virginia Water Control Board from June 30, 1957, to Dec. 31, 1986, and subsequent to Sept. 30, 1989.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1943	Oct. 15, 1942	a22	-	1971	Feb. 14, 1971	11.20	3,020
1951	Dec. 4, 1950	14.60	5,570	1972	June 22, 1972	27.66	38,600
1952	Apr. 27, 1952	9.22	2,170	1973	Apr. 27, 1973	10.30	2,550
1953	Nov. 21, 1952	14.17	5,290	1974	Dec. 21, 1973	10.59	2,700
1954	Dec. 14, 1953	7.13	1,180	1975	Sept. 25, 1975	14.38	5,400
1955	June 8, 1955	17.25	7,300	1976	Jan. 1, 1976	12.73	3,990
1956	July 21, 1956	16.50	6,700	1977	Oct. 9, 1976	17.06	8,270
1957	Apr. 5, 1957	9.32	2,060	1978	Jan. 26, 1978	14.80	6,620
1958	Dec. 20, 1957	10.45	2,570	1979	Feb. 26, 1979	14.72	6,520
1959	Mar. 6, 1959	7.46	1,320	1980	Oct. 1, 1979	16.14	7,960
1960	Feb. 19, 1960	11.35	3,290	1981	Aug. 30, 1981	13.38	5,280
1961	Feb. 19, 1961	10.93	2,990	1982	Feb. 3, 1982	11.29	3,620
1962	Mar. 12, 1962	12.40	3,890	1983	Apr. 15, 1983	12.85	4,840
1963	Mar. 12, 1963	10.73	2,870	1984	Feb. 14, 1984	13.63	5,510
1964	Jan. 9, 1964	10.35	2,690	1985	Feb. 12, 1985	10.64	3,170
1965	Feb. 8, 1965	13.12	4,310	1986	Mar. 15, 1986	7.64	1,420
1966	Feb. 14, 1966	11.25	3,170	1987	Sept. 8, 1987	11.79	3,990
1967	Mar. 7, 1967	13.28	4,430	1988	Nov. 29, 1987	12.78	4,780
1968	Jan. 14, 1968	12.40	3,780	1989	May 5, 1989	16.45	8,380
1969	Aug. 4, 1969	5.84	758	1990	May 29, 1990	9.14	2,170
1970	July 10, 1970	8.93	1,850				

a From information by local residents.

POTOMAC RIVER BASIN

01656100 CEDAR RUN NEAR ADEN, VA

LOCATION.--Lat 38°36'58", long 77°33'16", Prince William County, Hydrologic Unit 02070010, on left bank at upstream side of bridge on State Highway 611, 0.5 mi downstream from Darrels Run, 0.8 mi downstream from Town Run, and 3.0 mi southwest of Aden.

DRAINAGE AREA.--155 mi².

GAGE.--Water-stage recorder. Datum of gage is 166.27 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 6,510 ft³/s and extended above.

BANKFULL STAGE.--Not determined.

REMARKS.--Records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1972	June 1972	a21.37	-	1980	Oct. 1, 1979	15.29	14,900
1973	Apr. 27, 1973	12.60	7,320	1981	Aug. 30, 1981	13.25	8,730
1974	Dec. 21, 1973	12.18	6,530	1982	Feb. 3, 1982	12.98	8,120
1975	Dec. 2, 1974	14.43	11,900	1983	Apr. 16, 1983	13.40	9,100
1976	Jan. 1, 1976	13.50	9,350	1984	Mar. 29, 1984	13.90	10,400
1977	Oct. 9, 1976	14.00	10,700	1985	Feb. 12, 1985	12.49	7,090
1978	Jan. 26, 1978	14.77	13,100	1986	Nov. 4, 1985	10.21	2,600
1979	Feb. 26, 1979	14.90	13,400	1987	Dec. 25, 1986	12.41	6,920

a From high-water marks.

01656200 BROAD RUN NEAR WARRENTON, VA

LOCATION.--Lat 38°48'25", long 77°48'47", Fauquier County, Hydrologic Unit 02070010, on left downstream wingwall of culvert on State Highway 17, 7 mi north of Warrenton, and 8.6 mi upstream from Mill Run.

DRAINAGE AREA.--2.94 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 22 ft³/s and extended above.

BANKFULL STAGE.--4 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1950	July 16, 1950	5.12	70	1969	Sept. 18, 1969	4.30	64
1951	December 1950	5.73	97	1970	Dec. 11, 1969	5.00	91
1952	Sept. 1, 1952	4.92	63	1971	Feb. 13, 1971	6.12	145
1953	Nov. 21, 1952	5.92	105	1972	June 21, 1972	7.86	276
1954	Apr. 17, 1954	3.10	15	1973	Oct. 5, 1972	5.50	112
1955	June 8, 1955	6.68	150	1974	Dec. 21, 1973	5.29	103
1956	July 20, 1956	6.46	135	1975	Dec. 1, 1974	5.05	93
1957	Nov. 2, 1956	5.80	100	1976	Mar. 31, 1976	5.89	132
1958	Jan. 14, 1958	4.47	48	1977	Oct. 9, 1976	4.78	82
1959	June 2, 1959	4.34	44	1978	Aug. 12, 1978	3.39	35
1960	Aug. 15, 1960	5.44	100	1983	Apr. 10, 1983	5.19	99
1961	Aug. 26, 1961	6.61	175	1984	Feb. 14, 1984	4.58	74
1962	July 21, 1962	5.94	135	1985	Feb. 12, 1985	<2.59	<24
1963	Mar. 12, 1963	4.73	82	1986	Mar. 14, 1986	2.82	28
1964	Apr. 29, 1964	5.68	121	1987	Apr. 17, 1987	3.54	42
1965	Mar. 5, 1965	5.50	111	1988	May 6, 1988	4.49	71
1966	Sept. 14, 1966	5.13	96	1989	May 6, 1989	4.03	54
1967	Aug. 24, 1967	6.99	200	1990	July 30, 1990	3.41	-
1968	Mar. 12, 1968	5.65	120				

< Less than.

01656500 BROAD RUN AT BUCKLAND, VA

LOCATION.--Lat 38°46'50", long 77°40'22", Prince William County, Hydrologic Unit 02070010, on right bank at downstream side of bridge on U.S. Highway 29 at Buckland, 1.1 mi upstream from South Run.

DRAINAGE AREA.--50.5 mi².

GAGE.--Water-stage recorder. Datum of gage is 284.58 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 3,130 ft³/s and extended above on basis of slope-area measurements at 11,600 ft³/s and 17,100 ft³/s.

BANKFULL STAGE.--Not determined.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1951	Dec. 4, 1950	8.97	3,750	1969	Sept. 8, 1969	5.12	1,000
1952	Apr. 28, 1952	5.95	1,700	1970	July 9, 1970	6.17	1,600
1953	Nov. 21, 1952	7.28	2,400	1971	Feb. 13, 1971	5.85	1,390
1954	July 18, 1954	3.05	348	1972	June 21, 1972	13.92	16,800
1955	Aug. 18, 1955	7.95	2,750	1973	Aug. 21, 1973	6.46	1,780
1956	July 20, 1956	13.08	11,600	1974	Dec. 21, 1973	6.06	1,510
1957	Nov. 2, 1956	4.39	750	1975	Dec. 1, 1974	11.12	6,400
1958	Jan. 14, 1958	6.12	1,680	1976	Jan. 1, 1976	6.74	1,900
1959	June 2, 1959	4.20	650	1977	Oct. 9, 1976	11.58	7,400
1960	Apr. 5, 1960	5.87	1,360	1978	Jan. 26, 1978	-	a2,100
1961	Feb. 19, 1961	5.70	1,310	1979	Feb. 26, 1979	7.85	2,630
1962	Mar. 12, 1962	5.94	1,450	1981	Aug. 30, 1981	4.57	746
1963	Mar. 12, 1963	5.27	1,080	1982	June 13, 1982	5.59	1,250
1964	Jan. 9, 1964	6.68	1,900	1983	Apr. 10, 1983	8.10	2,850
1965	Mar. 5, 1965	6.86	2,020	1984	Feb. 14, 1984	7.54	2,450
1966	Feb. 13, 1966	5.35	1,120	1985	Feb. 12, 1985	6.99	2,070
1967	Aug. 25, 1967	8.43	3,090	1986	Nov. 4, 1985	4.45	692
1968	Jan. 14, 1968	7.53	2,420				

a Mean daily discharge; peak flow is greater than value shown.

01656600 BROAD RUN TRIBUTARY AT BUCKLAND, VA

LOCATION.--Lat 38°46'50", long 77°40'15", Prince William County, Hydrologic Unit 02070010, at culvert on U.S. Highway 29, 0.2 mi east of Buckland.

DRAINAGE AREA.--0.79 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 288.03 ft above National Geodetic Vertical Datum of 1929. Prior to May 3, 1972, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--5 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1966	Sept. 14, 1966	5.84	95	1971	Feb. 13, 1971	5.62	88
1967	Aug. 24, 1967	6.8	150	1972	June 21, 1972	16.20	575
1968	June 12, 1968	9.1	310	1973	Apr. 27, 1973	5.07	61
1969	Aug. 2, 1969	4.75	48	1974	Dec. 21, 1973	5.14	64
1970	July 9, 1970	5.70	92	1975	Dec. 1, 1974	14.34	515

POTOMAC RIVER BASIN

01656650 BROAD RUN NEAR BRISTOW, VA

LOCATION.--Lat 38°44'56", long 77°33'50", Prince William County, Hydrologic Unit 02070010, on left bank 50 ft downstream from bridge on State Highway 619, 0.2 mi upstream from Dawkins Branch, 1.9 mi downstream from Rocky Branch, and 2.3 mi northwest of Bristow.

DRAINAGE AREA.--89.6 mi².

GAGE.--Water-stage recorder. Datum of gage is 185 ft above National Geodetic Vertical Datum of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 4,020 ft³/s and extended above.

BANKFULL STAGE.--Not determined.

REMARKS.--Records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1975	Dec. 1, 1974	16.08	7,780	1981	Aug. 31, 1981	4.55	374
1976	Jan. 27, 1976	8.38	1,900	1982	Feb. 3, 1982	9.57	2,380
1977	Oct. 9, 1976	16.11	7,800	1983	Apr. 10, 1983	12.08	3,750
1978	Jan. 26, 1978	12.05	3,700	1984	Mar. 29, 1984	12.05	3,730
1979	Sept. 6, 1979	13.15	4,570	1985	Feb. 12, 1985	9.64	2,410
1980	Oct. 1, 1979	15.50	6,960	1986	Nov. 4, 1985	-	a750

a Mean daily discharge.

POTOMAC RIVER BASIN

01656700 OCCOQUAN RIVER NEAR MANASSAS, VA

LOCATION.--Lat 38°42'19", long 77°26'46", Prince William County, Hydrologic Unit 02070010, on right bank 200 ft downstream from bridge on State Highway 234 at Lake Jackson, 3.3 mi southeast of Manassas, and 3.7 mi upstream from Bull Run.

DRAINAGE AREA.--343 mi².

GAGE.--Water-stage recorder. Datum of gage is 119.53 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 54,700 ft³/s and extended above.

BANKFULL STAGE.--Not determined.

REMARKS.--Some attenuation of flood peaks caused by Lake Jackson Dam 650 ft upstream from station. Records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1969	Jan. 22, 1969	8.07	3,220	1976	Jan. 1, 1976	17.68	12,000
1970	Feb. 10, 1970	12.32	9,650	1977	Oct. 10, 1976	18.17	12,500
1971	Feb. 14, 1971	14.64	16,900	1978	Jan. 26, 1978	20.84	15,200
1972	June 22, 1972	40.31	57,600	1979	Feb. 26, 1979	22.66	17,600
1973	Apr. 27, 1973	15.04	9,440	1980	Oct. 1, 1979	20.89	15,300
1974	Dec. 21, 1973	13.24	7,820	1981	Feb. 21, 1981	5.49	1,520
1975	Sept. 26, 1975	25.57	22,400				

POTOMAC RIVER BASIN

01656725 BULL RUN NEAR CATHARPIN, VA

LOCATION.--Lat 38°53'21", long 77°34'14", Prince William County, Hydrologic Unit 02070010, on right bank 20 ft downstream from bridge on State Highway 705, 0.7 mi downstream from Chestnut Lick, 2.5 mi north of Catharpin, and 6.7 mi northeast of Gainesville.

DRAINAGE AREA.--25.8 mi².

GAGE.--Water-stage recorder. Datum of gage is 237.78 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 4,230 ft³/s and extended above on basis of slope-area measurement at 39,600 ft³/s.

BANKFULL STAGE.--Not determined.

REMARKS.--Records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1970	Apr. 14, 1970	6.81	1,530	1979	Sept. 5, 1979	7.61	2,500
1971	Feb. 7, 1971	6.88	1,600	1980	Oct. 1, 1979	8.21	2,980
1972	June 22, 1972	18.92	39,400	1981	Feb. 11, 1981	4.55	638
1973	May 28, 1973	7.04	1,700	1982	Aug. 6, 1982	7.17	2,190
1974	Dec. 21, 1973	6.35	2,400	1983	Apr. 10, 1983	8.16	2,940
1975	Dec. 1, 1974	8.63	3,410	1984	Aug. 14, 1984	8.61	4,380
1976	Jan. 1, 1976	7.33	2,280	1985	Nov. 28, 1984	5.83	1,200
1977	Oct. 9, 1976	8.62	3,410	1986	Mar. 15, 1986	5.81	1,190
1978	Jan. 26, 1978	7.09	2,140				

01656800 CUB RUN NEAR CHANTILLY, VA

LOCATION.--Lat 38°54'30", long 77°28'01", Fairfax County, Hydrologic Unit 02070010, on left bank at downstream side of bridge at U.S. Highway 50, 0.2 mi upstream from unnamed tributary, and 2.2 mi northwest of Chantilly.

DRAINAGE AREA.--7.13 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 239.60 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,200 ft³/s and extended above on basis of step-backwater computations.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1963	June 5, 1963	5.50	335	1968	Dec. 28, 1967	5.19	320
1964	Nov. 7, 1963	5.40	328	1970	July 10, 1970	4.85	275
1965	Mar. 5, 1965	5.53	370	1971	Nov. 5, 1970	5.27	390
1966	Sept. 14, 1966	5.76	365	1972	June 22, 1972	10.68	-
1967	Aug. 24, 1967	6.22	443				

POTOMAC RIVER BASIN

01656850 CAIN BRANCH NEAR CHANTILLY, VA

LOCATION.--Lat 38°54'08", long 77°27'06", Fairfax County, Hydrologic Unit 02070010, at Jackson Memorial Highway (State Highway 50), 1.2 mi west of Chantilly.

DRAINAGE AREA.--1.67 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined. November 1964 to June 1966, fragmentary record from flood-hydrograph recorder at same site and datum. Datum lost when culvert rebuilt in 1969-70.

STAGE-DISCHARGE RELATION.--Not developed.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1966	Sept. 14, 1966	2.95	-	1968	Sept. 10, 1968	2.59	-
1967	Aug. 24, 1967	3.50	-	1972	June 21, 1972	-	2,200

POTOMAC RIVER BASIN

01656940 CUB RUN NEAR CENTREVILLE, VA

LOCATION.--Lat 38°49'59", long 77°27'50", Fairfax County, Hydrologic Unit 02070010, at bridge on U.S. Highways 29 and 211, 0.4 mi upstream from Big Rocky Run, and 1.9 mi west of Centreville.

DRAINAGE AREA.--39.6 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 201.34 ft above National Geodetic Vertical Datum of 1929. June 1970 to June 1972, recording gage at datum 3.91 ft lower.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 3,440 ft³/s and extended above on basis of step-backwater computations.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1970	July 10, 1970	9.27	980	1972	June 22, 1972	23.9	-
1971	Feb. 14, 1971	11.44	2,300	1973	Apr. 27, 1973	a8.39	3,600

a At different datum prior to 1973.

POTOMAC RIVER BASIN

01656960 CUB RUN NEAR BULL RUN, VA

LOCATION.--Lat 38°49'16", long 77°27'57", Fairfax County, Hydrologic Unit 02070010, on right bank 20 ft downstream from bridge on State Highway 658, 0.6 mi downstream from Big Rocky Run, 1.2 mi southeast of Bull Run, and 2.3 mi upstream from mouth.

DRAINAGE AREA.--49.9 mi².

GAGE.--Water-stage recorder. Datum of gage is 151.54 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 4,060 ft³/s and extended above.

BANKFULL STAGE.--Not determined.

REMARKS.--Records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1972	June 1972	a28.64	-	1980	Oct. 1, 1979	16.43	10,600
1973	Apr. 27, 1973	11.94	3,080	1981	May 2, 1981	6.37	578
1974	Dec. 21, 1973	10.70	2,400	1982	June 13, 1982	11.82	3,110
1975	Sept. 26, 1975	15.63	8,980	1983	Apr. 15, 1983	12.23	3,570
1976	Jan. 1, 1976	13.20	4,770	1984	Mar. 29, 1984	11.66	2,950
1977	Oct. 9, 1976	10.94	2,270	1985	Feb. 12, 1985	11.92	3,210
1978	Jan. 26, 1978	13.34	4,910	1986	Apr. 16, 1986	7.45	890
1979	Sept. 6, 1979	13.03	4,490				

a From high-water marks.

01657000 BULL RUN NEAR MANASSAS, VA

LOCATION.--Lat 38°47'52", long 77°27'28", Fairfax County, Hydrologic Unit 02070010, on left bank at upstream side of bridge on State Highway 616, 0.5 mi downstream from Cub Run, and 3.2 mi north of Manassas.

DRAINAGE AREA.--148 mi².

GAGE.--Water-stage recorder. Datum of gage is 138.76 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 10,100 ft³/s and extended above on basis of contracted-opening measurement at 12,200 ft³/s and slope-area measurement at 76,000 ft³/s.

BANKFULL STAGE.--Not determined.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1951	Dec. 4, 1950	15.12	8,600	1967	Aug. 25, 1967	19.27	13,000
1952	Apr. 26, 1952	12.25	4,620	1968	Jan. 14, 1968	-	5,300
1953	Nov. 22, 1952	16.37	11,200	1969	Sept. 8, 1969	11.55	4,140
1954	Dec. 14, 1953	9.02	1,960	1970	Apr. 14, 1970	13.10	5,610
1955	Aug. 13, 1955	16.23	10,900	1971	Feb. 14, 1971	13.88	6,490
1956	July 5, 1956	16.45	11,200	1972	June 22, 1972	37.80	76,100
1957	Apr. 5, 1957	11.34	3,670	1973	Apr. 27, 1973	15.06	7,870
1958	Dec. 21, 1957	15.10	8,600	1974	Dec. 21, 1973	14.08	6,700
1959	Sept. 2, 1959	13.53	6,120	1975	Sept. 26, 1975	19.58	13,800
1960	Apr. 5, 1960	13.51	6,150	1976	Jan. 1, 1976	16.70	9,840
1961	Feb. 20, 1961	13.78	6,540	1977	Oct. 9, 1976	15.93	8,880
1962	Mar. 12, 1962	14.28	7,310	1978	Jan. 26, 1978	17.24	10,400
1963	Mar. 12, 1963	12.16	4,620	1979	Feb. 26, 1979	17.09	9,840
1964	Jan. 9, 1964	13.58	6,280	1980	Oct. 1, 1979	20.22	14,900
1965	Mar. 5, 1965	14.98	8,500	1981	Feb. 11, 1981	7.31	1,650
1966	Sept. 15, 1966	12.51	4,950				

POTOMAC RIVER BASIN

01657020 BULL RUN NEAR MANASSAS PARK, VA

LOCATION.--Lat 38°48'12", long 77°26'59", Fairfax County, Hydrologic Unit 02070010, on left bank 34 ft upstream from bridge on State Highway 28, 1.2 mi upstream from Little Rocky Run, 1.5 mi downstream from Cub Run, and 1.5 mi northeast of Manassas.

DRAINAGE AREA.--148 mi².

GAGE.--Water-stage recorder. Datum of gage is 135 ft above National Geodetic Vertical Datum of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 2,830 ft³/s and extended above on basis of slope-area measurement at 76,000 ft³/s.

BANKFULL STAGE.--Not determined.

REMARKS.--Records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1972	June 1972	44.8	76,000	1986	Aug. 6, 1986	11.37	3,520
1985	Feb. 12, 1985	15.80	6,800	1987	Dec. 25, 1986	15.05	6,050

POTOMAC RIVER BASIN

01657300 POPES HEAD CREEK NEAR FAIRFAX, VA

LOCATION.--Lat 38°48'57", long 77°20'16", Fairfax County, Hydrologic Unit 02070010, at Popes Head Road, 2.0 mi southwest of Fairfax.

DRAINAGE AREA.--4.25 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined. From November 1964 to June 1966, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Not developed. Flood peak of August 1967 determined from contracted-opening measurement.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1961	-	20.18	-	1964	May 13, 1964	21.82	-
1962	June 20, 1962	20.83	-	1967	Aug. 24, 1967	22.96	1,900
1963	June 30, 1963	21.75	-				

01657415 BULL RUN NEAR CLIFTON, VA

LOCATION.--Lat 38°45'59", long 77°24'52", Fairfax County, Hydrologic Unit 02070010, on left bank 0.6 mi downstream from Popes Head Creek, 1.6 mi upstream from Buckhall Branch, and 1.8 mi southwest of Clifton.

DRAINAGE AREA.--185 mi².

GAGE.--Water-stage recorder. Datum of gage is 120.24 ft above National Geodetic Vertical Datum of 1929. September 1972 to June 1978, at site 500 ft upstream at datum 3.59 ft higher.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 498 ft³/s and extended above on basis of runoff comparisons with upstream station near Manassas.

BANKFULL STAGE.--Not determined.

REMARKS.--Records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1972	June 1972	a35.0	80,000	1979	Feb. 26, 1979	18.13	12,700
1973	Apr. 27, 1973	12.06	8,910	1980	Oct. 1, 1979	19.50	14,600
1974	Dec. 21, 1973	9.88	6,490	1981	Feb. 11, 1981	7.84	1,360
1975	Sept. 26, 1975	19.52	22,000	1982	June 14, 1982	13.00	6,300
1976	Jan. 1, 1976	13.60	11,000	1983	Apr. 16, 1983	15.80	9,700
1977	Oct. 9, 1976	12.07	8,910	1984	Mar. 29, 1984	16.98	11,300
1978	Jan. 26, 1978	14.44	12,200				

a About.

POTOMAC RIVER BASIN

01657500 OCCOQUAN RIVER NEAR OCCOQUAN, VA

LOCATION.--Lat 38°42'20", long 77°19'35", Prince William County, Hydrologic Unit 02070010, on left bank 1.6 mi upstream from Sandy Run, 4.8 mi upstream from Occoquan, and 5.9 mi downstream from Bull Run.

DRAINAGE AREA.--570 mi².

GAGE.--Water-stage recorder. Datum of gage is 76.21 ft above National Geodetic Vertical Datum of 1929. Prior to Apr. 27, 1913, nonrecording gage at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 15,000 ft³/s and extended above by logarithmic plotting.

BANKFULL STAGE.--15 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1913a	Apr. 13, 1913	19.0	17,200	1944	Nov. 9, 1943	20.42	18,200
1914	Jan. 4, 1914	13.8	9,540	1945	Sept. 19, 1945	21.1	19,600
1915	Feb. 2, 1915	17.67	15,200	1946	May 28, 1946	21.34	20,000
1916	Mar. 28, 1916	15.51	11,900	1947	June 15, 1947	11.79	5,940
1921	May 13, 1921	14.11	9,970	1948	May 14, 1948	15.61	10,500
1922	Feb. 20, 1922	11.30	6,330	1949	Dec. 4, 1948	20.34	18,000
1923	Mar. 17, 1923	11.46	6,520	1950	Mar. 23, 1950	17.82	13,600
1937	Apr. 26, 1937	24.87	29,200	1951	Dec. 5, 1950	19.47	16,400
1938	Oct. 23, 1937	15.43	10,100	1952	Apr. 26, 1952	16.41	11,600
1939	Jan. 31, 1939	16.78	12,100	1953	Nov. 22, 1952	21.47	20,500
1940	Apr. 20, 1940	15.37	10,100	1954	Dec. 14, 1953	11.31	5,400
1941	Apr. 6, 1941	15.36	10,100	1955	Aug. 13, 1955	21.34	19,700
1942	Aug. 9, 1942	18.56	14,900	1956b	Mar. 15, 1956	15.17	9,790
1943	Oct. 16, 1942	27.60	37,000				

a Partial year, February through September.

b Partial year, October through May.

01657600 SANDY RUN NEAR FAIRFAX STATION, VA

LOCATION.--Lat 38°44'53", long 77°19'23", Fairfax County, Hydrologic Unit 02070010, at bridge on Henderson Road, 3.5 mi upstream from mouth, and 3.7 miles south of Fairfax Station.

DRAINAGE AREA.--2.35 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined. May 12 to Dec. 14, 1965, flood-hydrograph recorder at same site and datum. Aug. 9, 1966, to Sept. 15, 1970, water-stage recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 108 ft³/s and extended above on basis of indirect measurement at 1,700 ft³/s.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1966	Sept. 14, 1966	19.42	320	1969	June 15, 1969	18.78	185
1967	Aug. 24, 1967	21.37	1,700	1970	Apr. 14, 1970	18.71	175
1968	May 28, 1968	18.6	159				

POTOMAC RIVER BASIN

01657655 HOOES RUN NEAR OCCOQUAN, VA

LOCATION.--Lat 38°40'48", long 77°17'25", Prince William County, Hydrologic Unit 02070010, on left bank 900 ft upstream from bridge on State Highway 641, 0.9 mi downstream from Lake Omiscol, and 1.6 mi west of Occoquan.

DRAINAGE AREA.--3.97 mi².

GAGE.--Water-stage recorder. Datum of gage is 122.74 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 80 ft³/s and extended above on basis of velocity-area study.

BANKFULL STAGE.--Not determined.

REMARKS.--Records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1975	Sept. 26, 1975	8.18	1,280	1979	Sept. 5, 1979	7.41	1,040
1976	Dec. 31, 1975	4.40	353	1980	Oct. 1, 1979	4.88	440
1977	May 6, 1977	3.86	270	1981	July 26, 1981	4.16	312
1978	Jan. 26, 1978	6.34	752	1982	Aug. 8, 1982	7.38	1,030

POTOMAC RIVER BASIN

01657800 GILES RUN NEAR WOODBRIDGE, VA

LOCATION.--Lat 38°40'48", long 77°13'36", Prince William County, Hydrologic Unit 02070010, at upstream side of culvert on U.S. Highway 1, 1.5 mi northeast of Woodbridge.

DRAINAGE AREA.--4.54 mi².

GAGE.--Water-stage recorder. Datum of gage is 21.68 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 72.7 ft³/s and extended above on basis of indirect measurement at 840 ft³/s.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1965	Mar. 5, 1965	4.02	367	1968	Jan. 14, 1968	4.20	405
1966	Sept. 14, 1966	6.70	942	1969	Aug. 3, 1969	4.07	377
1967	Aug. 27, 1967	6.40	876	1970	July 9, 1970	4.88	548

POTOMAC RIVER BASIN

01658480 QUANTICO CREEK NEAR DUMFRIES, VA

LOCATION.--Lat 38°34'22", long 77°20'51", Prince William County, Hydrologic Unit 02070011, on left bank at upstream side of bridge on pyrite mine trail in Prince William Forest Park, 50 ft upstream from South Fork Quantico Creek, and 0.7 mi west of Dumfries.

DRAINAGE AREA.--6.90 mi².

GAGE.--Water-stage recorder. Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 250 ft³/s and extended above.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1984	Mar. 29, 1984	6.85	430	1985	Feb. 12, 1985	4.19	221

01658500 SOUTH FORK QUANTICO CREEK NEAR INDEPENDENT HILL, VA

LOCATION.--Lat 38°35'14", long 77°25'44", Prince William County, Hydrologic Unit 02070011, on left bank at upstream side of bridge on State Highway 619, 3.4 mi south of Independent Hill, 5.6 mi west of Dumfries, and 6.5 mi upstream from mouth.

DRAINAGE AREA.--7.64 mi².

GAGE.--Water-stage recorder and concrete control. Datum of gage is 238.88 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 755 ft³/s and extended above on basis of contracted-opening measurements at 3,830 ft³/s and 3,910 ft³/s.

BANKFULL STAGE.--5 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1952	Sept. 1, 1952	7.98	870	1972	June 21, 1972	11.35	3,940
1953	Nov. 21, 1952	7.76	800	1973	Apr. 27, 1973	7.35	556
1954	Dec. 14, 1953	4.80	183	1974	May 12, 1974	6.03	281
1955	May 23, 1955	7.49	692	1975	Sept. 26, 1975	10.88	3,070
1956	July 5, 1956	7.42	660	1976	Jan. 1, 1976	6.81	418
1957	Apr. 5, 1957	7.12	495	1977	Oct. 26, 1976	7.36	597
1958	Aug. 25, 1958	8.31	1,000	1978	Jan. 26, 1978	7.64	681
1959	Mar. 6, 1959	4.46	141	1979	Sept. 5, 1979	8.43	1,080
1960	June 14, 1960	7.84	775	1980	Oct. 1, 1979	7.29	570
1961	Sept. 7, 1961	7.01	450	1981	May 11, 1981	2.96	35
1962	Mar. 12, 1962	5.44	225	1982	June 13, 1982	5.05	190
1963	Mar. 12, 1963	7.41	584	1983	Apr. 15, 1983	7.67	699
1964	Jan. 9, 1964	5.82	262	1984	Mar. 29, 1984	7.39	599
1965	Mar. 5, 1965	7.03	465	1985	Feb. 12, 1985	6.40	350
1966	Sept. 14, 1966	6.91	425	1986	Nov. 4, 1985	4.81	170
1967	Aug. 25, 1967	7.18	504	1987	Dec. 24, 1986	6.69	400
1968	Jan. 14, 1968	7.27	528	1988	Jan. 20, 1988	6.38	347
1969	Aug. 3, 1969	8.40	1,040	1989	May 6, 1989	11.62	4,160
1970	Dec. 11, 1969	6.17	292	1990	Jan. 1, 1990	6.39	386
1971	Feb. 13, 1971	7.07	462				

POTOMAC RIVER BASIN

01658550 SOUTH FORK QUANTICO CREEK AT CAMP 5, NEAR JOPLIN, VA

LOCATION.--Lat 38°34'38", long 77°24'36", Prince William County, Hydrologic Unit 02070011, on right bank 100 ft downstream from footbridge in Happyland Camp No. 5 in Prince William Forest Park, 300 ft downstream from Camp 5 Lake, and 1.6 mi northwest of Joplin.

DRAINAGE AREA.--9.62 mi².

GAGE.--Water-stage recorder. Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 200 ft³/s and extended above.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1984	Mar. 29, 1984	4.05	527	1985	Feb. 12, 1985	3.24	297

POTOMAC RIVER BASIN

01658650 SOUTH FORK QUANTICO CREEK NEAR DUMFRIES, VA

LOCATION.--Lat 38°34'18", long 77°20'57", Prince William County, Hydrologic Unit 02070011, on left bank 50 ft downstream from footbridge in Prince William Forest Park, 500 ft upstream from mouth, and 0.7 mi west of Dumfries.

DRAINAGE AREA.--16.6 mi².

GAGE.--Water-stage recorder. Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 600 ft³/s and extended above.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1984	Mar. 29, 1984	6.74	910	1985	Feb. 12, 1985	4.66	571

01659000 NORTH BRANCH CHOPAWAMSIK CREEK NEAR INDEPENDENT HILL, VA

LOCATION.--Lat 38°33'58", long 77°25'48", Prince William County, Hydrologic Unit 02070011, on left bank 1.0 mi upstream from Chopawamsic Creek, 4.8 mi south of Independent Hill, and 5.5 mi west of Dumfries.

DRAINAGE AREA.--5.79 mi².

GAGE.--Water-stage recorder. Datum of gage is 216.43 ft above National Geodetic Vertical Datum of 1929 (Bureau of Yards and Docks bench mark).

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 274 ft³/s and extended above.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1951a	June 22, 1951	7.69	276	1955	Aug. 13, 1955	7.74	279
1952	Dec. 21, 1951	7.31	248	1956	July 5, 1956	6.08	174
1953	Nov. 21, 1952	8.04	298	1957b	Apr. 5, 1957	7.21	241
1954	Dec. 14, 1953	4.95	110	1990	Jan. 1, 1990	5.86	-
	Mar. 1, 1954	4.95	110				

a Partial year, May through September.

b Partial year, October through June.

POTOMAC RIVER BASIN

01659500 MIDDLE FORK CHOPAWAMSIK CREEK NEAR GARRISONVILLE, VA

LOCATION.--Lat 38°33'26", long 77°25'32", Stafford County, Hydrologic Unit 02070011, on left bank 300 ft upstream from highway culvert, 0.4 mi upstream from confluence with North Branch Chopawamsic Creek, and 5.6 mi north of Garrisonville.

DRAINAGE AREA.--4.51 mi².

GAGE.--Water-stage recorder. Datum of gage is 192.48 ft above National Geodetic Vertical Datum of 1929 (Bureau of Yards and Docks bench mark).

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 190 ft³/s and extended above.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1951a	June 22, 1951	4.98	220	1955	Aug. 13, 1955	5.80	340
1952	Dec. 21, 1951	4.48	149	1956	Feb. 6, 1956	3.54	58
1953	Nov. 21, 1952	5.11	235	1957b	Apr. 5, 1957	4.84	198
1954	Dec. 14, 1953	3.39	47	1990	Jan. 1, 1990	3.81	80
	Mar. 1, 1954	3.39	47				

a Partial year, May through September.

b Partial year, October through June.

POTOMAC RIVER BASIN

01660000 SOUTH BRANCH CHOPAWAMSIK CREEK NEAR GARRISONVILLE, VA

LOCATION.--Lat 38°32'22", long 77°25'30", Stafford County, Hydrologic Unit 02070011, on right bank 1.8 mi upstream from mouth, 4.3 mi north of Garrisonville.

DRAINAGE AREA.--2.56 mi².

GAGE.--Water-stage recorder. Datum of gage is 206.03 ft above National Geodetic Vertical Datum of 1929 (Bureau of Yards and Docks bench mark).

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 143 ft³/s and extended above.

BANKFULL STAGE.--6 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1951a	June 10, 1951	3.87	70	1955	Aug. 18, 1955	4.72	106
1952	Sept. 1, 1952	6.50	261	1956	July 4, 1956	6.09	225
1953	Mar. 15, 1953	7.07	320	1957b	Oct. 22, 1956	4.21	80
1954	May 29, 1954	5.00	126	1990	May 10, 1990	6.52	-

a Partial year, May through September.

b Partial year, October through June.

POTOMAC RIVER BASIN

01660400 AQUIA CREEK NEAR GARRISONVILLE, VA

LOCATION.--Lat 38°29'25", long 77°26'02", Stafford County, Hydrologic Unit 02070011, on right bank at bridge on State Highway 641, 1.1 mi northwest of Garrisonville, and 3.0 mi upstream from Beaverdam Run.

DRAINAGE AREA.--34.9 mi².

GAGE.--Water-stage recorder. Datum of gage is 120 ft above National Geodetic Vertical Datum of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,520 ft³/s and extended above on basis of contracted-opening measurement at 11,600 ft³/s.

BANKFULL STAGE.--Not determined.

REMARKS.--Records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1972	June 22, 1972	16.32	11,600	1982	Feb. 3, 1982	4.00	734
1973	Apr. 27, 1973	6.09	1,740	1983	Apr. 15, 1983	6.13	1,750
1974	Dec. 21, 1973	4.60	970	1984	Mar. 29, 1984	6.18	1,780
1975	Sept. 26, 1975	12.08	6,980	1985	Feb. 12, 1985	4.42	919
1976	Dec. 31, 1975	5.23	1,270	1986	Nov. 28, 1985	4.61	1,010
1977	Oct. 20, 1976	4.66	995	1987	Apr. 16, 1987	5.17	1,260
1978	Jan. 26, 1978	6.34	1,850	1988	Jan. 20, 1988	4.50	956
1979	Feb. 26, 1979	6.46	1,970	1989	May 6, 1989	11.40	6,240
1980	Oct. 2, 1979	6.50	1,970	1990	May 29, 1990	4.33	879
1981	Aug. 30, 1981	6.36	1,890				

01660500 BEAVERDAM RUN NEAR GARRISONVILLE, VA

LOCATION.--Lat 38°30'25", long 77°25'45", Stafford County, Hydrologic Unit 02070011, on left bank 2.2 mi north of Garrisonville, 3.4 mi upstream from mouth.

DRAINAGE AREA.--12.7 mi².

GAGE.--Water-stage recorder. Datum of gage is 150.43 ft above National Geodetic Vertical Datum of 1929 (Bureau of Yards and Docks bench mark).

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 800 ft³/s and extended above.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1951a	June 22, 1951	4.43	269	1955	Aug. 15, 1955	7.03	1,370
1952	Dec. 21, 1951	4.96	408	1956	Mar. 14, 1956	3.98	178
1953	Nov. 21, 1952	6.34	975	1957b	Apr. 6, 1957	4.17	216
1954	Dec. 14, 1953	3.70	123	1990	July 16, 1990	3.47	110

a Partial year, May through September.

b Partial year, October through June.

GREAT WICOMICO RIVER BASIN

01661600 GREAT WICOMICO RIVER NEAR HORSE HEAD, VA

LOCATION.--Lat 37°53'15", long 76°27'00", Northumberland County, Hydrologic Unit 02080102, on right upstream wingwall of culvert on State Highway 604, 1.5 mi upstream from Bush Mill Stream, and 1.7 mi west of Horse Head.

DRAINAGE AREA.--6.98 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined. Prior to May 25, 1978, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Determined by computation of flow through culvert.

BANKFULL STAGE.--4 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1969	Aug. 20, 1969	7.00	1,250	1982	Aug. 7, 1982	4.98	696
1970	Oct. 2, 1969	4.50	600	1983	Apr. 16, 1983	5.24	760
1971	Sept. 21, 1971	4.80	660	1984	Mar. 26, 1984	5.22	755
1972	June 21, 1972	4.80	660		May 30, 1984	5.22	755
1973	Oct. 6, 1972	5.10	725	1985	Sept. 26, 1985	5.04	710
1977	Oct. 2, 1976	4.73	646	1986	Oct. 21, 1985	6.41	1,070
1978	Aug. 1, 1978	5.84	910	1987	Feb. 23, 1987	5.12	730
1979	June 3, 1979	8.88	1,950	1988	May 6, 1988	5.03	708
1980	Nov. 11, 1979	4.56	612	1989	Aug. 18, 1989	4.61	622
1981	Oct. 25, 1980	4.97	694	1990	Oct. 19, 1989	4.81	662

01661800 BUSH MILL STREAM NEAR HEATHSVILLE, VA

LOCATION.--Lat 37°52'36", long 76°29'42", Northumberland County, Hydrologic Unit 02080102, on right bank 12 ft upstream from bridge on State Highway 601, 2.2 mi northwest of Howland, and 3.0 mi southwest of Heathsville.

DRAINAGE AREA.--6.82 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 22.22 ft above National Geodetic Vertical Datum of 1929. October 1963 to March 1969, water-stage recorder 52 ft downstream at datum 0.82 ft higher. October 1969 to December 1986, water-stage recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 121 ft³/s and extended above.

BANKFULL STAGE.--5 ft.

REMARKS.--Prior to Jan. 1, 1986, records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1964	Feb. 16, 1964	3.63	106	1978	Mar. 10, 1978	6.53	327
1965	June 12, 1965	4.36	164	1979	July 30, 1979	8.52	714
1966	May 27, 1966	4.83	220	1980	Nov. 11, 1979	5.03	108
1967	Oct. 19, 1966	4.61	189	1981	May 19, 1981	3.74	39
1968	June 20, 1968	5.25	276	1982	Aug. 7, 1982	4.51	73
1969	Aug. 20, 1969	a6.13	450	1983	Apr. 16, 1983	6.88	366
1970	July 30, 1970	4.98	122	1984	May 30, 1984	6.08	206
1971	May 16, 1971	4.47	82	1985	Sept. 27, 1985	6.52	294
1972	June 22, 1972	5.42	165	1986	July 28, 1986	4.99	77
1973	Aug. 21, 1973	6.12	139	1987	Feb. 23, 1987	5.29	107
1974	Aug. 7, 1974	5.62	119	1988	Feb. 12, 1988	5.25	98
1975	July 15, 1975	6.24	267	1989	Apr. 7, 1989	5.98	186
1976	Nov. 13, 1975	5.38	142	1990	May 29, 1990	6.34	258
1977	Oct. 3, 1976	6.56	327				

a From high-water marks, present datum.

RAPPAHANNOCK RIVER BASIN

01661900 CARTER RUN NEAR MARSHALL, VA

LOCATION.--Lat 38°47'57", long 77°52'09", Fauquier County, Hydrologic Unit 02080103, on left bank 50 ft upstream from farm road, 1.2 mi downstream from Horner Run, 4.7 mi south of Marshall, 6.7 mi southwest of The Plains, and 9 mi upstream from mouth.

DRAINAGE AREA.--19.5 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 388.39 ft above National Geodetic Vertical Datum of 1929. Prior to September 1982, water-stage recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 190 ft³/s and extended above on basis of slope-area measurement at 10.4 ft.

BANKFULL STAGE.--Not determined.

REMARKS.--Records for 1982 water year were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1977	Oct. 9, 1976	10.40	7,100	1984	Feb. 14, 1984	5.95	808
1978	Jan. 26, 1978	7.01	1,610	1985	Feb. 12, 1985	6.21	970
1979	Sept. 5, 1979	7.47	2,070	1986	Nov. 4, 1985	4.92	366
1980	Oct. 5, 1979	5.98	826	1987	Sept. 8, 1987	6.29	1,020
1981	Feb. 11, 1981	5.43	543	1988	May 23, 1988	7.95	2,620
1982	June 13, 1982	5.85	751	1989	May 6, 1989	6.56	1,220
1983	Apr. 10, 1983	7.04	1,640	1990	May 10, 1990	6.13	919

01662000 RAPPAHANNOCK RIVER NEAR WARRENTON, VA.

LOCATION.--Lat 38°41'05", long 77°54'15", Fauquier County, Hydrologic Unit 02080103, on left bank 50 ft downstream from westbound bridge on U.S. Highway 211, 0.9 mi downstream from Carter Run, 6.2 mi southwest of Warrenton, and 15 mi upstream from Hazel River.

DRAINAGE AREA.--195 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 312.57 ft above National Geodetic Vertical Datum of 1929. Oct. 8, 1942, to Dec. 17, 1944, nonrecording gage 50 ft upstream at present datum. Prior to Sept. 30, 1986, water-stage recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 24,000 ft³/s and extended above.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1943	Oct. 15, 1942	23.50	32,000	1967	Mar. 7, 1967	13.02	6,070
1944	Jan. 4, 1944	11.00	4,520	1968	Jan. 14, 1968	11.34	4,630
1945	Sept. 18, 1945	12.30	6,050	1969	Jan. 22, 1969	4.75	808
1946	Aug. 2, 1946	10.80	4,320	1970	Feb. 2, 1970	7.16	1,980
1947	June 14, 1947	6.44	1,600	1971	Feb. 14, 1971	11.83	5,020
1948	Apr. 1, 1948	8.94	2,900	1972	June 22, 1972	20.87	21,900
1949	May 15, 1949	9.88	3,540	1973	May 28, 1973	11.04	4,390
1950	Sept. 13, 1950	9.24	3,080	1974	Dec. 21, 1973	10.06	3,650
1951	Dec. 4, 1950	18.31	14,200	1975	Sept. 26, 1975	15.16	8,460
1952	Mar. 11, 1952	9.85	3,470	1976	Jan. 1, 1976	11.66	3,910
1953	Nov. 22, 1952	14.49	7,640	1977	Oct. 9, 1976	22.00	18,000
1954	Mar. 1, 1954	5.91	1,350	1978	Jan. 26, 1978	15.81	6,480
1955	Aug. 18, 1955	16.56	10,500	1979	Sept. 6, 1979	16.89	7,850
1956	July 21, 1956	13.05	6,050	1980	Mar. 21, 1980	12.13	4,180
1957	Oct. 27, 1956	6.53	1,650	1981	Feb. 11, 1981	7.51	1,880
1958	Jan. 14, 1958	10.00	3,610	1982	June 13, 1982	8.29	2,230
1959	June 2, 1959	8.96	2,960	1983	Apr. 10, 1983	15.01	5,940
1960	June 14, 1960	10.77	4,200	1984	Feb. 14, 1984	18.83	10,600
1961	May 13, 1961	11.69	4,920	1985	Feb. 12, 1985	13.25	4,840
1962	Mar. 13, 1962	10.16	3,750	1986	Nov. 4, 1985	14.47	5,600
1963	Nov. 10, 1962	7.46	2,150	1987	Sept. 8, 1987	10.12	3,110
1964	Apr. 29, 1964	9.98	3,610	1988	May 6, 1988	11.51	3,830
1965	Mar. 5, 1965	11.30	4,600	1989	May 6, 1989	10.62	3,360
1966	Feb. 13, 1966	8.79	2,840	1990	May 10, 1990	8.68	2,410

01662300 THORNTON RIVER TRIBUTARY NEAR THORNTON GAP, VA

LOCATION.--Lat 38°40'08", long 78°17'30", Rappahannock County, Hydrologic Unit 02080103, at culvert on U.S. Highway 211, 1.8 mi east of Thornton Gap.

DRAINAGE AREA.--1.38 mi².

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is 1,393.85 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--9 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1967	Aug. 24, 1967	7.98	50	1972	June 21, 1972	9.90	140
1968	May 28, 1968	7.52	32	1973	Oct. 5, 1972	8.52	71
1969	Sept. 20, 1969	7.20	21	1974	Oct. 29, 1973	8.60	75
1970	Dec. 30, 1969	7.70	38	1975	Mar. 19, 1975	9.62	126
1971	Sept. 12, 1971	8.34	64	1976	Sept. 15, 1976	7.63	35

RAPPAHANNOCK RIVER BASIN

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01662500 RUSH RIVER AT WASHINGTON, VA

LOCATION.--Lat 38°42'50", long 78°09'05", Rappahannock County, Hydrologic Unit 02080103, on left bank 20 ft upstream from bridge on old U.S. Highways 211 and 522, 0.5 mi east of Washington, and 1.6 mi upstream from Big Branch.

DRAINAGE AREA.--14.7 mi².

GAGE.--Water-stage recorder. Datum of gage is 597.97 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,260 ft³/s and extended above.

BANKFULL STAGE.--5 ft.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1954	Mar. 1, 1954	4.30	610	1966	Feb. 13, 1966	3.11	278
1955	Aug. 18, 1955	8.14	2,500	1967	Mar. 7, 1967	3.59	402
1956	July 20, 1956	4.05	525	1968	Sept. 10, 1968	3.70	429
1957	May 14, 1957	3.13	282	1969	Sept. 8, 1969	2.78	207
1958	July 14, 1958	3.64	416	1970	Feb. 2, 1970	3.58	402
1959	Sept. 30, 1959	5.26	935	1971	Nov. 12, 1970	4.32	600
1960	May 21, 1960	5.43	1,020	1972	June 22, 1972	6.44	1,460
1961	May 12, 1961	3.73	442	1973	May 28, 1973	3.39	350
1962	June 20, 1962	3.97	496	1974	May 12, 1974	3.32	325
1963	Nov. 10, 1962	3.52	375	1975	Mar. 19, 1975	5.19	1,670
1964	July 12, 1964	4.26	585	1976	Oct. 18, 1975	2.78	295
1965	Mar. 5, 1965	3.89	483	1977	Oct. 9, 1976	6.42	2,880

RAPPAHANNOCK RIVER BASIN

01662600 RUSH RIVER TRIBUTARY NEAR WASHINGTON, VA

LOCATION.--Lat 38°41'40", long 78°10'10", Rappahannock County, Hydrologic Unit 02080103, at culvert on U.S. Highways 211 and 522, 1.2 mi southwest of Washington.

DRAINAGE AREA.--0.09 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 676.44 ft above National Geodetic Vertical Datum of 1929. Prior to Nov. 14, 1973, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--6 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1966	Sept. 14, 1966	3.30	12	1971	Nov. 12, 1970	3.80	24
1967	Aug. 24, 1967	3.55	18	1972	Oct. 25, 1971	3.25	10
1968	Sept. 11, 1968	3.70	22	1973	Apr. 27, 1973	3.23	9.6
1969	July 29, 1969	3.70	22	1974	May 12, 1974	3.41	13
1970	Dec. 31, 1969	3.45	14	1975	Mar. 19, 1975	3.50	15

01662800 BATTLE RUN NEAR LAUREL MILLS, VA

LOCATION.--Lat 38°39'20", long 78°04'27", Rappahannock County, Hydrologic Unit 02080103, on left bank just upstream from bridge on State Highway 729, 0.8 mi upstream from mouth, and 1.0 mi northeast of Laurel Mills.

DRAINAGE AREA.--27.6 mi².

GAGE.--Water-stage recorder. Datum of gage is 374.62 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 2,450 ft³/s and extended above on basis of velocity-area study.

BANKFULL STAGE.--4 ft.

REMARKS.--Records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1959	Sept. 30, 1959	10.71	885	1975	Mar. 19, 1975	10.57	2,760
1960	May 21, 1960	11.37	1,120	1976	Jan. 1, 1976	6.69	820
1961	May 12, 1961	10.10	740	1977	Oct. 9, 1976	13.90	9,120
1962	June 20, 1962	9.91	700	1978	Jan. 26, 1978	10.62	2,760
1963	Mar. 19, 1963	8.75	500	1979	Aug. 24, 1979	11.52	3,650
1964	Apr. 29, 1964	11.16	1,050	1980	Mar. 21, 1980	10.25	2,470
1965	Mar. 5, 1965	10.37	810	1981	Feb. 11, 1981	5.28	419
1966	Feb. 13, 1966	9.65	620	1982	June 5, 1982	6.08	634
1967	Aug. 24, 1967	10.63	810	1983	Apr. 3, 1983	9.18	1,830
1968	Jan. 14, 1968	10.34	785	1984	Feb. 14, 1984	9.97	2,310
1969	July 11, 1969	9.36	600	1985	Feb. 12, 1985	8.08	1,300
1970	Feb. 2, 1970	9.32	740	1986	Nov. 4, 1985	12.46	5,060
1971	Aug. 4, 1971	10.16	680	1987	Sept. 8, 1987	7.55	1,030
1972	June 22, 1972	11.53	2,850	1988	May 20, 1988	12.02	4,340
1973	Aug. 18, 1973	8.02	1,270	1989	May 1, 1989	6.11	615
1974	May 12, 1974	6.54	760	1990	May 10, 1990	5.29	410

01663000 THORNTON RIVER NEAR LAUREL MILLS, VA

LOCATION.--Lat 38°37'41", long 78°03'47", Rappahannock County, Hydrologic Unit 02080103, near left bank on downstream side of bridge on State Highway 729, 2 mi southeast of Laurel Mills, 3 mi downstream from Battle Run, and 4.5 mi upstream from mouth.

DRAINAGE AREA.--142 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 342.43 ft above National Geodetic Vertical Datum of 1929. Prior to Nov. 21, 1950, nonrecording gage at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 2,600 ft³/s and extended above on basis of slope-area measurement at 26,000 ft³/s.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1943	Oct. 15, 1942	26.80	40,000	1950	Sept. 12, 1950	10.60	4,030
1944	Sept. 18, 1944	8.00	2,110	1951	Dec. 4, 1950	17.22	13,000
1945	Sept. 18, 1945	11.30	4,640	1952	Aug. 6, 1952	15.70	10,000
1946	May 28, 1946	9.08	2,840	1953	Nov. 21, 1952	14.00	7,450
1947	Aug. 18, 1947	8.20	2,250	1954	Mar. 2, 1954	10.18	3,950
1948	Nov. 3, 1947	14.00	7,500	1955	Aug. 18, 1955	21.50	26,500
1949	Apr. 13, 1949	12.90	6,240	1956	July 20, 1956	10.30	4,500

01663500 HAZEL RIVER AT RIXEYVILLE, VA

LOCATION.--Lat 38°35'30", long 77°57'55", Culpeper County, Hydrologic Unit 02080103, on right bank at downstream side of bridge on State Highway 229, 0.4 mi upstream from Waterford Run, 1.1 mi northeast of Rixeyville, 2.8 mi downstream from Thornton River, and 9.1 mi upstream from mouth.

DRAINAGE AREA.--287 mi².

GAGE.--Water-stage recorder. Datum of gage is 288.30 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 27,000 ft³/s and extended above.

BANKFULL STAGE.--13 ft.

REMARKS.--Subsequent to Sept. 30, 1989, records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1937	Apr. 26, 1937	28.40	43,500	1966	Sept. 21, 1966	13.57	5,430
1942	Aug. 9, 1942	13.75	5,420	1967	Mar. 7, 1967	15.43	7,330
1943	Oct. 15, 1942	31.80	60,000	1968	Jan. 14, 1968	13.91	5,680
1944	Sept. 19, 1944	9.49	2,720	1969	July 29, 1969	13.83	5,590
1945	Sept. 18, 1945	15.85	7,840	1970	Dec. 11, 1969	12.59	4,750
1946	May 28, 1946	13.70	5,330	1971	Nov. 13, 1970	15.55	7,490
1947	Aug. 18, 1947	12.50	4,440	1972	June 22, 1972	23.40	25,000
1948	Nov. 4, 1947	19.77	15,300	1973	May 28, 1973	16.01	8,140
1949	Apr. 14, 1949	18.40	12,300	1974	Dec. 21, 1973	14.29	6,010
1950	Sept. 13, 1950	15.30	7,160	1975	Mar. 19, 1975	20.84	17,900
1951	Dec. 4, 1950	21.36	19,300	1976	Jan. 1, 1976	14.18	5,910
1952	Mar. 11, 1952	15.50	7,420	1977	Oct. 9, 1976	24.00	26,900
1953	Nov. 22, 1952	18.60	12,700	1978	Jan. 26, 1978	19.62	14,900
1954	Mar. 1, 1954	12.80	4,650	1979	Aug. 29, 1979	24.57	28,800
1955	Aug. 18, 1955	25.97	33,700	1980	Mar. 21, 1980	16.37	8,960
1956	July 21, 1956	12.95	4,790	1981	Feb. 20, 1981	9.57	2,710
1957	Oct. 27, 1956	10.70	3,360	1982	June 13, 1982	12.22	4,420
1958	Jan. 14, 1958	12.88	4,720	1983	Apr. 10, 1983	18.03	11,600
1959	June 2, 1959	14.46	6,140	1984	Feb. 14, 1984	22.31	21,700
1960	Oct. 1, 1959	14.21	5,800	1985	Feb. 12, 1985	16.10	8,270
1961	Apr. 13, 1961	15.00	6,770	1986	Nov. 4, 1985	24.79	29,500
1962	Mar. 12, 1962	12.67	4,820	1987	Apr. 16, 1987	16.60	9,060
1963	Mar. 20, 1963	12.18	4,240	1988	Nov. 29, 1987	15.59	7,550
1964	Apr. 29, 1964	13.65	5,430	1989	May 6, 1989	12.29	4,460
1965	Mar. 5, 1965	16.42	8,720	1990	May 10, 1990	9.66	2,870

01664000 RAPPAHANNOCK RIVER AT REMINGTON, VA

LOCATION.--Lat 38°31'50", long 77°48'50", Fauquier County, Hydrologic Unit 02080103, on left bank 80 ft upstream from bridge on alternate U.S. Highway 29, at Remington, 0.3 mi upstream from Tinpot Run, 0.4 mi downstream from Ruffans Run, and 2.5 mi downstream from Hazel River.

DRAINAGE AREA.--620 mi².

GAGE.--Water-stage recorder. Datum of gage is 252.53 ft above National Geodetic Vertical Datum of 1929. Prior to Nov. 21, 1951, nonrecording gage at bridge 80 ft downstream at same datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 43,000 ft³/s and extended above on basis of slope-area measurement at 90,000 ft³/s.

BANKFULL STAGE.--13 ft.

REMARKS.--Flood peak of October 1942 is maximum known since at least 1828 from information by local resident.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1943	Oct. 16, 1942	a30.00	90,000	1967	Mar. 7, 1967	16.25	14,200
1944	Nov. 8, 1943	12.60	7,480	1968	Jan. 14, 1968	15.43	12,100
1945	July 31, 1945	16.20	13,500	1969	July 29, 1969	13.01	8,010
1946	Aug. 2, 1946	15.45	12,000	1970	Feb. 10, 1970	10.54	5,490
1947	Mar. 14, 1947	8.20	3,450	1971	Feb. 14, 1971	15.46	12,200
1948	Nov. 4, 1947	14.70	10,300	1972	June 22, 1972	24.82	52,900
1949	Dec. 4, 1948	14.90	10,600	1973	May 29, 1973	15.12	11,300
1950	Sept. 13, 1950	14.80	10,500	1974	Dec. 21, 1973	15.09	11,200
1951	Dec. 5, 1950	19.42	27,200	1975	Mar. 20, 1975	18.70	22,400
1952	Mar. 12, 1952	14.60	9,600	1976	Jan. 1, 1976	15.10	11,200
1953	Nov. 22, 1952	17.81	18,800	1977	Oct. 10, 1976	21.97	36,800
1954	Mar. 2, 1954	10.41	5,130	1978	Jan. 27, 1978	18.52	21,800
1955	Aug. 18, 1955	23.52	45,100	1979	Sept. 6, 1979	18.84	23,000
1956	July 21, 1956	14.14	9,400	1980	Mar. 22, 1980	14.98	11,000
1957	Oct. 27, 1956	11.26	6,200	1981	Aug. 31, 1981	9.93	4,970
1958	Jan. 15, 1958	13.42	8,480	1982	Aug. 6, 1982	13.86	9,230
1959	June 3, 1959	14.23	9,550	1983	Apr. 10, 1983	17.39	17,700
1960	Apr. 5, 1960	14.58	10,200	1984	Feb. 15, 1984	21.21	33,000
1961	Apr. 13, 1961	15.36	12,000	1985	Feb. 13, 1985	14.80	10,800
1962	Mar. 13, 1962	14.95	11,000	1986	Nov. 4, 1985	19.73	26,400
1963	Mar. 20, 1963	13.49	8,600	1987	Apr. 17, 1987	15.53	12,300
1964	Apr. 29, 1964	13.69	8,860	1988	Nov. 30, 1987	15.25	11,700
1965	Feb. 8, 1965	16.30	14,400	1989	May 6, 1989	16.35	14,500
1966	Feb. 14, 1966	14.20	9,550	1990	May 11, 1990	11.38	6,280

a From high-water marks.

RAPPAHANNOCK RIVER BASIN

01664500 RAPPAHANNOCK RIVER AT KELLYS FORD, VA

LOCATION.--Lat 38°28'38", long 77°46'53", Culpeper County, Hydrologic Unit 02080103, on right bank 50 ft upstream from highway bridge at Kellys Ford, 2.6 mi upstream from Mountain Run, 4.3 mi southeast of Remington, and at mile 30.9.

DRAINAGE AREA.--641 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 208.91 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 30, 1934, water-stage recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 10,000 ft³/s and extended above on basis of slope-area measurement of peak flow.

BANKFULL STAGE.--15 ft.

REMARKS.-- Flood peak of October 1942 is highest known since at least 1828, from information by local resident.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1886	Oct. 20, 1885	a22.9	34,500	1938	Oct. 20, 1937	18.04	16,000
1889	June 1889	a26.7	50,000	1939	Jan. 30, 1939	12.22	7,080
1924	May 1924	a21.8	29,700	1940	May 27, 1940	12.04	6,920
1925b	Feb. 12, 1925	11.63	7,730	1941	Apr. 5, 1941	12.83	7,550
1926	Sept. 24, 1926	16.35	12,300	1942	Aug. 9, 1942	14.66	9,060
1927	Nov. 17, 1926	19.90	22,100	1943	Oct. 16, 1942	32.60	90,000
1928	Aug. 12, 1928	16.37	12,300	1944	Nov. 9, 1943	12.88	7,630
1929	Apr. 17, 1929	13.90	8,420	1945	July 31, 1945	18.10	13,300
1930	Oct. 23, 1929	20.65	24,900	1946	May 29, 1946	16.00	11,500
1931	Aug. 10, 1931	7.00	3,050	1947	Mar. 14, 1947	8.41	3,740
1932	May 13, 1932	16.00	11,500	1948	Apr. 1, 1948	14.45	8,880
1933	Nov. 10, 1932	18.65	17,800	1949	Dec. 4, 1948	16.00	11,500
1934	Sept. 17, 1934	18.00	16,000	1950	Sept. 14, 1950	14.62	9,130
1935	Dec. 2, 1934	16.00	11,500	1951	Dec. 5, 1950	20.50	24,500
1936	Mar. 18, 1936	18.55	17,800	1952	Apr. 28, 1952	13.88	8,370
1937	Apr. 26, 1937	29.22	69,800				

a From information by local residents.

b Partial year, February through September.

RAPPAHANNOCK RIVER BASIN

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01664700 BROWNS RUN NEAR BEALETON, VA

LOCATION.--Lat 38°32'37", long 77°43'52", Fauquier County, Hydrologic Unit 02080103, at State Highway 17, 2.9 mi southeast of Bealeton.

DRAINAGE AREA.--7.54 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 264.91 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 600 ft³/s and extended above.

BANKFULL STAGE.--5.0 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1954a	Mar. 1, 1954	4.74	450	1958	July 23, 1958	5.50	730
1955	June 8, 1955	5.38	680	1959	June 2, 1959	5.20	610
1956	Feb. 6, 1956	5.07	550	1960	June 13, 1960	5.52	740
1957	Apr. 5, 1957	5.15	570	1961b	Apr. 13, 1961	5.48	720

a Partial year, January through September.

b Partial year, October through May.

RAPPAHANNOCK RIVER BASIN

01664800 HARPERS RUN NEAR MORRISVILLE, VA

LOCATION.--Lat 38°31'00", long 77°43'05", Fauquier County, Hydrologic Unit 02080103, at culvert on U.S. Highway 17, 1.7 mi northwest of Morrisville.

DRAINAGE AREA.--2.28 mi².

GAGE.--Flood-hydrograph recorder. Datum of gage is 287.56 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1966	May 19, 1966	4.80	320	1971	Feb. 13, 1971	4.35	280
1967	Mar. 7, 1967	4.45	240	1972	June 21, 1972	12.53	1,900
1968	Jan. 14, 1968	4.89	330	1973	Apr. 27, 1973	4.10	204
1969	July 28, 1969	5.65	460	1974	May 12, 1974	2.40	40
1970	Sept. 18, 1970	3.95	150	1975	Mar. 19, 1975	2.90	73

01665000 MOUNTAIN RUN NEAR CULPEPER, VA

LOCATION.--Lat 38°28'50", long 78°03'10", Culpeper County, Hydrologic Unit 02080103, on left bank 30 ft upstream from bridge on State Highway 641, 2.4 mi upstream from Bond Branch, and 3.0 mi west of Culpeper.

DRAINAGE AREA.--15.9 mi², of which 10.9 mi² are above flood-detention structures.

GAGE.--Water-stage recorder. Datum of gage is 389.46 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 910 ft³/s and extended above on basis of slope-area measurement at 6,840 ft³/s.

BANKFULL STAGE.--6 ft.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1950	Sept. 13, 1950	10.65	2,650	1971	Nov. 12, 1970	7.11	760
1951	Dec. 4, 1950	11.20	5,940	1972	June 21, 1972	9.86	3,040
1952	Sept. 1, 1952	8.54	1,150	1973	Oct. 5, 1972	5.51	387
1953	Nov. 21, 1952	10.52	2,550	1974	Dec. 21, 1973	5.46	378
1954	June 9, 1954	5.55	265	1975	May 23, 1975	6.66	632
1955	Aug. 18, 1955	11.00	5,440	1976	Dec. 31, 1975	5.62	404
1956	July 21, 1956	6.06	470	1977	Oct. 9, 1976	9.22	2,110
1957	Oct. 27, 1956	6.75	660	1978	Jan. 26, 1978	6.48	595
1958	Aug. 14, 1958	9.20	2,110	1979	Sept. 22, 1979	8.74	1,610
1959	July 27, 1959	6.32	520	1980	Mar. 21, 1980	6.22	520
1960	Sept. 10, 1960	5.80	438	1981	Feb. 11, 1981	4.26	207
1961	Sept. 7, 1961	5.93	465	1982	Aug. 6, 1982	5.25	346
1962	May 1, 1962	5.38	370	1983	Apr. 10, 1983	6.50	645
1963	Mar. 12, 1963	4.75	266	1984	Feb. 14, 1984	6.51	648
1964	Jan. 9, 1964	4.73	266	1985	Feb. 12, 1985	5.30	408
1965	Feb. 7, 1965	5.90	455	1986	Nov. 3, 1985	6.04	548
1966	Feb. 13, 1966	5.18	330	1987	Sept. 8, 1987	9.28	2,210
1967	Mar. 7, 1967	6.00	475	1988	Nov. 29, 1987	5.85	510
1968	Jan. 14, 1968	5.42	370	1989	May 5, 1989	8.10	1,240
1969	July 28, 1969	9.18	2,110	1990	July 14, 1990	7.28	873
1970	Aug. 8, 1970	4.77	266				

01665050 PONY MOUNTAIN BRANCH NEAR CULPEPER, VA

LOCATION.--Lat 38°27'04", long 77°57'24", Culpeper County, Hydrologic Unit 02080103, at culvert on State Highway 3, 0.3 mi upstream from mouth, and 2.7 mi southeast of Culpeper.

DRAINAGE AREA.--0.30 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 335 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Dec. 5, 1969, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by indirect methods.

BANKFULL STAGE.--Not determined.

REMARKS.--Prior to 1970, records were provided by the U.S. Department of Agriculture, Soil Conservation Service.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1958	June 24, 1958	2.29	91	1975	Mar. 19, 1975	1.62	53
1959	June 2, 1959	1.65	55	1976	June 20, 1976	2.35	96
1960	Sept. 19, 1960	1.81	64	1977	Oct. 9, 1976	3.98	194
1961	Apr. 13, 1961	1.22	29	1978	June 27, 1978	2.72	118
1962	Mar. 12, 1962	.98	13	1979	June 1, 1979	>7.23	-
1963	Mar. 12, 1963	1.28	34	1980	Mar. 21, 1980	1.46	45
1964	Apr. 29, 1964	1.32	36	1981	Aug. 30, 1981	1.71	58
1965	Feb. 7, 1965	1.64	54	1982	June 13, 1982	3.74	179
1966	May 19, 1966	2.00	76	1983	Apr. 10, 1983	1.59	52
1967	Mar. 7, 1967	1.33	37	1984	Aug. 10, 1984	2.69	116
1968	July 2, 1968	.98	13	1985	June 20, 1985	2.28	92
1969a	Jan. 21, 1969	0.74	5.7	1986	July 23, 1986	2.99	134
1970	Aug. 16, 1970	4.02	196	1987	Sept. 8, 1987	6.62	-
1971	May 30, 1971	1.81	64	1988	July 21, 1988	1.39	40
1972	June 21, 1972	3.94	191	1989	May 5, 1989	5.78	-
1973	Nov. 14, 1972	1.89	68	1990	July 14, 1990	3.38	158
1974	Sept. 3, 1974	1.52	48				

> Greater than.

a Partial year, December through September.

RAPPAHANNOCK RIVER BASIN

01665200 ROCK RUN TRIBUTARY NEAR GOLDVEIN, VA

LOCATION.--Lat 38°27'45", long 77°40'10", Fauquier County, Hydrologic Unit 02080103, at culvert on U.S. Highway 17, 1.5 mi northwest of Goldvein.

DRAINAGE AREA.--1.00 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 279.76 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 30, 1974, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1966	Sept. 14, 1966	4.20	84	1971	May 30, 1971	3.25	65
1967	Aug. 24, 1967	4.70	200	1972	June 21, 1972	7.37	536
1968	Jan. 14, 1968	4.00	100	1973	Apr. 27, 1973	5.10	232
1969	-	<3.00	<50	1974	Dec. 21, 1973	3.20	62
1970	July 23, 1970	2.74	<40	1975	Sept. 26, 1975	2.75	38

< Less than.

RAPPAHANNOCK RIVER BASIN

01665300 RAPIDAN RIVER NEAR STANARDSVILLE, VA

LOCATION.--Lat 38°21'13", long 78°22'29", Madison County, Hydrologic Unit 02080103, at bridge on State Highway 230, 5.3 mi northeast of Stanardsville.

DRAINAGE AREA.--37.6 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Not developed.

BANKFULL STAGE.--Not determined.

REMARKS.--Insufficient field data available to develop stage-discharge rating.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1967	-	<17.03	-	1972	June 21, 1972	18.28	-
1968	-	<17.03	-	1973	Oct. 5, 1972	19.20	-
1969	-	<17.03	-	1974	-	<17.09	-
1970	-	<17.03	-	1975	-	<17.09	-
1971	-	<17.03	-				

< Less than.

RAPPAHANNOCK RIVER BASIN

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01665400 CONWAY RIVER NEAR STANARDSVILLE, VA

LOCATION.--Lat 38°19'58", long 78°23'53", Madison County, Hydrologic Unit 02080103, at bridge on State Highway 230, 3.4 mi northeast of Stanardsville.

DRAINAGE AREA.--25.8 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 569.83 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Not developed.

BANKFULL STAGE.--Not determined.

REMARKS.--Insufficient field data available to develop stage-discharge rating.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1967	-	<18.04	-	1972	June 21, 1972	20.43	-
1968	-	<18.04	-	1973	Oct. 5, 1972	20.55	-
1969	-	15.0	-	1974	-	<16.28	-
1970	-	<18.04	-	1975	Mar. 19, 1975	18.17	-
1971	May 30, 1971	17.33	-				

< Less than.

RAPPAHANNOCK RIVER BASIN

01665450 SOUTH RIVER NEAR STANARDSVILLE, VA

LOCATION.--Lat 38°18'50", long 78°25'45", Greene County, Hydrologic Unit 02080103, at bridge on State Highway 230, 1.3 mi north of Stanardsville.

DRAINAGE AREA.--18.8 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 600.38 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Not developed.

BANKFULL STAGE.--Not determined.

REMARKS.--Insufficient field data available to develop stage-discharge rating.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1967	-	<9.88	-	1972	June 21, 1972	12.31	-
1968	-	<9.88	-	1973	Oct. 5, 1972	12.79	-
1969	-	<9.88	-	1974	-	<9.88	-
1970	-	<9.88	-	1975	Mar. 19, 1975	10.57	-
1971	-	<9.88	-				

< Less than.

RAPPAHANNOCK RIVER BASIN

01665500 RAPIDAN RIVER NEAR RUCKERSVILLE, VA

LOCATION.--Lat 38°16'50", long 78°20'25", Madison County, Hydrologic Unit 02080103, on left bank 250 ft downstream from bridge on U.S. Highway 29, 0.2 mi downstream from Elk Run, 1.7 mi upstream from White Run, 3.6 mi northeast of Ruckersville, and at mile 63.5.

DRAINAGE AREA.--114 mi².

GAGE.--Water-stage recorder. Datum of gage is 439.44 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 12,000 ft³/s and extended above on basis of slope-area measurement at 21,500 ft³/s.

BANKFULL STAGE.--9 ft.

REMARKS.--Subsequent to Sept. 30, 1989, records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1943	Oct. 15, 1942	20.80	30,700	1967	Aug. 25, 1967	9.79	4,150
1944	Sept. 19, 1944	10.36	4,910	1968	Dec. 10, 1967	5.56	1,600
1945	July 31, 1945	11.80	6,290	1969	July 12, 1969	7.57	2,710
1946	June 4, 1946	3.56	735	1970	Apr. 2, 1970	5.64	1,670
1947	June 14, 1947	7.00	2,500	1971	May 30, 1971	9.98	4,290
1948	Apr. 1, 1948	9.45	4,520	1972	June 21, 1972	16.87	17,600
1949	Aug. 15, 1949	13.28	8,160	1973	Oct. 5, 1972	19.41	25,800
1950	May 31, 1950	5.96	1,880	1974	Dec. 21, 1973	7.00	3,150
1951	Dec. 4, 1950	14.10	9,490	1975	Mar. 19, 1975	11.89	7,960
1952	Mar. 11, 1952	8.83	3,630	1976	Jan. 27, 1976	6.37	2,710
1953	Mar. 25, 1953	9.34	4,000	1977	Oct. 9, 1976	12.56	8,880
1954	Mar. 1, 1954	7.95	3,070	1978	Jan. 26, 1978	10.30	6,030
1955	Aug. 18, 1955	17.78	20,100	1979	Sept. 6, 1979	15.29	13,800
1956	July 21, 1956	5.16	1,450	1980	Mar. 21, 1980	11.11	6,960
1957	Feb. 26, 1957	5.91	1,450	1981	July 2, 1981	6.06	2,490
1958	Dec. 26, 1957	6.04	1,490	1982	May 28, 1982	10.37	6,170
1959	Sept. 30, 1959	11.14	5,310	1983	Apr. 3, 1983	10.18	5,970
1960	Feb. 18, 1960	8.02	3,000	1984	Feb. 14, 1984	11.63	7,630
1961	Aug. 5, 1961	16.10	14,700	1985	Feb. 12, 1985	6.93	3,110
1962	May 27, 1962	8.15	3,120	1986	Nov. 5, 1985	14.72	12,600
1963	Mar. 12, 1963	6.62	2,180	1987	Sept. 8, 1987	11.48	7,430
1964	Jan. 9, 1964	4.52	1,130	1988	May 6, 1988	5.01	1,760
1965	Feb. 7, 1965	10.30	4,570	1989	July 31, 1989	7.33	3,420
1966	Feb. 13, 1966	9.10	3,670	1990	July 11, 1990	8.22	4,140

01666500 ROBINSON RIVER NEAR LOCUST DALE, VA
(Formerly published as Robertson River near Locust Dale)

LOCATION.--Lat 38°19'30", long 78°05'45", Madison County, Hydrologic Unit 02080103, on right bank 100 ft upstream from bridge on State Highway 614, 1.1 mi upstream from Great Run, 1.7 mi upstream from mouth, 2.0 mi southeast of Locust Dale, and 3.4 mi downstream from Crooked Run.

DRAINAGE AREA.--179 mi².

GAGE.--Water-stage recorder. Datum of gage is 283.70 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 9,100 ft³/s and extended above on basis of slope-area measurement at 17,200 ft³/s and records for other stations in Rappahannock River basin.

BANKFULL STAGE.--12 ft.

REMARKS.--Subsequent to Sept. 30, 1989, records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1943	Oct. 15, 1942	a23.90	44,000	1967	Mar. 7, 1967	14.10	5,540
1944	Sept.19, 1944	13.26	4,940	1968	Jan. 14, 1968	15.37	7,270
1945	Sept.18, 1945	13.60	4,830	1969	July 29, 1969	12.48	4,090
1946	July 22, 1946	6.11	1,530	1970	Dec. 11, 1969	7.94	2,000
1947	Aug. 4, 1947	7.17	1,950	1971	May 30, 1971	14.00	5,420
1948	Nov. 4, 1947	16.46	9,900	1972	June 22, 1972	20.92	24,500
1949	Dec. 4, 1948	13.90	4,500	1973	Oct. 6, 1972	19.19	17,600
1950	Sept.13, 1950	15.10	6,960	1974	Dec. 21, 1973	14.32	5,800
1951	Dec. 4, 1950	16.20	9,140	1975	Mar. 19, 1975	16.42	9,690
1952	Feb. 4, 1952	11.19	3,620	1976	Jan. 27, 1976	12.30	3,980
1953	Nov. 21, 1952	13.39	4,720	1977	Oct. 9, 1976	18.49	15,500
1954	Mar. 1, 1954	9.63	2,900	1978	Jan. 26, 1978	16.42	9,690
1955	Aug. 18, 1955	19.49	18,600	1979	Sept. 6, 1979	18.75	16,300
1956	July 22, 1956	7.40	2,010	1980	Mar. 21, 1980	15.39	7,620
1957	Oct. 27, 1956	9.84	2,720	1981	Feb. 11, 1981	7.26	1,550
1958	Dec. 26, 1957	8.11	2,060	1982	June 13, 1982	13.40	4,140
1959	June 2, 1959	12.24	3,920	1983	Apr. 10, 1983	15.80	6,110
1960	Sept.20, 1960	13.36	4,790	1984	Feb. 14, 1984	17.36	9,200
1961	Apr. 13, 1961	11.51	3,530	1985	Feb. 12, 1985	15.63	8,110
1962	Mar. 12, 1962	12.20	3,920	1986	Nov. 5, 1985	20.17	17,200
1963	Mar. 12, 1963	10.92	3,220	1987	Sept. 8, 1987	19.16	9,550
1964	Jan. 9, 1964	7.63	1,880	1988	Nov. 29, 1987	14.40	6,020
1965	Feb. 8, 1965	15.66	8,080	1989	May 6, 1989	17.13	9,900
1966	Feb. 13, 1966	13.51	4,890	1990b	May 10, 1990	10.89	3,190

a From high-water marks.

b Maximum annual stage, 11.04 ft, Jan. 1, due to backwater from ice jam.

01667000 RAPIDAN RIVER AT RAPIDAN, VA

LOCATION.--Lat 38°18'47", long 78°03'50", Culpeper County, Hydrologic Unit 02080103, 1,000 ft downstream from bridge on State Highway 615 at Rapidan, 2 mi downstream from Robinson River.

DRAINAGE AREA.--446 mi².

GAGE.--Nonrecording gage, National Weather Service gage at site 1,000 ft upstream from November 1944. Datum of National Weather Service gage is 266.5 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 6,300 ft³/s and extended above on basis of slope-area measurement at 58,000 ft³/s at site 7 mi downstream. Relation at National Weather Service site is essentially the same as for the original site.

BANKFULL STAGE.--14 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1901	May 1901	23.40	36,000	1950	Sept. 13, 1950	13.80	9,550
1924a	Sept. 30, 1924	19.90	23,000	1951	Dec. 4, 1950	17.50	15,800
1925	Feb. 12, 1925	8.50	4,700	1952	Feb. 4, 1952	11.50	7,350
1926	Jan. 19, 1926	11.00	6,900	1953	Nov. 22, 1952	13.00	8,750
1927	Nov. 16, 1926	16.80	14,200	1954	Mar. 1, 1954	9.50	5,560
1928	Oct. 4, 1927	16.00	12,500	1955	Aug. 18, 1955	22.50	32,000
1929	Apr. 16, 1929	10.00	6,000	1956	Sept. 28, 1956	6.50	3,060
1930	Oct. 22, 1929	14.50	10,300	1957	Oct. 27, 1956	9.00	5,130
1931	May 23, 1931	-	1,600	1958	Dec. 27, 1957	9.00	5,130
1936	Mar. 18, 1936	-	20,000	1959	June 3, 1959	12.30	8,070
1937	Apr. 26, 1937	-	48,000	1960	Feb. 19, 1960	12.20	7,980
1943	Oct. 16, 1942	27.60	57,000	1961	Apr. 13, 1961	11.00	6,900
1944	Sept. 19, 1944	-	9,000	1962	Mar. 23, 1962	10.10	6,090
1945	July 31, 1945	9.90	5,910	1963	Mar. 13, 1963	11.50	7,350
1946	Mar. 31, 1946	5.20	2,090	1964	Jan. 9, 1964	8.40	4,620
1947	Mar. 15, 1947	7.00	3,460	1965	Feb. 8, 1965	16.50	13,500
1948	Apr. 1, 1948	13.70	9,450	1966	Feb. 14, 1966	12.00	7,800
1949	Dec. 4, 1948	15.50	11,600				

a Incomplete information for water year; peak in May was probably higher.

01667500 RAPIDAN RIVER NEAR CULPEPER, VA

LOCATION.--Lat 38°21'01", long 77°58'31", Culpeper County, Hydrologic Unit 02080103, on left bank 0.7 mi upstream from Cedar Run and bridge on U.S. Highway 522, 8.5 mi south of Culpeper, and at mile 29.6.

DRAINAGE AREA.--472 mi².

GAGE.--Water-stage recorder. Datum of gage is 241.36 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 43,000 ft³/s and extended above on basis of slope-area measurement at 58,100 ft³/s.

BANKFULL STAGE.--12 ft.

REMARKS.--Subsequent to Sept. 30, 1989, records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1931	May 23, 1931	4.25	1,760	1961	Apr. 13, 1961	10.42	6,970
1932	Mar. 7, 1932	12.03	6,500	1962	Mar. 13, 1962	12.27	8,520
1933	Apr. 17, 1933	16.00	12,000	1963	Mar. 12, 1963	10.42	6,970
1934	Sept. 17, 1934	19.53	21,900	1964	Jan. 9, 1964	6.70	4,390
1935	Sept. 6, 1935	17.53	15,600	1965	Feb. 8, 1965	15.15	11,600
1936	Mar. 18, 1936	19.25	21,000	1966	Feb. 14, 1966	11.76	8,090
1937	Apr. 26, 1937	28.03	50,000	1967	Mar. 7, 1967	12.06	8,300
1938	Oct. 20, 1937	19.41	21,600	1968	Jan. 14, 1968	10.86	7,380
1939	Feb. 4, 1939	9.69	4,540	1969	July 29, 1969	9.00	5,900
1940	Aug. 17, 1940	15.36	10,400	1970	Dec. 11, 1969	6.44	4,210
1941	Apr. 5, 1941	9.56	4,500	1971	May 31, 1971	12.73	9,560
1942	Aug. 9, 1942	15.58	11,200	1972	June 22, 1972	29.53	55,600
1943	Oct. 16, 1942	30.30	58,100	1973	Oct. 6, 1972	26.23	42,400
1944	Sept. 19, 1944	14.56	10,800	1974	Dec. 21, 1973	13.16	9,360
1945	Sept. 18, 1945	13.80	9,950	1975	Mar. 20, 1975	17.26	14,500
1946	Dec. 31, 1945	5.73	3,390	1976	Jan. 1, 1976	11.42	7,840
1947	Mar. 14, 1947	5.76	3,460	1977	Oct. 10, 1976	17.50	15,000
1948	Nov. 4, 1947	14.10	10,200	1978	Jan. 26, 1978	17.47	14,900
1949	Dec. 4, 1948	15.62	12,000	1979	Sept. 6, 1979	18.79	17,600
1950	Sept. 13, 1950	13.94	10,000	1980	Oct. 2, 1979	14.78	11,100
1951	Dec. 5, 1950	17.10	14,600	1981	Feb. 20, 1981	5.06	3,240
1952	Feb. 4, 1952	10.61	7,130	1982	June 13, 1982	11.72	8,120
1953	Nov. 22, 1952	12.69	8,880	1983	Apr. 10, 1983	13.78	10,000
1954	Mar. 1, 1954	8.02	5,100	1984	Feb. 15, 1984	18.24	16,400
1955	Aug. 18, 1955	24.31	33,800	1985	Feb. 12, 1985	12.09	8,430
1956	July 22, 1956	4.86	2,830	1986	Nov. 5, 1985	22.52	28,500
1957	Apr. 5, 1957	7.46	4,720	1987	Sept. 9, 1987	17.77	15,500
1958	Dec. 26, 1957	7.82	4,950	1988	Nov. 29, 1987	12.79	9,020
1959	June 3, 1959	11.33	7,690	1989	May 6, 1989	18.19	16,300
1960	Feb. 19, 1960	11.73	8,010	1990	May 10, 1990	9.19	6,130

RAPPAHANNOCK RIVER BASIN

01667600 CEDAR RUN TRIBUTARY NEAR CULPEPER, VA

LOCATION.--Lat 38°23'50", long 78°00'25", Culpeper County, Hydrologic Unit 02080103, at culvert on U.S. Highway 522, 5 mi south of Culpeper.

DRAINAGE AREA.--0.58 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 326.16 ft above National Geodetic Vertical Datum of 1929. Prior to May 3, 1972, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by computations of flow through culvert.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1966	May 19, 1966	6.43	117	1971	May 30, 1971	6.14	106
1967	Mar. 7, 1967	5.46	79	1972	June 21, 1972	6.63	125
1968	June 27, 1968	6.02	100	1973	Apr. 27, 1973	5.01	62
1969	July 27, 1969	5.14	66	1974	Sept. 3, 1974	4.46	46
1970	Dec. 30, 1969	3.90	29	1975	Mar. 19, 1975	5.33	73

01668000 RAPPAHANNOCK RIVER NEAR FREDERICKSBURG, VA

LOCATION.--Lat 38°19'20", long 77°31'05", Spotsylvania County, Hydrologic Unit 02080104, on right bank 1.6 mi upstream from dam of Virginia Power, 2.2 mi downstream from Motts Run, and 3.8 mi upstream from Fredericksburg.

DRAINAGE AREA.--1,596 mi².

GAGE.--Water-stage recorder. Datum of gage is 55.18 ft above National Geodetic Vertical Datum of 1929. Prior to Jan. 15, 1922, nonrecording gage, and Jan. 15, 1922, to Aug. 2, 1966, water-stage recorder at same site at datum 1.00 ft higher.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 76,000 ft³/s and extended above on basis of flow-over-dam and slope-area measurements at 134,000 ft³/s and 140,000 ft³/s.

BANKFULL STAGE.--11 ft.

REMARKS.--Flood of Oct. 16, 1942, was probably several feet higher than the flood of June 1889, which was the highest known at that time.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1908	Jan. 13, 1908	10.00	30,100	1950	Sept. 14, 1950	9.21	25,800
1909	Apr. 14, 1909	7.50	17,800	1951	Dec. 5, 1950	12.16	42,800
1910	July 4, 1910	7.30	17,000	1952	Apr. 28, 1952	8.29	21,400
1911	Jan. 4, 1911	6.40	13,200	1953	Nov. 22, 1952	11.12	36,300
1912	Sept. 25, 1912	10.10	31,400	1954	Mar. 2, 1954	6.36	12,600
1913	Apr. 13, 1913	10.50	33,600	1955	Aug. 19, 1955	17.00	74,500
1914	Jan. 4, 1914	9.10	25,700	1956	July 21, 1956	6.35	12,600
1915	Jan. 13, 1915	11.00	36,300	1957	Apr. 5, 1957	8.31	21,000
1916	June 17, 1916	11.20	37,400	1958	Jan. 15, 1958	7.81	18,600
1917	Mar. 5, 1917	8.50	23,100	1959	June 3, 1959	8.06	20,000
1918	Apr. 10, 1918	13.00	47,700	1960	Apr. 5, 1960	9.48	27,200
1919	Jan. 3, 1919	7.60	18,200	1961	Feb. 19, 1961	9.58	27,800
1920	July 13, 1920	5.40	9,220	1962	Mar. 13, 1962	10.31	31,800
1921	May 13, 1921	7.40	17,700	1963	Mar. 13, 1963	9.13	25,000
1922	June 5, 1922	9.30	27,200	1964	Jan. 10, 1964	7.94	19,000
1923	Aug. 1, 1923	6.50	13,700	1965	Feb. 8, 1965	10.55	33,600
1924	May 13, 1924	16.50	66,900	1966	Feb. 14, 1966	9.52	27,200
1925	Oct. 1, 1924	15.10	58,800	1967	Mar. 8, 1967	10.84	29,100
1926	Sept. 24, 1926	7.93	20,100	1968	Jan. 15, 1968	11.06	30,400
1927	Nov. 17, 1926	11.94	40,400	1969	July 29, 1969	8.13	15,600
1928	Aug. 12, 1928	11.66	39,400	1970	Feb. 10, 1970	7.85	14,400
1929	Apr. 17, 1929	8.47	22,200	1971	May 31, 1971	10.81	29,000
1930	Oct. 23, 1929	12.68	44,800	1972	June 22, 1972	22.56	107,000
1931	May 23, 1931	3.77	4,190	1973	Oct. 7, 1972	12.50	39,000
1932	May 13, 1932	8.78	23,800	1974	Dec. 22, 1973	10.99	29,900
1933	Nov. 10, 1932	11.84	39,900	1975	Mar. 20, 1975	13.37	44,200
1934	Sept. 17, 1934	11.07	36,000	1976	Jan. 1, 1976	11.03	29,800
1935	Sept. 6, 1935	10.65	33,300	1977	Oct. 10, 1976	14.38	50,700

RAPPAHANNOCK RIVER BASIN

01668000 RAPPAHANNOCK RIVER NEAR FREDERICKSBURG, VA--Continued

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1936	Mar. 18, 1936	12.33	42,600	1978	Jan. 27, 1978	13.44	44,700
1937	Apr. 26, 1937	25.14	134,000	1979	Feb. 27, 1979	14.72	52,900
1938	Oct. 20, 1937	11.90	40,800	1980	Oct. 2, 1979	12.83	40,900
1939	Feb. 4, 1939	7.84	19,700	1981	Feb. 20, 1981	7.04	11,000
1940	Feb. 13, 1940	8.80	24,600	1982	Feb. 4, 1982	10.20	25,500
1941	Apr. 6, 1941	8.03	20,600	1983	Apr. 10, 1983	11.63	33,500
1942	Aug. 9, 1942	9.78	29,000	1984	Feb. 15, 1984	14.79	53,000
1943	Oct. 16, 1942	25.90	140,000	1985	Feb. 13, 1985	10.24	25,700
1944	Nov. 9, 1943	8.90	24,300	1986	Nov. 6, 1985	14.33	50,200
1945	July 31, 1945	9.20	25,800	1987	Apr. 17, 1987	11.35	31,900
1946	May 27, 1946	8.23	20,900	1988	Nov. 30, 1987	11.09	30,400
1947	Mar. 15, 1947	5.96	11,600	1989	May 6, 1989	15.03	54,600
1948	Apr. 2, 1948	9.42	26,900	1990	May 11, 1990	8.68	17,900
1949	Dec. 4, 1948	11.34	37,400				

RAPPAHANNOCK RIVER BASIN

01668200 GINGOTEAGUE RUN NEAR PORT ROYAL, VA

LOCATION.--Lat 38°12'38", long 77°09'08", King George County, Hydrologic Unit 02080104, at culvert on State Highway 623, 3.5 mi northeast of Port Royal.

DRAINAGE AREA.--2.82 mi².

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 10 ft³/s and extended above on basis of computation of flow through culvert.

BANKFULL STAGE.--6 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1966	Sept. 21, 1966	8.28	110	1971	Aug. 27, 1971	7.47	77
1967	June 25, 1967	5.54	51	1972	June 22, 1972	9.94	388
1968	July 3, 1968	4.79	36	1973	Oct. 28, 1972	4.87	37
1969	Aug. 20, 1969	8.40	130	1974	July 26, 1974	6.95	72
1970	Dec. 10, 1969	4.52	30				

01668300 FARMERS HALL CREEK NEAR CHAMPLAIN, VA

LOCATION.--Lat 38°00'05", Long 76°58'40", Essex County, Hydrologic Unit 02080104, at culvert on U.S. Highway 17, 1.2 mi southeast of Champlain.

DRAINAGE AREA.--2.18 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 42.10 ft above National Geodetic Vertical Datum of 1929. Prior to May 25, 1978, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--4 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1966	Sept. 21, 1966	5.21	85	1979	Feb. 25, 1979	7.09	170
1967	June 19, 1967	4.85	72	1980	July 23, 1980	3.50	30
1968	May 13, 1968	4.58	62	1981	May 19, 1981	3.35	27
1969	Aug. 20, 1969	19.2	510	1982	Aug. 9, 1982	3.62	33
1970	July 23, 1970	4.20	50	1983	Apr. 15, 1983	3.94	42
1971	May 30, 1971	5.17	87	1984	Mar. 29, 1984	6.51	140
1972	June 22, 1972	15.72	452	1985	Aug. 18, 1985	6.71	150
1973	Feb. 2, 1973	5.07	83	1986	Aug. 12, 1986	3.86	40
1974	July 26, 1974	4.80	72	1987	Dec. 24, 1986	6.61	146
1975	Sept. 26, 1975	7.26	178	1988	Feb. 12, 1988	4.09	47
1976	Jan. 27, 1976	3.50	30	1989	July 16, 1989	7.31	180
1977	Apr. 5, 1977	4.55	62	1990	Aug. 9, 1990	4.09	47
1978	Jan. 26, 1978	5.23	89				

01668500 CAT POINT CREEK NEAR MONTROSS, VA

LOCATION.--Lat 38°02'23", Long 76°49'38", Richmond County, Hydrologic Unit 02080104, on right bank 200 ft upstream from bridge on State Highway 637, 1.7 mi west of Farmers Fork, 3.8 mi south of Montross, and 11.4 mi upstream from mouth.

DRAINAGE AREA.--45.6 mi².

GAGE.--Water-stage recorder. Datum of gage is 3.04 ft above National Geodetic Vertical Datum of 1929. Prior to Aug. 19, 1953, nonrecording gage near right bank at downstream side of highway bridge at same datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,920 ft³/s and extended above.

BANKFULL STAGE.--5 ft.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1935	Sept. 1935	6.30	-	1967	July 27, 1967	6.85	1,240
1944	Jan. 5, 1944	5.50	267	1968	June 20, 1968	5.73	400
1945	July 18, 1945	7.10	1,540	1969	Aug. 20, 1969	10.45	6,820
1946	Aug. 7, 1946	5.36	280	1970	Dec. 31, 1969	4.91	198
1947	July 21, 1947	4.86	188	1971	May 31, 1971	6.26	645
1948	Aug. 5, 1948	6.40	800	1972	June 22, 1972	9.33	4,200
1949	Dec. 4, 1948	5.72	290	1973	Feb. 3, 1973	6.28	660
1950	Oct. 31, 1949	6.14	495	1974	Aug. 7, 1974	6.96	1,100
1951	July 29, 1951	6.60	980	1975	Sept. 26, 1975	6.98	1,140
1952	Apr. 27, 1952	5.95	495	1976	Jan. 28, 1976	6.15	570
1953	Nov. 22, 1952	5.34	280	1977	Oct. 3, 1976	5.85	408
1954	July 20, 1954	5.33	280	1978	Jan. 26, 1978	6.52	780
1955	Aug. 13, 1955	7.56	2,350	1979	Sept. 6, 1979	9.41	4,300
1956	July 23, 1956	4.73	179	1980	Oct. 1, 1979	6.23	618
1957	Nov. 2, 1956	5.52	320	1981	May 16, 1981	5.67	335
1958	Oct. 7, 1957	6.80	1,180	1982	Aug. 8, 1982	6.34	684
1959	July 15, 1959	5.83	445	1983	Apr. 13, 1983	6.86	1,030
1960	Apr. 5, 1960	5.91	470	1984	Mar. 29, 1984	6.99	1,130
1961	May 13, 1961	6.24	685	1985	Sept. 27, 1985	8.03	1,940
1962	Jan. 7, 1962	6.30	720	1986	Dec. 1, 1985	5.42	238
1963	June 3, 1963	7.03	1,480	1987	Dec. 25, 1986	6.49	714
1964	Apr. 9, 1964	5.90	470	1988	Feb. 12, 1988	5.83	390
1965	July 12, 1965	5.67	445	1989	July 16, 1989	6.40	660
1966	Sept. 22, 1966	5.99	470	1990	May 29, 1990	7.45	1,360

a From information by local residents.

01668800 HOSKINS CREEK NEAR TAPPAHANNOCK, VA

LOCATION.--Lat 37°55'38", long 76°57'16", Essex County, Hydrologic Unit 02080104, at bridge on State Highway 717, 0.4 mi upstream from Criddlin Swamp, and 5.0 mi west of Tappahannock.

DRAINAGE AREA.--15.5 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 34.30 ft above National Geodetic Vertical Datum of 1929. Prior to Jan. 1, 1987, water-stage recorder gage at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 286 ft³/s and extended above on basis of velocity-area study.

BANKFULL STAGE.--6 ft.

REMARKS.--Prior to Jan. 1, 1987, records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1965	Mar. 5, 1965	4.43	75	1978	Mar. 26, 1978	4.37	142
1966	Sept. 21, 1966	4.75	76	1979	Feb. 25, 1979	5.35	425
1967	Aug. 5, 1967	5.01	95	1980	Oct. 1, 1979	4.11	148
1968	Jan. 14, 1968	4.31	66	1981	May 19, 1981	3.46	81
1969	Aug. 20, 1969	10.23	1,380	1982	June 4, 1982	4.02	136
1970	June 26, 1970	4.30	131	1983	Apr. 16, 1983	4.94	315
1971	Aug. 4, 1971	4.14	155	1984	Mar. 29, 1984	4.95	291
1972	June 22, 1972	5.99	289	1985	Sept. 27, 1985	4.91	208
1973	Feb. 2, 1973	4.52	135	1986	Oct. 22, 1985	4.07	98
1974	Aug. 7, 1974	4.33	126	1987	Sept. 13, 1987	5.58	415
1975	Sept. 26, 1975	5.00	174	1988	Feb. 12, 1988	4.05	96
1976	Jan. 27, 1976	4.05	120	1989	July 16, 1989	5.24	291
1977	Oct. 26, 1976	3.22	69	1990	May 29, 1990	5.27	300

01669000 PISCATAWAY CREEK NEAR TAPPAHANNOCK, VA

LOCATION.--Lat 37°52'37", long 76°54'03", Essex County, Hydrologic Unit 02080104, on right bank at upstream side of bridge on State Highway 691, 0.6 mi south of Hensley Fork, 2.3 mi downstream from Sturgeon Swamp, and 4.2 mi southwest of Tappahannock.

DRAINAGE AREA.--28.0 mi².

GAGE.--Water-stage recorder. Datum of gage is 2.50 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,330 ft³/s and extended above.

BANKFULL STAGE.--3 ft.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1952	Mar. 25, 1952	3.77	164	1972	June 22, 1972	6.04	1,090
1953	Nov. 22, 1952	3.68	156	1973	Feb. 3, 1973	3.98	245
1954	Jan. 28, 1954	2.97	75	1974	Aug. 7, 1974	4.41	350
1955	Aug. 13, 1955	7.07	1,870	1975	July 18, 1975	5.30	680
1956	Apr. 7, 1956	3.40	122	1976	Jan. 28, 1976	4.01	252
1957	Nov. 2, 1956	4.42	305	1977	Oct. 3, 1976	3.24	107
1958	Mar. 20, 1958	4.18	360	1978	Aug. 1, 1978	4.05	34
1959	July 15, 1959	4.65	536	1979	Feb. 25, 1979	5.17	720
1960	May 28, 1960	4.77	542	1980	Nov. 27, 1979	3.63	232
1961	Feb. 24, 1961	3.91	296	1981	May 12, 1981	3.35	179
1962	Jan. 7, 1962	4.32	400	1982	June 5, 1982	3.30	168
1963	June 3, 1963	5.55	880	1983	Apr. 16, 1983	4.64	532
1964	Feb. 16, 1964	-	a133	1984	Mar. 29, 1984	4.26	418
1965	June 16, 1965	-	a131	1985	Sept. 27, 1985	4.62	526
1966	Sept. 22, 1966	3.95	316	1986	Oct. 22, 1985	3.45	201
1967	Oct. 20, 1966	4.37	352	1987	Dec. 25, 1986	4.04	353
1968	Mar. 13, 1968	3.74	205	1988	Feb. 12, 1988	3.11	132
1969	Aug. 20, 1969	7.52	2,380	1989	May 2, 1989	3.79	283
1970	Dec. 11, 1969	3.47	145	1990	May 29, 1990	4.31	433
1971	Aug. 5, 1971	3.68	270				

a Mean daily discharge; peak is greater than value shown.

01669300 YORKERS SWAMP NEAR CENTER CROSS, VA

LOCATION.--Lat 37°47'10", long 76°45'55", Essex County, Hydrologic Unit 02080102, at culvert on U.S. Highway 17, 1.5 mi southeast of Center Cross.

DRAINAGE AREA.--1.37 mi².

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is 75.11 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--2 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1966	Sept. 21, 1966	3.95	25	1971	-	<3.50	<12
1967	Aug. 24, 1967	4.45	85	1972	June 22, 1972	5.65	142
1968	Jan. 14, 1968	3.95	25	1973	Feb. 2, 1973	4.00	28
1969	Aug. 20, 1969	4.80	75	1974	Sept. 6, 1974	3.80	20
1970	July 26, 1970	3.72	17	1975	Sept. 26, 1975	4.06	30

< Less than.

PIANKATANK RIVER BASIN

01669500 DRAGON SWAMP NEAR CHURCH VIEW, VA

LOCATION.--Lat 37°41'05", long 76°43'37", Middlesex County, Hydrologic Unit 02080102, on left bank at downstream side of bridge on State Highway 602, 0.9 mi upstream from Briery Swamp, 1.8 mi downstream from Tim Branch Swamp, 2.6 mi west of Church View, and 2.9 mi east of Dragonville.

DRAINAGE AREA.--84.9 mi².

GAGE.--Water-stage recorder. Datum of gage is 34.00 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,640 ft³/s and extended above.

BANKFULL STAGE.--5 ft.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1935	Sept. 1935	17.00	-	1963	June 4, 1963	10.00	3,990
1944	Mar. 8, 1944	5.48	449	1964	Mar. 5, 1964	-	396
1945	July 19, 1945	9.91	3,840	1965	Mar. 8, 1965	5.28	198
1946	Dec. 30, 1945	6.26	656	1966	Feb. 13, 1966	5.38	276
1947	Jan. 17, 1947	4.99	217	1967	Aug. 8, 1967	5.70	310
1948	Aug. 5, 1948	7.35	1,300	1968	Mar. 17, 1968	6.58	750
1949	July 18, 1949	6.35	746	1969	Aug. 23, 1969	6.98	1,000
1950	Nov. 3, 1949	5.53	354	1970	Apr. 3, 1970	5.49	255
1951	Aug. 15, 1951	5.44	364	1971	June 2, 1971	5.64	256
1952	Mar. 26, 1952	6.12	614	1972	June 24, 1972	7.81	1,610
1953	Nov. 23, 1952	5.37	311	1973	Feb. 4, 1973	6.83	908
1954	Apr. 20, 1954	4.79	153	1974	Apr. 1, 1974	5.75	490
1955	Aug. 15, 1955	6.96	972	1975	Mar. 20, 1975	6.72	655
1956	Feb. 8, 1956	5.42	204	1976	Jan. 29, 1976	7.43	1,020
1957	Nov. 4, 1956	7.80	1,610	1977	Oct. 3, 1976	6.27	478
1958	Mar. 21, 1958	7.35	1,250	1978	Jan. 21, 1978	6.80	890
1959	July 16, 1959	7.09	1,070	1979	Sept. 6, 1979	10.66	4,910
1960	Sept. 13, 1960	7.30	1,210	1980	Nov. 28, 1979	6.93	742
1961	Feb. 25, 1961	6.78	860	1981	May 22, 1981	5.69	252
1962	Jan. 8, 1962	7.35	1,250				

a From information by local residents.

PIANKATANK RIVER BASIN

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01669520 DRAGON SWAMP AT MASCOT, VA

LOCATION.--Lat 37°38'01", long 76°41'48", King and Queen County, Hydrologic Unit 02080102, on right bank at upstream side of bridge on State Highway 603, 0.8 mi east of Mascot, 2.1 mi downstream from Church Swamp, and 3.3 mi west of Warner.

DRAINAGE AREA.--108 mi².

GAGE.--Water-stage recorder. Datum of gage is 21.60 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,330 ft³/s and extended above.

BANKFULL STAGE.--Not determined.

REMARKS.--Records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1982	Mar. 23, 1982	6.56	622	1987	Apr. 27, 1987	6.45	601
1983	Mar. 17, 1983	8.85	2,530	1988	Feb. 14, 1988	6.10	482
1984	Mar. 27, 1984	7.92	1,470	1989	Apr. 9, 1989	6.81	745
1985	Sept. 28, 1985	8.17	1,720	1990	May 31, 1990	8.14	1,690
1986	Oct. 24, 1985	6.81	745				

PIANKATANK RIVER BASIN

01669800 MY LADYS SWAMP NEAR SALUDA, VA

LOCATION.--Lat 37°34'34", long 76°31'30", Middlesex County, Hydrologic Unit 02080102, on left upstream wingwall of culvert on State Highway 629, 1.45 mi upstream from mouth, and 4.4 mi southeast of Saluda.

DRAINAGE AREA.--4.81 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 4.16 ft above National Geodetic Vertical Datum of 1929. Prior to May 25, 1978, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--4 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1970	-	<5.00	<135	1981	Oct. 25, 1980	4.91	129
1971	Aug. 28, 1971	4.43	96	1982	Aug. 8, 1982	5.33	165
1972	Aug. 13, 1972	4.75	118	1983	Apr. 16, 1983	5.36	167
1973	Apr. 8, 1973	5.52	182	1984	July 21, 1984	5.67	199
1974	Sept. 6, 1974	4.75	118	1985	Jan. 2, 1985	8.38	592
1975	Sept. 26, 1975	5.50	180	1986	Oct. 21, 1985	5.01	136
1976	Nov. 13, 1975	5.53	-	1987	Jan. 19, 1987	5.53	183
1977	Oct. 2, 1976	10.80	-	1988	Feb. 12, 1988	4.98	134
1978	Apr. 27, 1978	5.65	196	1989	Apr. 7, 1989	5.84	217
1979	Sept. 5, 1979	6.58	322	1990	May 29, 1990	5.43	174
1980	July 23, 1980	6.14	256				

< Less than.

01670000 BEAVERDAM SWAMP NEAR ARK, VA

LOCATION.--Lat 37°28'14", long 76°33'48", Gloucester County, Hydrologic Unit 02080102, on right bank 300 ft downstream from bridge on State Highway 606, 1.4 mi upstream from Beech Swamp, 2.3 mi north of Ark, and 4.3 mi northwest of Gloucester.

DRAINAGE AREA.--6.63 mi².

GAGE.--Water-stage recorder. Datum of gage is 36.43 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 263 ft³/s and extended above.

BANKFULL STAGE.--3 ft.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1950	July 17, 1950	3.26	58	1970	Apr. 2, 1970	-	35
1951	July 30, 1951	2.99	42	1971	Feb. 8, 1971	3.02	59
1952	Jan. 28, 1952	3.30	61	1972	June 22, 1972	3.39	84
1953	Aug. 15, 1953	3.42	65	1973	June 28, 1973	3.72	114
1954	Feb. 22, 1954	2.95	40	1974	June 24, 1974	3.93	137
1955	Aug. 12, 1955	5.72	516	1975	Sept. 1, 1975	4.64	525
1956	Sept. 27, 1956	3.29	60	1976	Jan. 27, 1976	3.67	145
1957	Mar. 2, 1957	3.60	92	1977	Mar. 13, 1977	3.67	145
1958	Mar. 20, 1958	3.89	132	1978	Apr. 27, 1978	4.23	357
1959	Dec. 30, 1958	4.27	180	1979	Sept. 6, 1979	4.34	383
1960	Sept. 12, 1960	5.88	570	1980	Nov. 12, 1979	3.66	118
1961	May 11, 1961	4.76	270	1981	Feb. 12, 1981	2.43	15
1962	Jan. 7, 1962	4.18	167	1982	Aug. 11, 1982	3.93	212
1963	June 3, 1963	5.18	320	1983	Apr. 16, 1983	3.68	123
1964	Feb. 19, 1964	3.18	54	1984	Apr. 5, 1984	3.99	236
1965	July 12, 1965	3.90	135	1985	Sept. 27, 1985	4.59	496
1966	Feb. 13, 1966	2.87	46	1986	Oct. 4, 1985	3.74	141
1967	Aug. 24, 1967	3.62	106	1987	Jan. 19, 1987	3.80	160
1968	Jan. 14, 1968	3.16	65	1988	Feb. 12, 1988	3.38	53
1969	Aug. 5, 1969	-	39				

01670100 MOUNTAIN RUN TRIBUTARY NEAR GORDONSVILLE, VA

LOCATION.--Lat 38°09'45", long 78°09'45", Orange County, Hydrologic Unit 02080103, at culvert on U.S. Highway 15, 2.2 mi northeast of Gordonsville.

DRAINAGE AREA.--0.50 mi².

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1966	Feb. 13, 1966	3.25	16	1970	Apr. 14, 1970	3.20	14
1967	Jan. 27, 1967	3.37	18	1971	Aug. 27, 1971	3.70	24
1968	Jan. 14, 1968	3.60	22	1972	June 21, 1972	11.13	147
1969	July 22, 1969	8.00	110	1973	Oct. 5, 1972	10.85	144

YORK RIVER BASIN

01670300 CONTRARY CREEK NEAR MINERAL, VA

LOCATION.--Lat 38°03'53", long 77°52'45", Louisa County, Hydrologic Unit 02080106, on left bank 400 ft downstream from bridge on U.S. Highway 522, 4.0 mi northeast of Mineral.

DRAINAGE AREA.--5.53 mi².

GAGE.--Nonrecording gage (peak-stage indicator). Datum of gage is 275 ft above National Geodetic Vertical Datum of 1929, from topographic map. October 1975 to December 1986, water-stage recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 310 ft³/s and extended above.

BANKFULL STAGE.--Not determined.

REMARKS.--Prior to Jan. 1, 1987, records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1976	Dec. 31, 1975	2.88	420	1984	Feb. 14, 1984	3.62	966
1977	Oct. 20, 1976	2.61	294	1985	Aug. 18, 1985	4.70	2,280
1978	Jan. 26, 1978	3.33	701	1986	Nov. 4, 1985	2.97	532
1979	Feb. 25, 1979	3.21	687	1987	Sept. 12, 1987	4.06	1,400
1980	Oct. 1, 1979	2.89	484	1988	May 21, 1988	2.41	254
1981	July 6, 1981	1.80	87	1989	May 6, 1989	2.84	457
1982	Mar. 21, 1982	2.34	229	1990	May 29, 1990	3.88	1,220
1983	Apr. 24, 1983	2.82	446				

YORK RIVER BASIN

01670400 NORTH ANNA RIVER NEAR PARTLOW, VA

LOCATION.--Lat 38°00'46", long 77°42'06", Spotsylvania County, Hydrologic Unit 02080106, on left downstream side of bridge on State Highway 601, 1.1 mi upstream from Northeast Creek, and 3.8 mi southwest of Partlow.

DRAINAGE AREA.--344 mi².

GAGE.--Water-stage recorder. Datum of gage is 168.25 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 7,200 ft³/s and extended above.

BANKFULL STAGE.--Not determined.

REMARKS.--Flow regulated since January 1972 by Lake Anna 0.5 mi upstream. Records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1972	June 22, 1972	a36.32	22,000	1985	Feb. 2, 1985	9.17	2,240
1979	Feb. 26, 1979	25.30	11,700	1986	Nov. 5, 1985	21.48	8,690
1980	Oct. 2, 1979	16.51	6,050	1987	Apr. 17, 1987	18.02	6,660
1981	Feb. 11, 1981	4.61	87	1988	Nov. 30, 1987	14.35	4,810
1982	Feb. 4, 1982	-	b4,080	1989	May 6, 1989	18.06	6,680
1983	Apr. 25, 1983	15.19	5,200	1990	May 29, 1990	15.17	5,230
1984	Mar. 30, 1984	22.05	9,030				

a From high-water mark.

b Mean daily discharge; peak is greater than value shown.

01671000 NORTH ANNA RIVER NEAR DOSWELL, VA

LOCATION.--Lat 37°53'15", long 77°29'15", Caroline County, Hydrologic Unit 02080106, on left bank 1.5 mi upstream from bridge on U.S. Highway 1, 2.5 mi northwest of Doswell, and 4.4 mi upstream from Bull Run.

DRAINAGE AREA.--441 mi².

GAGE.--Water-stage recorder. Datum of gage is 55.66 ft above National Geodetic Vertical Datum of 1929. Mar. 23, 1926, to Aug. 11, 1928, nonrecording gage at site 10.2 mi upstream at different datum. Mar. 17, 1929, to Nov. 7, 1930, nonrecording gage at present site and datum.

STAGE-DISCHARGE RELATION.--Prior to 1929, defined by current-meter measurements below 2,800 ft³/s. Subsequent to 1929, defined by current-meter measurements below 24,600 ft³/s and extended above.

BANKFULL STAGE.--13 ft.

REMARKS.--Flow regulated since January 1972 by Lake Anna 20.5 mi upstream. Subsequent to June 30, 1957, records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1927	Nov. 17, 1926	15.73	6,720	1957	Apr. 7, 1957	12.12	3,910
1928	Aug. 12, 1928	33.70	18,400	1958	Mar. 21, 1958	12.69	4,170
1929	Apr. 17, 1929	11.55	3,830	1959	Dec. 30, 1958	11.86	3,830
1930	Oct. 24, 1929	18.00	6,390	1960	Apr. 7, 1960	15.05	5,270
1931	June 2, 1931	6.16	1,730	1961	Feb. 19, 1961	15.53	5,570
1932	May 14, 1932	15.00	5,830	1962	Mar. 14, 1962	16.46	6,170
1933	Jan. 27, 1933	16.49	6,730	1963	Mar. 14, 1963	16.27	6,050
1934	Sept. 18, 1934	15.79	6,310	1964	Jan. 11, 1964	10.58	2,960
1935	Sept. 7, 1935	21.19	9,660	1965	Mar. 6, 1965	11.86	3,540
1936	Jan. 5, 1936	22.68	10,600	1966	Feb. 15, 1966	12.18	3,690
1937	Apr. 27, 1937	33.58	18,300	1967	Oct. 20, 1966	9.57	2,560
1938	Oct. 21, 1937	13.57	5,020	1968	Jan. 16, 1968	16.44	6,110
1939	Feb. 12, 1939	14.60	5,600	1969	Aug. 21, 1969	32.60	24,800
1940	Apr. 10, 1940	15.65	6,250	1970	Apr. 3, 1970	10.96	3,460
1941	Nov. 16, 1940	12.86	4,630	1971	June 1, 1971	17.45	7,950
1942	Aug. 10, 1942	16.95	5,940	1972	June 22, 1972	31.58	23,300
1943	Oct. 17, 1942	24.54	11,600	1973	Apr. 28, 1973	16.40	7,100
1944	Nov. 10, 1943	12.06	3,910	1974	Sept. 7, 1974	15.28	6,180
1945	Sept. 20, 1945	15.40	5,370	1975	Sept. 26, 1975	21.49	11,600
1946	May 27, 1946	13.60	4,560	1976	Jan. 1, 1976	15.67	6,520
1947	Jan. 4, 1947	9.03	2,690	1977	Oct. 21, 1976	12.30	4,160
1948	Aug. 6, 1948	22.39	10,200	1978	Jan. 26, 1978	19.41	9,730
1949	Dec. 5, 1948	22.68	10,400	1979	Feb. 27, 1979	23.93	13,900
1950	May 20, 1950	14.53	5,030	1980	Oct. 3, 1979	17.06	7,700
1951	June 12, 1951	12.94	4,260	1981	May 12, 1981	2.20	388
1952	Dec. 23, 1951	16.80	6,350	1982	Feb. 4, 1982	13.26	4,750
1953	Nov. 22, 1952	18.10	7,180	1983	Apr. 25, 1983	15.04	5,990
1954	Dec. 15, 1953	7.85	2,270	1984	Mar. 30, 1984	21.56	11,700
1955	Aug. 20, 1955	25.58	12,400	1985	Aug. 19, 1985	13.11	4,650
1956	July 22, 1956	9.50	2,860	1986	Nov. 6, 1985	20.44	10,700

YORK RIVER BASIN

01671020 NORTH ANNA RIVER AT HART CORNER, NEAR DOSWELL, VA

LOCATION.--Lat 37°51'00", long 77°25'41", Hanover County, Hydrologic Unit 02080106, on right bank at downstream side of bridge on State Highway 30, 0.3 mi west of Hart Corner, 2.1 mi east of Doswell, and 5.4 mi upstream from confluence with South Anna River.

DRAINAGE AREA.--463 mi².

GAGE.--Water-stage recorder. Datum of gage is 43 ft above National Geodetic Vertical Datum of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 10,100 ft³/s and extended above.

BANKFULL STAGE.--11 ft.

REMARKS.--Flow regulated since January 1972 by Lake Anna 27.7 mi upstream. Records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1969	August 1969	a28.02	-	1985	Aug. 19, 1985	15.06	3,750
1980	Oct. 3, 1979	-	b7,800	1986	Nov. 6, 1985	20.47	9,980
1981	May 12, 1981	4.88	397	1987	Apr. 18, 1987	18.98	8,020
1982	Feb. 5, 1982	-	b3,650	1988	Nov. 30, 1987	15.92	4,490
1983	Apr. 26, 1983	17.22	5,820	1989	May 7, 1989	18.00	6,610
1984	Mar. 30, 1984	21.28	11,100	1990	May 30, 1990	18.10	6,730

a From high-water mark.

b Mean daily discharge; peak is greater than value shown.

01671100 LITTLE RIVER NEAR DOSWELL, VA

LOCATION.--Lat 37°52'21", long 77°30'48", Hanover County, Hydrologic Unit 02080106, on left bank at downstream side of bridge on State Highway 685, 0.8 mi southwest of Verdon, 2.9 mi west of Doswell, and 9.6 mi upstream from mouth.

DRAINAGE AREA.--107 mi².

GAGE.--Water-stage recorder. Datum of gage is 132.30 ft above National Geodetic Vertical Datum of 1929 (levels by La Prade Brothers Engineers).

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 7,600 ft³/s and extended above on basis of contracted-opening measurement at 12,000 ft³/s.

BANKFULL STAGE.--5 ft.

REMARKS.--Records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1962	Oct. 22, 1961	7.70	4,430	1977	Oct. 22, 1976	5.05	1,090
1963	Mar. 13, 1963	5.85	1,840	1978	Jan. 27, 1978	7.55	4,120
1964	Feb. 17, 1964	4.69	850	1979	Feb. 26, 1979	7.56	4,120
1965	Mar. 6, 1965	4.49	730	1980	Jan. 16, 1980	5.98	2,000
1966	Feb. 14, 1966	4.58	790	1981	Feb. 13, 1981	3.13	164
1967	Mar. 17, 1967	4.07	515	1982	Mar. 22, 1982	5.52	1,490
1968	Jan. 16, 1968	4.93	1,020	1983	Apr. 17, 1983	5.38	1,360
1969	Aug. 21, 1969	11.09	12,000	1984	Mar. 30, 1984	7.14	3,470
1970	Jan. 1, 1970	4.74	880	1985	Aug. 19, 1985	6.98	3,240
1971	May 31, 1971	5.82	1,780	1986	Nov. 5, 1985	6.21	2,240
1972	June 22, 1972	9.88	8,300	1987	Apr. 17, 1987	6.29	2,340
1973	Apr. 28, 1973	6.26	2,290	1988	May 23, 1988	5.07	1,110
1974	Dec. 22, 1973	6.50	2,610	1989	July 17, 1989	4.94	1,010
1975	Sept. 26, 1975	8.12	4,890	1990	May 30, 1990	6.50	2,610
1976	Jan. 2, 1976	6.42	2,480				

YORK RIVER BASIN

01671500 BUNCH CREEK NEAR BOSWELLS TAVERN, VA
(Formerly published as Hudson Creek near Boswells Tavern)

LOCATION.--Lat 38°01'54", long 78°11'30", Louisa County, Hydrologic Unit 02080106, on right bank at upstream side of bridge on U.S. Highway 15, 2.7 mi south of Boswells Tavern, 4.8 mi north of Zion Crossroads, 5.0 mi upstream from mouth, and 10 mi west of Louisa.

DRAINAGE AREA.--4.37 mi².

GAGE.--Water-stage recorder. Datum of gage is 377.14 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 335 ft³/s and extended above on basis of contracted-opening measurement at 2,750 ft³/s.

BANKFULL STAGE.--5 ft.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1949	Dec. 4, 1948	6.44	499	1965	Feb. 7, 1965	5.08	244
1950	May 17, 1950	6.82	532	1966	Feb. 13, 1966	4.83	214
1951	June 10, 1951	7.38	680	1967	Jan. 27, 1967	3.88	131
1952	Dec. 21, 1951	5.41	264	1968	Jan. 14, 1968	4.71	199
1953	Nov. 20, 1952	6.15	345	1969	Aug. 20, 1969	10.64	2,750
1954	Mar. 1, 1954	4.93	166	1970	Dec. 10, 1969	4.50	140
1955	Aug. 18, 1955	6.00	315	1971	May 30, 1971	4.55	326
1956	July 20, 1956	4.82	152	1972	June 21, 1972	10.44	2,580
1957	Apr. 5, 1957	4.97	166	1973	Oct. 5, 1972	6.25	705
1958	Oct. 6, 1957	5.02	191	1974	Dec. 21, 1973	3.61	251
1959	July 24, 1959	4.95	186	1975	Mar. 19, 1975	4.10	331
1960	Feb. 18, 1960	4.72	166	1976	Mar. 31, 1976	3.88	299
1961	Apr. 13, 1961	4.30	163	1977	Oct. 20, 1976	4.44	387
1962	May 1, 1962	6.50	450	1978	Apr. 26, 1978	4.43	387
1963	Mar. 12, 1963	4.89	220	1979	Sept. 5, 1979	4.43	387
1964	Feb. 6, 1964	3.26	83				

01671615 FOSTERS CREEK NEAR FERNCLIFF, VA

LOCATION.--Lat 37°57'35", long 78°11'20", Louisa County, Hydrologic Unit 02080106, at culvert on U.S. Highway 250, 1.9 mi southeast of Zion Crossroads, 4.6 mi northwest of Ferncliff, and 5.0 mi upstream from mouth.

DRAINAGE AREA.--0.61 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 424.22 ft above National Geodetic Vertical Datum of 1929. Prior to Dec. 4, 1969, recording gage at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by indirect methods.

BANKFULL STAGE.--5 ft.

REMARKS.--Prior to 1970, records were provided by the U.S. Department of Agriculture, Soil Conservation Service. The values for all previously published data are revised based on additional analyses.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1961	Feb. 18, 1961	a5.17	92	1976	Aug. 15, 1976	4.60	a63
1962	Oct. 20, 1961	a8.89	296	1977	Oct. 20, 1976	6.61	164
1963	Mar. 12, 1963	a4.35	54	1978	Oct. 26, 1977	6.17	142
1964	Jan. 25, 1964	a4.04	40	1979	Sept. 6, 1979	6.21	144
1965	Mar. 4, 1965	a4.99	83	1980	Nov. 26, 1979	4.12	39
1966	Feb. 28, 1966	a4.21	47	1981	July 6, 1981	3.98	32
1967	Aug. 24, 1967	a4.03	39	1982	June 13, 1982	5.95	130
1968	Mar. 12, 1968	a6.32	152	1983	Apr. 24, 1983	4.89	78
1969	Aug. 20, 1969	a10.55	1,000	1984	Feb. 14, 1984	6.43	154
1970	Mar. 29, 1970	a5.00	83	1985	Aug. 18, 1985	9.04	308
1971	May 30, 1971	a4.72	69	1986	Nov. 4, 1985	5.71	118
1972	June 21, 1972	a9.01	306	1987	Sept. 8, 1987	9.36	327
1973	Oct. 5, 1972	a9.91	458	1988	May 21, 1988	4.26	46
1974	Sept. 7, 1974	5.04	a85	1989	July 6, 1989	7.51	216
1975	June 25, 1975	6.58	a162	1990	May 27, 1990	7.15	195

a Revised.

01671650 WALDROP CREEK NEAR LOUISA, VA

LOCATION.--Lat 38°00'08", long 78°04'22", Louisa County, Hydrologic Unit 02080106, on left upstream wingwall of culvert on State Highway 632, 2.3 mi upstream from mouth, and 4.2 mi southwest of Louisa.

DRAINAGE AREA.--2.85 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 361.41 ft above National Geodetic Vertical Datum of 1929. Prior to Jan. 11, 1979, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by computations of flow through culvert.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1969	Aug. 20, 1969	21.00	2,500	1980	Aug. 11, 1980	4.08	96
1970	Dec. 31, 1969	5.20	188	1981	July 6, 1981	3.44	57
1971	May 13, 1971	6.30	290	1982	Feb. 3, 1982	5.00	170
1972	June 21, 1972	17.71	1,640	1983	Apr. 24, 1983	5.47	212
1973	Oct. 5, 1972	13.46	1,190	1984	Feb. 14, 1984	6.41	301
1974	Dec. 20, 1973	4.97	168	1985	Aug. 18, 1985	9.01	581
1975	Mar. 19, 1975	6.80	340	1986	Nov. 4, 1985	9.81	677
1976	Dec. 31, 1975	5.85	246	1987	Sept. 8, 1987	7.14	374
1977	Oct. 9, 1976	5.28	195	1988	May 21, 1988	6.63	323
1978	Oct. 26, 1977	7.20	380	1989	July 6, 1989	9.51	641
1979	Sept. 6, 1979	7.53	413	1990	May 27, 1990	10.05	707

01671750 HARRIS CREEK NEAR TREVILIANS, VA

LOCATION.--Lat 38°01'02", long 78°03'06", Louisa County, Hydrologic Unit 02080106, on left upstream wingwall of culvert on State Highway 632, 2.7 mi southeast of Trevilians, and 6 mi upstream from mouth.

DRAINAGE AREA.--3.31 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined. Prior to Aug. 16, 1978, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by computations of flow through culvert.

BANKFULL STAGE.--4 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1969	Aug. 20, 1969	16.70	3,300	1980	Jan. 18, 1980	4.16	274
1970	Apr. 14, 1970	5.20	430	1981	July 6, 1981	3.51	186
1971	May 13, 1971	7.33	766	1982	Feb. 3, 1982	4.67	350
1972	June 21, 1972	14.54	2,310	1983	Apr. 24, 1983	5.86	529
1973	Oct. 5, 1972	8.00	900	1984	Feb. 14, 1984	6.23	584
1974	Dec. 20, 1973	4.45	318	1985	Aug. 18, 1985	7.07	714
1975	June 25, 1975	4.50	450	1986	Nov. 4, 1985	8.64	1,030
1976	Dec. 31, 1975	5.23	310	1987	Sept. 8, 1987	5.85	528
1977	Oct. 9, 1976	4.50	325	1988	Nov. 29, 1987	5.31	446
1978	Oct. 26, 1977	5.90	535	1989	May 6, 1989	5.43	464
1979	Sept. 6, 1979	7.01	702	1990	May 27, 1990	6.34	601

YORK RIVER BASIN

01672400 SOUTH ANNA RIVER TRIBUTARY NO. 6 NEAR ASHLAND, VA

LOCATION.--Lat 37°48'40", long 77°34'20", Hanover County, Hydrologic Unit 02080106, at culvert on State Highway 54, 5.5 mi northwest of Ashland.

DRAINAGE AREA.--0.33 mi².

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is 180 ft above National Geodetic Vertical Datum of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1966	Sept. 21, 1966	5.95	126	1972	June 21, 1972	9.93	414
1967	-	<3.00	<5	1973	Feb. 2, 1973	4.80	28
1968	Jan. 14, 1968	3.55	35	1974	Sept. 6, 1974	3.70	13
1969	Aug. 20, 1969	9.30	360	1975	Sept. 26, 1975	5.68	54
1970	-	<3.00	<5	1976	Jan. 27, 1976	4.88	30
1971	Aug. 27, 1971	5.59	56				

< Less than.

01672500 SOUTH ANNA RIVER NEAR ASHLAND, VA

LOCATION.--Lat 37°47'48", long 77°32'57", Hanover County, Hydrologic Unit 02080106, on right bank at downstream side of bridge on State Highway 54, 4.5 mi northwest of Ashland, and 7.6 mi upstream from Newfound River.

DRAINAGE AREA.--394 mi².

GAGE.--Water-stage recorder. Datum of gage is 83.74 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 12,600 ft³/s and extended above.

BANKFULL STAGE.--12 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1928	Aug. 15, 1928	24.0	14,500	1961	Feb. 23, 1961	11.55	3,650
1931	May 23, 1931	8.79	2,200	1962	Oct. 22, 1961	17.47	7,650
1932	May 15, 1932	10.46	2,890	1963	Mar. 15, 1963	11.84	3,750
1933	Jan. 28, 1933	11.30	3,230	1964	Feb. 19, 1964	10.27	3,010
1934	Mar. 7, 1934	9.63	2,520	1965	Mar. 8, 1965	9.47	2,650
1935	Sept. 6, 1935	19.04	8,740	1966	Sept. 21, 1966	10.15	2,960
1936	Jan. 6, 1936	15.50	5,380	1967	Mar. 16, 1967	9.09	2,470
1937	Apr. 28, 1937	22.77	13,700	1968	Jan. 18, 1968	10.17	2,950
1938	Oct. 20, 1937	13.98	4,630	1969	Aug. 23, 1969	24.99	17,100
1939	Feb. 12, 1939	10.95	3,100	1970	Jan. 3, 1970	8.94	2,280
1940	Apr. 9, 1940	11.08	3,230	1971	June 2, 1971	12.63	4,180
1941	Apr. 8, 1941	9.02	2,300	1972	June 21, 1972	20.90	12,600
1942	Aug. 12, 1942	11.97	3,740	1973	Oct. 9, 1972	19.54	9,690
1943	Oct. 19, 1942	12.43	3,990	1974	Dec. 22, 1973	12.00	3,830
1944	Aug. 2, 1944	11.73	3,560	1975	Sept. 26, 1975	17.48	7,640
1945	July 18, 1945	13.10	4,450	1976	Jan. 27, 1976	11.91	3,820
1946	May 27, 1946	12.1	3,800	1977	Oct. 20, 1976	10.39	3,060
1947	Mar. 15, 1947	8.71	2,170	1978	Jan. 26, 1978	15.56	6,190
1948	Aug. 8, 1948	14.38	5,420	1979	Feb. 26, 1979	17.76	7,970
1949	Dec. 7, 1948	16.00	6,150	1980	Oct. 2, 1979	16.13	6,550
1950	Mar. 24, 1950	9.4	2,470	1981	Feb. 13, 1981	4.79	785
1951	June 13, 1951	8.19	1,970	1982	Feb. 7, 1982	9.94	2,850
1952	Sept. 1, 1952	13.92	4,640	1983	Apr. 16, 1983	10.47	3,100
1953	Nov. 21, 1952	12.95	4,150	1984	Mar. 29, 1984	14.79	5,550
1954	Mar. 3, 1954	7.83	1,860	1985	Aug. 19, 1985	18.55	8,720
1955	Aug. 18, 1955	17.19	7,220	1986	Nov. 7, 1985	16.30	6,690
1956	July 21, 1956	22.22	12,800	1987	Apr. 20, 1987	13.91	4,940
1957	Nov. 1, 1956	9.35	2,480	1988	May 21, 1988	9.80	2,790
1958	Aug. 25, 1958	11.68	3,400	1989	July 16, 1989	13.85	4,910
1959	Dec. 29, 1958	9.72	2,600	1990	May 30, 1990	16.93	7,190
1960	Apr. 6, 1960	11.90	3,480				

01672900 PAMUNKEY RIVER TRIBUTARY NO. 1 NEAR HANOVER, VA

LOCATION.--Lat 37°48'00", long 77°22'20", Caroline County, Hydrologic Unit 02080106, at culvert on U.S. Highway 301, 2.6 mi north of Hanover.

DRAINAGE AREA.--0.71 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined. Prior to Aug. 11, 1971, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by computations of flow through culvert.

BANKFULL STAGE.--8 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1966	June 10, 1966	3.35	24	1970	-	<2.80	<15
1967	May 7, 1967	3.20	20	1971	May 30, 1971	3.22	20
1968	Jan. 14, 1968	3.20	20	1972	June 21, 1972	4.19	51
1969	Aug. 20, 1969	8.45	175	1973	Feb. 2, 1973	3.60	31

<Less than.

01673000 PAMUNKEY RIVER NEAR HANOVER, VA

LOCATION.--Lat 37°46'03", long 77°19'57", Hanover County, Hydrologic Unit 02080106, on right bank 100 ft downstream from bridge on State Highway 614, 0.3 mi upstream from Mechumps Creek, 2.0 mi east of Hanover, and 7.0 mi upstream from Millpond Creek.

DRAINAGE AREA.--1,081 mi².

GAGE.--Water-stage recorder. Datum of gage is 14.72 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 15, 1976, nonrecording gage at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 22,000 ft³/s and extended above.

BANKFULL STAGE.--14 ft.

REMARKS.--Some regulation since January 1972 by Lake Anna 42.4 mi upstream.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1928	August 1928	a32.6	-	1966	Feb. 16, 1966	18.71	6,760
1942	Aug. 11, 1942	20.29	8,660	1967	Oct. 21, 1966	16.50	4,790
1943	Oct. 18, 1942	23.07	15,200	1968	Jan. 17, 1968	20.25	8,570
1944	Aug. 4, 1944	16.37	4,260	1969	Aug. 23, 1969	31.12	40,300
1945	July 19, 1945	21.3	10,700	1970	Jan. 3, 1970	18.80	5,940
1946	May 29, 1946	19.08	6,900	1971	June 2, 1971	22.22	10,900
1947	Mar. 17, 1947	16.88	4,610	1972	June 23, 1972	29.22	29,900
1948	Aug. 7, 1948	21.73	11,600	1973	Apr. 29, 1973	22.18	10,800
1949	Dec. 6, 1948	24.2	16,300	1974	Dec. 24, 1973	21.00	9,030
1950	Mar. 25, 1950	19.53	7,360	1975	Sept. 27, 1975	25.20	17,600
1951	Mar. 22, 1951	16.3	4,700	1976	Jan. 29, 1976	21.30	9,350
1952	Dec. 23, 1951	21.6	11,200	1977	Oct. 23, 1976	19.62	7,340
1953	Nov. 23, 1952	21.9	11,800	1978	Jan. 28, 1978	23.36	13,200
1954	Dec. 16, 1953	14.15	3,310	1979	Feb. 27, 1979	25.63	18,800
1955	Aug. 20, 1955	26.12	20,900	1980	Oct. 4, 1979	22.72	11,900
1956	July 21, 1956	17.70	6,280	1981	July 4, 1981	9.07	1,790
1957	Mar. 1, 1957	17.58	5,800	1982	Mar. 23, 1982	18.92	6,700
1958	Mar. 22, 1958	19.60	7,740	1983	Apr. 18, 1983	20.49	8,420
1959	Jan. 1, 1959	20.01	8,220	1984	Mar. 31, 1984	24.16	15,000
1960	Apr. 7, 1960	21.46	10,600	1985	Aug. 21, 1985	22.84	12,100
1961	Feb. 21, 1961	21.94	11,400	1988	Nov. 7, 1985	23.62	13,800
1962	Oct. 23, 1961	24.32	16,500	1987	Apr. 19, 1987	22.24	11,000
1963	Mar. 15, 1963	21.25	10,100	1988	Jan. 22, 1988	19.26	7,010
1964	Feb. 21, 1964	18.28	6,360	1989	May 9, 1989	20.60	8,570
1965	Mar. 8, 1965	18.70	6,760	1990	May 31, 1990	23.43	13,300

a From information by local residents.

01673500 TOTOPOTOMOY CREEK NEAR ATLEE, VA

LOCATION.--Lat 37°40'09", Long 77°22'58", Hanover County, Hydrologic Unit 02080106, on right bank at upstream side of bridge on U.S. Highway 301, 0.7 mi upstream from Opossum Creek, and 1.6 mi northeast of Atlee.

DRAINAGE AREA.--5.89 mi².

GAGE.--Water-stage recorder. Datum of gage is 116.33 ft above National Geodetic Vertical Datum of 1929. Prior to Aug. 9, 1954, at site 8 ft downstream at datum 0.04 ft higher.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 525 ft³/s and extended above.

BANKFULL STAGE.--Not determined.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	
1945	aJuly	1945	b7.5	400	1963	June 3, 1963	5.16	110
1949	July 16, 1949	4.44	66	1964	Feb. 16, 1964	4.04	59	
1950	Oct. 31, 1949	5.04	82	1965	July 12, 1965	4.91	95	
1951	June 14, 1951	3.41	39	1966	Sept. 21, 1966	5.66	43	
1952	Mar. 24, 1952	5.64	147	1967	Aug. 23, 1967	4.27	66	
1953	Nov. 21, 1952	6.27	192	1968	Jan. 14, 1968	4.60	83	
1954	Dec. 14, 1953	3.85	52	1969	July 22, 1969	6.02	182	
1955	Aug. 13, 1955	8.62	748	1970	Apr. 1, 1970	3.95	55	
1956	Oct. 14, 1955	5.85	158	1971	June 15, 1971	4.77	88	
1957	Feb. 27, 1957	5.30	90	1972	June 22, 1972	6.88	308	
1958	Dec. 21, 1957	6.36	194	1973	Feb. 2, 1973	5.64	148	
1959	Dec. 29, 1958	4.99	91	1974	Sept. 7, 1974	6.04	147	
1960	Apr. 5, 1960	6.08	194	1975	July 14, 1975	6.58	260	
1961	Feb. 23, 1961	6.23	212	1976	Jan. 1, 1976	5.43	140	
1962	Jan. 7, 1962	5.90	102	1977	Sept. 10, 1977	c4.86	d41	

a Probably.

b From high-water marks.

c Affected by backwater.

d Mean daily discharge; peak is greater than value shown.

YORK RIVER BASIN

01673550 TOTOPOTOMOY CREEK NEAR STUDLEY, VA

LOCATION.--Lat 37°39'44", long 77°15'29", Hanover County, Hydrologic Unit 02080106, on right bank at downstream side of bridge on State Highway 606, 2.0 mi southeast of Studley, 2.4 mi downstream from Hawes millrace, and 4.1 mi upstream from mouth.

DRAINAGE AREA.--26.2 mi².

GAGE.--Water-stage recorder. Datum of gage is 38.36 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 783 ft³/s and extended above.

BANKFULL STAGE.--6 ft.

REMARKS.--Records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1978	Jan. 26, 1978	7.38	296	1985	Aug. 19, 1985	8.22	802
1979	Feb. 25, 1979	8.77	640	1986	Nov. 5, 1985	7.09	448
1980	Jan. 19, 1980	6.26	236	1987	Apr. 17, 1987	7.65	610
1981	May 11, 1981	5.55	166	1988	May 22, 1988	6.17	263
1982	Aug. 8, 1982	5.81	191	1989	Mar. 25, 1989	5.03	145
1983	Apr. 16, 1983	7.30	350	1990	May 30, 1990	5.87	226
1984	Mar. 29, 1984	8.20	689				

YORK RIVER BASIN

01673800 PO RIVER NEAR SPOTSYLVANIA, VA

LOCATION.--Lat 38°10'17", long 77°35'42", Spotsylvania County, Hydrologic Unit 02080105, on right bank at upstream side of bridge on State Highway 208, 1.6 mi north of Snell, 2.0 mi south of Spotsylvania, 4.8 mi downstream from Gladys Run, and 4.9 mi upstream from U.S. Highway 1.

DRAINAGE AREA.--77.4 mi².

GAGE.--Water-stage recorder. Datum of gage is 183.76 ft above National Geodetic Vertical Datum of 1929. Prior to Sept. 30, 1964, nonrecording gage at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 3,360 ft³/s and extended above on basis of slope-area measurement at 5,000 ft³/s.

BANKFULL STAGE.--10 ft.

REMARKS.--Records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1963	Mar. 13, 1963	12.27	2,200	1977	Oct. 21, 1976	8.88	1,140
1964	Jan. 11, 1964	8.32	960	1978	Jan. 27, 1978	12.73	3,170
1965	Mar. 6, 1965	8.84	1,110	1979	Feb. 26, 1979	13.87	4,380
1966	Feb. 14, 1966	8.95	1,170	1980	Oct. 2, 1979	12.95	3,510
1967	Oct. 20, 1966	8.49	1,020	1981	May 12, 1981	6.54	675
1968	Mar. 14, 1968	10.37	1,590	1982	Feb. 4, 1982	8.36	1,190
1969	Aug. 20, 1969	14.00	4,480	1983	Apr. 16, 1983	12.18	2,930
1970	Apr. 3, 1970	8.96	1,180	1984	Mar. 29, 1984	13.02	3,530
1971	May 31, 1971	11.67	2,400	1985	Feb. 13, 1985	7.50	920
1972	June 22, 1972	19.03	10,900	1986	Nov. 5, 1985	10.67	2,110
1973	Apr. 28, 1973	12.15	2,780	1987	Apr. 17, 1987	11.08	2,300
1974	Dec. 22, 1973	11.27	2,150	1988	Jan. 21, 1988	8.83	1,360
1975	Sept. 26, 1975	13.52	3,920	1989	May 7, 1989	9.83	1,740
1976	Jan. 2, 1976	11.17	2,100	1990	Jan. 2, 1990	9.73	1,700

01674000 MATTAPONI RIVER NEAR BOWLING GREEN, VA

LOCATION.--Lat 38°03'42", long 77°23'10", Caroline County, Hydrologic Unit 02080105, on right bank 0.1 mi upstream from bridge on State Highway 605, 2.2 mi northwest of Bowling Green, 2.4 mi upstream from South River, and 7.1 mi downstream from confluence of Matta and Poni Rivers.

DRAINAGE AREA.--257 mi².

GAGE.--Water-stage recorder. Datum of gage is 85.14 ft above National Geodetic Vertical Datum of 1929. Prior to Aug. 17, 1978, gage located on left bank at same datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 8,100 ft³/s and extended above.

BANKFULL STAGE.--11 ft.

REMARKS.--Records were provided by the Virginia Water Control Board from July 1, 1957, to Jan. 13, 1987, and subsequent to Sept. 30, 1989.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1928	August 1928	19.5	15,000	1967	Oct. 22, 1966	8.68	1,280
1943	Oct. 17, 1942	17.45	10,400	1968	Mar. 15, 1968	10.64	2,160
1944	Mar. 15, 1944	8.82	1,300	1969	Aug. 21, 1969	16.70	8,960
1945	July 18, 1945	14.23	4,980	1970	Jan. 2, 1970	10.06	1,910
1946	Dec. 28, 1945	10.70	1,940	1971	June 1, 1971	12.66	3,840
1947	Jan. 6, 1947	8.90	1,330	1972	June 23, 1972	18.95	13,400
1948	Aug. 5, 1948	15.34	6,580	1973	Apr. 29, 1973	13.00	4,500
1949	Dec. 5, 1948	16.21	8,060	1974	Dec. 23, 1973	12.69	4,230
1950	Sept. 11, 1950	13.78	4,130	1975	Sept. 27, 1975	15.58	7,640
1951	Mar. 22, 1951	8.67	1,260	1976	Jan. 2, 1976	12.19	3,780
1952	Dec. 23, 1951	13.14	3,600	1977	Oct. 23, 1976	9.47	1,750
1953	Nov. 23, 1952	14.22	4,980	1978	Jan. 27, 1978	15.05	6,800
1954	Mar. 4, 1954	6.04	557	1979	Feb. 27, 1979	16.01	8,600
1955	Aug. 20, 1955	15.60	7,060	1980	Oct. 3, 1979	12.71	4,600
1956	Feb. 9, 1956	7.86	990	1981	May 14, 1981	5.87	655
1957	Nov. 3, 1956	11.70	2,570	1982	Feb. 6, 1982	8.27	1,300
1958	Mar. 22, 1958	12.80	3,420	1983	Apr. 17, 1983	12.69	4,590
1959	Jan. 1, 1959	9.87	1,670	1984	Mar. 30, 1984	15.16	7,470
1960	Apr. 7, 1960	12.82	3,560	1985	Feb. 4, 1985	9.24	1,680
1961	Feb. 20, 1961	14.03	4,760	1986	Nov. 6, 1985	11.30	3,240
1962	Mar. 14, 1962	13.58	4,310	1987	Apr. 20, 1987	12.37	4,260
1963	Mar. 14, 1963	13.12	3,830	1988	Jan. 22, 1988	10.38	2,460
1964	Feb. 18, 1964	9.83	1,770	1989	May 8, 1989	10.06	2,240
1965	Mar. 7, 1965	9.83	1,770	1990	May 31, 1990	10.75	2,780
1966	Feb. 16, 1966	9.67	1,720				

a Based on relative difference in stage between this flood and flood of Oct. 17, 1942, at Milford 4 mi downstream.

01674100 MOTTO RIVER TRIBUTARY NEAR CEDON, VA

LOCATION.--Lat 38°05'24", long 78°31'11", Caroline County, Hydrologic Unit 02080105, at culvert on State Highway 605, 1.9 mi north of Cedon.

DRAINAGE AREA.--1.64 mi².

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is 203.41 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--5 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1967	May 7, 1967	3.50	67	1972	June 21, 1972	9.30	488
1968	Jan. 14, 1968	4.42	120	1973	May 27, 1973	4.45	116
1969	Aug. 20, 1969	12.80	690	1974	Dec. 20, 1973	4.55	108
1970	Apr. 15, 1970	3.75	55	1975	Sept. 26, 1975	5.90	212
1971	Aug. 27, 1971	4.41	99	1976	Dec. 31, 1975	4.50	105

01674200 REEDY CREEK NEAR DAWN, VA

LOCATION.--Lat 37°52'55", long 77°21'35", Caroline County, Hydrologic Unit 02080105, at bridge on U.S. Highway 301, 3.3 mi north of Dawn.

DRAINAGE AREA.--16.8 mi².

GAGE.--Nonrecording gage (crest-stage gage). July 7, 1965, to Oct. 7, 1969, and Apr. 27, 1971, to June 19, 1973, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements.

BANKFULL STAGE.--4 ft.

REMARKS.--No data for 1970-71; gage not in service due to bridge reconstruction.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1951	June 14, 1951	3.64	125	1972	June 22, 1972	5.92	292
1952	Sept. 1, 1952	5.28	310	1973	Feb. 2, 1973	4.49	159
1953	Nov. 21, 1952	5.00	275	1974	Sept. 6, 1974	4.46	157
1954	Apr. 20, 1954	3.26	95	1975	Sept. 26, 1975	5.57	257
1955	Aug. 13, 1955	5.00	275	1976	Jan. 27, 1976	4.37	151
1956	Mar. 14, 1956	4.45	225	1977	Oct. 2, 1976	4.39	152
1957	June 1957	4.31	205	1978	Oct. 26, 1978	5.07	207
1958	December 1957	3.99	170	1979	Feb. 25, 1979	5.83	283
1959	Oct. 22, 1958	3.69	140	1980	Nov. 11, 1979	4.32	147
1960	Apr. 5, 1960	4.45	215	1981	July 4, 1981	3.72	108
1961	Feb. 23, 1961	4.16	185	1982	Dec. 5, 1981	3.93	121
1962	Oct. 21, 1961	4.67	246	1983	Apr. 15, 1983	4.62	170
1963	June 3, 1963	4.93	265	1984	Mar. 29, 1984	5.87	287
1964	July 15, 1964	4.06	176	1985	Aug. 18, 1985	3.66	105
1965	Mar. 5, 1965	3.51	127	1986	Oct. 21, 1985	4.40	153
1966	Sept. 21, 1966	4.10	180	1987	Apr. 16, 1987	4.69	175
1967	May 7, 1967	3.50	127	1988	Feb. 3, 1988	5.15	215
1968	Jan. 14, 1968	4.02	170	1989	June 26, 1989	5.49	249
1969	Aug. 20, 1969	7.28	2,500	1990	May 29, 1990	5.43	-

01674500 MATTAPONI RIVER NEAR BEULAHVILLE, VA

LOCATION.--Lat 37°53'16", long 77°09'48", King and Queen County, Hydrologic Unit 02080105, on left bank 0.4 mi upstream from bridge on State Highway 628, 2.4 mi north of Beulahville, and 2.7 mi downstream from Maracossic Creek.

DRAINAGE AREA.--601 mi².

GAGE.--Water-stage recorder. Datum of gage is 12.43 ft above National Geodetic Vertical Datum of 1929 (levels by Virginia Department of Transportation). Prior to Oct. 14, 1942, nonrecording gage, and Oct. 14, 1942, to Aug. 8, 1974, water-stage recorder at site 80 ft upstream at same datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements.

BANKFULL STAGE.--14 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1889	June 1889	a24.0	-	1965	Mar. 11, 1965	12.13	1,780
1928	August 1928	a23.0	12,000	1966	Feb. 19, 1966	12.26	1,840
1942	Aug. 14, 1942	13.4	2,700	1967	Oct. 23, 1966	10.45	1,400
1943	Oct. 20, 1942	18.65	7,490	1968	Jan. 20, 1968	13.18	2,610
1944	Mar. 19, 1944	11.54	1,730	1969	Aug. 23, 1969	24.04	12,300
1945	July 20, 1945	20.0	8,700	1970	Jan. 6, 1970	13.09	2,220
1946	Jan. 1, 1946	13.6	2,800	1971	June 5, 1971	15.45	3,580
1947	Jan. 10, 1947	11.92	1,890	1972	June 25, 1972	23.97	16,900
1948	Aug. 8, 1948	16.68	5,130	1973	May 2, 1973	15.30	3,750
1949	Dec. 8, 1948	18.82	7,280	1974	Dec. 26, 1973	15.04	3,390
1950	Sept. 14, 1950	15.84	4,360	1975	Sept. 30, 1975	19.90	8,390
1951	Mar. 26, 1951	10.86	1,590	1976	Jan. 31, 1976	-	3,770
1952	May 1, 1952	16.29	5,210	1977	Oct. 27, 1976	12.99	2,260
1953	Nov. 26, 1952	16.70	5,610	1978	Jan. 29, 1978	19.20	7,650
1954	Jan. 30, 1954	9.06	1,160	1979	Mar. 1, 1979	20.90	10,600
1955	Aug. 22, 1955	18.62	7,120	1980	Oct. 6, 1979	16.80	5,360
1956	Oct. 16, 1955	12.14	2,050	1981	May 21, 1981	8.79	916
1957	Mar. 4, 1957	13.19	2,620	1982	Feb. 24, 1982	10.91	1,470
1958	Mar. 25, 1958	16.10	4,690	1983	Apr. 20, 1983	16.20	4,780
1959	Jan. 4, 1959	12.67	2,350	1984	Apr. 1, 1984	20.49	9,960
1960	Apr. 9, 1960	15.62	4,280	1985	Feb. 8, 1985	12.18	2,010
1961	Feb. 23, 1961	17.37	5,900	1986	Nov. 9, 1985	14.52	3,370
1962	Mar. 17, 1962	16.78	5,320	1987	Apr. 21, 1987	15.97	4,570
1963	Mar. 17, 1963	15.64	4,280	1990	May 31, 1990	15.73	4,050
1964	Feb. 22, 1964	13.52	2,800				

a From information by old resident at Reedy Mill, about 16 mi upstream; approximate gage height.

01674700 AYLETT CREEK AT AYLETT, VA

LOCATION.--Lat 37°47'05", long 77°06'23", King William County, Hydrologic Unit 02080105, on right upstream wingwall of culvert on U.S. Highway 360 at Aylett and 2.8 mi upstream from mouth.

DRAINAGE AREA.--6.17 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 26.72 ft above National Geodetic Vertical Datum of 1929. Prior to Nov. 6, 1974, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by computations of flow through culvert.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1969	Aug. 20, 1969	4.55	350	1980	May 20, 1980	3.76	220
1970	-	<3.00	<100	1981	May 19, 1981	3.77	220
1971	May 16, 1971	3.73	245	1982	Aug. 9, 1982	4.70	420
1972	June 22, 1972	4.75	625	1983	Apr. 15, 1983	4.57	255
1973	Feb. 2, 1973	3.85	220	1984	Mar. 29, 1984	4.40	240
1974	Sept. 6, 1974	3.40	160	1985	Aug. 18, 1985	3.14	160
1975	Sept. 26, 1975	4.91	720	1986	May 20, 1986	3.47	145
1976	Jan. 27, 1976	3.47	145	1987	Sept. 13, 1987	4.76	650
1977	Oct. 20, 1976	3.58	180	1988	May 18, 1988	4.18	>160
1978	Apr. 27, 1978	4.06	210	1989	Nov. 1, 1988	a3.79	-
1979	Sept. 5, 1979	5.28	440	1990	May 29, 1990	4.26	-

< Less than.

> Greater than.

a Stage affected by beaver dams just downstream from gage.

YORK RIVER BASIN

01677000 WARE CREEK NEAR TOANO, VA

LOCATION.--Lat 37°26'17", long 76°47'12", New Kent County, Hydrologic Unit 02080107, on left bank at upstream side of bridge on State Highway 600, 0.8 mi upstream from France Swamp, and 4.9 mi north of Toano.

DRAINAGE AREA.--6.29 mi².

GAGE.--Water-stage recorder. Datum of gage is 10 ft above National Geodetic Vertical Datum of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 120 ft³/s and extended above.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1980	Nov. 3, 1979	2.30	36	1986	July 23, 1986	1.51	61
1981	Oct. 25, 1980	2.17	33	1987	Jan. 19, 1987	1.59	71
1982	June 2, 1982	1.83	26	1988	May 22, 1988	1.43	52
1983	Apr. 16, 1983	1.98	30	1989	May 2, 1989	1.74	91
1984	May 30, 1984	1.78	111	1990	May 27, 1990	1.35	43
1985	Sept. 27, 1985	a2.60	260				

a From high-water mark.

JAMES RIVER BASIN

02009500 CATTAIL RUN NEAR BOLAR, VA

LOCATION.--Lat 38°16'00", long 79°40'20", Highland County, Hydrologic Unit 02080201, at culvert on U.S. Highway 220, 3.5 mi north of Bolar.

DRAINAGE AREA.--0.74 mi².

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is 2,217.58 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1966	July 30, 1966	4.30	40	1971	Feb. 13, 1971	3.92	26
1967	Aug. 5, 1967	4.64	50	1972	Apr. 22, 1972	4.20	33
1968	June 18, 1968	3.80	28	1973	May 28, 1973	4.02	28
1969	July 23, 1969	4.30	36	1974	May 12, 1974	4.50	40
1970	Dec. 30, 1969	3.40	15	1975	Mar. 19, 1975	4.00	28

JAMES RIVER BASIN

02011400 JACKSON RIVER NEAR BACOVA, VA

LOCATION.--Lat 38°02'32", long 79°52'54", Bath County, Hydrologic Unit 02080201, on left bank 0.1 mi downstream from ford, 1.8 mi upstream from Back Creek, and 2.2 mi southwest of Bacova.

DRAINAGE AREA.--158 mi².

GAGE.--Water-stage recorder. Datum of gage is 1,639.20 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,300 ft³/s and extended above on basis of slope-area measurements at 2,400 ft³/s, 5,200 ft³/s, 7,100 ft³/s, and 30,000 ft³/s.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1972	June 21, 1972	11.40	4,800	1982	June 13, 1982	10.50	3,900
1974	Dec. 26, 1973	13.88	7,560	1983	Apr. 24, 1983	9.08	2,690
1975	Mar. 19, 1975	11.20	4,600	1984	Mar. 21, 1984	11.07	4,430
1976	Oct. 18, 1975	10.41	3,820	1985	Nov. 28, 1984	7.33	1,500
1977	Apr. 5, 1977	13.39	6,970	1986	Nov. 4, 1985	22.25	30,000
1978	Jan. 26, 1978	12.26	5,680	1987	Apr. 17, 1987	11.02	4,380
1979	Jan. 21, 1979	10.00	3,450	1988	Jan. 20, 1988	8.05	1,960
1980	Apr. 14, 1980	11.02	4,390	1989	Apr. 26, 1989	9.77	3,250
1981	May 28, 1981	10.22	3,640	1990	Dec. 31, 1989	8.70	2,410

02011460 BACK CREEK NEAR SUNRISE, VA

LOCATION.--Lat 38°14'43", long 79°46'08", Bath County, Hydrologic Unit 02080201, on right bank 900 ft upstream from bridge on State Highway 600, 0.8 mi upstream from Gap Run, and 4.8 mi northeast of Sunrise.

DRAINAGE AREA.--60.1 mi².

GAGE.--Water-stage recorder. Datum of gage is 2,200.02 ft above National Geodetic Vertical Datum of 1929 (levels by Virginia Department of Transportation).

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 3,800 ft³/s and extended above.

BANKFULL STAGE.--Not determined.

REMARKS.--Records were provided by the Virginia Water Control Board from June 20, 1975, to Sept. 30, 1984.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1975	Mar. 19, 1975	5.27	2,410	1983	Dec. 16, 1982	4.53	1,530
1976	Oct. 18, 1975	6.30	4,200	1984	Mar. 21, 1984	6.10	3,800
1977	Apr. 5, 1977	-	4,570	1985	May 3, 1985	5.05	2,130
1978	Jan. 26, 1978	6.80	5,400	1986	Nov. 4, 1985	10.01	17,500
1979	Jan. 21, 1979	5.15	2,270	1987	Apr. 17, 1987	4.88	1,920
1980	Apr. 14, 1980	-	2,380	1988	Jan. 20, 1988	4.26	1,270
1981	May 28, 1981	4.65	1,660	1989	Apr. 26, 1989	5.73	3,130
1982	June 13, 1982	5.51	2,780	1990	Dec. 31, 1989	5.03	2,100

JAMES RIVER BASIN

02011470 BACK CREEK AT SUNRISE, VA

LOCATION.--Lat 38°11'25", long 79°48'43", Bath County, Hydrologic Unit 02080201, on left bank 75 ft upstream from bridge on State Highway 600 at Sunrise, 180 ft upstream from Beaver Run, 0.5 mi downstream from Back Creek Dam, and 7.6 mi northeast of Mountain Grove.

DRAINAGE AREA.--76.1 mi².

GAGE.--Water-stage recorder. Concrete control since Oct. 24, 1984. Datum of gage is 1,968.52 ft above National Geodetic Vertical Datum of 1929 (Virginia Power bench mark).

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 960 ft³/s and extended above on basis of releases from Back Creek Lake at 5,100 ft³/s.

BANKFULL STAGE.--Not determined.

REMARKS.--Flow regulated to unknown extent since October 1984 by Back Creek Lake 0.5 mi upstream.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1985	May 3, 1985	7.81	2,360	1988	Jan. 20, 1988	6.93	1,680
1986	Nov. 5, 1985	11.37	5,100	1989	Apr. 26, 1989	9.98	3,980
1987	Apr. 16, 1987	8.04	2,530	1990	Dec. 31, 1989	8.33	2,740

JAMES RIVER BASIN

02011480 BACK CREEK ON ROUTE 600, NEAR MOUNTAIN GROVE, VA

LOCATION.--Lat 38°08'03", long 79°51'55", Bath County, Hydrologic Unit 02080201, on left bank 100 ft downstream from bridge on State Highway 600, 2.8 mi northeast of Mountain Grove, and 3.0 mi upstream from Little Back Creek.

DRAINAGE AREA.--85.8 mi².

GAGE.--Water-stage recorder. Datum of gage is 1,818.05 ft above National Geodetic Vertical Datum of 1929 (levels by Virginia Department of Transportation). Prior to Aug. 2, 1979, at site 170 ft upstream at same datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 5,140 ft³/s and extended above.

BANKFULL STAGE.--Not determined.

REMARKS.--Flow regulated to unknown extent since October 1984 by Back Creek Lake 11 mi upstream. Records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1974	Dec. 26, 1973	9.90	7,420	1980	Apr. 14, 1980	7.80	3,600
1975	Mar. 19, 1975	7.04	3,140	1981	May 28, 1981	7.04	2,870
1976	Oct. 18, 1975	8.85	5,800	1982	Mar. 20, 1982	8.61	4,830
1977	Apr. 5, 1977	9.43	6,880	1983	Dec. 16, 1982	6.25	2,080
1978	Jan. 26, 1978	-	6,200	1984	Mar. 21, 1984	8.82	5,450
1979	Jan. 21, 1979	7.33	3,580				

JAMES RIVER BASIN

02011490 LITTLE BACK CREEK NEAR SUNRISE, VA

LOCATION.--Lat 38°12'52", long 79°50'16", Bath County, Hydrologic Unit 02080201, in George Washington National Forest, on right bank 600 ft downstream from Long Spring Run, 1.2 mi downstream from Little Back Creek Dam, and 8.5 mi northeast of Mountain Grove.

DRAINAGE AREA.--4.91 mi².

GAGE.--Water-stage recorder. Concrete control with rectangular weir plate. Datum of gage is 2,638.48 ft above National Geodetic Vertical Datum of 1929 (Virginia Power bench mark).

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 30 ft³/s and extended above on basis of slope-area measurement at 580 ft³/s.

BANKFULL STAGE.--Not determined.

REMARKS.--Flow regulated to unknown extent since January 1985 by Little Back Creek Lake 1.2 mi upstream.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1985	May 3, 1985	3.50	254	1988	May 6, 1988	2.52	38
1986	Nov. 4, 1985	4.06	580	1989	Apr. 26, 1989	3.40	216
1987	Apr. 15, 1987	2.78	68	1990	Dec. 31, 1989	2.85	78

02011500 BACK CREEK NEAR MOUNTAIN GROVE, VA

LOCATION.--Lat 38°04'10", long 79°53'50", Bath County, Hydrologic Unit 02080201, on left bank 0.3 mi downstream from Cummings Run, 0.8 mi downstream from bridge on State Highway 39, and 2.1 mi south of Mountain Grove.

DRAINAGE AREA.--134 mi².

GAGE.--Water-stage recorder. Datum of gage is 1,701.45 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 3,710 ft³/s and extended above on the basis of three slope-area measurements.

BANKFULL STAGE.--7 ft.

REMARKS.--Flow regulated to unknown extent since October 1984 by Back Creek Lake 11.3 mi upstream, and since January 1985 by Little Back Creek Lake 14.4 mi upstream. Records were provided by the Virginia Water Control Board from July 1, 1957, to Sept. 30, 1984.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1913	March 1913	a17	-	1971	Feb. 13, 1971	9.02	7,790
1951	December 1950	8.2	5,940	1972	June 21, 1972	9.25	8,270
1952	Mar. 11, 1952	8.70	7,110	1973	Mar. 17, 1973	9.42	8,750
1953	Feb. 21, 1953	9.05	7,800	1974	Dec. 26, 1973	10.42	11,600
1954	Mar. 1, 1954	8.98	7,790	1975	Mar. 19, 1975	7.35	4,340
1955	Oct. 15, 1954	9.35	8,750	1976	Oct. 18, 1975	9.37	8,750
1956	Mar. 14, 1956	5.40	1,850	1977	Apr. 5, 1977	10.23	11,000
1957	Apr. 5, 1957	7.28	4,170	1978	Jan. 26, 1978	10.07	10,600
1958	Dec. 26, 1957	6.55	3,110	1979	Jan. 21, 1979	7.75	4,990
1959	June 2, 1959	6.69	3,300	1980	Apr. 9, 1980	7.10	3,860
1960	Mar. 30, 1960	7.96	5,510	1981	May 28, 1981	7.15	3,940
1961	Feb. 18, 1961	6.76	3,430	1982	June 13, 1982	8.36	6,300
1962	Mar. 21, 1962	7.44	4,340	1983	Dec. 16, 1982	6.46	2,800
1963	Mar. 12, 1963	8.24	5,940	1984	Feb. 14, 1984	8.65	6,960
1964	Mar. 5, 1964	8.66	7,080	1985	May 3, 1985	6.66	3,190
1965	Feb. 7, 1965	8.14	5,720	1986	Nov. 4, 1985	11.24	14,200
1966	Feb. 13, 1966	7.68	4,890	1987	Apr. 16, 1987	7.62	4,750
1967	Mar. 7, 1967	10.77	12,700	1988	Jan. 20, 1988	6.04	2,340
1968	Mar. 13, 1968	6.73	3,300	1989	Apr. 26, 1989	8.53	6,600
1969	Aug. 20, 1969	9.65	9,270	1990	Dec. 31, 1989	7.34	4,250
1970	Dec. 31, 1969	9.24	8,270				

a From information by local residents.

JAMES RIVER BASIN

02011800 JACKSON RIVER BELOW GATHRIGHT DAM, NEAR HOT SPRINGS, VA

LOCATION.--Lat 37°56'54", long 79°56'58", Alleghany County, Hydrologic Unit 02080201, on right bank 0.4 mi upstream from Cedar Creek, 0.5 mi downstream from Gathright Dam and Lake Moomaw, and 7.3 mi southwest of Hot Springs.

DRAINAGE AREA.--345 mi².

GAGE.--Water-stage recorder. Datum of gage is 1,400.00 ft above National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark). Prior to Dec. 20, 1973, nonrecording gage at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 9,200 ft³/s and extended above on basis of slope-area measurement at 29,000 ft³/s.

BANKFULL STAGE.--Not determined.

REMARKS.--Flow regulated since December 1979 by Lake Moomaw 0.5 mi upstream.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1972	June 21, 1972	17.20	-	1982	June 14, 1982	14.00	6,650
1974	Dec. 26, 1973	18.77	29,000	1983	Apr. 25, 1983	13.28	4,780
1975	Mar. 19, 1975	15.03	10,100	1984	Aug. 14, 1984	13.52	5,320
1976	Oct. 18, 1975	15.57	12,300	1985	Feb. 25, 1985	12.44	3,200
1977	Apr. 5, 1977	15.95	13,800	1986	Nov. 7, 1985	15.29	10,400
1978	Jan. 26, 1978	15.74	13,000	1987	Apr. 19, 1987	14.48	7,840
1979	Jan. 21, 1979	15.04	10,100	1988	Jan. 21, 1988	13.32	4,870
1980	Mar. 19, 1980	13.14	4,580	1989	May 8, 1989	13.26	4,740
1981	June 3, 1981	12.20	2,980	1990	Nov. 17, 1989	12.22	2,850

a From high-water mark.

JAMES RIVER BASIN

02012000 FALLING SPRING CREEK NEAR FALLING SPRING, VA

LOCATION.--Lat 37°52'05", long 79°56'45", Alleghany County, Hydrologic Unit 02080201, at bridge on U.S. Highway 220, 0.7 mi downstream from Falling Spring (the main source), 2.1 mi southeast of town of Falling Spring, and 5 mi northeast of Covington.

DRAINAGE AREA.--11.5 mi².

GAGE.--Water-stage recorder and concrete control. Datum of gage is 2,150 ft above National Geodetic Vertical Datum of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 320 ft³/s and extended above.

BANKFULL STAGE.--Not determined.

REMARKS.--Data for this station have been published under variations of both the stream name, Falling Spring(s) Creek, and the town name, Falling Spring(s).

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1948a	Feb. 14, 1948	3.0	-	1951	Dec. 7, 1950	2.94	519
1949	Apr. 13, 1949	2.27	304	1952	Mar. 11, 1952	1.81	197
1950	Sept. 13, 1950	1.91	222				

a Partial year; fragmentary record through February, continuous thereafter. Highest for period March through September, 2.08 ft, 162 ft³/s, Mar. 24, 1948.

02012500 JACKSON RIVER AT FALLING SPRING, VA
(Previously published as Jackson River at Barber)

LOCATION.--Lat 37°52'36", long 79°58'39", Alleghany County, Hydrologic Unit 02080201, on right bank 20 ft upstream from Smith Bridge, 0.8 mi south of town of Falling Spring, 1.6 mi downstream from Falling Spring Creek, and 5.5 mi north of Covington.

DRAINAGE AREA.--411 mi².

GAGE.--Water-stage recorder. Datum of gage is 1,333.49 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers). Prior to Oct. 26, 1934, nonrecording gage at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 17,000 ft³/s and extended above on basis of records for other stations in the James River basin.

BANKFULL STAGE.--11 ft.

REMARKS.--Flow regulated since December 1979 by Lake Moomaw 7.6 mi upstream.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1913	March 1913	20	a50,000	1957	Apr. 5, 1957	11.24	10,900
1925	May 12, 1925	6.04	1,390	1958	Dec. 26, 1957	9.46	6,080
1926	Jan. 19, 1926	9.7	6,680	1959	June 3, 1959	9.62	6,440
1927	Nov. 16, 1926	10.90	10,300	1960	Mar. 30, 1960	11.63	12,100
1928	May 1, 1928	9.0	4,890	1961	Feb. 19, 1961	10.02	7,400
1929	Feb. 28, 1929	10.4	8,680	1962	Oct. 21, 1961	11.52	11,800
1930	Nov. 18, 1929	12.0	14,000	1963	Mar. 12, 1963	12.26	14,600
1931	Mar. 29, 1931	7.9	3,100	1964	Mar. 5, 1964	11.41	11,500
1932	May 1, 1932	11.0	10,600	1965	Feb. 8, 1965	10.58	8,960
1933	Mar. 19, 1933	10.0	7,500	1966	Feb. 14, 1966	10.31	8,180
1934	Mar. 28, 1934	10.5	8,980	1967	Mar. 7, 1967	13.17	17,900
1935	Jan. 23, 1935	12.32	15,100	1968	Mar. 13, 1968	9.24	5,580
1936	Mar. 17, 1936	14.74	24,700	1969	Aug. 20, 1969	13.35	18,700
1937	Jan. 20, 1937	11.19	11,300	1970	Dec. 31, 1969	12.00	13,200
1938	Oct. 28, 1937	10.92	10,300	1971	Feb. 13, 1971	12.05	13,400
1939	Jan. 30, 1939	11.28	11,600	1972	June 21, 1972	12.72	16,100
1940	Apr. 20, 1940	10.03	7,500	1973	Mar. 17, 1973	12.02	13,300
1941	Apr. 5, 1941	7.14	2,290	1974	Dec. 26, 1973	14.45	23,600
1942	May 16, 1942	13.65	20,100	1975	Mar. 20, 1975	11.09	10,300
1943	Mar. 13, 1943	11.32	11,600	1976	Oct. 18, 1975	11.59	11,800
1944	Feb. 23, 1944	8.5	4,000	1977	Apr. 5, 1977	12.15	13,800
1945	Jan. 2, 1945	8.5	4,000	1978	Jan. 26, 1978	11.89	12,800
1946	Jan. 8, 1946	11.06	10,900	1979	Jan. 21, 1979	11.02	10,100
1947	Mar. 15, 1947	9.12	5,220	1980	Mar. 19, 1980	8.86	4,660
1948	Feb. 14, 1948	11.33	11,600	1981	June 2, 1981	7.92	3,110
1949	Apr. 14, 1949	12.97	17,800	1982	June 14, 1982	9.75	6,720
1950	Feb. 2, 1950	10.58	7,210	1983	Apr. 25, 1983	9.10	5,210
1951	Dec. 8, 1950	14.11	17,600	1984b	Feb. 15, 1984	9.50	6,140
1952	Mar. 11, 1952	12.28	11,600	1986	Nov. 7, 1985	12.62	15,600
1953	Feb. 21, 1953	12.43	15,500	1987	Apr. 19, 1987	10.43	8,490
1954	Mar. 1, 1954	11.55	12,600	1988	Jan. 21, 1988	9.05	5,090
1955	Oct. 16, 1954	11.86	13,700	1989	May 8, 1989	9.08	5,160
1956	Mar. 15, 1956	8.32	3,600	1990	Nov. 17, 1989	7.74	2,930

a Approximate.

b Partial year, October through March.

02012950 SWEET SPRINGS CREEK TRIBUTARY AT SWEET CHALYBEATE, VA

LOCATION.--Lat 37°39'25", long 80°14'10", Alleghany County, Hydrologic Unit 02080201, on left bank 20 ft upstream from culvert on State Highway 311, 0.1 mi upstream from mouth, and 0.9 mi north of Sweet Chalybeate.

DRAINAGE AREA.--0.66 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,926.94 ft above National Geodetic Vertical Datum of 1929. Prior to Nov. 2, 1976, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--4 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1966	-	<4.0	<30	1979	Sept. 22, 1979	4.84	67
1967	Mar. 15, 1967	4.61	58	1980	-	<4.14	<36
1968	June 18, 1968	4.50	52	1981	-	<4.14	<36
1969	Aug. 20, 1969	6.80	185	1982	-	<4.14	<36
1970	Dec. 31, 1969	4.40	46	1983	-	<4.14	<36
1971	Sept. 12, 1971	7.87	248	1984	Aug. 12, 1984	4.34	44
1972	June 22, 1972	7.50	230	1985	Feb. 2, 1985	4.33	43
1973	May 28, 1973	7.50	230	1986	Nov. 4, 1985	8.24	267
1974	July 5, 1974	10.5	375	1987	-	<4.14	<36
1975	June 1, 1975	4.79	64	1988	-	<4.14	<36
1977	Apr. 5, 1977	4.29	42	1989	-	<4.14	<36
1978	Oct. 8, 1977	4.41	46	1990	-	<4.14	<36

< Less than.

02013000 DUNLAP CREEK NEAR COVINGTON, VA

LOCATION.--Lat 37°48'10", long 80°02'50", Alleghany County, Hydrologic Unit 02080201, on right bank 20 ft downstream from bridge on U.S. Highway 60, 2.2 mi downstream from Ogle Creek, and 3.0 mi west of Covington.

DRAINAGE AREA.--164 mi².

GAGE.--Water-stage recorder. Datum of gage is 1,294.70 ft above National Geodetic Vertical Datum of 1929. Prior to Dec. 8, 1949, nonrecording gage at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 4,500 ft³/s and extended above on basis of step-backwater computations and contracted-opening measurement.

BANKFULL STAGE.--8 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1913	March 1913	a18	-	1960	Mar. 30, 1960	6.60	3,320
1929	Feb. 27, 1929	7.5	4,080	1961	Feb. 25, 1961	5.48	2,290
1930	Nov. 18, 1929	9.7	7,300	1962	Oct. 21, 1961	8.13	4,950
1931	Mar. 28, 1931	5.5	2,140	1963	Mar. 12, 1963	10.98	9,120
1932	May 1, 1932	8.7	5,580	1964	Mar. 4, 1964	5.38	2,200
1933	Mar. 19, 1933	8.5	5,300	1965	Mar. 25, 1965	8.53	5,440
1934	Mar. 8, 1934	7.2	3,760	1966	May 2, 1966	7.30	4,030
1935	Jan. 23, 1935	10.0	7,900	1967	Mar. 7, 1967	9.22	6,450
1936	Mar. 17, 1936	10.52	8,370	1968	Jan. 31, 1968	4.54	1,540
1937	Jan. 20, 1937	9.1	6,200	1969	Aug. 20, 1969	13.13	16,500
1938	Oct. 27, 1937	8.0	4,660	1970	Dec. 31, 1969	9.12	5,870
1939	Jan. 30, 1939	7.48	4,160	1971	Feb. 13, 1971	8.77	5,490
1940	Aug. 14, 1940	10.3	8,050	1972	June 21, 1972	15.65	27,400
1941	Mar. 12, 1941	4.2	1,150	1973	Mar. 17, 1973	10.76	9,370
1942	May 22, 1942	8.7	5,580	1974	Dec. 26, 1973	11.03	9,970
1943	Mar. 13, 1943	8.6	5,440	1975	Mar. 14, 1975	8.16	4,820
1944	Mar. 24, 1944	5.5	2,140	1976	Oct. 18, 1975	7.84	4,480
1945	Jan. 1, 1945	5.6	2,230	1977	Apr. 5, 1977	11.74	11,700
1946	Jan. 8, 1946	7.0	3,560	1978	Jan. 26, 1978	9.98	7,760
1947	Mar. 14, 1947	6.3	2,860	1979	Feb. 24, 1979	9.07	6,150
1948	Feb. 14, 1948	10.2	8,300	1980	Mar. 17, 1980	7.45	4,080
1949	Apr. 13, 1949	10.1	8,100	1981	May 28, 1981	8.44	5,230
1950	Feb. 2, 1950	7.28	4,030	1982	June 13, 1982	9.32	6,570
1951	Mar. 30, 1951	8.59	5,570	1983	Mar. 19, 1983	8.33	5,080
1952	Mar. 11, 1952	8.68	5,700	1984	Aug. 13, 1984	10.21	8,220
1953	Feb. 21, 1953	7.04	3,720	1985	Feb. 2, 1985	6.85	3,470
1954	Mar. 1, 1954	10.10	7,770	1986	Nov. 4, 1985	13.42	17,400
1955	Mar. 6, 1955	10.14	7,770	1987	Apr. 16, 1987	9.62	7,100
1956	Mar. 14, 1956	5.83	2,560	1988	Jan. 20, 1988	5.37	2,040
1957	Apr. 5, 1957	8.53	5,440	1989	Sept. 22, 1989	7.48	4,110
1958	Mar. 31, 1958	8.56	5,570	1990	Dec. 31, 1989	8.73	5,640
1959	Apr. 12, 1959	6.06	2,830				

a From information by local residents.

02013100 JACKSON RIVER BELOW DUNLAP CREEK, AT COVINGTON, VA

LOCATION.--Lat 37°47'19", long 80°00'03", Covington City, Hydrologic Unit 02080201, on left bank in city recreation park and 0.5 mi downstream from Dunlap Creek.

DRAINAGE AREA.--614 mi².

GAGE.--Water-stage recorder. Datum of gage is 1,206.53 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 19,000 ft³/s and extended above.

BANKFULL STAGE.--Not determined.

REMARKS.--Flow regulated since December 1979 by Lake Moomaw 19.9 mi upstream.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1972	June 21, 1972	a24.36	34,000	1982	June 13, 1982	11.84	8,870
1974	Dec. 27, 1973	a22.09	28,000	1983	Apr. 10, 1983	10.48	6,760
1975	Mar. 20, 1975	13.60	14,400	1984	Feb. 14, 1984	13.69	11,900
1976	Oct. 18, 1975	13.36	11,400	1985	Feb. 1, 1985	8.92	4,550
1977	Apr. 5, 1977	19.85	23,200	1986	Nov. 4, 1985	23.31	31,300
1978	Jan. 26, 1978	17.86	19,200	1987	Apr. 16, 1987	13.72	12,000
1979	Feb. 25, 1979	15.13	14,300	1988	Jan. 21, 1988	9.37	5,160
1980	Mar. 17, 1980	11.33	8,140	1989	Apr. 28, 1989	12.12	9,330
1981	May 28, 1981	10.94	7,550	1990	Dec. 31, 1989	10.85	7,320

a From high-water marks.

02014000 POTTS CREEK NEAR COVINGTON, VA

LOCATION.--Lat 37°43'44", long 80°02'33", Alleghany County, Hydrologic Unit 02080201, on left bank at downstream side of bridge on State Highway 18, 0.8 mi downstream from Blue Spring Creek, and 5.2 mi southwest of Covington.

DRAINAGE AREA.--153 mi².

GAGE.--Water-stage recorder. Datum of gage is 1,273.93 ft above National Geodetic Vertical Datum of 1929. Prior to Sept. 30, 1956, nonrecording gage at site 1.3 mi downstream at different datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 3,600 ft³/s and extended to 7,510 ft³/s on basis of velocity-area studies, for the period 1929-54. Subsequently defined by current-meter measurements. Major shift occurred during 1954, probably caused by channel changes made at time new bridge was constructed. Since 1954, defined by current-meter measurements below 11,200 ft³/s and extended above.

BANKFULL STAGE.--5 ft.

REMARKS.--Records were provided by the Virginia Water Control Board from July 1, 1957, to Sept. 30, 1989.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1878	November 1877	a12.0	-	1955	Mar. 6, 1955	9.67	6,460
1913	March 1913	a12.5	-	1956	Apr. 16, 1956	4.95	2,000
1929	Feb. 27, 1929	4.9	2,230	1966	Feb. 14, 1966	7.27	3,290
1930	Nov. 18, 1929	7.0	4,460	1967	Mar. 7, 1967	7.66	3,700
1931	May 23, 1931	3.8	1,310	1968	Mar. 13, 1968	5.56	1,620
1932	May 1, 1932	4.9	2,230	1969	Aug. 20, 1969	7.88	3,920
1933	Nov. 9, 1932	4.5	1,870	1970	Dec. 31, 1969	8.37	4,580
1934	Mar. 28, 1934	6.0	3,270	1971	May 30, 1971	8.97	5,420
1935	Jan. 23, 1935	10.10	7,510	1972	June 21, 1972	12.33	12,400
1936	Mar. 17, 1936	9.52	6,850	1973	May 28, 1973	11.01	9,320
1937	Jan. 20, 1937	6.9	4,330	1974	Dec. 27, 1973	8.92	5,280
1938	Oct. 28, 1937	5.6	2,870	1975	Mar. 14, 1975	7.63	3,590
1939	Jan. 30, 1939	5.06	2,410	1976	Oct. 18, 1975	7.43	3,370
1940	Aug. 14, 1940	7.9	5,090	1977	Apr. 5, 1977	9.08	5,570
1941	July 7, 1941	4.82	2,140	1978	Jan. 26, 1978	8.98	5,420
1942	May 16, 1942	8.58	5,860	1979	Mar. 5, 1979	8.23	4,300
1943	Dec. 30, 1942	5.9	3,170	1980	Apr. 14, 1980	7.14	3,040
1944	Feb. 29, 1944	4.3	1,710	1981	May 28, 1981	6.58	2,500
1945	Mar. 6, 1945	5.1	2,410	1982	June 13, 1982	8.24	4,360
1946	Jan. 8, 1946	4.9	2,230	1983	Mar. 19, 1983	8.01	4,040
1947	Mar. 14, 1947	5.3	2,590	1984	Feb. 14, 1984	8.05	4,100
1948	Feb. 14, 1948	7.72	5,480	1985	Aug. 18, 1985	8.30	4,440
1949	Apr. 13, 1949	9.32	6,630	1986	Nov. 4, 1985	13.46	15,400
1950	Feb. 2, 1950	5.32	2,590	1987	Apr. 17, 1987	9.56	5,920
1951	Dec. 7, 1950	8.70	5,970	1988	May 6, 1988	5.13	761
1952	Mar. 11, 1952	9.10	6,410	1989	Sept. 22, 1989	9.08	5,040
1953	Mar. 24, 1953	7.43	5,030	1990	Oct. 17, 1989	8.32	3,880
1954	Mar. 1, 1954	9.90	7,290				

a From information by local resident.

02014500 SMITH CREEK ABOVE OLD DAM, NEAR CLIFTON FORGE, VA

LOCATION.--Lat 37°51'10", long 79°50'50", Alleghany County, Hydrologic Unit 02080201, on left abutment of bridge on city of Clifton Forge highway, 0.2 mi upstream from old water-supply dam, 0.8 mi upstream from new water-supply dam, 3.1 mi northwest of Clifton Forge, and about 3.5 mi upstream from mouth.

DRAINAGE AREA.--12.4 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,406 ft above National Geodetic Vertical Datum of 1929, by barometer. Prior to August 1953, nonrecording gage at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 760 ft³/s and extended above by logarithmic plotting.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1947	July 18, 1947	4.4	342	1952	Mar. 11, 1952	4.90	447
1948	Nov. 3, 1947	5.5	600	1953	Mar. 24, 1953	5.95	752
1949	Apr. 13, 1949	6.0	752	1954	Mar. 1, 1954	4.08	282
1950	May 15, 1950	3.69	214	1955	Mar. 6, 1955	4.75	425
1951	Dec. 7, 1950	7.30	1,200	1956	Mar. 14, 1956	3.25	155

02015600 COWPASTURE RIVER NEAR HEAD WATERS, VA

LOCATION.--Lat 38°19'30", long 79°26'14", Highland County, Hydrologic Unit 02080201, on left downstream wingwall of bridge on U.S. Highway 250, 1.2 mi west of Head Waters, and 3 mi upstream from Shaw Fork.

DRAINAGE AREA.--11.3 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,985.65 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 187 ft³/s and extended on basis of contracted-opening measurements at 900 ft³/s and 5,650 ft³/s.

BANKFULL STAGE.--5 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1949	June 17, 1949	6.5	5,650	1970	July 10, 1970	4.44	426
1950	Sept. 12, 1950	4.2	340	1971	May 30, 1971	4.50	450
1951	Dec. 7, 1950	5.0	740	1972	June 21, 1972	3.80	240
1952	Mar. 11, 1952	4.84	620	1973	Oct. 5, 1972	5.80	2,450
1953	Feb. 21, 1953	5.0	740	1974	Dec. 26, 1973	5.05	775
1954	Mar. 1, 1954	5.07	810	1975	Mar. 19, 1975	4.71	566
1955	Oct. 15, 1954	5.19	900	1976	Oct. 18, 1975	3.74	228
1956	Mar. 14, 1956	3.64	200	1977	Apr. 5, 1977	4.94	704
1957	Apr. 5, 1957	4.13	320	1978	Jan. 26, 1978	4.87	662
1958	Dec. 26, 1957	2.97	110	1979	Mar. 5, 1979	4.04	302
1959	June 2, 1959	4.10	305	1980	Nov. 2, 1979	3.61	202
1960	May 8, 1960	4.21	340	1981	-	<2.95	<108
1961	Feb. 26, 1961	3.34	155	1982	Mar. 20, 1982	4.90	680
1962	Oct. 22, 1961	4.14	320	1983	Apr. 15, 1983	3.55	190
1963	Mar. 12, 1963	4.53	450	1984	Aug. 12, 1984	4.76	596
1964	Mar. 5, 1964	3.31	147	1985	May 3, 1985	3.74	228
1965	Feb. 7, 1965	3.12	124	1986	Nov. 4, 1985	6.45	5,380
1966	Feb. 13, 1966	2.70	83	1987	Apr. 16, 1987	3.88	264
1967	Mar. 7, 1967	4.66	560	1988	Jan. 20, 1988	3.30	147
1968	Mar. 12, 1968	3.06	118	1989	-	<2.97	<110
1969	Aug. 20, 1969	2.94	107	1990	Nov. 16, 1989	4.05	305

< Less than.

JAMES RIVER BASIN

02015700 BULLPASTURE RIVER AT WILLIAMSVILLE, VA

LOCATION.--Lat 38°11'43", long 79°34'14", Bath County, Hydrologic Unit 02080201, on left bank 15 ft downstream from bridge on State Highway 614 at Williamsville and 0.62 mi upstream from mouth.

DRAINAGE AREA.--110 mi².

GAGE.--Water-stage recorder. Datum of gage is 1,610.14 ft above National Geodetic Vertical Datum of 1929.

Prior to July 12, 1974, at site 700 ft upstream at datum 11.84 ft higher.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 2,790 ft³/s and extended above on basis of slope-area measurement at 22,800 ft³/s.

BANKFULL STAGE.--4 ft.

REMARKS.--Records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1961	Feb. 25, 1961	a4.93	3,350	1976	Oct. 18, 1975	7.85	5,650
1962	Mar. 21, 1962	a4.73	2,990	1977	Apr. 5, 1977	9.25	9,430
1963	Mar. 12, 1963	a4.82	3,080	1978	Jan. 26, 1978	8.92	8,430
1964	Mar. 5, 1964	a5.40	4,260	1979	Mar. 5, 1979	7.37	4,970
1965	Feb. 7, 1965	a4.83	3,170	1980	Apr. 9, 1980	7.56	5,350
1966	Feb. 13, 1966	a4.62	2,900	1981	Feb. 11, 1981	5.49	1,890
1967	Mar. 7, 1967	a5.91	6,230	1982	Mar. 20, 1982	8.39	7,060
1968	Mar. 12, 1968	a3.36	1,780	1983	Apr. 15, 1983	6.56	3,460
1969	Aug. 20, 1969	a4.03	2,820	1984	Feb. 14, 1984	7.06	4,320
1970	July 9, 1970	a5.04	4,530	1985	May 3, 1985	7.00	4,210
1971	Feb. 13, 1971	a4.46	3,540	1986	Nov. 4, 1985	14.39	22,900
1972	June 21, 1972	a4.54	3,720	1987	Apr. 15, 1987	6.23	4,260
1973	Oct. 5, 1972	a6.03	6,490	1988	Jan. 20, 1988	4.91	2,380
1974	Dec. 26, 1973	a6.37	7,230	1989	May 5, 1989	5.28	2,870
1975	Mar. 19, 1975	7.18	4,300	1990	Nov. 16, 1989	5.73	3,520

a At site 700 ft upstream at different datum.

JAMES RIVER BASIN

02015900 JERRY BRANCH NEAR CLIFTON FORGE, VA

LOCATION.--Lat 37°52'23", long 79°44'36", Alleghany County, Hydrologic Unit 02080201, at culvert on State Highway 42, 6 mi northeast of Clifton Forge.

DRAINAGE AREA.--0.55 mi².

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is 1,137.44 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--3 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1967	Mar. 7, 1967	4.15	84	1972	June 21, 1972	6.43	201
1968	-	<3.0	<38	1973	May 28, 1973	6.30	193
1969	Aug. 20, 1969	7.50	270	1974	May 12, 1974	5.90	170
1970	Dec. 31, 1969	3.50	56	1975	Mar. 19, 1975	3.23	45
1971	Feb. 13, 1971	3.44	54	1976	June 16, 1976	3.57	59

< Less than.

02016000 COWPASTURE RIVER NEAR CLIFTON FORGE, VA

LOCATION.--Lat 37°47'30", long 79°45'35", Alleghany County, Hydrologic Unit 02080201, on left bank 100 ft downstream from bridge on State Highway 633, 2.5 mi upstream from confluence with Jackson River, and 4.0 mi southeast of Clifton Forge.

DRAINAGE AREA.--461 mi².

GAGE.--Water-stage recorder. Datum of gage is 1,006.93 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers). Prior to October 1934, nonrecording gage at site 100 ft upstream at present datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 12,200 ft³/s and extended above on basis of slope-area measurements at 25,000 ft³/s and 40,900 ft³/s.

BANKFULL STAGE.--6 ft.

REMARKS.--Records were provided by the Virginia Water Control Board from Oct. 1, 1984, to Sept. 30, 1989.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1913	March 1913	a20.8	45,000	1958	Apr. 1, 1958	7.68	5,850
1926	Jan. 19, 1926	9.1	7,610	1959	June 3, 1959	9.52	8,950
1927	Dec. 26, 1926	10.0	9,240	1960	Mar. 31, 1960	10.79	11,100
1928	Oct. 13, 1927	9.7	8,680	1961	Feb. 26, 1961	8.15	6,320
1929	Feb. 27, 1929	9.0	7,440	1962	Oct. 21, 1961	11.68	13,100
1930	Nov. 18, 1929	9.88	9,050	1963	Mar. 13, 1963	10.80	11,400
1931	Mar. 29, 1931	5.99	3,090	1964	Mar. 6, 1964	9.30	8,570
1932	Feb. 5, 1932	9.90	9,050	1965	Feb. 8, 1965	9.50	8,950
1933	Oct. 18, 1932	9.15	7,780	1966	Feb. 14, 1966	9.75	9,520
1934	Mar. 28, 1934	8.80	7,100	1967	Mar. 8, 1967	12.27	14,300
1935	Feb. 23, 1935	13.76	17,700	1968	Mar. 13, 1968	8.17	6,590
1936	Mar. 18, 1936	18.62	34,200	1969	Aug. 20, 1969	15.70	25,000
1937	Jan. 21, 1937	11.57	12,500	1970	Dec. 31, 1969	10.22	10,300
1938	Oct. 20, 1937	11.56	12,500	1971	May 31, 1971	11.65	13,600
1939	Feb. 4, 1939	11.10	11,400	1972	June 22, 1972	12.63	15,700
1940	May 31, 1940	11.09	11,400	1973	Oct. 6, 1972	11.43	12,800
1941	Apr. 6, 1941	6.61	3,830	1974	Dec. 27, 1973	13.85	19,000
1942	May 17, 1942	14.07	18,500	1975	Mar. 20, 1975	11.41	12,800
1943	Mar. 14, 1943	10.93	11,000	1976	Jan. 1, 1976	10.53	11,000
1944	May 7, 1944	8.31	6,280	1977	Apr. 5, 1977	12.40	15,100
1945	Sept. 19, 1945	8.67	6,930	1978	Jan. 26, 1978	12.34	15,000
1946	Jan. 8, 1946	9.77	8,860	1979	Feb. 26, 1979	10.72	11,300
1947	Mar. 15, 1947	9.22	7,780	1980	Apr. 9, 1980	10.66	11,200
1948	Feb. 15, 1948	9.08	7,610	1981	May 28, 1981	8.01	6,060
1949	June 18, 1949	13.32	16,400	1982	June 14, 1982	12.00	14,400
1950	Sept. 13, 1950	12.17	13,900	1983	Apr. 25, 1983	9.51	8,780
1951	June 13, 1951	11.98	13,400	1984	Feb. 15, 1984	11.69	13,600
1952	Mar. 12, 1952	12.18	13,900	1985	Nov. 29, 1984	7.86	5,810
1953	Feb. 22, 1953	12.63	14,800	1986	Nov. 5, 1985	19.15	40,900
1954	Mar. 2, 1954	11.43	12,100	1987	Apr. 16, 1987	12.44	15,500
1955	Mar. 6, 1955	11.15	11,600	1988	Jan. 20, 1988	8.07	6,620
1956	Mar. 15, 1956	6.97	4,350	1989	May 6, 1989	b9.98	10,500
1957	Apr. 6, 1957	11.57	12,500	1990	Nov. 16, 1989	10.07	10,700

a From high-water marks, information by local residents.

b From high-water marks.

02016500 JAMES RIVER AT LICK RUN, VA

LOCATION.--Lat 37°46'25", long 79°47'05", Botetourt County, Hydrologic Unit 02080201, on right bank at community of Lick Run, 1,000 ft downstream from bridge on U.S. Highway 220, 0.9 mi downstream from confluence of Cowpasture and Jackson Rivers, 1.8 mi south of Iron Gate, and at mile 342.3.

DRAINAGE AREA.--1,373 mi².

GAGE.--Water-stage recorder. Datum of gage is 978.30 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers). Prior to Oct. 26, 1928, nonrecording gage at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 65,700 ft³/s and extended above. BANKFULL STAGE.--10 ft.

REMARKS.--Flow regulated since December 1979 by Lake Moomaw 43.7 mi upstream from station. Records were provided by the Virginia Water Control Board from July 1, 1957, to Sept. 30, 1989.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1878	November 1877	a33	a120,000	1957	Apr. 6, 1957	19.56	35,800
1913	March 1913	b30.4	a98,000	1958	Mar. 31, 1958	14.82	22,500
1924	May 1924	24.6	57,500	1959	June 3, 1959	13.18	18,600
1925	Apr. 30, 1925	6.30	5,370	1960	Mar. 31, 1960	19.65	35,400
1926	Jan. 19, 1926	14.47	20,600	1961	Feb. 26, 1961	13.08	18,300
1927	Dec. 26, 1926	20.0	37,000	1962	Oct. 21, 1961	19.87	36,200
1928	Oct. 13, 1927	12.5	17,000	1963	Mar. 12, 1963	22.60	45,200
1929	Feb. 28, 1929	15.1	21,800	1964	Mar. 6, 1964	16.07	25,900
1930	Nov. 18, 1929	17.75	31,400	1965	Feb. 8, 1965	16.50	27,000
1931	Mar. 29, 1931	8.32	8,890	1966	Feb. 14, 1966	16.34	26,400
1932	Feb. 5, 1932	18.14	32,300	1967	Mar. 8, 1967	22.30	42,800
1933	Mar. 20, 1933	13.08	17,800	1968	Mar. 13, 1968	12.58	17,000
1934	Mar. 28, 1934	14.07	19,900	1969	Aug. 20, 1969	25.53	58,500
1935	Jan. 23, 1935	22.98	53,000	1970	Dec. 31, 1969	19.88	34,800
1936	Mar. 18, 1936	25.65	66,000	1971	Feb. 14, 1971	19.61	33,900
1937	Jan. 21, 1937	17.45	28,700	1972	June 21, 1972	27.01	66,200
1938	Oct. 28, 1937	15.78	24,800	1973	May 28, 1973	19.44	33,500
1939	Jan. 31, 1939	16.98	27,700	1974	Dec. 27, 1973	24.77	54,200
1940	May 31, 1940	16.12	25,500	1975	Mar. 20, 1975	17.79	28,900
1941	Apr. 6, 1941	8.39	8,390	1976	Jan. 1, 1976	16.40	25,600
1942	May 17, 1942	21.10	43,500	1977	Apr. 5, 1977	22.54	43,700
1943	Mar. 14, 1943	17.60	30,800	1978	Jan. 26, 1978	21.66	40,600
1944	May 25, 1944	10.22	12,000	1979	Feb. 25, 1979	18.04	29,400
1945	Sept. 19, 1945	10.4	12,400	1980	Apr. 15, 1980	14.76	21,900
1946	Jan. 8, 1946	16.0	26,100	1981	May 28, 1981	13.43	18,800
1947	Mar. 15, 1947	13.0	18,200	1982	June 13, 1982	17.79	28,900
1948	Feb. 15, 1948	16.1	26,400	1983	Apr. 10, 1983	13.43	18,800
1949	Apr. 14, 1949	20.45	40,600	1984	Feb. 14, 1984	17.30	27,800
1950	Feb. 2, 1950	15.56	24,600	1985	Aug. 19, 1985	9.99	11,300
1951	Dec. 8, 1950	20.45	38,300	1986	Nov. 5, 1985	30.22	87,500
1952	Mar. 12, 1952	19.07	34,300	1987	Apr. 16, 1987	20.23	38,000
1953	Feb. 22, 1953	20.55	38,900	1988	Jan. 21, 1988	7.95	8,670
1954	Mar. 2, 1954	18.82	33,400	1989	May 6, 1989	13.69	21,200
1955	Mar. 6, 1955	19.50	35,500	1990	Jan. 1, 1990	13.23	20,000
1956	Mar. 15, 1956	10.78	13,300				

a Approximate.

b From high-water marks.

02017000 MEADOW CREEK AT NEW CASTLE, VA

LOCATION.--Lat 37°29'35", long 80°06'35", Craig County, Hydrologic Unit 02080201, on left bank at southern town limits of New Castle, 800 ft upstream from New Castle-Salem highway bridge, and 0.6 mi upstream from mouth.

DRAINAGE AREA.--13.8 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,337.32 ft above National Geodetic Vertical Datum of 1929. Prior to June 21, 1937, water-stage recorder at site 400 ft downstream at different datum. June 21, 1937, to Sept. 30, 1952, water-stage recorder and V-notch sharp-crested weir at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 287 ft³/s and extended above.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1930	Oct. 2, 1929	3.64	242	1944	Feb. 29, 1944	3.41	100
1931	Aug. 23, 1931	2.71	130	1945	Sept. 18, 1945	3.68	148
1932	Mar. 28, 1932	2.38	75	1946	Jan. 8, 1946	3.74	161
1933	Oct. 18, 1932	3.10	152	1947	Jan. 20, 1947	3.58	128
1934	Mar. 4, 1934	3.02	118	1948	Nov. 3, 1947	4.15	277
1935	Jan. 23, 1935	3.60	200	1949	July 15, 1949	4.22	303
1936	Mar. 17, 1936	3.65	218	1950	Nov. 2, 1949	3.84	187
1937	Jan. 20, 1937	3.12	152	1951	Mar. 31, 1951	4.08	253
1938	Aug. 10, 1938	3.35	90	1952	Mar. 11, 1952	3.98	222
1939	Aug. 19, 1939	3.45	106	1953	Mar. 24, 1953	3.40	95
1940	Aug. 16, 1940	4.80	700	1954	Mar. 1, 1954	4.00	227
1941	July 8, 1941	4.17	284	1955	Mar. 1, 1955	4.18	295
1942	May 16, 1942	4.10	259	1957	Apr. 5, 1957	4.00	227
1943	Dec. 30, 1942	3.83	182				

JAMES RIVER BASIN

02017300 CRAIG CREEK AT NEW CASTLE, VA

LOCATION.--Lat 37°30'06", long 80°06'18", Craig County, Hydrologic Unit 02080201, on left upstream pier of old bridge, about 20 ft downstream from new bridge on State Highway 616, 800 ft upstream from Johns Creek, and 0.3 mi southeast of New Castle.

DRAINAGE AREA.--112 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,245.69 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by step-backwater computations.

BANKFULL STAGE.--8 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1967	Mar. 7, 1967	10.15	3,250	1979	Sept. 21, 1979	10.96	4,150
1968	-	<8.5	<1,750	1980	Apr. 14, 1980	11.14	4,400
1969	Oct. 19, 1968	9.79	2,900	1981	May 28, 1981	11.24	4,540
1970	Dec. 31, 1969	10.49	3,600	1982	June 13, 1982	10.09	3,190
1971	May 30, 1971	10.09	3,200	1983	Mar. 18, 1983	12.11	5,780
1972	June 21, 1972	17.09	16,500	1984	May 6, 1984	10.69	3,830
1973	May 28, 1973	12.65	6,600	1985	Aug. 18, 1985	11.93	5,500
1974	Dec. 26, 1973	9.06	2,200	1986	Nov. 4, 1985	19.55	24,400
1975	Mar. 19, 1975	12.51	6,420	1987	Apr. 16, 1987	12.04	5,660
1976	Dec. 31, 1975	9.36	2,490	1988	-	<8.49	<1,810
1977	Apr. 5, 1977	11.57	5,000	1989	Sept. 22, 1989	11.54	4,960
1978	Apr. 26, 1978	14.35	9,870	1990	Nov. 16, 1989	10.09	3,190

< Less than.

JAMES RIVER BASIN

02017400 JOHNS CREEK TRIBUTARY NEAR NEW CASTLE, VA

LOCATION.--Lat 37°30'30", long 80°11'20", Craig County, Hydrologic Unit 02080201, at culvert on State Highway 311, 4.2 mi west of New Castle.

DRAINAGE AREA.--1.57 mi².

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is 1,551.65 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--4 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1967	Mar. 7, 1967	3.86	40	1972	June 21, 1972	8.48	354
1968	Mar. 12, 1968	3.38	25	1973	Mar. 16, 1973	8.12	328
1969	Aug. 20, 1969	4.05	48	1974	Dec. 26, 1973	5.54	145
1970	Dec. 31, 1969	4.00	46	1975	Mar. 19, 1975	5.05	105
1971	May 30, 1971	4.32	60	1976	June 16, 1976	5.05	105

02017500 JOHNS CREEK AT NEW CASTLE, VA

LOCATION.--Lat 37°30'22", long 80°06'25", Craig County, Hydrologic Unit 02080201, on right bank 20 ft downstream from bridge on State Highway 615 at New Castle and 1,700 ft upstream from mouth.

DRAINAGE AREA.--104 mi².

GAGE.--Water-stage recorder. Datum of gage is 1,254.30 ft above National Geodetic Vertical Datum of 1929. Prior to June 7, 1937, nonrecording gage at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 3,200 ft³/s and extended above on basis of slope-area measurement at 8,000 ft³/s.

BANKFULL STAGE.--8 ft.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1927	Feb. 23, 1927	9.4	4,310	1959	Apr. 13, 1959	8.00	1,810
1928	Aug. 16, 1928	10.2	6,290	1960	Apr. 4, 1960	9.21	2,800
1929	Mar. 1, 1929	7.7	1,790	1961	Feb. 26, 1961	8.52	2,100
1930	Oct. 3, 1929	9.4	4,310	1962	Dec. 18, 1961	8.68	2,300
1931	May 8, 1931	7.0	1,240	1963	Mar. 12, 1963	10.58	4,500
1932	Mar. 28, 1932	7.7	1,790	1964	Jan. 25, 1964	7.62	1,390
1933	Dec. 28, 1932	7.8	1,880	1965	Feb. 8, 1965	9.56	3,200
1934	Mar. 27, 1934	9.2	3,890	1966	Feb. 14, 1966	9.62	3,200
1935	Jan. 23, 1935	10.80	8,000	1967	Mar. 7, 1967	8.40	2,000
1936	Mar. 17, 1936	9.7	5,000	1968	Mar. 13, 1968	6.95	1,020
1937	Jan. 20, 1937	8.0	2,150	1969	Oct. 19, 1968	6.60	855
1938	Oct. 27, 1937	8.85	3,180	1970	Dec. 31, 1969	8.92	2,500
1939	Jan. 30, 1939	8.22	2,370	1971	Feb. 13, 1971	8.88	2,500
1940	Aug. 15, 1940	9.53	4,640	1972	June 21, 1972	12.48	7,960
1941	July 7, 1941	8.73	2,960	1973	May 28, 1973	10.63	5,000
1942	May 16, 1942	9.17	3,790	1974	Dec. 26, 1973	9.57	3,750
1943	Dec. 30, 1942	9.15	3,790	1975	Mar. 14, 1975	9.71	3,690
1944	May 28, 1944	8.35	2,530	1976	June 17, 1976	8.83	2,690
1945	Mar. 6, 1945	8.14	2,230	1977	Apr. 5, 1977	10.25	4,350
1946	Jan. 8, 1946	8.15	2,230	1978	Apr. 26, 1978	10.33	4,500
1947	Mar. 14, 1947	7.95	2,020	1979	Feb. 25, 1979	9.14	2,760
1948	Feb. 14, 1948	9.20	3,890	1980	Apr. 14, 1980	9.07	2,760
1949	Dec. 4, 1948	9.58	4,750	1981	May 28, 1981	9.94	3,960
1950	May 3, 1950	8.75	3,050	1982	June 13, 1982	9.37	3,100
1951	Mar. 31, 1951	9.38	4,310	1983	Mar. 18, 1983	9.79	3,740
1952	Mar. 11, 1952	9.71	5,000	1984	May 6, 1984	8.20	1,880
1953	Mar. 24, 1953	9.64	4,880	1985	Aug. 18, 1985	8.28	1,940
1954	Mar. 1, 1954	8.79	3,100	1986	Nov. 4, 1985	11.96	7,010
1955	Mar. 1, 1955	9.16	3,760	1987	Apr. 16, 1987	10.01	4,060
1956	Apr. 16, 1956	8.52	2,180	1988	Jan. 20, 1988	6.09	760
1957	Apr. 5, 1957	10.03	3,420	1989	Sept. 22, 1989	9.27	3,060
1958	Apr. 23, 1958	8.37	2,100	1990	Nov. 16, 1989	8.33	2,080

02017700 CRAIG CREEK TRIBUTARY NEAR NEW CASTLE, VA

LOCATION.--Lat 37°33'21", long 79°59'52", Craig County, Hydrologic Unit 02080201, on right upstream wingwall of culvert on State Highway 606, 0.4 mi upstream from mouth, and 7.1 mi northeast of New Castle.

DRAINAGE AREA.--2.05 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined. Prior to Aug. 17, 1978, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1968	Mar. 13, 1968	3.55	58	1980	Apr. 14, 1980	9.53	533
1969	Oct. 19, 1968	6.00	220	1981	May 28, 1981	3.50	55
1970	Dec. 31, 1969	4.40	104	1982	Feb. 3, 1982	3.40	50
1971	Oct. 31, 1970	6.38	252	1983	Mar. 18, 1983	3.56	58
1972	June 21, 1972	7.85	372	1984	May 6, 1984	3.63	62
1973	May 28, 1973	9.70	550	1985	Feb. 2, 1985	3.46	53
1974	May 12, 1974	6.30	244	1986	Nov. 4, 1985	13.45	1,100
1975	Mar. 19, 1975	6.00	220	1987	Apr. 16, 1987	8.11	395
1976	Oct. 18, 1975	4.65	119	1988	Jan. 20, 1988	3.49	54
1977	Mar. 13, 1977	6.70	276	1989	May 6, 1989	6.65	272
1978	Apr. 26, 1978	5.90	212	1990	Nov. 16, 1989	4.76	126
1979	Sept. 21, 1979	9.99	579				

02018000 CRAIG CREEK AT PARR, VA

LOCATION.--Lat 37°39'57", long 79°54'42", Botetourt County, Hydrologic Unit 02080201, on right bank 12 ft upstream from Chesapeake and Ohio Railway bridge, 700 ft downstream from Stony Run, 0.2 mi northeast of Horton, 0.4 mi northwest of Parr, and 12 mi upstream from mouth.

DRAINAGE AREA.--329 mi².

GAGE.--Water-stage recorder. Datum of gage is 992.50 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers). Prior to June 7, 1937, nonrecording gage at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 17,500 ft³/s and extended above on basis of slope-area measurement at 58,500 ft³/s.

BANKFULL STAGE.--7 ft.

REMARKS.--Records were provided by the Virginia Water Control Board from July 1, 1957, to Sept. 30, 1989.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1926	Jan. 19, 1926	9.53	5,820	1959	Apr. 13, 1959	9.40	4,860
1927	Dec. 26, 1926	12.60	11,200	1960	Oct. 1, 1959	10.59	6,620
1928	Aug. 17, 1928	15.6	16,900	1961	Feb. 26, 1961	8.37	3,480
1929	Feb. 27, 1929	8.8	4,650	1962	Dec. 19, 1961	10.02	5,660
1930	Oct. 22, 1929	11.3	8,660	1963	Mar. 13, 1963	11.75	8,800
1931	Aug. 23, 1931	7.35	2,700	1964	Apr. 14, 1964	9.64	5,030
1932	May 1, 1932	9.0	4,950	1965	Feb. 8, 1965	10.40	6,300
1933	Oct. 18, 1932	11.4	8,830	1966	Feb. 14, 1966	10.83	6,960
1934	Mar. 28, 1934	11.2	8,490	1967	Mar. 7, 1967	10.62	6,620
1935	Jan. 23, 1935	17.0	19,100	1968	Mar. 13, 1968	8.30	3,360
1936	Mar. 18, 1936	14.26	14,000	1969	Oct. 20, 1968	9.80	5,340
1937	Jan. 21, 1937	10.32	7,400	1970	Dec. 31, 1969	11.05	7,300
1938	Oct. 20, 1937	11.48	9,000	1971	May 30, 1971	11.23	7,640
1939	Jan. 31, 1939	9.18	5,330	1972	June 21, 1972	19.29	20,200
1940	Aug. 15, 1940	15.02	15,200	1973	May 28, 1973	13.04	11,200
1941	July 8, 1941	13.35	12,300	1974	Dec. 27, 1973	10.72	6,790
1942	May 16, 1942	13.43	12,300	1975	Mar. 15, 1975	12.68	10,600
1943	Apr. 20, 1943	10.30	7,030	1976	June 21, 1976	9.88	5,500
1944	Feb. 18, 1944	8.99	4,950	1977	Apr. 5, 1977	12.21	9,600
1945	Sept. 18, 1945	9.32	5,430	1978	Apr. 27, 1978	14.79	15,600
1946	Jan. 8, 1946	9.40	5,590	1979	Feb. 26, 1979	11.40	8,010
1947	Jan. 21, 1947	9.11	5,110	1980	Apr. 15, 1980	12.10	9,400
1948	Nov. 3, 1947	11.75	9,510	1981	May 29, 1981	11.10	7,500
1949	Dec. 4, 1948	12.95	11,600	1982	June 14, 1982	10.63	6,670
1950	May 3, 1950	9.92	6,710	1983	Mar. 19, 1983	12.40	10,000
1951	Dec. 8, 1950	12.24	10,200	1984	Feb. 14, 1984	11.63	8,460
1952	Mar. 11, 1952	10.60	7,510	1985	Aug. 19, 1985	11.06	7,400
1953	Mar. 24, 1953	11.93	9,680	1986	Nov. 4, 1985	24.76	58,500
1954	Mar. 1, 1954	13.42	12,000	1987	Apr. 16, 1987	13.67	12,800
1955	Mar. 7, 1955	12.40	10,100	1988	Jan. 21, 1988	6.84	1,840
1956	Apr. 16, 1956	9.15	4,280	1989	Sept. 23, 1989	11.07	7,530
1957	Apr. 5, 1957	12.10	9,550	1990	Nov. 17, 1989	10.05	5,890
1958	May 6, 1958	9.62	5,120				

02018500 CATAWBA CREEK NEAR CATAWBA, VA

LOCATION.--Lat 37°28'05", long 80°00'20", Botetourt County, Hydrologic Unit 02080201, on right bank 80 ft upstream from bridge on State Highway 779, 1.0 mi downstream from Little Catawba Creek, 1.9 mi west of Haymakertown, and 8.2 mi northeast of Catawba.

DRAINAGE AREA.--34.3 mi².

GAGE.--Water-stage recorder. Datum of gage is 1,299.96 ft above National Geodetic Vertical Datum of 1929. Prior to Aug. 1, 1953, nonrecording gage at site 80 ft downstream at same datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,650 ft³/s and extended above on basis of slope-area measurement at 7,740 ft³/s and 20,100 ft³/s.

BANKFULL STAGE.--5 ft.

REMARKS.--At a point 5.3 mi upstream from station, there is transmountain diversion through a tunnel into Roanoke River basin for municipal water supply of city of Roanoke since December 1974. Subsequent to Sept. 30, 1981, records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1940	August 1940	13.26	-	1967	Mar. 7, 1967	5.57	1,820
1944	Feb. 18, 1944	3.2	790	1968	Mar. 12, 1968	4.23	744
1945	Sept. 18, 1945	3.9	1,330	1969	Oct. 19, 1968	4.95	1,320
1946	Mar. 15, 1946	2.8	560	1970	Dec. 31, 1969	4.81	1,210
1947	Jan. 20, 1947	3.00	670	1971	May 30, 1971	4.99	1,350
1948	Nov. 3, 1947	3.90	1,330	1972	June 21, 1972	10.35	7,740
1949	June 29, 1949	5.60	3,000	1973	May 28, 1973	8.04	4,460
1950	May 31, 1950	3.73	1,090	1974	July 26, 1974	5.58	1,820
1951	Dec. 7, 1950	5.80	3,300	1975	Mar. 14, 1975	5.83	2,030
1952	Sept. 1, 1952	4.13	1,380	1976	May 29, 1976	4.49	963
1953	Mar. 24, 1953	5.46	2,870	1977	Apr. 5, 1977	4.99	1,350
1954	Mar. 1, 1954	6.58	2,780	1978	Apr. 26, 1978	7.43	3,720
1955	Oct. 15, 1954	4.72	1,140	1979	Sept. 21, 1979	6.15	2,350
1956	Apr. 16, 1956	3.68	443	1980	Apr. 14, 1980	6.68	2,880
1957	Apr. 5, 1957	4.52	976	1981	May 28, 1981	4.19	762
1958	May 5, 1958	5.30	1,600	1982	Feb. 3, 1982	3.84	562
1959	Sept. 30, 1959	6.09	2,290	1983	Mar. 18, 1983	6.46	2,640
1960	Feb. 11, 1960	5.22	1,540	1984	Feb. 14, 1984	5.64	1,880
1961	Aug. 25, 1961	5.70	1,920	1985	Aug. 18, 1985	6.69	2,870
1962	Dec. 18, 1961	4.37	856	1986	Nov. 4, 1985	19.19	21,200
1963	Nov. 9, 1962	5.93	2,130	1987	Apr. 16, 1987	7.11	3,320
1964	Apr. 14, 1964	4.79	1,190	1988	Nov. 29, 1987	2.65	145
1965	Feb. 7, 1965	4.81	1,210	1989	Sept. 16, 1989	5.98	2,180
1966	Feb. 13, 1966	4.91	1,290	1990	May 22, 1990	4.86	1,250

a From information by observer.

02018700 CAMPBELL BRANCH NEAR FINCASTLE, VA

LOCATION.--Lat 37°32'37", long 79°57'28", Botetourt County, Hydrologic Unit 02080201, at culvert on State Highway 606, 5.3 mi northwest of Fincastle.

DRAINAGE AREA.--1.51 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined. Prior to Oct. 7, 1973, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--7 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1968	-	<3.00	<100	1972	-	<2.50	<55
1969	Oct. 19, 1968	3.50	150	1973	May 28, 1973	3.90	190
1970	-	<3.00	<100	1974	-	<2.50	<55
1971	-	<3.00	<100	1975	Mar. 19, 1975	2.55	60

< Less than.

JAMES RIVER BASIN

02018800 NORTH FORK NEAR FINCASTLE, VA

LOCATION.--Lat 37°32'07", long 79°56'03", Botetourt County, Hydrologic Unit 02080201, on left upstream wingwall of culvert on State Highway 606, 3.5 mi upstream from mouth, and 3.9 mi northwest of Fincastle.

DRAINAGE AREA.--4.17 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,248.65 ft above National Geodetic Vertical Datum of 1929. Prior to Aug. 17, 1978, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1969	Oct. 19, 1968	5.15	304	1980	Apr. 14, 1980	9.25	1,100
1970	Dec. 31, 1969	4.45	203	1981	May 28, 1981	6.44	519
1971	Feb. 13, 1971	5.15	304	1982	Feb. 3, 1982	4.20	168
1972	June 21, 1972	7.00	620	1983	Mar. 18, 1983	7.17	654
1973	May 28, 1973	8.10	840	1984	May 6, 1984	5.55	368
1974	May 12, 1974	4.85	259	1985	Feb. 2, 1985	3.89	126
1975	Mar. 19, 1975	5.57	371	1986	Nov. 4, 1985	10.39	3,470
1976	May 29, 1976	4.35	189	1987	Apr. 16, 1987	10.76	3,870
1977	Mar. 13, 1977	6.10	458	1988	Jan. 20, 1988	3.46	78
1978	Jan. 26, 1978	6.25	485	1989	May 6, 1989	5.58	482
1979	Sept. 21, 1979	9.88	1,230	1990	Nov. 16, 1989	4.88	309

JAMES RIVER BASIN

02019000 CATAWBA CREEK NEAR FINCASTLE, VA

LOCATION.--Lat 37°33'00", long 79°50'05", Botetourt County, Hydrologic Unit 02080201, at highway bridge at Kyles Mills, 4 mi northeast of Fincastle.

DRAINAGE AREA.--104 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 994.05 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,600 ft³/s and extended to 7,700 ft³/s on basis of velocity-area studies and logarithmic plotting.

BANKFULL STAGE.--Not determined.

REMARKS.--Flood of August 1928 highest in memory from information by local residents while gage was in operation. Flood of November 1985 was probably higher but no data available for comparison.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1928	August 1928	20.0	7,700	1933	Oct. 17, 1932	15.2	3,890
1929	Feb. 28, 1929	10.5	1,550	1934	Mar. 4, 1934	9.6	1,330
1930	Oct. 2, 1929	15.0	3,750	1935	Jan. 23, 1935	18.02	6,000
1931	Aug. 2, 1931	10.0	1,430	1936	Mar. 17, 1936	14.27	3,330
1932	Mar. 6, 1932	10.4	1,520	1937	Jan. 2, 1937	19.4	7,160

JAMES RIVER BASIN

02019400 MILL CREEK NEAR BUCHANAN, VA
(Formerly published as Looney Mill Creek near Buchanan)

LOCATION.--Lat 37°29'48", long 79°45'28", Botetourt County, Hydrologic Unit 02080201, on right downstream abutment of bridge on State Highway 636, 300 ft southeast of U.S. Highway 11, and 5 mi southwest of Buchanan.

DRAINAGE AREA.--29.6 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 950 ft above National Geodetic Vertical Datum of 1929, from topographic map. Sept. 13, 1965, to Oct. 6, 1970, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 30 ft³/s and by contracted-opening measurements at 6,990 ft³/s and 7,680 ft³/s.

BANKFULL STAGE.--10 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1928	August 1928	a14	18,000	1962	Dec. 18, 1961	5.50	1,220
1950	Sept. 10, 1950	10.76	7,100	1963	July 28, 1963	7.75	2,800
1951	Dec. 7, 1950	7.6	2,650	1964	Mar. 6, 1964	6.20	1,620
1952	Sept. 1, 1952	7.2	2,300	1965	Feb. 7, 1965	5.50	1,220
1953	Mar. 24, 1953	6.8	2,000	1966	Sept. 14, 1966	7.00	2,200
1954	-	<5.2	<1,100	1967	Mar. 7, 1967	9.01	4,000
1955	Oct. 15, 1954	10.82	7,200	1968	-	<5.4	<1,200
1956	-	<5.2	<1,100	1969	Aug. 20, 1969	6.05	1,550
1957	Sept. 14, 1957	6.29	1,700	1970	-	<5.4	<1,200
1958	May 5, 1958	6.25	1,650	1971	Feb. 13, 1971	6.28	1,670
1959	Sept. 30, 1959	8.05	3,100	1972	June 21, 1972	9.08	4,370
1960	Feb. 3, 1960	8.10	3,150	1973	May 28, 1973	10.19	6,100
1961	Aug. 25, 1961	10.83	7,200	1974	-	<5.4	<1,200

< Less than.

a From information by local resident.

02019500 JAMES RIVER AT BUCHANAN, VA

LOCATION.--Lat 37°31'50", long 79°40'45", Botetourt County, Hydrologic Unit 02080201, on left bank 300 ft upstream from bridge on U.S. Highway 11 at Buchanan, 1,000 ft upstream from Purgatory Creek, 1.5 mi downstream from Looney Creek, and at mile 306.4.

DRAINAGE AREA.--2,075 mi².

GAGE.--Water-stage recorder. Datum of gage is 802.90 ft above National Geodetic Vertical Datum of 1929. Prior to July 1, 1927, nonrecording gage at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 110,000 ft³/s and extended above on basis of records for other stations in James River basin.

BANKFULL STAGE.--15 ft.

REMARKS.--Gage-height record for October 1892 to July 1927 provided by the National Weather Service. Flow regulated since December 1979 by Lake Moomaw, 79.6 mi upstream. Prior to flood of November 1985, the flood of November 1877 was reported by local residents to have been the highest since at least 1870.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1878	November 1877	a34.9	b142,000	1941	July 8, 1941	11.73	23,300
1886	April 1886	c27	85,000	1942	May 17, 1942	19.56	52,300
1889	March 1889	c27	85,000	1943	Mar. 14, 1943	15.19	35,100
1893	May 4, 1893	15.0	36,000	1944	Mar. 1, 1944	10.00	17,900
1894	Oct. 14, 1893	11.0	22,000	1945	Sept. 18, 1945	11.2	21,700
1895	Apr. 9, 1895	19.0	49,800	1946	Jan. 8, 1946	14.8	33,700
1896	Sept. 30, 1896	15.5	38,000	1947	Mar. 15, 1947	12.48	25,800
1897	Feb. 23, 1897	16.5	40,400	1948	Feb. 15, 1948	16.25	38,800
1898	May 7, 1898	12.0	25,700	1949	Apr. 14, 1949	20.18	54,800
1899	Mar. 5, 1899	19.5	51,900	1950	Feb. 2, 1950	14.73	33,300
1900	Mar. 20, 1900	11.4	23,800	1951	Dec. 8, 1950	18.95	49,800
1901	Nov. 26, 1900	21.4	59,800	1952	Mar. 12, 1952	17.73	42,000
1902	Mar. 1, 1902	25.0	76,000	1953	Feb. 22, 1953	19.15	48,000
1903	Mar. 24, 1903	17.5	43,800	1954	Mar. 2, 1954	18.75	46,400
1904	May 19, 1904	10.4	20,500	1955	Mar. 7, 1955	19.36	48,800
1905	June 13, 1905	15.4	36,800	1956	Apr. 17, 1956	10.03	15,800
1906	Jan. 23, 1906	11.5	24,000	1957	Apr. 6, 1957	18.78	46,400
1907	June 14, 1907	17.0	41,800	1958	Mar. 31, 1958	14.42	29,500
1908	Feb. 16, 1908	19.0	49,800	1959	Apr. 13, 1959	11.63	20,100
1909	Apr. 14, 1909	15.0	35,500	1960	Mar. 21, 1960	18.45	44,700
1910	June 14, 1910	16.0	38,800	1961	Feb. 26, 1961	12.40	22,600
1911	Jan. 3, 1911	12.0	25,700	1962	Oct. 21, 1961	17.68	42,000
1912	Mar. 30, 1912	16.5	39,900	1963	Mar. 13, 1963	22.30	61,800
1913	Mar. 27, 1913	31.0	115,000	1964	Mar. 6, 1964	14.27	27,500
1914	Feb. 20, 1914	10.0	17,900	1965	Feb. 8, 1965	16.28	35,600
1915	Feb. 2, 1915	20.0	56,100	1966	Feb. 14, 1966	16.44	36,000
1916	Dec. 30, 1915	13.0	28,800	1967	Mar. 8, 1967	20.77	55,000
1917	Mar. 5, 1917	17.7	44,600	1968	Mar. 13, 1968	12.46	21,500
1918	Mar. 14, 1918	17.3	43,000	1969	Aug. 20, 1969	23.37	65,800

JAMES RIVER BASIN

02019500 JAMES RIVER AT BUCHANAN, VA--Continued

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1919	Jan. 3, 1919	18.5	47,800	1970	Jan. 1, 1970	19.81	49,500
1920	Mar. 20, 1920	12.8	26,800	1971	May 31, 1971	19.07	46,600
1921	Jan. 23, 1921	12.0	24,400	1972	June 22, 1972	30.49	111,000
1922	Mar. 11, 1922	12.0	24,200	1973	May 29, 1973	20.38	52,900
1923	Mar. 7, 1923	10.3	18,800	1974	Dec. 27, 1973	24.17	73,400
1924	May 12, 1924	21.5	60,000	1975	Mar. 20, 1975	17.93	42,000
1925	Jan. 12, 1925	8.0	11,700	1976	Jan. 1, 1976	16.02	34,400
1926	Jan. 19, 1926	13.4	28,700	1977	Apr. 6, 1977	22.81	66,000
1927	Dec. 26, 1926	16.0	38,000	1978	Jan. 27, 1978	22.31	63,200
1928	Aug. 16, 1928	16.53	39,000	1979	Feb. 25, 1979	19.91	50,600
1929	Mar. 1, 1929	13.85	30,000	1980	Apr. 15, 1980	18.29	43,500
1930	Nov. 19, 1929	16.50	39,000	1981	May 29, 1981	15.10	30,700
1931	Mar. 30, 1931	8.12	12,000	1982	June 13, 1982	18.37	43,400
1932	Feb. 5, 1932	15.30	35,000	1983	Apr. 10, 1983	16.05	33,700
1933	Mar. 21, 1933	12.27	24,900	1984	Feb. 14, 1984	19.10	46,700
1934	Mar. 28, 1934	14.36	32,000	1985	Feb. 2, 1985	11.73	18,600
1935	Jan. 23, 1935	23.82	70,400	1986	Nov. 5, 1985	38.84	179,000
1936	Mar. 18, 1936	26.80	84,100	1987	Apr. 16, 1987	24.81	76,100
1937	Jan. 21, 1937	17.12	41,400	1988	Jan. 21, 1988	10.27	14,500
1938	Oct. 20, 1937	15.36	35,600	1989	May 6, 1989	16.29	35,000
1939	Jan. 31, 1939	15.63	36,200	1990	Jan. 1, 1990	14.95	29,800
1940	May 31, 1940	17.00	41,100				

a From information by local residents.

b Approximate.

c From information provided by Chesapeake and Ohio Railway.

02020100 RENICK RUN NEAR BUCHANAN, VA

LOCATION.--Lat 37°35'27", long 79°38'04", Botetourt County, Hydrologic Unit 02080201, on left upstream wingwall of culvert on Frontage Road of Interstate Highway 81 between exits 48 and 49, 2.2 mi upstream from mouth, and 4.8 mi northeast of Buchanan.

DRAINAGE AREA.--2.06 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,261.85 ft above National Geodetic Vertical Datum of 1929. Prior to Nov. 7, 1978, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--4 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1967	Mar. 7, 1967	6.57	580	1979	Sept. 21, 1979	8.48	926
1968	Mar. 17, 1968	4.15	230	1980	Apr. 14, 1980	4.66	296
1969	Aug. 20, 1969	9.90	1,210	1981	May 28, 1981	3.50	150
1970	Apr. 2, 1970	3.70	174	1982	June 13, 1982	4.78	311
1971	May 30, 1971	4.55	282	1983	Apr. 24, 1983	5.24	376
1972	June 21, 1972	4.55	282	1984	Aug. 11, 1984	4.78	311
1973	May 28, 1973	8.45	920	1985	Aug. 18, 1985	3.13	113
1974	Dec. 21, 1973	3.48	148	1986	Nov. 4, 1985	5.88	472
1975	Sept. 1, 1975	6.50	570	1987	Sept. 7, 1987	9.74	1,190
1976	Oct. 17, 1975	5.97	486	1988	July 21, 1988	5.76	454
1977	Oct. 9, 1976	5.55	422	1989	May 6, 1989	5.23	374
1978	Jan. 26, 1978	5.15	362	1990	Nov. 16, 1989	6.06	500

02020200 CALFPASTURE RIVER NEAR WEST AUGUSTA, VA

LOCATION.--Lat 38°16'24", long 79°18'00", Augusta County, Hydrologic Unit 02080202, at bridge on U.S. Highway 250, 1.5 mi east of West Augusta, and 9 mi west of Churchville.

DRAINAGE AREA.--12.8 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,897.46 ft above National Geodetic Vertical Datum of 1929. Aug. 11, 1965, to Aug. 22, 1973, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 14 ft³/s and extended above on basis of slope-area measurement at 1,840 ft³/s.

BANKFULL STAGE.--5 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1949	June 17, 1949	6.6	4,800	1963	Mar. 12, 1963	3.03	560
1950	-	<1.3	<85	1964	Mar. 5, 1964	2.39	320
1951	Dec. 7, 1950	4.0	1,180	1965	Feb. 7, 1965	3.10	600
1952	Mar. 11, 1952	1.98	210	1966	Apr. 24, 1966	2.86	490
1953	Feb. 21, 1953	2.34	300	1967	Mar. 7, 1967	3.66	940
1954	Mar. 1, 1954	4.74	1,840	1968	May 28, 1968	2.41	310
1955	Aug. 19, 1955	2.83	480	1969	Aug. 20, 1969	2.41	310
1956	Mar. 14, 1956	1.35	94	1970	Dec. 31, 1969	2.81	474
1957	Apr. 5, 1957	3.15	640	1971	May 30, 1971	5.46	2,810
1958	Dec. 26, 1957	1.79	170	1972	June 21, 1972	3.56	846
1959	June 2, 1959	4.01	1,180	1973	Oct. 5, 1972	5.71	3,160
1960	May 8, 1960	3.54	880	1974	Dec. 26, 1973	3.41	756
1961	Feb. 26, 1961	2.73	440	1975	Mar. 19, 1975	3.72	954
1962	Oct. 21, 1961	2.56	380	1976	Dec. 31, 1975	2.08	226

< Less than.

02020500 CALFPASTURE RIVER ABOVE MILL CREEK, AT GOSHEN, VA

LOCATION.--Lat 37°59'16", long 79°29'38", Rockbridge County, Hydrologic Unit 02080202, on left bank 20 ft upstream from bridge on State Highway 42 at Goshen and 400 ft upstream from Mill Creek.

DRAINAGE AREA.--144 mi².

GAGE.--Water-stage recorder. Datum of gage is 1,384.84 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 9,200 ft³/s and extended above on basis of slope-area measurements at 16,500 ft³/s and 56,100 ft³/s.

BANKFULL STAGE.--8 ft.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1939	Feb. 4, 1939	7.67	4,900	1965	Feb. 8, 1965	7.88	5,230
1940	May 31, 1940	9.03	7,010	1966	Feb. 13, 1966	7.03	3,760
1941	Apr. 5, 1941	5.73	2,300	1967	Mar. 7, 1967	10.32	10,100
1942	May 16, 1942	10.38	10,200	1968	Mar. 17, 1968	6.78	3,500
1943	Oct. 16, 1942	8.38	6,120	1969	Aug. 20, 1969	8.06	5,600
1944	May 7, 1944	6.39	3,110	1970	Dec. 31, 1969	8.44	6,170
1945	Sept. 18, 1945	7.00	3,910	1971	May 30, 1971	11.97	16,600
1946	Jan. 8, 1946	6.26	2,920	1972	June 22, 1972	11.43	13,600
1947	Mar. 14, 1947	6.71	3,500	1973	Oct. 6, 1972	12.78	20,900
1948	Feb. 14, 1948	7.00	3,910	1974	Dec. 26, 1973	12.19	17,600
1949	June 18, 1949	12.14	14,800	1975	Mar. 19, 1975	10.90	11,600
1950	Sept. 10, 1950	8.97	7,240	1976	Jan. 1, 1976	7.26	4,210
1951	Dec. 8, 1950	10.43	10,200	1977	Oct. 9, 1976	10.75	11,200
1952	Mar. 11, 1952	7.83	5,080	1978	Jan. 26, 1978	11.70	15,000
1953	Feb. 21, 1953	9.87	9,080	1979	Sept. 6, 1979	11.76	15,600
1954	Mar. 1, 1954	10.74	10,900	1980	Apr. 14, 1980	7.13	3,910
1955	Oct. 16, 1954	8.58	6,480	1981	May 20, 1981	5.01	1,530
1956	Mar. 14, 1956	5.29	1,520	1982	May 13, 1982	10.66	10,900
1957	Apr. 5, 1957	9.32	7,840	1983	Apr. 24, 1983	7.11	4,040
1958	Dec. 26, 1957	5.98	2,280	1984	Feb. 14, 1984	8.70	6,740
1959	June 2, 1959	8.42	6,120	1985	Aug. 18, 1985	7.56	4,640
1960	May 8, 1960	8.06	5,600	1986	Nov. 4, 1985	20.23	56,300
1961	Feb. 26, 1961	6.03	2,520	1987	Apr. 17, 1987	7.80	5,120
1962	Oct. 21, 1961	7.45	4,360	1988	Jan. 20, 1988	4.62	1,870
1963	Mar. 12, 1963	8.54	6,360	1989	Aug. 25, 1989	6.49	3,540
1964	Mar. 5, 1964	6.25	2,810	1990	Nov. 16, 1989	7.23	4,380

JAMES RIVER BASIN

02021000 CALFPASTURE RIVER AT GOSHEN, VA

LOCATION.--Lat 37°59'10", long 79°29'38", Rockbridge County, Hydrologic Unit 02080202, at downstream side of highway bridge at Goshen, 500 ft downstream from Mill Creek.

DRAINAGE AREA.--190 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,381.69 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,900 ft³/s and extended to 20,000 ft³/s on basis of logarithmic plotting and comparison with peak discharge at other stations in the James River basin.

BANKFULL STAGE.--8 ft.

REMARKS.--Flood in 1922 reported by local resident to have been 2 ft higher than flood in March 1936.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1926	Jan. 19, 1926	8.2	5,980	1933	Oct. 17, 1932	10.0	11,600
1927	Nov. 16, 1926	10.0	11,600	1934	Mar. 28, 1934	6.2	3,140
1928	Oct. 13, 1927	7.3	4,380	1935	Jan. 23, 1935	9.9	11,200
1929	Apr. 16, 1929	8.6	6,930	1936	Mar. 17, 1936	11.71	20,000
1930	Nov. 18, 1929	8.8	7,500	1937	Apr. 26, 1937	8.0	5,570
1931	Mar. 29, 1931	5.3	2,190	1938	Oct. 19, 1937	9.8	10,900
1932	Feb. 4, 1932	8.5	6,670				

JAMES RIVER BASIN

02021100 BRATTONS RUN TRIBUTARY NEAR GOSHEN, VA

LOCATION.--Lat 37°55'55", long 79°34'40", Rockbridge County, Hydrologic Unit 02080202, at culvert on State Highway 780, 5.8 mi southwest of Goshen.

DRAINAGE AREA.--1.62 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined. Prior to Apr. 17, 1972, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--3 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1966	-	<3.00	<45	1971	-	<3.00	<45
1967	-	<3.00	<45	1972	June 21, 1972	3.89	90
1968	-	<3.00	<45	1973	May 28, 1973	3.55	70
1969	Aug. 20, 1969	9.20	670	1974	May 12, 1974	3.52	69
1970	-	<3.00	<45	1975	Mar. 19, 1975	4.55	128

< Less than.

02021500 MAURY RIVER AT ROCKBRIDGE BATHS, VA

LOCATION.--Lat 37°54'26", Long 79°25'20", Rockbridge County, Hydrologic Unit 02080202, on right bank at Rockbridge Baths, 1,200 ft upstream from bridge on State Highway 39, and 1.0 mi upstream from Hays Creek.

DRAINAGE AREA.--329 mi².

GAGE.--Water-stage recorder. Datum of gage is 1,100.33 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers).

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 16,000 ft³/s and extended above.

BANKFULL STAGE.--8 ft.

REMARKS.--Since 1966, some regulation at times by Lake Merriweather on Little Calpasture River 5.7 mi upstream.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1929	Apr. 16, 1929	8.50	9,550	1960	Mar. 30, 1960	8.54	9,550
1930	Nov. 18, 1929	8.58	9,900	1961	Apr. 13, 1961	6.50	4,500
1931	Mar. 29, 1931	5.16	2,600	1962	Oct. 21, 1961	9.68	14,000
1932	Feb. 4, 1932	8.20	8,600	1963	Mar. 12, 1963	9.08	11,600
1933	Oct. 17, 1932	9.00	11,300	1964	Mar. 4, 1964	6.64	4,920
1934	Mar. 3, 1934	6.97	5,400	1965	Feb. 8, 1965	7.87	7,550
1935	Jan. 23, 1935	10.08	15,600	1966	Feb. 13, 1966	7.45	6,540
1936	Mar. 17, 1936	13.07	33,000	1967	Mar. 7, 1967	9.48	13,100
1937	Jan. 20, 1937	8.36	9,200	1968	Mar. 17, 1968	7.04	5,670
1938	Oct. 19, 1937	9.44	12,800	1969	Aug. 20, 1969	11.48	22,900
1939	Feb. 4, 1939	8.16	8,600	1970	Dec. 31, 1969	8.88	10,900
1940	May 31, 1940	9.13	11,600	1971	May 30, 1971	10.73	18,600
1941	Apr. 5, 1941	6.76	5,000	1972	June 22, 1972	10.81	19,000
1942	May 22, 1942	10.53	17,500	1973	Oct. 6, 1972	10.27	16,400
1943	Oct. 16, 1942	8.94	11,000	1974	Dec. 27, 1973	11.05	20,300
1944	May 7, 1944	7.34	6,290	1975	Mar. 19, 1975	10.28	16,400
1945	Sept. 18, 1945	7.23	6,060	1976	Jan. 1, 1976	7.70	7,150
1946	Jan. 8, 1946	6.60	4,700	1977	Oct. 9, 1976	9.93	14,900
1947	Mar. 14, 1947	7.6	6,900	1978	Jan. 26, 1978	10.98	19,900
1948	Feb. 14, 1948	7.75	7,280	1979	Sept. 6, 1979	9.48	13,100
1949	June 18, 1949	10.07	15,600	1980	Apr. 14, 1980	8.19	8,560
1950	Sept. 10, 1950	9.1	11,600	1981	June 4, 1981	5.52	3,190
1951	Dec. 8, 1950	9.80	14,400	1982	June 13, 1982	10.68	18,400
1952	Mar. 11, 1952	8.64	9,900	1983	Apr. 24, 1983	7.91	7,730
1953	Feb. 21, 1953	9.40	12,800	1984	Feb. 14, 1984	8.89	10,900
1954	Mar. 1, 1954	9.75	14,400	1985	Nov. 29, 1984	7.64	7,060
1955	Oct. 16, 1954	8.40	9,200	1986	Nov. 5, 1985	19.19	87,700
1956	Mar. 14, 1956	6.02	3,650	1987	Apr. 16, 1987	9.14	11,800
1957	Apr. 5, 1957	9.03	11,300	1988	Jan. 20, 1988	5.86	3,650
1958	Apr. 1, 1958	6.35	4,220	1989	May 6, 1989	8.00	7,990
1959	June 3, 1959	7.85	7,550	1990	Nov. 16, 1989	8.47	9,450

02021700 CEDAR GROVE BRANCH NEAR ROCKBRIDGE BATHS, VA

LOCATION.--Lat 37°53'00", long 79°23'10", Rockbridge County, Hydrologic Unit 02080202, on right upstream wingwall of culvert on State Highway 39, 0.1 mi upstream from mouth, and 1.8 mi southeast of Rockbridge Baths.

DRAINAGE AREA.--12.3 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,041.22 ft above National Geodetic Vertical Datum of 1929. Prior to Apr. 2, 1975, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--4 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1967	Mar. 7, 1967	7.0	364	1979	Sept. 22, 1979	10.58	806
1968	-	<4.0	<90	1980	Apr. 14, 1980	6.60	321
1969	Aug. 20, 1969	31.2	7,300	1981	Sept. 7, 1981	a20.72	1,050
1970	Dec. 31, 1969	4.75	150	1982	June 13, 1982	7.50	420
1971	Feb. 13, 1971	5.82	242	1983	Apr. 24, 1983	7.26	394
1972	June 21, 1972	7.10	376	1984	Aug. 12, 1984	9.62	712
1973	May 28, 1973	19.00	1,400	1985	June 10, 1985	5.57	217
1974	Sept. 6, 1974	9.75	735	1986	Nov. 4, 1985	10.87	830
1975	Mar. 19, 1975	7.97	476	1987	Apr. 16, 1987	6.39	299
1976	Dec. 31, 1975	5.62	222	1988	Jan. 20, 1988	3.94	86
1977	Oct. 9, 1976	8.11	492	1989	May 6, 1989	5.14	178
1978	Jan. 26, 1978	9.50	700	1990	Nov. 16, 1989	5.51	211

< Less than.

a Affected by backwater from debris jam.

02022500 KERRS CREEK NEAR LEXINGTON, VA

LOCATION.--Lat 37°49'32", long 79°26'36", Rockbridge County, Hydrologic Unit 02080202, on right bank 100 ft upstream from bridge on Interstate Highway 64, 1.4 mi upstream from mouth, and 2.9 mi north of Lexington.

DRAINAGE AREA.--35.0 mi².

GAGE.--Water-stage recorder. Datum of gage is 980.32 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers). Jan. 27, 1927, to Sept. 30, 1953, nonrecording gage at site 1,000 ft downstream at different datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 800 ft³/s and extended above on basis of contracted-opening measurement and slope-area measurement at 23,000 ft³/s. Since 1953, defined by current-meter measurements below 1,730 ft³/s and extended above on basis of slope-area measurements at 4,160 ft³/s and 13,800 ft³/s.

BANKFULL STAGE.--6 ft.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1927	Feb. 23, 1927	a7.75	1,500	1959	Sept. 30, 1959	8.51	4,680
1928	Aug. 16, 1928	a8.50	2,090	1960	Oct. 24, 1959	10.46	8,400
1929	Apr. 16, 1929	a7.40	1,200	1961	May 9, 1961	5.44	862
1930	Mar. 6, 1930	a8.15	1,820	1962	Oct. 20, 1961	8.42	3,980
1931	Aug. 2, 1931	a7.30	1,130	1963	Mar. 12, 1963	6.92	2,100
1932	Mar. 6, 1932	a8.0	1,780	1964	Feb. 6, 1964	5.60	1,010
1933	Apr. 16, 1933	a9.0	3,320	1965	July 11, 1965	7.13	2,400
1934	June 18, 1934	a8.0	1,780	1966	Feb. 13, 1966	5.65	1,040
1935	Dec. 1, 1934	a9.0	3,320	1967	Mar. 7, 1967	7.35	2,640
1936	Mar. 17, 1936	a10.8	7,600	1968	Mar. 16, 1968	5.10	695
1937	Apr. 25, 1937	a8.4	2,300	1969	Aug. 19, 1969	13.38	13,800
1938	Oct. 19, 1937	a9.5	4,380	1970	Dec. 31, 1969	5.72	1,080
1939	Jan. 30, 1939	a8.5	2,460	1971	Feb. 13, 1971	5.90	1,220
1940	Aug. 31, 1940	a10.5	7,100	1972	June 21, 1972	7.92	3,300
1941	Apr. 5, 1941	a7.2	1,060	1973	May 28, 1973	7.27	2,320
1942	May 22, 1942	a10.0	5,660	1974	May 12, 1974	7.20	2,220
1943	Oct. 14, 1942	a7.2	1,060	1975	Mar. 19, 1975	7.47	2,760
1944	Mar. 7, 1944	a6.7	765	1976	Oct. 18, 1975	6.90	2,100
1945	Oct. 20, 1944	a7.0	940	1977	Oct. 9, 1976	7.26	2,520
1946	Jan. 7, 1946	a6.8	820	1978	Jan. 26, 1978	8.57	4,300
1947	Mar. 14, 1947	a7.3	1,130	1979	Sept. 21, 1979	8.87	4,810
1948	Mar. 31, 1948	a9.7	4,860	1980	Apr. 14, 1980	7.48	2,740
1949	Apr. 13, 1949	a10.0	5,660	1981	Feb. 11, 1981	4.40	345
1950	Sept. 10, 1950	a13.8	23,000	1982	June 13, 1982	7.39	2,620
1951	July 14, 1951	a9.3	5,260	1983	Apr. 10, 1983	6.59	1,740
1952	Mar. 11, 1952	a9.04	4,620	1984	Aug. 13, 1984	8.15	3,610
1953	July 1, 1953	a8.45	3,560	1985	Nov. 28, 1984	5.50	880
1954	Mar. 1, 1954	9.28	6,700	1986	Nov. 4, 1985	11.37	9,450
1955	Oct. 15, 1954	7.18	2,480	1987	Sept. 7, 1987	10.02	6,800
1956	Mar. 14, 1956	4.46	391	1988	Jan. 20, 1988	4.37	334
1957	Apr. 5, 1957	5.99	1,250	1989	Sept. 16, 1989	7.85	3,190
1958	Mar. 31, 1958	5.21	720	1990	Oct. 17, 1989	8.93	4,860

a At different datum at site 1,000 ft downstream.

JAMES RIVER BASIN

02023000 MAURY RIVER NEAR LEXINGTON, VA
(Formerly published as North River near Lexington)

LOCATION.--Lat 37°48'49", long 79°26'42", Rockbridge County, Hydrologic Unit 02080202, 900 ft upstream from Lime Kiln highway bridge, 0.2 mi downstream from Kerrs Creek, and 2.8 mi upstream from Lexington.

DRAINAGE AREA.--487 mi².

GAGE.--Water-stage recorder. Datum of gage is 906.56 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers).

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 9,000 ft³/s and extended to 40,000 ft³/s by logarithmic plotting and on basis of records for other stations in the James River basin.

BANKFULL STAGE.--9 ft.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Water Control Board. Flood of March 1936 reported to be highest known since 1877.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1926	Jan. 18, 1926	9.74	6,730	1944	May 7, 1944	9.52	6,680
1927	Nov. 16, 1926	11.42	9,150	1945	Sept. 18, 1945	9.41	6,540
1928	Aug. 17, 1928	9.45	6,310	1946	Jan. 8, 1946	8.67	5,560
1929	Apr. 16, 1929	11.95	10,000	1947	Mar. 14, 1947	10.20	7,700
1930	Nov. 18, 1929	-	15,000	1948	Feb. 14, 1948	10.80	8,630
1931	May 21, 1931	6.63	2,950	1949	June 18, 1949	13.98	14,500
1932	Feb. 5, 1932	11.05	8,650	1950	Sept. 10, 1950	18.0	23,700
1933	Oct. 18, 1932	12.63	11,100	1951	Dec. 8, 1950	14.28	15,100
1934	Mar. 3, 1934	9.42	6,360	1952	Mar. 11, 1952	12.78	12,100
1935	Dec. 1, 1934	14.29	13,800	1953	Feb. 21, 1953	13.66	13,900
1936	Mar. 18, 1936	23.58	40,000	1954	Mar. 1, 1954	14.22	14,900
1937	Jan. 21, 1937	11.97	10,200	1955	Oct. 15, 1954	11.80	10,300
1938	Oct. 19, 1937	14.03	13,400	1956	Mar. 14, 1956	7.5	4,100
1939	Feb. 4, 1939	11.18	8,950	1957	Apr. 6, 1957	13.16	12,900
1940	May 31, 1940	13.08	11,900	1958	Apr. 1, 1958	8.47	5,280
1941	Apr. 5, 1941	8.93	5,840	1959	June 3, 1959	10.28	7,850
1942	May 22, 1942	16.77	20,700	1960	Mar. 30, 1960	12.15	11,000
1943	Oct. 16, 1942	12.92	12,300	1969	Aug. 20, 1969	27.08	52,000

02023300 SOUTH RIVER NEAR STEELES TAVERN, VA
(Formerly published as St. Marys River near Steeles Tavern)

LOCATION.--Lat 37°55'50", long 79°09'55", Augusta County, Hydrologic Unit 02080202, at bridge on State Highway 608, 2.5 mi northeast of Vesuvius, 3 mi east of Steeles Tavern, and 5 mi south of Greenville.

DRAINAGE AREA.--15.7 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined. July 12, 1965, to Sept. 10, 1975, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 360 ft³/s and extended above on basis of slope-area measurement at 2,800 ft³/s.

BANKFULL STAGE.--4 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1951	Dec. 4, 1950	5.1	1,500	1971	May 30, 1971	2.58	274
1952	Mar. 11, 1952	3.9	790	1972	June 21, 1972	5.80	2,040
1953	Dec. 11, 1952	2.91	370	1973	Oct. 5, 1972	4.25	1,000
1954	Mar. 1, 1954	4.57	1,150	1974	Dec. 21, 1973	3.75	700
1955	Aug. 18, 1955	6.52	2,770	1975	Mar. 19, 1975	5.20	1,620
1956	September 1956	2.81	340	1976	-	<3.7	<700
1957	Apr. 5, 1957	3.77	720	1977	Oct. 9, 1976	4.21	976
1958	Dec. 26, 1957	3.82	750	1978	Oct. 26, 1978	5.67	1,950
1959	Sept. 30, 1959	4.43	1,080	1979	Sept. 22, 1979	5.16	1,590
1960	Oct. 24, 1959	4.48	1,100	1980	Apr. 14, 1980	3.91	805
1961	Apr. 13, 1961	3.04	420	1981	-	<3.67	<685
1962	Oct. 21, 1961	5.45	1,800	1982	-	<3.67	<685
1963	Mar. 12, 1963	3.37	540	1983	Apr. 24, 1983	3.86	780
1964	Jan. 25, 1964	3.30	520	1984	Feb. 14, 1984	4.60	1,210
1965	Feb. 7, 1965	4.49	1,150	1985	Nov. 28, 1984	3.73	715
1966	Feb. 13, 1966	3.60	650	1986	Nov. 4, 1985	6.53	2,680
1967	Mar. 7, 1967	4.20	970	1987	Apr. 16, 1987	3.84	770
1968	May 27, 1968	3.00	400	1988	-	<3.68	<685
1969	Aug. 20, 1969	8.70	4,700	1989	-	<3.68	<685
1970	Dec. 31, 1969	3.35	540	1990	-	<3.68	<690

< Less than.

02023500 SOUTH RIVER NEAR RIVERSIDE, VA

LOCATION.--Lat 37°47'00", long 79°21'35", Rockbridge County, Hydrologic Unit 02080202, on right bank 20 ft upstream from highway bridge, 1.1 mi southwest of Riverside, 1.9 mi upstream from mouth, and 4 mi east of Lexington.

DRAINAGE AREA.--111 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 910 ft above National Geodetic Vertical Datum of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 2,300 ft³/s for period 1950-58, and below 3,000 ft³/s for 1959 and extended above. A large shift occurred in June 1959 as a result of bulldozing of channel.

BANKFULL STAGE.--4 ft.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Water Control Board. Flood of August 1969 is highest known since at least 1936.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1936	March 1936	13.7	25,000	1956	Feb. 7, 1956	4.83	472
1950	June 10, 1950	6.14	1,360	1958	Mar. 31, 1958	6.89	1,950
1951	Dec. 7, 1950	8.67	3,860	1959	Sept. 30, 1959	7.12	3,740
1952	Mar. 11, 1952	7.30	2,310	1960	May 8, 1960	6.51	2,840
1953	Mar. 24, 1953	6.25	1,440	1961	Apr. 13, 1961	4.90	990
1954	Mar. 1, 1954	8.78	4,000	1962	Oct. 21, 1961	8.63	6,300
1955	Oct. 15, 1954	9.44	4,890	1969	Aug. 20, 1969	15.2	35,000

a From information by local residents.

02024000 MAURY RIVER NEAR BUENA VISTA, VA

LOCATION.--Lat 37°45'45", long 79°23'30", Rockbridge County, Hydrologic Unit 02080202, on right bank 0.5 mi downstream from South River and 2.8 mi northwest of Buena Vista.

DRAINAGE AREA.--646 mi².

GAGE.--Water-stage recorder. Datum of gage is 846.58 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 17,000 ft³/s and extended above on basis of slope-area measurement at 105,000 ft³/s.

BANKFULL STAGE.--10 ft.

REMARKS.--Since 1966, some regulation at times by Lake Merriweather on Little Calfpasture River 27 mi upstream.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1936	Mar. 18, 1936	a22.0	-	1965	Feb. 8, 1965	10.61	9,020
1939	Feb. 4, 1939	-	11,000	1966	Feb. 13, 1966	10.12	8,120
1940	Aug. 16, 1940	13.36	14,700	1967	Mar. 7, 1967	13.74	15,500
1941	Apr. 5, 1941	9.33	6,790	1968	Mar. 17, 1968	9.30	6,790
1942	May 22, 1942	16.0	21,700	1969	Aug. 20, 1969	31.23	105,000
1943	Oct. 16, 1942	13.58	15,200	1970	Dec. 31, 1969	12.26	12,200
1944	May 7, 1944	10.2	8,300	1971	May 31, 1971	14.01	17,900
1945	Sept. 18, 1945	10.3	8,480	1972	June 21, 1972	17.10	27,800
1946	Jan. 8, 1946	9.24	6,630	1973	Oct. 6, 1972	13.20	15,800
1947	Mar. 14, 1947	10.59	9,020	1974	Dec. 27, 1973	14.63	19,700
1948	Feb. 14, 1948	11.54	10,700	1975	Mar. 20, 1975	14.07	18,100
1949	Dec. 4, 1948	13.84	15,600	1976	Jan. 1, 1976	9.41	8,240
1950	Sept. 10, 1950	16.2	22,400	1977	Oct. 9, 1976	12.69	14,700
1951	Dec. 8, 1950	13.76	15,600	1978	Jan. 26, 1978	15.46	22,300
1952	Mar. 11, 1952	12.75	13,400	1979	Sept. 6, 1979	11.28	11,700
1953	Feb. 21, 1953	12.88	13,600	1980	Apr. 14, 1980	10.63	10,400
1954	Mar. 1, 1954	13.80	15,600	1981	June 4, 1981	5.66	3,330
1955	Oct. 15, 1954	12.35	12,500	1982	June 13, 1982	14.55	19,400
1956	Mar. 14, 1956	7.85	4,770	1983	Apr. 24, 1983	9.73	9,260
1957	Apr. 6, 1957	12.39	12,500	1984	Feb. 14, 1984	12.36	14,400
1958	Apr. 1, 1958	8.80	6,010	1985	Nov. 29, 1984	9.01	8,020
1959	Sept. 30, 1959	10.58	9,020	1986	Nov. 5, 1985	26.30	72,100
1960	Mar. 31, 1960	12.20	12,100	1987	Apr. 16, 1987	13.36	16,600
1961	Apr. 13, 1961	8.84	6,010	1988	Jan. 20, 1988	6.37	4,180
1962	Oct. 21, 1961	16.2	22,400	1989	May 6, 1989	10.84	11,300
1963	Mar. 12, 1963	13.70	15,400	1990	Nov. 16, 1989	9.88	9,520
1964	Jan. 25, 1964	9.06	6,470				

a From information by local residents.

JAMES RIVER BASIN

02024300 BUFFALO CREEK NEAR GLASGOW, VA

LOCATION.--Lat 37°41'10", long 79°26'03", Rockbridge County, Hydrologic Unit 02080202, near right bank on upstream side of bridge on State Highway 608, 100 ft downstream from Falling Spring Run, 1 mi upstream from mouth, and 4 mi northeast of Glasgow.

DRAINAGE AREA.--123 mi².

GAGE.--Nonrecording gage (wire-weight gage and crest-stage gage indicator; gage read twice daily). Datum of gage is 749.83 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 2,870 ft³/s and extended above.

BANKFULL STAGE.--Not determined.

REMARKS.--Records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1950	Sept. 10, 1950	a23	-	1964	Apr. 14, 1964	5.72	2,150
1963	Mar. 12, 1963	7.36	3,960				

a From information by local residents.

JAMES RIVER BASIN

02024500 MAURY RIVER NEAR GLASGOW, VA
(Formerly published as North River at Glasgow)

LOCATION.--Lat 37°37'52", long 79°26'38", Rockbridge County, Hydrologic Unit 02080202, at highway bridge 0.8 mi from post office at Glasgow, 1 mi above mouth.

DRAINAGE AREA.--831 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 710 ft above National Geodetic Vertical Datum of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 11,000 ft³/s and extended above by logarithmic plotting.

BANKFULL STAGE.--13 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1896	Sept. 30, 1896	16.0	37,200	1901	June 16, 1901	8.9	16,100
1897	Feb. 23, 1897	10.0	16,900	1902	Dec. 29, 1901	16.0	42,000
1898	Aug. 11, 1898	9.8	16,300	1903	Feb. 17, 1903	10.0	19,500
1899	Mar. 5, 1899	13.05	30,000	1904	May 19, 1904	5.5	7,400
1900	Feb. 22, 1900	7.6	12,600	1905	July 13, 1905	9.4	17,600

02025000 PEDLAR RIVER NEAR PEDLAR MILLS, VA

LOCATION.--Lat 37°32'35", long 79°15'10", Amherst County, Hydrologic Unit 02080203, on right bank 6 ft downstream from highway bridge, 1.2 mi south of Pedlar Mills, 1.5 mi downstream from Horsley Mill Creek, and 3.7 mi upstream from mouth.

DRAINAGE AREA.--91 mi², approximately.

GAGE.--Water-stage recorder. Datum of gage is 656 ft above National Geodetic Vertical Datum of 1929, by barometer.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 2,200 ft³/s and extended above by logarithmic plotting.

BANKFULL STAGE.--9 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1942	Aug. 8, 1942	14.10	11,200	1950	Sept. 10, 1950	7.77	2,740
1943	Oct. 15, 1942	13.57	10,400	1951	Feb. 7, 1951	7.96	2,900
1944	Sept. 19, 1944	10.7	6,080	1952	Mar. 11, 1952	9.63	4,620
1945	Oct. 20, 1944	4.92	926	1953	Mar. 24, 1953	7.89	2,820
1946	Dec. 5, 1945	5.68	1,320	1954	Mar. 1, 1954	7.52	2,500
1947	June 14, 1947	6.38	1,660	1955	Aug. 18, 1955	11.28	6,890
1948	Apr. 1, 1948	9.84	4,860	1956	July 20, 1956	4.77	856
1949	Dec. 4, 1948	11.44	7,060	1969	Aug. 20, 1969	21.0	32,000

02025500 JAMES RIVER AT HOLCOMBS ROCK, VA

LOCATION.--Lat 37°30'04", long 79°15'46", Bedford County, Hydrologic Unit 02080203, on right bank at Holcombs Rock, 0.9 mi downstream from Pedlar River, and at mile 268.6.

DRAINAGE AREA.--3,259 mi².

GAGE.--Water-stage recorder. Datum of gage is 548.53 ft above National Geodetic Vertical Datum of 1929. January 1900 to September 1915, nonrecording gage in powerhouse of Owens Illinois Glass Company 1,000 ft upstream at different datum. December 1926 to June 1931, water-stage recorder at site 2 mi downstream at different datum.

STAGE-DISCHARGE RELATION.--Period 1900-17 defined by curves of relation based on stage graphs, flood stage of March 1913, and records for station at Buchanan. Defined by current-meter measurements below 17,000 ft³/s at 1927-31 site, below 73,000 ft³/s at present site, and extended above on basis of records for other stations in James River basin.

BANKFULL STAGE.--12 ft.

REMARKS.--Peak flows regulated to unknown degree since December 1979 by Lake Moonaw, 117.4 mi upstream. Records were provided by the Virginia Water Control Board from July 1, 1957, to Sept. 30, 1989.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1900	Mar. 21, 1900	a11.3	29,000	1950	Sept. 10, 1950	24.0	69,900
1901	Apr. 21, 1901	a16.5	52,000	1951	Dec. 8, 1950	22.83	62,700
1902	Mar. 1, 1902	a21.0	78,000	1952	Mar. 12, 1952	20.33	49,600
1903	Mar. 24, 1903	a16.6	53,000	1953	Feb. 22, 1953	21.63	56,100
1904	May 19, 1904	a11.8	31,000	1954	Mar. 2, 1954	22.8	62,700
1905	July 13, 1905	a17.7	58,000	1955	Mar. 7, 1955	23.33	65,900
1906	Jan. 24, 1906	a11.0	28,000	1956	Mar. 15, 1956	12.60	18,800
1907	Oct. 20, 1906	a19.5	69,000	1957	Apr. 6, 1957	22.36	60,500
1908	Jan. 13, 1908	a19.6	70,000	1958	Mar. 31, 1958	18.08	39,500
1909	Apr. 14, 1909	a17.5	58,000	1959	Sept. 30, 1959	15.49	29,000
1910	June 14, 1910	a15.9	50,000	1960	Mar. 31, 1960	22.00	58,300
1911	Jan. 31, 1911	a12.0	32,000	1961	Feb. 27, 1961	14.69	26,000
1912	Mar. 30, 1912	a17.0	55,000	1962	Oct. 21, 1961	21.87	57,800
1913	Mar. 28, 1913	b31.3	118,000	1963	Mar. 13, 1963	24.75	74,700
1914	Feb. 1, 1914	a10.2	25,000	1964	Mar. 6, 1964	16.25	31,700
1915	Jan. 7, 1915	a21.0	78,000	1965	Feb. 8, 1965	18.70	42,100
1916	Dec. 30, 1915	a10.5	26,000	1966	Feb. 14, 1966	18.35	40,800
1917	Mar. 5, 1917	a16.6	53,000	1967	Mar. 8, 1967	22.46	61,000
1927	Dec. 27, 1926	c14.51	45,000	1968	Mar. 14, 1968	14.73	26,000
1928	Aug. 16, 1928	c16.8	65,000	1969	Aug. 20, 1969	35.50	150,000
1929	Mar. 1, 1929	c12.83	37,300	1970	Jan. 1, 1970	22.20	59,400
1930	Nov. 19, 1929	c14.92	46,800	1971	May 31, 1971	22.62	61,600
1931	Mar. 30, 1931	c7.29	14,600	1972	June 22, 1972	32.38	126,000
1932	Feb. 5, 1932	17.90	38,700	1973	May 29, 1973	21.89	57,700
1933	Oct. 17, 1932	19.42	45,300	1974	Dec. 27, 1973	24.69	74,000
1934	Mar. 29, 1934	17.66	37,800	1975	Mar. 20, 1975	22.53	61,200
1935	Jan. 23, 1935	26.61	86,300	1976	Jan. 2, 1976	18.25	40,200
1936	Mar. 18, 1936	30.78	115,000	1977	Apr. 6, 1977	23.47	66,700

02025500 JAMES RIVER AT HOLCOMBS ROCK, VA--Continued

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1937	Jan. 21, 1937	21.15	53,100	1978	Jan. 26, 1978	25.59	79,700
1938	Oct. 20, 1937	22.52	59,000	1979	Feb. 26, 1979	24.56	73,300
1939	Jan. 31, 1939	18.62	41,600	1980	Apr. 15, 1980	21.84	57,400
1940	Aug. 16, 1940	24.25	66,800	1981	May 29, 1981	15.70	29,800
1941	July 8, 1941	14.35	25,000	1982	June 13, 1982	23.67	67,900
1942	May 22, 1942	24.62	68,700	1983	Apr. 11, 1983	18.97	43,400
1943	Dec. 31, 1942	18.48	41,200	1984	Feb. 15, 1984	22.63	61,800
1944	Sept. 19, 1944	16.6	33,300	1985	Aug. 19, 1985	14.29	24,600
1945	Sept. 19, 1945	15.7	29,800	1986	Nov. 5, 1985	42.15	207,000
1946	Jan. 8, 1946	17.94	38,700	1987	Apr. 17, 1987	28.36	97,900
1947	Mar. 15, 1947	15.90	30,600	1988	Jan. 21, 1988	12.14	17,400
1948	Feb. 15, 1948	19.9	47,600	1989	May 6, 1989	19.52	45,900
1949	Apr. 14, 1949	22.9	63,300	1990	Jan. 1, 1990	17.16	35,600

a At site 1,000 ft upstream at different datum.

b From high-water marks, present datum.

c At site 2.0 mi downstream at different datum.

JAMES RIVER BASIN

02025800 BURTON CREEK TRIBUTARY AT LYNCHBURG, VA

LOCATION.--Lat 37°21'10", long 79°11'05", Campbell County, Hydrologic Unit 02080203, at culvert on access road just west of U.S. Highway 29, 0.6 mi south of city limits of Lynchburg.

DRAINAGE AREA.--2.36 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 761.87 ft above National Geodetic Vertical Datum of 1929. Prior to Apr. 2, 1975, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements and computation of flow through culvert.

BANKFULL STAGE.--5 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1966	Feb. 13, 1966	4.58	-	1971	May 30, 1971	5.17	-
1967	Aug. 24, 1967	5.10	-	1972	June 21, 1972	7.88	790
1968	May 27, 1968	3.68	-	1973	July 17, 1973	6.10	-
1969	Mar. 24, 1969	4.28	228	1974	Sept. 6, 1974	5.65	-
1970	Apr. 2, 1970	5.40	-	1975	Mar. 19, 1975	6.00	-

02026000 JAMES RIVER AT BENT CREEK, VA

LOCATION.--Lat 37°32'10", long 78°49'30", Nelson County, Hydrologic Unit 02080203, on left bank at town of Bent Creek, 150 ft downstream from Bent Creek, 525 ft upstream from bridge on U.S. Highway 60, 1.3 mi southeast of Gladstone, and at mile 227.8.

DRAINAGE AREA.--3,683 mi².

GAGE.--Water-stage recorder. Datum of gage is 381.39 ft above National Geodetic Vertical Datum of 1929. Prior to Sept. 12, 1930, nonrecording gage at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 89,000 ft³/s and extended above on basis of slope-area measurement at 226,000 ft³/s.

BANKFULL STAGE.--16 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1870	Sept. 30, 1870	a27	150,000	1956	Mar. 15, 1956	8.70	17,600
1878	Nov. 24, 1877	a24	125,000	1957	Apr. 6, 1957	16.60	60,200
1886	Apr. 1, 1886	a19	79,000	1958	Apr. 1, 1958	13.39	41,200
1889	June 1, 1889	a19	79,000	1959	June 4, 1959	10.71	27,600
1925	May 1, 1925	6.05	7,060	1960	Mar. 31, 1960	16.19	58,400
1926	Jan. 20, 1926	12.33	35,000	1961	Feb. 27, 1961	10.68	27,600
1927	Dec. 27, 1926	14.58	48,800	1962	Oct. 22, 1961	16.42	59,800
1928	Aug. 17, 1928	18.80	74,000	1963	Mar. 13, 1963	18.47	75,500
1929	Mar. 1, 1929	13.08	39,800	1964	Mar. 7, 1964	11.55	32,000
1930	Nov. 19, 1929	14.60	48,800	1965	Feb. 9, 1965	13.62	42,300
1931	Aug. 23, 1931	8.21	15,200	1966	Feb. 15, 1966	13.16	40,100
1932	Feb. 6, 1932	13.30	41,000	1967	Mar. 8, 1967	16.23	58,600
1933	Oct. 18, 1932	15.32	51,300	1968	Mar. 14, 1968	10.53	26,200
1934	Mar. 29, 1934	12.65	35,800	1969	Aug. 20, 1969	24.77	144,000
1935	Jan. 24, 1935	20.22	91,000	1970	Jan. 1, 1970	16.08	57,600
1936	Mar. 18, 1936	23.02	115,000	1971	May 31, 1971	16.31	59,200
1937	Jan. 21, 1937	15.64	53,100	1972	June 21, 1972	27.13	176,000
1938	Oct. 20, 1937	16.76	60,700	1973	May 29, 1973	15.75	55,400
1939	Aug. 19, 1939	15.18	50,700	1974	Dec. 28, 1973	18.00	71,500
1940	Aug. 16, 1940	19.63	86,200	1975	Mar. 19, 1975	18.34	75,100
1941	July 8, 1941	10.5	25,200	1976	Jan. 2, 1976	12.86	37,700
1942	May 23, 1942	18.34	70,400	1977	Apr. 6, 1977	16.66	61,600
1943	Dec. 31, 1942	13.67	43,200	1978	Jan. 27, 1978	18.38	75,400
1944	Sept. 19, 1944	18.0	73,500	1979	Feb. 26, 1979	18.37	75,300
1945	Sept. 18, 1945	12.6	36,500	1980	Apr. 15, 1980	15.37	53,000
1946	Jan. 9, 1946	13.06	39,500	1981	May 29, 1981	10.72	27,800
1947	Mar. 16, 1947	11.57	30,800	1982	June 14, 1982	16.75	69,500
1948	Feb. 15, 1948	15.05	49,500	1983	Apr. 11, 1983	13.32	44,100
1949	Dec. 4, 1948	18.68	76,400	1984	Feb. 15, 1984	16.11	64,400
1950	Sept. 10, 1950	17.8	69,200	1985	Aug. 19, 1985	10.07	25,100
1951	Dec. 8, 1950	16.7	60,900	1986	Nov. 5, 1985	30.76	226,000
1952	Mar. 12, 1952	14.97	49,500	1987	Apr. 17, 1987	21.73	115,000
1953	Feb. 22, 1953	16.07	56,700	1988	Jan. 21, 1988	8.73	18,800
1954	Mar. 2, 1954	16.78	61,600	1989	May 6, 1989	14.13	49,600
1955	Mar. 7, 1955	17.28	65,100	1990	Jan. 1, 1990	11.95	35,600

a From flood profiles by U.S. Army Corps of Engineers.

02026500 TYE RIVER AT ROSELAND, VA

LOCATION.--Lat 37°45'13", long 78°59'12", Nelson County, Hydrologic Unit 02080203, 0.8 mi northwest of Roseland and 0.8 mi upstream from Hat Creek.

DRAINAGE AREA.--68 mi², approximately.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 643.3 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 600 ft³/s and extended above on basis of velocity-area studies.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1927 ^a	Apr. 22, 1927	5.54	676	1933	Oct. 17, 1932	9.1	4,310
1928	Aug. 16, 1928	8.65	3,490	1934	Sept. 16, 1934	10.02	6,000
1929	May 2, 1929	7.1	1,760	1935	Dec. 1, 1934	9.0	4,140
1930	Mar. 7, 1930	7.3	1,920	1936	Mar. 17, 1936	8.92	3,970
1931	Aug. 22, 1931	6.4	1,280	1937	Feb. 22, 1937	7.8	2,410
1932	Mar. 6, 1932	6.0	1,040	1938	Oct. 19, 1937	9.6	5,210

^a Partial year, February through September.

02027000 TYE RIVER NEAR LOVINGSTON, VA

LOCATION.--Lat 37°42'55", long 78°58'55", Nelson County, Hydrologic Unit 02080203, on right bank at downstream side of bridge on State Highway 158, 3.5 mi downstream from Hat Creek, 4.8 mi upstream from Piney River, and 6.8 mi southwest of Lovingsston.

DRAINAGE AREA.--92.8 mi².

GAGE.--Water-stage recorder. Datum of gage is 578.39 ft above National Geodetic Vertical Datum of 1929. Sept. 15, 1969, to Oct. 15, 1970, nonrecording gage at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 7,460 ft³/s and extended above on basis of slope-area measurement at 80,000 ft³/s.

BANKFULL STAGE.--5 ft.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1939	Aug. 19, 1939	11.13	6,900	1965	Feb. 7, 1965	9.20	5,000
1940	Aug. 16, 1940	11.94	7,700	1966	Feb. 13, 1966	6.44	2,600
1941	July 7, 1941	5.18	1,740	1967	Mar. 7, 1967	8.20	4,050
1942	May 16, 1942	12.09	7,910	1968	May 27, 1968	4.92	1,610
1943	Oct. 15, 1942	13.33	9,230	1969	Aug. 20, 1969	29.00	80,000
1944	Sept. 19, 1944	13.7	9,670	1970	Dec. 30, 1969	6.74	1,950
1945	Sept. 18, 1945	9.90	5,700	1971	Oct. 31, 1970	8.94	4,180
1946	Mar. 15, 1946	3.10	776	1972	June 21, 1972	14.34	12,200
1947	June 14, 1947	4.90	1,690	1973	Oct. 5, 1972	9.35	5,200
1948	Apr. 1, 1948	7.63	3,510	1974	May 12, 1974	5.97	2,390
1949	June 18, 1949	10.1	5,900	1975	Mar. 19, 1975	11.49	7,300
1950	Sept. 10, 1950	8.02	3,870	1976	June 29, 1976	4.44	1,480
1951	Dec. 7, 1950	8.86	4,700	1977	Oct. 9, 1976	10.18	6,000
1952	Mar. 11, 1952	10.82	6,600	1978	Jan. 26, 1978	10.92	6,700
1953	Mar. 24, 1953	7.17	3,150	1979	Sept. 22, 1979	13.78	11,100
1954	Mar. 1, 1954	5.46	1,760	1980	Apr. 9, 1980	7.84	3,730
1955	Aug. 18, 1955	11.50	7,300	1981	Sept. 6, 1981	9.18	4,980
1956	July 20, 1956	6.54	2,560	1982	June 13, 1982	5.94	2,350
1957	Feb. 26, 1957	7.18	3,150	1983	Apr. 2, 1983	8.69	4,490
1958	Apr. 23, 1958	5.43	1,810	1984	Aug. 12, 1984	9.27	5,070
1959	Sept. 30, 1959	7.90	3,780	1985	Aug. 20, 1985	5.98	2,380
1960	Oct. 24, 1959	8.03	3,870	1986	Nov. 4, 1985	14.46	12,700
1961	Feb. 25, 1961	5.88	2,080	1987	Apr. 17, 1987	7.83	3,720
1962	Oct. 21, 1961	8.98	4,800	1988	Mar. 26, 1988	2.99	965
1963	Nov. 10, 1962	5.67	1,930	1989	July 16, 1989	6.02	2,430
1964	Jan. 25, 1964	5.78	2,000	1990	May 10, 1990	8.57	4,380

02027500 PINEY RIVER AT PINEY RIVER, VA

LOCATION.--Lat 37°42'08", long 79°01'40", Nelson County, Hydrologic Unit 02080203, on left bank at upstream side of bridge on State Highway 151, 0.2 mi southwest of Piney River post office, 1.7 mi downstream from Indian Creek, and 2.5 mi southeast of Lowesville.

DRAINAGE AREA.--47.6 mi².

GAGE.--Water-stage recorder. Datum of gage is 633.58 ft above National Geodetic Vertical Datum of 1929. Prior to May 27, 1969, water-stage recorder, and Nov. 4, 1969, to Feb. 26, 1970, nonrecording gage at site 20 ft downstream from former highway bridge at same datum. Feb. 26, 1970, to Sept. 20, 1973, on right bank 20 ft upstream from bridge at same datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 5,940 ft³/s and extended above on basis of slope-area measurement at 38,000 ft³/s.

BANKFULL STAGE.--6 ft.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1949	June 18, 1949	a9.9	-	1970	Dec. 31, 1969	-	1,260
1950	Sept. 10, 1950	5.00	1,710	1971	Oct. 31, 1970	6.12	3,750
1951	Dec. 7, 1950	6.08	2,740	1972	June 21, 1972	9.95	10,000
1952	Mar. 11, 1952	5.31	1,930	1973	Oct. 5, 1972	8.37	5,760
1953	Mar. 24, 1953	4.89	1,570	1974	Dec. 21, 1973	4.17	1,340
1954	Mar. 1, 1954	3.36	608	1975	Mar. 19, 1975	6.19	2,830
1955	Aug. 18, 1955	7.90	4,930	1976	Dec. 31, 1975	2.71	540
1956	July 20, 1956	3.58	720	1977	Oct. 9, 1976	6.27	2,920
1957	Feb. 26, 1957	5.06	1,700	1978	Jan. 26, 1978	6.43	3,010
1958	Apr. 23, 1958	3.55	698	1979	Sept. 21, 1979	9.53	8,600
1959	Sept. 30, 1959	6.13	2,800	1980	Apr. 9, 1980	5.44	2,310
1960	July 27, 1960	6.52	3,180	1981	Sept. 6, 1981	2.42	521
1961	Feb. 25, 1961	3.90	870	1982	June 13, 1982	4.60	1,740
1962	Oct. 21, 1961	4.67	1,380	1983	Apr. 2, 1983	4.74	1,830
1963	Mar. 12, 1963	3.82	810	1984	Feb. 14, 1984	5.46	2,320
1964	Jan. 25, 1964	3.64	735	1985	Aug. 18, 1985	4.48	1,660
1965	Feb. 7, 1965	5.58	2,220	1986	Nov. 4, 1985	12.63	25,200
1966	Feb. 13, 1966	4.85	1,540	1987	Apr. 16, 1987	5.10	2,070
1967	Mar. 7, 1967	4.92	1,580	1988	Nov. 29, 1987	2.48	541
1968	May 27, 1968	3.30	570	1989	May 5, 1989	4.42	1,620
1969	Aug. 20, 1969	13.80	38,000	1990	May 10, 1990	4.79	1,860

a From high-water marks.

02027700 BUFFALO RIVER TRIBUTARY NEAR AMHERST, VA

LOCATION.--Lat 37°33'45", long 78°57'35", Amherst County, Hydrologic Unit 02080203, on left bank just upstream from culvert on U.S. Highway 60, 0.8 mi upstream from mouth, and 5.2 mi southeast of Amherst.

DRAINAGE AREA.--0.46 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 583.66 ft above National Geodetic Vertical Datum of 1929. Prior to Apr. 17, 1972, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--3 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1966	Feb. 13, 1966	3.27	28	1978	Mar. 26, 1978	3.50	35
1967	Jan. 27, 1967	3.14	24	1980	Apr. 9, 1980	2.95	19
1968	-	<3.0	<20	1981	May 28, 1981	3.36	31
1969	-	<3.0	<20	1982	June 13, 1982	3.17	25
1970	-	<3.0	<20	1983	Apr. 2, 1983	3.93	48
1971	May 30, 1971	3.32	30	1984	Feb. 14, 1984	3.81	44
1972	June 21, 1972	7.18	187	1985	Aug. 18, 1985	>2.96	>20
1973	Oct. 5, 1972	6.43	150	1986	Nov. 4, 1985	4.18	55
1974	Dec. 21, 1973	3.09	23	1987	Sept. 8, 1987	6.24	145
1975	Mar. 19, 1975	4.68	75	1988	May 18, 1988	3.06	22
1976	Dec. 31, 1975	3.10	23	1989	May 6, 1989	6.30	-
1977	Mar. 13, 1977	3.60	38	1990	-	<2.78	-

< Less than.

> Greater than. Mud in gage resulted in reading that is probably less than actual high-water level.

02027800 BUFFALO RIVER NEAR TYE RIVER, VA

LOCATION.--Lat 37°36'20", long 78°55'25", Nelson County, Hydrologic Unit 02080203, on right bank 35 ft upstream from bridge on State Highway 657, 2.1 mi upstream from mouth, and 3.5 mi southeast of town of Tye River.

DRAINAGE AREA.--147 mi².

GAGE.--Water-stage recorder. Datum of gage is 444.39 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 5,350 ft³/s and extended above on basis of flow-over-dam measurement at 6,150 ft³/s and slope-area measurement at 45,000 ft³/s.

BANKFULL STAGE.--8 ft.

REMARKS.--Records were provided by the Virginia Water Control Board from Aug. 1, 1960, to Sept. 30, 1989.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1961	Feb. 19, 1961	7.04	2,010	1976	Dec. 31, 1975	8.04	2,300
1962	Oct. 21, 1961	11.03	6,150	1977	Oct. 9, 1976	14.48	12,000
1963	Mar. 12, 1963	8.20	3,000	1978	Jan. 26, 1978	12.94	9,130
1964	Feb. 6, 1964	6.10	1,470	1979	June 3, 1979	18.00	19,000
1965	Feb. 7, 1965	11.18	6,400	1980	Oct. 3, 1979	8.73	3,500
1966	Feb. 28, 1966	9.12	3,910	1981	July 5, 1981	4.83	916
1967	Mar. 7, 1967	10.35	5,400	1982	June 13, 1982	9.02	3,820
1968	May 27, 1968	6.78	1,890	1983	Apr. 3, 1983	12.59	8,600
1969	Aug. 20, 1969	27.95	45,000	1984	Feb. 14, 1984	12.75	8,880
1970	Dec. 31, 1969	10.29	3,900	1985	Aug. 18, 1985	6.22	1,550
1971	Oct. 31, 1970	9.69	4,570	1986	Nov. 5, 1985	15.26	13,500
1972	June 21, 1972	25.22	36,600	1987	Sept. 8, 1987	10.05	4,950
1973	Oct. 5, 1972	19.90	22,800	1988	May 18, 1988	3.83	737
1974	Dec. 21, 1973	8.70	3,500	1989	May 6, 1989	13.13	9,520
1975	Mar. 19, 1975	14.80	12,600	1990	Jan. 1, 1990	7.81	2,930

JAMES RIVER BASIN

02028000 TYE RIVER NEAR NORWOOD, VA
(Formerly published as Buffalo River near Norwood)

LOCATION.--Lat 37°37'40", long 78°52'50", Nelson County, Hydrologic Unit 02080203, on right bank 1.0 mi downstream from Tye River, 3 mi upstream from Rucker Run, and 4.2 mi upstream from mouth and Norwood.

DRAINAGE AREA.--360 mi².

GAGE.--Water-stage recorder. Datum of gage is 400.78 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 12,600 ft³/s and extended on basis of slope-area measurement at 18,300 ft³/s and logarithmic plotting.

BANKFULL STAGE.--10 ft.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1940	Aug. 16, 1940	15.25	25,600	1951	June 13, 1951	7.77	8,170
1941	Dec. 29, 1940	5.58	4,220	1952	Mar. 11, 1952	7.60	7,770
1942	May 16, 1942	10.29	13,500	1953	Mar. 24, 1953	6.77	6,270
1943	Oct. 15, 1942	18.1	33,500	1954	Dec. 14, 1953	5.14	3,490
1944	Sept. 19, 1944	18.1	33,500	1955	Aug. 18, 1955	12.06	17,600
1945	Sept. 18, 1945	10.0	12,800	1956	Apr. 16, 1956	4.27	2,110
1946	Dec. 6, 1945	4.33	2,260	1957	Feb. 26, 1957	5.77	4,540
1947	June 14, 1947	5.37	3,810	1958	Apr. 22, 1958	5.35	3,810
1948	Aug. 4, 1948	10.79	14,600	1959	Dec. 29, 1958	4.92	3,090
1949	Mar. 23, 1949	14.28	23,200	1960	May 8, 1960	6.76	6,270
1950	Sept. 10, 1950	9.56	11,900				

02028500 ROCKFISH RIVER NEAR GREENFIELD, VA

LOCATION.--Lat 37°52'10", long 78°49'25", Nelson County, Hydrologic Unit 02080203, on left bank 50 ft downstream from bridge on State Highway 634, 2.8 mi downstream from confluence of North and South Forks, and 4.1 mi south of Greenfield.

DRAINAGE AREA.--94.6 mi².

GAGE.--Water-stage recorder. Datum of gage is 530.29 ft above National Geodetic Vertical Datum of 1929. Prior to Aug. 21, 1943, nonrecording gage at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 8,100 ft³/s and extended above on basis of slope-area measurements at 11,000 ft³/s, 35,000 ft³/s, 70,000 ft³/s, contracted-opening measurement at 17,500 ft³/s, and peak runoff comparison for nearby stations.

BANKFULL STAGE.--12 ft.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1943	Oct. 15, 1942	a23.4	b30,000	1967	Mar. 7, 1967	12.98	5,260
1944	Sept. 19, 1944	17.20	13,700	1968	Dec. 10, 1967	8.10	1,740
1945	Sept. 18, 1945	11.66	4,780	1969	Aug. 20, 1969	31.20	70,000
1946	Dec. 6, 1945	4.89	635	1970	Feb. 2, 1970	8.67	1,690
1947	Mar. 14, 1947	6.40	2,260	1971	May 30, 1971	9.22	5,560
1948	Apr. 1, 1948	9.28	3,050	1972	June 21, 1972	18.11	17,500
1949	Dec. 4, 1948	11.30	4,450	1973	Oct. 5, 1972	9.57	5,540
1950	Sept. 10, 1950	8.25	2,440	1974	Dec. 26, 1973	6.15	2,190
1951	Dec. 4, 1950	12.12	5,260	1975	Mar. 19, 1975	10.32	6,310
1952	Mar. 11, 1952	13.30	6,840	1976	Dec. 31, 1975	5.45	1,620
1953	Mar. 25, 1953	9.60	3,040	1977	Oct. 9, 1976	8.81	4,680
1954	Mar. 1, 1954	6.68	1,460	1978	Jan. 26, 1978	6.96	2,880
1955	Aug. 18, 1955	16.45	12,200	1979	Sept. 5, 1979	11.24	7,370
1956	July 20, 1956	8.85	2,560	1980	Apr. 9, 1980	7.07	2,950
1957	Apr. 5, 1957	8.17	2,210	1981	Feb. 20, 1981	3.73	827
1958	Apr. 23, 1958	8.30	1,840	1982	June 13, 1982	5.85	1,920
1959	Sept. 30, 1959	14.96	7,860	1983	Apr. 3, 1983	9.23	5,130
1960	Oct. 24, 1959	8.92	2,140	1984	Aug. 12, 1984	9.72	5,670
1961	Apr. 13, 1961	9.12	2,240	1985	Aug. 18, 1985	7.85	3,730
1962	Oct. 21, 1961	13.90	6,340	1986	Nov. 4, 1985	13.24	9,970
1963	Nov. 10, 1962	9.23	2,300	1987	Sept. 8, 1987	9.10	4,990
1964	Jan. 25, 1964	8.32	1,840	1988	Nov. 29, 1987	5.53	1,700
1965	Feb. 7, 1965	13.5	5,860	1989	May 6, 1989	6.61	2,530
1966	Feb. 13, 1966	10.11	2,820	1990	May 10, 1990	9.72	5,670

a From high-water marks.

b Approximate.

JAMES RIVER BASIN

02028700 COVE CREEK NEAR COVESVILLE, VA

LOCATION.--Lat 37°52'06", long 78°43'32", Albemarle County, Hydrologic Unit 02080203, at culvert on U.S. Highway 29, 1.8 mi southwest of Covesville.

DRAINAGE AREA.--4.0 mi², approximately.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 629.78 ft above National Geodetic Vertical Datum of 1929. Prior to Dec. 9, 1970, at site just downstream and datum 1.00 ft higher. Dec. 9, 1970, to Apr. 3, 1975, flood-hydrograph recorder at same site and datum then in use.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 30 ft³/s and extended on basis of contracted-opening measurements at 2,000 ft³/s and 3,000 ft³/s.

BANKFULL STAGE.--4 ft.

REMARKS.--Original culvert destroyed by flood waters on Aug. 20, 1969. Culvert rebuilt in 1971.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1944	Sept. 19, 1944	9.1	2,000	1962	Oct. 21, 1961	6.98	1,100
1950	May 31, 1950	6.2	820	1963	-	<2.2	<70
1951	June 10, 1951	5.6	640	1964	Jan. 25, 1964	3.24	175
1952	Aug. 31, 1952	5.89	730	1965	Feb. 7, 1965	5.51	600
1953	Mar. 25, 1953	4.1	305	1966	Feb. 28, 1966	4.38	360
1954	-	<2.2	<70	1967	Mar. 7, 1967	4.69	420
1955	Aug. 18, 1955	6.52	900	1968	May 27, 1968	3.82	250
1956	July 10, 1956	4.41	380	1969	Aug. 20, 1969	8.80	3,000
1957	Apr. 5, 1957	3.66	230	1972	June 21, 1972	a5.65	645
1958	July 27, 1958	4.99	490	1973	Oct. 5, 1972	a4.22	324
1959	Sept. 30, 1959	8.2	1,560	1974	Sept. 7, 1974	a2.68	113
1960	-	<2.2	<70	1975	Sept. 26, 1975	a6.34	869
1961	Apr. 13, 1961	3.16	165	1976	Dec. 31, 1975	a4.15	310

< Less than.

a At site of rebuilt culvert.

02028750 COVE CREEK AT FABER, VA

LOCATION.--Lat 37°49'40", long 78°44'10", Nelson County, Hydrologic Unit 02080203, at bridge on State Highway 632, at Faber.

DRAINAGE AREA.--19.7 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Not developed. Peak discharge for flood of August 1969 determined by slope-area measurement.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1967	Mar. 7, 1967	34.0	-	1969	Aug. 20, 1969	56.0	28,000
1968	-	<34.4	-				

< Less than.

JAMES RIVER BASIN

02028800 BALLINGER CREEK AT ESMONT, VA

LOCATION.--Lat 37°49'39", long 78°36'32", Albemarle County, Hydrologic Unit 02080203, at bridge on State Highway 6, at Esmont.

DRAINAGE AREA.--5.42 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert and contracted-opening and flow-over-road measurement at 4,800 ft³/s.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1967	Aug. 24, 1967	12.84	1,010	1973	Dec. 15, 1972	11.71	790
1968	Dec. 10, 1967	10.53	580	1974	Sept. 7, 1974	12.24	900
1969	Aug. 20, 1969	17.60	4,800	1975	Sept. 26, 1975	13.23	1,110
1970	Apr. 14, 1970	10.53	580	1976	Dec. 31, 1975	10.89	635
1971	May 30, 1971	12.45	940	1977	Oct. 9, 1976	12.25	900
1972	June 21, 1972	16.90	2,260	1978	Jan. 26, 1978	12.09	868

02028900 MILLER CREEK NEAR SCOTTSVILLE, VA

LOCATION.--Lat 37°48'30", long 78°30'46", Albemarle County, Hydrologic Unit 02080203, at bridge on State Highway 6, 1.5 mi west of Scottsville.

DRAINAGE AREA.--6.60 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 309.87 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 65 ft³/s and extended above on basis of contracted-opening measurement at 6,300 ft³/s.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1967	Mar. 15, 1967	10.29	1,150	1973	Oct. 5, 1972	10.06	1,050
1968	-	8.95	<490	1974	Sept. 7, 1974	9.15	560
1969	Aug. 20, 1969	13.44	6,300	1975	Sept. 26, 1975	10.66	1,500
1970	July 10, 1970	10.37	1,250	1976	Dec. 31, 1975	9.24	620
1971	May 30, 1971	10.05	1,050	1978	Jan. 26, 1978	10.11	1,060
1972	June 21, 1972	11.75	2,750				

< Less than.

02029000 JAMES RIVER AT SCOTTSVILLE, VA

LOCATION.--Lat 37°47'50", long 78°29'30", Albemarle County, Hydrologic Unit 02080203, on left bank 900 ft downstream from bridge on State Highway 20 at Scottsville, 6.8 mi upstream from Hardware River, and at mile 188.6.

DRAINAGE AREA.--4,584 mi².

GAGE.--Water-stage recorder. Datum of gage is 253.18 ft above National Geodetic Vertical Datum of 1929. Prior to Nov. 28, 1928, nonrecording gage at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 120,000 ft³/s and extended above on basis of slope-conveyance study.

BANKFULL STAGE.--10 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1871	October 1870	a30.7	b215,000	1957	Apr. 7, 1957	19.14	64,200
1878	November 1877	a27.9	b160,000	1958	Apr. 1, 1958	15.88	44,500
1913	March 1913	c25.16	121,000	1959	June 3, 1959	12.81	29,300
1925	Oct. 1, 1924	-	d80,000	1960	Apr. 1, 1960	19.10	64,200
1926	Jan. 20, 1926	15.80	42,300	1961	Feb. 27, 1961	12.94	29,700
1927	Feb. 20, 1927	15.68	41,900	1962	Oct. 22, 1961	18.88	62,900
1928	Aug. 17, 1928	20.92	75,600	1963	Mar. 14, 1963	20.82	76,200
1929	Feb. 28, 1929	15.90	44,700	1964	Mar. 7, 1964	13.58	32,700
1930	Nov. 19, 1929	16.12	45,800	1965	Feb. 8, 1965	17.19	52,100
1931	Aug. 23, 1931	10.73	21,100	1966	Feb. 15, 1966	15.63	42,900
1932	Mar. 30, 1932	13.14	31,400	1967	Mar. 9, 1967	19.07	64,000
1933	Oct. 18, 1932	18.45	59,500	1968	Mar. 14, 1968	12.11	25,900
1934	Mar. 29, 1934	14.70	38,800	1969	Aug. 20, 1969	30.00	188,000
1935	Sept. 6, 1935	23.06	93,400	1970	Jan. 1, 1970	19.05	63,900
1936	Mar. 19, 1936	25.46	126,000	1971	June 1, 1971	19.12	64,400
1937	Apr. 26, 1937	18.80	62,200	1972	June 22, 1972	34.02	301,000
1938	Oct. 20, 1937	22.33	87,400	1973	Oct. 6, 1972	23.24	97,600
1939	Aug. 19, 1939	19.71	68,400	1974	Dec. 28, 1973	21.12	78,500
1940	Aug. 16, 1940	25.84	130,000	1975	Mar. 19, 1975	24.63	114,000
1941	July 9, 1941	12.07	27,100	1976	Jan. 2, 1976	15.55	42,500
1942	May 23, 1942	21.44	80,600	1977	Apr. 6, 1977	19.55	67,400
1943	Oct. 16, 1942	23.0	95,200	1978	Jan. 27, 1978	22.23	88,400
1944	Sept. 19, 1944	26.0	133,000	1979	Feb. 26, 1979	22.63	92,300
1945	Sept. 18, 1945	18.0	57,000	1980	Apr. 15, 1980	18.56	58,700
1946	Jan. 9, 1946	15.3	41,200	1981	May 30, 1981	12.74	28,000
1947	Mar. 16, 1947	13.68	33,200	1982	June 14, 1982	20.08	69,800
1948	Apr. 1, 1948	18.4	59,600	1983	Apr. 10, 1983	17.37	51,000
1949	Dec. 4, 1948	22.9	94,200	1984	Feb. 15, 1984	19.65	66,600
1950	Sept. 11, 1950	20.43	73,300	1985	Aug. 19, 1985	13.03	29,200
1951	Dec. 9, 1950	19.17	64,900	1986	Nov. 6, 1985	31.77	243,000

JAMES RIVER BASIN

02029000 JAMES RIVER AT SCOTTSVILLE, VA--Continued

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1952	Mar. 13, 1952	17.59	54,500	1987	Apr. 17, 1987	26.17	133,000
1953	Mar. 25, 1953	19.48	67,000	1988	Jan. 21, 1988	10.68	20,200
1954	Mar. 3, 1954	18.9	62,900	1989	May 6, 1989	20.35	71,900
1955	Mar. 7, 1955	19.94	70,000	1990	Jan. 2, 1990	15.20	38,800
1956	Apr. 18, 1956	10.61	20,400				

a From information by local residents.

b Approximate.

c From high-water mark.

d Estimated.

JAMES RIVER BASIN

02029200 NORTH FORK HARDWARE RIVER AT RED HILL, VA

LOCATION.--Lat 37°58'03", long 78°37'04", Albemarle County, Hydrologic Unit 02080203, at bridge on U.S. Highway 29, 0.5 mi west of Red Hill.

DRAINAGE AREA.--11.0 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 577.11 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 260 ft³/s and extended above on basis of contracted-opening measurements at 4,000 ft³/s and 7,300 ft³/s.

BANKFULL STAGE.--7 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1950	Sept. 11, 1950	8.89	850	1963	-	<3.1	<75
1951	-	<3.1	<75	1964	-	<3.1	<75
1952	Mar. 11, 1952	7.77	390	1965	Feb. 7, 1965	6.36	282
1953	Mar. 25, 1953	6.75	300	1966	Feb. 28, 1966	5.29	200
1954	Mar. 1, 1954	6.47	280	1967	Mar. 7, 1967	6.80	314
1955	Aug. 18, 1955	8.84	750	1968	Dec. 10, 1967	4.49	149
1956	July 20, 1956	7.76	390	1969	Aug. 20, 1969	17.00	7,300
1957	Apr. 7, 1957	6.45	270	1970	July 10, 1970	6.67	304
1958	July 27, 1958	4.45	145	1971	Feb. 13, 1971	5.95	246
1959	Sept. 30, 1959	10.00	4,030	1972	June 21, 1972	10.70	4,350
1960	Feb. 18, 1960	4.10	125	1973	Oct. 5, 1972	7.73	414
1961	Apr. 13, 1961	5.62	220	1974	Dec. 21, 1973	5.64	225
1962	Oct. 21, 1961	7.25	340				

< Less than.

02029400 SOUTH BRANCH OF NORTH FORK HARDWARE RIVER NEAR NORTH GARDEN, VA

LOCATION.--Lat 37°57'21", long 78°39'35", Albemarle County, Hydrologic Unit 02080203, at culvert on U.S. Highway 29 at crossroads, 1.5 mi northwest of North Garden.

DRAINAGE AREA.--6.59 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 681.11 ft above National Geodetic Vertical Datum of 1929. Dec. 9, 1970, to Apr. 3, 1975, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined prior to 1970 by current-meter measurements below 100 ft³/s and extended above on basis of contracted-opening measurements at 3,000 ft³/s and 6,200 ft³/s.

BANKFULL STAGE.--6 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1949	Aug. 15, 1949	8.8	1,870	1963	Mar. 12, 1963	5.97	565
1950	Sept. 11, 1950	8.76	1,870	1964	July 13, 1964	6.75	840
1951	-	6.57	730	1965	Feb. 7, 1965	6.31	690
1952	Aug. 31, 1952	5.68	490	1966	Feb. 28, 1966	4.80	310
1953	Mar. 15, 1953	5.48	445	1967	July 20, 1967	6.50	750
1954	Mar. 1, 1954	3.22	105	1968	Dec. 10, 1967	3.89	170
1955	Aug. 18, 1955	7.50	1,100	1969	Aug. 20, 1969	8.70	6,200
1956	July 20, 1956	7.25	1,000	1970	July 10, 1970	(a)	-
1957	Apr. 5, 1957	5.15	370	1971	May 30, 1971	4.60	-
1958	July 27, 1958	7.58	1,140	1972	June 21, 1972	6.83	-
1959	Sept. 30, 1959	8.86	3,050	1973	Feb. 2, 1973	4.62	-
1960	Feb. 18, 1960	5.10	360	1974	Dec. 21, 1973	3.95	-
1961	Apr. 13, 1961	5.37	420	1975	Sept. 26, 1975	7.75	-
1962	Oct. 21, 1961	7.98	1,600	1976	Dec. 31, 1975	4.57	-

a No high-water mark due to culvert reconstruction.

JAMES RIVER BASIN

02029410 SOWELL BRANCH NEAR CHARLOTTESVILLE, VA

LOCATION.--Lat 37°56'30", long 78°32'16", Albemarle County, Hydrologic Unit 02080203, at culvert on State Highway 20, 6.8 mi southwest of Charlottesville.

DRAINAGE AREA.--1.55 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 475.09 ft above National Geodetic Vertical Datum of 1929. June 6, 1966, to Apr. 4, 1975, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--4 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1966a	-	<3.0	<60	1972	June 21, 1972	12.67	1,200
1967	Aug. 24, 1967	3.96	140	1973	-	<3.0	<60
1968	-	<3.0	<60	1974	-	<3.0	<60
1969	Aug. 20, 1969	14.6	1,500	1975	Sept. 26, 1975	7.03	453
1970	-	<3.0	<60	1976	-	<3.0	<60
1971	May 30, 1971	3.50	-	1977	-	<3.0	<60

< Less than.

a Partial year, June through September.

JAMES RIVER BASIN

02029430 HARRIS CREEK NEAR KEENE, VA

LOCATION.--Lat 37°53'05", long 78°33'00", Albemarle County, Hydrologic Unit 02080203, at bridge on State Highway 20, 1.4 mi north of Keene.

DRAINAGE AREA.--1.71 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Not developed. Peak of August 1969 determined from contracted-opening measurement.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1967	Mar. 7, 1967	3.8	-	1972	June 21, 1972	7.25	-
1968	-	<3.95	-	1973	Oct. 5, 1972	5.70	-
1969	Aug. 20, 1969	8.0	2,200	1974	Sept. 7, 1974	4.81	-
1970	Feb. 9, 1970	4.00	-	1975	Sept. 26, 1975	6.99	-
1971	May 30, 1971	4.72	-	1976	-	<4.0	-

< Less than.

02029450 THOMAS CREEK AT KEENE, VA

LOCATION.--Lat 37°52'25", long 78°33'10", Albemarle County, Hydrologic Unit 02080203, at culvert on State Highway 20, 0.7 mi north of Keene.

DRAINAGE AREA.--0.28 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 470 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Apr. 4, 1975, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert and flow over road.

BANKFULL STAGE.--4 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1966	Feb. 28, 1966	2.12	10	1971	May 30, 1971	2.60	21
1967	Aug. 24, 1967	4.60	110	1972	June 21, 1972	6.96	325
1968	-	<2.0	<10	1973	Oct. 5, 1972	2.60	22
1969	Aug. 20, 1969	7.37	440	1974	Sept. 7, 1974	2.45	19
1970	-	<2.0	<10	1975	Sept. 26, 1975	4.07	74

< Less than.

JAMES RIVER BASIN

02029500 HARDWARE RIVER NEAR SCOTTSVILLE, VA

LOCATION.--Lat 37°50'25", long 78°28'28", Albemarle County, Hydrologic Unit 02080203, at bridge on Woodridge-Scottsville Highway, 2 mi upstream from Briery Run, 3 mi north of Scottsville, and 11.5 mi upstream from mouth.

DRAINAGE AREA.--104 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 308.50 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 4,000 ft³/s and extended above by logarithmic plotting.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1927	Dec. 26, 1926	10.20	1,510	1933	Oct. 17, 1932	16.0	4,470
1928	Aug. 26, 1928	16.62	4,690	1934	June 19, 1934	8.90	1,150
1929	June 24, 1929	16.30	4,510	1935	Sept. 5, 1935	19.6	6,150
1930	Mar. 8, 1930	9.50	1,300	1936	Mar. 17, 1936	16.45	4,550
1931	June 1, 1931	8.10	952	1937	Apr. 25, 1937	20.1	6,440
1932	May 12, 1932	12.8	2,600	1938	Oct. 19, 1937	16.0	4,350

02030000 HARDWARE RIVER BELOW BRIERY RUN, NEAR SCOTTSVILLE, VA

LOCATION.--Lat 37°48'45", long 78°27'20", Fluvanna County, Hydrologic Unit 02080203, on left bank 75 ft upstream from bridge on State Highway 637, 0.8 mi downstream from Briery Run, 2.4 mi northeast of Scottsville, and 10.8 mi upstream from mouth.

DRAINAGE AREA.--116 mi².

GAGE.--Water-stage recorder. Datum of gage is 294.96 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 17,900 ft³/s and extended above on basis of slope-area measurements at 23,000 ft³/s and 52,000 ft³/s.

BANKFULL STAGE.--8 ft.

REMARKS.--Records were provided by the Virginia Water Control Board from July 1, 1957, to Sept. 30, 1989.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1939	Feb. 11, 1939	10.04	1,370	1965	Feb. 8, 1965	14.36	5,280
1940	Aug. 16, 1940	13.73	4,250	1966	Mar. 1, 1966	10.66	1,910
1941	Apr. 5, 1941	10.70	1,740	1967	Aug. 25, 1967	12.54	3,250
1942	Aug. 9, 1942	11.02	1,880	1968	Jan. 14, 1968	9.10	1,320
1943	Oct. 15, 1942	13.68	4,250	1969	Aug. 20, 1969	31.00	52,000
1944	Sept. 19, 1944	23.8	23,000	1970	Dec. 31, 1969	8.70	1,280
1945	Sept. 18, 1945	10.4	1,600	1971	May 30, 1971	14.19	4,680
1946	May 18, 1946	7.80	913	1972	June 21, 1972	25.50	21,600
1947	June 14, 1947	8.71	1,080	1973	Oct. 6, 1972	15.72	6,030
1948	Apr. 1, 1948	14.50	5,200	1974	Dec. 21, 1973	12.00	2,800
1949	Aug. 15, 1949	18.48	11,100	1975	Mar. 19, 1975	16.96	7,300
1950	Sept. 11, 1950	10.25	1,660	1976	Jan. 28, 1976	12.13	2,880
1951	June 10, 1951	12.72	3,200	1977	Oct. 9, 1976	12.90	3,560
1952	Mar. 11, 1952	12.86	3,400	1978	Jan. 26, 1978	14.17	4,680
1953	Nov. 20, 1952	11.07	2,440	1979	Sept. 22, 1979	15.50	5,850
1954	Mar. 1, 1954	12.14	2,660	1980	Oct. 5, 1979	8.78	1,500
1955	Aug. 18, 1955	15.73	6,800	1981	Aug. 8, 1981	7.54	1,190
1956	July 21, 1956	5.50	622	1982	Feb. 3, 1982	11.28	2,540
1957	Apr. 6, 1957	8.84	1,520	1983	Apr. 3, 1983	13.65	4,200
1958	Mar. 31, 1958	9.22	1,340	1984	July 21, 1984	14.52	4,970
1959	June 3, 1959	10.88	2,010	1985	Aug. 19, 1985	11.45	2,640
1960	Oct. 1, 1959	14.81	5,760	1986	Nov. 4, 1985	14.57	5,010
1961	Apr. 13, 1961	11.43	2,330	1987	Sept. 8, 1987	21.39	12,400
1962	Oct. 21, 1961	16.12	7,470	1988	Nov. 29, 1987	(a)	b1,500
1963	Mar. 12, 1963	12.07	2,890	1989	May 6, 1989	16.60	6,900
1964	Feb. 6, 1964	7.77	1,020	1990	Jan. 1, 1990	10.92	2,460

a Unknown.

b Mean daily discharge; peak is greater than value shown.

02030100 FRISBY BRANCH NEAR BUCKINGHAM, VA

LOCATION.--Lat 37°31'15", long 78°37'04", Buckingham County, Hydrologic Unit 02080203, at culvert on State Highway 24, 4 mi southwest of Buckingham.

DRAINAGE AREA.--4.35 mi².

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Defined by computations of flow through culvert.

BANKFULL STAGE.--5 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1967	June 22, 1967	5.66	165	1971	May 13, 1971	7.80	800
1968	Dec. 28, 1967	5.00	105	1972	June 21, 1972	16.50	2,110
1969	Aug. 20, 1969	5.50	170	1973	Oct. 6, 1972	6.65	500
1970	Apr. 2, 1970	5.16	130				

02030500 SLATE RIVER NEAR ARVONIA, VA

LOCATION.--Lat 37°42'10", long 78°22'40", Buckingham County, Hydrologic Unit 02080203, on left bank 250 ft upstream from bridge on State Highway 676, 1.8 mi northwest of Arvonias, 2.9 mi upstream from Hunts Creek, and 3.8 mi upstream from mouth.

DRAINAGE AREA.--226 mi².

GAGE.--Water-stage recorder. Datum of gage is 238.78 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers). Prior to Feb. 15, 1936, nonrecording gage at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 5,900 ft³/s and extended above on basis of slope-area measurement at 42,200 ft³/s.

BANKFULL STAGE.--6 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1926a	Apr. 14, 1926	5.19	666	1959	Dec. 29, 1958	11.18	4,050
1927	Dec. 26, 1926	9.80	2,940	1960	Feb. 19, 1960	11.20	4,050
1928	Aug. 12, 1928	14.12	6,870	1961	Feb. 19, 1961	11.23	4,050
1929	Apr. 17, 1929	12.12	4,720	1962	Oct. 21, 1961	14.68	7,650
1930	Mar. 8, 1930	8.80	2,310	1963	Mar. 12, 1963	9.16	2,800
1931	Aug. 1, 1931	7.30	1,570	1964	Feb. 16, 1964	8.86	2,620
1932	Mar. 7, 1932	10.74	3,700	1965	Feb. 8, 1965	10.47	3,580
1933	Oct. 17, 1932	10.50	3,560	1966	Feb. 13, 1966	10.77	3,780
1934	Mar. 5, 1934	10.70	3,700	1967	Aug. 24, 1967	10.11	3,340
1935	Sept. 6, 1935	22.18	26,900	1968	May 27, 1968	9.61	3,040
1936	Mar. 18, 1936	16.10	9,860	1969	Aug. 20, 1969	13.00	5,400
1937	Apr. 26, 1937	20.86	21,600	1970	Apr. 2, 1970	8.60	2,440
1938	Oct. 19, 1937	12.05	4,650	1971	May 31, 1971	13.66	6,360
1939	Aug. 20, 1939	10.67	3,700	1972	June 22, 1972	25.10	42,200
1940	Aug. 16, 1940	13.62	6,320	1973	Oct. 5, 1972	14.48	7,370
1941	Apr. 6, 1941	10.49	3,560	1974	Sept. 8, 1974	13.89	6,590
1942	Aug. 12, 1942	8.25	2,100	1975	Sept. 26, 1975	16.38	10,300
1943	Oct. 16, 1942	10.53	3,560	1976	Jan. 1, 1976	12.14	4,840
1944	Sept. 20, 1944	19.00	16,000	1977	Oct. 20, 1976	12.19	4,890
1945	Sept. 19, 1945	13.00	5,400	1978	Jan. 27, 1978	14.52	7,420
1946	Feb. 11, 1946	8.50	2,280	1979	Feb. 26, 1979	17.02	11,500
1947	Mar. 14, 1947	8.77	2,460	1980	Jan. 18, 1980	10.10	3,290
1948	Aug. 4, 1948	12.74	5,180	1981	Aug. 8, 1981	9.61	2,820
1949	Dec. 4, 1948	18.25	14,100	1982	Feb. 3, 1982	12.91	5,640
1950	Sept. 10, 1950	9.25	2,800	1983	Apr. 24, 1983	11.43	4,250
1951	Dec. 4, 1950	9.58	3,040	1984	Mar. 29, 1984	13.51	6,270
1952	Dec. 22, 1951	12.10	4,720	1985	Aug. 18, 1985	12.19	4,940
1953	Nov. 20, 1952	10.80	3,780	1986	Nov. 5, 1985	14.10	6,930
1954	Mar. 1, 1954	11.61	4,350	1987	Sept. 8, 1987	14.60	7,620
1955	Aug. 19, 1955	16.75	10,900	1988	Nov. 29, 1987	8.82	2,290
1956	Apr. 16, 1956	7.59	1,840	1989	Sept. 26, 1989	12.10	4,860
1957	Apr. 5, 1957	10.10	3,340	1990	May 29, 1990	10.46	3,450
1958	Feb. 27, 1958	8.60	2,440				

a Partial year, April through September.

02030800 STOCKTON CREEK NEAR AFTON, VA

LOCATION.--Lat 38°01'48", long 78°48'30", Albemarle County, Hydrologic Unit 02080204, on left upstream wingwall of culvert on State Highway 6, 1.7 mi east of Afton, and 4.3 mi upstream from Stony Run.

DRAINAGE AREA.--2.80 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 835.27 ft above National Geodetic Vertical Datum of 1929. Prior to Dec. 13, 1977, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--5 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1967	Mar. 7, 1967	5.65	180	1979	Sept. 6, 1979	7.99	498
1968	Dec. 10, 1967	4.50	70	1980	Apr. 9, 1980	5.77	195
1969	Aug. 20, 1969	9.3	650	1981	July 4, 1981	4.52	70
1970	Apr. 14, 1970	5.12	127	1982	June 13, 1982	4.74	90
1971	May 30, 1971	6.29	258	1983	Apr. 3, 1983	9.09	198
1972	June 21, 1972	9.68	678	1984	Feb. 14, 1984	6.11	234
1973	Oct. 5, 1972	5.95	214	1985	Aug. 19, 1985	4.50	68
1974	May 12, 1974	5.35	150	1986	Nov. 4, 1985	8.18	525
1975	Mar. 19, 1975	6.10	233	1987	Apr. 17, 1987	4.86	101
1976	Dec. 31, 1975	4.75	90	1988	-	<4.29	<50
1977	Oct. 9, 1976	5.72	189	1989	May 5, 1989	6.96	345
1978	Jan. 26, 1978	5.91	210	1990	-	<4.29	<51

< Less than.

JAMES RIVER BASIN

02030900 POWELLS CREEK NEAR CROZET, VA

LOCATION.--Lat 38°04'50", long 78°43'02", Albemarle County, Hydrologic Unit 02080204, at bridge on State Highway 684, 1.2 mi northwest of Crozet.

DRAINAGE AREA.--2.32 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Not fully developed; insufficient field data available, culvert rebuilt in 1978.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1967	Mar. 7, 1967	5.65	180	1973	Oct. 5, 1972	5.13	-
1968	Dec. 10, 1967	4.50	70	1974	-	<3.00	-
1969	Aug. 20, 1969	3.04	-	1975	Mar. 19, 1975	3.41	-
1970	-	<3.00	-	1976	-	<3.00	-
1971	May 30, 1971	3.92	-	1977	Oct. 9, 1976	3.04	-
1972	June 21, 1972	5.21	-	1978	Jan. 26, 1978	3.19	-

< Less than.

JAMES RIVER BASIN

02031000 MECHUMS RIVER NEAR WHITE HALL, VA
(Formerly published as Mechum River near Ivy)

LOCATION.--Lat 38°06'09", long 78°35'35", Albemarle County, Hydrologic Unit 02080204, on right bank 20 ft downstream from bridge on State Highway 614, 1.5 mi downstream from Rocky Run, 4.0 mi southeast of White Hall, and 4.9 mi upstream from confluence with Moormans River.

DRAINAGE AREA.--95.4 mi².

GAGE.--Water-stage recorder. Datum of gage is 429.75 ft above National Geodetic Vertical Datum of 1929. Oct. 1, 1942, to Sept. 30, 1951, on right bank 20 ft downstream from former highway bridge at different datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 8,250 ft³/s and extended above by logarithmic plotting.

BANKFULL STAGE.--9 ft.

REMARKS.--Subsequent to Sept. 30, 1979, records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1943	Oct. 15, 1942	30.3	20,000	1980	Apr. 9, 1980	15.26	4,540
1944	Sept. 18, 1944	21.9	10,600	1981	Feb. 20, 1981	9.01	1,300
1945	Sept. 18, 1945	9.32	2,360	1982	June 13, 1982	11.77	2,680
1946	Dec. 6, 1945	4.80	686	1983	Apr. 3, 1983	20.68	9,500
1947	July 9, 1947	5.58	878	1984	Feb. 14, 1984	17.54	6,420
1948	Aug. 4, 1948	10.90	3,490	1985	Feb. 12, 1985	9.89	1,740
1949	Dec. 4, 1948	14.7	5,340	1986	Nov. 5, 1985	21.11	9,960
1950	Sept. 13, 1950	16.80	6,330	1987	Sept. 8, 1987	19.24	8,060
1951	Dec. 4, 1950	16.28	5,980	1988	Nov. 29, 1988	10.55	2,080
1959	Sept. 30, 1959	18.05	7,200	1989	May 6, 1989	11.78	2,690
1979	Sept. 6, 1979	a24.5	b13,500	1990	May 10, 1990	11.05	2,320

a From high-water marks.

b Approximate.

02031500 NORTH FORK MOORMANS RIVER NEAR WHITE HALL, VA

LOCATION.--Lat 38°08'25", long 78°45'05", Albemarle County, Hydrologic Unit 02080204, on left bank 0.5 mi upstream from confluence with South Fork, 0.8 mi upstream from city of Charlottesville dam, and 5.1 mi west of White Hall.

DRAINAGE AREA.--11.4 mi².

GAGE.--Water-stage recorder. Datum of gage is 999 ft above National Geodetic Vertical Datum of 1929, by barometer. Prior to October 1963 and July 1982 to September 1984, water-stage recorder. June 1966 to September 1975, nonrecording gage (crest-stage gage).

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 350 ft³/s and extended above by slope-area measurements at 2,400 ft³/s and 7,620 ft³/s. Shift occurred in August 1955, below 1,000 ft³/s.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1943	Oct. 15, 1942	4.17	7,620	1965	Feb. 7, 1965	3.94	344
1952	Feb. 4, 1952	4.40	437	1966	Sept. 21, 1966	4.84	662
1953	Mar. 24, 1953	4.61	492	1967	Aug. 24, 1967	5.02	720
1954	Mar. 1, 1954	4.93	603	1968	May 27, 1968	5.16	780
1955	Aug. 18, 1955	7.94	2,400	1969	July 7, 1969	4.12	407
1956	July 20, 1956	3.33	158	1970	Dec. 30, 1969	3.90	330
1957	Feb. 26, 1957	4.70	520	1971	May 30, 1971	6.98	1,840
1958	Apr. 23, 1958	4.11	350	1972	June 21, 1972	7.42	2,190
1959	Sept. 30, 1959	5.97	1,180	1973	Oct. 6, 1972	6.44	1,460
1960	May 8, 1960	5.72	1,050	1974	Dec. 21, 1973	4.66	596
1961	Apr. 13, 1961	4.02	372	1975	Sept. 26, 1975	5.42	910
1962	Oct. 21, 1961	4.41	505	1983	Mar. 19, 1983	6.69	1,670
1963	Nov. 10, 1962	4.17	424	1984	Feb. 14, 1984	6.10	1,290
1964	-	3.62	241				

a From high-water marks.

JAMES RIVER BASIN

02032000 MOORMANS RIVER NEAR WHITE HALL, VA

LOCATION.--Lat 38°08'05", long 78°44'10", Albemarle County, Hydrologic Unit 02080204, 0.2 mi downstream from Charlottesville Reservoir, 4 mi west of White Hall, and 4.2 mi upstream from Doyles River.

DRAINAGE AREA.--18 mi².

GAGE.--Nonrecording gage (staff gage). Datum of gage is 890 ft above National Geodetic Vertical Datum of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,600 ft³/s and extended above on basis of slope-area and flow-over-dam computations.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1943	October 1942	a9.3	10,000	1945	Sept. 18, 1945	b4.30	1,700
1944	Sept. 19, 1944	b4.65	1,990	1946	Jan. 1, 1946	b2.40	190

a From high-water marks.

b From graph based on gage readings.

JAMES RIVER BASIN

02032200 DOYLES RIVER NEAR WHITE HALL, VA

LOCATION.--Lat 38°12'10", long 78°40'17", Albemarle County, Hydrologic Unit 02080204, on right downstream abutment of bridge on State Highway 810, 5.5 mi upstream from mouth, and 5.9 mi north of White Hall.

DRAINAGE AREA.--6.70 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 928.08 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by slope-area measurements at 230 ft³/s and 1,780 ft³/s.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1967	-	<10.10	<220	1979	Sept. 22, 1979	13.73	2,560
1968	-	<10.10	<220	1980	-	<10.10	<220
1969	-	<10.10	<220	1981	-	<10.10	<220
1970	-	<10.10	<220	1983	Aug. 10, 1983	10.21	242
1971	May 30, 1971	12.04	954	1984	-	<10.10	<220
1972	June 21, 1972	12.90	1,580	1985	-	<10.10	<220
1973	Oct. 5, 1972	10.99	461	1986	Nov. 4, 1985	13.06	1,780
1974	-	<10.10	<220	1987	Sept. 8, 1987	a10.16	232
1975	Sept. 26, 1975	11.84	844	1988	-	<10.10	<220
1976	-	<10.10	<220	1989	-	<10.10	<220
1977	Oct. 9, 1976	11.35	598	1990	-	<10.10	<220
1978	Jan. 26, 1978	12.09	984				

< Less than.

a From high-water mark.

02032250 MOORMANS RIVER NEAR FREE UNION, VA

LOCATION.--Lat 38°08'26", long 78°33'22", Albemarle County, Hydrologic Unit 02080204, on right bank 130 ft upstream from bridge on State Highway 601, 0.4 mi upstream from confluence with Mechums River, 0.8 mi downstream from Wards Creek, and 1.1 mi southeast of Free Union.

DRAINAGE AREA.--74.6 mi².

GAGE.--Water-stage recorder. Datum of gage is 403.11 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 5,540 ft³/s and extended above on basis of slope-area measurement at 15,500 ft³/s.

BANKFULL STAGE.--Not determined.

REMARKS.--Records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1972	June 21, 1972	a20.1	15,100	1985	Aug. 18, 1985	6.91	1,190
1979	Sept. 6, 1979	a21.55	b16,500	1986	Nov. 4, 1985	20.41	15,500
1980	Apr. 9, 1980	12.31	3,800	1987	Sept. 8, 1987	14.78	7,070
1981	Feb. 20, 1981	6.05	802	1988	Nov. 29, 1987	7.97	2,050
1982	June 13, 1982	12.73	4,030	1989	May 5, 1989	9.43	2,850
1983	Apr. 3, 1983	15.48	5,670	1990	May 10, 1990	7.12	1,580
1984	Feb. 14, 1984	15.48	5,670				

a From high-water marks.

b Approximate.

JAMES RIVER BASIN

02032300 MUDDY RUN NEAR STANARDSVILLE, VA

LOCATION.--Lat 38°14'05", long 78°37'02", Albemarle County, Hydrologic Unit 02080204, on right downstream abutment of bridge on State Highway 810, 0.7 mi upstream from mouth, and 11 mi southwest of Stanardsville.

DRAINAGE AREA.--3.36 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 756.79 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.-- Preliminary rating developed by step-backwater computations not confirmed by current-meter measurements.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1967	-	<6.00	-	1979	Aug. 28, 1979	8.33	-
1968	-	<6.00	-	1980	Oct. 6, 1979	7.00	-
1969	-	<6.00	-	1981	Feb. 19, 1981	6.38	-
1970	-	<6.00	-	1982	June 13, 1982	7.11	-
1971	May 30, 1971	6.77	-	1983	Apr. 3, 1983	6.87	-
1972	June 21, 1972	7.20	-	1984	Feb. 14, 1984	8.03	-
1973	Oct. 5, 1972	7.05	-	1985	Feb. 12, 1985	6.39	-
1974	-	<6.00	-	1986	Nov. 4, 1985	7.22	-
1975	Mar. 19, 1975	6.15	-	1987	Sept. 8, 1987	6.72	-
1976	-	<6.00	-	1988	-	<6.06	-
1977	Oct. 9, 1976	6.75	-	1989	-	<6.06	-
1978	May 13, 1978	8.33	-	1990	-	<6.06	-

< Less than.

JAMES RIVER BASIN

02032400 BUCK MOUNTAIN CREEK NEAR FREE UNION, VA

LOCATION.--Lat 38°09'16", long 78°32'22", Albemarle County, Hydrologic Unit 02080204, on left bank at downstream side of bridge on State Highway 665, 0.2 mi downstream from Piney Creek, 1.6 mi east of Free Union, and 2.0 mi upstream from mouth.

DRAINAGE AREA.--37.0 mi².

GAGE.--Water-stage recorder. Datum of gage is 408.71 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,510 ft³/s and extended above on basis of contracted-opening measurement at 5,800 ft³/s.

BANKFULL STAGE.--Not determined.

REMARKS.--Records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1979	Aug. 22, 1979	a11.12	b6,600	1985	Feb. 12, 1985	5.12	1,160
1980	Apr. 9, 1980	7.91	3,120	1986	Nov. 4, 1985	9.30	5,800
1981	Aug. 31, 1981	5.18	1,190	1987	Sept. 8, 1987	9.50	6,200
1982	June 13, 1982	7.32	2,610	1988	Nov. 29, 1987	5.56	1,390
1983	Apr. 2, 1983	8.57	3,770	1989	May 5, 1989	6.20	1,780
1984	Aug. 9, 1984	7.78	3,000	1990	Oct. 2, 1989	6.20	1,170

a From high-water marks.

b Approximate.

JAMES RIVER BASIN

02032500 SOUTH FORK RIVANNA RIVER NEAR EARLYSVILLE, VA

LOCATION.--Lat 38°07'30", long 78°31'05", Albemarle County, Hydrologic Unit 02080204, on left bank 0.3 mi upstream from Fishing Creek, 3.0 mi southwest of Earlysville, and 8.7 mi upstream from confluence with North Fork.

DRAINAGE AREA.--216 mi².

GAGE.--Water-stage recorder. Datum of gage is 369 ft above National Geodetic Vertical Datum of 1929, by barometer.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 6,600 ft³/s and extended above on basis of contracted-opening measurement at 30,200 ft³/s.

BANKFULL STAGE.--10 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1943	October 1942	a33	b36,000	1959	Sept. 30, 1959	24.35	25,500
1952	Mar. 11, 1952	13.55	7,480	1960	Feb. 18, 1960	11.97	6,010
1953	Mar. 25, 1953	11.71	5,750	1961	Apr. 13, 1961	11.84	5,340
1954	Mar. 1, 1954	15.55	9,560	1962	Oct. 21, 1961	14.00	7,200
1955	Aug. 18, 1955	26.1	30,200	1963	Nov. 10, 1962	11.47	5,570
1956	July 20, 1956	9.04	3,480	1964	July 12, 1964	8.09	2,760
1957	Feb. 26, 1957	8.75	3,300	1965	Feb. 7, 1965	14.05	7,200
1958	Mar. 31, 1958	8.22	2,860	1966	Feb. 13, 1966	11.10	4,780

a From information by local residents.

b Estimated.

02032515 SOUTH FORK RIVANNA RIVER NEAR CHARLOTTESVILLE, VA

LOCATION.--Lat 38°06'06", long 78°27'39", Albemarle County, Hydrologic Unit 02080204, on left bank 10 ft downstream from upstream bridge on U.S. Highway 29, 0.4 mi downstream from South Fork Rivanna River dam, 2.5 mi northeast of Charlottesville city limits, and 2.9 mi upstream from mouth.

DRAINAGE AREA.--260 mi².

GAGE.--Water-stage recorder. Datum of gage is 330 ft above National Geodetic Vertical Datum of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 11,100 ft³/s and extended above.

BANKFULL STAGE.--Not determined.

REMARKS.--Flow regulated by Rivanna Water and Sewer Authority at South Fork Rivanna and Sugar Hollow Reservoirs. Records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1979a	Sept. 6, 1979	23.50	15,200	1985	Feb. 12, 1985	10.24	3,660
1980	Apr. 9, 1980	15.46	7,540	1986	Nov. 5, 1985	22.70	14,300
1981	Feb. 20, 1981	8.34	2,450	1987	Sept. 8, 1987	22.52	14,200
1982	June 13, 1982	16.23	8,200	1988	Nov. 29, 1987	11.42	4,440
1983	Apr. 3, 1983	20.50	12,100	1989	May 6, 1989	13.29	5,820
1984	Feb. 14, 1984	19.80	11,400	1990	Oct. 2, 1989	11.16	4,260

a Partial year, August to September.

JAMES RIVER BASIN

02032530 PARKER BRANCH NEAR STANARDSVILLE, VA

LOCATION.--Lat 38°17'10", long 78°30'50", Greene County, Hydrologic Unit 02080204, at culvert on State Highway 810, 4.3 mi west of Stanardsville.

DRAINAGE AREA.--3.24 mi².

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is 623.13 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--6 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1967	Aug. 24, 1967	6.40	560	1972	June 21, 1972	8.44	1,270
1968	Sept. 10, 1968	6.28	524	1973	Oct. 5, 1972	9.94	2,000
1969	July 23, 1969	8.54	1,300	1974	Oct. 29, 1973	6.19	497
1970	Apr. 14, 1970	5.79	472	1975	Mar. 19, 1975	8.20	1,180
1971	May 30, 1971	5.77	371	1976	Oct. 18, 1975	5.36	272

02032540 HANEYTOWN CREEK NEAR STANARDSVILLE, VA

LOCATION.--Lat 38°16'48", long 78°30'50", Greene County, Hydrologic Unit 02080204, on left downstream wingwall of bridge on State Highway 810, 0.2 mi upstream from mouth, and 4.5 mi west of Stanardsville.

DRAINAGE AREA.--4.45 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 616.34 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by step-backwater computations.

BANKFULL STAGE.--11 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1967	Mar. 7, 1967	12.00	290	1979	Sept. 22, 1979	13.61	1,030
1968	-	<12.00	<290	1980	Apr. 9, 1980	12.83	575
1969	July 7, 1969	12.36	398	1981	-	<12.33	<389
1970	Dec. 30, 1969	12.18	344	1982	June 13, 1982	12.61	484
1971	May 30, 1971	12.70	520	1983	-	<12.33	<389
1972	June 21, 1972	13.72	1,120	1984	Feb. 14, 1984	12.55	460
1973	Oct. 5, 1972	13.5	950	1985	-	<12.33	<389
1974	-	<12.33	a<389	1986	Nov. 4, 1985	13.34	854
1975	Mar. 19, 1975	13.85	1,220	1987	Sept. 8, 1987	12.58	472
1976	-	<12.33	a<389	1988	-	<12.33	<389
1977	Oct. 9, 1976	13.76	1,150	1989	-	<12.33	<389
1978	Jan. 26, 1978	12.81	565	1990	-	<12.33	<389

< Less than.
a Revised.

02032550 LYNCH RIVER AT NORTONSVILLE, VA

LOCATION.--Lat 38°14'16", long 78°32'32", Albemarle County, Hydrologic Unit 02080204, on right downstream abutment of bridge on State Highway 810, 4 mi upstream from mouth, and 7 mi southwest of Stanardsville.

DRAINAGE AREA.--13.6 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 591.70 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by step-backwater computations.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1967	Mar. 7, 1967	12.55	1,820	1979	Sept. 22, 1979	16.08	15,500
1968	-	<12.00	<1,100	1980	Oct. 6, 1979	16.00	15,000
1969	July 7, 1969	12.06	1,170	1981	-	<12.00	<1,100
1970	Dec. 30, 1969	12.12	1,230	1982	June 13, 1982	13.21	3,330
1971	May 30, 1971	14.35	6,500	1983	Apr. 3, 1983	13.63	4,700
1972	June 21, 1972	16.50	18,000	1984	Feb. 14, 1984	14.22	6,880
1973	Oct. 5, 1972	16.45	18,000	1985	-	<12.00	<1,100
1974	June 2, 1974	12.40	1,600	1986	Nov. 4, 1985	15.60	13,000
1975	Mar. 19, 1975	15.24	11,200	1987	Sept. 8, 1987	14.96	9,840
1976	Dec. 31, 1975	12.31	1,470	1988	-	<12.00	<1,100
1977	Oct. 9, 1976	14.93	9,720	1989	May 5, 1989	12.73	2,160
1978	May 13, 1978	16.16	16,000	1990	-	<12.01	<1,100

< Less than.

JAMES RIVER BASIN

02032600 SWIFT RUN TRIBUTARY NEAR STANARDSVILLE, VA

LOCATION.--Lat 38°20'33", long 78°30'37", Greene County, Hydrologic Unit 02080204, at culvert on U.S. Highway 33, 4.9 mi northwest of Stanardsville.

DRAINAGE AREA.--0.35 mi².

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is 1,345.84 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by computations of flow through culvert.

BANKFULL STAGE.--5 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1966	Feb. 13, 1966	5.60	14	1970	Feb. 2, 1970	5.70	15
1967	Mar. 7, 1967	5.06	9	1971	May 30, 1971	6.20	19
1968	Jan. 14, 1968	4.75	6	1972	June 21, 1972	8.50	63
1969	June 9, 1969	5.15	9	1973	Oct. 5, 1972	8.52	65

JAMES RIVER BASIN

02032680 NORTH FORK RIVANNA RIVER NEAR PROFFIT, VA

LOCATION.--Lat 38°05'16", long 78°24'44", Albemarle County, Hydrologic Unit 02080204, on left bank 50 ft downstream from bridge on State Highway 649, 1.9 mi southeast of Proffit, and 2.2 mi upstream from confluence with South Fork.

DRAINAGE AREA.--176 mi².

GAGE.--Water-stage recorder. Datum of gage is 323.43 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 8,820 ft³/s and extended above.

BANKFULL STAGE.--Not determined.

REMARKS.--Records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1971	May 30, 1971	16.67	5,000	1981	Feb. 20, 1981	7.70	1,520
1972	June 21, 1972	30.40	31,800	1982	May 28, 1982	18.22	8,830
1973	Oct. 6, 1972	27.80	22,400	1983	Apr. 3, 1983	17.20	7,210
1974	Dec. 21, 1973	15.79	4,290	1984	Feb. 14, 1984	18.73	9,790
1975	Mar. 19, 1975	20.90	14,100	1985	Feb. 12, 1985	12.37	3,300
1976	Jan. 28, 1976	13.99	4,220	1986	Nov. 5, 1985	18.64	10,900
1977	Oct. 9, 1976	19.11	10,500	1987	Sept. 8, 1987	18.17	10,100
1978	Jan. 26, 1978	17.70	7,950	1988	Nov. 29, 1988	12.11	4,140
1979	Sept. 6, 1979	20.50	13,300	1989	May 6, 1989	16.80	8,100
1980	Apr. 9, 1980	15.16	5,010	1990	May 26, 1990	12.21	4,180

a From high-water marks.

02032700 SCHENKS BRANCH AT CHARLOTTESVILLE, VA

LOCATION.--Lat 38°02'32", long 78°28'30", Charlottesville City, Hydrologic Unit 02080204, on right downstream retaining wall of small road culvert 25 ft upstream from U.S. Highway 250 bypass culvert, 200 ft southeast of intersection of U.S. Highway 250 bypass and McIntire Road, and 1.2 mi upstream from mouth.

DRAINAGE AREA.--1.34 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 371.63 ft above National Geodetic Vertical Datum of 1929. Jan. 8, 1965, to Aug. 18, 1978, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements, slope-area measurement, and computations of flow through culvert.

BANKFULL STAGE.--5 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1950	Sept. 13, 1950	-	692	1971	July 11, 1971	6.51	600
1951	Dec. 4, 1950	-	175	1972	June 21, 1972	8.02	920
1952	Aug. 31, 1952	-	220	1973	June 28, 1973	4.43	230
1953	May 20, 1953	-	510	1974	Sept. 7, 1974	4.52	240
1955	Aug. 18, 1955	6.47	400	1975	Sept. 26, 1975	7.00	710
1956	July 20, 1956	8.60	650	1976	July 29, 1976	4.85	275
1957	Sept. 17, 1957	4.75	210	1977	Apr. 4, 1977	5.00	290
1958	July 27, 1958	6.45	400	1978	May 13, 1978	5.97	800
1959	Sept. 30, 1959	7.99	580	1979	Sept. 22, 1979	9.76	1,250
1960	July 25, 1960	6.81	390	1980	July 29, 1980	4.77	280
1961	Aug. 8, 1961	5.30	235	1981	July 4, 1981	5.49	400
1962	May 1, 1962	9.41	900	1982	May 28, 1982	6.27	560
1963	June 30, 1963	5.90	300	1983	Apr. 3, 1983	6.00	500
1964	July 12, 1964	6.90	400	1984	Feb. 14, 1984	6.47	530
1965	Nov. 25, 1964	6.40	354	1985	May 23, 1985	4.96	315
1966	Mar. 1, 1966	5.71	280	1986	Nov. 4, 1985	a5.20	340
1967	July 14, 1967	5.70	280	1987	Sept. 8, 1987	a12.54	1,670
1968	July 11, 1968	7.74	504	1988	June 20, 1988	7.31	620
1969	Aug. 20, 1969	7.15	1,100	1989	May 5, 1989	6.63	-
1970	July 24, 1970	5.00	-	1990	May 10, 1990	6.32	-

a From high-water mark.

02033300 MOORES CREEK NEAR CHARLOTTESVILLE, VA

LOCATION.--Lat 38°00'25", long 78°34'25", Albemarle County, Hydrologic Unit 02080204, on right downstream wingwall of culvert on access road, 30 ft north of U.S. Highway 29, 2.8 mi upstream from Morey Creek, and 4 mi southwest of Charlottesville.

DRAINAGE AREA.--3.52 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 505.40 ft above National Geodetic Vertical Datum of 1929. May 16, 1972, to Aug. 18, 1978, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--11 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1967	July 14, 1967	14.85	235	1979	June 2, 1979	18.74	-
1968	July 2, 1968	14.96	255	1980	-	<13.82	<80
1969	Aug. 20, 1969	16.85	2,000	1981	July 4, 1981	13.97	95
1970	July 10, 1970	15.28	370	1982	-	<13.82	<80
1971	Sept. 11, 1971	15.04	292	1983a	Apr. 3, 1983	-	-
1972	June 21, 1972	16.30	900	1984	Feb. 14, 1984	14.09	109
1973	Oct. 5, 1972	14.47	165	1985	-	<13.82	<80
1974	-	<13.82	<80	1986	Nov. 4, 1985	14.38	152
1975	Mar. 19, 1975	15.66	499	1987	Sept. 8, 1987	b18.05	-
1976	-	<13.82	<80	1988	-	<13.82	<80
1977	Oct. 9, 1976	15.78	561	1989	May 5, 1989	14.24	131
1978	May 13, 1978	15.03	289	1990	-	<13.82	<80

< Less than.

a Partial year; peak for year probably occurred during period of missing record caused by insect damage between February and June. Peaks for remainder of year less than 13.82 feet and 80 ft³/s.

b Suspected backwater from unknown source.

02033500 RIVANNA RIVER BELOW MOORES CREEK, NEAR CHARLOTTESVILLE, VA

LOCATION.--Lat 38°01'09", long 78°27'13", Albemarle County, Hydrologic Unit 02080204, 200 ft downstream from Moores Creek and 500 ft upstream from Virginia Public Service Company powerplant near Charlottesville.

DRAINAGE AREA.--507 mi².

GAGE.--Water-stage recorder. Datum of gage is 292.90 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 6,400 ft³/s and extended above.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1926	Aug. 25, 1926	9.68	6,390	1931	July 25, 1931	11.00	7,690
1927	Nov. 16, 1926	11.96	8,790	1932	Mar. 6, 1932	10.37	7,100
1928	Oct. 4, 1927	11.83	8,570	1933	Apr. 17, 1933	16.50	13,800
1929	Apr. 16, 1929	14.15	11,200	1934	Sept. 17, 1934	19.00	18,000
1930	Oct. 22, 1929	10.56	7,290	1943	October 1942	-	63,000

JAMES RIVER BASIN

02033700 HENDERSON CREEK NEAR SHADWELL, VA

LOCATION.--Lat 37°59'05", long 78°24'05", Albemarle County, Hydrologic Unit 02080204, at culvert on State Highway 729, 2.0 mi south of Shadwell.

DRAINAGE AREA.--1.76 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 280.20 ft above National Geodetic Vertical Datum of 1929. Prior to Apr. 4, 1974, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Not developed. Peak of August 1969 determined from indirect measurement of flow through culvert and over road.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1966	Feb. 13, 1966	5.41	-	1971	May 30, 1971	7.55	-
1967	Jan. 27, 1967	5.51	-	1972	June 21, 1972	11.59	-
1968	Dec. 10, 1967	3.87	-	1973	Oct. 5, 1972	8.85	-
1969	Aug. 20, 1969	9.60	2,000	1974	Sept. 7, 1974	4.85	-
1970	Mar. 29, 1970	4.02	-	1975	Mar. 19, 1975	7.53	-

02034000 RIVANNA RIVER AT PALMYRA, VA

LOCATION.--Lat 37°51'28", long 78°15'58", Fluvanna County, Hydrologic Unit 02080204, on left bank 10 ft upstream from bridge on U.S. Highway 15 at Palmyra, 0.5 mi upstream from Cunningham Creek, and 15 mi upstream from mouth.

DRAINAGE AREA.--664 mi².

GAGE.--Water-stage recorder. Datum of gage is 210.39 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 24, 1942, water-stage recorder at site 200 ft downstream at same datum. Oct. 24, 1942, to Dec. 18, 1947, nonrecording gage 10 ft downstream at same datum.

STAGE-DISCHARGE RELATION.-- Defined by current-meter measurements below 76,000 ft³/s and extended above on the basis of contracted-opening measurement at 86,000 ft³/s.

BANKFULL STAGE.--17 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1934	Sept. 17, 1934	24.75	24,000	1963	Mar. 12, 1963	18.63	13,100
1935	Sept. 6, 1935	26.27	29,000	1964	Jan. 9, 1964	9.45	4,780
1936	Mar. 18, 1936	29.26	39,900	1965	Feb. 8, 1965	21.77	18,000
1937	Apr. 26, 1937	33.35	56,700	1966	Feb. 14, 1966	14.92	9,010
1938	Oct. 20, 1937	23.45	20,000	1967	Mar. 8, 1967	18.41	12,800
1939	Feb. 11, 1939	13.75	6,800	1968	Jan. 14, 1968	13.40	7,660
1940	Aug. 17, 1940	21.78	16,300	1969	Aug. 20, 1969	39.85	98,800
1941	Apr. 6, 1941	14.87	7,560	1970	Apr. 3, 1970	12.53	6,920
1942	Aug. 9, 1942	18.59	11,400	1971	May 31, 1971	23.39	21,000
1943	Oct. 16, 1942	a37.4	78,000	1972	June 22, 1972	37.34	73,400
1944	Sept. 19, 1944	30.5	39,600	1973	Oct. 6, 1972	31.07	45,800
1945	Sept. 18, 1945	15.38	8,270	1974	Dec. 21, 1973	20.32	14,900
1946	Mar. 20, 1946	10.0	4,940	1975	Mar. 20, 1975	26.38	28,100
1947	Mar. 14, 1947	11.50	6,140	1976	Jan. 1, 1975	18.99	13,200
1948	Aug. 4, 1948	22.9	19,800	1977	Oct. 10, 1976	22.41	18,100
1949	Dec. 4, 1948	26.78	28,800	1978	Jan. 26, 1978	23.51	20,800
1950	Sept. 14, 1950	15.02	8,060	1979	Sept. 6, 1979	25.50	25,800
1951	Dec. 5, 1950	21.55	17,000	1980	Apr. 9, 1980	17.19	11,000
1952	Mar. 12, 1952	17.80	11,400	1981	Feb. 20, 1981	9.57	4,700
1953	Nov. 20, 1952	16.23	9,800	1982	June 14, 1982	19.53	13,800
1954	Mar. 2, 1954	16.24	9,800	1983	Apr. 3, 1983	22.02	17,300
1955	Aug. 19, 1955	29.00	34,800	1984	Feb. 15, 1984	24.42	22,800
1956	July 21, 1956	8.95	4,400	1985	Aug. 19, 1985	19.57	12,900
1957	Apr. 6, 1957	14.15	7,930	1986	Nov. 5, 1985	26.53	31,800
1958	Mar. 31, 1958	13.91	7,670	1987	Sept. 9, 1987	26.65	32,200
1959	June 3, 1959	15.78	9,900	1988	Nov. 30, 1987	16.92	10,300
1960	Oct. 1, 1959	20.41	15,700	1989	May 6, 1989	26.33	31,100
1961	Apr. 13, 1961	17.83	12,100	1990	May 27, 1990	18.73	12,700
1962	Oct. 21, 1961	24.27	22,900				

a At present location; gage height was 36.5 feet at site then in use.

02034050 HUNTERS BRANCH NEAR PALMYRA, VA

LOCATION.--Lat 37°56'48", long 78°14'30", Fluvanna County, Hydrologic Unit 02080204, at culvert on U.S. Highway 15, 6.1 mi north of Palmyra.

DRAINAGE AREA.--1.63 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 398.68 ft above National Geodetic Vertical Datum of 1929. Prior to Nov. 1, 1976, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--5 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1967	Mar. 7, 1967	2.78	46	1972	June 21, 1972	10.50	1,400
1968	Jan. 14, 1968	3.47	100	1973	Oct. 5, 1972	10.12	1,290
1969	Aug. 20, 1969	10.82	1,500	1974	Dec. 21, 1973	4.15	154
1970	Apr. 2, 1970	3.60	108	1975	Mar. 19, 1975	4.20	158
1971	May 30, 1971	3.42	94	1976	Mar. 31, 1976	3.80	124

JAMES RIVER BASIN

02034200 WILLIS RIVER AT CURDSVILLE, VA

LOCATION.--Lat 37°25'44", long 78°27'35", Buckingham County, Hydrologic Unit 02080205, 1 mi north of Curdsville.

DRAINAGE AREA.--42.3 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Not developed.

BANKFULL STAGE.--6 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1950	Sept. 10, 1950	5.06	-	1956	Feb. 7, 1956	6.15	-
1951	Mar. 20, 1951	4.90	-	1957	Apr. 11, 1957	5.63	-
1952	Dec. 23, 1951	7.10	-	1958	May 8, 1958	6.02	-
1953	Nov. 20, 1952	7.45	-	1959	Dec. 30, 1958	6.43	-
1954	May 22, 1954	6.28	-	1960	Apr. 6, 1960	6.87	-
1955	Aug. 18, 1955	9.67	-	1961a	Feb. 24, 1960	6.81	-

a Partial year, October through March.

JAMES RIVER BASIN

02034250 WHISPERING CREEK AT SPROUSES CORNER, VA

LOCATION.--Lat 37°31'31", long 78°29'03", Buckingham County, Hydrologic Unit 02080205, at culvert on U.S. Highway 60, 0.5 mi southeast of Sprouses Corner.

DRAINAGE AREA.--0.43 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 545 ft above National Geodetic Vertical Datum of 1929, from topographic map. June 7, 1972, to May 24, 1978, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1962	June 13, 1962	3.58	56	1970	Dec. 31, 1969	2.15	6.5
1963	-	<2.0	<5	1971	May 30, 1971	3.11	31
1964	-	<2.0	<5	1972	June 21, 1972	4.44	161
1965	Mar. 25, 1965	2.13	6.3	1973	Oct. 5, 1972	3.90	85
1966	Feb. 13, 1966	3.29	40	1974	May 10, 1974	3.29	40
1967	June 23, 1967	4.00	95	1975	Mar. 19, 1975	3.37	44
1968	June 11, 1968	2.71	17	1976	Dec. 31, 1975	3.70	18
1969	July 7, 1969	4.87	248	1977	Oct. 9, 1976	3.13	32

< Less than.

JAMES RIVER BASIN

02034300 LITTLE WILLIS RIVER AT CURDSVILLE, VA

LOCATION.--Lat 37°24'38", long 78°27'35", Buckingham County, Hydrologic Unit 02080205, at bridge on U.S. Highway 15, 0.5 mi south of Curdsville, and 2 mi north of Sheppards.

DRAINAGE AREA.--7.07 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 380 ft above National Geodetic Vertical Datum of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 38 ft³/s and extended above on basis of slope-area measurement at 337 ft³/s and contracted-opening measurement at 563 ft³/s.

BANKFULL STAGE.--5 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1951	Mar. 20, 1951	5.42	420	1957	Apr. 11, 1957	5.3	390
1952	Dec. 23, 1951	5.50	430	1958	May 8, 1958	4.7	305
1953	Nov. 20, 1952	5.69	450	1959	Sept. 30, 1959	4.68	300
1954	May 22, 1954	5.54	430	1960	Apr. 6, 1960	5.56	430
1955	Aug. 18, 1955	6.26	563	1961	Feb. 24, 1961	5.4	400
1956	Feb. 7, 1956	3.64	150				

02034500 WILLIS RIVER AT LAKESIDE VILLAGE, VA
(Formerly published as Willis River at Flanagan Mills)

LOCATION.--Lat 37°40'00", long 78°10'00", Cumberland County, Hydrologic Unit 02080205, on left bank 15 ft upstream from bridge on State Highway 690, 0.4 mi east of Lakeside Village, 6.9 mi upstream from mouth, and 7.7 mi downstream from Reynolds Creek.

DRAINAGE AREA.--262 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 178.98 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers). Prior to Jan. 3, 1935, nonrecording gage at site 1,300 ft upstream at same datum. Jan. 3, 1935, to Oct. 1, 1986, water-stage recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 5,770 ft³/s and extended above by logarithmic plotting.

BANKFULL STAGE.--Not determined.

REMARKS.--Records were provided by the Virginia Water Control Board from July 1, 1957, to Dec. 31, 1986.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1927	Dec. 28, 1926	-	1,600	1959	Dec. 31, 1958	14.22	2,200
1928	Aug. 13, 1928	-	7,350	1960	Apr. 7, 1960	15.27	2,960
1929	Mar. 1, 1929	-	1,790	1961	Feb. 25, 1961	14.12	2,150
1930	Feb. 5, 1930	-	1,620	1962	Oct. 22, 1961	18.78	5,930
1931	May 23, 1931	-	1,760	1963	Mar. 15, 1963	12.05	1,470
1932	Mar. 8, 1932	-	2,310	1964	Feb. 19, 1964	11.83	1,430
1933	Oct. 19, 1932	-	2,000	1965	Mar. 7, 1965	13.05	1,720
1934	Mar. 6, 1934	-	2,000	1966	Mar. 3, 1966	12.88	1,690
1935	Sept. 6, 1935	-	8,000	1967	Aug. 27, 1967	12.42	1,550
1936	Mar. 19, 1936	20.44	5,300	1968	Jan. 15, 1968	12.92	1,690
1937	Apr. 27, 1937	23.86	9,580	1969	July 24, 1969	13.80	2,000
1938	Oct. 21, 1937	14.67	2,680	1970	Jan. 2, 1970	10.08	991
1939	Feb. 13, 1939	13.84	2,160	1971	May 31, 1971	18.64	5,760
1940	Aug. 17, 1940	21.94	7,380	1972	June 22, 1972	29.80	24,000
1941	Apr. 7, 1941	13.55	2,080	1973	Oct. 6, 1972	21.12	7,880
1942	Aug. 10, 1942	14.85	2,800	1974	Sept. 8, 1974	15.68	3,300
1943	Oct. 17, 1942	16.66	2,510	1975	Mar. 20, 1975	16.75	4,230
1944	Sept. 20, 1944	21.80	7,500	1976	Jan. 2, 1976	14.08	2,150
1945	Sept. 30, 1945	15.67	3,300	1977	Oct. 23, 1976	13.30	1,810
1946	Dec. 28, 1945	13.02	1,720	1978	Jan. 27, 1978	19.28	6,360
1947	Mar. 16, 1947	12.94	1,690	1979	Feb. 26, 1979	21.92	8,560
1948	Aug. 6, 1948	18.70	5,840	1980	Oct. 1, 1979	15.26	2,960
1949	Dec. 5, 1948	20.59	6,800	1981	Feb. 12, 1981	8.04	585
1950	Nov. 3, 1949	12.91	1,690	1982	June 6, 1982	15.57	3,180
1951	Mar. 20, 1951	9.97	1,040	1983	Apr. 16, 1983	14.07	2,140
1952	Dec. 23, 1951	16.05	3,550	1984	Mar. 30, 1984	16.24	3,750
1953	Nov. 20, 1952	14.54	2,380	1985	Aug. 19, 1985	14.41	2,330
1954	May 22, 1954	14.45	2,320	1986	Nov. 6, 1985	22.97	9,470
1955	Aug. 19, 1955	21.35	8,100	1987	Apr. 16, 1987	20.35	7,250
1956	Feb. 7, 1956	9.41	920	1988	May 6, 1988	13.06	1,740
1957	Apr. 11, 1957	11.32	1,320	1989	May 6, 1989	14.17	2,185
1958	May 8, 1958	13.34	1,810	1990	Oct. 19, 1989	16.16	3,690

02035000 JAMES RIVER AT CARTERSVILLE, VA

LOCATION.--Lat 37°40'15", long 78°05'10", Goochland County, Hydrologic Unit 02080205, on left bank 200 ft downstream from bridge on State Highway 45 at Cartersville, 1.8 mi downstream from Willis River, and at mile 156.4.

DRAINAGE AREA.--6,257 mi².

GAGE.--Water-stage recorder. Datum of gage is 163.90 ft above National Geodetic Vertical Datum of 1929. Prior to June 4, 1927, nonrecording gage at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 160,000 ft³/s and extended above on basis of slope-conveyance study.

BANKFULL STAGE.--16 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1870	October 1869	a32	-	1944	Sept. 20, 1944	29.60	180,000
1878	November 1877	a30.4	-	1945	Sept. 19, 1945	19.5	67,400
1899	Mar. 6, 1899	25.2	111,000	1946	Jan. 9, 1946	14.8	43,700
1900	Mar. 2, 1900	16.0	49,200	1947	Mar. 16, 1947	13.68	38,900
1901	May 23, 1901	27.0	134,000	1948	Apr. 2, 1948	22.14	83,500
1902	Dec. 30, 1901	26.7	130,000	1949	Dec. 5, 1948	27.00	134,000
1903	June 7, 1903	22.0	82,800	1950	Sept. 11, 1950	19.73	68,600
1904	Mar. 8, 1904	14.0	40,200	1951	Dec. 9, 1950	19.42	66,900
1905	July 14, 1905	17.0	54,200	1952	Dec. 22, 1951	18.16	60,300
1906	Jan. 4, 1906	17.1	54,700	1953	Mar. 26, 1953	20.90	75,600
1907	Oct. 21, 1906	23.8	97,200	1954	Mar. 3, 1954	18.75	63,600
1908	Feb. 17, 1908	19.8	69,100	1955	Aug. 19, 1955	24.48	104,000
1909	Apr. 16, 1909	15.8	48,200	1956	Mar. 16, 1956	9.93	23,800
1910	June 17, 1910	20.3	72,000	1957	Apr. 7, 1957	19.47	67,400
1911	Jan. 4, 1911	16.3	50,700	1958	Apr. 1, 1958	16.46	51,700
1912	May 13, 1912	22.5	86,400	1959	June 3, 1959	14.47	42,300
1913	Mar. 29, 1913	23.4	93,600	1960	Apr. 6, 1960	20.13	70,800
1914	Nov. 10, 1913	13.6	39,000	1961	Apr. 14, 1961	15.10	45,000
1915	Feb. 4, 1915	20.6	69,300	1962	Oct. 22, 1961	23.13	91,200
1916	Oct. 2, 1915	18.4	59,000	1963	Mar. 14, 1963	21.33	78,000
1917	Mar. 6, 1917	19.9	66,300	1964	Jan. 26, 1964	13.02	35,900
1918	Apr. 22, 1918	17.0	52,800	1965	Feb. 8, 1965	19.83	69,100
1919	Jan. 4, 1919	23.0	82,900	1966	Feb. 14, 1966	16.82	53,200
1920	Feb. 4, 1920	20.2	67,300	1967	Mar. 8, 1967	19.61	68,100
1921	Dec. 1, 1920	14.7	43,300	1968	Dec. 12, 1967	12.81	35,100
1922	Mar. 16, 1922	15.5	46,600	1969	Aug. 21, 1969	33.75	250,000
1923	Mar. 17, 1923	18.5	60,200	1970	Jan. 2, 1970	19.03	64,900
1924	May 13, 1924	24.7	106,000	1971	June 1, 1971	21.51	79,400
1925	Oct. 1, 1924	24.38	103,000	1972	June 22, 1972	37.87	362,000
1926	Jan. 20, 1926	15.25	45,300	1973	Oct. 6, 1972	27.12	131,000
1927	Dec. 28, 1926	16.20	49,800	1974	Dec. 29, 1973	20.89	75,500

02035000 JAMES RIVER AT CARTERSVILLE, VA--Continued

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1928	Aug. 18, 1928	23.80	97,200	1975	Mar. 20, 1975	26.04	120,000
1929	Apr. 17, 1929	17.66	56,600	1976	Jan. 1, 1976	17.26	54,400
1930	Nov. 20, 1929	15.82	48,000	1977	Oct. 10, 1976	20.60	73,900
1931	Aug. 23, 1931	11.14	28,400	1978	Jan. 27, 1978	25.08	109,000
1932	Mar. 7, 1932	17.13	54,800	1979	Feb. 26, 1979	26.33	123,000
1933	Oct. 18, 1932	21.54	75,400	1980	Apr. 16, 1980	18.86	64,000
1934	Mar. 5, 1934	15.93	49,000	1981	May 30, 1981	22.48	29,700
1935	Sept. 6, 1935	27.80	134,000	1982	June 15, 1982	20.91	76,000
1936	Mar. 19, 1936	28.77	166,000	1983	Apr. 11, 1983	20.26	71,900
1937	Apr. 26, 1937	27.73	133,000	1984	Feb. 16, 1984	22.42	86,800
1938	Oct. 21, 1937	24.34	98,400	1985	Aug. 19, 1985	18.17	60,400
1939	Aug. 20, 1939	19.12	65,500	1986	Nov. 6, 1985	32.60	225,000
1940	Aug. 17, 1940	28.34	145,000	1987	Apr. 18, 1987	27.96	142,000
1941	Apr. 6, 1941	13.88	39,700	1988	Nov. 30, 1988	12.21	32,600
1942	May 24, 1942	20.80	75,000	1989	May 7, 1989	23.38	93,800
1943	Oct. 16, 1942	27.14	135,000	1990	May 30, 1990	16.57	52,300

a From information by U.S. Army Corps of Engineers.

JAMES RIVER BASIN

02035400 BIG LICKINGHOLE CREEK TRIBUTARY NEAR FERNCLIFF, VA

LOCATION.--Lat 37°49'34", long 77°58'23", Goochland County, Hydrologic Unit 02080205, at bridge on U.S. Highway 250, 10.5 mi southeast of Ferncliff.

DRAINAGE AREA.--0.55 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 253.68 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by contracted-opening measurements at 150 ft³/s and 600 ft³/s and computation of flow through culvert.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1962	Oct. 21, 1961	4.28	150	1970	-	<2.55	<50
1963	Mar. 12, 1963	2.85	55	1971	May 30, 1971	3.35	76
1964	-	<2.55	<50	1972	June 21, 1972	4.93	280
1965	-	<2.55	<50	1973	Oct. 5, 1972	3.88	140
1966	-	<2.55	<50	1974	-	<2.55	<50
1967	-	<2.55	<50	1975	June 25, 1975	3.40	79
1968	Jan. 14, 1968	3.09	70	1976	Mar. 31, 1976	3.01	60
1969	Aug. 20, 1969	5.55	600	1977	-	<2.55	<50

< Less than.

JAMES RIVER BASIN

02035450 ROCKETTS CREEK TRIBUTARY NEAR GUM SPRINGS, VA
(Formerly published as Mill Creek near Gum Springs)

LOCATION.--Lat 37°47'15", long 77°54'40", Goochland County, Hydrologic Unit 02080205, at culvert on U.S. Highway 250, 1.2 mi northwest of Gum Springs.

DRAINAGE AREA.--0.34 mi².

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is 291.65 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--3 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1966	-	<3.0	<14	1971	May 20, 1971	5.85	88
1967	-	<3.0	<14	1972	June 21, 1972	9.58	187
1968	Aug. 19, 1968	7.59	142	1973	Oct. 5, 1972	4.75	56
1969	Aug. 20, 1969	9.72	190	1974	Sept. 6, 1974	4.10	36
1970	-	<3.0	<14	1975	July 14, 1975	4.66	53

< Less than.

02035500 LICKINGHOLE CREEK NEAR GOOCHLAND, VA

LOCATION.--Lat 37°41'31", long 77°57'22", Goochland County, Hydrologic Unit 02080205, at highway bridge 0.25 mi downstream from confluence of Big and Little Lickinghole Creeks, 1.75 mi upstream from mouth, and 4.0 mi west of Goochland.

DRAINAGE AREA.--70 mi², approximately.

GAGE.--Nonrecording gage (chain gage). Datum of gage is 161.69 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 220 ft³/s and extended above.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1945	July 20, 1945	10.7	729	1946	May 5, 1946	9.20	557

JAMES RIVER BASIN

02036000 BEAVERDAM CREEK NEAR STATE FARM, VA

LOCATION.--Lat 37°38'50", long 77°49'34", Goochland County, Hydrologic Unit 02080205, 75 ft upstream from highway bridge at State Farm, 0.75 mi upstream from mouth, and 4 mi southeast of Goochland Courthouse.

DRAINAGE AREA.--42 mi², approximately.

GAGE.--Nonrecording gage (staff gage). Datum of gage is 136.59 ft above National Geodetic Vertical Datum of 1929 (levels by State Farm surveyors).

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 280 ft³/s and extended above.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1945	July 19, 1945	5.6	750	1947	Jan. 20, 1947	4.6	478
1946	May 4, 1946	5.6	750				

02036500 FINE CREEK AT FINE CREEK MILLS, VA

LOCATION.--Lat 37°35'52", long 77°49'12", Powhatan County, Hydrologic Unit 02080205, on right bank 75 ft downstream from bridge on State Highway 711 at Fine Creek Mills, 0.8 mi upstream from mouth, and 6.7 mi northeast of Powhatan.

DRAINAGE AREA.--22.1 mi².

GAGE.--Water-stage recorder. Datum of gage is 156.59 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 28, 1953, nonrecording gage at site 75 ft upstream at same datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 2,560 ft³/s and extended above by logarithmic plotting.

BANKFULL STAGE.--3.0 ft.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1945	Sept. 18, 1945	4.0	550	1968	Jan. 15, 1968	2.88	191
1946	May 5, 1946	3.33	370	1969	Aug. 20, 1969	3.55	392
1947	Apr. 17, 1947	3.54	224	1970	Dec. 31, 1969	2.51	104
1948	Aug. 4, 1948	7.0	1,650	1971	Aug. 27, 1971	4.76	955
1949	July 17, 1949	3.80	440	1972	June 22, 1972	6.60	2,140
1950	Sept. 13, 1950	4.60	718	1973	Oct. 6, 1972	9.02	4,180
1951	Feb. 17, 1951	3.10	204	1974	Dec. 21, 1973	4.65	905
1952	Dec. 21, 1951	6.4	1,410	1975	Sept. 26, 1975	3.71	454
1953	Jan. 25, 1953	3.25	253	1976	Jan. 27, 1976	3.84	508
1954	June 15, 1954	3.16	266	1977	Oct. 21, 1976	3.89	530
1955	Aug. 18, 1955	6.98	2,010	1978	Jan. 26, 1978	4.90	1,030
1956	Oct. 15, 1955	2.71	138	1979	Feb. 25, 1979	6.10	1,780
1957	Apr. 9, 1957	2.84	150	1980	Oct. 1, 1979	6.42	2,120
1958	May 7, 1958	3.44	302	1981	Aug. 13, 1981	2.41	86
1959	Dec. 29, 1958	4.84	1,000	1982	Mar. 20, 1982	3.09	270
1960	Apr. 5, 1960	3.52	381	1983	Apr. 16, 1983	5.07	1,280
1961	June 24, 1961	3.82	499	1984	Feb. 14, 1984	6.21	2,000
1962	Oct. 21, 1961	8.35	3,640	1985	Aug. 19, 1985	4.17	775
1963	June 3, 1963	2.97	209	1986	Nov. 4, 1985	7.65	3,000
1964	Feb. 16, 1964	2.71	148	1987	Apr. 16, 1987	3.90	640
1965	Feb. 8, 1965	2.77	152	1988	Dec. 11, 1987	3.16	295
1966	Feb. 13, 1966	2.87	180	1989	May 6, 1989	3.10	273
1967	Mar. 7, 1967	2.80	171	1990	May 29, 1990	4.74	1,090

02037000 JAMES RIVER AND KANAWHA CANAL NEAR RICHMOND, VA

LOCATION.--Lat 37°33'52", long 77°34'28", Henrico County, Hydrologic Unit 02080205, on left bank 75 ft downstream from Canal bridge, 400 ft downstream from head gates, 1,200 ft north of north end of Boshier Dam on James River, 1.6 mi upstream from Huguenot Memorial Bridge, and 2.0 mi west of Richmond city limits.

GAGE.--Water-stage recorder. Datum of gage is 106.07 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1938, at datum 3.06 ft higher.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 2,020 ft³/s and extended above.

BANKFULL STAGE.--Not determined.

REMARKS.--Canal diverts from James River 1,200 ft upstream from Boshier Dam and discharges into river at several points downstream from gaging station near Richmond. Above 2,540 ft³/s, gage height, 14.5 ft, there is interchange of flow with James River; discharge above 2,540 ft³/s included in discharge for James River near Richmond (station 02037500). Figures given show flow in canal only. Subsequent to June 30, 1957, records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1938	Oct. 21, 1937	-	2,200	1966	Mar. 1, 1966	8.54	1,000
1939	Feb. 21, 1939	-	1,010	1967	Mar. 18, 1967	9.07	1,140
1941	Apr. 5, 1941	-	1,130	1968	Jan. 15, 1968	9.13	1,140
1942	Mar. 10, 1942	-	1,130	1969	Aug. 21, 1969	24.7	(a)
1943	Oct. 17, 1942	-	3,320	1970	Dec. 12, 1969	8.61	1,020
1945	July 18, 1945	-	1,370	1971	May 30, 1971	9.23	1,160
1946	Dec. 26, 1945	-	1,230	1972	June 23, 1972	29.1	(a)
1947	June 15, 1947	-	1,150	1973	Oct. 7, 1972	20.80	(a)
1948	Apr. 2, 1948	-	1,260	1974	Oct. 3, 1973	8.30	1,020
1950	Oct. 31, 1949	-	1,230	1975	Mar. 31, 1975	17.51	(a)
1951	Dec. 4, 1950	-	1,360	1976	Oct. 19, 1975	8.33	1,040
1952	Sept. 2, 1952	-	1,390	1977	Apr. 10, 1977	8.21	1,020
1953	Feb. 22, 1953	-	1,230	1978	Jan. 28, 1978	16.68	(a)
1954	Mar. 2, 1954	-	1,390	1979	Feb. 27, 1979	18.75	(a)
1955	Aug. 20, 1955	-	2,340	1980b	Oct. 1, 1979	-	859
1956	Apr. 17, 1956	-	1,120	1981c	June 6, 1981	8.83	1,080
1957	Apr. 6, 1957	-	1,100	1982d	June 15, 1982	12.20	1,780
1958	Apr. 24, 1958	-	1,220	1983e	Aug. 19, 1983	17.85	-
1959	Apr. 26, 1959	-	1,060	1984	Feb. 15, 1984	10.68	1,340
1960	Oct. 1, 1959	-	1,180	1985	Aug. 19, 1985	14.72	(a)
1961	Feb. 28, 1961	9.05	1,160	1986	Nov. 7, 1985	24.50	(a)
1962	Oct. 23, 1961	13.10	2,240	1987	Apr. 18, 1987	20.74	(a)
1963	Nov. 11, 1962	9.06	1,180	1988	July 9, 1988	6.01	536
1964	Mar. 5, 1964	8.92	1,140	1989	May 7, 1989	10.32	1,340
1965	Nov. 27, 1964	8.79	1,060	1990	Apr. 2, 1990	8.59	988

a Indeterminate, flows above 2,540 ft³/s and 14.5 ft intermingle with those of James River.

b Partial year, headgates closed October 2 through September 30.

c Partial year, headgates closed October 1 through November 9.

d Partial year, headgates closed August 20 through September 30.

e Partial year, headgates closed October 1 through September 20.

f Backwater from construction.

02037500 JAMES RIVER NEAR RICHMOND, VA

LOCATION.--Lat 37°33'47", long 77°32'50", Henrico County, Hydrologic Unit 02080205, on left bank 0.2 mi upstream from Huguenot Memorial Bridge, 0.5 mi southwest of Richmond city limits, 1.7 mi downstream from Bosher Dam, 3.3 mi upstream from Powhite Creek, and at mile 116.6.

DRAINAGE AREA.--6,758 mi².

GAGE.--Water-stage recorder. Control is Williams Island dams which divert flow for city of Richmond water supply. Datum of gage is 98.82 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 318,700 ft³/s.

BANKFULL STAGE.--11 ft.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Water Control Board. Records below 120,000 ft³/s do not include the flow of the James River and Kanawha Canal.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1935	Sept. 7, 1935	21.01	127,000	1963	Mar. 15, 1963	16.42	81,600
1936	Mar. 19, 1936	23.42	175,000	1964	Jan. 27, 1964	11.22	34,300
1937	Apr. 27, 1937	22.65	148,000	1965	Feb. 9, 1965	15.32	69,600
1938	Oct. 21, 1937	18.20	92,500	1966	Feb. 15, 1966	13.75	55,200
1939	Aug. 20, 1939	14.37	57,900	1967	Mar. 9, 1967	15.37	70,600
1940	Aug. 18, 1940	21.80	151,000	1968	Dec. 12, 1967	11.24	34,300
1941	Apr. 6, 1941	11.93	39,100	1969	Aug. 21, 1969	24.95	222,000
1942	May 24, 1942	15.74	68,600	1970	Jan. 2, 1970	14.92	65,600
1943	Oct. 17, 1942	19.80	119,000	1971	June 1, 1971	17.02	88,500
1944	Sept. 20, 1944	21.80	150,000	1972	June 23, 1972	28.62	313,000
1945	Sept. 20, 1945	14.82	61,100	1973	Oct. 7, 1972	21.76	162,000
1946	Jan. 9, 1946	12.20	41,300	1974	Dec. 19, 1973	15.94	76,100
1947	Mar. 17, 1947	11.65	37,000	1975	Mar. 21, 1975	20.08	133,000
1948	Apr. 2, 1948	16.45	75,000	1976	Jan. 2, 1976	14.08	57,900
1949	Dec. 5, 1948	20.90	136,000	1977	Oct. 11, 1976	15.63	72,800
1950	Sept. 12, 1950	14.60	59,500	1978	Jan. 28, 1978	19.36	122,000
1951	Dec. 10, 1950	14.85	61,100	1979	Feb. 27, 1979	20.38	138,000
1952	Dec. 22, 1951	14.53	58,700	1980	Apr. 16, 1980	14.74	63,600
1953	Mar. 27, 1953	15.95	71,100	1981	May 30, 1981	9.85	25,700
1954	Mar. 3, 1954	14.54	58,700	1982	June 15, 1982	15.65	73,400
1955	Aug. 20, 1955	18.36	98,700	1983	Apr. 12, 1983	15.66	73,500
1956	Mar. 17, 1956	9.32	22,600	1984	Feb. 16, 1984	17.27	91,700
1957	Apr. 8, 1957	15.00	62,700	1985	Aug. 19, 1985	14.94	66,000
1958	Apr. 2, 1958	13.35	50,100	1986	Nov. 7, 1985	24.77	218,000
1959	June 4, 1959	12.05	39,800	1987	Apr. 18, 1987	21.91	163,000
1960	Apr. 7, 1960	15.70	68,600	1988	Nov. 30, 1988	10.72	31,000
1961	Apr. 14, 1961	12.63	44,200	1989	May 7, 1989	17.70	96,900
1962	Oct. 23, 1961	17.98	94,000	1990	May 30, 1990	14.01	57,100

02037800 FALLING CREEK NEAR MIDLOTHIAN, VA

LOCATION.--Lat 37°27'15", long 77°35'20", Chesterfield County, Hydrologic Unit 02080206, at bridge on State Highway 653, 2.2 mi upstream from Horners Run, and 4 mi southeast of Midlothian.

DRAINAGE AREA.--18.1 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 170.06 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 700 ft³/s and extended above on basis of contracted-opening measurement at 1,450 ft³/s.

BANKFULL STAGE.--4 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1951	-	<2.3	<130	1971	Aug. 27, 1971	6.18	576
1952	Mar. 24, 1952	5.93	500	1972	June 21, 1972	5.88	516
1953	Nov. 21, 1952	4.67	315	1973	Feb. 2, 1973	5.54	448
1954	May 21, 1954	4.63	310	1974	Dec. 21, 1973	5.00	360
1955	Aug. 18, 1955	7.50	943	1975	July 14, 1975	7.28	912
1956	Oct. 1, 1955	3.96	235	1976	Jan. 1, 1976	4.93	390
1957	Feb. 26, 1957	5.44	420	1977	-	<2.30	<130
1958	Aug. 4, 1958	5.21	385	1978	Mar. 10, 1978	5.60	520
1959	Aug. 8, 1959	6.95	780	1979	Sept. 30, 1979	11.71	5,170
1960	Sept. 12, 1960	8.62	1,450	1980	Nov. 11, 1979	7.54	1,020
1961	Feb. 23, 1961	4.75	325	1981	July 4, 1981	3.92	252
1962	Oct. 21, 1961	7.45	950	1982	Mar. 7, 1982	3.97	257
1963	Mar. 6, 1963	3.98	240	1983	Mar. 21, 1983	6.02	604
1964	Feb. 16, 1964	3.55	198	1984	Mar. 29, 1984	6.33	666
1965	Feb. 7, 1965	3.77	216	1985	Aug. 18, 1985	7.23	919
1966	-	<2.3	<130	1986	Nov. 4, 1985	7.76	1,100
1967	-	<2.3	<130	1987	Apr. 16, 1987	6.35	670
1968	Jan. 14, 1968	3.24	167	1988	July 22, 1988	4.31	296
1969	Aug. 20, 1969	4.07	251	1989	June 7, 1989	4.31	296
1970	Aug. 19, 1970	3.56	199	1990	Apr. 30, 1990	5.17	434

< Less than.

02038000 FALLING CREEK NEAR CHESTERFIELD, VA

LOCATION.--Lat 37°26'37", long 77°31'21", Chesterfield County, Hydrologic Unit 02080206, on left bank at upstream side of bridge on State Highway 651, 0.8 mi downstream from Licking Creek, 2.8 mi upstream from Pocoshock Creek, and 4.7 mi northwest of Chesterfield.

DRAINAGE AREA.--32.8 mi².

GAGE.--Water-stage recorder. Datum of gage is 126.39 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,400 ft³/s and extended above on the basis of slope-area measurement at 5,930 ft³/s.

BANKFULL STAGE.--8 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1955	Aug. 18, 1955	-	2,000	1973	Feb. 2, 1973	8.63	616
1956	June 2, 1956	7.04	356	1974	Dec. 21, 1973	8.63	550
1957	Feb. 26, 1957	8.42	592	1975	July 14, 1975	10.65	1,600
1958	Aug. 4, 1958	10.07	855	1976	Jan. 1, 1976	8.46	592
1959	Dec. 29, 1958	9.92	815	1977	Apr. 5, 1977	6.25	268
1960	Sept. 12, 1960	12.67	2,510	1978	Mar. 10, 1978	9.62	860
1961	Feb. 23, 1961	7.41	432	1979	Sept. 30, 1979	13.44	a4,300
1962	Oct. 21, 1961	11.10	1,500	1980	Oct. 1, 1979	15.32	5,930
1963	June 3, 1963	8.33	574	1981	July 5, 1981	6.07	204
1964	Feb. 16, 1964	5.94	268	1982	Mar. 7, 1982	7.87	464
1965	Feb. 8, 1965	6.20	298	1983	Mar. 21, 1983	10.84	1,380
1966	Feb. 28, 1966	5.47	214	1984	Mar. 29, 1984	11.07	1,490
1967	Oct. 19, 1966	5.57	227	1985	Aug. 19, 1985	10.23	1,110
1968	Jan. 14, 1968	6.99	387	1986	Nov. 4, 1985	11.63	1,820
1969	July 23, 1969	10.39	1,200	1987	Apr. 16, 1987	10.27	1,130
1970	Aug. 20, 1970	5.34	196	1988	July 23, 1988	8.55	598
1971	May 31, 1971	6.48	339	1989	Aug. 18, 1989	9.09	726
1972	Oct. 24, 1971	9.68	904	1990	Apr. 3, 1990	8.03	491

a Rising stage at midnight; peak actually occurred on Oct. 1, 1979. Highest independent peak of water year was 12.20 ft, 2,880 ft³/s, on Sept. 5, 1979.

02038500 FALLING CREEK NEAR DREWRY'S BLUFF, VA

LOCATION.--Lat 37°27'40", long 77°28'00", Chesterfield County, Hydrologic Unit 02080206, on left bank 300 ft downstream from Chesterfield County Reservoir, 2.4 mi northeast of Drewry's Bluff, 2.7 mi downstream from Pocoshock Creek, and 3.7 mi upstream from mouth.

DRAINAGE AREA.--54 mi², approximately.

GAGE.--Water-stage recorder. Datum of gage is 60 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Oct. 1, 1952, at site 300 ft upstream, at datum 5.39 ft higher.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,450 ft³/s; extended to 4,700 ft³/s and above on basis of slope-area and flow-over-dam measurements of the flood peak of August 1955.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1943	Oct. 26, 1942	4.30	575	1954	May 21, 1954	5.19	932
1944	Aug. 7, 1944	4.68	745	1955	Aug. 18, 1955	10.12	4,700
1945	July 18, 1945	10.1	7,270	1956	Oct. 1, 1955	4.70	700
1946	July 23, 1946	5.09	940	1957a	Feb. 26, 1957	-	b1,070
1947	Sept. 25, 1947	4.80	790	1958	Dec. 21, 1957	5.62	1,300
1948	Feb. 14, 1948	4.72	745	1959	Dec. 29, 1958	5.95	1,530
1949	Aug. 16, 1949	4.60	700	1960	Sept. 12, 1960	10.40	5,010
1950	Nov. 2, 1949	5.91	1,420	1961	Feb. 23, 1961	4.66	689
1951	Mar. 20, 1951	3.27	249	1962	Jan. 6, 1962	7.56	2,860
1952	Mar. 24, 1952	5.28	1,040	1963	June 3, 1963	5.85	1,480
1953	Nov. 21, 1952	5.38	1,020	1964c	Feb. 16, 1964	4.32	486

a Partial year, July through September.

b Estimated.

c Partial year, October through June.

JAMES RIVER BASIN

02038800 APPOMATTOX RIVER NEAR APPOMATTOX, VA

LOCATION.--Lat 37°22'55", long 78°47'24", Appomattox County, Hydrologic Unit 02080207, at bridge on State Highway 24, 3.0 mi northeast of Appomattox.

DRAINAGE AREA.--5.79 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 649.60 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 2 ft³/s and extended above on basis of slope-area measurement at 535 ft³/s and contracted-opening measurement at 3,870 ft³/s.

BANKFULL STAGE.--4 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1955	Aug. 17, 1955	5.42	535	1966	Mar. 1, 1966	4.70	340
1956	Apr. 15, 1956	4.21	240	1967	-	<4.1	<220
1957	Apr. 5, 1957	4.55	310	1968	-	<4.1	<220
1958	Nov. 19, 1957	5.47	545	1969	-	<4.1	<220
1959	Sept. 30, 1959	5.84	670	1970	-	<4.1	<220
1960	May 8, 1960	5.51	560	1971	May 30, 1971	6.06	780
1961	Feb. 24, 1961	5.48	550	1972	June 21, 1972	8.68	3,870
1962	Oct. 21, 1961	5.22	480	1973	Oct. 5, 1972	6.71	1,190
1963	-	<4.1	<220	1974	Dec. 21, 1973	7.31	1,770
1964	-	<4.1	<220	1975	Mar. 19, 1975	6.56	1,070
1965	Feb. 7, 1965	5.40	540	1976	Mar. 31, 1976	5.71	678

< Less than.

JAMES RIVER BASIN

02038830 FISHPOND CREEK NEAR HIXBURG, VA

LOCATION.--Lat 37°22'09", long 78°38'45", Appomattox County, Hydrologic Unit 02080207, on left bank attached to upstream side of bridge on State Highway 617, 0.5 mi upstream from mouth, and 2.8 mi north of Hixburg.

DRAINAGE AREA.--14.0 mi².

GAGE.--Water-stage recorder. Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1980	Jan. 18, 1980	4.71	201	1981	July 24, 1981	3.44	97

02038840 HOLIDAY CREEK NEAR TOGA, VA

LOCATION.--Lat 37°25'58", long 78°41'12", Buckingham County, Hydrologic Unit 02080207, on left bank 40 ft downstream from State Forest Road 2307, 1.8 mi upstream from confluence with North Holiday Creek, and 5.9 mi southwest of Toga.

DRAINAGE AREA.--1.68 mi².

GAGE.--Water-stage recorder. Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Developed by current-meter measurements, step-backwater computations, and slope-area measurement at 2,820 ft³/s.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1972	June 21, 1972	6.72	2,820	1982	June 3, 1982	5.03	798
1973	Aug. 18, 1973	5.06	816	1983	Mar. 18, 1983	2.41	141
1974	Sept. 6, 1974	2.96	207	1984a	Nov. 25, 1983	a2.29	a129
1975	Sept. 25, 1975	5.33	994	1985	Aug. 18, 1985	3.11	226
1976	Dec. 31, 1975	2.95	206	1986	Nov. 4, 1985	4.60	590
1977	Oct. 20, 1976	3.18	236	1987	Sept. 8, 1987	5.61	1,250
1978	Jan. 26, 1978	3.06	220	1988	May 18, 1988	2.13	114
1979	Feb. 25, 1979	2.50	151	1989	May 5, 1989	3.57	296
1980	Jan. 18, 1980	1.97	99	1990	Mar. 17, 1990	2.92	202
1981	Feb. 19, 1981	1.95	97				

a No record January through July due to vandalism; value listed is highest for remainder of year.

JAMES RIVER BASIN

02038845 NORTH HOLIDAY CREEK NEAR TOGA, VA

LOCATION.--Lat 37°26'09", long 78°40'04", Buckingham County, Hydrologic Unit 02080207, on left bank 18 ft upstream from State Forest Road 2307, 1.0 mi upstream from mouth, and 4.5 mi southwest of Toga.

DRAINAGE AREA.--1.31 mi².

GAGE.--Water-stage recorder. Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Developed by current-meter measurements and computation of flow through culvert and flow over road.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1972	June 21, 1972	6.79	1,570	1982	June 3, 1982	5.54	302
1973	Aug. 18, 1973	6.02	500	1983	Mar. 18, 1983	2.20	42
1974	Sept. 6, 1974	3.07	68	1984	Mar. 29, 1984	3.28	76
1975	Sept. 25, 1975	5.78	392	1985	Aug. 18, 1985	4.42	138
1976	Dec. 31, 1975	2.02	38	1986	Nov. 4, 1985	5.39	258
1977	Oct. 9, 1976	2.30	45	1987	Sept. 8, 1987	5.85	420
1978	Jan. 8, 1978	4.69	161	1988	May 18, 1988	1.28	23
1979	Feb. 24, 1979	5.47	281	1989	May 5, 1989	2.62	55
1980	Jan. 18, 1980	1.45	26	1990	Mar. 17, 1990	2.83	61
1981	Feb. 20, 1981	1.19	21				

02038850 HOLIDAY CREEK NEAR ANDERSONVILLE, VA

LOCATION.--Lat 37°24'55", long 78°38'10", Appomattox County, Hydrologic Unit 02080207, on right bank 350 ft downstream from culvert on State Highway 614, 1.0 mi upstream from Holiday Lake, and 5.2 mi southwest of Andersonville.

DRAINAGE AREA.--8.53 mi².

GAGE.--Water-stage recorder. Datum of gage is 472.97 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 4,200 ft³/s and extended above on basis of slope-area measurement at 9,640 ft³/s.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1967	June 23, 1967	3.80	336	1980	Jan. 18, 1980	3.06	209
1968	Dec. 10, 1967	3.14	224	1981	Feb. 19, 1981	2.62	138
1969	July 23, 1969	3.55	294	1982	June 4, 1982	5.67	753
1970	July 9, 1970	2.26	90	1983	Mar. 18, 1983	3.39	265
1971	May 13, 1971	5.16	615	1984	Mar. 29, 1984	4.45	460
1972	June 21, 1972	14.64	9,640	1985	Aug. 18, 1985	5.26	731
1973	Aug. 18, 1973	11.90	4,980	1986	Nov. 4, 1985	6.80	1,220
1974	Sept. 6, 1974	4.78	526	1987	Sept. 8, 1987	9.94	2,950
1975	Sept. 25, 1975	10.66	3,610	1988	May 18, 1988	2.73	194
1976	Dec. 31, 1975	3.89	351		Aug. 29, 1988	2.73	194
1977	Oct. 9, 1976	4.05	380	1989	May 6, 1989	4.55	550
1978	Jan. 26, 1978	5.36	665	1990	Mar. 17, 1990	4.58	556
1979	Feb. 24, 1979	6.31	952				

JAMES RIVER BASIN

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02038880 VAUGHANS CREEK NEAR HIXBURG, VA

LOCATION.--Lat 37°21'08", long 78°35'57", Appomattox County, Hydrologic Unit 02080207, on left bank attached to upstream side of bridge on State Highway 526, 3.3 mi northeast of Hixburg, and 3.9 mi upstream from mouth.

DRAINAGE AREA.--23.2 mi².

GAGE.--Water-stage recorder. Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 33 ft³/s and extended above.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1980	July 10, 1980	3.88	136	1981	Feb. 11, 1981	-	a50

a Mean daily discharge; peak discharge is known to be greater than the value shown.

JAMES RIVER BASIN

02038900 DRY CREEK NEAR FARMVILLE, VA

LOCATION.--Lat 37°20'45", long 78°24'45", Cumberland County, Hydrologic Unit 02080207, at culvert on State Highway 635, 3.5 mi northwest of Farmville.

DRAINAGE AREA.--3.64 mi².

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is 315 ft above National Geodetic Vertical Datum of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--4 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1966	Feb. 28, 1966	5.00	270	1970	-	<3.00	<100
1967	Aug. 24, 1967	3.40	132	1971	May 30, 1971	4.97	267
1968	June 10, 1968	5.25	295	1972	June 21, 1972	8.60	700
1969	July 30, 1969	3.65	165				

< Less than.

02039000 BUFFALO CREEK NEAR HAMPDEN SYDNEY, VA

LOCATION.--Lat 37°15'25", Long 78°29'12", Prince Edward County, Hydrologic Unit 02080207, on left bank 100 ft upstream from bridge on State Highway 658, 0.8 mi upstream from Locket Creek, 2.0 mi northwest of Hampden Sydney, and 6.0 mi southwest of Farmville.

DRAINAGE AREA.--69.7 mi².

GAGE.--Water-stage recorder. Datum of gage is 339.19 ft above National Geodetic Vertical Datum of 1929 (levels by Virginia Department of Transportation). Prior to Aug. 19, 1953, nonrecording gage at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,700 ft³/s and extended above on basis of slope-area measurement at 8,200 ft³/s.

BANKFULL STAGE.--5 ft.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1940	August 1940	a15	-	1969	Mar. 25, 1969	6.33	748
1947	Apr. 17, 1947	5.90	730	1970	Apr. 3, 1970	5.21	360
1948	Feb. 14, 1948	7.10	2,640	1971	Sept. 12, 1971	7.81	2,050
1949	Dec. 4, 1948	7.00	2,440	1972	June 21, 1972	12.38	9,160
1950	Mar. 23, 1950	6.60	1,660	1973	Apr. 27, 1973	7.82	2,050
1951	Dec. 5, 1950	5.47	452	1974	Sept. 7, 1974	9.82	4,220
1952	Dec. 21, 1951	7.53	3,540	1975	Mar. 30, 1975	8.48	2,930
1953	Nov. 21, 1952	7.77	4,040	1976	Jan. 1, 1976	7.28	1,490
1954	Jan. 23, 1954	6.57	1,580	1977	Oct. 20, 1976	7.32	1,490
1955	Aug. 18, 1955	9.00	6,440	1978	Jan. 26, 1978	9.72	4,560
1956	Feb. 7, 1956	5.79	643	1979	Feb. 25, 1979	10.43	5,580
1957	Apr. 9, 1957	6.17	1,020	1980	Oct. 3, 1979	6.91	1,190
1958	Feb. 27, 1958	6.36	1,280	1981	Sept. 7, 1981	5.32	424
1959	Dec. 29, 1958	7.00	2,440	1982	Feb. 3, 1982	6.93	1,200
1960	Apr. 5, 1960	6.84	2,120	1983	Apr. 15, 1983	8.11	2,420
1961	Aug. 6, 1961	7.10	2,640	1984	Mar. 29, 1984	7.64	1,410
1962	Jan. 7, 1962	6.55	1,580	1985	Aug. 18, 1985	7.54	1,740
1963	Mar. 6, 1963	6.75	1,940	1986	Nov. 5, 1985	8.24	2,590
1964	Feb. 7, 1964	5.36	418	1987	Apr. 17, 1987	7.85	2,110
1965	Feb. 8, 1965	6.45	825	1988	May 22, 1988	5.65	546
1966	Mar. 1, 1966	6.37	772	1989	July 16, 1989	8.73	3,230
1967	Aug. 25, 1967	5.33	386	1990	May 29, 1990	7.15	1,360
1968	Mar. 17, 1968	5.72	480				

a From information by local residents.

02039500 APPOMATTOX RIVER AT FARMVILLE, VA

LOCATION.--Lat 37°18'25", long 78°23'20", Cumberland County, Hydrologic Unit 02080207, on left bank at downstream side of bridge on State Highway 45 at north town limits of Farmville and 1.1 mi downstream from Buffalo Creek.

DRAINAGE AREA.--303 mi².

GAGE.--Water-stage recorder. Datum of gage is 281.93 ft above National Geodetic Vertical Datum of 1929. Prior to Nov. 29, 1928, nonrecording gage at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 12,000 ft³/s and extended above on basis of contracted-opening measurement at 33,100 ft³/s.

BANKFULL STAGE.--Not determined.

REMARKS.--Subsequent to Sept. 30, 1989, records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1926	July 6, 1926	8.90	898	1959	Dec. 30, 1958	16.13	3,930
1927	Dec. 29, 1926	13.50	2,560	1960	Feb. 20, 1960	16.15	4,060
1928	Aug. 12, 1928	21.10	13,900	1961	Feb. 24, 1961	15.40	3,280
1929	Apr. 17, 1929	16.46	5,530	1962	Oct. 22, 1961	16.39	4,370
1930	Feb. 5, 1930	13.80	2,800	1963	Mar. 7, 1963	14.86	2,920
1931	May 22, 1931	14.02	2,960	1964	Feb. 7, 1964	12.78	1,980
1932	Mar. 7, 1932	16.36	5,400	1965	Feb. 8, 1965	15.07	3,050
1933	Oct. 18, 1932	17.33	6,650	1966	Mar. 1, 1966	15.22	3,120
1934	Mar. 5, 1934	15.73	4,570	1967	Aug. 25, 1967	11.74	1,650
1935	Sept. 6, 1935	19.88	11,300	1968	Jan. 15, 1968	12.89	2,010
1936	Mar. 18, 1936	17.72	7,270	1969	Mar. 26, 1969	13.64	2,290
1937	Apr. 26, 1937	20.28	12,100	1970	Apr. 3, 1970	9.35	997
1938	June 21, 1938	17.64	7,110	1971	May 31, 1971	17.41	6,720
1939	Feb. 12, 1939	14.59	3,460	1972	June 22, 1972	29.70	33,100
1940	Aug. 15, 1940	23.60	21,000	1973	Oct. 6, 1972	19.14	7,680
1941	Nov. 15, 1940	13.64	2,640	1974	Sept. 7, 1974	18.59	8,320
1942	Aug. 9, 1942	15.72	4,570	1975	Sept. 26, 1975	20.90	11,900
1943	Feb. 7, 1943	15.08	3,940	1976	Jan. 1, 1976	16.53	5,410
1944	Sept. 20, 1944	21.0	13,700	1977	Oct. 21, 1976	17.04	5,820
1945	Sept. 19, 1945	20.90	13,500	1978	Jan. 26, 1978	21.19	12,300
1946	May 5, 1946	14.88	3,740	1979	Feb. 25, 1979	21.79	13,400
1947	Mar. 15, 1947	14.57	3,470	1980	Jan. 19, 1980	15.72	4,490
1948	Apr. 2, 1948	17.02	5,400	1981	Aug. 8, 1981	10.35	1,400
1949	Dec. 5, 1948	18.84	9,000	1982	Feb. 4, 1982	17.52	6,770
1950	Nov. 1, 1949	15.59	3,350	1983	Apr. 16, 1983	16.40	5,300
1951	Dec. 5, 1950	12.68	1,790	1984	Mar. 30, 1984	17.28	6,440
1952	Dec. 23, 1951	17.96	7,400	1985	Aug. 19, 1985	18.49	8,160
1953	Nov. 21, 1952	16.82	5,020	1986	Nov. 5, 1985	20.03	9,400
1954	Jan. 23, 1954	15.28	3,060	1987	Sept. 9, 1987	19.82	10,200
1955	Aug. 19, 1955	19.76	11,000	1988	May 22, 1988	12.88	2,350
1956	Feb. 7, 1956	11.15	1,400	1989	May 7, 1989	16.82	5,820
1957	Apr. 10, 1957	13.67	2,100	1990	May 30, 1990	14.60	3,500
1958	Feb. 28, 1958	15.15	2,960				

02040000 APPOMATTOX RIVER AT MATTOAX, VA

LOCATION.--Lat 37°25'17", long 77°51'33", Amelia County, Hydrologic Unit 02080207, on right bank 75 ft upstream from Southern Railway bridge at Mattoax, 0.3 mi upstream from Skinquarter Creek, and 3.7 mi upstream from Flat Creek.

DRAINAGE AREA.--726 mi².

GAGE.--Water-stage recorder. Datum of gage is 174.51 ft above National Geodetic Vertical Datum of 1929.

August 1900 to December 1905, nonrecording gage at same site, different datum. March 1926 to October 1936, nonrecording gage at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 20,000 ft³/s and extended above on basis of records for stations at Farmville and near Petersburg.

BANKFULL STAGE.--19 ft.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1901	May 25, 1901	-	13,400	1956	Oct. 14, 1955	16.23	3,080
1902	Feb. 28, 1902	-	12,000	1957	Mar. 1, 1957	16.50	3,190
1903	Mar. 25, 1903	-	10,600	1958	May 10, 1958	20.02	4,750
1904	Sept. 16, 1904	-	6,120	1959	Jan. 2, 1959	22.26	6,460
1905	Feb. 25, 1905	-	5,020	1960	Apr. 9, 1960	22.22	6,340
1926	July 7, 1926	12.74	1,940	1961	Feb. 28, 1961	19.74	4,510
1927	Dec. 29, 1926	17.85	3,850	1962	Jan. 10, 1962	22.84	7,060
1928	Aug. 15, 1928	25.94	11,200	1963	Mar. 10, 1963	19.80	4,550
1929	Apr. 20, 1929	20.10	4,770	1964	Feb. 19, 1964	17.10	3,500
1930	Oct. 22, 1929	18.36	4,090	1965	Mar. 8, 1965	16.92	3,420
1931	May 25, 1931	16.75	3,450	1966	Mar. 5, 1966	18.13	3,880
1932	Mar. 10, 1932	22.50	6,700	1967	Feb. 23, 1967	15.10	2,740
1933	Apr. 20, 1933	20.88	5,090	1968	Jan. 17, 1968	17.50	3,650
1934	Mar. 8, 1934	23.40	7,800	1969	July 23, 1969	19.33	4,350
1935	Dec. 4, 1934	23.66	8,190	1970	Apr. 4, 1970	14.91	2,660
1936	Mar. 20, 1936	25.27	10,300	1971	June 2, 1971	24.34	8,970
1937	Apr. 28, 1937	29.97	20,100	1972	June 25, 1972	34.08	31,100
1938	June 24, 1938	24.21	8,840	1973	Oct. 7, 1972	31.10	22,400
1939	Mar. 4, 1939	18.02	3,930	1974	Sept. 10, 1974	23.81	8,330
1940	Aug. 18, 1940	35.3	35,000	1975	Sept. 29, 1975	25.66	10,900
1941	Apr. 6, 1941	15.83	3,080	1976	Jan. 4, 1976	22.28	6,440
1942	Aug. 12, 1942	17.29	3,650	1977	Oct. 25, 1976	19.74	4,530
1943	Feb. 9, 1943	21.64	5,700	1978	Jan. 28, 1978	27.73	14,000
1944	Sept. 23, 1944	25.3	10,300	1979	Feb. 26, 1979	30.84	21,600
1945	Sept. 22, 1945	25.3	10,300	1980	Oct. 2, 1979	23.27	7,630
1946	Dec. 30, 1945	20.00	4,730	1981	Aug. 12, 1981	14.63	2,300
1947	Mar. 18, 1947	19.34	4,300	1982	June 8, 1982	20.15	4,720
1948	Feb. 18, 1948	23.10	7,420	1983	Apr. 19, 1983	23.81	8,330
1949	Dec. 7, 1948	24.39	9,100	1984	Mar. 29, 1984	24.80	9,640
1950	Nov. 4, 1949	22.09	6,230	1985	Aug. 23, 1985	18.90	4,190
1951	Mar. 22, 1951	14.81	2,590	1986	Nov. 7, 1985	26.64	12,300
1952	Dec. 24, 1951	23.2	7,540	1987	Apr. 19, 1987	25.96	11,300
1953	Nov. 24, 1952	21.70	5,800	1988	Dec. 13, 1987	16.60	3,310
1954	May 21, 1954	19.06	4,200	1989	May 6, 1989	20.93	5,170
1955	Aug. 21, 1955	26.53	12,100	1990	May 30, 1990	19.47	4,420

02040500 FLAT CREEK NEAR AMELIA, VA

LOCATION.--Lat 37°23'27", Long 78°03'45", Amelia County, Hydrologic Unit 02080207, at bridge on State Highway 681, 0.5 mi downstream from Horsepen Creek, and 6.0 mi northwest of Amelia.

DRAINAGE AREA.--73.0 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 240 ft above National Geodetic Vertical Datum of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,300 ft³/s and extended above.

BANKFULL STAGE.--5 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1947	Sept. 26, 1947	6.9	1,090	1973	Oct. 6, 1972	15.81	-
1954	May 21, 1954	7.96	1,800	1974	Dec. 21, 1973	8.67	-
1955	Aug. 18, 1955	9.15	3,200	1975	July 14, 1975	12.14	4,960
1956	Oct. 15, 1955	8.33	2,180	1976	Jan. 27, 1976	8.64	1,730
1957	Apr. 10, 1957	6.15	670	1977	Oct. 20, 1976	7.84	1,260
1958	Aug. 26, 1958	8.47	2,280	1978	Mar. 11, 1978	10.13	2,840
1959	Dec. 30, 1958	8.63	2,400	1979	Sept. 5, 1979	11.99	4,790
1960	May 8, 1960	7.80	1,700	1980	Jan. 18, 1980	7.79	1,240
1961	Feb. 24, 1961	7.96	1,850	1981	June 7, 1981	5.52	389
1962	Oct. 21, 1961	9.21	3,300	1982	June 5, 1982	7.42	1,060
1963	Mar. 6, 1963	7.42	1,470	1983	Apr. 16, 1983	8.47	1,620
1964	Feb. 8, 1964	5.33	384	1984	Mar. 29, 1984	8.71	1,710
1965	Feb. 7, 1965	5.76	520	1985	Feb. 1, 1985	6.80	788
1966	June 17, 1966	7.42	1,470	1986	Nov. 4, 1985	9.85	2,610
1967	Aug. 25, 1967	7.52	1,540	1987	Apr. 16, 1987	12.38	5,260
1968	Mar. 13, 1968	7.37	1,440	1988	Nov. 11, 1987	7.27	986
1969	Aug. 20, 1969	7.42	1,450	1989	Nov. 28, 1988	6.58	703
1970	Dec. 26, 1969	7.90	1,810	1990	May 29, 1990	8.74	1,790
1972	Oct. 24, 1971	14.12	-				

02040600 NIBBS CREEK TRIBUTARY NEAR AMELIA, VA

LOCATION.--Lat 37°23'45", long 77°58'20", Amelia County, Hydrologic Unit 02080207, 3.8 mi north of Amelia.

DRAINAGE AREA.--0.35 mi².

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is 225 ft above National Geodetic Vertical Datum of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert and flow over road.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1966	Sept. 21, 1966	5.85	77	1971	Sept. 12, 1971	8.00	114
1967	June 23, 1967	5.55	71	1972	June 21, 1972	9.48	740
1968	Jan. 14, 1968	5.24	64	1973	Oct. 5, 1972	9.79	1,030
1969	July 23, 1969	8.00	115	1974	Dec. 21, 1973	6.53	91
1970	Mar. 29, 1970	3.45	21	1975	Mar. 30, 1975	5.35	67

02041000 DEEP CREEK NEAR MANNBORO, VA

LOCATION.--Lat 37°16'59", long 77°52'12", Amelia County, Hydrologic Unit 02080207, on left bank 300 ft upstream from bridge on State Highway 153, 0.9 mi upstream from Sweathouse Creek, 3.4 mi northwest of Mannboro, and 7.5 mi southeast of Amelia.

DRAINAGE AREA.--158 mi².

GAGE.--Water-stage recorder. Datum of gage is 177.20 ft above National Geodetic Vertical Datum of 1929. Prior to Sept. 2, 1949, nonrecording gage at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 11,700 ft³/s and extended above.

BANKFULL STAGE.--7 ft.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1940	August 1940	a14.8	10,000	1969	July 24, 1969	9.72	2,180
1947	Sept. 25, 1947	13.1	7,140	1970	Apr. 3, 1970	6.59	534
1948	Feb. 15, 1948	11.30	4,560	1971	May 30, 1971	11.16	4,290
1949	Dec. 31, 1948	8.0	1,300	1972	Oct. 24, 1971	19.53	10,200
1950	Nov. 2, 1949	10.49	3,480	1973	Oct. 6, 1972	24.04	15,000
1951	Mar. 21, 1951	7.04	900	1974	Dec. 22, 1973	10.40	3,070
1952	Dec. 22, 1951	9.78	2,590	1975	Mar. 31, 1975	11.99	4,030
1953	Nov. 21, 1952	11.64	4,980	1976	Jan. 1, 1976	10.39	3,070
1954	May 22, 1954	7.98	1,300	1977	Oct. 21, 1976	8.30	1,850
1955	Aug. 19, 1955	10.35	3,720	1978	Mar. 11, 1978	14.46	9,250
1956	Oct. 15, 1955	12.64	7,020	1979	Sept. 6, 1979	16.27	12,100
1957	Sept. 18, 1957	8.77	2,240	1980	Oct. 1, 1979	14.56	9,340
1958	Apr. 12, 1958	8.74	2,160	1981	June 8, 1981	7.67	1,500
1959	Dec. 30, 1958	10.46	3,910	1982	Mar. 8, 1982	7.24	1,170
1960	Nov. 25, 1959	10.08	3,480	1983	Apr. 16, 1983	10.38	3,970
1961	Feb. 24, 1961	9.08	2,680	1984	Feb. 15, 1984	15.79	11,300
1962	Jan. 7, 1962	12.45	6,000	1985	Feb. 2, 1985	8.27	1,840
1963	Mar. 7, 1963	8.92	2,520	1986	Nov. 4, 1985	14.35	9,030
1964	Feb. 8, 1964	6.48	950	1987	Apr. 17, 1987	14.92	9,880
1965	Feb. 8, 1965	9.30	2,840	1988	Dec. 12, 1987	6.87	975
1966	June 17, 1966	9.20	2,760	1989	May 7, 1989	8.84	2,320
1967	Aug. 28, 1967	6.85	1,120	1990	May 30, 1990	8.26	1,830
1968	Jan. 15, 1968	8.34	2,040				

a From information by local resident.

02041500 APPOMATTOX RIVER NEAR PETERSBURG, VA

LOCATION.--Lat 37°13'33", long 77°32'20", Dinwiddie County, Hydrologic Unit 02080207, on right bank 2.2 mi upstream from Virginia Power dam, 4.2 mi downstream from Wipponock Creek, and 5.9 mi west of corporate limits of city of Petersburg.

DRAINAGE AREA.--1,335 mi².

GAGE.--Water-stage recorder. Datum of gage is 118 ft above National Geodetic Vertical Datum of 1929, by barometer. Prior to Sept. 22, 1931, at site 0.8 mi downstream at different datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements.

BANKFULL STAGE.--10 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1927	Dec. 30, 1926	-	7,000	1947	Sept. 27, 1947	9.75	7,950
1928	Apr. 30, 1928	9.53	8,710	1948	Feb. 16, 1948	10.75	9,600
1929	Mar. 1, 1929	8.51	7,380	1949	Dec. 10, 1948	9.63	7,650
1930	Oct. 24, 1929	8.30	7,120	1950	Nov. 4, 1949	11.70	11,400
1931	Aug. 13, 1931	7.35	5,950	1951	Mar. 21, 1951	7.27	4,660
1932	Mar. 8, 1932	10.40	8,890	1952	Apr. 28, 1952	9.82	7,950
1933	Oct. 21, 1932	-	a7,500	1953	Nov. 23, 1952	9.72	7,800
1934	Mar. 6, 1934	10.39	8,890	1954	May 23, 1954	9.57	7,650
1935	Sept. 6, 1935	11.12	10,200	1955	Aug. 22, 1955	11.15	10,300
1936	Jan. 9, 1936	11.75	11,000	1956	Oct. 1, 1955	9.54	7,500
1937	Apr. 30, 1937	14.85	18,800	1957	Mar. 1, 1957	8.28	5,890
1938	July 26, 1938	14.58	18,200	1958	May 8, 1958	9.70	7,800
1939	July 1, 1939	8.22	5,540	1959	Jan. 1, 1959	9.85	7,950
1940	Aug. 20, 1940	18.15	28,000	1960	Apr. 6, 1960	9.27	7,220
1941	Nov. 16, 1940	7.32	4,560	1961	Feb. 26, 1961	9.30	7,580
1942	Mar. 30, 1942	6.76	4,080	1962	Jan. 9, 1962	11.52	11,500
1943	Feb. 8, 1943	9.17	7,080	1963	Mar. 8, 1963	8.63	6,540
1944	Sept. 25, 1944	9.32	7,220	1964	Feb. 20, 1964	7.52	5,100
1945	July 19, 1945	14.50	17,900	1965	Feb. 9, 1965	8.35	6,260
1946	Jan. 1, 1946	9.28	7,220	1966	Mar. 3, 1966	8.70	6,680

a Estimated.

02041650 APPOMATTOX RIVER AT MATOACA, VA

LOCATION.--Lat 37°13'28", long 77°28'32", Chesterfield County, Hydrologic Unit 02080207, on left bank at upstream side of bridge on State Highway 600, 0.2 mi south of Matoaca, 2.0 mi upstream from Rohoic Creek, 2.8 mi downstream from Lake Chesdin, 3.5 mi west of Petersburg, and at mile 15.9.

DRAINAGE AREA.--1,344 mi².

GAGE.--Water-stage recorder. Datum of gage is 68.30 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 40,000 ft³/s.

BANKFULL STAGE.--Not determined.

REMARKS.--Flow regulated to unknown extent by Appomattox Water Authority at Lake Chesdin 2.8 mi upstream. Records do not include flow of Upper Appomattox Canal of city of Petersburg which diverts around station. Records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1970	Apr. 4, 1970	7.04	4,710	1981	June 9, 1981	6.07	3,650
1971	May 31, 1971	10.70	10,500	1982	June 8, 1982	7.86	6,380
1972	June 27, 1972	14.60	22,800	1983	Mar. 21, 1983	10.61	10,900
1973	Oct. 7, 1972	18.39	40,800	1984	Feb. 16, 1984	12.63	16,200
1974	Dec. 23, 1973	9.19	8,500	1985	Feb. 3, 1985	8.62	7,950
1975	Mar. 19, 1975	12.31	15,200	1986	Nov. 6, 1985	12.07	14,400
1976	Jan. 29, 1976	9.22	8,550	1987	Apr. 18, 1987	12.04	14,300
1977	Oct. 23, 1976	7.88	6,410	1988	Jan. 21, 1988	7.40	5,880
1978	Mar. 12, 1978	11.98	14,200	1989	May 7-8, 1989	9.20	8,940
1979	Feb. 26, 1979	14.37	22,000	1990	June 1, 1990	8.52	7,780
1980	Oct. 3, 1979	13.09	17,700				

JAMES RIVER BASIN

02042000 SWIFT CREEK NEAR CHESTER, VA

LOCATION.--Lat 37°18'55", long 77°29'40", Chesterfield County, Hydrologic Unit 02080207, at Bradley Bridge, 1.25 mi downstream from Second Branch, 3 mi upstream from Frank Branch, and 4 mi southwest of Chester.

DRAINAGE AREA.--143 mi².

GAGE.--Nonrecording gage (chain gage). Datum of gage is 65 ft above National Geodetic Vertical Datum of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1940	August 1940	a27.0	10,700	1947	Sept. 26, 1947	13.0	2,180
1944	Aug. 3, 1944	7.8	853	1948	Feb. 15, 1948	13.0	2,180
1945	July 18, 1945	29.0	13,200	1949	May 12, 1949	10.50	1,480
1946	May 27, 1946	11.5	1,740				

a From information by local resident.

02042200 GLEBE CREEK TRIBUTARY NEAR CHARLES CITY, VA

LOCATION.--Lat 37°22'05", long 77°04'15", Charles City County, Hydrologic Unit 02080206, at culvert on State Highway 155, 2.0 mi north of Charles City.

DRAINAGE AREA.--0.7 mi², approximately.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 52.31 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1 ft³/s by contracted-opening measurements at 286 ft³/s and 555 ft³/s and extended above.

BANKFULL STAGE.--2 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1948	May 26, 1948	4.64	555	1964	-	<1.6	<5
1951	June 5, 1951	2.8	110	1965	-	<1.6	<5
1952	June 30, 1952	2.58	65	1966	Sept. 21, 1966	2.10	19
1953	Nov. 22, 1952	2.14	16	1967	Oct. 19, 1966	2.22	26
1954	Jan. 28, 1954	1.76	4	1968	Mar. 12, 1968	1.99	15
1955	Aug. 13, 1955	4.20	286	1969	Aug. 15, 1969	2.07	18
1956	July 29, 1956	2.18	19	1970	Apr. 4, 1970	2.14	21
1957	Dec. 16, 1956	2.08	13	1971	May 30, 1971	2.00	15
1958	May 25, 1958	2.68	85	1972	Oct. 23, 1971	2.40	40
1959	Dec. 29, 1958	2.18	19	1973	Feb. 2, 1973	2.36	37
1960	Sept. 13, 1960	2.82	110	1974	Sept. 6, 1974	1.95	14
1961	Feb. 8, 1961	2.13	15	1975	Jan. 10, 1975	2.29	31
1962	Oct. 2, 1961	5.62	900	1976	Jan. 27, 1976	2.26	29
1963	June 3, 1963	3.84	195				

< Less than.

02042250 BAILEY BRANCH TRIBUTARY AT SPRING GROVE, VA

LOCATION.--Lat 37°10'29", long 76°59'13", Surry County, Hydrologic Unit 02080206, on right upstream wingwall of culvert on State Highway 10, 1.0 mi northwest of Spring Grove.

DRAINAGE AREA.--0.71 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 61.39 ft above National Geodetic Vertical Datum of 1929. Prior to Jan. 8, 1974, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--3 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1967	-	<3.0	<27	1979	Sept. 22, 1979	6.01	231
1968	July 4, 1968	4.10	76	1980	May 20, 1980	3.23	35
1969	Aug. 5, 1969	4.85	124	1981	June 7, 1981	5.37	170
1970	-	<3.0	<27	1982	-	<2.28	<12
1971	-	<3.0	<27	1983	Apr. 16, 1983	3.40	42
1972	Oct. 24, 1971	3.55	48	1984	May 30, 1984	3.55	48
1973	Oct. 6, 1972	3.65	52	1985	Sept. 27, 1985	5.73	203
1974	Jan. 30, 1974	3.19	34	1986	Aug. 12, 1986	2.99	27
1975	July 14, 1975	6.52	282	1987	Apr. 16, 1987	3.49	46
1976	Jan. 27, 1976	4.30	88	1988	-	<2.28	<7
1977	Oct. 20, 1976	3.80	60	1989	May 2, 1989	3.63	52
1978	Oct. 27, 1977	5.01	141	1990	Oct. 31, 1989	2.50	12

< Less than.

02042300 HORSEPEN BRANCH AT RICHMOND, VA

LOCATION.--Lat 37°35'45", long 77°30'40", Henrico County, Hydrologic Unit 02080206, on left downstream retaining wall at culverts on U.S. Highway 250 (Broad Street), at Richmond, and 0.9 mi upstream from mouth.

DRAINAGE AREA.--1.35 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined. Prior to July 30, 1980, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by step-backwater computations and slope-area measurement at 2,730 ft³/s.

BANKFULL STAGE.--7 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1965	July 25, 1965	3.30	500	1978	Aug. 31, 1978	4.15	810
1966	July 30, 1966	3.15	454	1979	Sept. 30, 1979	6.17	1,820
1967	Aug. 23, 1967	3.05	424	1980	July 23, 1980	4.75	1,080
1968	Aug. 2, 1968	3.32	507	1981	May 11, 1981	2.74	337
1969	July 22, 1969	5.70	1,550	1982	Dec. 15, 1981	4.28	865
1970	July 4, 1970	3.75	655	1983	Dec. 12, 1982	3.66	622
1971	July 31, 1971	3.90	711	1984	Mar. 29, 1984	4.20	831
1972	May 31, 1972	4.00	750	1985	Aug. 18, 1985	7.50	2,730
1973	June 22, 1973	5.22	1,300	1986	July 23, 1986	3.96	734
1974	Sept. 6, 1974	3.35	517	1987	Apr. 16, 1987	3.81	677
1975	July 14, 1975	5.55	1,470	1988	July 23, 1988	3.68	630
1976	June 17, 1976	3.25	485	1989	May 5, 1989	3.79	730
1977	Apr. 5, 1977	4.60	1,010	1990	May 29, 1990	6.22	1,810

02042400 JORDANS BRANCH AT RICHMOND, VA

LOCATION.--Lat 37°35'10", long 77°29'55", Henrico County, Hydrologic Unit 02080206, on left downstream wingwall of bridge on U.S. Highway 250 (Broad Street), at Richmond, and 2.0 mi upstream from mouth.

DRAINAGE AREA.--2.41 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined. Prior to Feb. 28, 1972, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 60 ft³/s and extended above on basis of slope-area measurement at 2,300 ft³/s.

BANKFULL STAGE.--15 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1966	July 30, 1966	8.27	598	1979	Sept. 30, 1979	12.60	2,460
1967	Aug. 23, 1967	6.55	262	1980	July 23, 1980	10.09	1,190
1968	Aug. 2, 1968	9.27	881	1981	-	<8.43	<638
1969	July 22, 1969	11.20	1,650	1982	July 12, 1982	10.88	1,500
1970	July 4, 1970	9.35	905	1983	-	<8.46	<645
1971	July 11, 1971	10.33	1,280	1984	-	<8.46	<645
1972	June 21, 1972	9.06	818	1985	Aug. 18, 1985	12.44	2,360
1973	June 22, 1973	9.78	1,060	1986	July 23, 1986	8.90	770
1974	-	<8.43	<638	1987	Sept. 11, 1987	8.93	779
1975	July 14, 1975	9.62	998	1988	July 23, 1988	8.98	794
1976	June 17, 1976	8.63	689	1989	May 5, 1989	8.70	710
1977	Apr. 5, 1977	8.57	672	1990	May 29, 1990	9.06	820
1978	Oct. 26, 1977	8.56	670				

< Less than.

02042500 CHICKAHOMINY RIVER NEAR PROVIDENCE FORGE, VA

LOCATION.--Lat 37°26'10", long 77°03'40", New Kent County, Hydrologic Unit 02080206, on left bank 100 ft downstream from bridge on State Highway 618, 1.1 mi southwest of Providence Forge, and 1.7 mi downstream from Schimine Creek.

DRAINAGE AREA.--248 mi².

GAGE.--Water-stage recorder. Datum of gage is 6.07 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 5,520 ft³/s and extended above.

BANKFULL STAGE.--10 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1942	Apr. 4, 1942	7.77	760	1967	Feb. 25, 1967	7.67	631
1943	Feb. 8, 1943	8.54	1,080	1968	Jan. 20, 1968	8.63	1,040
1944	Mar. 7, 1944	8.53	1,080	1969	July 25, 1969	10.79	5,080
1945	July 21, 1945	10.60	5,750	1970	Apr. 4, 1970	7.92	788
1946	Dec. 31, 1945	9.02	1,620	1971	Feb. 14, 1971	8.27	962
1947	Apr. 21, 1947	8.24	940	1972	June 25, 1972	10.07	3,440
1948	May 26, 1948	8.64	1,320	1973	Feb. 4, 1973	9.09	1,840
1949	Dec. 4, 1948	8.65	1,320	1974	Sept. 11, 1974	8.86	1,540
1950	Nov. 5, 1949	9.13	1,820	1975	July 17, 1975	9.78	2,880
1951	Mar. 26, 1951	7.03	575	1976	Jan. 31, 1976	9.00	1,620
1952	May 1, 1952	8.93	1,590	1977	Oct. 27, 1976	7.22	575
1953	Nov. 25, 1952	9.10	1,820	1978	Jan. 21, 1978	9.37	2,370
1954	Jan. 29, 1954	7.63	767	1979	Feb. 27, 1979	10.99	5,490
1955	Aug. 15, 1955	11.67	7,710	1980	Oct. 5, 1979	9.37	2,320
1956	Oct. 20, 1955	8.38	1,180	1981	June 4, 1981	6.55	450
1957	Nov. 4, 1956	9.04	1,700	1982	Mar. 11, 1982	8.44	1,140
1958	Dec. 25, 1957	9.12	1,820	1983	Apr. 17, 1983	9.34	2,080
1959	Aug. 12, 1959	8.86	1,590	1984	Mar. 30, 1984	10.26	3,700
1960	Sept. 13, 1960	9.58	2,500	1985	Aug. 22, 1985	9.76	2,740
1961	Feb. 27, 1961	9.22	1,910	1986	Nov. 8, 1985	9.19	1,870
1962	Jan. 8, 1962	9.73	2,660	1987	Apr. 20, 1987	9.64	2,530
1963	June 5, 1963	9.01	1,650	1988	May 27, 1988	8.27	1,030
1964	Feb. 22, 1964	8.26	980	1989	May 8, 1989	8.56	1,230
1965	Mar. 11, 1965	7.94	780	1990	May 30, 1990	9.15	1,820
1966	Feb. 18, 1966	7.77	740				

02042700 COLLINS RUN NEAR PROVIDENCE FORGE, VA

LOCATION.--Lat 37°23'59", long 77°02'54", Charles City County, Hydrologic Unit 02080206, at bridge on State Highway 155, 2.8 mi south of Providence Forge.

DRAINAGE AREA.--2.84 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 32.74 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 10 ft³/s and extended above on basis of contracted-opening measurements at 1,350 ft³/s and 1,630 ft³/s.

BANKFULL STAGE.--4 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1948	May 26, 1948	7.4	1,630	1964	Feb. 16, 1964	3.52	87
1951	Dec. 5, 1950	3.54	82	1965	June 15, 1965	2.57	38
1952	Jan. 28, 1952	4.37	160	1966	June 17, 1966	3.43	84
1953	Nov. 22, 1952	4.18	135	1967	Oct. 19, 1966	3.32	75
1954	Jan. 28, 1954	3.48	78	1968	-	<2.5	<35
1955	Aug. 13, 1955	7.03	1,350	1969	Aug. 15, 1969	4.60	180
1956	July 29, 1956	3.74	96	1970	-	<2.5	<35
1957	Aug. 19, 1957	4.47	170	1971	Sept. 30, 1971	4.87	224
1958	May 25, 1958	4.90	255	1972	Oct. 23, 1971	4.64	186
1959	Oct. 22, 1958	4.55	185	1973	Feb. 2, 1973	4.70	195
1960	Sept. 13, 1960	4.86	240	1974	Sept. 6, 1974	4.23	145
1961	Feb. 8, 1961	3.53	90	1975	Jan. 10, 1975	4.49	169
1962	Oct. 21, 1961	4.96	255	1976	Jan. 27, 1976	4.57	177
1963	Mar. 6, 1963	3.02	58	1977	Oct. 2, 1976	4.56	176

< Less than.

JAMES RIVER BASIN

02042710 COLLINS RUN TRIBUTARY NEAR PROVIDENCE FORGE, VA

LOCATION.--Lat 37°24'15", long 77°02'50", Charles City County, Hydrologic Unit 02080206, at culvert on State Highway 155, 2.5 mi south of Providence Forge.

DRAINAGE AREA.--0.28 mi².

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is 49.96 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--5 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1966	July 30, 1966	3.8	30	1971	Sept. 30, 1971	4.34	46
1967	Oct. 19, 1966	3.13	13	1972	Oct. 23, 1971	3.57	23
1968	Nov. 2, 1967	3.60	25	1973	Feb. 2, 1973	3.56	22
1969	Aug. 15, 1969	4.3	45	1974	Sept. 6, 1974	3.47	20
1970	-	<3.0	<10	1975	Jan. 10, 1975	3.82	31

< Less than.

JAMES RIVER BASIN

02042780 WEST BRANCH LONG HILL SWAMP NEAR LIGHTFOOT, VA

LOCATION.--Lat 37°18'50", long 76°46'02", James City County, Hydrologic Unit 02080206, on left upstream wingwall of culvert on State Highway 612, 1.1 mi upstream from mouth, and 2.0 mi south of Lightfoot.

DRAINAGE AREA.--2.47 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined. Prior to Sept. 8, 1975, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--3 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1970	July 23, 1970	3.55	84	1981	Oct. 25, 1980	3.35	68
1971	June 23, 1971	3.50	80	1982	Aug. 8, 1982	4.00	120
1972	June 22, 1972	3.60	88	1983	Apr. 15, 1983	3.57	95
1973	Oct. 6, 1972	3.70	96	1984	May 30, 1984	3.64	91
1974	Sept. 6, 1974	3.48	78	1985	Sept. 26, 1985	4.54	163
1975	Sept. 1, 1975	5.20	320	1986	Oct. 21, 1985	2.98	49
1976	Jan. 27, 1976	3.60	88	1987	Jan. 19, 1987	3.81	105
1978	Aug. 1, 1978	3.78	102	1988	May 5, 1988	3.34	68
1979	Sept. 22, 1979	4.04	123	1989	Aug. 8, 1989	4.63	170
1980	Nov. 11, 1979	3.47	78	1990	Feb. 10, 1990	a6.25	95
					May 29, 1990	a6.18	115

a Affected by backwater from beaver dams in culvert.

02043500 CYPRESS SWAMP AT CYPRESS CHAPEL, VA

LOCATION.--Lat 36°37'24", long 76°36'07", Suffolk City, Hydrologic Unit 03010205, near center of span on downstream side of bridge on State Highway 32, 0.5 mi downstream from Dragon Swamp, 0.8 mi northwest of Cypress Chapel, and 6.5 mi south of downtown Suffolk.

DRAINAGE AREA.--23.8 mi².

GAGE.--Water-stage recorder. Datum of gage is 28.65 ft above National Geodetic Vertical Datum of 1929. October 1953 to September 1971, recording gage on right bank 30 ft upstream at same datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,100 ft³/s and extended above.

BANKFULL STAGE.--3 ft.

REMARKS.--Records were provided by the Virginia Water Control Board from July 1, 1957, to Mar. 1, 1978.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1940	August 1940	410.2	-	1969	Mar. 2, 1969	4.80	298
1954	Jan. 23, 1954	5.67	552	1970	Feb. 3, 1970	5.56	517
1955	Sept. 20, 1955	6.65	1,170	1971	Jan. 6, 1971	5.35	452
1956	Mar. 17, 1956	5.17	392	1978	June 9, 1978	5.32	543
1957	Feb. 1, 1957	5.87	690	1979	Mar. 7, 1979	5.68	714
1958	May 7, 1958	6.37	1,190	1980	Nov. 12, 1979	4.77	371
1959	Aug. 1, 1959	5.59	735	1981	June 3, 1981	4.45	252
1960	Sept. 12, 1960	6.62	1,130	1982	Feb. 18, 1982	4.82	357
1961	May 12, 1961	5.36	452	1983	Feb. 15, 1983	5.26	462
1962	Jan. 7, 1962	5.48	500	1984	Apr. 23, 1984	5.44	584
1963	June 3, 1963	6.47	1,020	1985	Sept. 27, 1985	5.36	551
1964	Sept. 14, 1964	4.93	417	1986	Oct. 22, 1985	4.91	385
1965	Oct. 5, 1964	6.22	840	1987	Jan. 20, 1987	5.44	584
1966	Aug. 9, 1966	5.90	660	1988	May 6, 1988	4.26	215
1967	Aug. 11, 1967	6.85	1,330	1989	Mar. 24, 1989	5.35	547
1968	Mar. 18, 1968	5.37	452	1990	Nov. 24, 1989	4.68	309

a From information by local residents.

02043550 WASHINGTON DITCH NEAR CYPRESS CHAPEL, VA

LOCATION.--Lat 36°38'21", long 76°31'36", Suffolk City, Hydrologic Unit 03010205, on left bank 400 ft downstream from junction with Lynn Ditch and 3.0 mi above Lake Drummond.

DRAINAGE AREA.--41 mi², approximately.

GAGE.--Water-stage recorder. Datum of gage is 15.00 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 100 ft³/s and extended above.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1979	Feb. 27, 1979	8.67	150	1981	June 3, 1981	8.44	111
1980	Mar. 8, 1980	-	a220				

a Maximum daily discharge.

02044000 NOTTOWAY RIVER NEAR BURKEVILLE, VA

LOCATION.--Lat 37°04'40", long 78°11'52", Lunenburg County, Hydrologic Unit 03010201, on right bank at downstream side of bridge on State Highway 723, 4.0 mi upstream from Modest Creek, 5.6 mi north of Victoria, and 7.5 mi south of Burkeville.

DRAINAGE AREA.--38.7 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 354.58 ft above National Geodetic Vertical Datum of 1929. Prior to July 4, 1951, nonrecording gage at same site and datum. July 4, 1951, to Oct. 28, 1981, water-stage recorder on left bank at downstream side of bridge at same datum. Oct. 29, 1981, to Oct. 1, 1986, water-stage recorder on right bank at downstream side of bridge at same datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 3,200 ft³/s and extended above on basis of slope-area measurement at 13,400 ft³/s.

BANKFULL STAGE.--8 ft.

REMARKS.--Records were provided by the Virginia Water Control Board from July 1, 1957, to Jan. 1, 1987. Flood peak of August 1940 was highest since at least 1930.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1940	August 1940	a27.4	-	1969	Mar. 25, 1969	14.37	1,780
1947	Sept. 25, 1947	18.15	3,020	1970	July 10, 1970	9.51	652
1948	Feb. 14, 1948	15.56	2,130	1971	May 16, 1971	13.92	1,640
1949	Nov. 29, 1948	13.4	1,510	1972	Oct. 23, 1971	22.33	13,400
1950	Nov. 2, 1949	15.85	2,190	1973	Oct. 5, 1972	18.14	3,830
1951	Mar. 20, 1951	10.55	858	1974	Sept. 7, 1974	17.43	3,310
1952	Apr. 28, 1952	15.17	2,010	1975	Mar. 30, 1975	18.06	3,770
1953	Jan. 24, 1953	13.92	1,640	1976	Jan. 27, 1976	14.55	2,040
1954	Mar. 1, 1954	14.50	1,810	1977	Sept. 9, 1977	16.29	2,730
1955	Aug. 18, 1955	19.06	3,320	1978	Apr. 27, 1978	18.36	4,010
1956	Oct. 1, 1955	18.70	3,200	1979	Sept. 22, 1979	20.88	7,940
1957	Sept. 18, 1957	18.06	2,980	1980	Oct. 3, 1979	-	3,200
1958	Jan. 25, 1958	14.15	1,730	1981	June 7, 1981	16.90	3,000
1959	Dec. 29, 1958	14.81	1,890	1982	Jan. 4, 1982	9.99	678
1960	Feb. 19, 1960	15.25	2,010	1983	Apr. 16, 1983	15.90	2,600
1961	Feb. 23, 1961	15.65	2,130	1984	Mar. 29, 1984	13.78	1,650
1962	Jan. 7, 1962	17.82	2,880	1985	Feb. 1, 1985	10.38	756
1963	Mar. 6, 1963	14.22	1,730	1986	Nov. 21, 1985	14.44	1,950
1964	Feb. 6, 1964	11.90	1,140	1987	Apr. 17, 1987	16.84	2,980
1965	Feb. 8, 1965	13.36	1,510	1988	Dec. 11, 1987	8.05	391
1966	Mar. 1, 1966	13.07	1,440	1989	May 6, 1989	12.15	1,145
1967	Feb. 21, 1967	10.20	777	1990	Aug. 24, 1990	16.81	2,960
1968	Jan. 14, 1968	13.85	1,620				

a From high-water marks by U.S. Army Corps of Engineers.

CHOWAN RIVER BASIN

02044200 FALLS CREEK TRIBUTARY NEAR VICTORIA, VA

LOCATION.--Lat 37°02'04", long 78°10'26", Lunenburg County, Hydrologic Unit 03010201, at upstream end of culvert on State Highway 49, 3.6 mi northeast of Victoria.

DRAINAGE AREA.--0.34 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 409.21 ft above National Geodetic Vertical Datum of 1929. Prior to Feb. 24, 1978, flood-hydrograph recorder at same site and datum. Prior to Feb. 1, 1968, crest-stage gage at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--4 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1968	Jan. 14, 1968	3.90	52	1980	Nov. 11, 1979	4.54	78
1969	Mar. 25, 1969	4.10	60	1981	June 7, 1981	6.35	173
1970	June 22, 1970	4.70	85	1982	May 24, 1982	4.42	73
1971	Aug. 4, 1971	5.20	110	1983	Oct. 25, 1982	3.55	38
1972	June 21, 1972	9.15	343	1984	Oct. 14, 1983	5.73	136
1973	Oct. 5, 1972	8.30	292	1985	Feb. 1, 1985	3.20	27
1974	July 26, 1974	4.85	92	1986	Nov. 4, 1985	4.21	64
1975	Sept. 26, 1975	5.75	138	1987	Apr. 16, 1987	4.23	65
1976	Jan. 27, 1976	3.70	44	1988	July 22, 1988	3.54	34
1977	Oct. 20, 1976	4.40	72	1989	May 6, 1989	4.42	73
1978	Apr. 27, 1978	4.45	74	1990	Aug. 24, 1990	8.73	318
1979	Sept. 30, 1979	6.30	170				

CHOWAN RIVER BASIN

02044400 HURRICANE BRANCH AT BLACKSTONE, VA

LOCATION.--Lat 37°04'47", long 77°58'55", Nottoway County, Hydrologic Unit 03010201, at culvert on State Highway 40, 0.3 mi east of Blackstone.

DRAINAGE AREA.--1.61 mi².

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is 333.24 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--7 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1967	Feb. 18, 1967	4.95	50	1972	June 21, 1972	13.31	1,340
1968	Jan. 14, 1968	6.15	130	1973	Oct. 5, 1972	13.34	1,350
1969	Aug. 20, 1969	6.85	173	1974	July 26, 1974	6.35	134
1970	June 21, 1970	5.60	72	1975	July 14, 1975	9.70	465
1971	May 30, 1971	6.20	134	1976	Sept. 15, 1976	5.08	-

02044500 NOTTOWAY RIVER NEAR RAWLINGS, VA

LOCATION.--Lat 36°59'00", long 77°48'00", Brunswick County, Hydrologic Unit 03010201, on right bank at downstream side of bridge on State Highway 612 at Harpers Bridge, 0.1 mi upstream from Beaver Pond Creek, and 2.6 mi north west of Rawlings.

DRAINAGE AREA.--309 mi².

GAGE.--Water-stage recorder. Datum of gage is 184.88 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 16,000 ft³/s and extended above on basis of slope-area measurements at 23,000 ft³/s and 31,000 ft³/s.

BANKFULL STAGE.--10 ft.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1940	August 1940	a20.8	b19,000	1971	May 31, 1971	11.65	5,620
1951	Mar. 21, 1951	5.97	1,690	1972	Oct. 24, 1971	21.36	23,900
1952	Dec. 22, 1951	9.80	4,240	1973	Oct. 6, 1972	23.25	c29,900
1953	Nov. 21, 1952	12.14	6,020	1974	Sept. 8, 1974	12.64	6,420
1954	May 22, 1954	6.67	2,110	1975	July 16, 1975	14.39	8,900
1955	Aug. 19, 1955	12.61	6,420	1976	Jan. 28, 1976	10.04	4,390
1956	Oct. 2, 1955	12.82	6,580	1977	Oct. 22, 1976	6.92	2,230
1957	Sept. 19, 1957	9.57	4,090	1978	Apr. 27, 1978	17.58	14,500
1958	May 7, 1958	11.21	5,300	1979	Sept. 23, 1979	15.76	11,100
1959	Dec. 31, 1958	9.42	3,940	1980	Oct. 1, 1979	13.48	7,430
1960	Nov. 25, 1959	10.98	5,140	1981	June 8, 1981	11.16	5,270
1961	Feb. 25, 1961	8.00	2,940	1982	Mar. 8, 1982	6.09	1,740
1962	Jan. 7, 1962	12.70	6,500	1983	Apr. 17, 1983	12.16	6,070
1963	Mar. 8, 1963	8.63	3,360	1984	Feb. 15, 1984	15.06	9,960
1964	Aug. 31, 1964	9.20	3,790	1985	Feb. 3, 1985	8.51	3,300
1965	Feb. 9, 1965	9.68	4,160	1986	Nov. 4, 1985	16.43	12,200
1966	Mar. 2, 1966	7.70	2,750	1987	Apr. 17, 1987	16.78	12,900
1967	Feb. 22, 1967	6.68	2,110	1988	Dec. 12, 1987	5.28	1,310
1968	Jan. 16, 1968	7.36	2,550	1989	May 7, 1989	8.09	3,000
1969	Mar. 27, 1969	7.60	2,680	1990	May 31, 1990	8.38	3,210
1970	July 11, 1970	6.34	1,870				

a From information by local residents.

b Approximate.

c Corrected.

02045500 NOTTOWAY RIVER NEAR STONY CREEK, VA

LOCATION.--Lat 36°54'00", long 77°24'00", Sussex County, Hydrologic Unit 03010201, on left bank 15 ft downstream from bridge on U.S. Highway 301, 1.8 mi upstream from Island Swamp, 3.3 mi south of town of Stony Creek, and 4.4 mi upstream from Stony Creek.

DRAINAGE AREA.--579 mi².

GAGE.--Water-stage recorder. Datum of gage is 58.42 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 11, 1934, nonrecording gage at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 21,000 ft³/s and extended above.

BANKFULL STAGE.--15 ft.

REMARKS.--Subsequent to Sept. 30, 1989, records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1930	Oct. 4, 1929	-	5,700	1961	Feb. 9, 1961	b13.78	3,680
1931	Aug. 21, 1931	14.80	4,540	1962	Jan. 9, 1962	17.57	8,020
1932	Mar. 7, 1932	15.66	5,540	1963	Mar. 7, 1963	15.75	5,550
1933	Oct. 21, 1932	12.92	3,140	1964	Sept. 2, 1964	17.48	7,770
1934	Mar. 7, 1934	15.38	5,180	1965	Feb. 10, 1965	13.32	3,540
1935	Sept. 7, 1935	17.76	8,300	1966	June 18, 1966	12.96	3,300
1936	Jan. 22, 1936	17.42	7,690	1967	Feb. 22, 1967	11.89	2,810
1937	Apr. 28, 1937	20.00	11,500	1968	Jan. 17, 1968	11.26	2,630
1938	July 28, 1938	19.93	11,400	1969	Aug. 6, 1969	14.44	4,340
1939	Aug. 30, 1939	16.42	6,370	1970	July 12, 1970	14.09	4,100
1940	Aug. 17, 1940	23.66	25,200	1971	June 2, 1971	16.17	6,100
1941	Apr. 5, 1941	13.48	3,440	1972	Oct. 26, 1971	20.32	13,100
1942	July 3, 1942	10.50	2,230	1973	Oct. 7, 1972	21.69	20,800
1943	Feb. 8, 1943	14.43	4,150	1974	Sept. 10, 1974	16.00	5,730
1944	Mar. 8, 1944	-	a3,500	1975	July 16, 1975	20.09	13,800
1945	July 20, 1945	20.30	12,600	1976	Jan. 28, 1976	15.92	5,420
1946	Dec. 30, 1945	15.10	4,920	1977	Oct. 21, 1976	12.54	3,160
1947	Sept. 28, 1947	14.23	4,140	1978	Apr. 29, 1978	19.39	12,800
1948	Feb. 17, 1948	15.90	5,780	1979	Feb. 27, 1979	20.03	14,700
1949	June 30, 1949	15.18	5,020	1980	Oct. 3, 1979	17.96	8,870
1950	Nov. 4, 1949	13.92	3,930	1981	June 10, 1981	15.09	4,960
1951	Mar. 20, 1951	10.87	2,510	1982	July 15, 1982	13.90	3,980
1952	Apr. 28, 1952	17.30	7,600	1983	Mar. 23, 1983	16.68	6,860
1953	Nov. 23, 1952	16.16	6,140	1984	Feb. 16, 1984	19.19	11,400
1954	May 22, 1954	16.32	6,270	1985	Jan. 5, 1985	14.96	4,860
1955	Aug. 21, 1955	16.73	6,830	1986	Nov. 6, 1985	20.22	14,800
1956	Oct. 4, 1955	16.38	6,400	1987	Apr. 19, 1987	19.69	13,200
1957	Feb. 2, 1957	15.12	4,920	1988	Feb. 12, 1988	9.68	1,950
1958	May 7, 1958	17.73	8,090	1989	May 3, 1989	14.70	4,650
1959	Dec. 30, 1958	14.83	4,460	1990	Jan. 2, 1990	14.56	4,560
1960	Nov. 27, 1959	15.68	5,430				

a Estimated.

b Backwater from ice jam.

02046000 STONY CREEK NEAR DINWIDDIE, VA

LOCATION.--Lat 37°04'01", long 77°36'10", Dinwiddie County, Hydrologic Unit 03010201, on right bank at upstream side of upstream bridge on U.S. Highway 1, 1.2 mi southwest of Dinwiddie, 1.7 mi downstream from Chamberlains Bed Creek, and 5.7 mi downstream from confluence of White Oak and Butterwood Creeks.

DRAINAGE AREA.--112 mi².

GAGE.--Water-stage recorder. Datum of gage is 129.94 ft above National Geodetic Vertical Datum of 1929. Prior to June 12, 1957, nonrecording gage at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 6,300 ft³/s and extended above on basis of contracted-opening measurement at 11,400 ft³/s.

BANKFULL STAGE.--6 ft.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1940	August 1940	-	8,000	1969	Aug. 5, 1969	7.57	688
1947	Mar. 15, 1947	7.20	890	1970	July 11, 1970	7.18	616
1948	Feb. 15, 1948	10.05	1,950	1971	May 31, 1971	10.30	1,800
1949	Aug. 29, 1949	8.53	1,270	1972	Oct. 24, 1971	15.07	5,030
1950	Sept. 10, 1950	8.00	1,100	1973	Oct. 6, 1972	20.84	11,400
1951	Mar. 20, 1951	6.7	771	1974	Sept. 7, 1974	7.58	777
1952	Jan. 29, 1952	10.93	2,530	1975	Sept. 26, 1975	15.10	5,370
1953	Jan. 25, 1953	10.38	2,190	1976	Jan. 28, 1976	8.71	1,370
1954	May 21, 1954	9.08	1,510	1977	Oct. 21, 1976	7.24	930
1955	Aug. 18, 1955	11.52	3,000	1978	Apr. 27, 1978	11.26	2,770
1956	Oct. 1, 1955	9.82	1,830	1979	Sept. 30, 1979	18.50	9,050
1957	Oct. 28, 1956	10.96	2,600	1980	Oct. 1, 1979	18.70	9,250
1958	May 7, 1958	11.30	2,840	1981	June 7, 1981	11.63	2,970
1959	Dec. 29, 1958	9.59	1,730	1982	Aug. 17, 1982	8.51	1,300
1960	Nov. 7, 1959	12.62	3,980	1983	Mar. 22, 1983	12.13	3,280
1961	Feb. 9, 1961	8.78	1,390	1984	Feb. 15, 1984	13.09	3,900
1962	Jan. 7, 1962	13.05	4,340	1985	Feb. 2, 1985	9.16	1,580
1963	Mar. 7, 1963	8.52	1,270	1986	Nov. 5, 1985	15.23	5,780
1964	Sept. 1, 1964	13.42	4,530	1987	Apr. 16, 1987	12.28	3,370
1965	Mar. 5, 1965	7.77	1,040	1988	Feb. 12, 1988	5.65	595
1966	June 17, 1966	10.22	1,500	1989	May 2, 1989	9.26	1,640
1967	Feb. 21, 1967	8.39	860	1990	Jan. 1, 1990	8.06	1,150
1968	Mar. 13, 1968	7.79	724				

CHOWAN RIVER BASIN

02046200 MILLRUN BRANCH NEAR MCKENNEY, VA

LOCATION.--Lat 36°56'47", long 77°34'41", Dinwiddie County, Hydrologic Unit 03010201, at bridge on State Highway 40, 9.3 mi east of McKenney.

DRAINAGE AREA.--2.29 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 172.37 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Not fully developed.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1962	July 3, 1962	4.92	a320	1970	July 10, 1970	4.92	320
1963	Nov. 10, 1962	4.30	a220	1971	May 30, 1971	3.88	-
1964	Aug. 31, 1964	4.83	a300	1972	Oct. 24, 1971	4.22	-
1965	Feb. 7, 1965	5.40	-	1973	Dec. 15, 1972	3.41	-
1966	Sept. 21, 1966	4.02	-	1974	-	<2.0	-
1967	Aug. 24, 1967	3.46	-	1975	July 14, 1975	5.11	-
1968	Mar. 13, 1968	3.64	-	1976	Jan. 27, 1976	4.12	-
1969	Mar. 7, 1969	4.29	-				

< Less than.
a Approximate.

CHOWAN RIVER BASIN

02046400 JONES HOLE SWAMP TRIBUTARY NEAR CARSON, VA

LOCATION.--Lat 37°04'13", long 77°20'30", Prince George County, Hydrologic Unit 03010201, at culvert on State Highway 35, 3.8 mi east of McKenney.

DRAINAGE AREA.--3.02 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 89.35 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 3, 1973, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1967	Aug. 24, 1967	3.56	25	1972	June 22, 1972	4.00	67
1968	Jan. 14, 1968	4.00	45	1973	Feb. 2, 1973	4.50	101
1969	Apr. 19, 1969	4.05	70	1974	Sept. 6, 1974	3.54	40
1970	Mar. 30, 1970	3.85	58	1975	Sept. 26, 1975	4.66	112
1971	May 30, 1971	3.65	54	1976	Nov. 13, 1975	3.50	48

02046500 ANDERSON BRANCH AT SUSSEX, VA

LOCATION.--Lat 36°55'10", long 77°15'45", Sussex County, Hydrologic Unit 03010201, at bridge on State Highway 40, 1.0 mi east of Sussex.

DRAINAGE AREA.--5.35 mi², approximately.

GAGE.--Water-stage recorder. Datum of gage is 58.00 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 120 ft³/s and extended above.

BANKFULL STAGE.--4 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1949	Aug. 15, 1949	4.95	96	1971	June 24, 1971	4.58	50
1950	Sept. 12, 1950	6.12	228	1972	Oct. 24, 1971	5.05	102
1951	Mar. 20, 1951	4.29	35	1973	Oct. 6, 1972	4.94	89
1952	Jan. 29, 1952	5.37	138	1974	Dec. 21, 1973	4.42	22
1953	Feb. 15, 1953	4.45	40	1975	Sept. 24, 1975	5.61	167
1954	May 21, 1954	5.63	170	1976	Jan. 27, 1976	5.50	154
1955	Aug. 23, 1955	5.78	188	1977	Oct. 20, 1976	4.72	65
1956	June 2, 1956	5.28	128	1978	Mar. 10, 1978	5.50	154
1966	Mar. 4, 1966	4.02	13	1979	Feb. 25, 1979	5.41	143
1967	Feb. 18, 1967	4.06	14	1980	Nov. 11, 1979	4.97	93
1968	Jan. 14, 1968	4.87	82	1981	June 7, 1981	5.86	197
1969	Aug. 5, 1969	5.34	135	1982	July 17, 1982	6.64	298
1970	June 26, 1970	5.13	110	1983	Feb. 11, 1983	4.81	75

CHOWAN RIVER BASIN

02046800 THREE CREEK TRIBUTARY NEAR DREWRYVILLE, VA

LOCATION.--Lat 36°41'36", long 77°20'58", Southampton County, Hydrologic Unit 03010201, at bridge on U.S. Highway 58, 2.8 mi southwest of Drewryville.

DRAINAGE AREA.--1.25 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 76.10 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--2 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1962	June 14, 1962	4.69	a130	1970	Dec. 26, 1969	4.61	-
1963	Nov. 10, 1962	3.46	a80	1971	Feb. 4, 1971	3.30	-
1964	Aug. 31, 1964	3.16	a70	1972	Oct. 24, 1971	3.90	-
1965	Oct. 4, 1964	4.10	a110	1973	Dec. 15, 1972	3.55	-
1966	June 17, 1966	4.14	-	1974	Jan. 29, 1974	2.72	-
1967	Aug. 24, 1967	4.00	-	1975	July 14, 1975	3.43	-
1968	Mar. 16, 1968	4.58	-	1976	Jan. 27, 1976	3.92	-
1969	Aug. 5, 1969	4.62	-	1977	Oct. 20, 1976	3.55	-

a Approximate.

CHOWAN RIVER BASIN

02046900 MUSGRAVE BRANCH NEAR DREWRYVILLE, VA

LOCATION.--Lat 36°42'13", long 77°16'29", Southampton County, Hydrologic Unit 03010201, at culvert on U.S. Highway 58, 2.0 mi east of Drewryville.

DRAINAGE AREA.--1.99 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 60 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Nov. 1, 1974, water-stage recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--4 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1966	Mar. 4, 1966	4.45	30	1971	Feb. 4, 1971	4.70	60
1967	Aug. 24, 1967	5.45	88	1972	Oct. 23, 1971	5.20	72
1968	Jan. 14, 1968	5.93	130	1973	Dec. 15, 1972	4.92	57
1969	Feb. 23, 1969	4.70	62	1974	Jan. 29, 1974	4.57	43
1970	Feb. 17, 1970	5.10	50	1975	July 14, 1975	5.40	84

02047000 NOTTOWAY RIVER NEAR SEBRELL, VA

LOCATION.--Lat 36°46'13", long 77°09'59", Southampton County, Hydrologic Unit 03010201, on right bank 1,000 ft upstream from bridge on State Highway 653, 1 mi downstream from Three Creek, 2.5 mi southwest of Sebrell, and 5.5 mi upstream from Assamoosick Swamp.

DRAINAGE AREA.--1,451 mi².

GAGE.--Water-stage recorder. Datum of gage is 5.94 ft above National Geodetic Vertical Datum of 1929. Prior to Aug. 23, 1950, nonrecording gage at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 25,000 ft³/s and extended above.

BANKFULL STAGE.--12 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1940	August 1940	29.7	48,000	1966	Mar. 6, 1966	15.03	5,100
1942	Apr. 2, 1942	12.78	3,050	1967	Feb. 26, 1967	15.63	5,760
1943	Feb. 11, 1943	17.00	6,800	1968	Jan. 19, 1968	15.43	4,990
1944	Mar. 11, 1944	16.7	6,410	1969	Aug. 9, 1969	17.65	7,690
1945	July 22, 1945	24.5	25,000	1970	Apr. 6, 1970	16.24	5,850
1946	Jan. 2, 1946	18.29	9,230	1971	June 5, 1971	17.34	7,330
1947	Jan. 25, 1947	14.50	4,170	1972	Oct. 29, 1971	21.44	16,100
1948	Feb. 19, 1948	18.24	9,020	1973	Oct. 11, 1972	24.13	22,400
1949	Jan. 3, 1949	17.60	7,800	1974	Sept. 13, 1974	15.70	5,810
1950	Sept. 14, 1950	16.13	5,690	1975	July 19, 1975	24.43	26,000
1951	Mar. 24, 1951	14.40	4,090	1976	Oct. 1, 1975	19.69	12,300
1952	May 1, 1952	19.61	12,000	1977	Mar. 11, 1977	15.10	5,090
1953	Nov. 26, 1952	15.72	5,260	1978	May 1, 1978	21.32	16,400
1954	May 25, 1954	18.70	10,100	1979	Mar. 1, 1979	23.28	22,000
1955	Aug. 24, 1955	19.00	10,700	1980	Oct. 6, 1979	18.74	10,300
1956	Feb. 11, 1956	16.27	5,920	1981	June 12, 1981	16.34	6,620
1957	Feb. 5, 1957	18.35	9,440	1982	Feb. 21, 1982	15.63	5,950
1958	May 10, 1958	21.80	16,900	1983	Apr. 20, 1983	18.81	10,400
1959	Jan. 3, 1959	17.55	8,240	1984	Feb. 19, 1984	19.42	11,600
1960	Feb. 23, 1960	17.93	8,400	1985	Feb. 7, 1985	16.38	6,670
1961	Feb. 13, 1961	16.95	6,800	1986	Nov. 9, 1985	20.39	13,800
1962	Jan. 11, 1962	20.26	12,800	1987	Apr. 21, 1987	20.66	14,500
1963	Mar. 11, 1963	17.83	8,520	1988	Feb. 16, 1988	14.84	4,840
1964	Sept. 5, 1964	16.98	7,400	1989	May 6, 1989	17.71	8,580
1965	Oct. 9, 1964	15.62	5,720	1990	Jan. 6, 1990	16.30	6,570

02047100 ASSAMOOSICK SWAMP NEAR SEBRELL, VA

LOCATION.--Lat 36°46'22", long 77°05'57", Southampton County, Hydrologic Unit 03010201, near center of span on upstream side of bridge on State Highway 35, 0.7 mi upstream from Indian Branch, 1.7 mi southeast of Sebrell, and 2.8 mi upstream from mouth.

DRAINAGE AREA.--86.4 mi².

GAGE.--Water-stage recorder. Datum of gage is 20 ft above National Geodetic Vertical Datum of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,130 ft³/s and extended above by logarithmic plotting.

BANKFULL STAGE.--Not determined.

REMARKS.--Records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1983	Apr. 18, 1983	6.57	1,180	1986	Nov. 24, 1985	5.68	706
1984	Mar. 8, 1984	6.75	1,290	1987	Apr. 18, 1987	9.34	3,480
1985	Sept. 28, 1985	7.42	1,730				

02047500 BLACKWATER RIVER NEAR DENDRON, VA

LOCATION.--Lat 37°01'30", long 76°52'30", Surry County, Hydrologic Unit 03010202, on left bank 10 ft upstream from Walls Bridge on State Highway 617, 1.2 mi downstream from Cypress Swamp, and 3.5 mi southeast of Dendron.

DRAINAGE AREA.--294 mi².

GAGE.--Water-stage recorder. Datum of gage is 30.99 ft above National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark). Prior to Aug. 13, 1980, at site 25 ft upstream at same datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 4,700 ft³/s and extended above.

BANKFULL STAGE.--5 ft.

REMARKS.--Records were provided by the Virginia Water Control Board from Oct. 1, 1958, to Dec. 31, 1986, and subsequent to July 28, 1988.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1940	August 1940	13.1	10,000	1966	May 7, 1966	4.22	682
1942	Mar. 11, 1942	4.34	560	1967	Feb. 24, 1967	5.23	1,540
1943	Feb. 8, 1943	5.70	1,580	1968	Mar. 20, 1968	5.78	2,090
1944	Mar. 9, 1944	5.84	1,790	1969	Aug. 7, 1969	6.93	3,370
1945	July 21, 1945	8.90	4,710	1970	Apr. 5, 1970	5.64	2,000
1946	Dec. 31, 1945	6.74	2,580	1971	Apr. 9, 1971	5.10	1,460
1947	Jan. 23, 1947	4.62	845	1972	Oct. 26, 1971	6.25	2,250
1948	Feb. 18, 1948	6.20	2,130	1973	Oct. 8, 1972	7.62	4,230
1949	Aug. 16, 1949	6.45	2,220	1974	Mar. 21, 1974	4.58	839
1950	Sept. 12, 1950	6.12	2,040	1975	Mar. 21, 1975	8.40	4,900
1951	Mar. 22, 1951	4.56	842	1976	Jan. 31, 1976	6.26	2,540
1952	Jan. 30, 1952	6.56	2,490	1977	Mar. 10, 1977	5.03	1,360
1953	Mar. 18, 1953	5.08	1,220	1978	Jan. 21, 1978	7.07	3,470
1954	May 23, 1954	5.66	1,660	1979	Feb. 28, 1979	8.26	4,790
1955	Aug. 19, 1955	6.41	2,310	1980	Nov. 15, 1979	6.89	2,810
1956	Feb. 13, 1956	4.99	1,150	1981	June 9, 1981	5.42	1,370
1957	Feb. 5, 1957	6.20	2,130	1982	Aug. 13, 1982	6.71	2,650
1958	Aug. 5, 1958	7.49	3,300	1983	Apr. 19, 1983	6.90	2,880
1959	Jan. 2, 1959	6.24	2,190	1984	Mar. 8, 1984	6.99	2,990
1960	Sept. 14, 1960	8.39	3,800	1985	Sept. 28, 1985	9.11	5,850
1961	Feb. 10, 1961	6.10	2,310	1986	Dec. 2, 1985	5.82	1,730
1962	Oct. 22, 1961	7.93	3,700	1987	Apr. 20, 1987	7.63	3,820
1963	June 5, 1963	9.1	5,070	1988	Feb. 14, 1988	5.43	1,380
1964	Feb. 22, 1964	4.76	1,020	1989	May 4, 1989	6.51	2,440
1965	Mar. 29, 1965	4.75	1,020	1990	Aug. 8, 1990	8.76	5,360

a From high-water marks by U.S. Army Corps of Engineers.

02048000 BLACKWATER RIVER AT ZUNI, VA

LOCATION.--Lat 36°52'05", long 76°50'07", Isle of Wight County, Hydrologic Unit 03010202, on left bank at downstream side of bridge on U.S. Highway 460 at Zuni, 1.6 mi downstream from Pope Swamp, and 4.2 mi upstream from Antioch Swamp.

DRAINAGE AREA.--456 mi².

GAGE.--Water-stage recorder. Datum of gage is 8.56 ft above National Geodetic Vertical Datum of 1929. Prior to July 18, 1957, nonrecording gage at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 6,900 ft³/s and extended above.

BANKFULL STAGE.--9 ft.

REMARKS.--Subsequent to July 1, 1958, records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1940	August 1940	23.2	16,000	1966	Mar. 6, 1966	8.00	900
1943	Feb. 9, 1943	10.35	2,120	1967	Aug. 25, 1967	10.47	2,070
1944	Mar. 9, 1944	11.08	2,580	1968	Mar. 21, 1968	10.88	2,270
1945	July 25, 1945	15.05	5,200	1969	Aug. 9, 1969	12.35	3,020
1946	Jan. 2, 1946	11.62	2,740	1970	Apr. 5, 1970	10.38	2,210
1947	Jan. 22, 1947	8.23	985	1971	Apr. 10, 1971	9.67	1,670
1948	Feb. 17, 1948	11.09	2,440	1972	Oct. 28, 1971	11.70	2,584
1949	Aug. 18, 1949	13.34	3,880	1973	Oct. 9, 1972	15.05	4,330
1950	Sept. 14, 1950	9.80	1,720	1974	Jan. 31, 1974	9.36	1,520
1951	Mar. 24, 1951	8.28	1,070	1975	Mar. 21, 1975	15.70	7,000
1952	Mar. 7, 1952	11.88	2,920	1976	Feb. 4, 1976	12.34	3,770
1953	Mar. 22, 1953	8.76	1,260	1977	Mar. 9, 1977	-	a1,640
1954	May 23, 1954	10.90	2,320	1978	Jan. 22, 1978	13.93	5,210
1955	Aug. 24, 1955	11.40	2,620	1979	Mar. 1, 1979	14.88	6,200
1956	Feb. 10, 1956	9.62	1,620	1980	Nov. 16, 1979	12.48	4,020
1957	Feb. 5, 1957	11.80	2,860	1981	June 10, 1981	11.26	3,150
1958	May 9, 1958	13.77	4,240	1982	Aug. 15, 1982	11.05	3,000
1959	Jan. 4, 1959	11.32	2,560	1983	Apr. 20, 1983	12.48	4,020
1960	Sept. 14, 1960	17.47	5,680	1984	Mar. 10, 1984	12.10	3,740
1961	Feb. 12, 1961	11.32	2,560	1985	Sept. 29, 1985	15.38	6,640
1962	Jan. 10, 1962	13.67	4,160	1986	Dec. 3, 1985	11.01	2,970
1963	June 5, 1963	17.51	5,800	1987	Jan. 24, 1987	14.90	6,200
1964	Feb. 20, 1964	9.59	1,620	1988	Nov. 6, 1987	10.22	2,420
1965	Oct. 19, 1964	9.88	1,680				

a Mean daily discharge; peak discharge is known to be greater than the value shown.

02048400 SEACOCK CREEK NEAR IVOR, VA

LOCATION.--Lat 36°55'28", long 76°55'48", Southampton County, Hydrologic Unit 03010202, at bridge on State Highway 618, 2 mi northwest of Ivor.

DRAINAGE AREA.--27.4 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined. Prior to Sept. 7, 1960, at same site and different datum. July 8, 1965, to Nov. 15, 1970, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 50 ft³/s and extended above.

BANKFULL STAGE.--3 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1950	Sept. 12, 1950	a4.50	170	1964	Sept. 1, 1964	3.35	140
1951	June - 1951	a3.98	95	1965	Dec. 27, 1964	3.69	210
1952	Jan. 29, 1952	a4.86	240	1966	July 31, 1966	3.70	210
1953	Nov. 21, 1952	a4.59	180	1967	Aug. 24, 1967	4.45	410
1954	May 23, 1954	a4.81	220	1968	Jan. 14, 1968	4.08	320
1955	Aug. 24, 1955	a4.64	195	1969	Aug. 5, 1969	5.30	800
1956	Feb. 9, 1956	a4.38	145	1970	Dec. 26, 1969	3.70	210
1957	Feb. 4, 1957	a4.9	240	1971	Sept. 30, 1971	3.79	228
1958	May 6, 1958	a6.33	700	1972	Oct. 24, 1971	4.89	606
1959	Dec. 30, 1958	a5.57	430	1973	Oct. 6, 1972	4.77	558
1960	Sept. 12, 1960	7.26	4,000	1974	Jan. 30, 1974	3.85	245
1961	Feb. 8, 1961	4.36	380	1975	Mar. 19, 1975	4.59	486
1962	Jan. 6, 1962	5.38	840	1976	Jan. 27, 1976	4.95	630
1963	June 3, 1963	6.33	1,500				

a Different datum prior to bridge reconstruction.

CHOWAN RIVER BASIN

02048500 SEACOCK CREEK AT UNITY, VA

LOCATION.--Lat 36°49'15", long 76°53'00", Southampton County, Hydrologic Unit 03010202, at downstream side of highway bridge on State Highway 635, 0.7 mi northeast of Unity, 1 mi upstream from mouth, and 4.2 mi downstream from Round Hill Swamp.

DRAINAGE AREA.--102 mi².

GAGE.--Nonrecording gage (chain gage). Datum of gage is 9.22 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 500 ft³/s and extended above.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1943	July 11, 1943	7.50	500	1947	Apr. 18, 1947	6.40	332
1944	Mar. 9, 1944	7.94	614	1948	Feb. 16, 1948	8.18	778
1945	Sept. 19, 1945	9.02	1,180	1949	Aug. 16, 1949	8.62	946
1946	Dec. 31, 1945	7.70	633				

CHOWAN RIVER BASIN

02049000 BLACKWATER RIVER NEAR BURDETTE, VA

LOCATION.--Lat 36°48'15", long 76°51'45", Southampton-Isle of Wight County line, Hydrologic Unit 03010202, near center of downstream side of highway bridge on State Highway 603, 1.5 mi downstream from Seacock Creek, 1.8 mi upstream from Corrowaugh Swamp, and 3 mi northeast of Burdette.

DRAINAGE AREA.--576 mi².

GAGE.--Nonrecording gage (wire-weight gage). Datum of gage is 1.81 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 2,600 ft³/s and extended above.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1940	August 1940	a28.7	-	1943	Feb. 9, 1943	15.65	2,500
1942	Mar. 14, 1942	10.46	756	1944	Mar. 10, 1944	17.27	3,380

a From high-water marks.

02049500 BLACKWATER RIVER NEAR FRANKLIN, VA

LOCATION.--Lat 36°45'45", long 76°53'55", Southampton County, Hydrologic Unit 03010202, on right bank 0.4 mi south of Burdette, 0.5 mi upstream from Black Creek, 3.3 mi downstream from Corrowaugh Swamp, and 6.0 mi north of Franklin.

DRAINAGE AREA.--617 mi².

GAGE.--Water-stage recorder. Datum of gage is 1.56 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 9,400 ft³/s and extended above.

BANKFULL STAGE.--8 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1940	August 1940	22	a21,000	1968	Mar. 21, 1968	10.50	2,860
1945	July 25, 1945	13.4	5,360	1969	Aug. 9, 1969	11.06	3,310
1946	Jan. 3, 1946	11.1	3,340	1970	Apr. 5, 1970	10.00	2,460
1947	Jan. 24, 1947	8.16	1,280	1971	Apr. 10, 1971	9.57	2,130
1948	Feb. 18, 1948	10.9	3,180	1972	Oct. 28, 1971	11.12	3,360
1949	Aug. 19, 1949	11.5	3,660	1973	Oct. 10, 1972	13.11	4,930
1950	July 17, 1950	9.94	2,480	1974	Feb. 1, 1974	9.33	2,270
1951	Mar. 24, 1951	8.08	1,350	1975	Mar. 22, 1975	14.21	6,580
1952	Mar. 7, 1952	12.1	4,190	1976	Feb. 4, 1976	11.72	3,840
1953	Mar. 22, 1953	8.44	1,430	1977	Mar. 9, 1977	9.43	2,140
1954	May 23, 1954	10.64	2,940	1978	Jan. 22, 1978	12.95	4,940
1955	Aug. 24, 1955	11.50	3,660	1979	Mar. 2, 1979	13.31	5,260
1956	Feb. 10, 1956	9.49	2,090	1980	Nov. 16, 1979	11.29	3,490
1957	Feb. 5, 1957	11.55	3,930	1981	June 9, 1981	10.61	2,910
1958	May 9, 1958	13.47	5,450	1982	Feb. 20, 1982	9.87	2,360
1959	Jan. 5, 1959	10.40	2,970	1983	Apr. 21, 1983	11.46	3,620
1960	Sept. 14, 1960	17.14	9,420	1984	Apr. 25, 1984	11.26	3,440
1961	Feb. 12, 1961	10.75	3,290	1985	Sept. 30, 1985	13.42	5,360
1962	Jan. 10, 1962	12.47	4,650	1986	Dec. 2, 1985	11.04	3,260
1963	June 6, 1963	14.97	6,900	1987	Jan. 24, 1987	13.67	5,600
1964	Feb. 20, 1964	-	b2,090	1988	Feb. 15, 1988	10.00	2,460
1965	Oct. 7, 1964	9.70	2,230	1989	Apr. 9, 1989	13.68	5,610
1966	Mar. 6, 1966	8.18	1,220	1990	Aug. 11, 1990	10.77	2,980
1967	Aug. 26, 1967	10.26	2,670				

a About.

b Mean daily discharge; peak discharge is known to be greater than the value shown.

02049700 CYPRESS SWAMP NEAR BURDETTE, VA

LOCATION.--Lat 36°44'29", long 76°56'18", Southampton County, Hydrologic Unit 03010202, at bridge on State Highway 635, 3 mi southwest of Burdette, and 5 mi north of Franklin.

DRAINAGE AREA.--8.55 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 18.36 ft above National Geodetic Vertical Datum of 1929. July 8, 1965, to Nov. 20, 1973, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 74 ft³/s and extended above.

BANKFULL STAGE.--5 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1950	Sept. 12, 1950	5.30	150	1964	Sept. 1, 1964	3.98	87
1951	March 1951	5.25	148	1965	Dec. 28, 1964	5.24	145
1952	Jan. 29, 1952	5.20	145	1966	June 18, 1966	4.16	94
1953	February 1953	3.61	73	1967	Feb. 18, 1967	2.90	47
1954	January 1954	5.52	162	1968	Jan. 14, 1968	5.0	135
1955	Apr. 26, 1955	5.36	152	1969	Mar. 2, 1969	3.59	72
1956	Feb. 9, 1956	5.05	137	1970	Feb. 17, 1970	4.46	108
1957	Feb. 4, 1957	4.74	122	1971	Jan. 5, 1971	4.73	122
1958	May 6, 1958	6.17	197	1972	Oct. 24, 1971	5.14	142
1959	Dec. 30, 1958	4.65	118	1973	Oct. 6, 1972	5.41	156
1960	Sept. 12, 1960	9.85	526	1974	Jan. 29, 1974	3.10	53
1961	May 11, 1961	5.91	185	1975	Mar. 19, 1975	5.09	140
1962	June 14, 1962	5.51	160	1976	Jan. 27, 1976	4.87	134
1963	June 3, 1963	6.88	270				

02050050 BLACKWATER RIVER TRIBUTARY NEAR HOLLAND, VA

LOCATION.--Lat 36°38'44", long 76°51'29", Suffolk City, Hydrologic Unit 03010202, on left upstream wingwall of culvert on State Highway 189, 3.0 mi upstream from mouth, and 4.9 mi southwest of Holland.

DRAINAGE AREA.--2.76 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 29.25 ft above National Geodetic Vertical Datum of 1929. Prior to Dec. 14, 1977, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--4 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1967	Aug. 24, 1967	5.62	140	1979	Sept. 5, 1979	7.62	403
1968	Mar. 17, 1968	5.55	130	1980	Nov. 11, 1979	4.71	96
1969	July 30, 1969	5.7	150	1981	June 7, 1981	4.86	103
1970	Feb. 2, 1970	5.35	145	1982	Oct. 25, 1981	5.33	133
1971	Jan. 5, 1971	5.40	138	1983	Apr. 16, 1983	7.43	380
1972	Oct. 23, 1971	6.53	254	1984	Apr. 23, 1984	7.37	372
1973	Aug. 3, 1973	7.65	408	1985	Sept. 26, 1985	6.78	289
1974	Mar. 30, 1974	4.90	105	1986	Oct. 22, 1985	4.37	78
1975	Mar. 19, 1975	5.40	138	1987	Jan. 18, 1987	5.90	181
1976	Jan. 27, 1976	5.25	128	1988	July 20, 1988	4.57	88
1977	Oct. 20, 1976	4.87	104	1989	July 13, 1989	7.08	331
1978	Jan. 20, 1978	5.61	155	1990	Aug. 24, 1990	5.20	124

CHOWAN RIVER BASIN

02050400 NORTH MEHERRIN RIVER NEAR BRIERY, VA

LOCATION.--Lat 37°04'20", long 78°27'45", Charlotte County, Hydrologic Unit 03010204, at culvert on U.S. Highway 360, 1.3 mi south of Briery, and 2.5 mi northeast of Keysville.

DRAINAGE AREA.--1.19 mi².

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is 437 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--4 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1966	Sept. 21, 1966	5.15	200	1971	Aug. 27, 1971	6.28	255
1967	June 23, 1967	6.30	270	1972	Oct. 23, 1971	7.85	472
1968	May 27, 1968	5.58	200	1973	Oct. 5, 1972	7.20	397
1969	June 2, 1969	3.82	61	1974	Sept. 6, 1974	5.10	195
1970	Aug. 19, 1970	7.47	355	1975	Mar. 30, 1975	7.25	407

02050500 NORTH MEHERRIN RIVER NEAR KEYSVILLE, VA

LOCATION.--Lat 37°03'05", long 78°25'20", Charlotte County, Hydrologic Unit 03010204, on right bank at upstream side of highway bridge, 3.5 mi northeast of Keysville, and 3.6 mi upstream from Owl Creek.

DRAINAGE AREA.--9.2 mi², approximately.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 475 ft above National Geodetic Vertical Datum of 1929, by barometer. Prior to Sept. 30, 1961, water-stage recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 560 ft³/s and extended above.

BANKFULL STAGE.--5 ft.

REMARKS.--Prior to Sept. 30, 1961, records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1940	August 1940	10.3	-	1959	Dec. 29, 1958	5.76	800
1949	Dec. 4, 1948	5.63	755	1960	Feb. 18, 1960	6.09	890
1950	July 24, 1950	6.04	860	1961	Feb. 23, 1961	6.38	1,000
1951	July 16, 1951	4.55	440	1966	Mar. 1, 1966	5.66	755
1952	Sept. 1, 1952	6.80	1,160	1967	June 23, 1967	4.25	410
1953	Nov. 20, 1952	5.74	770	1968	May 27, 1968	4.92	540
1954	Mar. 1, 1954	6.06	890	1969	Mar. 25, 1969	6.34	960
1955	Apr. 14, 1955	7.28	1,320	1970	Aug. 19, 1970	4.87	534
1956	Oct. 14, 1955	5.54	725	1971	May 30, 1971	6.23	932
1957	Sept. 17, 1957	6.45	1,000	1972	June 21, 1972	8.03	1,720
1958	Jan. 25, 1958	5.49	710	1973	Oct. 5, 1972	6.24	936

a From information by local residents.

02051000 NORTH MEHERRIN RIVER NEAR LUNENBURG, VA

LOCATION.--Lat 36°59'53", long 78°21'03", Lunenburg County, Hydrologic Unit 03010204, on right bank at upstream side of bridge on State Highway 40, 0.5 mi downstream from Iusekiah Creek, 4.6 mi upstream from Juniper Creek, and 5.2 mi northwest of Lunenburg.

DRAINAGE AREA.--55.6 mi².

GAGE.--Water-stage recorder. Datum of gage is 333.7 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers). Prior to July 5, 1951, nonrecording gage at same site and datum. July 5, 1951, to July 11, 1980, water-stage recorder at site 20 ft downstream at same datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,700 ft³/s and extended above on basis of slope-area measurement at 14,400 ft³/s.

BANKFULL STAGE.--Not determined.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1940	August 1940	a48.0	-	1968	June 10, 1968	16.72	3,060
1947	Sept. 25, 1947	15.0	2,480	1969	Mar. 25, 1969	16.10	2,880
1948	Feb. 14, 1948	17.0	2,890	1970	July 9, 1970	11.70	1,860
1949	Nov. 28, 1948	14.0	2,240	1971	May 16, 1971	15.85	2,800
1950	Oct. 31, 1949	18.25	3,340	1972	Oct. 23, 1971	28.30	14,400
1951	July 16, 1951	7.20	808	1973	Oct. 6, 1972	18.80	3,880
1952	Apr. 27, 1952	17.0	3,000	1974	Sept. 7, 1974	18.95	3,950
1953	Nov. 20, 1952	16.15	2,790	1975	Mar. 30, 1975	21.95	5,660
1954	Apr. 16, 1954	15.13	2,500	1977	Sept. 9, 1977	16.80	3,120
1955	Apr. 14, 1955	19.70	3,800	1978	Apr. 26, 1978	21.64	5,500
1956	Oct. 14, 1955	15.50	2,610	1979	Sept. 22, 1979	26.94	11,800
1957	Sept. 17, 1957	20.80	4,160	1980	Oct. 3, 1979	19.72	4,300
1958	Jan. 25, 1958	14.86	2,560	1982	July 13, 1982	15.37	2,680
1959	Dec. 29, 1958	16.76	3,090	1983	Apr. 16, 1983	18.40	3,700
1960	Feb. 18, 1960	16.55	3,030	1984	Mar. 29, 1984	15.63	2,750
1961	Feb. 23, 1961	17.05	3,150	1985	Feb. 1, 1985	-	b780
1962	Jan. 6, 1962	19.75	3,990	1986	Nov. 4, 1985	15.42	2,690
1963	Mar. 6, 1963	14.68	2,520	1987	Apr. 17, 1987	9.64	1,410
1964	Feb. 6, 1964	13.13	2,170	1988	Aug. 29, 1988	6.87	847
1965	Feb. 7, 1965	15.46	2,710	1989	June 6, 1989	16.15	2,900
1966	Mar. 1, 1966	11.18	1,750	1990	May 29, 1990	11.59	1,840
1967	Feb. 20, 1967	9.90	1,460				

a From information by local resident.

b Mean daily discharge; peak is known to be greater than the value shown.

CHOWAN RIVER BASIN

02051400 SADDLETREE CREEK NEAR LAWRENCEVILLE, VA

LOCATION.--Lat 36°43'51", long 77°54'39", Brunswick County, Hydrologic Unit 03010204, at culvert on U.S. Highway 58, 1.3 mi upstream from mouth, and 4.3 mi west of Lawrenceville.

DRAINAGE AREA.--0.87 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 220 ft above National Geodetic Vertical Datum of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

REMARKS.--Records were provided by the U.S. Department of Agriculture, Soil Conservation Service.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1958	May 6, 1958	2.67	104	1968	June 17, 1968	1.44	46
1959	July 10, 1959	2.04	73	1969	Aug. 5, 1969	1.09	25
1960	Feb. 18, 1960	1.23	36	1970	July 23, 1970	4.95	370
1961	June 7, 1961	2.98	120	1971	Feb. 6, 1971	1.36	42
1962	June 20, 1962	1.39	43	1972	Mar. 20, 1972	5.82	332
1963	Mar. 6, 1963	2.49	95	1973	Oct. 5, 1972	7.96	610
1964	Aug. 31, 1964	2.66	104	1974	Sept. 6, 1974	1.64	55
1965	Aug. 25, 1965	.95	16	1975	Sept. 26, 1975	2.28	86
1966	Aug. 4, 1966	1.10	26	1976	Feb. 2, 1976	1.15	30
1967	May 7, 1967	.89	13				

02051500 MEHERRIN RIVER NEAR LAWRENCEVILLE, VA

LOCATION.--Lat 36°43'00", long 77°49'55", Brunswick County, Hydrologic Unit 03010204, on right bank 50 ft upstream from Gholson Bridge on State Highway 715, 0.6 mi upstream from Allen Creek, and 3.0 mi southeast of Lawrenceville.

DRAINAGE AREA.--552 mi².

GAGE.--Water-stage recorder. Datum of gage is 136.56 ft above National Geodetic Vertical Datum of 1929. Prior to Nov. 17, 1931, nonrecording gage at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 19,000 ft³/s and extended above on basis of velocity-area studies and records for Nottoway River near Stony Creek.

BANKFULL STAGE.--15 ft.

REMARKS.--Information for floods prior to 1929 derived from data reported in Congressional documents: 71st Cong., 2nd Sess., H. Doc. 446, Meherrin River (1930). Discharges shown are based on the assumption that no shift in the rating curve occurred other than defined in subsequent years. The flood of Aug. 17, 1940, is the highest known since at least 1873.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1889	June 2, 1889	a31.2	a18,000	1959	Dec. 31, 1958	22.67	8,660
1908	Aug. 28, 1908	a31.9	a19,000	1960	Nov. 26, 1959	21.90	8,030
1928	Apr. 27, 1928	a25	a10,000	1961	Feb. 9, 1961	16.75	5,150
1929	Mar. 6, 1929	22.10	6,990	1962	Jan. 8, 1962	25.30	11,000
1930	Oct. 3, 1929	22.66	7,270	1963	Mar. 8, 1963	20.77	7,280
1931	Apr. 7, 1931	15.88	4,320	1964	Feb. 7, 1964	14.98	4,300
1932	Mar. 7, 1932	23.42	8,600	1965	Feb. 9, 1965	18.95	6,250
1933	Apr. 18, 1933	17.98	5,200	1966	June 18, 1966	19.17	6,360
1934	Mar. 6, 1934	19.63	5,880	1967	Feb. 22, 1967	15.83	4,670
1935	Dec. 1, 1934	24.17	9,420	1968	May 29, 1968	17.21	5,360
1936	Jan. 21, 1936	25.84	11,200	1969	Mar. 8, 1969	16.27	4,880
1937	Apr. 27, 1937	30.92	17,300	1970	July 11, 1970	14.12	3,870
1938	July 27, 1938	28.7	14,500	1971	June 1, 1971	19.58	6,570
1939	Aug. 30, 1939	20.95	6,480	1972	Oct. 26, 1971	31.24	17,700
1940	Aug. 17, 1940	42.0	38,000	1973	Oct. 7, 1972	32.99	20,000
1941	Nov. 16, 1940	17.02	4,450	1974	Sept. 8, 1974	24.71	10,400
1942	Aug. 10, 1942	15.65	3,970	1975	July 16, 1975	26.09	11,800
1943	Feb. 7, 1943	18.36	4,970	1976	Jan. 19, 1976	20.74	7,290
1944	Sept. 21, 1944	18.15	4,890	1977	Oct. 22, 1976	16.65	5,080
1945	July 19, 1945	26.4	11,800	1978	Apr. 28, 1978	31.91	18,600
1946	Feb. 12, 1946	18.7	6,190	1979	Feb. 27, 1979	28.89	14,800
1947	Sept. 27, 1947	19.1	5,280	1980	Oct. 2, 1979	25.32	11,000
1948	Feb. 16, 1948	22.37	7,660	1981	June 8, 1981	15.54	4,550
1949	Nov. 30, 1948	19.44	5,430	1982	May 26, 1982	15.76	4,650
1950	Nov. 2, 1949	15.95	4,110	1983	Apr. 17, 1983	23.42	9,370
1951	Mar. 21, 1951	15.12	3,800	1984	Feb. 15, 1984	24.74	10,400
1952	Dec. 23, 1951	21.38	6,800	1985	Jan. 5, 1985	21.71	8,070
1953	Nov. 22, 1952	22.7	7,930	1986	Nov. 5, 1985	28.98	15,000
1954	Mar. 2, 1954	15.70	4,350	1987	Apr. 18, 1987	28.26	14,100
1955	Aug. 20, 1955	25.30	10,600	1988	Jan. 21, 1988	11.96	2,980
1956	Oct. 2, 1955	18.88	5,560	1989	Feb. 23, 1989	19.51	6,610
1957	Feb. 2, 1957	18.53	6,060	1990	Jan. 2, 1990	18.80	6,210
1958	May 8, 1958	24.09	9,890				

a From information in Congressional document, see REMARKS.

02051600 GREAT CREEK NEAR COCHRAN, VA

LOCATION.--Lat 36°48'46", long 77°55'19", Brunswick County, Hydrologic Unit 03010204, on left bank at upstream side of bridge on State Highway 763, 1.4 mi southwest of Cochran, and 9.5 mi upstream from Roses Creek.

DRAINAGE AREA.--30.7 mi².

GAGE.--Water-stage recorder. Datum of gage is 215.72 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 3,600 ft³/s and extended above on basis of contracted-opening measurements at 4,800 ft³/s and 7,130 ft³/s.

BANKFULL STAGE.--6 ft.

REMARKS.--Records were provided by the Virginia Water Control Board from May 20, 1958, to Dec. 31, 1986.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1958	May 6, 1958	7.62	580	1975	July 14, 1975	11.75	2,140
1959	July 10, 1959	14.57	4,810	1976	Jan. 28, 1976	6.86	392
1960	Nov. 25, 1959	10.51	1,660	1977	Oct. 21, 1976	6.43	322
1961	Feb. 8, 1961	7.85	620	1978	Apr. 27, 1978	13.58	3,500
1962	Jan. 7, 1962	12.08	2,680	1979	Sept. 30, 1979	13.18	3,170
1963	Mar. 6, 1963	8.11	690	1980	Oct. 1, 1979	11.08	1,720
1964	Sept. 1, 1964	6.44	380	1981	Aug. 4, 1981	8.16	636
1965	Feb. 8, 1965	5.34	270	1982	July 14, 1982	7.04	414
1966	June 17, 1966	14.58	4,700	1983	Mar. 21, 1983	10.08	1,200
1967	Feb. 21, 1967	6.64	264	1984	Feb. 14, 1984	14.72	4,640
1968	Mar. 13, 1968	5.98	202	1985	Jan. 4, 1985	7.77	545
1969	July 24, 1969	7.71	438	1986	Nov. 4, 1985	14.15	4,030
1970	July 10, 1970	9.87	1,240	1987	Apr. 16, 1987	11.71	2,110
1971	May 30, 1971	7.79	551	1988	Feb. 12, 1988	4.53	137
1972	June 22, 1972	15.34	5,470	1989	Aug. 8, 1989	8.45	711
1973	Oct. 6, 1972	16.65	7,100	1990	Jan. 1, 1990	8.42	702
1974	Sept. 7, 1974	9.40	1,020				

a Stage falling; peak occurred on Sept. 30, 1979. Maximum independent peak in water year was 8.58 ft, 750 ft³/s on Nov. 12, 1979.

02051650 ROCKY RUN NEAR DOLPHIN, VA

LOCATION.--Lat 36°47'35", long 77°49'35", Brunswick County, Hydrologic Unit 03010204, at culvert on State Highway 641, 3.2 mi southwest of Dolphin.

DRAINAGE AREA.--1.41 mi².

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is 255 ft above National Geodetic Vertical Datum of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert and flow over road.

BANKFULL STAGE.--5 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1966	June 17, 1966	9.25	275	1971	May 30, 1971	6.18	117
1967	Feb. 18, 1967	4.45	50	1972	Oct. 22, 1971	6.30	122
1968	Jan. 14, 1968	5.90	108	1973	Oct. 5, 1972	9.65	315
1969	July 24, 1969	7.10	155	1974	July 26, 1974	6.52	131
1970	July 10, 1970	5.10	74	1975	July 14, 1975	7.84	192

CHOWAN RIVER BASIN

02051700 ROCKY RUN AT LAWRENCEVILLE, VA

LOCATION.--Lat 36°46'14", long 77°50'28", Brunswick County, Hydrologic Unit 03010204, at culvert on State Highway 642, 0.4 mi northeast of Lawrenceville.

DRAINAGE AREA.--6.16 mi².

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is 181.06 ft above National Geodetic Vertical Datum of 1929. Prior to May 1964, nonrecording gage (crest-stage gage) at site 25 ft upstream at different datum.

STAGE-DISCHARGE RELATION.--Not developed.

BANKFULL STAGE.--6 ft.

REMARKS.--Insufficient field data available to develop stage-discharge rating at either location.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1954	Apr. 16, 1964	5.63	-	1967	Feb. 18, 1967	a5.95	-
1955	Aug. 18, 1955	4.87	-	1968	Jan. 14, 1968	a6.42	-
1956	Oct. 14, 1955	3.28	-	1969	Feb. 23, 1969	a6.45	-
1957	Oct. 28, 1956	6.25	-	1970	July 3, 1970	a7.30	-
1958	May 7, 1958	6.20	-	1971	May 30, 1971	a6.85	-
1959	Dec. 29, 1958	6.17	-	1972	Oct. 22, 1971	a7.07	-
1960	Dec. 12, 1959	5.70	-	1973	Oct. 5, 1972	a18.00	-
1961	Feb. 9, 1961	6.21	-	1974	Sept. 7, 1974	a6.75	-
1962	June 27, 1962	5.85	-	1975	July 14, 1975	a7.67	-
1963	Mar. 6, 1963	6.31	-				

a Subsequent to culvert reconstruction in 1964.

02052000 MEHERRIN RIVER AT EMPORIA, VA

LOCATION.--Lat 36°41'24", long 77°32'27", Emporia City, Hydrologic Unit 03010204, on left bank at downstream side of bridge on U.S. Highway 301 and 1.2 mi upstream from Falling Run.

DRAINAGE AREA.--747 mi².

GAGE.--Water-stage recorder. Datum of gage is 67.17 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers).

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 18,000 ft³/s and extended above.

BANKFULL STAGE.--13 ft.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Water Control Board. Flood peak of August 1940 is highest known since at least 1873.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1908	Aug. 28, 1908	28.0	-	1969	Mar. 9, 1969	18.13	5,800
1912	March 1912	25.0	-	1970	July 11, 1970	16.52	5,400
1928	Apr. 27, 1928	26.0	-	1971	June 1, 1971	19.96	7,800
1940	Aug. 17, 1940	a31.5	b40,000	1972	Oct. 26, 1971	26.59	19,400
1951	Mar. 21, 1951	16.90	5,100	1973	Oct. 8, 1972	27.38	21,100
1952	Dec. 23, 1951	20.60	9,410	1974	Sept. 9, 1974	21.95	10,000
1953	Nov. 23, 1952	21.90	11,200	1975	July 17, 1975	25.09	16,200
1954	May 21, 1954	17.63	5,860	1976	Jan. 29, 1976	20.40	8,100
1955	Aug. 21, 1955	22.80	12,600	1977	Oct. 22, 1976	17.83	5,640
1956	Oct. 3, 1955	19.07	7,520	1978	Apr. 29, 1978	26.62	19,400
1957	Feb. 3, 1957	19.78	7,580	1979	Feb. 27, 1979	25.34	16,600
1958	May 8, 1958	22.76	12,100	1980	Oct. 3, 1979	22.60	11,100
1959	Dec. 31, 1958	21.18	9,400	1981	June 9, 1981	16.70	4,790
1960	Nov. 27, 1959	20.70	8,710	1982	May 26, 1982	16.38	4,940
1961	Feb. 10, 1961	19.02	6,700	1983	Apr. 18, 1983	21.70	9,360
1962	Jan. 9, 1962	23.17	12,900	1984	Feb. 16, 1984	23.96	13,800
1963	Mar. 8, 1963	20.47	8,450	1985	Jan. 6, 1985	20.84	8,570
1964	Feb. 8, 1964	16.30	4,210	1986	Nov. 6, 1985	25.74	17,500
1965	Feb. 20, 1965	19.34	7,030	1987	Apr. 18, 1987	25.29	16,600
1966	June 19, 1966	19.72	7,470	1988	Jan. 21, 1988	13.85	3,800
1967	Feb. 22, 1967	17.50	5,200	1989	Feb. 24, 1989	19.69	7,390
1968	Jan. 16, 1968	18.52	6,200	1990	Jan. 3, 1990	19.36	7,060

a From high-water mark.

b About.

02052500 FOUNTAINS CREEK NEAR BRINK, VA
(Formerly published as Fontaine Creek near Brink)

LOCATION.--Lat 36°36'55", long 77°42'00", Greensville County, Hydrologic Unit 03010204, on left bank 30 ft upstream from bridge on State Highway 603, 0.3 mi downstream from Quarrel Creek, 3.6 mi west of Brink, and 10 mi southwest of Emporia.

DRAINAGE AREA.--65.2 mi².

GAGE.--Water-stage recorder. Datum of gage is 152.59 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 3,000 ft³/s and extended above on basis of slope-area measurement at 16,000 ft³/s.

BANKFULL STAGE.--12 ft.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1940	August 1940	a18.5	2,720	1972	Oct. 24, 1971	16.68	2,530
1954	Apr. 27, 1954	12.49	1,320	1973	Oct. 6, 1972	24.14	16,000
1955	Aug. 18, 1955	13.71	1,620	1974	Aug. 7, 1974	11.08	992
1956	Oct. 2, 1955	11.36	1,040	1975	July 14, 1975	18.90	4,920
1957	Feb. 1, 1957	14.37	1,940	1976	Jan. 28, 1976	12.88	1,420
1958	May 7, 1958	18.18	2,660	1977	Oct. 21, 1976	11.42	1,060
1959	Dec. 29, 1958	13.42	1,590	1978	Apr. 27, 1978	18.75	4,760
1960	July 30, 1960	11.30	980	1979	Sept. 25, 1979	15.36	2,300
1961	Feb. 9, 1961	10.22	771	1980	Oct. 1, 1979	12.82	1,400
1962	Jan. 7, 1962	15.56	2,340	1981	Feb. 11, 1981	5.90	200
1963	Mar. 7, 1963	12.78	1,380	1982	Feb. 18, 1982	8.87	557
1964	Jan. 10, 1964	7.70	357	1983	Apr. 16, 1983	14.37	1,840
1965	Oct. 5, 1964	9.39	612	1984	Feb. 14, 1984	18.71	4,630
1966	Mar. 5, 1966	9.29	632	1985	Jan. 4, 1985	10.78	888
1967	Aug. 24, 1967	16.36	2,430	1986	Nov. 5, 1985	18.02	4,020
1968	Jan. 14, 1968	11.02	970	1987	Jan. 20, 1987	16.34	2,870
1969	Aug. 5, 1969	16.50	2,460	1988	Feb. 12, 1988	8.11	394
1970	Feb. 18, 1970	9.71	634	1989	Mar. 25, 1989	12.17	1,230
1971	May 31, 1971	10.80	881	1990	Feb. 17, 1990	12.60	1,340

a From information by local residents.

02053000 FONTAINE CREEK NEAR EMPORIA, VA

LOCATION.--Lat 36°38'10", long 77°38'10", Greenville County, Hydrologic Unit 03010204, near center of span on upstream side of highway bridge, 4.4 mi southwest of Emporia, and 7.1 mi upstream from Cattail Creek.

DRAINAGE AREA.--96 mi², approximately.

GAGE.--Nonrecording gage (chain gage). Datum of gage is 98 ft above National Geodetic Vertical Datum of 1929, by barometer. Additional crest-stage gage installed May 29, 1951, at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 2,000 ft³/s and extended above.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1945	July 19, 1945	10.58	3,500	1950	Sept. 13, 1950	6.26	1,220
1946	May 27, 1946	9.50	2,840	1951	Aug. 5, 1951	4.60	520
1947	Jan. 21, 1947	4.17	354	1952	Apr. 27, 1952	7.90	2,010
1948	Feb. 15, 1948	7.32	1,660	1953	Mar. 26, 1953	6.00	1,080
1949	Dec. 1, 1948	6.12	1,120				

02053800 SOUTH FORK ROANOKE RIVER NEAR SHAWSVILLE, VA

LOCATION.--Lat 37°08'24", long 80°16'00", Montgomery County, Hydrologic Unit 03010101, on right bank 95 ft downstream from bridge on State Highway 637, 0.3 mi downstream from Georges Run, 1.3 mi downstream from Elliott Creek, and 2.0 mi southwest of Shawsville.

DRAINAGE AREA.--110 mi².

GAGE.--Water-stage recorder. Datum of gage is 1,361.87 ft above National Geodetic Vertical Datum of 1929. Prior to Aug. 26, 1974, water-stage recorder, and Aug. 26, 1974, to July 24, 1975, nonrecording gage at site 95 ft upstream at same datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 3,700 ft³/s and extended above on basis of slope-area measurement at 14,200 ft³/s.

BANKFULL STAGE.--5 ft.

REMARKS.--Records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1959	Sept. 30, 1959	9.89	-	1976	June 17, 1976	5.08	2,300
1961	May 11, 1961	4.33	1,380	1977	Apr. 5, 1977	6.62	3,520
1962	Mar. 12, 1962	3.87	1,160	1978	Apr. 26, 1978	7.72	4,860
1963	Nov. 10, 1962	4.93	2,140	1979	Sept. 21, 1979	9.27	8,380
1964	Aug. 31, 1964	3.21	970	1980	Apr. 14, 1980	4.82	2,080
1965	Mar. 26, 1965	4.24	1,700	1981	May 28, 1981	2.77	682
1966	Feb. 13, 1966	4.02	1,530	1982	Feb. 3, 1982	4.55	1,870
1967	Mar. 7, 1967	6.35	3,840	1983	Apr. 10, 1983	7.79	4,990
1968	Mar. 12, 1968	2.60	736	1984	Feb. 14, 1984	4.70	1,980
1969	Oct. 19, 1968	5.95	3,020	1985	Aug. 18, 1985	7.07	3,980
1970	Dec. 31, 1969	3.33	1,120	1986	Nov. 4, 1985	8.81	7,070
1971	June 6, 1971	3.01	921	1987	Apr. 25, 1987	6.02	4,690
1972	June 21, 1972	11.12	14,200	1988	Jan. 20, 1988	1.87	411
1973	May 28, 1973	7.44	4,500	1989	Sept. 22, 1989	8.05	8,110
1974	Apr. 4, 1974	4.51	1,840	1990	Nov. 16, 1989	4.66	2,960
1975	Mar. 14, 1975	7.10	4,020				

a From information by local resident.

02054500 ROANOKE RIVER AT LAFAYETTE, VA

LOCATION.--Lat 37°14'11", long 80°12'34", Montgomery County, Hydrologic Unit 03010101, on right bank 120 ft upstream from bridge on State Highway 603 at Lafayette, 0.4 mi downstream from confluence of North and South Forks, and 1.1 mi upstream from Cove Hollow.

DRAINAGE AREA.--257 mi².

GAGE.--Water-stage recorder. Datum of gage is 1,174.47 ft above National Geodetic Vertical Datum of 1929. Prior to July 30, 1949, nonrecording gage at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 11,400 ft³/s and extended above on basis of slope-area measurement at 24,500 ft³/s.

BANKFULL STAGE.--6 ft.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1940	August 1940	a12.2	19,000	1967	Mar. 7, 1967	8.52	6,830
1944	Feb. 18, 1944	7.5	6,500	1968	Mar. 12, 1968	5.04	2,320
1945	Sept. 18, 1945	10.0	10,400	1969	Oct. 19, 1969	7.53	5,380
1946	Feb. 10, 1946	8.0	7,200	1970	Dec. 31, 1969	5.62	2,900
1947	Jan. 20, 1947	8.0	7,200	1971	May 30, 1971	5.97	3,350
1948	Aug. 4, 1948	11.0	13,200	1972	June 21, 1972	15.60	24,500
1949	Dec. 4, 1948	10.5	11,500	1973	May 28, 1973	9.78	9,020
1950	July 12, 1950	8.23	6,600	1974	Apr. 4, 1974	6.37	3,860
1951	Dec. 7, 1950	9.38	8,800	1975	Mar. 14, 1975	9.46	9,360
1952	Sept. 1, 1952	8.10	6,430	1976	June 17, 1976	6.06	4,120
1953	Mar. 24, 1953	8.00	6,260	1977	Apr. 5, 1977	9.18	8,850
1954	Mar. 1, 1954	6.05	3,250	1978	Apr. 26, 1978	12.12	14,500
1955	Oct. 15, 1954	7.91	6,090	1979	Sept. 22, 1979	10.75	11,800
1956	Apr. 16, 1956	6.66	4,200	1980	Apr. 14, 1980	7.20	5,690
1957	Jan. 29, 1957	9.02	8,000	1981	June 7, 1981	3.74	1,520
1958	July 13, 1958	6.77	4,200	1982	Feb. 3, 1982	7.27	4,510
1959	Sept. 30, 1959	11.56	15,600	1983	Apr. 10, 1983	10.21	9,400
1960	Feb. 11, 1960	6.11	4,110	1984	Feb. 14, 1984	6.99	4,160
1961	May 11, 1961	4.66	2,560	1985	Aug. 18, 1985	8.65	6,510
1962	Dec. 18, 1961	6.76	4,940	1986	Nov. 4, 1985	13.34	17,100
1963	Nov. 10, 1962	7.70	6,040	1987	Apr. 25, 1987	9.78	8,540
1964	Apr. 14, 1964	5.13	3,010	1988	Jan. 20, 1988	3.07	1,050
1965	Mar. 26, 1965	6.54	4,580	1989	Sept. 22, 1989	10.73	10,500
1966	Feb. 13, 1966	6.57	4,120	1990	Nov. 16, 1989	7.84	5,290

a From information by local resident.

02055000 ROANOKE RIVER AT ROANOKE, VA

LOCATION.--Lat 37°15'30", long 79°56'20", Roanoke City, Hydrologic Unit 03010101, on left bank 50 ft downstream from Walnut Street Bridge, 3.2 mi upstream from Tinker Creek, and at mile 360.6.

DRAINAGE AREA.--395 mi².

GAGE.--Water-stage recorder. Datum of gage is 906.84 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers). Prior to June 7, 1937, nonrecording gage on downstream side of highway bridge 50 ft upstream at same datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 25,000 ft³/s and extended above on basis of slope-area measurement at 26,000 ft³/s.

BANKFULL STAGE.--10 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1878	November 1877	16.0	20,300	1945	Sept. 18, 1945	13.70	15,100
1899	Mar. 4, 1899	10.0	11,000	1946	Feb. 10, 1946	7.33	5,400
1900	Mar. 20, 1900	5.6	5,060	1947	Jan. 20, 1947	7.77	5,960
1901	May 22, 1901	15.0	19,000	1948	Aug. 5, 1948	11.96	11,900
1902	Feb. 25, 1902	13.2	15,300	1949	Dec. 4, 1948	13.68	15,100
1903	Feb. 17, 1903	9.4	10,200	1950	May 30, 1950	8.64	6,960
1904	Aug. 10, 1904	4.0	2,900	1951	Dec. 8, 1950	11.15	10,600
1905	July 12, 1905	12.8	14,800	1952	Sept. 1, 1952	8.29	6,570
1906	Dec. 20, 1905	5.2	4,520	1953	Mar. 24, 1953	8.79	7,220
1907	Sept. 23, 1907	9.2	9,920	1954	Mar. 1, 1954	6.69	4,770
1908	Jan. 12, 1908	10.6	11,800	1955	Oct. 15, 1954	7.80	5,960
1909	Oct. 24, 1908	9.0	9,660	1956	Apr. 16, 1956	6.16	4,270
1910	June 13, 1910	8.8	9,380	1957	Jan. 29, 1957	9.20	8,900
1911	Apr. 5, 1911	4.1	3,040	1958	May 6, 1958	7.21	5,760
1912	May 12, 1912	8.5	8,980	1959	Sept. 30, 1959	13.28	14,900
1913	Mar. 14, 1913	8.6	9,120	1960	Feb. 11, 1960	6.92	5,180
1914	Jan. 9, 1914	3.9	2,780	1961	May 11, 1961	5.91	3,980
1915	Dec. 5, 1914	10.0	11,000	1962	Dec. 18, 1961	7.80	6,340
1916	Dec. 18, 1915	7.8	8,040	1963	Nov. 10, 1962	9.26	8,450
1917	Mar. 5, 1917	6.6	6,420	1964	Apr. 14, 1964	5.76	3,870
1918	June 26, 1918	8.2	6,440	1965	Mar. 26, 1965	7.32	5,690
1919	Jan. 3, 1919	8.4	6,700	1966	Feb. 13, 1966	7.25	5,560
1920	Feb. 4, 1920	6.2	4,270	1967	Mar. 7, 1967	10.93	11,000
1921	Nov. 30, 1920	3.5	1,700	1968	Mar. 13, 1968	5.82	3,890
1922	Nov. 1, 1921	13.2	14,100	1969	Oct. 19, 1968	9.83	9,240
1923	Mar. 7, 1923	7.4	5,510	1970	Dec. 31, 1969	6.98	5,280
1924	Sept. 29, 1924	10.5	9,600	1971	May 30, 1971	6.84	5,110
1925	Jan. 18, 1925	3.0	1,300	1972	June 21, 1972	19.61	25,300
1926	Jan. 17, 1926	4.1	2,240	1973	May 28, 1973	12.31	13,000

ROANOKE RIVER BASIN

02055000 ROANOKE RIVER AT ROANOKE, VA--Continued

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1927	Dec. 26, 1926	10.0	8,900	1974	Apr. 4, 1974	6.53	4,740
1928	Aug. 16, 1928	18.1	22,600	1975	Mar. 14, 1975	11.96	12,400
1929	Mar. 5, 1929	7.1	5,180	1976	June 17, 1976	5.80	3,870
1930	Oct. 2, 1929	11.5	11,100	1977	Apr. 5, 1977	11.01	11,000
1931	Aug. 22, 1931	5.4	3,470	1978	Apr. 27, 1978	18.95	24,100
1932	Feb. 3, 1932	4.1	2,240	1979	Sept. 22, 1979	11.62	11,900
1933	Oct. 17, 1932	13.1	13,900	1980	Apr. 14, 1980	9.79	9,180
1934	Mar. 28, 1934	8.3	6,570	1981	Sept. 4, 1981	4.87	2,930
1935	Jan. 23, 1935	11.70	11,400	1982	Feb. 3, 1982	7.97	6,560
1936	Mar. 18, 1936	11.0	10,400	1983	Apr. 10, 1983	12.53	13,300
1937	Aug. 30, 1937	10.15	9,180	1984	Feb. 14, 1984	8.16	6,820
1938	Oct. 19, 1937	10.84	10,000	1985	Aug. 18, 1985	11.32	11,400
1939	Aug. 19, 1939	9.67	8,480	1986	Nov. 4, 1985	23.35	32,300
1940	Aug. 14, 1940	18.25	22,800	1987	Apr. 25, 1987	13.56	14,900
1941	July 8, 1941	5.84	3,910	1988	Jan. 20, 1988	3.31	1,460
1942	May 22, 1942	7.38	5,740	1989	Sept. 23, 1989	11.63	11,900
1943	Apr. 19, 1943	7.50	5,870	1990	Nov. 16, 1989	7.74	6,250
1944	Feb. 18, 1944	6.65	4,750				

a Estimated by U.S. Army Corps of Engineers from flood profile.

02055100 TINKER CREEK NEAR DALEVILLE, VA

LOCATION.--Lat 37°25'03", long 79°56'08", Botetourt County, Hydrologic Unit 03010101, on left bank 1,100 ft downstream from Norfolk and Western Railway bridge, 0.2 mi downstream from unnamed tributary, 0.5 mi south of Glebe Mills, and 1.3 mi northwest of Daleville.

DRAINAGE AREA.--11.7 mi².

GAGE.--Water-stage recorder. Datum of gage is 1,217.47 ft above National Geodetic Vertical Datum of 1929 (Norfolk and Western Railway bench mark).

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 120 ft³/s and extended above on basis of slope-area measurements at 2,200 ft³/s and 10,000 ft³/s.

BANKFULL STAGE.--6 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1940	August 1940	a9.0	-	1974	July 26, 1974	9.55	3,580
1957	Apr. 5, 1957	3.91	245	1975	Mar. 19, 1975	5.82	788
1958	May 5, 1958	5.20	580	1976	Oct. 18, 1975	3.84	251
1959	Sept. 30, 1959	4.98	520	1977	Oct. 25, 1976	4.76	458
1960	Sept. 1, 1960	5.52	670	1978	Nov. 7, 1977	5.94	836
1961	Aug. 25, 1961	8.52	2,180	1979	Sept. 21, 1979	9.17	3,040
1962	Aug. 5, 1962	5.61	700	1980	Apr. 14, 1980	7.05	1,340
1963	Nov. 9, 1962	4.53	403	1981	July 5, 1981	2.60	87
1964	Aug. 31, 1964	5.65	720	1982	Feb. 3, 1982	3.89	272
1965	July 7, 1965	5.62	700	1983	Apr. 10, 1983	6.78	1,170
1966	Feb. 13, 1966	5.60	700	1984	June 30, 1984	7.13	1,350
1967	Mar. 7, 1967	7.90	1,820	1985	Aug. 18, 1985	4.95	508
1968	Mar. 12, 1968	4.03	286	1986	Nov. 4, 1985	13.36	10,400
1969	Oct. 19, 1968	6.23	952	1987	Apr. 16, 1987	8.37	2,200
1970	July 24, 1970	4.64	426	1988	July 21, 1988	2.82	117
1971	Feb. 13, 1971	5.28	604	1989	Sept. 16, 1989	7.11	1,350
1972	June 21, 1972	9.82	4,000	1990	Nov. 16, 1989	8.48	2,290
1973	May 28, 1973	9.25	3,150				

a From information by local residents.

02056000 ROANOKE RIVER AT NIAGARA, VA

LOCATION.--Lat 37°15'18", long 79°52'18", Roanoke County, Hydrologic Unit 03010101, on right bank 200 ft downstream from powerplant of Appalachian Power Company at Niagara, 2 mi downstream from Tinker Creek, 2.1 mi southeast of Vinton, and at mile 355.

DRAINAGE AREA.--512 mi².

GAGE.--Water-stage recorder. Datum of gage is 820.15 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers).

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 12,000 ft³/s and extended above on basis of slope-area measurements at 29,000 ft³/s and 52,000 ft³/s.

BANKFULL STAGE.--13 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1927	Dec. 26, 1926	12.23	10,800	1959	Dec. 29, 1958	11.08	8,180
1928	Aug. 16, 1928	17.36	24,000	1960	Oct. 1, 1959	15.10	17,200
1929	Feb. 28, 1929	10.51	7,300	1961	Aug. 26, 1961	9.11	5,140
1930	Oct. 2, 1929	14.29	15,200	1962	Dec. 18, 1961	11.30	8,540
1931	Aug. 23, 1931	-	5,000	1963	Nov. 10, 1962	12.22	10,500
1932	Mar. 6, 1932	7.99	4,150	1964	Apr. 14, 1964	8.54	4,400
1933	Oct. 17, 1932	15.36	18,000	1965	Mar. 26, 1965	10.44	7,040
1934	Mar. 28, 1934	11.48	8,950	1966	Feb. 13, 1966	10.82	7,680
1935	Jan. 23, 1935	14.20	15,000	1967	Mar. 7, 1967	13.64	13,600
1936	Mar. 17, 1936	14.78	16,400	1968	Mar. 13, 1968	8.53	4,440
1937	Jan. 20, 1937	11.54	8,950	1969	Oct. 19, 1968	13.72	13,800
1938	Oct. 19, 1937	13.58	13,400	1970	Dec. 31, 1969	9.89	6,250
1939	Aug. 19, 1939	-	13,000	1971	May 30, 1971	10.06	6,500
1940	Aug. 14, 1940	17.5	24,400	1972	June 21, 1972	18.98	28,800
1941	July 8, 1941	9.71	6,290	1973	May 28, 1973	15.27	17,700
1942	May 22, 1942	11.25	8,380	1974	Apr. 4, 1974	9.63	5,880
1943	Apr. 19, 1943	11.57	9,170	1975	Mar. 14, 1975	15.59	18,700
1944	Sept. 18, 1944	13.24	12,600	1976	May 29, 1976	9.37	5,520
1945	Sept. 18, 1945	15.10	17,200	1977	Apr. 5, 1977	14.12	14,800
1946	Feb. 10, 1946	10.1	6,570	1978	Apr. 27, 1978	19.12	29,300
1947	Jan. 20, 1947	10.73	7,380	1979	Sept. 22, 1979	14.51	15,800
1948	Aug. 4, 1948	14.00	14,500	1980	Apr. 14, 1980	14.55	15,900
1949	Dec. 4, 1948	16.30	20,800	1981	Sept. 4, 1981	8.28	4,150
1950	May 31, 1950	12.20	10,500	1982	Feb. 3, 1982	11.17	8,340
1951	Dec. 7, 1950	13.50	13,200	1983	Apr. 10, 1983	15.60	18,700
1952	Sept. 1, 1952	13.10	13,200	1984	Feb. 14, 1984	11.75	9,410
1953	Mar. 24, 1953	12.42	11,100	1985	Aug. 18, 1985	14.82	16,500
1954	Mar. 1, 1954	10.27	6,830	1986	Nov. 4, 1985	25.30	52,300
1955	Oct. 15, 1954	13.60	13,500	1987	Apr. 16, 1987	16.29	20,600
1956	Apr. 16, 1956	9.30	5,580	1988	Nov. 29, 1987	6.09	2,010
1957	Jan. 29, 1957	12.33	10,800	1989	Sept. 23, 1989	14.20	14,800
1958	May 6, 1958	10.68	7,490	1990	Oct. 2, 1989	11.37	8,710

02056650 BACK CREEK NEAR DUNDEE, VA

LOCATION.--Lat 37°13'39", long 79°52'06", Roanoke County, Hydrologic Unit 03010101, on right bank 130 ft upstream from bridge on State Highway 660, 0.9 mi upstream from Horseshoe Branch, 1.1 mi southeast of Dundee, 2.8 mi west of Hardy post office, and at mile 2.4 mi.

DRAINAGE AREA.--56.8 mi².

GAGE.--Water-stage recorder. Datum of gage is 822.67 ft above National Geodetic Vertical Datum of 1929. Prior to Apr. 4, 1975, nonrecording gage, and Apr. 4, 1975, to Nov. 4, 1985, water-stage recorder, at site 80 ft downstream at same datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 6,000 ft³/s and extended above on basis of slope-area measurement at 20,000 ft³/s.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1971	May 30, 1971	a17.5	-	1982	June 10, 1982	5.97	1,130
1972	June 21, 1972	a20.0	-	1983	Apr. 10, 1983	10.25	3,410
1975	Mar. 19, 1975	8.69	2,510	1984	Feb. 14, 1984	7.11	1,600
1976	May 29, 1976	15.00	7,500	1985	Aug. 18, 1985	12.46	5,110
1977	Oct. 9, 1976	9.31	2,890	1986	Nov. 4, 1985	25.10	20,000
1978	Apr. 26, 1978	13.27	5,840	1987	Sept. 7, 1987	15.05	6,440
1979	Sept. 22, 1979	12.42	5,140	1988	Nov. 29, 1987	5.63	521
1980	Apr. 14, 1980	9.60	3,060	1989	July 7, 1989	11.41	3,370
1981	June 7, 1981	5.18	840	1990	Oct. 2, 1989	7.34	1,100

a From information by local resident.

ROANOKE RIVER BASIN

02056900 BLACKWATER RIVER NEAR ROCKY MOUNT, VA

LOCATION.--Lat 37°02'42", long 79°50'40", Franklin County, Hydrologic Unit 03010101, on right bank 45 ft downstream from bridge on State Highway 122, 3.0 mi northeast of Rocky Mount, and 4.1 mi upstream from Maggodee Creek.

DRAINAGE AREA.--115 mi².

GAGE.--Water-stage recorder. Datum of gage is 876.45 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 7,000 ft³/s and extended above on basis of slope-area measurement at 20,800 ft³/s.

BANKFULL STAGE.--Not determined.

REMARKS.--Records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1977	Oct. 9, 1976	-	a5,000	1984	Feb. 14, 1984	6.25	1,690
1978	Apr. 27, 1978	15.81	7,710	1985	Aug. 18, 1985	10.95	4,470
1979	Sept. 22, 1979	16.38	8,130	1986	Nov. 5, 1985	21.92	20,800
1980	Apr. 14, 1980	12.15	5,280	1987	Sept. 8, 1987	17.53	9,140
1981	Feb. 11, 1981	2.95	242	1988	Nov. 29, 1987	4.41	779
1982	June 13, 1982	8.68	3,060	1989	July 5, 1989	12.61	5,550
1983	Apr. 10, 1983	13.53	6,140	1990	July 15, 1990	10.85	4,400

a Mean daily discharge; peak is known to be greater than the value shown.

02057000 BLACKWATER RIVER NEAR UNION HALL, VA

LOCATION.--Lat 37°02'35", long 79°41'07", Franklin County, Hydrologic Unit 03010101, on left bank 100 ft upstream from highway bridge at Kemps Fork, 3 mi upstream from Gills Creek, and 3 mi north of Union Hall.

DRAINAGE AREA.--208 mi².

GAGE.--Water-stage recorder. Datum of gage is 693.13 ft above National Geodetic Vertical Datum of 1929. Prior to Nov. 22, 1929, nonrecording gage at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 6,500 ft³/s and extended above by logarithmic plotting on basis of unit hydrograph and flood-routing studies by U.S. Army Corps of Engineers, and records for other stations in Roanoke River basin.

BANKFULL STAGE.--10 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1890	June 1890	a18.3	-	1945	Sept. 18, 1945	12.80	8,350
1925	Apr. 29, 1925	3.85	1,070	1946	Jan. 7, 1946	6.66	2,860
1926	Jan. 18, 1926	5.0	1,840	1947	June 14, 1947	6.98	3,130
1927	Dec. 25, 1926	11.0	6,400	1948	June 18, 1948	7.92	3,770
1928	Aug. 11, 1928	19.5	18,000	1949	Mar. 23, 1949	12.90	8,610
1929	June 9, 1929	6.5	2,800	1950	May 31, 1950	10.32	5,850
1930	Oct. 2, 1929	12.70	8,730	1951	Dec. 7, 1950	10.13	5,610
1931	Aug. 22, 1931	6.12	2,490	1952	Sept. 1, 1952	10.36	5,850
1932	Mar. 6, 1932	6.22	2,560	1953	Mar. 24, 1953	8.88	4,730
1933	Oct. 17, 1932	15.27	12,500	1954	Mar. 1, 1954	6.57	2,890
1934	Mar. 28, 1934	7.09	3,190	1955	Aug. 18, 1955	11.30	6,660
1935	Sept. 6, 1935	9.36	4,800	1956	Sept. 27, 1956	4.70	1,520
1936	Jan. 19, 1936	9.87	5,200	1957	Sept. 17, 1957	8.44	4,250
1937	Oct. 17, 1936	10.15	5,440	1958	May 7, 1958	5.02	1,760
1938	Oct. 19, 1937	15.88	13,400	1959	Dec. 29, 1958	9.10	4,810
1939	Aug. 19, 1939	18.50	17,900	1960	Oct. 1, 1959	10.78	6,210
1940	Aug. 14, 1940	19.52	19,700	1961	Apr. 10, 1961	5.30	1,940
1941	Apr. 5, 1941	5.77	2,190	1962	June 14, 1962	7.51	3,530
1942	May 22, 1942	9.28	5,220	1963	Nov. 10, 1962	10.74	6,120
1943	July 10, 1943	13.25	9,480	1964b	Nov. 29, 1963	3.84	1,100
1944	Sept. 18, 1944	10.0	5,530				

a From information by local residents.

b Partial year, September through December.

02057500 ROANOKE (STAUNTON) RIVER NEAR TOSHES, VA

LOCATION.--Lat 37°02'03", long 79°31'18", Pittsylvania County, Hydrologic Unit 03010101, on right bank 1.8 mi downstream from Witchers Creek, 3 mi upstream from Pigg River, 5 mi northwest of Toshes, and at mile 313.

DRAINAGE AREA.--1,020 mi².

GAGE.--Water-stage recorder. Datum of gage is 588.99 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers). Prior to Oct. 14, 1929, nonrecording gage at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 31,000 ft³/s and extended to 70,000 ft³/s by logarithmic plotting, on basis of unit hydrographs and flood-routing studies by U.S. Army Corps of Engineers, and records for other stations in Roanoke River basin.

BANKFULL STAGE.--13 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1926	Jan. 19, 1926	8.6	7,840	1945	Sept. 18, 1945	21.04	30,800
1927	Feb. 19, 1927	13.7	15,900	1946	Jan. 8, 1946	9.37	9,000
1928	Aug. 16, 1928	20.0	28,600	1947	Jan. 20, 1947	9.98	9,900
1929	June 15, 1929	10.0	9,900	1948	Aug. 5, 1948	16.81	21,800
1930	Oct. 2, 1929	19.75	28,200	1949	Dec. 4, 1948	22.40	35,800
1931	Aug. 22, 1931	8.67	7,990	1950	May 31, 1950	18.88	26,200
1932	Mar. 6, 1932	8.60	7,850	1951	Dec. 8, 1950	15.62	19,400
1933	Oct. 18, 1932	19.60	27,700	1952	Sept. 1, 1952	15.56	19,400
1934	Mar. 28, 1934	8.38	7,560	1953	Mar. 14, 1953	13.97	16,400
1935	Dec. 1, 1934	15.70	19,400	1954	Mar. 1, 1954	10.88	11,300
1936	Mar. 18, 1936	17.13	21,900	1955	Oct. 15, 1954	19.76	28,200
1937	Aug. 31, 1937	13.38	15,400	1956	Apr. 16, 1956	8.11	7,120
1938	Oct. 19, 1937	20.45	29,500	1957	Apr. 5, 1957	13.68	15,900
1939	Aug. 19, 1939	19.95	28,600	1958	May 6, 1958	11.12	11,600
1940	Aug. 15, 1940	27.36	70,000	1959	Dec. 29, 1958	14.13	16,600
1941	Apr. 5, 1941	8.11	7,120	1960	Oct. 1, 1959	18.58	25,500
1942	May 22, 1942	14.28	16,900	1961	Apr. 13, 1961	7.75	6,810
1943	Apr. 20, 1943	12.12	13,200	1962	Dec. 12, 1961	10.40	10,500
1944	Sept. 19, 1944	18.88	26,200	1963	Nov. 10, 1962	13.28	15,200

ROANOKE RIVER BASIN

02057700 POWDER MILL CREEK AT ROCKY MOUNT, VA

LOCATION.--Lat 37°00'26", long 79°52'25", Franklin County, Hydrologic Unit 03010101, on right upstream wingwall of western-most culvert in the interchange between U.S. Highway 220 bypass and State Highways 40 and 122 at Rocky Mount, 3.5 mi upstream from mouth.

DRAINAGE AREA.--0.64 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,075 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Aug. 10, 1978, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--15 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1967	Aug. 24, 1967	14.35	104	1979	Sept. 22, 1979	15.32	176
1968	Dec. 12, 1967	13.35	41	1980	Apr. 14, 1980	14.34	104
1969	July 3, 1969	15.10	158	1981	July 6, 1981	13.86	72
1970	Apr. 3, 1970	14.20	94	1982	June 13, 1982	14.50	115
1971	Oct. 31, 1970	14.50	115	1983	Apr. 10, 1983	15.12	160
1972	July 5, 1972	15.65	202	1984	Aug. 12, 1984	14.53	117
1973	June 21, 1973	15.80	214	1985	Aug. 18, 1985	14.38	107
1974	Dec. 21, 1973	14.20	94	1986	Aug. 12, 1986	15.14	161
1975	Mar. 14, 1975	14.55	118	1987	Sept. 8, 1987	16.26	238
1976	Mar. 31, 1976	15.10	158	1988	May 16, 1988	14.65	126
1977	Oct. 9, 1976	15.02	152	1989	May 5, 1989	16.78	305
1978	Apr. 17, 1978	15.10	158	1990	July 14, 1990	17.84	-

ROANOKE RIVER BASIN

02058000 SNOW CREEK AT SAGO, VA

LOCATION.--Lat 36°53'50", long 79°39'05", Franklin County, Hydrologic Unit 03010101, at highway bridge 200 ft downstream from First Fork and 0.8 mi northwest of Sago.

DRAINAGE AREA.--60 mi², approximately.

GAGE.--Water-stage recorder. Datum of gage is 706.20 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 2,200 ft³/s and extended above by logarithmic plotting on basis of velocity-area studies and records for other stations in Roanoke River basin.

BANKFULL STAGE.--14 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1935	Jan. 23, 1935	9.63	888	1940	Aug. 14, 1940	22.98	12,000
1936	Jan. 19, 1936	-	3,000	1941	July 8, 1941	10.70	972
1937	Aug. 11, 1937	12.65	1,290	1942	May 22, 1942	14.20	1,910
1938	Oct. 20, 1937	15.16	2,290	1943	Apr. 19, 1943	12.69	1,440
1939	July 29, 1939	13.63	1,700	1944	Sept. 19, 1944	13.58	1,700

02058400 PIGG RIVER NEAR SANDY LEVEL, VA

LOCATION.--Lat 36°56'45", long 79°31'30", Pittsylvania County, Hydrologic Unit 03010101, on left bank 300 ft downstream from Harpen Creek, 0.5 mi upstream from bridge on State Highway 40, and 1.1 mi south of Sandy Level.

DRAINAGE AREA.--350 mi².

GAGE.--Water-stage recorder. Datum of gage is 617.00 ft above National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark). Prior to Nov. 18, 1963, nonrecording gage at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurement below 12,000 ft³/s and extended above on basis of slope-area measurements at 22,600 ft³/s and 66,000 ft³/s.

BANKFULL STAGE.--12 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1964	Aug. 31, 1964	21.11	14,900	1978	Apr. 27, 1978	25.56	25,400
1965	Feb. 8, 1965	12.07	6,670	1979	Sept. 22, 1979	19.92	14,400
1966	Feb. 13, 1966	10.87	5,830	1980	Apr. 9, 1980	12.58	7,000
1967	Aug. 24, 1967	15.93	9,640	1981	Feb. 11, 1981	3.59	648
1968	Mar. 13, 1968	7.66	3,800	1982	June 13, 1982	9.54	4,920
1969	Mar. 25, 1969	9.65	4,990	1983	Apr. 10, 1983	17.16	11,000
1970	Aug. 10, 1970	10.79	5,720	1984	Feb. 14, 1984	12.25	6,770
1971	Oct. 31, 1970	9.59	4,950	1985	Aug. 18, 1985	21.54	17,100
1972	June 22, 1972	24.07	22,700	1986	Nov. 4, 1985	19.50	13,800
1973	Feb. 2, 1973	14.65	8,620	1987	Sept. 8, 1987	31.12	65,600
1974	Dec. 21, 1973	13.09	7,370	1988	July 28, 1988	5.97	2,670
1975	Mar. 19, 1975	18.67	12,700	1989	May 6, 1989	14.35	8,380
1976	May 30, 1976	12.27	6,790	1990	Mar. 18, 1990	12.94	7,260
1977	Oct. 10, 1976	12.74	7,120				

ROANOKE RIVER BASIN

02058500 PIGG RIVER NEAR TOSHES, VA

LOCATION.--Lat 36°59'01", long 79°30'52", Pittsylvania County, Hydrologic Unit 03010101, on right bank 0.5 mi downstream from Fryingpan Creek, and 1.7 mi northwest of Toshes.

DRAINAGE AREA.--394 mi².

GAGE.--Water-stage recorder. Datum of gage is 596.10 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 11,000 ft³/s and extended above on basis of slope-area measurement at 21,000 ft³/s, and records for other stations in Roanoke River basin.

BANKFULL STAGE.--15 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1931	Aug. 22, 1931	12.58	4,880	1948	Apr. 1, 1948	16.72	8,670
1932	Mar. 6, 1932	13.57	5,680	1949	Dec. 4, 1948	17.27	9,330
1933	Oct. 17, 1932	21.98	15,100	1950	Sept. 11, 1950	17.73	9,770
1934	Sept. 16, 1934	13.11	5,280	1951	Feb. 7, 1951	13.28	5,440
1935	Dec. 1, 1934	15.28	7,200	1952	Dec. 21, 1951	15.93	7,700
1936	Jan. 19, 1936	20.71	13,400	1953	Feb. 21, 1953	13.23	5,360
1937	Jan. 3, 1937	16.98	9,000	1954	Jan. 22, 1954	15.24	7,100
1938	Oct. 20, 1937	22.23	15,400	1955	Oct. 15, 1954	23.66	17,500
1939	Aug. 19, 1939	18.40	10,600	1956	Apr. 16, 1956	11.32	3,970
1940	Aug. 15, 1940	32.5	34,300	1957	Sept. 17, 1957	19.17	11,500
1941	July 5, 1941	12.87	4,820	1958	Nov. 19, 1957	13.98	6,000
1942	May 22, 1942	15.34	7,070	1959	Dec. 29, 1958	21.33	14,200
1943	Apr. 19, 1943	15.80	7,700	1960	Oct. 1, 1959	15.26	7,200
1944	Sept. 18, 1944	25.8	20,800	1961	Feb. 23, 1961	12.58	4,980
1945	Sept. 18, 1945	20.3	12,800	1962	Dec. 12, 1961	16.06	8,010
1946	Jan. 7, 1946	17.0	9,000	1963	Nov. 10, 1962	15.70	7,600
1947	Jan. 20, 1947	10.7	3,550				

02059000 ROANOKE RIVER NEAR GRETN, VA

LOCATION.--Lat 37°00'46", long 79°28'24", Pittsylvania County, Hydrologic Unit 03010101, 0.7 mi downstream from Pigg River and 7.5 mi northwest of Gretna.

DRAINAGE AREA.--1,430 mi², approximately.

GAGE.--Nonrecording gage (chain gage). Datum of gage is 575 ft above National Geodetic Vertical Datum of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 14,000 ft³/s and extended above.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1924	September 1924	17.8	17,400	1928	Aug. 17, 1928	29.2	35,700
1926	Jan. 19, 1926	12.80	9,980	1929	Feb. 28, 1929	18.48	18,400
1927	Feb. 19, 1927	20.00	20,700	1930	Oct. 2, 1929	27.6	31,200

a From information by local resident.

ROANOKE RIVER BASIN

02059450 SOUTH FORK GOOSE CREEK AT MONTVALE, VA

LOCATION.--Lat 37°22'47", long 79°43'50", Bedford County, Hydrologic Unit 03010101, at culvert on State Highway 607, 0.5 mi south of Montvale.

DRAINAGE AREA.--7.56 mi².

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is 938.02 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--2 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1967	Mar. 7, 1967	4.18	464	1972	June 21, 1972	8.10	2,060
1968	-	<3.0	<180	1973	May 28, 1973	5.53	912
1969	Oct. 19, 1968	5.0	750	1974	Dec. 21, 1973	3.38	256
1970	-	<3.0	<180	1975	Mar. 19, 1975	4.45	545
1971	Feb. 13, 1971	4.42	536	1976	Mar. 31, 1976	3.60	305

< Less than.

ROANOKE RIVER BASIN

02059500 GOOSE CREEK NEAR HUDDLESTON, VA

LOCATION.--Lat 37°10'23", long 79°31'14", Bedford County, Hydrologic Unit 03010101, on left bank 0.3 mi upstream from Haden Bridge on State Highway 732, 0.4 mi upstream from Rockcastle Creek, and 3.5 mi northwest of Huddleston.

DRAINAGE AREA.--188 mi².

GAGE.--Water-stage recorder. Datum of gage is 592.91 ft above National Geodetic Vertical Datum of 1929. Mar. 15, 1925, to Aug. 4, 1928, nonrecording gage at site 1,300 ft downstream at different datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 11,000 ft³/s and extended above on basis of slope-area measurements at 13,000 ft³/s and 18,000 ft³/s.

BANKFULL STAGE.--13 ft.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1924	September 1924	a21.40	14,000	1959	Sept. 30, 1959	7.72	2,600
1926	Jan. 18, 1926	-	4,300	1960	Feb. 19, 1960	8.01	2,730
1927	Feb. 19, 1927	a9.70	5,500	1961	Feb. 23, 1961	5.83	1,810
1930	Oct. 2, 1929	-	7,000	1962	June 14, 1962	8.90	3,140
1931	Aug. 22, 1931	10.05	3,610	1963	Nov. 10, 1962	13.30	5,500
1932	Mar. 6, 1932	10.22	3,730	1964	Aug. 30, 1964	11.04	4,130
1933	Oct. 17, 1932	18.15	8,980	1965	Feb. 7, 1965	12.68	5,120
1934	Mar. 27, 1934	9.98	3,610	1966	Feb. 13, 1966	7.78	2,640
1935	Sept. 5, 1935	17.53	8,350	1967	Aug. 24, 1967	13.39	5,560
1936	Jan. 3, 1936	13.26	5,730	1968	Jan. 14, 1968	6.67	2,160
1937	Oct. 17, 1936	12.30	5,040	1969	Aug. 20, 1969	9.76	4,580
1938	Oct. 19, 1937	25.75	20,300	1970	Dec. 31, 1969	7.44	2,890
1939	Aug. 18, 1939	21.70	14,100	1971	Sept. 19, 1971	19.25	13,400
1940	Aug. 14, 1940	21.90	14,400	1972	June 21, 1972	19.43	13,600
1941	June 2, 1941	8.20	2,620	1973	May 28, 1973	16.14	7,740
1942	Aug. 8, 1942	19.70	11,000	1974	Jan. 21, 1974	10.32	3,790
1943	May 26, 1943	12.80	5,380	1975	Mar. 19, 1975	17.64	9,240
1944	Sept. 18, 1944	16.80	7,990	1976	Dec. 31, 1975	7.89	2,750
1945	Oct. 20, 1944	15.0	6,630	1977	Oct. 9, 1976	18.28	9,930
1946	Feb. 10, 1946	10.18	3,690	1978	Jan. 26, 1978	19.42	11,200
1947	Aug. 23, 1947	9.98	3,580	1979	Sept. 22, 1979	24.89	18,800
1948	Aug. 4, 1948	18.05	9,000	1980	Apr. 9, 1980	13.00	5,300
1949	Mar. 23, 1949	24.10	17,600	1981	June 7, 1981	5.80	1,560
1950	May 31, 1950	25.10	19,200	1982	June 13, 1982	11.22	4,250
1951	Feb. 7, 1951	10.31	3,740	1983	Apr. 10, 1983	20.68	12,800
1952	Aug. 31, 1952	19.95	11,900	1984	Aug. 14, 1984	16.39	7,990
1953	Feb. 21, 1953	9.22	3,150	1985	Aug. 18, 1985	10.17	3,720
1954	Jan. 22, 1954	7.62	2,350	1986	Nov. 4, 1985	22.05	14,600
1955	Oct. 15, 1954	23.14	16,000	1987	Sept. 8, 1987	37.49	53,200
1956	Sept. 27, 1956	7.33	2,200	1988	Nov. 29, 1987	5.05	1,400
1957	May 19, 1957	14.67	6,420	1989	May 6, 1989	a25.34	19,500
1958	Mar. 27, 1958	10.90	4,080	1990	Jan. 1, 1990	8.48	2,800

a From high-water marks.

02060000 GOOSE CREEK AT HUDDLESTON, VA

LOCATION.--Lat 37°09'23", long 79°28'38", Pittsylvania County, Hydrologic Unit 03010101, at highway bridge at Huddleston, 0.5 mi downstream from Crab Orchard Creek.

DRAINAGE AREA.--218 mi².

GAGE.--Nonrecording gage (chain gage). Datum not determined.

STAGE-DISCHARGE RELATION.--Not developed.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1928	August 1928	35.3	-	1931	Aug. 22, 1931	b12.70	-
1929a	Sept. 17, 1929	b4.93	-	1932c	Dec. 23, 1931	b3.70	-
1930	Oct. 2, 1929	20.70	-				

a Partial year, July through September.

b Average of twice-daily observer readings.

c Partial year, September through December.

02060500 ROANOKE (STAUNTON) RIVER AT ALTAVISTA, VA

LOCATION.--Lat 37°06'16", long 79°17'44", Pittsylvania County, Hydrologic Unit 03010101, on right bank 12 ft upstream from bridge on alternate U.S. Highway 29, 0.3 mi south of Altavista, 0.3 mi downstream from Sycamore Creek, 3.5 mi upstream from Big Otter River, and at mile 286.

DRAINAGE AREA.--1,789 mi².

GAGE.--Water-stage recorder. Datum of gage is 503.10 ft above National Geodetic Vertical Datum of 1929. Prior to Feb. 23, 1951, on left bank 50 ft downstream at same datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 52,000 ft³/s and extended above on basis of unit hydrograph and flood-routing studies by U.S. Army Corps of Engineers, and records for other stations in Roanoke River basin.

BANKFULL STAGE.--20 ft.

REMARKS.--Flow regulated since 1962 by Leesville Lake 9.5 mi upstream and since 1963 by Smith Mountain Lake 27.5 mi upstream.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1931	Aug. 22, 1931	18.76	19,500	1961	Feb. 23, 1961	16.81	15,200
1932	Mar. 7, 1932	19.36	20,800	1962	Dec. 12, 1961	21.78	25,300
1933	Oct. 18, 1932	29.30	49,000	1963	Nov. 10, 1962	22.20	26,100
1934	Mar. 28, 1934	18.54	17,800	1964	Sept. 1, 1964	20.11	21,500
1935	Dec. 1, 1934	26.01	37,600	1965	Feb. 8, 1965	15.30	12,700
1936	Jan. 20, 1936	27.66	42,200	1966	Mar. 1, 1966	15.39	12,800
1937	Jan. 3, 1937	24.03	32,400	1967	Aug. 25, 1967	18.55	18,400
1938	Oct. 20, 1937	31.27	57,000	1968	Jan. 15, 1968	14.90	12,000
1939	Aug. 19, 1939	29.60	47,300	1969	Mar. 25, 1969	17.52	16,400
1940	Aug. 15, 1940	40.08	105,000	1970	Jan. 10, 1970	20.97	23,400
1941	Apr. 5, 1941	15.47	13,000	1971	May 30, 1971	17.22	15,900
1942	May 22, 1942	24.31	32,700	1972	June 22, 1972	26.78	37,300
1943	Apr. 20, 1943	22.78	28,800	1973	Feb. 2, 1973	19.40	20,400
1944	Sept. 19, 1944	31.10	55,900	1974	Dec. 21, 1973	18.29	18,300
1945	Sept. 19, 1945	28.30	44,100	1975	Mar. 19, 1975	24.02	30,100
1946	Jan. 8, 1946	20.0	21,300	1976	Apr. 1, 1976	14.37	11,700
1947	Jan. 21, 1947	17.5	16,400	1977	Apr. 5, 1977	16.97	15,800
1948	Aug. 5, 1948	24.53	32,100	1978	Apr. 27, 1978	27.68	40,100
1949	Dec. 4, 1948	30.84	54,600	1979	Feb. 26, 1979	23.76	29,600
1950	June 1, 1950	25.80	35,800	1980	Apr. 14, 1980	17.10	16,100
1951	Dec. 8, 1950	22.14	26,000	1981	Nov. 25, 1980	8.00	5,150
1952	Sept. 1, 1952	27.46	41,200	1982	June 13, 1982	16.02	15,100
1953	Mar. 24, 1953	22.15	26,300	1983	Apr. 10, 1983	23.60	29,200
1954	Jan. 22, 1954	19.04	19,300	1984	Feb. 14, 1984	18.81	19,300
1955	Oct. 16, 1954	31.23	52,000	1985	Aug. 18, 1985	19.51	20,600
1956	Apr. 16, 1956	14.93	12,000	1986	Nov. 5, 1985	27.38	35,700
1957	Apr. 6, 1957	23.96	30,100	1987	Sept. 8, 1987	34.45	62,100
1958	May 6, 1958	20.34	22,000	1988	Jan. 19, 1988	11.17	8,310
1959	Dec. 30, 1958	24.71	31,800	1989	May 6, 1989	18.87	18,600
1960	Oct. 1, 1959	26.15	35,600	1990	Jan. 1, 1990	15.88	14,900

02061000 BIG OTTER RIVER NEAR BEDFORD, VA
(Formerly published as Otter River near Bedford)

LOCATION.--Lat 37°21'50", long 79°25'10", Bedford County, Hydrologic Unit 03010101, on left bank 10 ft upstream from bridge on U.S. Highway 460, 1 mi downstream from Roaring Run, 5 mi upstream from Elk Creek, 6.5 mi northeast of Bedford, and 8 mi upstream from Little Otter River.
DRAINAGE AREA.--116 mi².
GAGE.--Water-stage recorder. Datum of gage is 647.16 ft above National Geodetic Vertical Datum of 1929.
STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 4,000 ft³/s and extended above on basis of slope-area measurements at gage heights 12.1 ft and 17.3 ft.
BANKFULL STAGE.--7 ft.
REMARKS.--Flood in 1937 or 1939 reached a stage of 21.8 ft, from high-water marks at present site. Subsequent to June 30, 1957, records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1940	Aug. 14, 1940	a12.1	8,080	1952	Aug. 9, 1952	16.10	11,100
1944	Sept. 18, 1944	12.0	8,000	1953	Mar. 24, 1953	6.54	3,080
1945	Jan. 1, 1945	4.67	1,320	1954	Mar. 1, 1954	7.62	4,240
1946	Feb. 10, 1946	5.37	1,880	1955	Oct. 15, 1954	11.96	8,000
1947	June 14, 1947	7.91	4,620	1956	Apr. 16, 1956	4.88	1,510
1948	Aug. 4, 1948	15.62	10,700	1957	Feb. 28, 1957	6.19	2,750
1949	Mar. 23, 1949	17.3	12,100	1958	Mar. 27, 1958	7.30	3,950
1950	May 31, 1950	7.59	4,240	1959	Sept. 30, 1959	9.39	5,860
1951	Feb. 7, 1951	6.05	2,580	1960	May 27, 1960	8.22	4,780

a From high-water marks.

ROANOKE RIVER BASIN

02061150 CHESTNUT BRANCH NEAR FOREST, VA

LOCATION.--Lat 37°22'10", long 79°23'16", Bedford County, Hydrologic Unit 03010101, at culvert on U.S. Highway 460, 0.8 mi north of Goode, 2.8 mi upstream from mouth, and 5.5 mi west of Forest.
DRAINAGE AREA.--1.65 mi².
GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 750 ft above National Geodetic Vertical Datum of 1929, from topographic map.
STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.
BANKFULL STAGE.--Not determined.
REMARKS.--Records were furnished by the U.S. Department of Agriculture, Soil Conservation Service.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1960a	Sept. 18, 1960	1.09	16	1969	Mar. 25, 1969	1.58	44
1961	Feb. 23, 1961	2.30	109	1970	July 14, 1970	4.67	339
1962	Nov. 6, 1961	4.11	256	1971	Sept. 12, 1971	4.22	311
1963	Nov. 9, 1962	2.48	124	1972	July 31, 1972	3.06	176
1964	July 22, 1964	1.65	49	1973	bJune 24, 1973	b12.55	b2,300
1965	Feb. 7, 1965	2.47	123	1974	Aug. 4, 1974	5.05	341
1966	Sept. 14, 1966	2.08	87	1975	Mar. 19, 1975	4.61	300
1967	Aug. 23, 1967	5.72	404	1976	May 29, 1976	2.09	88
1968	Aug. 14, 1968	1.97	76				

a Partial year.

b Revised U.S. Geological Survey Water Data Report VA-77-1, 1978.

ROANOKE RIVER BASIN

02061300 NININGER CREEK NEAR BEDFORD, VA

LOCATION.--Lat 37°16'26", long 79°29'31", Bedford County, Hydrologic Unit 03010101, at bridge on State Highway 43, 4.5 mi southeast of Bedford.

DRAINAGE AREA.--4.77 mi².

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is 720 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Sept. 28, 1965, crest-stage gage at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 6 ft³/s and extended on basis of slope-area and contracted-opening measurements at 1,100 ft³/s and by flow-through-culvert measurement at 2,200 ft³/s.

BANKFULL STAGE.--4 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1949	Mar. 23, 1949	7.7	2,200	1962	June 14, 1962	3.61	570
1950	May 31, 1950	3.73	600	1963	Nov. 10, 1962	4.53	900
1951	Feb. 7, 1951	4.17	760	1964	Aug. 31, 1964	2.96	355
1952	August 1952	3.44	520	1965	Feb. 7, 1965	3.40	495
1953	February 1953	3.58	560	1966	Feb. 28, 1966	2.82	320
1954	-	<2.1	<180	1967	Aug. 24, 1967	3.97	705
1955	Oct. 15, 1954	5.1	1,140	1968	Jan. 14, 1968	2.92	340
1956	(a)	4.05	720	1969	Aug. 20, 1969	3.25	445
1957	May 1957	5.95	1,450	1970	Apr. 2, 1970	3.37	484
1958	Mar. 27, 1958	3.06	400	1971	Sept. 19, 1971	5.82	1,400
1959	Dec. 29, 1958	2.87	340	1972	June 21, 1972	4.42	852
1960	Mar. 9, 1960	2.54	270	1973	Nov. 14, 1972	3.72	607
1961	June 21, 1961	3.54	550	1974	Apr. 4, 1974	3.59	562

< Less than.

a Date uncertain, either April 16 or September 27.

02061500 BIG OTTER RIVER NEAR EVINGTON, VA
(Formerly published as Otter River near Evington)

LOCATION.--Lat 37°12'30", long 79°18'14", Campbell County, Hydrologic Unit 03010101, on right bank 60 ft upstream from bridge on State Highway 682, 2.0 mi southwest of Evington, and 2.1 mi upstream from Flat Creek.

DRAINAGE AREA.--320 mi².

GAGE.--Water-stage recorder. Datum of gage is 544.02 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 23,800 ft³/s and extended above on basis of slope-area measurement at 41,900 ft³/s.

BANKFULL STAGE.--14 ft.

REMARKS.--Subsequent to Sept. 30, 1979, records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1937	Jan. 3, 1937	15.17	6,070	1964	Feb. 19, 1964	11.70	3,740
1938	Oct. 19, 1937	23.14	27,500	1965	Feb. 8, 1965	17.34	8,700
1939	Aug. 19, 1939	23.13	27,500	1966	Feb. 28, 1966	14.21	5,450
1940	Aug. 14, 1940	22.42	24,600	1967	Aug. 24, 1967	18.61	11,300
1941	Apr. 5, 1941	9.80	2,950	1968	Dec. 29, 1967	9.30	2,650
1942	Aug. 8, 1942	19.84	14,600	1969	Aug. 20, 1969	14.67	5,830
1943	Dec. 30, 1942	16.26	7,280	1970	Dec. 31, 1969	13.60	4,970
1944	Sept. 19, 1944	19.64	14,000	1971	May 30, 1971	15.52	6,510
1945	Oct. 21, 1944	12.00	3,870	1972	June 21, 1972	21.03	18,800
1946	Feb. 10, 1946	13.94	4,950	1973	Oct. 5, 1972	17.59	9,200
1947	June 14, 1947	13.35	4,610	1974	Sept. 7, 1974	16.22	6,490
1948	Aug. 4, 1948	17.82	9,580	1975	Mar. 19, 1975	19.83	14,700
1949	Mar. 23, 1949	21.86	22,300	1976	Jan. 1, 1976	14.10	5,370
1950	May 31, 1950	14.66	5,600	1977	Oct. 9, 1976	17.40	8,860
1951	June 13, 1951	16.14	7,040	1978	Jan. 26, 1978	19.78	14,500
1952	Aug. 9, 1952	18.56	11,300	1979	Sept. 22, 1979	21.47	20,500
1953	Mar. 24, 1953	13.63	4,970	1980	Mar. 21, 1980	15.43	6,430
1954	Mar. 1, 1954	14.94	6,010	1981	June 7, 1981	9.00	3,040
1955	Oct. 15, 1954	19.42	13,400	1982	June 13, 1982	17.53	9,130
1956	Apr. 16, 1956	10.88	3,370	1983	Apr. 10, 1983	19.29	13,100
1957	May 19, 1957	15.18	6,250	1984	Aug. 14, 1984	17.30	8,740
1958	Mar. 27, 1958	13.49	4,890	1985	Aug. 18, 1985	12.92	5,170
1959	June 2, 1959	11.05	3,420	1986	Nov. 5, 1985	22.69	27,100
1960	Oct. 1, 1959	15.67	6,670	1987	Sept. 8, 1987	24.96	41,900
1961	Sept. 20, 1961	13.92	5,210	1988	Nov. 29, 1987	5.97	2,340
1962	Mar. 12, 1962	15.15	6,250	1989	May 6, 1989	22.27	25,600
1963	Nov. 10, 1962	15.18	6,250	1990	Jan. 1, 1990	12.58	5,630

ROANOKE RIVER BASIN

02062000 BIG OTTER RIVER NEAR ALTAVISTA, VA

LOCATION.--Lat 37°11'05", long 79°16'45", Campbell County, Hydrologic Unit 03010101, on left bank 1.2 mi downstream from Flat Creek and 5 mi north of Altavista.

DRAINAGE AREA.--372 mi².

GAGE.--Water-stage recorder. Datum of gage is 540 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Aug. 23, 1930, staff gage at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,900 ft³/s and extended above.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1930	Oct. 2, 1929	21.20	14,500	1935	Sept. 6, 1935	21.00	14,100
1931	Aug. 23, 1931	16.98	7,800	1936	Mar. 17, 1936	21.70	15,500
1932	Mar. 6, 1932	18.90	10,500	1937	Oct. 17, 1936	15.10	5,690
1933	Oct. 17, 1932	20.88	13,900	1938	Oct. 19, 1937	26.80	a28,000
1934	Mar. 28, 1934	11.91	3,420				

a Approximate.

02062500 ROANOKE (STAUNTON) RIVER AT BROOKNEAL, VA

LOCATION.--Lat 37°02'28", Long 78°57'02", Campbell County, Hydrologic Unit 03010102, on left bank 1,600 ft upstream from bridge on U.S. Highway 501 at Brookneal, 2.9 mi upstream from Falling River, and at mile 256.

DRAINAGE AREA.--2,415 mi².

GAGE.--Water-stage recorder. Datum of gage is 351.96 ft above National Geodetic Vertical Datum of 1929. Apr. 30, 1923, to Aug. 29, 1929, nonrecording gage, Aug. 30, 1929, to Aug. 15, 1940, water-stage recorder, and Aug. 16 to Oct. 1, 1940, nonrecording gage at site 1,800 ft downstream at same datum. Oct. 2, 1940, to Sept. 30, 1941, nonrecording gage at site 1,600 ft downstream at same datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 54,000 ft³/s and extended above on basis of slope-area measurement by Geological Survey, unit hydrograph and flood-routing studies by U.S. Army Corps of Engineers, and records for other stations in Roanoke River basin.

BANKFULL STAGE.--23 ft.

REMARKS.--Flow regulated since 1962 by Leesville Lake 40.1 mi upstream and since 1963 by Smith Mountain Lake 58.1 mi upstream.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1878	November 1877	36.0	-	1957	Apr. 6, 1957	26.36	31,000
1924	Jan. 17, 1924	26.9	25,100	1958	May 7, 1958	24.41	26,000
1925	Oct. 1, 1924	31.46	41,000	1959	Dec. 30, 1958	26.98	32,500
1926	Jan. 19, 1926	21.0	18,100	1960	Oct. 2, 1959	27.31	33,200
1927	Dec. 26, 1926	20.0	16,900	1961	Feb. 24, 1961	21.08	18,300
1928	Aug. 12, 1928	37.15	76,300	1962	Mar. 13, 1962	26.18	30,500
1929	Apr. 16, 1929	21.0	20,200	1963	Nov. 11, 1962	22.22	20,500
1930	Oct. 3, 1929	33.35	57,700	1964	Sept. 1, 1964	19.71	16,100
1931	Aug. 23, 1931	22.19	22,300	1965	Feb. 8, 1965	20.16	16,700
1932	Mar. 7, 1932	24.12	25,800	1966	Mar. 1, 1966	17.75	13,800
1933	Oct. 18, 1932	31.64	49,900	1967	Aug. 25, 1967	24.60	26,500
1934	Mar. 28, 1934	20.44	19,300	1968	Jan. 16, 1968	15.58	11,300
1935	Sept. 6, 1935	29.70	42,000	1969	Mar. 25, 1969	21.10	18,200
1936	Jan. 20, 1936	30.80	45,700	1970	Jan. 1, 1970	18.97	15,200
1937	Jan. 3, 1937	28.60	38,500	1971	May 31, 1971	22.41	21,000
1938	Oct. 20, 1937	34.47	60,400	1972	June 22, 1972	34.27	58,400
1939	Aug. 20, 1939	32.40	51,200	1973	Feb. 3, 1973	25.86	29,600
1940	Aug. 15, 1940	46.00	130,000	1974	Dec. 22, 1973	24.97	27,400
1941	Apr. 6, 1941	19.5	17,700	1975	Mar. 20, 1975	31.81	48,200
1942	May 23, 1942	27.76	35,500	1976	Apr. 1, 1976	18.83	15,100
1943	Apr. 20, 1943	25.55	29,800	1978	Apr. 27, 1978	32.02	49,100
1944	Sept. 19, 1944	37.47	75,500	1979	Sept. 23, 1979	30.82	44,600
1945	Sept. 19, 1945	30.90	44,200	1980	Mar. 22, 1980	24.40	25,800
1946	Jan. 8, 1946	22.68	23,200	1981	June 7, 1981	13.48	7,030
1947	Jan. 19, 1947	19.90	17,900	1982	June 14, 1982	23.50	23,800
1948	Apr. 1, 1948	28.15	36,100	1983	Apr. 11, 1983	29.64	40,500
1949	Dec. 5, 1948	33.93	55,100	1984	Feb. 14, 1984	29.06	38,600
1950	June 1, 1950	28.5	37,000	1985	Aug. 18, 1985	30.21	42,700

ROANOKE RIVER BASIN

02062500 ROANOKE (STAUNTON) RIVER AT BROOKNEAL, VA--Continued

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1951	Dec. 9, 1950	21.61	21,000	1986	Nov. 5, 1985	33.77	56,100
1952	Sept. 2, 1952	30.68	43,600	1987	Sept. 9, 1987	39.80	85,800
1953	Mar. 25, 1953	22.84	23,400	1988	Jan. 20, 1988	16.80	10,400
1954	Jan. 23, 1954	21.14	20,100	1989	May 6, 1989	29.50	40,000
1955	Oct. 16, 1954	32.35	49,100	1990	Mar. 18, 1990	a23.98	a24,900
1956	Apr. 16, 1956	17.81	14,500				

a Maximum recorded; may have been higher during period of no gage-height record May 26 to June 12.

ROANOKE RIVER BASIN

02063000 CALDWELLS CREEK NEAR APPOMATTOX, VA
(Formerly published as East Fork Falling River near Appomattox)

LOCATION.--Lat 37°19'40", long 78°51'20", Appomattox County, Hydrologic Unit 03010102, on right bank 130 ft downstream from bridge on State Highway 644 and 2.0 mi southwest of Appomattox.

DRAINAGE AREA.--5.1 mi², approximately.

GAGE.--Water-stage recorder. Datum of gage is 740 ft above National Geodetic Vertical Datum of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 60 ft³/s and extended above.

BANKFULL STAGE.--Not determined.

REMARKS.--Since August 1956, flow from 3.5 mi² above station has been partly controlled by Soil Conservation Service flood-detention reservoir 0.25 mi above station.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1928	-	a8.0	-	1958	Nov. 19, 1957	2.77	122
1955	Aug. 17, 1955	5.24	338	1959	Sept. 30, 1959	2.61	101
1956	Apr. 15, 1956	2.80	84	1960	Aug. 7, 1960	2.85	122
1957	Sept. 17, 1957	2.30	46				

a From information by local resident.

02063500 FALLING RIVER AT SPRING MILLS, VA
(Formerly published as East Fork Falling River at Spring Mills)

LOCATION.--Lat 37°14'40", long 78°55'30", Appomattox County, Hydrologic Unit 03010102, on right bank 300 ft downstream from bridge on State Highway 646 at Spring Mills, 0.6 mi upstream from Burger Branch, and 5 mi upstream from South Fork Falling River.

DRAINAGE AREA.--52.2 mi².

GAGE.--Water-stage recorder. Datum of gage is 470 ft above National Geodetic Vertical Datum of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,000 ft³/s and extended above.

BANKFULL STAGE.--Not determined.

REMARKS.--Flow from 9.8 mi² above station slightly regulated by three Soil Conservation Service flood-detention reservoirs (two completed in 1956, one in 1958).

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1940	August 1940	a19.20	9,500	1958	Nov. 19, 1957	7.70	1,480
1955	Aug. 18, 1955	7.93	1,530	1959	Apr. 12, 1959	4.70	758
1956	Apr. 16, 1956	4.53	710	1960	May 8, 1960	6.92	1,290
1957	Apr. 5, 1957	4.60	734				

a From information by local resident.

ROANOKE RIVER BASIN

02063600 BUTTON CREEK NEAR RUSTBURG, VA

LOCATION.--Lat 37°17'25", long 79°04'10", Campbell County, Hydrologic Unit 03010102, at culvert on State Highway 24, 2.0 mi northeast of Rustburg.

DRAINAGE AREA.--0.59 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 830 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Sept. 26, 1973, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1966	Sept. 20, 1966	3.50	50	1971	May 30, 1971	4.05	72
1967	Aug. 22, 1967	4.03	70	1972	June 21, 1972	5.65	152
1968	Mar. 12, 1968	3.50	50	1973	July 16, 1973	4.35	88
1969	July 7, 1969	3.35	44	1974	-	<3.3	<40
1970	Aug. 10, 1970	3.90	66	1975	Mar. 19, 1975	7.33	253

< Less than.

02063700 BUTTON CREEK TRIBUTARY NEAR RUSTBURG, VA

LOCATION.--Lat 37°17'05", long 79°04'27", Campbell County, Hydrologic Unit 03010102, at culvert on State Highway 24, 2.0 mi northeast of Rustburg.

DRAINAGE AREA.--0.16 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Not developed.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1962	-	<2.1	-	1970	Aug. 10, 1970	1.18	-
1963	-	<.87	-	1971	May 30, 1971	1.39	-
1964	Aug. 31, 1964	1.63	-	1972	June 21, 1972	2.04	-
1965	Feb. 7, 1965	.98	-	1973	July 16, 1973	2.40	-
1966	Feb. 28, 1966	1.23	-	1974	-	<.87	-
1967	Aug. 23, 1967	1.53	-	1975	Mar. 19, 1975	2.58	-
1968	Dec. 29, 1967	1.54	-	1976	Apr. 1, 1976	1.37	-
1969	July 23, 1969	1.19	-	1977	Oct. 9, 1976	1.34	-

< Less than.

02064000 FALLING RIVER NEAR NARUNA, VA

LOCATION.--Lat 37°07'36", long 78°57'36", Campbell County, Hydrologic Unit 03010102, on left bank at upstream side of bridge on State Highway 643, 2.7 mi northeast of Naruna, and 3.2 mi upstream from Little Falling River.

DRAINAGE AREA.--173 mi².

GAGE.--Water-stage recorder. Datum of gage is 412.32 ft above National Geodetic Vertical Datum of 1929. Prior to Jan. 15, 1935, nonrecording gage at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 7,100 ft³/s and extended above on basis of slope-area measurements at 15,000 ft³/s, 22,000 ft³/s, and 32,600 ft³/s.

BANKFULL STAGE.--10 ft.

REMARKS.--Subsequent to Sept. 30, 1981, records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1930	Oct. 2, 1929	13.0	3,710	1964	Feb. 7, 1964	7.49	1,630
1931	May 23, 1931	7.5	1,510	1965	Feb. 7, 1965	13.7	4,540
1932	Mar. 6, 1932	16.0	5,900	1966	Mar. 1, 1966	12.61	3,910
1933	Oct. 17, 1932	15.0	5,000	1967	Oct. 19, 1966	10.21	2,790
1934	Mar. 28, 1934	12.5	3,500	1968	May 27, 1968	8.35	1,990
1940	August 1940	a26.5	22,000	1969	Mar. 25, 1969	12.23	3,720
1942	May 16, 1942	12.96	4,120	1970	Aug. 10, 1970	6.08	1,070
1943	Oct. 15, 1942	16.12	6,240	1971	May 13, 1971	18.83	8,730
1944	Sept. 19, 1944	23.90	15,800	1972	June 22, 1972	29.21	32,600
1945	Sept. 18, 1945	19.8	9,760	1973	Oct. 6, 1972	16.23	6,340
1946	May 4, 1946	9.40	2,440	1974	Sept. 7, 1974	15.70	5,920
1947	Jan. 20, 1947	9.38	2,440	1975	Mar. 19, 1975	22.08	12,800
1948	Feb. 14, 1948	13.25	4,240	1976	Apr. 1, 1976	13.00	4,120
1949	Dec. 4, 1948	17.34	7,270	1977	Oct. 20, 1976	11.30	3,290
1950	Sept. 22, 1950	11.68	3,470	1978	Jan. 26, 1978	20.12	10,100
1951	Dec. 4, 1950	11.78	3,520	1979	Feb. 25, 1979	20.55	10,800
1952	Dec. 21, 1951	15.48	5,760	1980	Jan. 18, 1980	12.03	3,640
1953	Mar. 15, 1953	7.86	1,800	1981	June 7, 1981	10.48	2,910
1954	Jan. 22, 1954	14.36	4,970	1982	Feb. 3, 1982	13.41	4,380
1955	Aug. 14, 1955	12.65	3,910	1983	Apr. 3, 1983	13.78	4,600
1956	Apr. 16, 1956	8.83	2,180	1984	Feb. 14, 1984	17.54	7,500
1957	Apr. 9, 1957	10.16	2,790	1985	Aug. 18, 1985	18.14	8,060
1958	Nov. 19, 1957	12.32	3,760	1986	Nov. 4, 1985	19.17	9,160
1959	Dec. 29, 1958	9.84	2,610	1987	Sept. 8, 1987	28.53	29,800
1960	May 8, 1960	14.19	4,840	1988	Dec. 11, 1987	7.74	1,730
1961	Feb. 23, 1961	10.75	3,060	1989	May 6, 1989	15.13	5,520
1962	June 13, 1962	15.98	6,160	1990	Mar. 18, 1990	16.15	6,290
1963	Nov. 10, 1962	10.64	2,970				

a From high-water marks.

ROANOKE RIVER BASIN

02064500 LITTLE FALLING RIVER AT HAT CREEK, VA

LOCATION.--Lat 37°07'50", long 78°54'50", Campbell County, Hydrologic Unit 03010102, at highway bridge 1 mi northwest of village of Hat Creek and 1 mi upstream from mouth.

DRAINAGE AREA.--43 mi², approximately.

GAGE.--Nonrecording gage (chain gage). Datum of gage is 425 ft above National Geodetic Vertical Datum of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 800 ft³/s and extended above.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1928	August 1928	a22.0	-	1933	Oct. 17, 1933	9.26	854
1930	Oct. 2, 1929	6.90	428	1934	Aug. 13, 1934	7.09	508
1931	Aug. 22, 1931	6.60	358	1935b	Oct. 6, 1934	14.0	1,630
1932	Mar. 6, 1932	18.0	2,300				

a Approximate.

b Partial year, October through January.

ROANOKE RIVER BASIN

02065000 FALLING RIVER NEAR BROOKNEAL, VA

LOCATION.--Lat 37°04'54", long 78°56'07", Campbell County, Hydrologic Unit 03010102, 300 ft downstream from Hat Creek and 2.25 mi north of Brookneal.

DRAINAGE AREA.--228 mi².

GAGE.--Water-stage recorder. Datum of gage is 378.69 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 7,000 ft³/s and extended above.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1935a	Sept. 6, 1935	26.3	17,500	1939	Aug. 13, 1939	17.45	6,280
1936	Mar. 17, 1936	28.0	20,400	1940	Aug. 15, 1940	29.35	23,000
1937	Apr. 26, 1937	22.76	12,200	1941	July 17, 1941	17.50	6,260
1938	June 22, 1938	26.7	18,200				

a Partial year, January through September.

02065100 SNAKE CREEK NEAR BROOKNEAL, VA

LOCATION.--Lat 37°00'42", long 78°57'52", Halifax County, Hydrologic Unit 03010102, on left upstream wingwall of culvert on U.S. Highway 501, 0.5 mi upstream from mouth, and 2.1 mi south of Brookneal.

DRAINAGE AREA.--1.68 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 418 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Aug. 9, 1978, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--8 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1967	Aug. 24, 1967	5.7	260	1980	Nov. 12, 1979	3.28	57
1968	Jan. 14, 1968	3.85	100	1981	June 7, 1981	6.30	300
1969	-	<3.0	<35	1982	Oct. 27, 1981	7.77	447
1970	Aug. 10, 1970	2.90	35	1983	Apr. 3, 1983	7.54	424
1971	May 30, 1971	4.66	120	1984	Feb. 14, 1984	6.83	353
1972	June 21, 1972	10.00	715	1985	Aug. 18, 1985	<7.02	-
1973	Oct. 5, 1972	9.70	676	1986	Nov. 4, 1985	7.02	372
1974	Sept. 6, 1974	6.10	280	1987	Sept. 8, 1987	15.9	1,500
1975	Mar. 30, 1975	8.60	537	1988	May 23, 1988	a3.87	a92
1976	Dec. 31, 1975	4.50	115	1989	May 6, 1989	7.27	397
1977	Oct. 9, 1976	4.18	114	1990	July 14, 1990	3.36	62

< Less than.

a Possible backwater from beaver dam 50 ft downstream.

ROANOKE RIVER BASIN

02065200 ROANOKE (STAUNTON) RIVER AT CLARKTON, VA

LOCATION.--Lat 36°58'38", long 78°53'50", Halifax County, Hydrologic Unit 03010102, on right bank 100 ft downstream from bridge on State Highway 620, 1,300 ft upstream from Catawba Creek, 0.8 mi southeast of Clarkton, 1.0 mi downstream from Childrey Creek, and at mile 249.

DRAINAGE AREA.--2,691 mi².

GAGE.--Water-stage recorder. Datum of gage is 340.00 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 47,000 ft³/s and extended above.

BANKFULL STAGE.--Not determined.

REMARKS.--Flow regulated by Leesville Lake 46.8 mi upstream and, beginning September 1963, by Smith Mountain Lake 64.8 mi upstream.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1940	August 1940	27.0	-	1970	Jan. 1, 1970	20.02	16,500
1964	Sept. 1, 1964	19.49	15,800	1971	May 16, 1971	24.85	24,600
1965	Feb. 8, 1965	22.62	20,700	1972	June 22, 1972	35.56	85,500
1966	Mar. 1, 1966	20.70	17,600	1973	Feb. 3, 1973	26.40	31,400
1967	Aug. 25, 1967	24.87	24,700	1974	Sept. 7, 1974	25.26	27,800
1968	Jan. 16, 1968	16.38	11,200	1975	Mar. 20, 1975	32.69	63,800
1969	Mar. 25, 1969	22.60	20,700				

02065300 RIGHT HAND FORK NEAR APPOMATTOX, VA

LOCATION.--Lat 37°16'12", long 78°49'14", Appomattox County, Hydrologic Unit 03010102, on right upstream wingwall of culvert on State Highway 727, 0.5 mi upstream from Maple Spring Branch, and 5.2 mi south of the city of Appomattox.

DRAINAGE AREA.--2.08 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 580 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Feb. 24, 1978, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--3 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1967	Aug. 24, 1967	5.85	164	1979	Feb. 25, 1979	9.84	420
1968	Dec. 11, 1967	3.19	40	1980	-	<2.78	<25
1969	May 19, 1969	4.30	83	1981	July 4, 1981	3.84	64
1970	Aug. 10, 1970	4.20	78	1982	Feb. 3, 1982	6.02	171
1971	May 30, 1971	9.50	400	1983	Apr. 10, 1983	5.22	129
1972	June 21, 1972	15.54	705	1984	Mar. 29, 1984	5.79	158
1973	Oct. 5, 1972	8.80	356	1985	Aug. 18, 1985	4.31	84
1974	Sept. 6, 1974	5.13	124	1986	Nov. 4, 1985	5.59	148
1975	Mar. 19, 1975	11.56	534	1987	Sept. 8, 1987	16.8	962
1976	Dec. 31, 1975	4.90	113	1988	Nov. 11, 1987	3.78	61
1977	Oct. 9, 1976	4.77	106	1989	May 6, 1989	6.89	223
1978	Jan. 26, 1978	8.25	318	1990	Mar. 18, 1990	6.98	229

< Less than.

02065500 CUB CREEK AT PHENIX, VA

LOCATION.--Lat 37°04'45", long 78°45'50", Charlotte County, Hydrologic Unit 03010102, on right bank 10 ft upstream from bridge on State Highway 40, 0.9 mi west of Phenix, 1.9 mi downstream from Rough Creek, and 6.4 mi upstream from Louse Creek.

DRAINAGE AREA.--98.0 mi².

GAGE.--Water-stage recorder. Datum of gage is 370.19 ft above National Geodetic Vertical Datum of 1929. Prior to July 14, 1950, nonrecording gage at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 5,410 ft³/s and extended above on basis of contracted-opening measurement at 10,600 ft³/s.

BANKFULL STAGE.--8 ft.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1940	August 1940	a17.5	4,000	1969	Mar. 26, 1969	7.53	1,120
1947	Mar. 14, 1947	8.3	1,250	1970	Apr. 3, 1970	3.04	229
1948	Apr. 1, 1948	11.88	2,340	1971	May 14, 1971	10.33	1,960
1949	Dec. 4, 1948	13.0	2,720	1972	June 22, 1972	a20.37	7,380
1950	Sept. 13, 1950	9.62	1,600	1973	Oct. 6, 1972	12.12	2,800
1951	Dec. 5, 1950	7.09	938	1974	Sept. 7, 1974	10.82	2,120
1952	Dec. 21, 1951	11.80	2,300	1975	Sept. 25, 1975	15.85	4,550
1953	Nov. 21, 1952	11.76	2,300	1976	Jan. 1, 1976	9.61	1,780
1954	Jan. 23, 1954	10.37	1,870	1977	Oct. 21, 1976	10.15	2,000
1955	Aug. 18, 1955	12.68	2,620	1978	Jan. 26, 1978	16.45	7,170
1956	Mar. 17, 1956	4.44	430	1979	Feb. 25, 1979	15.86	6,770
1957	Apr. 9, 1957	7.73	1,090	1980	Jan. 19, 1980	8.65	1,570
1958	Feb. 27, 1958	8.72	1,370	1981	June 7, 1981	4.83	506
1959	Dec. 30, 1958	9.07	1,480	1982	Feb. 4, 1982	11.72	3,430
1960	Apr. 16, 1960	9.98	1,870	1983	Apr. 10, 1983	9.37	1,900
1961	Feb. 24, 1961	9.38	1,690	1984	Mar. 29, 1984	10.75	2,700
1962	Dec. 13, 1961	10.25	1,930	1985	Aug. 19, 1985	14.61	5,740
1963	Mar. 7, 1963	7.77	1,210	1986	Nov. 4, 1985	12.74	4,240
1964	Feb. 7, 1964	5.83	695	1987	Sept. 8, 1987	19.31	10,600
1965	Feb. 8, 1965	9.05	1,570	1988	May 23, 1988	5.95	722
1966	Mar. 1, 1966	9.10	1,600	1989	May 2, 1989	9.62	2,030
1967	Aug. 26, 1967	5.56	655	1990	Feb. 11, 1990	9.58	2,010
1968	Jan. 15, 1968	6.25	785				

a From high-water marks.

02066000 ROANOKE (STAUNTON) RIVER AT RANDOLPH, VA

LOCATION.--Lat 36°54'54", long 78°44'28", Halifax County, Hydrologic Unit 03010102, on right bank 6 ft downstream from bridge on State Highway 746, 2.8 mi northwest of Randolph, 3.6 mi upstream from Roanoke Creek, and at mile 227.

DRAINAGE AREA.--2,977 mi².

GAGE.--Water-stage recorder. Datum of gage is 307.59 ft above National Geodetic Vertical Datum of 1929. Aug. 27, 1900, to Oct. 13, 1902, nonrecording gage at site 3.2 mi downstream at datum about 5.9 ft lower. Oct. 14, 1902, to Aug. 11, 1906, and Oct. 1, 1927, to Mar. 31, 1930, nonrecording gage at site of original gage at datum 3.93 ft lower than present datum.

STAGE-DISCHARGE RELATION.--For periods 1901-6 and 1928-30, defined by current-meter measurements below 58,000 ft³/s and extended above. Since 1950, defined by current-meter measurements below 57,000 ft³/s and extended above.

BANKFULL STAGE.--22 ft.

REMARKS.--Flow regulated since 1962 by Leesville Lake 68.7 mi upstream and since 1963 by Smith Mountain Lake 86.7 mi upstream.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1878	November 1877	a39	130,000	1946	Jan. 9, 1946	23.6	b30,000
1901	May 23, 1901	28.6	60,000	1947	Jan. 22, 1947	22.2	b25,000
1902	Dec. 31, 1901	35.0	97,000	1948	Feb. 16, 1948	26.4	b42,000
1903	Feb. 18, 1903	26.8	47,000	1949	Dec. 6, 1948	28.7	b53,000
1904	June 2, 1904	12.5	10,000	1950	June 2, 1950	25.7	b38,000
1905	July 15, 1905	23.2	34,000	1951	Dec. 9, 1950	22.76	22,800
1906	Jan. 5, 1906	25.8	39,000	1952	Sept. 2, 1952	26.50	31,600
1907	Oct. 21, 1906	25.7	b38,000	1953	Mar. 25, 1953	23.39	23,100
1908	Jan. 9, 1908	24.8	b34,000	1954	Jan. 23, 1954	23.79	25,000
1909	May 23, 1909	21.6	b23,000	1955	Oct. 17, 1954	27.08	39,700
1910	June 15, 1910	20.8	b21,000	1956	Apr. 17, 1956	19.62	14,800
1911	Apr. 7, 1911	19.8	b19,000	1957	Apr. 7, 1957	27.44	28,600
1912	Mar. 16, 1912	30.6	b63,000	1958	May 8, 1958	24.72	28,200
1913	Mar. 16, 1913	28.4	b52,000	1959	Dec. 31, 1958	25.74	33,800
1914	Nov. 19, 1913	21.4	b23,000	1960	Oct. 2, 1959	24.36	28,600
1915	Jan. 9, 1915	25.2	b36,000	1961	Feb. 24, 1961	28.88	23,800
1916	Oct. 3, 1915	24.8	b34,000	1962	Mar. 13, 1962	25.26	32,200
1917	Mar. 6, 1917	26.6	b42,000	1963	Nov. 11, 1962	23.65	24,500
1918	Apr. 22, 1918	22.0	b24,000	1964	Sept. 2, 1964	19.55	14,800
1919	Jan. 4, 1919	24.9	b35,000	1965	Feb. 9, 1965	22.59	21,800
1920	Feb. 5, 1920	30.9	b65,000	1966	Mar. 1, 1966	21.14	18,000
1921	Jan. 16, 1921	20.0	b20,000	1967	Aug. 26, 1967	23.37	23,800
1922	Mar. 5, 1922	21.6	b23,000	1968	Jan. 16, 1968	16.83	10,600
1923	Mar. 18, 1923	27.8	b48,000	1969	Mar. 26, 1969	22.47	21,400
1924	Jan. 18, 1924	22.6	b26,000	1970	Jan. 1, 1970	19.09	13,900
1925	Oct. 2, 1924	27.5	b47,000	1971	May 31, 1971	23.91	25,300

02066000 ROANOKE (STAUNTON) RIVER AT RANDOLPH, VA--Continued

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1926	Jan. 20, 1926	21.9	b24,000	1972	June 23, 1972	30.96	72,500
1927	Feb. 21, 1927	23.3	b29,000	1973	Feb. 3, 1973	25.04	30,800
1928	Aug. 13, 1928	32.46	74,500	1974	Sept. 8, 1974	24.46	27,300
1929	Apr. 17, 1929	22.08	24,800	1975	Mar. 20, 1975	29.07	58,900
1930	Oct. 4, 1929	28.04	49,500	1976	Jan. 1, 1976	21.77	17,400
1931	Aug. 24, 1931	21.4	b23,000	1977	Apr. 6, 1977	23.15	21,600
1932	Mar. 8, 1932	24.2	b32,000	1978	Apr. 28, 1978	29.73	56,200
1933	Oct. 18, 1932	28.9	b54,000	1979	Feb. 26, 1979	29.59	55,200
1934	Mar. 5, 1934	22.8	b27,000	1980	Mar. 22, 1980	23.50	23,100
1935	Dec. 3, 1934	27.0	b44,000	1981	June 7, 1981	15.52	9,280
1936	Mar. 19, 1936	29.1	b55,000	1982	Feb. 4, 1982	23.86	24,100
1937	Jan. 4, 1937	26.4	b42,000	1983	Apr. 12, 1983	26.58	36,800
1938	Oct. 22, 1937	29.2	b56,000	1984	Feb. 15, 1984	25.96	33,200
1939	Aug. 21, 1939	26.9	b44,000	1985	Aug. 20, 1985	27.28	37,000
1940	Aug. 16, 1940	c41.6	150,000	1986	Nov. 6, 1985	29.58	51,200
1941	Apr. 6, 1941	19.6	b19,000	1987	Sept. 10, 1987	33.18	76,300
1942	Aug. 10, 1942	23.4	b29,000	1988	Jan. 20, 1988	18.08	12,400
1943	Feb. 6, 1943	25.0	b35,000	1989	May 7, 1989	26.79	34,300
1944	Sept. 30, 1944	32.6	b75,000	1990	May 30, 1990	24.51	24,500
1945	Sept. 20, 1945	28.7	b53,000				

a From information by U.S. Army Corps of Engineers.

b Approximate values considered accurate within 20 percent.

c From information by U.S. Army Corps of Engineers, present site and datum.

ROANOKE RIVER BASIN

02066500 ROANOKE CREEK AT SAXE, VA

LOCATION.--Lat 36°55'49", long 78°39'56", Charlotte County, Hydrologic Unit 03010102, on right bank at downstream side of bridge on State Highway 612, 500 ft northwest of Saxe, and 5.2 mi upstream from mouth.

DRAINAGE AREA.--135 mi².

GAGE.--Water-stage recorder. Datum of gage is 322.36 ft above National Geodetic Vertical Datum of 1929. Prior to July 21, 1950, nonrecording gage at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 2,600 ft³/s and extended above.

BANKFULL STAGE.--8 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1940	Aug. 16, 1940	a25.70	-	1959	Dec. 30, 1958	10.37	2,020
1947	Sept. 25, 1947	11.40	2,790	1961	Feb. 24, 1961	9.66	1,530
1948	Feb. 15, 1948	11.44	2,790	1962	Jan. 7, 1962	11.28	2,710
1949	Dec. 5, 1948	12.00	2,400	1963	Mar. 7, 1963	10.35	2,020
1950	Nov. 1, 1949	11.90	3,190	1964	Feb. 8, 1964	7.78	615
1951	Dec. 5, 1950	8.70	960	1965	Aug. 26, 1965	9.40	1,350
1952	Dec. 22, 1951	10.80	2,310	1966	Mar. 1, 1966	9.81	1,600
1953	Nov. 21, 1952	11.33	2,710	1967	Feb. 22, 1967	8.69	925
1954	Mar. 2, 1954	9.54	1,410	1968	Jan. 15, 1968	8.91	1,040
1955	Aug. 18, 1955	13.58	4,710	1969	Mar. 26, 1969	10.00	1,740
1956	Apr. 13, 1956	8.52	870	1970	Apr. 3, 1970	8.20	680
1957	Sept. 18, 1957	11.18	2,630	1971	May 31, 1971	11.08	2,530
1958	May 7, 1958	9.78	1,600	1972	Oct. 24, 1971	15.83	7,110

a From high-water mark; backwater from Roanoke River.

ROANOKE RIVER BASIN

02066600 SANDY CREEK NEAR WYLLIESBURG, VA

LOCATION.--Lat 36°50'35", long 78°38'30", Charlotte County, Hydrologic Unit 03010102, at culvert on State Highway 608, 3.0 mi southwest of Wylliesburg, and 1.4 mi upstream from mouth.

DRAINAGE AREA.--8.84 mi².

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--6 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1966	Feb. 28, 1966	8.65	540	1971	May 30, 1971	8.95	620
1967	Feb. 18, 1967	7.90	230	1972	Oct. 24, 1971	15.32	-
1968	Mar. 12, 1968	8.43	360	1973	Oct. 5, 1972	11.25	1,500
1969	Jan. 20, 1969	7.85	340	1974	Sept. 6, 1974	10.80	-
1970	Mar. 22, 1970	6.55	-	1975	Mar. 30, 1975	10.95	-

02067000 ROANOKE (STAUNTON) RIVER NEAR CLOVER, VA

LOCATION.--Lat 36°50'17", long 78°40'02", Halifax County, Hydrologic Unit 03010102, on left bank 150 ft downstream from bridge on U.S. Highway 360, 3.7 mi downstream from Roanoke Creek, 3.7 mi east of Clover, and at mile 220.

DRAINAGE AREA.--3,230 mi², approximately.

GAGE.--Water-stage recorder. Datum of gage is 302.91 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 70,000 ft³/s and extended above by logarithmic plotting on basis of slope-area measurement by Geological Survey, unit hydrograph and flood-routing studies by U.S. Army Corps of Engineers, and records for other stations in Roanoke River basin.

BANKFULL STAGE.--14 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1930	Oct. 4, 1929	22.90	52,300	1942	Aug. 10, 1942	18.33	28,000
1931	Aug. 24, 1931	15.44	19,600	1943	Dec. 31, 1942	17.30	24,600
1932	Mar. 8, 1932	18.24	27,600	1944	Sept. 20, 1944	27.50	77,000
1933	Oct. 19, 1932	23.19	54,300	1945	Sept. 20, 1945	23.4	51,700
1934	Mar. 29, 1934	15.77	20,500	1946	Jan. 9, 1946	17.20	24,300
1935	Dec. 3, 1934	21.95	46,500	1947	Jan. 22, 1947	15.90	20,800
1936	Mar. 19, 1936	23.48	56,400	1948	Feb. 16, 1948	20.20	35,800
1937	Jan. 5, 1937	-	a48,000	1949	Dec. 5, 1948	-	a62,000
1938	Oct. 21, 1937	-	a70,000	1950	June 2, 1950	18.97	30,600
1939	Aug. 21, 1939	21.37	42,800	1951	Dec. 9, 1950	15.98	21,000
1940	Aug. 16, 1940	37.15	160,000	1952	Sept. 3, 1952	19.88	34,400
1941	Apr. 6, 1941	14.18	16,900				

a Recorder malfunction during time of peak; estimate of peak based on flow records at stations on Roanoke River near Brookneal and Roanoke River at Clarksville.

ROANOKE RIVER BASIN

02067810 MAPLE SWAMP BRANCH NEAR MEADOWS OF DAN, VA

LOCATION.--Lat 36°44'10", long 80°26'28", Patrick County, Hydrologic Unit 03010103, at culvert on U.S. Highway 58, 1.8 mi west of Meadows of Dan.

DRAINAGE AREA.--0.49 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined. Prior to Aug. 5, 1970, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--4 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1970	July 20, 1970	4.90	87	1975	Sept. 18, 1975	5.34	113
1971	May 13, 1971	3.07	27	1976	May 29, 1976	4.67	80
1972	June 21, 1972	4.04	56	1977	Mar. 13, 1977	4.51	72
1973	Feb. 2, 1973	3.59	43	1978	Jan. 26, 1978	4.79	86
1974	May 4, 1974	3.87	51	1979	Sept. 21, 1979	6.60	181

ROANOKE RIVER BASIN

02069600 ANGLIN BRANCH NEAR STUART, VA

LOCATION.--Lat 36°38'15", long 80°12'55", Patrick County, Hydrologic Unit 03010103, at culvert on U.S. Highway 58, 3 mi east of Stuart.

DRAINAGE AREA.--3.10 mi².

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is 1,165 ft above National Geodetic Vertical Datum of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--4 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1967	May 7, 1967	4.87	240	1972	Jan. 13, 1972	5.25	260
1968	June 9, 1968	3.63	160	1973	-	<3.0	<30
1969	June 21, 1969	5.53	418	1974	Apr. 4, 1974	3.90	108
1970	July 20, 1970	5.00	250	1975	Mar. 30, 1975	5.90	570
1971	Oct. 31, 1970	5.10	235	1976	Mar. 31, 1976	4.45	340

< Less than.

02069700 SOUTH MAYO RIVER NEAR NETTLERIDGE, VA

LOCATION.--Lat 36°34'15", long 80°07'47", Patrick County, Hydrologic Unit 03010103, on right bank 60 ft downstream from bridge on State Highway 700, 1.2 mi southeast of Nettleridge, 1.4 mi downstream from Russell Creek, and 3.6 mi upstream from Spoon Creek.

DRAINAGE AREA.--84.6 mi².

GAGE.--Water-stage recorder. Datum of gage is 871.60 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 9, 1964, nonrecording gage and crest-stage gage at same site and datum.

STGE-DISCHARGE RELATION.--Defined by current-meter measurement below 2,940 ft³/s and extended above on basis of contracted-opening measurements at 12,500 ft³/s, 18,300 ft³/s, and 20,600 ft³/s.

BANKFULL STAGE.--Not determined.

REMARKS.--Records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1963	Mar. 12, 1963	10.40	2,990	1977	Oct. 9, 1976	10.32	2,930
1964	Sept. 1, 1964	9.20	2,310	1978	Jan. 26, 1978	11.33	3,590
1965	Oct. 16, 1964	8.91	2,150	1979	Sept. 22, 1979	22.00	20,600
1966	Feb. 13, 1966	7.94	1,660	1980	Apr. 9, 1980	13.27	5,490
1967	Aug. 24, 1967	6.24	930	1981	Sept. 16, 1981	6.51	1,040
1968	Mar. 12, 1968	6.42	990	1982	June 13, 1982	8.83	2,120
1969	Oct. 19, 1968	8.48	1,950	1983	Apr. 10, 1983	10.45	3,020
1970	Aug. 10, 1970	10.36	2,990	1984	Mar. 29, 1984	7.27	1,380
1971	Oct. 31, 1970	10.91	3,290	1985	Aug. 18, 1985	20.89	18,100
1972	June 21, 1972	18.32	12,500	1986	Nov. 4, 1985	16.18	9,170
1973	Feb. 2, 1973	9.03	2,200	1987	Mar. 1, 1987	12.33	4,480
1974	Apr. 4, 1974	12.16	4,350	1988	June 19, 1988	6.79	1,130
1975	Mar. 30, 1975	9.69	2,580	1989	July 6, 1989	11.05	3,390
1976	Apr. 1, 1976	6.93	1,210	1990	Mar. 17, 1990	9.83	2,660

02070000 NORTH MAYO RIVER NEAR SPENCER, VA

LOCATION.--Lat 36°34'05", long 79°59'15", Henry County, Hydrologic Unit 03010103, on left bank 800 ft downstream from bridge on State Highway 629 at Moores Mill, 2.1 mi downstream from Horse Pasture Creek, and 3.8 mi southeast of Spencer.

DRAINAGE AREA.--108 mi².

GAGE.--Water-stage recorder. Datum of gage is 730.94 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers). Prior to Jan. 23, 1936, nonrecording gage at site 800 ft upstream at datum 1.50 ft higher. July 25 to Sept. 27, 1936, nonrecording gage at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 6,470 ft³/s since 1936 and extended above on basis of slope-area measurement at 12,800 ft³/s and velocity-area study. Relation prior to 1936 extended on basis of difference in ratings at 3.4 ft.

BANKFULL STAGE.--7 ft.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1929	Feb. 28, 1929	5.8	1,660	1960	Oct. 1, 1959	8.38	4,490
1930	Oct. 2, 1929	9.0	4,600	1961	Mar. 8, 1961	5.43	1,870
1931	May 21, 1931	6.2	1,980	1962	Dec. 12, 1961	5.90	2,200
1932	Mar. 6, 1932	7.2	2,840	1963	Mar. 12, 1963	6.87	2,980
1933	Oct. 17, 1932	11.0	7,200	1964	Sept. 1, 1964	6.33	2,500
1934	Mar. 29, 1934	5.5	1,450	1965	Feb. 8, 1965	6.04	2,270
1935	Jan. 23, 1935	5.26	1,310	1966	Feb. 13, 1966	6.02	2,270
1936	Jan. 19, 1936	7.6	3,200	1967	Aug. 24, 1967	4.50	1,310
1937	Jan. 3, 1937	6.95	3,060	1968	Mar. 12, 1968	5.35	1,870
1938	Oct. 19, 1937	14.33	14,300	1969	Oct. 19, 1968	6.10	2,340
1939	Aug. 19, 1939	7.75	3,820	1970	Aug. 10, 1970	6.32	2,500
1940	Aug. 14, 1940	10.11	6,800	1971	Oct. 31, 1970	7.63	3,620
1941	Dec. 29, 1940	4.45	1,180	1972	June 21, 1972	13.41	12,600
1942	June 10, 1942	8.75	4,980	1973	Feb. 2, 1973	6.56	2,740
1943	Apr. 19, 1943	6.48	2,660	1974	Apr. 5, 1974	7.35	3,420
1944	Sept. 30, 1944	6.38	2,580	1975	Mar. 14, 1975	7.53	3,520
1945	Sept. 18, 1945	10.40	7,280	1976	May 30, 1976	4.77	1,460
1946	Jan. 8, 1946	5.38	1,850	1977	Oct. 9, 1976	6.77	2,900
1947	Jan. 20, 1947	4.86	1,480	1978	Jan. 26, 1978	7.27	3,330
1948	Oct. 9, 1947	15.80	17,200	1979	Sept. 22, 1979	13.70	13,100
1949	June 29, 1949	6.32	2,500	1980	Apr. 9, 1980	7.96	4,040
1950	Sept. 10, 1950	4.68	1,390	1981	Sept. 16, 1981	3.52	745
1951	Feb. 7, 1951	5.17	1,680	1982	Oct. 27, 1981	4.30	1,190
1952	Dec. 21, 1951	6.05	2,270	1983	Apr. 10, 1983	7.17	3,210
1953	Mar. 24, 1953	6.28	2,500	1984	Feb. 14, 1984	5.48	1,920
1954	Jan. 22, 1954	5.88	2,200	1985	Aug. 18, 1985	14.22	14,100
1955	Oct. 15, 1954	6.15	2,420	1986	Nov. 5, 1985	11.95	9,910
1956	Apr. 16, 1956	5.16	1,680	1987	Sept. 7, 1987	13.39	12,500
1957	Sept. 17, 1957	9.77	6,350	1988	Nov. 10, 1987	3.71	845
1958	Nov. 19, 1957	6.42	2,580	1989	July 6, 1989	10.16	6,900
1959	Dec. 29, 1958	7.11	3,150	1990	Mar. 17, 1990	7.96	4,000

02071800 NICHOLAS CREEK NEAR FERRUM, VA

LOCATION.--Lat 36°52'11", long 80°03'10", Franklin County, Hydrologic Unit 03010103, at bridge on State Highway 605, 4.1 mi southwest of Ferrum.

DRAINAGE AREA.--12.2 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 15 ft³/s and extended above to discharges below 500 ft³/s.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1949	June 28, 1949	13.40	11,800	1963	Nov. 10, 1962	4.60	400
1950	-	<3.44	<75	1964	Aug. 31, 1964	12.77	-
1951	-	<3.44	<75	1965	July 11, 1965	9.30	-
1952	Sept. 1, 1952	9.55	-	1966	Feb. 13, 1966	6.92	-
1953	February 1953	8.49	-	1967	Aug. 24, 1967	5.17	-
1954	January 1954	3.74	135	1968	-	<3.44	<75
1955	Mar. 5, 1955	7.41	-	1969	July 30, 1969	6.22	-
1956	April 1956	6.10	-	1970	Aug. 22, 1970	11.32	-
1957	April 1957	6.97	-	1971	May 30, 1971	6.55	-
1958	November 1957	5.22	-	1972	June 21, 1972	9.30	-
1959	Dec. 28, 1958	9.10	-	1974	Sept. 6, 1974	9.72	-
1960	May 8, 1960	5.43	-	1975	Mar. 14, 1975	9.72	-
1961	Feb. 23, 1961	4.86	490	1976	June 17, 1976	11.53	-
1962	Nov. 21, 1961	4.34	300				

< Less than.

ROANOKE RIVER BASIN

02072000 SMITH RIVER NEAR PHILPOTT, VA

LOCATION.--Lat 36°46'50", long 80°01'30", Franklin County, Hydrologic Unit 03010103, on left bank 900 ft downstream from Philpott Dam, 3.1 mi west of Philpott, 11.6 mi upstream from Reed Creek, and at mile 44.1.

DRAINAGE AREA.--216 mi².

GAGE.--Water-stage recorder. Datum of gage is 804.27 ft above National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark). Prior to Oct. 8, 1952, at site 1.9 mi downstream at different datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,500 ft³/s and extended above. Prior to 1952, defined by current-meter measurements below 9,600 ft³/s and extended above on basis of slope-area measurements at 13,000 ft³/s and 17,000 ft³/s.

BANKFULL STAGE.--Not determined.

REMARKS.--Since August 1950, flow regulated by Philpott Lake 0.2 mi upstream.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1947	June 14, 1947	11.34	5,710	1969	Sept. 24, 1969	5.09	1,430
1948	Oct. 9, 1947	13.15	7,600	1970	Aug. 27, 1970	5.18	1,500
1949	June 29, 1949	20.30	17,000	1971	May 20, 1971	5.27	1,580
1950	Sept. 10, 1950	15.40	9,980	1972	June 22, 1972	8.10	4,560
1951	Dec. 7, 1950	15.00	9,500	1973	Feb. 16, 1973	5.15	1,480
1952	Dec. 4, 1951	8.44	3,300	1974	May 14, 1974	5.08	1,420
1953	Dec. 13, 1952	8.90	4,030	1975	June 7, 1975	5.13	1,450
1954	Nov. 10, 1953	5.00	1,300	1977	Sept. 13, 1977	5.14	1,470
1955	June 28, 1955	5.60	1,720	1978	Apr. 27, 1978	7.34	3,650
1956	July 17, 1956	5.48	1,650	1979	Sept. 22, 1979	7.22	3,510
1957	June 7, 1957	5.03	1,340	1980	Apr. 15, 1980	7.43	3,760
1958	Feb. 28, 1958	8.36	4,920	1981	Aug. 20, 1981	5.01	1,360
1959	Sept. 30, 1959	5.27	1,560	1982	Feb. 15, 1982	5.17	1,480
1960	June 2, 1960	5.27	1,560	1983	Apr. 13, 1983	7.47	3,730
1961	Apr. 17, 1961	5.28	1,600	1984	Apr. 2, 1984	5.35	1,620
1962	Apr. 13, 1962	5.15	1,480	1985	May 23, 1985	5.18	1,480
1963	Aug. 23, 1963	5.21	1,520	1986	Nov. 8, 1985	8.37	4,840
1964	Nov. 1, 1963	5.07	1,400	1987	Apr. 18, 1987	7.44	3,690
1965	Mar. 2, 1965	5.14	1,480	1988	Aug. 29, 1988	5.11	1,430
1966	Apr. 13, 1966	5.15	1,480	1989	Nov. 21, 1988	5.07	1,400
1967	Aug. 22, 1967	5.01	1,370	1990	Oct. 3, 1989	8.46	4,960
1968	Sept. 12, 1968	5.05	1,410				

02072500 SMITH RIVER AT BASSETT, VA

LOCATION.--Lat 36°46'12", long 80°00'04", Henry County, Hydrologic Unit 03010103, on left bank 25 ft upstream from bridge on State Highway 666 at north edge of North Bassett, 1.0 mi northwest of Bassett, 3.0 mi downstream from Town Creek, 5.6 mi upstream from Reed Creek, 6.2 mi downstream from Philpott Dam, and at mile 38.1.

DRAINAGE AREA.--259 mi².

GAGE.--Water-stage recorder. Datum of gage is 753.09 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers).

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 22,000 ft³/s and extended above on basis of backwater studies and records for station at Martinsville.

BANKFULL STAGE.--8 ft.

REMARKS.--Since August 1950, flow regulated by Philpott Lake 6.2 mi upstream.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1938	Oct. 19, 1937	a22.9	38,200	1965	Oct. 16, 1964	5.43	3,780
1939	Aug. 18, 1939	16.93	23,300	1966	Feb. 13, 1966	4.56	2,460
1940	Aug. 14, 1940	18.28	26,600	1967	Oct. 19, 1966	4.18	2,000
1941	July 4, 1941	7.63	5,380	1968	Mar. 12, 1968	3.99	1,790
1942	June 11, 1942	9.15	7,730	1969	June 21, 1969	4.44	2,310
1943	July 10, 1943	15.00	19,000	1970	Aug. 22, 1970	6.16	4,840
1944	Sept. 29, 1944	7.21	4,860	1971	Feb. 22, 1971	5.35	3,620
1945	Sept. 18, 1945	15.10	19,200	1972	June 21, 1972	8.61	6,300
1946	Jan. 7, 1946	8.34	6,350	1973	Feb. 2, 1973	5.96	3,360
1947	June 14, 1947	6.95	6,100	1974	July 26, 1974	9.60	7,940
1948	Oct. 9, 1947	8.58	8,560	1975	Mar. 19, 1975	7.53	4,530
1949	June 29, 1949	16.00	21,600	1976	May 29, 1976	6.83	3,910
1950	Sept. 10, 1950	13.04	b16,000	1977	Oct. 9, 1976	5.99	3,240
1951	Dec. 7, 1950	11.2	b12,800	1978	Jan. 26, 1978	7.38	4,390
1952	Dec. 4, 1951	5.58	4,000	1979	Sept. 22, 1979	11.64	10,800
1953	Dec. 13, 1952	4.50	2,470	1980	Apr. 15, 1980	6.80	3,890
1954	Jan. 22, 1954	4.43	2,410	1981	Sept. 16, 1981	3.85	1,560
1955	Oct. 15, 1954	4.81	2,850	1982	May 28, 1982	11.87	11,200
1956	July 17, 1956	5.50	2,930	1983	Apr. 9, 1983	9.17	6,400
1957	Sept. 17, 1957	6.49	5,350	1984	Aug. 12, 1984	4.99	2,440
1958	Nov. 19, 1957	6.41	5,200	1985	Aug. 18, 1985	8.43	5,480
1959	Sept. 30, 1959	7.00	6,100	1986	Nov. 8, 1985	7.98	5,060
1960	Feb. 5, 1960	5.53	3,850	1987	Sept. 7, 1987	15.20	17,700
1961	June 21, 1961	4.27	2,080	1988	July 12, 1988	4.20	1,830
1962	Dec. 12, 1961	4.14	1,960	1989	May 6, 1989	8.72	5,920
1963	Nov. 9, 1962	5.19	3,400	1990	Oct. 3, 1989	8.11	5,210
1964	Aug. 31, 1964	6.85	5,800				

a From information by local residents.

b Possibly affected by regulation of Philpott Reservoir.

02073000 SMITH RIVER AT MARTINSVILLE, VA

LOCATION.--Lat 36°39'40", long 79°52'51", Henry County, Hydrologic Unit 03010103, on right bank at south edge of Martinsville, 800 ft downstream from bridge on U.S. Highways 58 and 220, and 5.0 mi downstream from Beaver Creek.

DRAINAGE AREA.--380 mi².

GAGE.--Water-stage recorder. Datum of gage is 657.22 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 16,700 ft³/s and extended above on basis of computations of flow over dam at 28,900 ft³/s and 38,200 ft³/s.

BANKFULL STAGE.--Not determined.

REMARKS.--Flow regulated since August 1950 by Philpott Lake 19.6 mi upstream from station. Subsequent to June 30, 1957, records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1930	Oct. 2, 1929	12.27	15,200	1961	Feb. 23, 1961	5.73	4,040
1931	Aug. 22, 1931	7.70	6,620	1962	Dec. 12, 1961	6.66	5,400
1932	Mar. 6, 1932	6.60	5,660	1963	Nov. 9, 1962	8.15	7,720
1933	Oct. 17, 1932	17.50	27,200	1964	Aug. 31, 1964	8.88	8,840
1934	Sept. 16, 1934	8.70	8,520	1965	Feb. 7, 1965	7.39	6,440
1935	Sept. 6, 1935	8.43	8,040	1966	Feb. 13, 1966	6.50	5,170
1936	Jan. 3, 1936	11.75	14,000	1967	Aug. 24, 1967	4.97	3,300
1937	Oct. 17, 1936	11.57	13,600	1968	Mar. 12, 1968	5.31	3,660
1938	Oct. 19, 1937	21.50	39,000	1969	July 3, 1969	6.87	5,690
1939	Aug. 18, 1939	16.76	25,400	1970	Aug. 10, 1970	5.87	4,390
1940	Aug. 14, 1940	19.50	34,200	1971	Oct. 31, 1970	7.00	5,840
1941	July 8, 1941	10.10	10,900	1972	June 21, 1972	14.95	20,900
1942	June 10, 1942	11.38	14,200	1973	Feb. 2, 1973	7.89	7,220
1943	July 10, 1943	12.48	16,600	1974	Apr. 4, 1974	7.94	7,300
1944	Sept. 30, 1944	7.95	7,600	1975	Mar. 19, 1975	8.95	8,920
1945	Sept. 18, 1945	15.30	21,600	1976	May 30, 1976	6.08	4,620
1946	Jan. 7, 1946	9.32	9,510	1977	Oct. 9, 1976	8.84	8,740
1947	June 14, 1947	7.80	7,080	1978	Jan. 26, 1978	10.77	12,100
1948	Oct. 9, 1947	12.00	14,400	1979	Sept. 22, 1979	16.59	24,900
1949	June 29, 1949	12.72	15,800	1980	Apr. 9, 1980	8.99	8,980
1950	Sept. 10, 1950	14.50	19,700	1981	Sept. 16, 1981	3.85	1,940
1951	Dec. 7, 1950	10.95	12,500	1982	May 28, 1982	6.93	5,740
1952	Sept. 1, 1952	7.36	6,440	1983	Apr. 10, 1983	9.65	10,100
1953	Mar. 24, 1953	6.37	4,880	1984	Feb. 14, 1984	5.81	4,800
1954	Jan. 22, 1954	7.14	5,960	1985	Aug. 18, 1985	15.43	21,900
1955	Oct. 15, 1954	8.98	9,000	1986	Nov. 4, 1985	8.09	7,880
1956	Apr. 16, 1956	6.06	4,430	1987	Sept. 8, 1987	20.08	34,600
1957	Sept. 17, 1957	10.10	10,900	1988	July 27, 1988	7.81	7,480
1958	Nov. 19, 1957	7.94	7,240	1989	July 6, 1989	10.98	12,500
1959	Sept. 30, 1959	9.30	9,510	1990	Mar. 17, 1990	7.86	7,550
1960	Feb. 5, 1960	8.18	7,720				

02073500 LEATHERWOOD CREEK NEAR OLD LIBERTY, VA

LOCATION.--Lat 36°38'10", long 79°47'30", Henry County, Hydrologic Unit 03010103, at highway bridge, 1.7 mi upstream from mouth, 3 mi southeast of Old Liberty, and 6 mi southeast of Martinsville.

DRAINAGE AREA.--68 mi², approximately.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 627.95 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 400 ft³/s and extended above on basis of logarithmic plotting and velocity-area study.

BANKFULL STAGE.--6 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1926	Nov. 13, 1925	8.10	1,040	1931	May 23, 1931	5.7	616
1927	Dec. 29, 1926	4.90	481	1932	Jan. 9, 1932	5.1	511
1928	Aug. 11, 1928	14.38	2,970	1933	Oct. 18, 1932	8.0	1,090
1929	July 14, 1929	6.1	690	1934	Mar. 4, 1934	-	a1,000
1930	Oct. 2, 1929	5.44	562				

a Mean daily discharge; peak discharge is known to be greater than the value shown.

02074500 SANDY RIVER NEAR DANVILLE, VA

LOCATION.--Lat 36°37'10", long 79°30'16", Pittsylvania County, Hydrologic Unit 03010103, on right bank 200 ft downstream from Hickory Forest Creek, 400 ft upstream from bridge on State Highway 863 between Callahans Store and Mount Cross, 5.5 mi northwest of western city limits of Danville, and 5.8 mi upstream from mouth.

DRAINAGE AREA.--112 mi².

GAGE.--Water-stage recorder. Datum of gage is 460.38 ft above National Geodetic Vertical Datum of 1929. Prior to June 26, 1942, at site 1,200 ft downstream at datum 5.57 ft lower.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 10,500 ft³/s and extended above.

BANKFULL STAGE.--7 ft.

REMARKS.--Records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1930	Oct. 2, 1929	-	1,000	1961	Mar. 5, 1961	5.50	2,640
1931	Aug. 22, 1931	9.45	4,590	1962	Dec. 12, 1961	5.43	2,580
1932	Mar. 6, 1932	8.69	3,990	1963	Mar. 12, 1963	6.66	4,430
1933	Oct. 17, 1932	9.29	4,500	1964	Aug. 31, 1964	5.40	2,510
1934	Sept. 7, 1934	11.60	7,140	1965	July 12, 1965	5.45	2,580
1935	Dec. 1, 1934	9.76	4,980	1966	Feb. 28, 1966	5.56	2,700
1936	Jan. 19, 1936	10.95	6,330	1967	Aug. 24, 1967	9.58	9,820
1937	Aug. 25, 1937	9.20	4,410	1968	Dec. 28, 1967	4.63	1,700
1938	Oct. 20, 1937	9.98	5,180	1969	July 8, 1969	5.30	2,390
1939	Aug. 18, 1939	7.40	3,000	1970	Aug. 10, 1970	5.68	2,900
1940	Aug. 14, 1940	17.38	23,000	1971	May 13, 1971	6.01	3,330
1941	July 19, 1941	5.42	1,650	1972	June 21, 1972	9.92	10,500
1942	May 15, 1942	7.11	2,780	1973	Nov. 14, 1972	6.18	3,630
1943	Apr. 19, 1943	5.33	2,400	1974	Sept. 6, 1974	6.60	4,270
1944	Sept. 19, 1944	10.51	11,800	1975	Mar. 30, 1975	10.90	12,700
1945	Sept. 17, 1945	6.58	4,270	1976	Jan. 27, 1976	4.65	1,700
1946	Jan. 8, 1946	5.04	2,100	1977	Oct. 9, 1976	5.47	2,580
1947	Sept. 24, 1947	5.83	3,110	1978	Apr. 26, 1978	8.77	8,210
1948	Apr. 1, 1948	5.81	3,180	1979	Sept. 22, 1979	10.38	11,600
1949	Nov. 28, 1948	5.24	2,330	1980	Apr. 9, 1980	6.95	4,860
1950	July 14, 1950	6.07	3,400	1981	Feb. 20, 1981	3.66	934
1951	June 18, 1951	6.18	3,630	1982	Jan. 4, 1982	5.14	2,200
1952	Aug. 31, 1952	5.30	2,270	1983	Apr. 2, 1983	7.11	5,130
1953	Mar. 24, 1953	4.18	1,330	1984	Aug. 13, 1984	6.69	4,410
1954	Jan. 22, 1954	5.60	2,840	1985	Aug. 18, 1985	10.10	10,900
1955	Oct. 15, 1954	8.65	7,830	1986	Nov. 4, 1985	7.54	5,870
1956	Mar. 16, 1956	4.52	1,570	1987	Apr. 16, 1987	10.97	12,800
1957	Apr. 8, 1957	5.94	3,260	1988	July 23, 1988	5.72	2,930
1958	Nov. 19, 1957	6.52	4,110	1989	July 5, 1989	10.63	12,100
1959	Dec. 29, 1958	6.56	4,270	1990	Oct. 1, 1989	6.62	4,300
1960	Apr. 5, 1960	5.55	2,700				

02075000 DAN RIVER AT DANVILLE, VA

LOCATION.--Lat 36°35'15", long 79°22'55", Danville City, Hydrologic Unit 03010104, on left bank 50 ft downstream from Southern Railway bridge, 1,000 ft upstream from Fall Creek, and at mile 62.7.

DRAINAGE AREA.--2,050 mi², approximately.

GAGE.--Water-stage recorder. Datum of gage is 379.29 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 56,000 ft³/s and extended above on basis of computations of flow over dam at 80,000 ft³/s.

BANKFULL STAGE.--12 ft.

REMARKS.--Since August 1950, flow regulated by Philpott Lake 74.7 mi upstream.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1935	Dec. 1, 1934	12.32	28,100	1963	Mar. 14, 1963	14.40	31,900
1936	Jan. 20, 1936	17.30	52,400	1964	Sept. 2, 1964	11.04	23,400
1937	Aug. 26, 1937	13.45	31,800	1965	Oct. 18, 1964	12.04	23,300
1938	Oct. 21, 1937	18.34	54,100	1966	Mar. 1, 1966	11.91	23,000
1939	Aug. 20, 1939	12.90	30,600	1967	Aug. 24, 1967	11.25	20,800
1940	Aug. 15, 1940	20.96	75,000	1968	Mar. 13, 1968	8.99	13,700
1941	July 18, 1941	9.60	19,300	1969	Oct. 20, 1968	8.61	12,500
1942	May 23, 1942	11.39	25,600	1970	Aug. 12, 1970	13.95	25,000
1943	Apr. 20, 1943	a11.95	b25,000	1971	May 13, 1971	11.65	19,900
1944	Sept. 30, 1944	13.08	31,400	1972	June 22, 1972	21.34	59,200
1945	Sept. 19, 1945	19.0	59,400	1973	Feb. 3, 1973	12.99	26,900
1946	Jan. 8, 1946	10.46	22,200	1974	Dec. 21, 1973	12.70	25,800
1947	Sept. 25, 1947	12.95	30,700	1975	Mar. 30, 1975	17.69	46,600
1948	Oct. 11, 1947	13.96	34,400	1976	Jan. 1, 1976	8.78	13,200
1949	Nov. 29, 1948	10.90	23,500	1977	Oct. 10, 1976	11.79	22,600
1950	Sept. 11, 1950	9.74	19,300	1978	Apr. 27, 1978	18.56	37,000
1951	June 18, 1951	10.10	20,900	1979	Sept. 24, 1979	17.89	42,900
1952	Mar. 25, 1952	10.92	23,500	1980	Apr. 9, 1980	13.62	26,000
1953	Mar. 25, 1953	10.36	21,900	1981	Sept. 8, 1981	6.37	7,230
1954	Jan. 23, 1954	11.53	25,500	1982	Jan. 5, 1982	9.21	14,400
1955	Oct. 16, 1954	15.20	39,200	1983	Apr. 11, 1983	11.36	21,200
1956	Apr. 17, 1956	9.34	18,400	1984	Mar. 29, 1984	13.19	27,600
1957	Sept. 19, 1957	11.82	25,500	1985	Aug. 18, 1985	14.78	33,800
1958	Nov. 20, 1957	a12.18	b25,500	1986	Nov. 6, 1985	11.86	22,900
1959	Dec. 29, 1958	13.43	32,100	1987	Apr. 16, 1987	20.81	55,400
1960	Oct. 11, 1959	12.24	27,700	1988	Jan. 21, 1988	6.91	8,400
1961	Mar. 9, 1961	10.58	22,000	1989	July 6, 1989	11.99	23,300
1962	June 14, 1962	10.73	21,000	1990	Oct. 3, 1989	14.90	34,300

a Affected by backwater from debris.

b Mean daily discharge; peak is known to be greater than the value shown.

ROANOKE RIVER BASIN

02075350 POWELLS CREEK NEAR TURBEVILLE, VA

LOCATION.--Lat 36°34'50", long 79°11'20", Halifax County, Hydrologic Unit 03010104, at culvert on U.S. Highway 58, 0.8 mi upstream from mouth, 1.1 mi east of Halifax-Pittsylvania County line, and 8.8 mi southwest of Turbeville.

DRAINAGE AREA.--0.28 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 386.76 ft above National Geodetic Vertical Datum of 1929. Prior to Dec. 18, 1969, water-stage recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by indirect methods by U.S. Department of Agriculture, Soil Conservation Service.

BANKFULL STAGE.--Not determined.

REMARKS.--Prior to 1970, records were provided by the U.S. Department of Agriculture, Soil Conservation Service.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1958	Apr. 6, 1958	1.88	67	1975	Mar. 30, 1975	3.13	124
1959	Dec. 28, 1958	1.66	56	1976	Dec. 31, 1975	1.33	38
1960	Oct. 10, 1959	2.88	111	1977	Oct. 9, 1976	1.21	32
1961	Apr. 9, 1961	2.18	79	1978	Jan. 26, 1978	3.66	150
1962	May 31, 1962	5.16	238	1979	Sept. 22, 1979	3.25	130
1963	Mar. 12, 1963	2.69	102	1980	June 26, 1980	1.29	37
1964	July 22, 1964	2.62	99	1981	Feb. 20, 1981	.74	11
1965	July 11, 1965	7.86	384	1982	Oct. 26, 1981	1.52	48
1966	May 27, 1966	1.34	38	1983	Apr. 15, 1983	2.45	92
1967	Aug. 23, 1967	.86	17	1984	Mar. 29, 1984	2.80	108
1968	Mar. 12, 1968	1.19	32	1985	Aug. 18, 1985	2.69	103
1969a	Apr. 18, 1969	1.31	37	1986	Aug. 12, 1986	2.35	88
1970	Feb. 17, 1970	2.66	101	1987	Sept. 7, 1987	3.60	147
1971	Sept. 11, 1971	1.64	54	1988	Aug. 4, 1988	4.19	40
1972	June 21, 1972	2.60	98	1989	July 6, 1989	5.08	83
1973	Aug. 15, 1973	3.61	148	1990	May 2, 1990	3.97	30
1974	Sept. 6, 1974	2.00	70				

a Partial year, December through September.

02075450 LITTLE WINNS CREEK NEAR TURBEVILLE, VA

LOCATION.--Lat 36°35'20", long 79°05'20", Halifax County, Hydrologic Unit 03010104, at culvert on U.S. Highway 58, 1.0 mi upstream from mouth, and 3.6 mi southwest of Turbeville.

DRAINAGE AREA.--2.30 mi².

GAGE.--Water-stage recorder. Datum of gage is 385 ft above National Geodetic Vertical Datum of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by indirect methods by U.S. Department of Agriculture, Soil Conservation Service.

BANKFULL STAGE.--Not determined.

REMARKS.--Records were provided by the U.S. Department of Agriculture, Soil Conservation Service.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1958	Jan. 24, 1958	3.04	208	1967	July 14, 1967	1.96	75
1959	June 4, 1959	3.79	297	1968	Mar. 12, 1968	2.07	86
1960	Oct. 10, 1959	9.42	865	1969	June 15, 1969	3.70	290
1961	June 24, 1961	3.83	301	1970	Apr. 2, 1970	1.66	48
1962	Jan. 6, 1962	3.50	269	1971	Aug. 27, 1971	2.70	166
1963	Mar. 6, 1963	3.60	282	1972	June 21, 1972	3.24	242
1964	July 12, 1964	3.00	203	1973	Oct. 5, 1972	5.19	638
1965	Oct. 4, 1964	4.03	322	1974	Sept. 6, 1974	6.40	731
1966	Feb. 28, 1966	2.69	160				

ROANOKE RIVER BASIN

02075500 DAN RIVER AT PACES, VA

LOCATION.--Lat 36°38'32", long 79°05'23", Halifax County, Hydrologic Unit 03010104, on right bank 100 ft upstream from bridge on State Highway 658, 0.5 mi southeast of Paces, 0.5 mi upstream from Big Toby Creek, 2.7 mi upstream from Birch Creek, and at mile 36.0.

DRAINAGE AREA.--2,550 mi², approximately.

GAGE.--Water-stage recorder. Datum of gage is 322.48 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 32,000 ft³/s and extended above.

BANKFULL STAGE.--Not determined.

REMARKS.--Since August 1950, flow regulated by Philpott Lake 101.4 mi upstream.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1940	Aug. 16, 1940	a32.30	-	1970	Aug. 13, 1970	23.11	25,200
1951	Apr. 10, 1951	20.50	23,200	1971	May 17, 1971	21.05	20,500
1952	Mar. 26, 1952	22.12	25,700	1972	June 23, 1972	33.15	64,800
1953	Mar. 26, 1953	20.00	20,200	1973	Feb. 4, 1973	23.26	25,600
1954	Jan. 24, 1954	22.13	24,800	1974	Sept. 8, 1974	23.32	25,700
1955	Oct. 17, 1954	25.40	34,000	1975	Mar. 16, 1975	26.95	37,800
1956	Apr. 17, 1956	18.67	17,300	1977	Oct. 11, 1976	19.69	18,100
1957	Feb. 2, 1957	22.46	26,100	1978	Apr. 28, 1978	29.08	46,300
1958	Apr. 30, 1958	22.19	25,300	1979	Sept. 24, 1979	29.34	47,400
1959	Dec. 30, 1958	24.30	30,300	1980	Apr. 11, 1980	22.39	23,400
1960	Oct. 12, 1959	24.48	30,900	1981	Feb. 20, 1981	12.38	7,920
1961	Mar. 10, 1961	19.91	19,800	1982	Jan. 5, 1982	19.36	17,500
1962	Jan. 8, 1962	22.18	25,000	1983	Apr. 12, 1983	20.95	20,700
1963	Mar. 14, 1963	24.72	31,500	1984	Mar. 30, 1984	23.16	26,100
1964	Sept. 2, 1964	20.54	21,100	1985	Aug. 20, 1985	23.74	27,600
1965	Oct. 19, 1964	21.24	22,600	1986	Nov. 6, 1985	21.12	21,100
1966	Mar. 2, 1966	21.41	21,100	1987	Apr. 17, 1987	30.91	54,200
1967	Aug. 25, 1967	18.93	16,900	1988	Jan. 21, 1988	14.44	10,400
1968	Mar. 14, 1968	19.00	17,000	1989	May 7, 1989	a20.89	20,600
1969	Oct. 21, 1968	16.66	13,300	1990	Oct. 4, 1989	a25.58	33,000

a From high-water mark.

02075900 LAWSONS CREEK AT TURBEVILLE, VA

LOCATION.--Lat 36°36'41", long 79°01'28", Halifax County, Hydrologic Unit 03010104, at culvert on State Highway 658, 1 mi southeast of Turbeville.

DRAINAGE AREA.--8.58 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined. Aug. 25, 1965, to Sept. 9, 1975, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.-- Defined by flow-through-culvert computations for period prior to 1962. Culvert rebuilt in 1967.

BANKFULL STAGE.--8 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1951	Apr. 10, 1951	9.20	780	1964	Aug. 31, 1964	8.97	-
1952	June 1952	9.03	750	1965	July 12, 1965	9.25	-
1953	Nov. 21, 1952	6.60	360	1966	Feb. 28, 1966	8.30	-
1954	Jan. 22, 1954	7.92	580	1967	Feb. 18, 1967	5.40	-
1955	Oct. 15, 1954	10.81	1,050	1968	Mar. 12, 1968	9.43	-
1956	Oct. 3, 1955	8.25	630	1969	May 19, 1969	9.11	-
1957	Sept. 17, 1957	11.56	1,200	1970	Apr. 3, 1970	7.31	-
1958	Aug. 13, 1958	9.18	780	1971	Sept. 11, 1971	11.15	-
1959	Apr. 12, 1959	10.88	1,100	1972	June 21, 1972	12.61	-
1960	Oct. 10, 1959	14.00	7,740	1973	Oct. 5, 1972	10.87	-
1961	June 22, 1961	9.80	2,000	1974	Sept. 6, 1974	12.02	-
1962	Jan. 6, 1962	9.60	-	1975	July 14, 1975	11.31	-
1963	Mar. 12, 1963	9.80	-	1976	Dec. 31, 1975	7.05	-

02076000 DAN RIVER AT SOUTH BOSTON, VA

LOCATION.--Lat 36°41'37", long 78°54'09", South Boston City, Hydrologic Unit 03010104, on left bank 100 ft upstream from Norfolk and Western Railroad bridge at South Boston, 1 mi downstream from Lawsons Creek, 6 mi upstream from Banister, and at mile 22.6.

DRAINAGE AREA.--2,730 mi², approximately.

GAGE.--Water-stage recorder. Datum of gage is 299.23 ft above National Geodetic Vertical Datum of 1929. August 1900 to May 1907, wire or chain gage at same site at datum 3.06 ft higher. Apr. 28, 1923, to Dec. 8, 1928, chain gage at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 60,000 ft³/s and slope-area measurement at 90,000 ft³/s for period prior to 1953.

BANKFULL STAGE.--20 ft.

REMARKS.--Flow slightly regulated since August 1950 by Philpott Reservoir on Smith River. Flow at high stages (possibly in backwater conditions from Kerr Reservoir) has been affected since March 1953.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1901	May 23, 1901	24.5	51,000	1946	Jan. 9, 1946	22.5	22,200
1902	Dec. 31, 1901	25.5	52,600	1947	Sept. 26, 1947	25.7	32,000
1903	Mar. 24, 1903	23.5	45,000	1948	Oct. 12, 1947	25.0	29,000
1904	Aug. 10, 1904	13.0	14,000	1949	Dec. 1, 1948	24.2	26,600
1905	Feb. 22, 1905	16.2	20,000	1950	Nov. 2, 1949	23.0	23,400
1906	Jan. 5, 1906	20.5	32,000	1951	Apr. 10, 1951	22.60	22,400
1924	Jan. 18, 1924	24.6	29,000	1952	Mar. 26, 1952	24.12	26,300
1925	Oct. 2, 1924	24.41	28,500	1953	Feb. 23, 1953	21.63	-
1926	Jan. 20, 1926	21.5	22,300	1954	Jan. 25, 1954	23.85	-
1927	Dec. 26, 1926	20.5	20,400	1955	Oct. 18, 1954	26.38	-
1928	Aug. 14, 1928	25.8	31,800	1956	Apr. 18, 1956	20.75	-
1929	Mar. 2, 1929	22.76	25,000	1957	Feb. 3, 1957	24.30	-
1930	Oct. 4, 1929	27.03	40,000	1958	May 1, 1958	24.09	-
1931	Aug. 24, 1931	20.48	20,400	1959	Dec. 31, 1958	26.30	-
1932	Jan. 10, 1932	24.9	29,700	1960	Oct. 12, 1959	26.35	-
1933	Oct. 20, 1932	26.53	33,500	1961	Mar. 10, 1961	21.98	-
1934	Mar. 6, 1934	23.49	26,500	1962	Jan. 8, 1962	23.95	-
1935	Dec. 2, 1934	24.47	26,100	1980	-	<19.5	-
1936	Jan. 21, 1936	28.5	51,000	1981	-	<19.5	-
1937	Jan. 4, 1937	25.7	32,000	1982	Jan. 6, 1982	22.18	-
1938	Oct. 22, 1937	28.25	48,600	1983	Apr. 12, 1983	23.40	-
1939	Aug. 21, 1939	24.52	27,500	1984	Mar. 31, 1984	25.62	-
1940	Aug. 16, 1940	31.8	81,000	1985	Aug. 21, 1985	26.36	-
1941	Nov. 16, 1940	20.94	19,400	1986	Nov. 7, 1985	23.15	-
1942	May 24, 1942	23.90	25,700	1987	Apr. 18, 1987	32.57	-
1943	Apr. 21, 1943	24.26	26,900	1988	Jan. 21, 1988	<19.51	-
1944	Sept. 20, 1944	24.00	26,000	1989	May 8, 1989	23.23	-
1945	Sept. 20, 1945	30.5	68,000	1990	Oct. 4, 1989	27.33	-

< Less than.

02076200 BEARSKIN CREEK NEAR CHATHAM, VA

LOCATION.--Lat 36°50'30", long 79°29'05", Pittsylvania County, Hydrologic Unit 03010105, on left upstream wingwall of culvert on State Highway 57, 4.5 mi west of Chatham, and 6 mi upstream from mouth.

DRAINAGE AREA.--4.06 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 630 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Sept. 9, 1978, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--3 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1967	Aug. 24, 1967	11.50	1,530	1980	-	<3.86	<186
1968	July 12, 1968	8.28	860	1981	-	<3.18	<118
1969	-	<3.4	<150	1982	May 26, 1982	4.12	212
1970	July 25, 1970	4.43	252	1983	Apr. 3, 1983	4.93	312
1971	May 13, 1971	5.35	369	1984	Aug. 13, 1984	5.28	359
1972	June 21, 1972	13.12	1,920	1985	Aug. 18, 1985	(a)	-
1973	Nov. 14, 1972	6.85	596	1986	Nov. 4, 1985	16.00	2,300
1974	Sept. 6, 1974	6.45	532	1987	Apr. 16, 1987	10.65	1,350
1975	Mar. 19, 1975	7.45	701	1988	-	<3.18	<118
1976	-	<3.5	<150	1989	July 6, 1989	5.93	450
1977	Oct. 9, 1976	7.54	717	1990	Mar. 18, 1990	5.11	335
1978	Jan. 26, 1978	8.10	820				

< Less than.

a Gage height and discharge unknown. High-water mark destroyed by flood of Nov. 4, 1985.

ROANOKE RIVER BASIN

02076400 WHITETHORN CREEK TRIBUTARY AT GRETN, VA
(Formerly published as "02076600")

LOCATION.--Lat 36°56'00", long 79°22'10", Pittsylvania County, Hydrologic Unit 03010105, at culvert on U.S. Highway 29, 0.9 mi southwest of Gretna.

DRAINAGE AREA.--1.93 mi².

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is 725.26 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--6 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1966	Feb. 28, 1966	4.0	120	1971	May 13, 1971	3.85	125
1967	Aug. 24, 1967	5.70	340	1972	June 21, 1972	7.00	510
1968	July 13, 1968	4.75	220	1973	Oct. 5, 1972	4.25	168
1969	Mar. 25, 1969	3.50	90	1974	Sept. 6, 1974	4.45	190
1970	Aug. 4, 1970	4.12	153	1975	Mar. 19, 1975	4.90	243

02076500 GEORGES CREEK NEAR GRETN, VA

LOCATION.--Lat 36°56'11", long 79°18'42", Pittsylvania County, Hydrologic Unit 03010105, on left bank 15 ft downstream from bridge on State Highway 40, 2.8 mi southeast of Gretna, and 5.8 mi upstream from Whitethorn Creek.

DRAINAGE AREA.--9.24 mi².

GAGE.--Water-stage recorder. Datum of gage is 629.54 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 640 ft³/s and extended above on basis of slope-area measurements at 930 ft³/s and 1,590 ft³/s.

BANKFULL STAGE.--4 ft.

REMARKS.--Subsequent to June 30, 1957, records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1950	Sept. 13, 1950	6.48	1,100	1971	May 16, 1971	4.32	419
1951	Dec. 4, 1950	3.77	261	1972	June 21, 1972	7.75	1,160
1952	Sept. 1, 1952	6.08	865	1973	Nov. 14, 1972	5.79	660
1953	June 22, 1953	3.56	191	1974	Sept. 6, 1974	6.91	935
1954	Jan. 22, 1954	4.93	460	1975	Mar. 19, 1975	6.06	648
1955	Oct. 15, 1954	6.23	932	1976	May 30, 1976	4.45	390
1956	Aug. 16, 1956	3.59	196	1977	Oct. 9, 1976	5.17	540
1957	Sept. 17, 1957	4.60	390	1978	Jan. 26, 1978	7.20	1,010
1958	Nov. 19, 1957	6.06	842	1979	Sept. 22, 1979	8.50	1,480
1959	Dec. 28, 1958	4.57	380	1980	Apr. 9, 1980	3.88	287
1960	Feb. 19, 1960	3.53	246	1981	Feb. 19, 1981	2.85	135
1961	Feb. 23, 1961	3.30	200	1982	Jan. 4, 1982	4.04	311
1962	Dec. 12, 1961	4.56	502	1983	Apr. 2, 1983	6.25	772
1963	Mar. 12, 1963	3.53	248	1984	Feb. 14, 1984	5.60	620
1964	Feb. 6, 1964	3.34	208	1985	Aug. 18, 1985	6.55	905
1965	July 11, 1965	7.23	1,250	1986	Nov. 4, 1985	7.33	1,160
1966	Feb. 28, 1966	4.27	408	1987	Apr. 16, 1987	6.59	917
1967	Aug. 24, 1967	7.66	1,440	1988	July 23, 1988	2.73	158
1968	July 13, 1968	2.85	115	1989	July 30, 1989	7.07	1,060
1969	Mar. 25, 1969	3.37	214	1990	Feb. 10, 1990	4.60	460
1970	July 21, 1970	3.03	146				

02076700 BLACKS CREEK NEAR MT. AIRY, VA

LOCATION.--Lat 36°56'40", long 79°09'56", Pittsylvania County, Hydrologic Unit 03010105, on left upstream wingwall of culvert on State Highway 40, 1.5 mi east of Mt. Airy, and 3.5 mi upstream from mouth.

DRAINAGE AREA.--3.44 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 420 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Aug. 9, 1978, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--4 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1966a	July 30, 1966	4.7	210	1978	Jan. 26, 1978	7.50	575
1967	Jan. 27, 1967	3.35	115	1979	Sept. 22, 1979	>b10.51	(*)
1968	Dec. 10, 1967	3.74	140	1980	-	<2.22	<24
1969	-	<3.0	<60	1981	Sept. 7, 1981	4.59	173
1970	-	<3.0	<60	1982	Jan. 4, 1982	4.97	207
1971	May 13, 1971	10.45	870	1983	Apr. 3, 1983	5.92	302
1972	June 21, 1972	13.66	1,080	1984	Feb. 14, 1984	6.53	390
1973	Nov. 14, 1972	6.75	308	1985	Aug. 18, 1985	>c3.79	<235
1974	Sept. 6, 1974	6.30	355	1986	Nov. 4, 1985	5.25	235
1975	Mar. 19, 1975	8.07	620	1987	Sept. 8, 1987	d19.5	2,200
1976	May 30, 1976	4.78	180	1988	Nov. 11, 1987	2.76	48
1977	Oct. 9, 1976	6.45	439				

* Discharge not determined.

< Less than.

> Greater than.

a Partial year, August through September.

b Gage height affected by backwater.

c Gage height of annual peak unknown; high-water mark was destroyed by flood of Nov. 4, 1985. Gage height listed is second highest of year resulting from runoff from storm of Feb. 12, 1985. Peak discharge for Aug. 18, 1985 is more than 110 ft³/s but less than 235 ft³/s.

d From high-water marks.

ROANOKE RIVER BASIN

02077000 BANISTER RIVER AT HALIFAX, VA

LOCATION.--Lat 36°46'35", long 78°54'58", Halifax County, Hydrologic Unit 03010105, on left bank 10 ft downstream from bridge on State Highway 360, 1,700 ft downstream from Terrible Creek, 1 mi northeast of Halifax, and 10 mi upstream from mouth.

DRAINAGE AREA.--547 mi².

GAGE.--Water-stage recorder. Datum of gage is 318.54 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers). Sept. 28, 1904, to Dec. 31, 1905, nonrecording gage at site 400 ft upstream at different datum. Dec. 9, 1928, to Sept. 20, 1950, water-stage recorder at site 400 ft upstream at present datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 12,000 ft³/s and extended above on basis of slope-area measurement at 50,000 ft³/s and velocity-area study.

BANKFULL STAGE.--17 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1905	Feb. 22, 1905	-	3,650	1960	Apr. 6, 1960	17.54	5,800
1929	Apr. 17, 1929	19.36	6,430	1961	Feb. 24, 1961	15.09	4,600
1930	Oct. 3, 1929	24.02	10,100	1962	Jan. 8, 1962	16.71	5,350
1931	June 24, 1931	14.20	3,530	1963	Mar. 13, 1963	20.20	7,640
1932	Mar. 7, 1932	21.89	8,310	1964	Sept. 2, 1964	18.99	6,800
1933	Oct. 18, 1932	20.59	7,270	1965	Feb. 9, 1965	17.49	5,800
1934	Mar. 5, 1934	19.60	6,570	1966	Mar. 2, 1966	16.46	5,250
1935	Dec. 2, 1934	20.64	7,270	1967	Aug. 26, 1967	13.87	4,040
1936	Mar. 18, 1936	24.10	10,200	1968	Jan. 15, 1968	11.10	2,890
1937	Apr. 26, 1937	22.90	9,110	1969	Mar. 26, 1969	8.81	2,030
1938	June 22, 1938	31.22	19,000	1970	Feb. 17, 1970	7.83	1,820
1939	Aug. 20, 1939	19.33	6,360	1971	Sept. 12, 1971	24.07	10,800
1940	Aug. 16, 1940	37.8	34,000	1972	June 22, 1972	28.90	16,000
1941	Nov. 16, 1940	14.6	3,690	1973	Feb. 3, 1973	19.46	7,120
1942	Aug. 10, 1942	21.20	7,750	1974	Sept. 8, 1974	22.45	9,360
1943	Dec. 31, 1942	16.86	4,750	1975	Mar. 31, 1975	25.89	12,600
1944	Sept. 20, 1944	40.8	50,000	1976	Jan. 2, 1976	14.42	4,290
1945	Sept. 19, 1945	24.2	11,100	1977	Dec. 8, 1976	11.62	3,100
1946	Jan. 8, 1946	21.0	7,800	1978	Apr. 27, 1978	29.78	17,000
1947	Sept. 25, 1947	19.40	6,420	1979	Feb. 26, 1979	26.26	12,900
1948	Feb. 15, 1948	19.0	6,100	1980	Oct. 3, 1979	19.66	7,170
1949	Nov. 29, 1948	20.7	7,530	1981	Feb. 21, 1981	10.44	2,650
1950	Oct. 31, 1949	20.4	7,260	1982	Feb. 4, 1982	17.49	5,820
1951	Dec. 5, 1950	13.61	3,320	1983	Apr. 4, 1983	20.48	7,850
1952	Sept. 2, 1952	19.80	6,740	1984	Feb. 15, 1984	21.74	8,800
1953	Nov. 21, 1952	14.10	3,500	1985	Aug. 19, 1985	19.50	7,140
1954	Jan. 24, 1954	17.12	5,260	1986	Nov. 6, 1985	19.76	7,320
1955	Aug. 19, 1955	23.28	10,100	1987	Sept. 9, 1987	26.71	13,400
1956	Apr. 12, 1956	12.54	3,450	1988	Jan. 21, 1988	10.04	2,510
1957	Apr. 10, 1957	16.80	5,400	1989	May 3, 1989	18.06	6,170
1958	May 7, 1958	18.75	7,330	1990	Oct. 3, 1989	18.27	6,310
1959	Dec. 30, 1958	24.30	11,000				

02077500 HYCO RIVER NEAR DENNISTON, VA

LOCATION.--Lat 36°35'16", long 78°53'56", Halifax County, Hydrologic Unit 03010104, on left bank 60 ft upstream from bridge on U.S. Highway 501, 0.8 mi upstream from Mayo Creek, 2.5 mi northeast of Denniston, and 7.3 mi south of South Boston.

DRAINAGE AREA.--289 mi².

GAGE.--Water-stage recorder. Datum of gage is 315.24 ft above National Geodetic Vertical Datum of 1929. July 10, 1929, to Mar. 14, 1934, nonrecording gage at same site and datum.

STAGE-DISCHARGE RELATION.--Prior to Mar. 15, 1934, defined by current-meter measurements below 1,900 ft³/s and extended above. Since October 1950, defined by current-meter measurements below 8,200 ft³/s and extended above.

BANKFULL STAGE.--13 ft.

REMARKS.--Since 1964, flow regulated by Hyco Lake 15.7 mi upstream, and since Apr. 26, 1974, by Roxboro Steam-Electric Generating Plant afterbay Reservoir.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1928	August 1928	a26.4	-	1968	Mar. 14, 1968	16.84	3,840
1930	Oct. 3, 1929	21.88	5,000	1969	Mar. 8, 1969	15.89	2,870
1931	Apr. 7, 1931	17.18	2,660	1970	Feb. 19, 1970	15.23	2,190
1932	Mar. 8, 1932	18.58	3,190	1971	Feb. 9, 1971	16.98	3,980
1933	Dec. 28, 1932	17.52	2,770	1972	Oct. 25, 1971	18.04	4,830
1945	September 1945	a25.6	-	1973	Dec. 17, 1972	17.77	4,620
1951	Apr. 11, 1951	16.22	2,500	1974	Sept. 8, 1974	22.62	9,170
1952	Mar. 6, 1952	17.96	2,540	1975	July 15, 1975	24.27	10,800
1953	Nov. 21, 1952	16.32	2,080	1976	Jan. 1, 1976	14.77	1,860
1954	June 17, 1954	18.25	2,650	1977	Mar. 7, 1977	11.34	931
1955	Aug. 18, 1955	20.57	3,300	1978	Apr. 27, 1978	22.82	9,340
1956	Oct. 3, 1955	17.84	2,480	1979	Feb. 26, 1979	22.97	9,490
1957	Feb. 3, 1957	19.39	b5,880	1980	Nov. 13, 1979	16.20	2,840
1958	Jan. 16, 1958	17.18	b3,800	1981	Feb. 11, 1981	9.93	626
1959	Dec. 30, 1958	18.92	b5,360	1982	Feb. 5, 1982	16.55	3,100
1960	Feb. 20, 1960	17.61	4,480	1983	Apr. 17, 1983	17.72	4,060
1961	Feb. 26, 1961	15.67	2,660	1984	July 30, 1984	18.09	4,360
1962	Jan. 8, 1962	19.59	6,020	1985	Jan. 6, 1985	15.54	2,420
1963	Mar. 8, 1963	18.82	5,440	1986	Nov. 24, 1985	16.11	2,790
1964	Feb. 7, 1964	13.91	1,520	1987	Mar. 2, 1987	21.86	7,960
1965	Feb. 8, 1965	14.74	1,830	1988	Jan. 21, 1988	12.49	1,380
1966	Mar. 2, 1966	16.43	3,400	1989	Feb. 23, 1989	17.77	4,110
1967	Feb. 21, 1967	13.53	1,430	1990	Oct. 4, 1989	15.18	2,240

a From high-water marks.

b Mean daily discharge; peak discharge is known to be greater than value shown.

ROANOKE RIVER BASIN

02078000 HYCO RIVER NEAR OMEGA, VA

LOCATION.--Lat 36°38'09", long 78°48'20", Halifax County, Hydrologic Unit 03010104, on right bank 100 ft upstream from bridge on State Highway 738, 1.5 mi upstream from Hilly Creek, 2.5 mi south of Omega, and 7 mi upstream from mouth.

DRAINAGE AREA.--413 mi².

GAGE.--Water-stage recorder. Datum of gage is 294.45 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 6,700 ft³/s and extended above by logarithmic plotting.

BANKFULL STAGE.--17 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1934	Sept. 8, 1934	27.50	11,000	1943	Feb. 8, 1943	16.66	3,470
1935	Dec. 1, 1934	21.15	6,040	1944	Sept. 20, 1944	18.21	4,140
1936	Mar. 19, 1936	22.90	7,230	1945	Sept. 20, 1945	28.44	11,900
1937	Jan. 5, 1937	25.0	8,800	1946	Dec. 29, 1945	17.2	3,660
1938	July 27, 1938	23.21	7,440	1947	Sept. 27, 1947	18.32	4,190
1939	Aug. 31, 1939	18.48	4,030	1948	Feb. 15, 1948	22.28	6,810
1940	Aug. 17, 1940	25.65	9,280	1949	Dec. 1, 1948	17.53	3,790
1941	Nov. 17, 1940	16.16	3,140	1950	Nov. 3, 1949	14.60	2,780
1942	May 3, 1942	15.41	2,890				

02079000 ROANOKE (STAUNTON) RIVER AT CLARKSVILLE, VA

LOCATION.--Lat 36°37'40", long 78°33'04", Mecklenburg County, Hydrologic Unit 03010102, on right bank 6 ft downstream from highway bridge in Clarksville, 500 ft upstream from Dan River, and at mile 199.0.

DRAINAGE AREA.--7,320 mi², approximately, includes that of Dan River.

GAGE.--Water-stage recorder. Datum of gage is 258.23 ft above National Geodetic Vertical Datum of 1929. July 1, 1891, to Dec. 31, 1933, nonrecording gage at site 0.5 mi upstream (on Dan River) at datum about 1 ft higher. Jan. 1 to Dec. 24, 1934, nonrecording gage at same site and datum.

STAGE-DISCHARGE RELATION.--Defined after 1934 by current-meter measurements below 264,000 ft³/s and extended above.

BANKFULL STAGE.--13 ft.

REMARKS.--Slight regulation by Philpott Reservoir on Smith River since August 1950. Site flooded since March 1953 by John H. Kerr Reservoir on the Roanoke River. Gage-height records were provided by the National Weather Service prior to Dec. 24, 1934.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1878	Nov. 27, 1877	27	-	1922	Mar. 5, 1922	9.8	-
1892	Jan. 15, 1892	10.3	-	1923	Mar. 19, 1923	14.3	-
1893	Sept. 14, 1893	13.5	-	1924	Jan. 19, 1924	10.3	-
1894	Oct. 24, 1893	10.5	-	1925	Oct. 2, 1924	12.5	-
1895	Apr. 9, 1895	9.6	-	1926	Jan. 20, 1926	10.0	-
1896	July 10, 1896	13.8	-	1927	Feb. 22, 1927	9.0	-
1897	Feb. 25, 1897	12.8	-	1928	Aug. 14, 1928	15.2	-
1898	Sept. 25, 1898	10.4	-	1929	Mar. 2, 1929	10.8	-
1899	Mar. 21, 1899	17	-	1930	Oct. 5, 1929	15.1	-
1900	Apr. 21, 1900	14.3	-	1931	Aug. 24, 1931	9.2	-
1901	May 14, 1901	18.4	-	1932	Mar. 8, 1932	12.4	-
1902	Mar. 2, 1902	14.7	-	1933	Oct. 20, 1932	14.3	-
1903	Mar. 25, 1903	16.8	-	1934	Mar. 6, 1934	11.7	-
1904	Feb. 23, 1904	8.9	-	1935	Dec. 3, 1934	14.70	88,000
1905	July 15, 1905	7.3	-	1936	Jan. 21, 1936	16.88	114,000
1906	Jan. 6, 1906	11.0	-	1937	Jan. 5, 1937	14.74	87,900
1907	Oct. 21, 1906	9.9	-	1938	Oct. 22, 1937	16.37	108,000
1908	Aug. 26, 1908	13.6	-	1939	Aug. 21, 1939	13.24	71,400
1909	May 23, 1909	9.0	-	1940	Aug. 17, 1940	26.66	280,000
1910	Mar. 3, 1910	8.8	-	1941	Apr. 6, 1941	9.73	39,600
1911	Jan. 5, 1911	8.8	-	1942	May 24, 1942	11.60	55,400
1912	Mar. 17, 1912	17.0	-	1943	Apr. 22, 1943	11.69	56,300
1913	Mar. 16, 1913	13.5	-	1944	Sept. 21, 1944	18.61	138,000
1914	Nov. 10, 1913	9.5	-	1945	Sept. 20, 1945	17.80	127,000
1915	Jan. 9, 1915	12.0	-	1946	Jan. 10, 1946	11.60	55,400
1916	Feb. 4, 1916	11.3	-	1947	Sept. 26, 1947	11.80	57,200
1917	Mar. 7, 1917	12.4	-	1948	Feb. 16, 1948	13.53	74,500
1918	Apr. 23, 1918	11.5	-	1949	Dec. 6, 1948	14.20	82,400
1919	Jan. 5, 1919	12.8	-	1950	Nov. 2, 1949	11.17	51,800
1920	Aug. 21, 1920	18.0	-	1951	Apr. 11, 1951	9.98	42,000
1921	Dec. 2, 1920	10.2	-	1952	Sept. 3, 1952	12.58	65,000

02079500 ROANOKE RIVER AT BUGGS ISLAND, VA

LOCATION.--Lat 36°36'06", long 78°17'56", Mecklenburg County, Hydrologic Unit 03010106, opposite Buggs Island on left bank 1,200 ft downstream from John H. Kerr Dam, 2.4 mi upstream from Allens Creek, 5.3 mi upstream from bridge on U.S. Highway 1, 6.7 mi southeast of Boydton, and at mile 178.4.

DRAINAGE AREA.--7,780 mi², approximately.

GAGE.--Water-stage recorder. Datum of gage is 196.72 ft above National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark). November 1921 to August 1923, at site 0.3 mi upstream at different datum. April 1947 to Sept. 30, 1952, at site 2,800 ft downstream at datum 0.38 ft higher.

STAGE-DISCHARGE RELATION.--Defined after April 1947 by current-meter measurements below 69,000 ft³/s and extended above.

BANKFULL STAGE.--Not determined.

REMARKS.--Stage affected by backwater from Lake Gaston and flow regulated by John H. Kerr Dam since August 1950.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1940	August 1940	a33.90	-	1973	Jan. 12, 1973	11.02	-
1947	Sept. 26, 1947	b11.57	50,400	1974	Dec. 18, 1973	10.86	-
1948	Feb. 15, 1948	b14.64	72,800	1975	Apr. 22, 1975	10.94	-
1949	Dec. 7, 1948	b14.97	76,000	1976	Jan. 2, 1976	10.64	-
1950	Nov. 2, 1949	b11.64	52,600	1977	Oct. 28, 1976	10.78	-
1951	Apr. 11, 1951	b7.41	30,000	1978	Sept. 18, 1978	10.82	-
1952	Dec. 23, 1951	b8.94	37,500	1979	Jan. 13, 1979	11.11	-
1953	Mar. 26, 1953	9.45	32,300	1980	Nov. 12, 1979	11.18	-
1954	Sept. 7, 1954	8.19	25,100	1981	Dec. 22, 1980	10.71	-
1955	Apr. 19, 1955	9.94	35,300	1982	June 29, 1982	10.52	-
1956	Apr. 17, 1956	10.05	35,900	1983	Feb. 3, 1983	10.66	-
1957	Feb. 4, 1957	10.60	42,000	1984	Mar. 29, 1984	11.20	-
1958	Dec. 13, 1957	10.36	40,400	1985	Sept. 3, 1985	10.86	-
1959	May 29, 1959	10.26	39,600	1986	Nov. 21, 1985	10.64	-
1960	Dec. 22, 1959	10.40	40,400	1987c	Apr. 30, 1987	11.05	-
1961	Aug. 28, 1961	10.25	38,800	1988	July 29, 1988	10.47	-
1962	July 31, 1962	10.83	43,600	1989	Sept. 8, 1989	10.73	-
1972	Aug. 9, 1972	11.07	-	1990	Aug. 27, 1990	10.80	-

a From levels by U.S. Army Corps of Engineers.

b At different datum.

c Partial year, October, November, and February through September.

02079640 ALLEN CREEK NEAR BOYDTON, VA

LOCATION.--Lat 36°40'46", long 78°19'37", Mecklenburg County, Hydrologic Unit 03010106, on left bank at upstream side of bridge on U.S. Highway 58, 0.8 mi upstream from Coleman Creek, 2.3 mi downstream from Layton Creek, 3.7 mi east of Boydton, and 11.8 mi southwest of South Hill.

DRAINAGE AREA.--53.4 mi².

GAGE.--Water-stage recorder. Datum of gage is 216.50 ft above National Geodetic Vertical Datum of 1929 (levels by Virginia Department of Transportation).

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 3,020 ft³/s and extended above.

BANKFULL STAGE.--15 ft.

REMARKS.--Records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1962	Jan. 7, 1962	20.56	4,580	1977	Oct. 20, 1976	12.80	1,040
1963	Mar. 6, 1963	18.50	3,050	1978	Apr. 27, 1978	20.13	4,180
1964	Feb. 6, 1964	14.20	1,200	1979	Sept. 22, 1979	20.43	4,420
1965	Feb. 8, 1965	18.33	2,930	1980	Oct. 1, 1979	18.65	3,140
1966	June 17, 1966	15.10	1,490	1981	July 24, 1981	13.39	1,140
1967	Feb. 21, 1967	13.71	1,080	1982	July 5, 1982	16.82	2,210
1968	Mar. 12, 1968	15.30	1,560	1983	Apr. 16, 1983	19.28	3,550
1969	Apr. 19, 1969	13.94	1,130	1984	Mar. 29, 1984	17.76	2,630
1970	Dec. 26, 1969	9.72	568	1985	Jan. 4, 1985	16.99	2,280
1971	May 30, 1971	17.04	2,250	1986	Nov. 4, 1985	16.19	1,970
1972	Oct. 23, 1971	21.80	5,620	1987	Apr. 25, 1987	19.98	4,080
1973	Oct. 6, 1972	20.60	4,580	1988	Jan. 20, 1988	8.95	541
1974	Sept. 7, 1974	18.58	3,110	1989	Feb. 21, 1989	16.98	2,270
1975	Mar. 30, 1975	19.94	4,020	1990	Jan. 1, 1990	16.66	2,140
1976	Dec. 31, 1975	14.43	1,400				

ROANOKE RIVER BASIN

02079660 JOLLY HOLLOW BRANCH AT BOYDTON, VA

LOCATION.--Lat 36°40'38", long 78°23'13", Mecklenburg County, Hydrologic Unit 03010106, at bridge on State Highway 92, 0.5 mi north of Boydton.

DRAINAGE AREA.--3.60 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Not developed; insufficient field data.

BANKFULL STAGE.--8 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1955	Aug. 13, 1955	5.62	-	1967	May 31, 1967	4.16	-
1956	June 2, 1956	6.24	-	1968	-	<3.22	-
1957	Feb. 1, 1957	3.67	-	1969	-	<3.22	-
1958	May 6, 1958	4.20	-	1970	-	<3.20	-
1959	Oct. 22, 1958	3.65	-	1971	May 30, 1971	3.62	-
1960	Feb. 18, 1960	4.00	-	1972	Oct. 24, 1971	5.26	-
1961	-	<3.22	-	1973	Feb. 2, 1973	5.26	-
1962	July 4, 1962	5.46	-	1974	Sept. 6, 1974	4.49	-
1963	Mar. 6, 1963	4.81	-	1975	Jan. 10, 1975	4.90	-
1964	-	<3.22	-	1976	-	<3.22	-
1965	Feb. 7, 1965	3.29	-	1977	-	<3.22	-
1966	-	<3.22	-				

< Less than.

ROANOKE RIVER BASIN

02079720 SMITH CREEK TRIBUTARY NEAR SOUTH HILL, VA

LOCATION.--Lat 36°33'50", long 78°12'10", Mecklenburg County, Hydrologic Unit 03010106, on U.S. Highway 1, 12 mi southwest of South Hill.

DRAINAGE AREA.--0.39 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 249.71 ft above National Geodetic Vertical Datum of 1929. Prior to July 21, 1970, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--6 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1966	Mar. 1, 1966	4.50	96	1971	May 30, 1971	5.41	145
1967	May 31, 1967	3.71	62	1972	June 21, 1972	5.95	177
1968	-	<3.0	<30	1973	Oct. 5, 1973	5.41	145
1969	Sept. 2, 1969	3.40	51	1974	Sept. 6, 1974	5.96	178
1970	July 23, 1970	3.84	69	1975	July 14, 1975	3.95	73

< Less than.

03162700 WALLEN CREEK NEAR TROUT DALE, VA

LOCATION.--Lat 36°38'00", long 81°24'10", Grayson County, Hydrologic Unit 05050001, at culvert on State Highway 16, 5 mi southeast of Trout Dale.

DRAINAGE AREA.--2.23 mi².

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--5 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1966	Feb. 13, 1966	5.84	160	1971	Feb. 13, 1971	5.78	155
1967	Aug. 3, 1967	6.12	185	1972	Apr. 7, 1972	5.20	106
1968	-	<5.00	<90	1973	May 28, 1973	5.36	119
1969	-	<5.00	<90	1974	June 27, 1974	5.55	134
1970	Apr. 28, 1970	6.00	175	1975	Mar. 30, 1975	5.16	103

< Less than.

KANAWHA RIVER BASIN

03162800 MILL CREEK NEAR TROUT DALE, VA

LOCATION.--Lat 36°40'06", long 81°24'24", Grayson County, Hydrologic Unit 05050001, at bridge on State Highway 16, 3 mi southeast of Trout Dale.

DRAINAGE AREA.--5.32 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 2,650 ft above National Geodetic Vertical Datum of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--3.5 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1951	Dec. 7, 1950	3.57	-	1969	July 12, 1969	2.80	-
1952	-	<2.10	<130	1970	Apr. 28, 1970	2.55	230
1953	Feb. 20, 1953	2.10	130	1971	-	<2.10	<130
1955	Mar. 18, 1955	3.50	-	1972	-	<2.10	<130
1963	Mar. 12, 1963	2.47	-	1973	Mar. 16, 1973	2.35	177
1964	Mar. 5, 1964	2.70	-	1974	June 27, 1974	2.59	223
1965	Mar. 26, 1965	3.40	-	1975	Mar. 30, 1975	2.37	181
1966	Feb. 13, 1966	2.83	250	1976	-	<2.10	<130
1967	July 9, 1967	2.12	-	1977	Oct. 28, 1976	4.40	-
1968	-	<2.10	<130				

< Less than.

KANAWHA RIVER BASIN

03162810 SADDLE CREEK TRIBUTARY NEAR INDEPENDENCE, VA

LOCATION.--Lat 36°37'11", long 81°12'55", Grayson County, Hydrologic Unit 05050001, at culvert on U.S. Highway 58, 3 mi west of Independence.

DRAINAGE AREA.--0.39 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined. Prior to Aug. 11, 1970, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--5 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1966	-	<5.00	-	1971	-	<4.07	-
1967	-	<5.00	-	1972	-	<4.07	-
1968	Dec. 11, 1967	5.27	62	1973	May 28, 1973	5.78	84
1969	-	<5.00	-	1974	-	<4.07	-
1970	-	<5.00	-	1975	-	<4.07	-

< Less than.

KANAWHA RIVER BASIN

03163000 NEW RIVER NEAR BAYWOOD, VA

LOCATION.--Lat 36°36'00", long 81°03'00", Grayson County, Hydrologic Unit 05050001, at Boyers Ferry, 1 mi downstream from Little River, and 2 mi west of Baywood.

DRAINAGE AREA.--1,000 mi².

GAGE.--Nonrecording gage (staff gage). Datum of gage is 2,260 ft above National Geodetic Vertical Datum of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Determined by current-meter measurements below 5,000 ft³/s and extended above.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1916	July 16, 1916	a28.7	-	1929	Feb. 28, 1929	5.60	10,400
1928b	Aug. 16, 1928	9.50	19,500	1930c	Oct. 2, 1929	12.0	25,000

a From high-water marks.

b Partial year, January through September.

c Partial year, October through March.

03164000 NEW RIVER NEAR GALAX, VA

LOCATION.--Lat 36°38'50", long 80°58'45", Grayson County, Hydrologic Unit 05050001, on left bank at upstream side of bridge on State Highway 94, 500 ft downstream from Meadow Creek, 1.2 mi southwest of Old Town, 3.1 mi southwest of Galax, and 3.6 mi downstream from Elk Creek.

DRAINAGE AREA.--1,131 mi².

GAGE.--Water-stage recorder. Datum of gage is 2,208.04 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 31,000 ft³/s and extended above on basis of computation of peak flow over dam at Fries 6 mi downstream at 141,000 ft³/s and slope-area measurement at 152,000 ft³/s.

BANKFULL STAGE.--5 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1930	Oct. 2, 1929	9.0	33,100	1961	May 12, 1961	7.77	26,900
1931	Aug. 22, 1931	4.35	12,000	1962	Dec. 12, 1961	6.09	18,700
1932	May 1, 1932	3.96	9,470	1963	Mar. 13, 1963	8.67	31,500
1933	Oct. 17, 1932	6.54	22,000	1964	Mar. 5, 1964	4.76	12,600
1934	Mar. 28, 1934	5.18	14,800	1965	Oct. 17, 1964	6.86	22,500
1935	Sept. 6, 1935	7.38	24,900	1966	Feb. 13, 1966	8.47	30,500
1936	Nov. 13, 1935	6.34	20,800	1967	Mar. 7, 1967	4.67	12,000
1937	Oct. 17, 1936	5.22	14,800	1968	Mar. 13, 1968	4.05	9,350
1938	Oct. 19, 1937	6.00	19,200	1969	Oct. 19, 1968	5.23	14,600
1939	Aug. 18, 1939	6.45	21,400	1970	Aug. 10, 1970	7.89	27,400
1940	Aug. 14, 1940	25.7	141,000	1971	Oct. 31, 1970	3.81	8,340
1941	Dec. 28, 1940	3.84	8,940	1972	June 21, 1972	8.54	30,700
1942	Sept. 6, 1942	5.33	15,000	1973	May 28, 1973	10.77	42,800
1943	Dec. 30, 1942	5.55	15,400	1974	Apr. 5, 1974	7.86	27,200
1944	Feb. 18, 1944	4.97	13,600	1975	Mar. 14, 1975	7.66	26,200
1945	Sept. 18, 1945	9.90	38,000	1976	Oct. 18, 1975	7.75	26,600
1946	Jan. 8, 1946	6.77	22,000	1977	Apr. 5, 1977	8.10	28,400
1947	Jan. 20, 1947	5.64	16,400	1978	Nov. 6, 1977	18.59	91,000
1948	Nov. 3, 1947	5.37	15,400	1979	Sept. 22, 1979	9.78	37,300
1949	Aug. 29, 1949	8.35	30,000	1980	Apr. 14, 1980	7.72	26,500
1950	Nov. 2, 1949	4.88	13,200	1981	May 28, 1981	6.37	19,800
1951	Dec. 7, 1950	9.94	38,000	1982	Feb. 3, 1982	5.80	17,200
1952	Mar. 11, 1952	5.24	14,500	1983	Feb. 2, 1983	8.50	30,500
1953	Feb. 21, 1953	5.48	15,900	1984	May 7, 1984	6.83	22,000
1954	Jan. 23, 1954	5.60	16,400	1985	Aug. 18, 1985	4.31	10,500
1955	Apr. 14, 1955	7.19	23,900	1986	Nov. 5, 1985	5.30	14,800
1956	Apr. 16, 1956	6.34	19,600	1987	Mar. 1, 1987	7.29	24,300
1957	Apr. 5, 1957	9.04	33,300	1988	Jan. 20, 1988	3.15	6,200
1958	Jan. 14, 1958	5.01	13,700	1989	Sept. 22, 1989	12.80	54,100
1959	Sept. 30, 1959	10.35	40,700	1990	Jan. 1, 1990	10.24	39,800
1960	Mar. 31, 1960	7.44	24,900				

a From ice jam.

03165000 CHESTNUT CREEK AT GALAX, VA

LOCATION.--Lat 36°38'45", long 80°55'10", Galax City, Hydrologic Unit 05050001, on right bank 200 ft upstream from bridge on State Highway 89 and 1.7 mi downstream from Wards Mill Branch.

DRAINAGE AREA.--39.4 mi².

GAGE.--Water-stage recorder. Concrete control since Aug. 30, 1979. Datum of gage is 2,344.17 ft above National Geodetic Vertical Datum of 1929. Prior to June 25, 1948, nonrecording gage, and June 25, 1948, to May 28, 1953, water-stage recorder at site 200 ft upstream at datum 0.86 ft higher.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 2,200 ft³/s and extended above on basis of slope-area measurements at 5,000 ft³/s and 7,000 ft³/s and contracted-opening measurement at 11,000 ft³/s.

BANKFULL STAGE.--5 ft.

Annual maximum stages and discharges							
Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1940	Aug. 14, 1940	a17.4	11,000	1968	Dec. 10, 1967	3.03	486
1945	Oct. 20, 1944	a7.48	1,560	1969	Oct. 20, 1968	5.81	1,460
1946	Jan. 7, 1946	a3.35	502	1970	Aug. 10, 1970	5.10	1,210
1947	June 14, 1947	a6.20	1,120	1971	Sept. 11, 1971	6.61	1,740
1948	Oct. 17, 1947	a14.4	6,980	1972	June 21, 1972	7.92	2,070
1949	June 17, 1949	9.58	2,540	1973	May 28, 1973	11.07	5,000
1950	July 28, 1950	4.67	810	1974	Apr. 4, 1974	5.20	1,060
1951	Dec. 7, 1950	10.80	3,300	1975	May 29, 1975	7.78	3,070
1952	Mar. 11, 1952	9.60	2,540	1976	Oct. 17, 1975	12.93	6,880
1953	Nov. 21, 1952	4.63	780	1977	Mar. 13, 1977	6.94	2,620
1954	Mar. 1, 1954	8.17	2,300	1978	Jan. 26, 1978	7.83	3,100
1955	Apr. 14, 1955	5.30	1,280	1979	Sept. 22, 1979	10.43	4,800
1956	Sept. 27, 1956	6.08	1,560	1980	Apr. 9, 1980	5.84	2,070
1957	Apr. 5, 1957	5.94	1,500	1981	Feb. 11, 1981	3.67	1,080
1958	Dec. 21, 1957	4.79	1,100	1982	May 31, 1982	4.36	1,390
1959	Sept. 30, 1959	11.25	4,100	1983	Apr. 10, 1983	5.88	2,200
1960	Feb. 5, 1960	4.87	1,140	1984	Feb. 13, 1984	4.62	1,490
1961	May 11, 1961	5.08	1,210	1985	Aug. 18, 1985	5.97	2,250
1962	Nov. 23, 1961	4.83	1,100	1986	Nov. 4, 1985	5.32	1,840
1963	Nov. 9, 1962	6.78	1,800	1987	Mar. 1, 1987	5.81	2,080
1964	Aug. 30, 1964	5.57	1,380	1988	Nov. 29, 1987	3.22	846
1965	Oct. 16, 1964	5.72	1,420	1989	Sept. 22, 1989	9.53	4,190
1966	Feb. 13, 1966	8.69	2,480	1990	Nov. 16, 1989	8.44	3,510
1967	Mar. 7, 1967	4.10	860				

a At different datum at site 200 feet upstream.

03165200 MILL CREEK TRIBUTARY AT GALAX, VA

LOCATION.--Lat 36°40'38", long 80°54'02", Carroll County, Hydrologic Unit 05050001, at culvert on U.S. Highways 58 and 221.

DRAINAGE AREA.--1.05 mi².

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--5 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1966	Feb. 13, 1966	4.25	120	1971	Sept. 11, 1971	6.05	223
1967	Mar. 7, 1967	3.85	102	1972	June 21, 1972	5.45	187
1968	-	<3.00	<65	1973	May 28, 1973	5.30	178
1969	Oct. 19, 1968	3.10	69	1974	-	<3.00	<65
1970	-	<3.00	<65				

<Less than.

KANAWHA RIVER BASIN

03165500 NEW RIVER AT IVANHOE, VA

LOCATION.--Lat 36°50'05", long 80°57'10", Wythe County, Hydrologic Unit 05050001, on left bank at Ivanhoe, 2.1 mi downstream from Big Branch, and 2.3 mi upstream from Cripple Creek.

DRAINAGE AREA.--1,340 mi².

GAGE.--Water-stage recorder. Datum of gage is 1,943.09 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 32,000 ft³/s and extended above on basis of flood records for other stations on New River.

BANKFULL STAGE.--11 ft.

REMARKS.--Flood in September 1878 was the highest known between 1840 and 1916 from information from local residents.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1878	September 1878	a30	100,000	1956	Apr. 16, 1956	11.06	20,300
1913	May 24, 1913	-	b16,000	1957	Apr. 5, 1957	15.90	34,200
1916	July 16, 1916	c34.8	132,000	1958	Jan. 14, 1958	12.02	22,700
1931	Aug. 22, 1931	8.25	13,200	1959	Sept. 30, 1959	17.88	42,100
1932	Jan. 1, 1932	7.22	10,500	1960	Mar. 31, 1960	13.24	25,900
1933	Oct. 17, 1932	12.44	23,100	1961	May 12, 1961	14.39	29,200
1934	Mar. 28, 1934	10.32	19,200	1962	Dec. 12, 1961	11.00	20,000
1935	Sept. 6, 1935	13.22	25,200	1963	Mar. 13, 1963	15.50	32,800
1936	Nov. 13, 1935	12.32	22,800	1964	Aug. 31, 1964	10.18	17,900
1937	Oct. 17, 1936	10.27	17,700	1965	Oct. 17, 1964	12.40	23,600
1938	Oct. 19, 1937	12.16	22,600	1966	Feb. 14, 1966	14.95	31,000
1939	Aug. 19, 1939	12.29	22,800	1967	Mar. 7, 1967	9.01	14,900
1940	Aug. 14, 1940	38.1	155,000	1968	Mar. 13, 1968	8.35	13,200
1941	Dec. 28, 1940	8.67	13,800	1969	Oct. 19, 1968	9.56	16,300
1942	Sept. 6, 1942	10.26	17,700	1970	Aug. 10, 1970	13.48	26,600
1943	Dec. 30, 1942	10.22	17,400	1971	Oct. 31, 1970	6.74	9,470
1944	Feb. 18, 1944	10.44	18,000	1972	June 21, 1972	16.01	34,500
1945	Sept. 18, 1945	17.3	39,700	1973	May 28, 1973	18.52	44,600
1946	Jan. 8, 1946	12.3	22,800	1974	Apr. 5, 1974	13.18	25,800
1947	Jan. 20, 1947	10.63	18,400	1975	Mar. 14, 1975	13.70	27,300
1948	Oct. 18, 1947	12.02	22,000	1976	Oct. 18, 1975	15.57	33,000
1949	Aug. 29, 1949	14.51	29,200	1977	Apr. 5, 1977	13.80	27,500
1950	Nov. 2, 1949	8.56	13,500	1978	Nov. 7, 1977	28.08	91,600
1951	Dec. 8, 1950	16.97	38,500	1979	Sept. 22, 1979	16.58	36,800
1952	Mar. 11, 1952	11.46	21,300	1980	Apr. 14, 1980	13.42	26,500
1953	Mar. 24, 1953	10.83	19,500	1981	May 28, 1981	11.48	21,300
1954	Mar. 1, 1954	10.80	19,500	1982	Feb. 3, 1982	11.30	20,800
1955	Apr. 14, 1955	12.92	25,000				

a Approximate stage.

b Mean daily discharge, from records of Appalachian Power Company; peak discharge is known to be greater than value shown.

c From high-water marks, present datum.

03165700 CRIPPLE CREEK AT CEDAR SPRINGS, VA

LOCATION.--Lat 36°49'31", long 81°16'45", Wythe County, Hydrologic Unit 05050001, on right downstream wingwall of bridge on State Highway 749, 0.6 mi southeast of Cedar Springs.

DRAINAGE AREA.--11.3 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 2,455 ft above National Geodetic Vertical Datum of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 400 ft³/s and a contracted-opening measurement at 1,900 ft³/s.

BANKFULL STAGE.--14 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1967	-	<13.88	<360	1979	Mar. 24, 1979	14.10	400
1968	-	<13.88	<360	1980	-	<13.88	<360
1969	July 21, 1969	14.05	390	1981	-	<13.88	<360
1970	Dec. 30, 1969	14.10	400	1982	-	<13.88	<360
1971	-	<13.88	<360	1983	-	<13.88	<360
1972	June 21, 1972	14.49	478	1984	May 5, 1984	14.17	414
1973	July 3, 1973	13.86	353	1985	-	<13.88	<360
1974	June 27, 1974	14.32	444	1986	-	<13.88	<360
1975	-	<13.88	<360	1987	-	<13.88	<360
1976	-	<13.88	<360	1988	-	<13.88	<357
1977	Apr. 4, 1977	15.08	598	1989	Sept. 22, 1989	16.33	873
1978	Nov. 6, 1977	20.37	1,860	1990	-	<13.88	<357

< Less than.

KANAWHA RIVER BASIN

03165800 SUGAR RUN NEAR SPEEDWELL, VA

LOCATION.--Lat 36°49'45", long 81°10'10", Wythe County, Hydrologic Unit 05050001, at bridge on State Highway 684, 1.1 mi north of Speedwell.

DRAINAGE AREA.--3.57 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Not developed.

BANKFULL STAGE.--15 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1967	Nov. 2, 1966	14.11	-	1973	May 28, 1973	15.50	-
1968	May 27, 1968	14.37	-	1974	June 27, 1974	14.80	-
1969	July 21, 1969	13.65	-	1975	Mar. 30, 1975	14.24	-
1970	Dec. 30, 1969	12.55	-	1976	-	<12.30	-
1971	-	<12.30	-	1977	Apr. 4, 1977	16.46	-
1972	June 21, 1972	16.37	-	1978	Aug. 11, 1978	14.54	-

< Less than.

KANAWHA RIVER BASIN

03166000 CRIPPLE CREEK NEAR IVANHOE, VA

LOCATION.--Lat 36°51'35", long 80°58'50", Wythe County, Hydrologic Unit 05050001, at highway bridge 2 mi northwest of Ivanhoe and 2.8 mi upstream from mouth.

DRAINAGE AREA.--148 mi².

GAGE.--Nonrecording gage (chain gage). Datum of gage is 1,990 ft above National Geodetic Vertical Datum of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,200 ft³/s and extended above.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1930	Oct. 2, 1929	-	a4,000	1933	Feb. 8, 1933	-	1,240
1931	Apr. 4, 1931	-	1,440	1934	Mar. 28, 1934	-	1,190
1932	May 1, 1932	-	1,190				

a Estimated.

03166800 GLADE CREEK AT GRAHAMS FORGE, VA

LOCATION.--Lat 36°55'51", long 80°54'02", Wythe County, Hydrologic Unit 05050001, on left bank 30 ft downstream from bridge on State Highway 629, 1.0 mi southwest of Grahams Forge, and at mile 0.4.

DRAINAGE AREA.--7.15 mi².

GAGE.--Water-stage recorder. Concrete control since June 1, 1979. Datum of gage is 1,972 ft above National Geodetic Vertical Datum of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 60 ft³/s and extended above on basis of slope-area measurement at 1,100 ft³/s.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1976	June 16, 1976	5.11	1,100	1984	July 5, 1984	5.37	1,350
1977	Feb. 24, 1977	3.26	114	1985	Aug. 17, 1985	4.01	386
1978	Mar. 10, 1978	3.76	268	1986	Mar. 14, 1986	2.16	14
1979	Sept. 21, 1979	3.40	170	1987	Apr. 25, 1987	3.68	259
1980	July 28, 1980	2.94	84	1988	Sept. 24, 1988	1.90	5.8
1981	July 5, 1981	3.74	279	1989	Sept. 16, 1989	6.75	3,210
1982	July 9, 1982	4.83	869	1990	Nov. 16, 1989	3.18	125
1983	Dec. 16, 1982	3.18	127				

03167000 REED CREEK AT GRAHAMS FORGE, VA

LOCATION.--Lat 36°56'22", long 80°53'13", Wythe County, Hydrologic Unit 05050001, on left bank 20 ft downstream from bridge on State Highway 619 at Grahams Forge, 2.2 mi downstream from Glade Creek, and at mile 7.3.

DRAINAGE AREA.--247 mi².

GAGE.--Water-stage recorder. Datum of gage is 1,924.65 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1916, nonrecording gage at same site at datum 0.68 ft lower. Feb. 3, 1927, to Oct. 28, 1934, and June 11, 1974, to July 22, 1975, nonrecording gage at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 7,600 ft³/s and extended above on basis of slope-area measurement at 14,000 ft³/s and velocity-area study.

BANKFULL STAGE.--4 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1909	May 1, 1909	5.6	3,200	1955	Apr. 14, 1955	6.63	6,720
1910	June 13, 1910	5.3	2,800	1956	Apr. 16, 1956	5.72	4,780
1911	Jan. 30, 1911	5.5	3,100	1957	Jan. 30, 1957	7.25	7,800
1912	Mar. 29, 1912	6.3	4,400	1958	Mar. 31, 1958	5.59	4,820
1913	Mar. 27, 1913	10.5	15,200	1959	Apr. 13, 1959	5.30	4,100
1914	Mar. 12, 1914	4.7	2,060	1960	Mar. 31, 1960	5.21	4,060
1915	Jan. 7, 1915	5.4	3,000	1961	May 12, 1961	7.11	7,600
1916	July 16, 1916	11.4	17,500	1962	Dec. 18, 1961	5.70	4,880
1927	Apr. 22, 1927	4.4	3,040	1963	Mar. 13, 1963	6.68	6,800
1928	Aug. 16, 1928	4.3	2,870	1964	Mar. 5, 1964	5.08	3,900
1929	June 9, 1929	6.4	6,850	1965	Mar. 26, 1965	6.34	6,000
1930	Oct. 2, 1929	6.0	6,020	1966	Feb. 14, 1966	5.71	4,880
1931	Apr. 4, 1931	4.5	3,210	1967	Mar. 7, 1967	5.44	4,440
1932	May 1, 1932	5.0	4,090	1968	Mar. 13, 1968	5.21	4,080
1933	Dec. 28, 1932	4.3	2,870	1969	Feb. 3, 1969	4.42	2,820
1934	Mar. 27, 1934	5.6	5,220	1970	Dec. 31, 1969	6.28	5,960
1935	Jan. 23, 1935	7.33	8,800	1971	Feb. 14, 1971	4.72	3,290
1936	Nov. 13, 1935	6.88	7,920	1972	June 21, 1972	6.83	7,060
1937	Aug. 31, 1937	4.88	3,910	1973	May 28, 1973	6.39	6,180
1938	Oct. 19, 1937	4.83	3,820	1974	May 13, 1974	4.76	3,360
1939	Jan. 30, 1939	3.98	2,390	1975	Mar. 14, 1975	7.10	7,600
1940	Aug. 14, 1940	4.82	3,730	1976	June 20, 1976	5.10	3,900
1941	Mar. 11, 1941	3.31	1,380	1977	Apr. 5, 1977	10.01	14,000
1942	May 22, 1942	5.24	4,230	1978	Mar. 10, 1978	5.33	4,270
1943	Dec. 30, 1942	5.41	4,500	1979	Feb. 25, 1979	5.20	4,060
1944	Feb. 18, 1944	6.60	6,940	1980	July 11, 1980	4.95	3,660
1945	Feb. 18, 1945	5.76	5,200	1981	May 28, 1981	4.00	2,220
1946	Jan. 8, 1946	6.49	6,700	1982	Feb. 3, 1982	5.09	3,840
1947	Jan. 20, 1947	6.10	5,820	1983	Apr. 10, 1983	4.31	2,650
1948	Feb. 14, 1948	6.10	5,820	1984	Feb. 14, 1984	6.17	5,710

03167000 REED CREEK AT GRAHAMS FORGE, VA--Continued

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1949	Dec. 4, 1948	5.55	4,820	1985	Aug. 18, 1985	4.07	2,310
1950	Feb. 2, 1950	4.92	3,580	1986	Nov. 4, 1985	4.29	2,620
1951	Dec. 8, 1950	5.22	4,090	1987	Apr. 25, 1987	6.08	5,540
1952	Jan. 29, 1952	3.60	1,690	1988	Feb. 4, 1988	3.58	1,710
1953	Feb. 21, 1953	5.21	4,090	1989	Sept. 23, 1989	5.03	3,740
1954	Jan. 23, 1954	5.56	4,820	1990	Oct. 2, 1989	5.59	4,690

KANAWHA RIVER BASIN

03167300 MIRA FORK TRIBUTARY NEAR DUGSPUR, VA

LOCATION.--Lat 36°50'16", long 80°34'44", Carroll County, Hydrologic Unit 05050001, on left upstream wingwall of culvert on U.S. Highway 221, 1.3 mi upstream from mouth, and 2.2 mi northeast of Dugspur.

DRAINAGE AREA.--0.62 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 2,602.96 ft above National Geodetic Vertical Datum of 1929. Prior to Aug. 10, 1978, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--4 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1967	July 20, 1967	2.70	38	1979	Sept. 21, 1979	5.77	171
1968	-	<3.00	<50	1980	Apr. 9, 1980	5.52	156
1969	Oct. 19, 1968	4.00	85	1981	May 28, 1981	4.45	103
1970	-	<3.00	<50	1982	-	<2.79	<44
1971	May 13, 1971	5.25	142	1983	Apr. 10, 1983	3.31	62
1972	May 3, 1972	3.82	78	1984	-	<2.79	<44
1973	May 28, 1973	4.48	104	1985	-	<2.79	<44
1974	-	<3.00	<50	1986	July 27, 1986	5.57	159
1975	Sept. 18, 1975	3.27	58	1987	-	<2.79	<44
1976	-	<3.00	<50	1988	Apr. 4, 1988	3.55	67
1977	Aug. 11, 1977	3.52	66	1989	May 8, 1989	5.98	184
1978	Oct. 25, 1977	4.55	108	1990	Jan. 1, 1990	as.98	-

< Less than.

a Affected by backwater from ice jam.

03167500 BIG REED ISLAND CREEK NEAR ALLISONIA, VA

LOCATION.--Lat 36°53'20", long 80°43'40", Pulaski County, Hydrologic Unit 05050001, on left bank 700 ft downstream from bridge on State Highway 693, 3.5 mi southeast of Allisonia, 4 mi upstream from Little Reed Island Creek, and at mile 4.5.

DRAINAGE AREA.--278 mi².

GAGE.--Water-stage recorder. Datum of gage is 1,902.74 ft above National Geodetic Vertical Datum of 1929. Prior to Sept. 30, 1916, nonrecording gage at site 4 mi downstream at different datum (drainage area, 291 mi²).

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,100 ft³/s and extended above on the basis of velocity-area study for 1909-16 site. Defined by current-meter measurements below 6,000 ft³/s and extended above on basis of slope-area measurement at 14,500 ft³/s.

BANKFULL STAGE.--7 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1909	Apr. 14, 1909	4.2	4,110	1962	Dec. 12, 1961	5.98	3,650
1910	June 13, 1910	4.6	4,660	1963	Mar. 13, 1963	7.50	5,850
1911	Oct. 7, 1910	3.4	3,070	1964	Apr. 14, 1964	6.32	4,070
1912	May 12, 1912	6.6	7,500	1965	Mar. 26, 1965	-	b4,400
1913	Mar. 14, 1913	5.4	5,780	1966	Feb. 13, 1966	10.14	10,100
1914	Jan. 31, 1914	3.6	3,330	1967	Mar. 7, 1967	8.50	7,350
1915	Jan. 7, 1915	5.8	6,060	1968	July 27, 1968	7.75	6,220
1939a	Aug. 18, 1939	6.52	4,160	1969	Oct. 19, 1968	10.17	10,200
1940	Aug. 14, 1940	11.70	13,000	1970	Dec. 31, 1969	6.45	4,280
1941	July 7, 1941	6.37	4,020	1971	Feb. 13, 1971	7.65	6,080
1942	May 22, 1942	6.33	3,880	1972	June 21, 1972	9.89	9,730
1943	May 26, 1943	7.36	5,550	1973	Feb. 2, 1973	8.84	7,870
1944	July 15, 1944	5.63	3,340	1974	Dec. 26, 1973	8.75	7,730
1945	Sept. 18, 1945	8.77	8,800	1975	Mar. 14, 1975	8.94	8,040
1946	Jan. 8, 1946	7.43	5,550	1976	Oct. 18, 1975	7.80	6,300
1947	June 14, 1947	10.3	10,500	1977	Oct. 9, 1976	9.50	9,030
1948	Oct. 18, 1947	7.73	6,120	1978	Jan. 26, 1978	11.29	12,300
1949	Aug. 29, 1949	7.38	5,550	1979	Sept. 22, 1979	12.38	14,200
1950	May 29, 1950	6.16	3,750	1980	Apr. 9, 1980	10.87	11,500
1951	Dec. 7, 1950	9.70	9,390	1981	Feb. 11, 1981	5.89	3,480
1952	Mar. 11, 1952	9.92	9,750	1982	Oct. 27, 1981	7.07	5,120
1953	Mar. 24, 1953	8.71	8,500	1983	Apr. 10, 1983	11.04	11,600
1954	Mar. 1, 1954	9.05	9,450	1984	Feb. 14, 1984	7.51	5,760
1955	Apr. 14, 1955	7.46	5,550	1985	Aug. 18, 1985	7.22	5,330
1956	Apr. 16, 1956	7.16	5,070	1986	Nov. 4, 1985	8.14	6,730
1957	Sept. 17, 1957	9.00	8,610	1987	Mar. 1, 1987	9.97	9,740
1958	Jan. 14, 1958	6.54	4,010	1988	Jan. 20, 1988	5.89	3,480
1959	Sept. 30, 1959	12.54	14,500	1989	Sept. 22, 1989	12.52	14,400
1960	Feb. 11, 1960	8.15	6,770	1990	Nov. 16, 1989	10.17	10,100
1961	Feb. 25, 1961	6.32	3,730				

a Partial year, April through September.

b Mean daily discharge; peak discharge is known to be greater than the value shown.

03167700 BEAVERDAM CREEK AT HILLSVILLE, VA

LOCATION.--Lat 36°46'05", long 80°43'33", Carroll County, Hydrologic Unit 05050001, at bridge on private road to Burlington Industries, 0.2 mi east of Hillsville corporate limits, and 3.0 mi upstream from mouth.

DRAINAGE AREA.--4.75 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 2,373.04 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 22, 1968, nonrecording gage at site 0.4 mi upstream at same datum (drainage area, 4.13 mi²). Nov. 6, 1973, to Aug. 10, 1978, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert since 1971. Rating not developed for upstream site.

BANKFULL STAGE.--10 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1962	Nov. 23, 1961	a3.05	-	1977	Mar. 13, 1977	3.83	229
1963	Nov. 9, 1962	a4.55	-	1978	Jan. 26, 1978	5.51	472
1964	Jan. 7, 1964	a3.90	-	1979	Sept. 21, 1979	7.42	834
1965	Feb. 7, 1965	a3.75	-	1980	Apr. 9, 1980	4.83	366
1966	Feb. 13, 1966	a7.24	-	1981	Feb. 11, 1981	3.46	186
1967	Aug. 24, 1967	a5.14	-	1982	July 15, 1982	4.68	345
1968	May 27, 1968	a4.56	-	1983	Apr. 10, 1983	4.72	351
1969	Oct. 19, 1966	a8.69	-	1984	Feb. 14, 1984	4.07	260
1970	July 22, 1970	a4.91	-	1985	Feb. 2, 1985	3.20	160
1971	Feb. 13, 1971	3.60	202	1986	Nov. 4, 1985	3.55	196
1972	June 21, 1972	4.59	333	1987	Mar. 1, 1987	4.35	299
1973	May 28, 1973	5.98	547	1988	Apr. 4, 1986	3.06	146
1974	Apr. 4, 1974	3.27	167	1989	July 5, 1989	6.85	720
1975	Dec. 3, 1974	3.85	232	1990	Jan. 1, 1990	b8.50	-
1976	June 3, 1976	6.03	556				

a At upstream site.

b Affected by backwater from ice jam.

03168000 NEW RIVER AT ALLISONIA, VA

LOCATION.--Lat 36°56'15", long 80°44'45", Pulaski County, Hydrologic Unit 05050001, on left bank on State Highway 653, 0.2 mi downstream from Big Reed Island Creek, and 0.5 mi upstream from Allisonia.

DRAINAGE AREA.--2,202 mi².

GAGE.--Water-stage recorder. Datum of gage is 1,848.36 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 52,000 ft³/s and extended above on basis of flood records for other stations on New River.

BANKFULL STAGE.--6 ft.

REMARKS.--Flow regulated by powerplants 25 mi upstream; peak discharge not materially affected.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1930	Oct. 2, 1929	11.14	59,800	1961	May 12, 1961	9.98	47,400
1931	Aug. 23, 1931	4.78	13,500	1962	Dec. 12, 1961	7.12	27,600
1932	May 2, 1932	4.72	13,000	1963	Mar. 16, 1963	10.24	48,800
1933	Oct. 17, 1932	6.63	25,700	1964	Mar. 6, 1964	6.22	21,900
1934	Mar. 28, 1934	6.48	24,700	1965	Mar. 27, 1965	7.94	32,800
1935	Nov. 29, 1934	8.28	38,000	1966	Feb. 13, 1966	9.93	46,700
1936	Nov. 13, 1935	7.52	32,000	1967	Mar. 7, 1967	6.52	23,800
1937	Oct. 17, 1936	5.85	20,600	1968	Mar. 13, 1968	5.89	20,000
1938	Oct. 19, 1937	8.33	38,000	1969	Oct. 19, 1968	6.46	23,500
1939	Aug. 19, 1939	6.79	27,200	1970	Aug. 10, 1970	8.23	35,000
1940	Aug. 14, 1940	23.42	185,000	1971	Feb. 13, 1971	5.31	16,600
1941	Dec. 28, 1940	5.05	15,600	1972	June 21, 1972	11.85	62,800
1942	May 22, 1942	6.69	26,300	1973	May 28, 1973	12.43	68,100
1943	Dec. 30, 1942	6.82	27,000	1974	Apr. 5, 1974	8.79	38,900
1944	Feb. 18, 1944	6.84	27,000	1975	Mar. 14, 1975	10.52	51,200
1945	Sept. 18, 1945	10.72	54,700	1976	Oct. 18, 1975	9.51	44,000
1946	Jan. 8, 1946	8.39	37,500	1977	Apr. 5, 1977	10.70	52,600
1947	Jan. 21, 1947	7.09	28,900	1978	Nov. 7, 1977	16.59	109,000
1948	Feb. 14, 1948	7.31	30,200	1979	Sept. 22, 1979	11.08	55,900
1949	Aug. 29, 1949	8.63	37,800	1980	Apr. 15, 1980	8.75	38,600
1950	Nov. 2, 1949	5.20	16,000	1981	May 28, 1981	7.35	29,200
1951	Dec. 8, 1950	10.32	49,500	1982	Feb. 3, 1982	7.90	32,800
1952	Mar. 11, 1952	7.67	31,500	1983	Apr. 10, 1983	9.55	44,300
1953	Mar. 24, 1953	7.58	30,800	1984	May 8, 1984	9.74	45,800
1954	Mar. 1, 1954	8.03	33,400	1985	Aug. 18, 1985	6.25	21,800
1955	Apr. 14, 1955	8.37	36,200	1986	Nov. 5, 1985	7.82	32,100
1956	Apr. 16, 1956	7.16	28,200	1987	Mar. 1, 1987	10.32	50,300
1957	Apr. 5, 1957	10.54	51,300	1988	Jan. 21, 1988	4.22	10,700
1958	Jan. 14, 1958	7.05	27,300	1989	Sept. 22, 1989	15.68	98,900
1959	Sept. 30, 1959	12.05	64,200	1990	Nov. 16, 1989	9.75	45,800
1960	Mar. 31, 1960	8.75	39,000				

03168500 PEAK CREEK AT PULASKI, VA

LOCATION.--Lat 37°02'50", long 80°46'35", Pulaski County, Hydrologic Unit 05050001, on right bank at upstream side of bridge on Second Street at Pulaski, 0.6 mi downstream from Tract Fork, and 8.7 mi upstream from mouth.

DRAINAGE AREA.--60.9 mi²; 58.3 mi² prior to 1951.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,897.79 ft above National Geodetic Vertical Datum of 1929. Prior to June 1951, nonrecording gage at site 0.2 mi upstream at datum 5.84 ft higher. June 1951 to September 1957, recording gage at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,200 ft³/s and extended above by logarithmic plotting for 1927-33. Defined by current-meter measurements below 2,300 ft³/s and extended above on basis of slope-area measurement at 4,900 ft³/s.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1927	Apr. 22, 1927	a9.2	2,850	1954	Mar. 1, 1954	10.03	4,830
1928	Nov. 17, 1927	a9.10	2,790	1955	Feb. 6, 1955	6.85	2,000
1929	June 9, 1929	a10.6	3,680	1956	Apr. 16, 1956	5.62	1,400
1930	Oct. 2, 1929	a10.8	3,890	1957	Jan. 29, 1957	9.24	4,140
1931	Apr. 4, 1931	a7.0	1,600	1958	-	6.12	1,650
1932	May 1, 1932	a8.4	2,370	1959	Sept. 30, 1959	6.98	2,160
1933	Dec. 28, 1932	a6.2	1,220	1960	Feb. 6, 1960	6.02	1,600
1952	Mar. 23, 1952	4.81	1,010	1961b	-	4.78	1,050
1953	June 7, 1953	7.65	2,500				

a At different site and datum prior to 1952.

b Partial year, October through March.

KANAWHA RIVER BASIN

03168600 PEAK CREEK TRIBUTARY NEAR PULASKI, VA

LOCATION.--Lat 37°04'19", long 80°46'25", Pulaski County, Hydrologic Unit 05050001, at culvert on State Highway 636, 2 mi north of Pulaski.

DRAINAGE AREA.--0.61 mi².

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is 1,983.82 ft above National Geodetic Vertical Datum of 1929. Prior to Aug. 13, 1970, nonrecording gage (crest-stage gage) at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--4.5 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1949	July 21, 1949	a9.71	340	1964	-	<3.40	<12
1951	-	<3.40	<12	1965	Apr. 9, 1965	4.20	26
1952	-	<3.40	<12	1966	Feb. 13, 1966	3.58	14
1953	-	3.92	18	1967	-	<3.40	<12
1954	Mar. 1, 1954	5.90	80	1968	-	<3.40	<12
1955	Feb. 6, 1955	5.0	47	1969	Aug. 17, 1969	3.31	11
1956	Apr. 16, 1956	4.60	35	1970	-	<3.45	<13
1957	Jan. 29, 1957	5.8	76	1971	-	<3.45	<13
1958	-	8.33	228	1972	-	<3.45	<13
1959	Dec. 29, 1958	5.54	64	1973	May 28, 1973	b11.50	-
1960	Mar. 30, 1960	3.46	13	1974	Dec. 20, 1973	3.93	19
1961	Aug. 26, 1961	4.50	32	1975	-	<3.45	<13
1962	-	<3.40	<12	1976	Oct. 17, 1975	4.55	34
1963	Mar. 12, 1963	3.41	12				

< Less than.

a From high-water mark.

b Stage may have been affected by debris in culvert.

03168750 THORNE SPRINGS BRANCH NEAR DUBLIN, VA

LOCATION.--Lat 37°05'30", long 80°44'34", Pulaski County, Hydrologic Unit 05050001, at pond dam just upstream from U.S. Highway 11, 3.3 mi southwest of Dublin, and 4.3 mi upstream from mouth.

DRAINAGE AREA.--4.77 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,975 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to 1970, water-stage recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow over weir by Soil Conservation Service.

BANKFULL STAGE.--7 ft.

REMARKS.--Prior to May 1970, records were provided by U.S. Department of Agriculture, Soil Conservation Service.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1957	July 27, 1957	2.56	212	1974	May 12, 1974	1.99	85
1958	May 17, 1958	2.99	374	1975	Dec. 1, 1974	3.65	720
1959	Jan. 21, 1959	1.51	40	1976	Oct. 17, 1975	3.29	525
1960	Apr. 3, 1960	2.21	124	1977	Apr. 4, 1977	2.58	219
1961	Feb. 12, 1961	1.21	22	1978	Apr. 26, 1978	2.17	114
1962	Aug. 22, 1962	2.33	150	1979	Feb. 25, 1979	1.87	72
1963	Oct. 14, 1962	2.41	170	1980	Apr. 14, 1980	2.10	101
1964	Jan. 9, 1964	2.03	90	1981	Feb. 9, 1981	1.52	41
1965	Feb. 7, 1965	1.08	16	1982	Feb. 3, 1982	1.84	69
1966	Aug. 11, 1966	2.34	153	1983	Apr. 10, 1983	1.59	46
1967	Aug. 24, 1967	1.59	46	1984	May 7, 1984	1.25	24
1968	July 13, 1968	2.30	144	1985	Feb. 2, 1985	.57	4.7
1969a	Feb. 10, 1969	1.04	15	1986	July 27, 1986	2.58	219
1970	Dec. 30, 1969	2.08	98	1987	Apr. 25, 1987	2.39	165
1971	Feb. 13, 1971	2.37	160	1988	Sept. 17, 1988	1.37	30
1972	June 21, 1972	1.27	28	1989	Sept. 22, 1989	2.51	198
1973	May 28, 1973	8.01	2,200	1990	May 29, 1990	1.88	73

a Partial year.

KANAWHA RIVER BASIN

03169200 DODD CREEK TRIBUTARY NEAR FLOYD, VA

LOCATION.--Lat 36°52'21", long 80°20'00", Floyd County, Hydrologic Unit 05050001, at culvert on State Highway 8, 2.8 mi southwest of Floyd.

DRAINAGE AREA.--0.96 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 2,390.45 ft above National Geodetic Vertical Datum of 1929. Prior to Sept. 10, 1975, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--3 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1967	Mar. 7, 1967	3.20	53	1972	June 21, 1972	5.20	210
1968	-	<2.55	<25	1973	May 28, 1973	5.28	225
1969	July 2, 1969	4.00	95	1974	Sept. 6, 1974	4.10	47
1970	Apr. 2, 1970	3.40	60	1975	Sept. 18, 1975	4.00	49
1971	May 13, 1971	3.73	43	1976	June 16, 1976	5.87	290

< Less than.

KANAWHA RIVER BASIN

03169350 BRUSH CREEK AT TERRYS FORK, VA

LOCATION.--Lat 37°02'44", long 80°16'45", Floyd County, Hydrologic Unit 05050001, at culvert on State Highway 660 and 0.8 mi west of Terrys Fork.

DRAINAGE AREA.--1.40 mi².

GAGE.--Water-stage recorder. Datum of gage is 2,485 ft above National Geodetic Vertical Datum of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by indirect methods by Soil Conservation Service.

BANKFULL STAGE.--Not determined.

REMARKS.--Records were provided by U.S. Department of Agriculture, Soil Conservation Service.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1957	Sept. 17, 1957	2.00	81	1967	Mar. 7, 1967	2.01	82
1958	Feb. 26, 1958	1.83	63	1968	Dec. 3, 1967	1.05	15
1959	Sept. 30, 1959	8.02	648	1969	Oct. 19, 1968	1.85	65
1960	Oct. 10, 1959	4.98	333	1970	July 24, 1970	1.97	77
1961	Aug. 22, 1961	2.32	115	1971	May 20, 1971	2.27	110
1962	July 30, 1962	1.75	55	1972	June 21, 1972	6.14	456
1963	Nov. 9, 1962	1.80	60	1973	May 28, 1973	1.84	348
1964	Aug. 31, 1964	1.52	38	1974	Apr. 4, 1974	2.17	101
1965	July 10, 1965	2.07	89	1975	Sept. 20, 1975	2.73	154
1966	Feb. 13, 1966	1.94	75	1976	June 17, 1976	1.78	56

03169500 LITTLE RIVER NEAR COPPER VALLEY, VA

LOCATION.--Lat 37°00'00", long 80°31'10", Floyd County, Hydrologic Unit 05050001, at highway bridge 600 ft upstream from Indian Creek, 0.5 mi north of Copper Valley, and 5 mi south of Childress.

DRAINAGE AREA.--239 mi².

GAGE.--Nonrecording gage (chain gage). Datum of gage is 1,900 ft above National Geodetic Vertical Datum of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 800 ft³/s and extended above. Peak discharge for flood of August 1940 determined from slope-area measurement.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1900	-	13.00	9,000	1913	Mar. 14, 1913	8.80	4,210
1909	Apr. 14, 1909	8.80	4,210	1914	Jan. 31, 1914	6.80	2,380
1910	June 14, 1910	7.30	2,820	1915	Jan. 7, 1915	8.40	3,830
1911	Apr. 5, 1911	6.00	1,720	1916	July 15, 1916	9.07	4,500
1912	May 12, 1912	8.70	4,120	1940	Aug. 14, 1940	-	14,000

03170000 LITTLE RIVER AT GRAYSONTON, VA

LOCATION.--Lat 37°02'15", long 80°33'25", Pulaski County, Hydrologic Unit 05050001, on left bank at upstream side of bridge on State Highway 693 at Snowville, 0.5 mi southeast of Grayson, 7 mi south of Radford, and at mile 8.6.

DRAINAGE AREA.--300 mi².

GAGE.--Water-stage recorder. Datum of gage is 1,816.04 ft above National Geodetic Vertical Datum of 1929. Prior to Nov. 20, 1931, nonrecording gage at bridge 1.0 mi downstream at datum 17.99 ft lower. Nov. 20, 1931, to Nov. 12, 1941, water-stage recorder 1.2 mi downstream at datum 20.58 ft lower.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 2,500 ft³/s for 1929-31. Defined by current-meter measurements below 3,500 ft³/s and extended above on basis of slope-area measurements near Floyd and near Copper Valley, and on basis of flood records for other stations in New River basin for 1932-41. Defined by current-meter measurements below 16,000 ft³/s and extended above on basis of slope-area measurement at 18,500 ft³/s and 25,000 ft³/s since 1941.

BANKFULL STAGE.--6 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1929	May 2, 1929	a8.0	6,180	1960	Feb. 11, 1960	5.33	5,070
1930	Oct. 2, 1929	a12.84	13,500	1961	May 11, 1961	5.33	5,070
1931	Aug. 22, 1931	a4.90	2,100	1962	Mar. 12, 1962	4.28	3,650
1932	May 1, 1932	a4.96	2,820	1963	Nov. 10, 1962	6.91	7,730
1933	Oct. 17, 1932	a11.44	10,300	1964	Feb. 6, 1964	4.08	3,350
1934	Sept. 16, 1934	a6.90	4,630	1965	Mar. 26, 1965	4.70	4,250
1935	Dec. 1, 1934	a11.04	9,740	1966	Feb. 13, 1966	6.48	7,050
1936	Feb. 14, 1936	b14.61	9,200	1967	Mar. 7, 1967	8.14	9,850
1937	Oct. 17, 1936	a9.92	8,240	1968	Mar. 13, 1968	3.26	2,110
1938	Oct. 19, 1937	a11.55	10,600	1969	Oct. 19, 1968	6.43	6,930
1939	Aug. 19, 1939	a10.67	9,320	1970	Dec. 13, 1969	4.43	3,840
1940	Aug. 14, 1940	a16.44	17,700	1971	Feb. 13, 1971	4.65	4,180
1941	Apr. 5, 1941	a2.61	1,290	1972	June 21, 1972	13.40	22,800
1942	Aug. 13, 1942	6.18	7,080	1973	May 28, 1973	7.78	9,560
1943	Dec. 30, 1942	4.68	4,140	1974	Apr. 4, 1974	5.46	5,390
1944	Sept. 18, 1944	6.44	7,520	1975	Mar. 14, 1975	7.77	9,540
1945	Sept. 18, 1945	8.30	11,000	1976	June 21, 1976	4.86	4,490
1946	Jan. 8, 1946	5.70	6,040	1977	Oct. 9, 1976	6.55	7,190
1947	June 14, 1947	6.10	6,870	1978	Jan. 26, 1978	10.33	15,000
1948	Feb. 14, 1948	6.42	7,500	1979	Sept. 22, 1978	8.78	11,600
1949	Aug. 29, 1949	7.64	9,420	1980	Apr. 15, 1980	6.47	7,010
1950	Sept. 10, 1950	4.58	3,950	1981	Feb. 9, 1981	3.89	2,720
1951	Dec. 8, 1950	10.4	13,900	1982	Feb. 3, 1982	5.40	5,080
1952	Mar. 11, 1952	6.28	6,860	1983	Apr. 10, 1983	9.39	12,800
1953	Mar. 24, 1953	6.69	7,610	1984	Feb. 14, 1984	5.08	4,540
1954	Mar. 1, 1954	4.60	3,950	1985	Aug. 18, 1985	5.54	5,330
1955	Oct. 16, 1954	7.11	8,400	1986	Nov. 5, 1985	11.67	18,200
1956	Apr. 16, 1956	5.02	4,600	1987	Apr. 24, 1987	6.90	7,780
1957	Sept. 17, 1957	7.71	9,660	1988	Jan. 20, 1988	3.98	2,850
1958	Jan. 14, 1958	4.59	3,930	1989	Sept. 22, 1989	10.49	15,400
1959	Sept. 30, 1959	12.76	18,500	1990	Nov. 16, 1989	5.73	5,650

a At different site and datum.

b At different site and datum; affected by backwater from ice.

03171000 NEW RIVER AT RADFORD, VA

LOCATION.--Lat 37°08'30", long 80°34'10", Pulaski County, Hydrologic Unit 05050001, on left bank 2,000 ft downstream from bridge on U.S. Highway 11 at Radford, 5 mi downstream from Little River, and 5.5 mi downstream from Claytor Dam.

DRAINAGE AREA.--2,748 mi².

GAGE.--Water-stage recorder. Datum of gage is 1,712.16 ft above National Geodetic Vertical Datum of 1929. Prior to Aug. 30, 1939, nonrecording gage at highway bridge 2,000 ft upstream at datum 0.85 ft lower.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 31,000 ft³/s and extended above on basis of curve of relation and 1941 rating, for 1896-1939. Defined by current-meter measurements below 75,000 ft³/s and extended above on basis of records for other stations on New River and flow over Claytor Dam (computed by Appalachian Power Company) since 1939.

BANKFULL STAGE.--7 ft.

REMARKS.--Flow regulated since May 1939 by Claytor Reservoir. Gage-height records for 1896-97 and 1916-39 from reports of the National Weather Service.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1878	Sept. 15, 1878	a37.4	217,000	1948	Feb. 14, 1948	10.86	34,500
1896	Apr. 1, 1896	b13.0	52,400	1949	Aug. 29, 1949	12.31	40,800
1897	Feb. 22, 1897	b16.0	67,200	1950	Nov. 2, 1949	5.58	15,200
1908	Jan. 12, 1908	a14.0	41,600	1951	Dec. 8, 1950	16.86	62,200
1909	May 21, 1909	a15.0	46,200	1952	Mar. 11, 1952	9.30	28,100
1910	June 14, 1910	a11.0	31,000	1953	Feb. 21, 1953	11.00	34,900
1911	Apr. 6, 1911	a8.8	21,900	1954	Mar. 1, 1954	13.90	48,000
1912	Mar. 16, 1912	a10.8	30,500	1955	Apr. 15, 1955	10.26	32,100
1913	Mar. 27, 1913	a15.0	46,200	1956	Apr. 16, 1956	10.63	33,300
1914	Feb. 21, 1914	a7.0	14,000	1957	Apr. 6, 1957	15.33	54,400
1915	Dec. 5, 1914	a13.6	38,700	1958	May 8, 1958	7.02	19,700
1916	July 16, 1916	a35.7	200,000	1959	Dec. 29, 1958	12.16	40,300
1917	Mar. 5, 1917	b8.0	32,000	1960	Oct. 1, 1959	18.64	71,000
1918	Jan. 29, 1918	b10.0	38,500	1961	May 12, 1961	13.95	48,400
1919	Oct. 26, 1918	b18.5	69,400	1962	Dec. 12, 1961	12.06	39,800
1920	Apr. 3, 1920	b5.0	19,600	1963	Mar. 13, 1963	13.62	46,600
1921	Feb. 12, 1921	b8.0	24,200	1964	Mar. 6, 1964	8.15	24,000
1922	Nov. 2, 1921	b7.7	31,000	1965	Mar. 27, 1965	11.23	35,800
1923	June 13, 1923	b8.7	27,500	1966	Feb. 14, 1966	15.57	55,700
1924	Jan. 17, 1924	b10.9	42,600	1967	Mar. 8, 1967	8.04	23,400
1925	Dec. 9, 1924	b5.7	22,800	1968	Mar. 13, 1968	7.86	22,700
1926	Jan. 19, 1926	b9.7	37,000	1969	Oct. 20, 1968	7.58	21,700
1927	Nov. 16, 1926	b9.1	34,500	1970	Aug. 10, 1970	10.12	31,400
1928	Aug. 17, 1928	b13.8	55,700	1971	May 14, 1971	5.80	15,800
1929	Mar. 1, 1929	b6.8	28,000	1972	June 21, 1972	20.21	80,600
1930	Oct. 2, 1929	b17.7	76,200	1973	May 28, 1973	20.02	79,300
1931	Aug. 23, 1931	b5.0	19,600	1974	Apr. 5, 1974	12.36	41,000
1932	May 2, 1932	b5.1	20,100	1975	Mar. 15, 1975	13.92	48,000

KANAWHA RIVER BASIN

03171000 NEW RIVER AT RADFORD, VA--Continued

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1933	Oct. 13, 1932	b8.7	34,000	1976	June 21, 1976	14.26	49,600
1934	Mar. 28, 1934	b6.0	24,200	1977	Apr. 5, 1977	16.46	60,000
1935	Nov. 29, 1934	b11.4	44,800	1978	Nov. 7, 1977	24.10	108,000
1936	Feb. 15, 1936	b10.0	38,500	1979	Sept. 22, 1979	15.23	53,900
1937	Jan. 21, 1937	b8.0	32,000	1980	Apr. 15, 1980	12.42	41,300
1938	Oct. 20, 1937	b12.0	47,500	1981	May 29, 1981	8.64	25,700
1939	Feb. 17, 1939	b4.0	15,300	1982	Feb. 3, 1982	12.15	40,100
1940	Aug. 14, 1940	35.96	218,000	1983	Apr. 10, 1983	13.79	47,700
1941	Dec. 29, 1940	4.96	13,200	1984	Feb. 15, 1984	11.87	39,000
1942	May 22, 1942	10.13	31,300	1985	Aug. 18, 1985	6.71	19,100
1943	Dec. 31, 1942	7.85	22,500	1986	Nov. 5, 1985	13.60	46,800
1944	Feb. 18, 1944	10.32	32,100	1987	Mar. 1, 1987	15.12	54,100
1945	Sept. 18, 1945	17.0	62,700	1988	Nov. 17, 1987	4.48	11,200
1946	Jan. 8, 1946	13.07	44,400	1989	Sept. 23, 1989	21.73	92,600
1947	Jan. 20, 1947	10.86	34,500	1990	Nov. 16, 1989	11.79	38,600

a Crest, from reports of the National Weather Service, 1904-15 datum, which is 0.85 ft below present datum.
 b Site 2,000 ft upstream and datum 2.56 ft higher.

03171150 CRAB CREEK TRIBUTARY NEAR CHRISTIANSBURG, VA

LOCATION.--Lat 37°07'56", long 80°27'32", Montgomery County, Hydrologic Unit 05050001, at culvert on U.S. Highway 11, 1.3 mi upstream from mouth, and 3.0 mi west of Christiansburg.

DRAINAGE AREA.--1.23 mi².

GAGE.--Water-stage recorder. Datum of gage is 1,970 ft above National Geodetic Vertical Datum of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by indirect methods by Soil Conservation Service.

BANKFULL STAGE.--Not determined.

REMARKS.--Records were provided by the U.S. Department of Agriculture, Soil Conservation Service.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1957	July 28, 1957	1.05	58	1967	Mar. 13, 1967	1.52	136
1958	Feb. 27, 1958	.89	26	1968	Mar. 12, 1968	.60	6.8
1959	Jan. 22, 1959	.90	27	1969	July 6, 1969	.65	9.2
1960	Apr. 3, 1960	1.31	110	1970	Aug. 20, 1970	.55	6.6
1961	Aug. 25, 1961	1.48	131	1971	Aug. 4, 1971	1.07	62
1962	June 23, 1962	1.30	109	1972	Oct. 25, 1971	1.90	182
1963	Oct. 13, 1962	.83	22	1973	May 28, 1973	1.38	118
1964	Jan. 17, 1964	1.04	55	1974	Aug. 26, 1974	1.19	90
1965	Sept. 16, 1965	1.02	49	1975	Mar. 14, 1975	1.42	123
1966	Aug. 21, 1966	1.87	178	1976	June 16, 1976	2.12	207

03171500 NEW RIVER AT EGGLESTON, VA

LOCATION.--Lat 37°17'22", long 80°37'01", Giles County, Hydrologic Unit 05050002, on left bank 50 ft downstream from highway bridge at Eggleston, 1.9 mi downstream from Spruce Run, and 7.8 mi upstream from Walker Creek.

DRAINAGE AREA.--2,941 mi².

GAGE.--Water-stage recorder. Datum of gage is 1,615.59 ft above National Geodetic Vertical Datum of 1929. Prior to July 2, 1926, nonrecording gage at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 83,000 ft³/s and extended above on basis of flood records for other stations on New River.

BANKFULL STAGE.--9 ft.

REMARKS.--Flow regulated since May 1939 by Claytor Reservoir 30 mi upstream.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1878	September 1878	a40	209,000	1949	Aug. 29, 1949	14.75	40,000
1915	Dec. 5, 1914	14.2	39,800	1950	Nov. 2, 1949	8.78	15,800
1916	July 16, 1916	39.5	204,000	1951	Dec. 8, 1950	19.23	61,800
1917	Mar. 5, 1917	11.86	28,400	1952	Mar. 12, 1952	11.90	27,500
1918	June 26, 1918	8.93	16,300	1953	Feb. 22, 1953	13.71	35,000
1919	Oct. 27, 1918	23.0	82,500	1954	Mar. 1, 1954	15.55	43,800
1920	Apr. 3, 1920	10.57	22,800	1955	Apr. 15, 1955	12.76	31,100
1921	Dec. 15, 1920	10.47	22,800	1956	Apr. 16, 1956	13.27	33,200
1922	Nov. 1, 1921	11.70	27,700	1957	Apr. 6, 1957	17.90	55,200
1923	June 13, 1923	11.40	26,400	1958	May 6, 1958	10.12	20,600
1924	Jan. 17, 1924	14.98	41,200	1959	Dec. 29, 1958	14.51	38,600
1925	Oct. 1, 1924	17.02	49,600	1960	Oct. 1, 1959	20.85	70,600
1926	Jan. 19, 1926	15.10	41,600	1961	May 12, 1961	15.22	41,900
1927	Nov. 16, 1926	13.13	33,400	1962	Dec. 12, 1961	14.22	37,200
1928	Aug. 17, 1928	18.04	53,800	1963	Mar. 13, 1963	15.86	45,200
1929	Feb. 28, 1929	12.20	29,700	1964	Mar. 6, 1964	10.99	23,900
1930	Oct. 2, 1929	22.44	72,300	1965	Mar. 27, 1965	13.78	35,400
1931	Aug. 23, 1931	9.15	17,600	1966	Feb. 14, 1966	17.95	55,700
1932	May 2, 1932	8.99	16,800	1967	Mar. 8, 1967	10.67	22,600
1933	Oct. 18, 1932	12.77	32,200	1968	Mar. 13, 1968	10.04	20,300
1934	Mar. 28, 1934	12.71	29,200	1969	Oct. 20, 1968	10.09	20,400
1935	Nov. 29, 1934	16.18	44,800	1970	Aug. 10, 1970	12.75	30,900
1936	Feb. 15, 1936	14.03	35,800	1971	Feb. 14, 1971	9.24	17,400
1937	Jan. 20, 1937	12.16	28,500	1972	June 22, 1972	22.81	82,100
1938	Oct. 20, 1937	16.43	45,700	1973	May 28, 1973	22.41	79,700
1939	Feb. 16, 1939	9.08	16,500	1974	Apr. 5, 1974	14.83	40,100
1940	Aug. 14, 1940	41.16	219,000	1975	Mar. 15, 1975	16.22	46,800
1941	July 5, 1941	8.77	15,400	1976	June 21, 1976	16.78	49,600
1942	May 22, 1942	13.16	32,800	1977	Apr. 5, 1977	19.01	60,800

03171500 NEW RIVER AT EGGLESTON, VA--Continued

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1943	Dec. 31, 1942	11.18	24,500	1978	Nov. 7, 1977	25.59	99,000
1944	Feb. 18, 1944	13.18	32,800	1979	Sept. 22, 1979	17.66	54,000
1945	Sept. 18, 1945	19.7	64,600	1980	Apr. 15, 1980	15.12	41,500
1946	Jan. 8, 1946	16.1	46,200	1981	May 29, 1981	11.30	25,000
1947	Jan. 21, 1947	13.67	35,000	1982	Feb. 4, 1982	14.56	38,900
1948	Feb. 15, 1948	13.69	35,000				

a Approximate.

KANAWHA RIVER BASIN

03171600 LITTLE STONY CREEK AT PEMBROKE, VA

LOCATION.--Lat 37°19'10", long 80°38'25", Giles County, Hydrologic Unit 05050002, at culvert on U.S. Highway 460, at Pembroke.

DRAINAGE AREA.--24.0 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined. Prior to Sept. 18, 1973, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--12 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1967	Mar. 7, 1967	10.40	465	1971	May 30, 1971	10.40	395
1968	Mar. 13, 1968	10.08	275	1972	June 21, 1972	14.20	-
1969	Oct. 19, 1968	10.35	430	1973	May 28, 1973	11.90	760
1970	Dec. 31, 1969	10.60	490				

KANAWHA RIVER BASIN

03171800 HELVEYS MILL CREEK TRIBUTARY AT POINT PLEASANT, VA

LOCATION.--Lat 37°07'24", long 81°01'16", Bland County, Hydrologic Unit 05050002, at culvert on State Highway 42, 0.2 mi west of Point Pleasant.

DRAINAGE AREA.--0.38 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Not developed.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1961	-	<0.00	<1.00	1970	Dec. 30, 1969	0.91	-
1962	-	<.00	<1.00	1971	Feb. 13, 1971	1.29	-
1963	Mar. 12, 1963	.32	-	1972	June 21, 1972	1.00	-
1964	Mar. 5, 1964	.30	-	1973	Dec. 10, 1972	.94	-
1965	Feb. 8, 1965	.65	-	1974	Apr. 4, 1974	1.98	-
1966	Feb. 13, 1966	.91	-	1975	June 26, 1975	2.28	-
1967	Nov. 3, 1966	1.04	-	1976	Oct. 17, 1975	2.75	-
1968	Mar. 13, 1968	1.27	-	1977	Apr. 4, 1977	3.22	-
1969	Feb. 2, 1969	.59	-	1978	Jan. 26, 1978	3.14	-

< Less than.

KANAWHA RIVER BASIN

03172500 WALKER CREEK AT STAFFORDSVILLE, VA

LOCATION.--Lat 37°14'30", long 80°42'40", Giles County, Hydrologic Unit 05050002, at highway bridge at Staffordsville, 500 ft downstream from Whitley Creek.

DRAINAGE AREA.--277 mi².

GAGE.--Nonrecording gage (chain gage). Datum of gage is 1,720 ft above National Geodetic Vertical Datum of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,900 ft³/s and extended above on basis of velocity-area studies.

BANKFULL STAGE.--8 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1909	May 27, 1909	9.8	5,100	1913	Mar. 27, 1913	15.8	12,100
1910	June 13, 1910	8.7	4,000	1914	Feb. 20, 1914	7.5	2,820
1911	Jan. 30, 1911	8.1	3,400	1915	Jan. 7, 1915	10.8	6,180
1912	Mar. 29, 1912	12.0	7,500	1916	July 16, 1916	14.5	10,500

03173000 WALKER CREEK AT BANE, VA

LOCATION.--Lat 37°16'05", long 80°42'35", Giles County, Hydrologic Unit 05050002, on left bank at Bane, 0.2 mi downstream from bridge on State Highway 100, 0.2 mi downstream from Sugar Run, and at mile 7.9.

DRAINAGE AREA.--305 mi².

GAGE.--Water-stage recorder. Datum of gage is 1,665.92 ft above National Geodetic Vertical Datum of 1929. Prior to Aug. 1, 1938, nonrecording gage at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 7,000 ft³/s and extended on basis of slope-area measurement at 16,500 ft³/s.

BANKFULL STAGE.--10 ft.

REMARKS.-- Flood peak of September 1878 was maximum known by local resident as of 1938.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1878	September 1878	23.5	-	1964	Mar. 5, 1964	10.07	5,180
1938a	July 22, 1938	12.4	9,350	1965	Feb. 8, 1965	10.74	6,190
1939	Jan. 30, 1939	9.65	4,450	1966	Feb. 13, 1966	12.11	8,570
1940	Apr. 20, 1940	12.64	9,760	1967	Mar. 7, 1967	10.35	5,600
1941	July 5, 1941	9.16	3,700	1968	Mar. 13, 1968	9.13	3,850
1942	May 22, 1942	11.63	7,430	1969	Feb. 3, 1969	7.39	2,120
1943	Dec. 30, 1942	11.13	6,580	1970	Dec. 31, 1969	10.93	6,580
1944	Feb. 18, 1944	14.0	12,800	1971	Feb. 14, 1971	10.38	5,650
1945	Sept. 18, 1945	10.9	5,890	1972	June 21, 1972	13.69	11,300
1946	Jan. 8, 1946	12.6	9,760	1973	Feb. 2, 1973	11.59	7,700
1947	Jan. 20, 1947	10.23	5,010	1974	Apr. 4, 1974	13.01	10,100
1948	Feb. 14, 1948	12.50	8,700	1975	Mar. 14, 1975	12.91	9,950
1949	June 17, 1949	14.44	13,700	1976	Jan. 1, 1976	11.43	7,430
1950	May 3, 1950	10.77	6,350	1977	Apr. 5, 1977	16.69	16,900
1951	Dec. 8, 1950	12.33	9,150	1978	Jan. 26, 1978	12.90	9,930
1952	Apr. 28, 1952	8.84	3,480	1979	Feb. 25, 1979	11.38	7,350
1953	Feb. 21, 1953	11.82	8,150	1980	Apr. 14, 1980	10.20	5,440
1954	Mar. 1, 1954	10.40	5,670	1981	May 28, 1981	9.24	4,150
1955	Apr. 14, 1955	12.85	10,200	1982	June 13, 1982	11.05	6,770
1956	Apr. 16, 1956	10.47	5,840	1983	Apr. 10, 1983	9.66	4,710
1957	Jan. 30, 1957	16.50	16,500	1984	May 7, 1984	11.38	7,260
1958	Mar. 31, 1958	10.89	6,510	1985	Feb. 2, 1985	8.71	3,490
1959	Apr. 13, 1959	10.87	6,530	1986	May 21, 1986	9.56	4,580
1960	Mar. 30, 1960	10.03	5,020	1987	Apr. 25, 1987	12.76	9,470
1961	May 12, 1961	9.44	4,190	1988	Jan. 20, 1988	7.42	2,130
1962	Dec. 18, 1961	10.40	5,680	1989	Sept. 23, 1989	11.48	7,410
1963	Mar. 12, 1963	12.36	9,080	1990	Oct. 1, 1989	10.92	6,560

a Partial year, April through September.

KANAWHA RIVER BASIN

03175500 WOLF CREEK NEAR NARROWS, VA

LOCATION.--Lat 37°18'20", long 80°51'00", Giles County, Hydrologic Unit 05050002, on right bank at downstream side of bridge on State Highway 724, 2.8 mi southwest of Narrows, and at mile 3.5.

DRAINAGE AREA.--223 mi².

GAGE.--Water-stage recorder. Datum of gage is 1,583.83 ft above National Geodetic Vertical Datum of 1929. July 22, 1908, to Sept. 30, 1916, and Mar. 31 to Nov. 7, 1938, nonrecording gage at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 5,700 ft³/s and extended above on basis of contracted-opening measurement at 12,700 ft³/s.

BANKFULL STAGE.--8 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1909	Apr. 30, 1909	9.0	5,500	1961	Feb. 25, 1961	10.42	7,680
1910	Jan. 21, 1910	7.8	3,740	1962	Dec. 18, 1961	8.80	4,760
1911	Mar. 10, 1911	8.2	4,300	1963	Mar. 12, 1963	11.42	10,100
1912	Mar. 15, 1912	9.3	6,010	1964	Mar. 5, 1964	9.19	5,240
1913	Mar. 27, 1913	11.7	8,820	1965	Mar. 26, 1965	9.03	5,000
1914	Feb. 20, 1914	7.0	2,740	1966	Feb. 13, 1966	8.88	4,880
1915	Jan. 7, 1915	10.4	6,800	1967	Mar. 7, 1967	9.63	5,990
1916	July 16, 1916	13.0	11,000	1968	May 28, 1968	7.44	3,140
1938a	May 24, 1938	6.14	1,980	1969	Feb. 2, 1969	5.79	1,570
1939	Jan. 30, 1939	7.10	2,740	1970	Dec. 31, 1969	10.30	7,460
1940	Apr. 20, 1940	8.77	5,200	1971	May 7, 1971	8.60	4,520
1941	July 6, 1941	9.31	6,010	1972	Apr. 14, 1972	10.09	7,000
1942	May 22, 1942	7.70	3,360	1973	Mar. 17, 1973	9.24	5,300
1943	Dec. 30, 1942	7.91	3,880	1974	Dec. 27, 1973	9.59	5,900
1944	Feb. 18, 1944	11.10	9,430	1975	Mar. 14, 1975	10.87	8,790
1945	Feb. 17, 1945	8.92	5,350	1976	Jan. 1, 1976	8.43	4,320
1946	Jan. 8, 1946	10.0	7,200	1977	Apr. 5, 1977	12.01	11,500
1947	Jan. 16, 1947	9.43	6,180	1978	Jan. 26, 1978	10.10	7,020
1948	Feb. 14, 1948	10.50	8,200	1979	Jan. 21, 1979	9.40	5,540
1949	June 17, 1949	9.41	6,180	1980	July 29, 1980	6.80	2,500
1950	Feb. 2, 1950	9.62	6,520	1981	May 28, 1981	8.08	3,750
1951	Dec. 7, 1950	10.05	7,200	1982	June 13, 1982	9.77	6,240
1952	Mar. 11, 1952	9.02	5,500	1983	Mar. 21, 1983	7.11	2,650
1953	Feb. 21, 1953	9.26	6,010	1984	May 7, 1984	10.21	7,130
1954	Jan. 22, 1954	7.75	3,110	1985	Feb. 1, 1985	7.79	3,400
1955	Mar. 6, 1955	10.66	7,870	1986	Mar. 15, 1986	7.90	3,530
1956	Apr. 16, 1956	9.50	6,350	1987	Apr. 25, 1987	10.89	8,630
1957	Jan. 29, 1957	b13.8	12,900	1988	Jan. 20, 1988	5.78	1,490
1958	Mar. 31, 1958	9.69	6,670	1989	Sept. 23, 1989	8.68	4,510
1959	Apr. 13, 1959	8.25	4,300	1990	Jan. 1, 1990	9.82	6,340
1960	Mar. 31, 1960	9.36	5,540				

a Partial year, April through September.

b From high-water marks.

03176500 NEW RIVER AT GLEN LYN, VA

LOCATION.--Lat 37°22'22", long 80°51'39", Giles County, Hydrologic Unit 05050002, on right bank 90 ft upstream from bridge on U.S. Highway 460 at Glen Lyn, 0.3 mi upstream from East River, and 6.3 mi downstream from Wolf Creek.

DRAINAGE AREA.--3,768 mi².

GAGE.--Water-stage recorder. Datum of gage is 1,490.11 ft above National Geodetic Vertical Datum of 1929. Aug. 11, 1927, to Oct. 16, 1934, on left bank just upstream from highway bridge at same datum, and Oct. 16, 1934, to June 16, 1939, on left bank 200 ft upstream from highway bridge at same datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 17,500 ft³/s and extended above for site 6.5 mi upstream. Defined by current-meter measurements below 88,000 ft³/s and extended above on basis of slope-area measurement at 226,000 ft³/s at present site.

BANKFULL STAGE.--11 ft.

REMARKS.--Records prior to Aug. 10, 1927, collected by the National Weather Service. Flow regulated since 1939 by Claytor Reservoir 55 mi upstream.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1878	Sept. 13, 1878	a33.1	240,000	1953	Feb. 22, 1953	11.42	47,100
1915	Dec. 5, 1914	b13.5	38,000	1954	Mar. 1, 1954	11.93	51,500
1916	July 16, 1916	b31.1	210,000	1955	Apr. 15, 1955	10.13	36,900
1917	Mar. 5, 1917	b13.5	34,000	1956	Apr. 17, 1956	11.13	44,700
1918	Jan. 29, 1918	b14.6	40,000	1957	Apr. 6, 1957	13.57	66,700
1919	Oct. 26, 1918	b19.0	73,000	1958	Mar. 31, 1958	10.41	35,300
1920	Apr. 3, 1920	b12.0	27,000	1959	Dec. 29, 1958	12.15	52,000
1921	Feb. 11, 1921	b12.4	29,000	1960	Mar. 31, 1960	13.60	66,000
1922	Mar. 16, 1922	b10.4	20,000	1961	May 13, 1961	12.14	51,000
1923	June 13, 1923	b15.0	43,000	1962	Dec. 13, 1961	11.28	43,000
1924	Jan. 17, 1924	b15.0	43,000	1963	Mar. 13, 1963	12.72	57,000
1925	Dec. 9, 1924	b9.7	17,000	1964	Mar. 6, 1964	9.57	29,200
1926	Jan. 19, 1926	b12.0	27,000	1965	Mar. 27, 1965	11.39	44,000
1927	Nov. 16, 1926	c10.74	42,000	1966	Feb. 14, 1966	14.37	74,000
1928	Aug. 17, 1928	13.47	66,000	1967	Mar. 7, 1967	10.28	34,200
1929	Mar. 1, 1929	10.40	36,100	1968	Mar. 14, 1968	8.65	22,900
1930	Oct. 3, 1929	16.75	99,000	1969	Oct. 19, 1968	9.66	29,600
1931	Aug. 23, 1931	7.66	19,600	1970	Jan. 1, 1970	9.86	31,000
1932	May 2, 1932	7.94	21,200	1971	Feb. 14, 1971	9.31	27,200
1933	Oct. 18, 1932	9.84	32,500	1972	June 22, 1972	17.36	105,000
1934	Mar. 28, 1934	-	d35,000	1973	May 29, 1973	16.69	93,600
1935	Jan. 23, 1935	13.40	63,600	1974	Apr. 5, 1974	11.75	47,000
1936	Feb. 15, 1936	12.00	51,600	1975	Mar. 14, 1975	14.49	71,400
1937	Jan. 20, 1937	10.95	43,500	1976	June 21, 1976	12.67	55,000
1938	Oct. 20, 1937	12.65	56,600	1977	Apr. 5, 1977	17.16	98,900
1939	Jan. 31, 1939	7.60	20,100	1978	Nov. 7, 1977	18.12	110,000
1940	Aug. 14, 1940	27.50	226,000	1979	Feb. 26, 1979	13.62	63,600
1941	July 6, 1941	8.30	24,300	1980	Apr. 15, 1980	12.08	49,700

KANAWHA RIVER BASIN

03176500 NEW RIVER AT GLEN LYN, VA--Continued

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1942	May 22, 1942	10.91	43,100	1981	May 29, 1981	9.59	31,600
1943	Dec. 31, 1942	9.55	33,200	1982	Feb. 4, 1982	12.14	50,400
1944	Feb. 18, 1944	11.01	43,900	1983	Apr. 10, 1983	12.96	57,100
1945	Sept. 18, 1945	14.5	76,000	1984	Feb. 15, 1984	11.96	48,700
1946	Jan. 8, 1946	13.5	66,000	1985	Aug. 19, 1985	8.95	24,700
1947	Jan. 21, 1947	11.1	44,700	1986	Nov. 5, 1985	12.55	53,600
1948	Feb. 15, 1948	11.32	46,300	1987	Apr. 25, 1987	15.97	85,200
1949	Dec. 4, 1948	11.66	49,700	1988	Jan. 20, 1988	6.47	12,900
1950	Feb. 2, 1950	9.09	29,600	1989	Sept. 23, 1989	17.71	103,000
1951	Dec. 8, 1950	14.85	79,000	1990	Nov. 17, 1989	11.38	44,300
1952	Mar. 12, 1952	9.90	35,400				

a Estimated by National Weather Service at 1926 site.

b At different datum at site 6.5 miles upstream.

c Information furnished by Appalachian Power Company.

d Estimated.

KANAWHA RIVER BASIN

379

03177700 BLUESTONE RIVER AT BLUEFIELD, VA

LOCATION.--Lat 37°15'21", long 81°16'55", Tazewell County, Hydrologic Unit 05050002, on right bank 50 ft downstream from pump house and 1,000 ft upstream from outfall of sewage treatment plant at Bluefield, 0.9 mi downstream from Beaverpond Creek, and 3.5 mi upstream from Brush Fork.

DRAINAGE AREA.--39.8 mi².

GAGE.--Nonrecording gage (staff gage). Datum of gage is 2,350 ft above National Geodetic Vertical Datum of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 800 ft³/s and extended above.

BANKFULL STAGE.--5 ft.

REMARKS.--Records were provided by the Virginia Water Control Board.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1966	May 2, 1966	5.10	550	1974	Mar. 12, 1974	4.90	520
1967	Mar. 7, 1967	6.30	783	1975	Mar. 14, 1975	7.40	1,030
1968	May 27, 1968	4.28	432	1976	Jan. 1, 1976	4.72	490
1969	Feb. 9, 1969	2.56	197	1977	Apr. 4, 1977	6.40	805
1970	Dec. 30, 1969	6.10	739	1978	Jan. 26, 1978	7.80	1,120
1971	May 6, 1971	6.24	761	1979	Jan. 21, 1979	5.70	655
1972	Apr. 14, 1972	7.00	937	1980	July 10, 1980	8.40	1,260
1973	Dec. 10, 1972	5.80	675				

KANAWHA RIVER BASIN

03177710 BLUESTONE RIVER AT FALLS MILLS, VA

LOCATION.--Lat 37°16'17", long 81°18'18", Tazewell County, Hydrologic Unit 05050002, on right bank at upstream side of bridge on State Highway 717, 0.3 mi upstream from Brush Fork, and 0.4 mi southeast of Falls Mills.

DRAINAGE AREA.--44.2 mi².

GAGE.--Water-stage recorder. Datum of gage is 2,310.41 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 650 ft³/s and extended above.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1981	May 28, 1981	5.68	667	1988	Mar. 15, 1988	4.81	525
1982	June 10, 1982	6.26	738	1987	Apr. 25, 1987	8.21	1,020
1983	Apr. 10, 1983	4.25	445	1988	Sept. 17, 1988	3.19	296
1984	May 7, 1984	8.37	1,050	1989	Sept. 22, 1989	6.86	825
1985	Feb. 1, 1985	6.33	749	1990	Jan. 1, 1990	5.85	677

BIG SANDY RIVER BASIN

03207400 PRATER CREEK AT VANSANT, VA

LOCATION.--Lat 37°13'05", long 82°06'10", Buchanan County, Hydrologic Unit 05070202, at bridge on State Highway 620, 1 mi south of Vansant.

DRAINAGE AREA.--19.8 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,152.77 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 260 ft³/s and extended above on basis of contracted-opening measurements at 1,140 ft³/s and 4,550 ft³/s.

BANKFULL STAGE.--9 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1951	Feb. 1, 1951	3.54	260	1965	Mar. 26, 1965	5.33	1,500
1952	Apr. 28, 1952	-	a1,500	1966	May 1, 1966	3.03	100
1953	May 19, 1953	4.30	720	1967	Mar. 7, 1967	4.03	530
1954	Jan. 22, 1954	-	450	1968	May 27, 1968	4.19	650
1955	Feb. 27, 1955	5.20	1,400	1969	Jan. 20, 1969	2.35	35
1956	Apr. 15, 1956	4.87	1,140	1970	Apr. 28, 1970	4.10	575
1957	Jan. 29, 1957	9.45	4,550	1971	May 7, 1971	4.22	665
1958	Aug. 25, 1958	-	3,000	1972	Apr. 12, 1972	4.65	988
1959	Dec. 29, 1958	4.70	1,000	1973	Mar. 16, 1973	3.87	435
1960	Nov. 28, 1959	4.30	700	1974	Jan. 11, 1974	4.66	995
1961	Feb. 25, 1961	4.94	1,210	1975	Mar. 30, 1975	4.70	1,020
1962	Dec. 18, 1961	5.20	1,400	1976	Dec. 31, 1975	2.90	90
1963	Mar. 12, 1963	7.50	3,200	1977	Apr. 4, 1977	13.49	b8,000
1964	Mar. 8, 1964	4.15	600				

a Estimated.

b Approximate.

03207500 LEVISA FORK NEAR GRUNDY, VA

LOCATION.--Lat 37°17'52", long 82°07'34", Buchanan County, Hydrologic Unit 05070202, on right bank 200 ft upstream from Six and Twenty Mile Creek, 2.4 mi northwest of Grundy, 2.5 mi downstream from Slate Creek, and 3.0 mi upstream from Poplar Creek.

DRAINAGE AREA.--235 mi², includes that of Six and Twenty Mile Creek.

GAGE.--Water-stage recorder. Datum of gage is 984.47 ft above National Geodetic Vertical Datum of 1929. Prior to Aug. 20, 1949, nonrecording gage at bridge 1,000 ft downstream at datum 1.70 ft higher. Aug. 20, 1949, to July 28, 1958, water-stage recorder at site 1,050 ft downstream at datum 1.70 ft higher; July 29, 1958, to Aug. 1, 1961, at site 1,020 ft downstream at datum 0.30 ft lower; and Aug. 2, 1961, to Sept. 30, 1974, at present site at datum 4.03 ft higher.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 16,700 ft³/s and extended above on basis of slope-area and contracted-opening measurements at 33,000 ft³/s.

BANKFULL STAGE.--16 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1929	March 1929	a16.0	21,800	1962	Feb. 28, 1962	9.04	8,600
1942	June 20, 1942	9.37	5,720	1963	Mar. 12, 1963	18.19	24,100
1943	Mar. 13, 1943	11.94	11,700	1964	Mar. 8, 1964	6.9	6,120
1944	Feb. 17, 1944	14.0	16,000	1965	Mar. 26, 1965	11.11	12,100
1945	Feb. 17, 1945	13.6	14,900	1966	May 1, 1966	8.14	7,680
1946	Jan. 7, 1946	14.5	17,400	1967	Mar. 7, 1967	16.65	21,300
1947	Jan. 15, 1947	10.5	8,000	1968	May 27, 1968	10.70	11,500
1948	Feb. 13, 1948	11.17	9,700	1969	Jan. 20, 1969	4.15	2,220
1949	Mar. 18, 1949	10.0	7,000	1970	Apr. 28, 1970	11.24	12,300
1950	Feb. 2, 1950	13.00	13,300	1971	May 6, 1971	11.92	13,400
1951	Feb. 1, 1951	8.33	4,370	1972	Jan. 21, 1972	13.78	16,200
1952	Apr. 28, 1952	10.98	9,200	1973	Mar. 16, 1973	13.36	15,500
1953	May 19, 1953	13.17	13,800	1974	Jan. 11, 1974	13.63	16,000
1954	Jan. 22, 1954	6.55	2,680	1977	Apr. 4, 1977	b28.87	52,000
1955	Feb. 27, 1955	13.36	14,400	1984	May 7, 1984	b23.40	32,800
1956	Apr. 15, 1956	12.43	11,800	1986	May 13, 1986	b11.08	5,550
1957	Jan. 29, 1957	19.06	33,200	1987	Apr. 8, 1987	b13.42	8,990
1958	Aug. 25, 1958	16.6	17,700	1988	Dec. 25, 1987	b7.32	1,780
1959	Apr. 12, 1959	10.25	6,420	1989	May 5, 1989	b13.80	9,630
1960	Nov. 28, 1959	8.29	3,830	1990	Oct. 17, 1989	b13.04	8,370
1961	July 31, 1961	11.01	7,700				

a From information by local resident; site and datum in use prior to July 29, 1958.

b At present site and datum.

BIG SANDY RIVER BASIN

03207800 LEVISA FORK AT BIG ROCK, VA

LOCATION.--Lat 37°21'13", long 82°11'45", Buchanan County, Hydrologic Unit 05070202, on left bank at Big Rock, 2,000 ft downstream from Rocklick Creek, and 2,500 ft downstream from bridge on State Highway 645.

DRAINAGE AREA.--297 mi².

GAGE.--Water-stage recorder. Datum of gage is 866.37 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 9,070 ft³/s and extended above on basis of slope-area measurement at 56,000 ft³/s.

BANKFULL STAGE.--22 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1957	Jan. 29, 1957	23.00	-	1979	July 15, 1979	12.46	11,400
1968	May 27, 1968	10.07	5,460	1980	Jan. 18, 1980	8.63	3,910
1969	Jan. 21, 1969	7.36	2,070	1981	June 7, 1981	9.90	6,050
1970	Apr. 28, 1970	13.00	13,000	1982	May 27, 1982	12.48	11,400
1971	May 6, 1971	13.95	14,900	1983	Apr. 24, 1983	7.24	2,410
1972	Jan. 21, 1972	15.40	18,100	1984	May 7, 1984	20.74	33,200
1973	Mar. 16, 1973	15.16	17,600	1985	Feb. 1, 1985	10.41	7,100
1974	Jan. 11, 1974	15.90	19,200	1986	May 13, 1986	9.18	5,040
1975	Mar. 30, 1975	15.70	18,700	1987	Apr. 8, 1987	11.58	10,300
1976	Jan. 1, 1976	8.37	4,590	1988	Dec. 25, 1987	7.06	2,260
1977	Apr. 4, 1977	27.38	56,000	1989	May 6, 1989	11.70	9,630
1978	Jan. 26, 1978	17.56	24,200	1990	Oct. 17, 1989	12.14	10,600

a From information by local resident.

BIG SANDY RIVER BASIN

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03208034 GRISSOM CREEK NEAR COUNCIL, VA

LOCATION.--Lat 37°04'43", long 82°02'25", Buchanan County, Hydrologic Unit 05070202, on right bank 150 ft upstream from culvert on State Highway 620, 250 ft upstream from mouth, and 1.7 mi east of Council.

DRAINAGE AREA.--2.82 mi².

GAGE.--Water-stage recorder and V-notch sharp-crested weir. Datum of gage is 1,810 ft above National Geodetic Vertical Datum of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 30 ft³/s and extended above.

BANKFULL STAGE.--3.5 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1982	Feb. 3, 1982	3.02	85	1983	Apr. 24, 1983	2.74	37

BIG SANDY RIVER BASIN

03208036 BARTON FORK NEAR COUNCIL, VA

LOCATION.--Lat 37°04'37", long 82°02'21", Buchanan County, Hydrologic Unit 05070202, on left bank on private road, 180 ft upstream from mouth, 200 ft upstream from State Highway 620, 0.5 mi downstream from Coon Flat Branch, and 1.8 mi east of Council.

DRAINAGE AREA.--1.23 mi².

GAGE.--Water-stage recorder and V-notch sharp-crested weir. Datum of gage is 1,800 ft above National Geodetic Vertical Datum of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 22 ft³/s and extended above.

BANKFULL STAGE.--2.5 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1982	Sept. 14, 1982	2.52	49	1983	Oct. 9, 1982	2.20	22

BIG SANDY RIVER BASIN

03208040 RUSSELL FORK AT COUNCIL, VA

LOCATION.--Lat 37°04'41", long 82°03'56", Buchanan County, Hydrologic Unit 05070202, on left bank 50 ft upstream from bridge on State Highway 80, 750 ft downstream from Ball Creek, 0.6 mi southeast of Council, and 4.7 mi upstream from Hurricane Creek.

DRAINAGE AREA.--10.2 mi².

GAGE.--Water-stage recorder. Datum of gage is 1,680 ft above National Geodetic Vertical Datum of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 130 ft³/s and extended above.

BANKFULL STAGE.--12 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1983	Dec. 16, 1982	1.99	138	1987	Apr. 8, 1987	3.87	628
1984	May 7, 1984	5.98	1,540	1988	Apr. 8, 1988	2.93	343
1985	Feb. 1, 1985	a>1.91	-	1989	May 5, 1989	4.37	810
1986	Feb. 18, 1986	3.18	411	1990	May 5, 1990	4.36	806

> Greater than.

a Mechanical failure in recording device; value shown is minimum gage height for period October through February.

BIG SANDY RIVER BASIN

03208100 RUSSELL FORK NEAR BIRCHLEAF, VA

LOCATION.--Lat 37°09'50", long 82°15'20", Dickenson County, Hydrologic Unit 05070202, on right bank 125 ft upstream from bridge on State Highway 80, 150 ft upstream from Fryingspan Creek, 1.3 mi southeast of Birchleaf and 3.5 mi southeast of Haysi.

DRAINAGE AREA.--87.4 mi².

GAGE.--Water-stage recorder. Datum of gage is 1,280 ft above National Geodetic Vertical Datum of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,100 ft³/s and extended above.

BANKFULL STAGE.--23 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1982	Sept. 14, 1982	8.85	3,470	1987	July 11, 1987	17.92	15,800
1983	Mar. 24, 1983	6.17	1,500	1988	Apr. 8, 1988	4.04	523
1984	May 7, 1984	21.30	22,600	1989	May 5, 1989	10.98	5,570
1985	Feb. 1, 1985	9.15	3,730	1990	Oct. 17, 1989	9.92	4,460
1986	Feb. 18, 1986	7.24	2,190				

03208500 RUSSELL FORK AT HAYSI, VA

LOCATION.--Lat 37°12'25", long 82°17'45", Dickenson County, Hydrologic Unit 05070202, on right bank 180 ft downstream from bridge on State Highway 63, at Haysi, and 700 ft downstream from McClure River.

DRAINAGE AREA.--286 mi².

GAGE.--Water-stage recorder. Datum of gage is 1,237.61 ft above National Geodetic Vertical Datum of 1929. Prior to Dec. 21, 1939, nonrecording gage at highway bridge 180 ft upstream at same datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 31,000 ft³/s and extended above on basis of slope-area measurements at 46,600 ft³/s and 59,000 ft³/s.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1927	Dec. 21, 1926	12.5	17,500	1959	Apr. 12, 1959	10.39	12,200
1928	Apr. 29, 1928	8.8	8,800	1960	Nov. 28, 1959	10.46	12,500
1929	Mar. 23, 1929	18.5	34,500	1961	July 31, 1961	14.88	24,200
1930	Nov. 18, 1929	8.72	8,600	1962	Feb. 28, 1962	11.78	15,900
1931	July 23, 1931	8.02	7,200	1963	Mar. 12, 1963	21.10	33,800
1932	Jan. 30, 1932	13.04	18,800	1964	Apr. 8, 1964	6.33	3,950
1933	Dec. 28, 1932	11.0	13,800	1965	Mar. 26, 1965	13.00	15,200
1934	Mar. 3, 1934	8.70	8,600	1966	May 1, 1966	8.46	7,300
1935	Mar. 12, 1935	11.0	13,800	1967	Mar. 7, 1967	20.34	31,800
1936	Apr. 6, 1936	9.35	10,100	1968	May 27, 1968	12.09	13,500
1937	Feb. 9, 1937	13.0	18,800	1969	Jan. 20, 1969	5.24	2,330
1938	Mar. 6, 1938	10.6	12,800	1970	Apr. 28, 1970	15.71	21,000
1939	Feb. 3, 1939	16.95	30,000	1971	May 7, 1971	12.56	14,400
1940	Aug. 14, 1940	10.20	11,900	1972	Jan. 21, 1972	13.29	15,800
1941	Mar. 11, 1941	5.72	3,120	1973	Mar. 16, 1973	17.27	24,400
1942	July 8, 1942	7.44	6,250	1974	Jan. 11, 1974	16.21	22,100
1943	Mar. 13, 1943	10.68	13,100	1975	Mar. 30, 1975	18.03	26,300
1944	Feb. 17, 1944	15.46	25,600	1976	Mar. 30, 1976	7.70	6,020
1945	Feb. 17, 1945	10.82	13,300	1977	Apr. 5, 1977	28.24	59,000
1946	Jan. 7, 1946	13.10	19,100	1978	Jan. 26, 1978	19.12	28,900
1947	Jan. 15, 1947	9.65	10,500	1979	Dec. 9, 1978	12.99	15,200
1948	Feb. 14, 1948	11.30	14,500	1980	Nov. 28, 1979	9.40	8,780
1949	Dec. 3, 1948	8.65	8,400	1981	May 20, 1981	7.50	5,640
1950	Jan. 30, 1950	11.45	14,800	1982	Sept. 14, 1982	7.88	6,220
1951	Dec. 7, 1950	9.60	10,500	1983	Apr. 24, 1983	6.49	4,090
1952	Mar. 23, 1952	11.32	14,500	1984	May 7, 1984	22.08	37,000
1953	May 19, 1953	12.62	17,800	1985	Feb. 1, 1985	9.11	8,280
1954	Jan. 22, 1954	5.50	2,820	1986	Feb. 18, 1986	7.52	5,670
1955	Mar. 6, 1955	14.63	23,100	1987	July 11, 1987	12.28	13,800
1956	Apr. 15, 1956	14.32	22,200	1988	Dec. 25, 1987	5.76	3,060
1957	Jan. 29, 1957	23.17	46,600	1989	May 6, 1989	11.73	12,800
1958	May 6, 1958	14.97	24,400	1990	Oct. 19, 1989	10.53	10,700

BIG SANDY RIVER BASIN

03208700 NORTH FORK POUND RIVER AT POUND, VA

LOCATION.--Lat 37°07'32", long 82°37'36", Wise County, Hydrologic Unit 05070202, on right bank at Pound, 700 ft downstream from Stacy Branch, 1,600 ft downstream from North Fork Pound River Dam, and 0.9 mi upstream from confluence with South Fork.

DRAINAGE AREA.--18.5 mi².

GAGE.--Water-stage recorder. Datum of gage is 1,500.00 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers). Prior to Oct. 1, 1965, on left bank at datum 44.88 ft higher.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 640 ft³/s and extended above on basis of slope-area measurement at 4,500 ft³/s.

BANKFULL STAGE.--54.5 ft.

REMARKS.--Flow regulated since August 1966 by North Fork Pound River Lake.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1957	Jan. 29, 1957	53.90	-	1976	Jan. 1, 1976	50.74	252
1962	Feb. 28, 1962	55.02	865	1977	Apr. 4, 1977	54.44	860
1963	Mar. 12, 1963	61.58	4,480	1978	Mar. 10, 1978	51.30	325
1964	Apr. 4, 1964	52.99	565	1979	May 4, 1979	51.54	356
1965	Mar. 26, 1965	54.70	820	1980	Mar. 21, 1980	51.30	325
1966	Feb. 13, 1966	55.16	1,060	1981	Apr. 20, 1981	51.33	321
1967	Mar. 15, 1967	53.72	624	1982	Sept. 14, 1982	55.79	1,230
1968	Mar. 14, 1968	51.55	296	1983	May 16, 1983	51.72	377
1969	Jan. 20, 1969	51.30	266	1984	May 7, 1984	52.20	446
1970	Feb. 17, 1970	51.96	345	1985	Feb. 1, 1985	50.60	213
1971	May 13, 1971	51.89	404	1986	Feb. 20, 1986	51.31	314
1972	Oct. 22, 1971	51.23	304	1987	Apr. 10, 1987	51.35	320
1973	Dec. 9, 1972	51.25	308	1988	Dec. 25, 1987	50.22	301
1974	Dec. 26, 1973	51.84	396	1989	June 17, 1989	51.65	366
1975	May 18, 1975	55.04	1,010	1990	Oct. 17, 1989	52.25	453

a From high-water mark, present datum, by U.S. Army Corps of Engineers.

03208800 POUND RIVER ABOVE INDIAN CREEK, AT POUND, VA

LOCATION.--Lat 37°07'26", long 82°36'28", Wise County, Hydrologic Unit 05070202, on left bank at Pound, 1,600 ft downstream from confluence of North and South Forks, 2,400 ft upstream from bridge on U.S. Highway 23, and 3,800 ft upstream from Indian Creek.

DRAINAGE AREA.--36.7 mi².

GAGE.--Water-stage recorder with rock and concrete control. Datum of gage is 1,535.64 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 970 ft³/s and extended above.

BANKFULL STAGE.--Not determined.

REMARKS.--Some regulation since August 1966 by North Fork Pound River Lake 1.4 mi upstream.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1942	-	a25.1	-	1977	Apr. 4, 1977	17.87	3,070
1957	Jan. 29, 1957	b25.70	-	1978	Jan. 26, 1978	10.63	1,360
1963	Mar. 12, 1963	c21.20	-	1979	Dec. 9, 1978	9.19	1,060
1966	Feb. 13, 1966	10.82	1,760	1980	July 11, 1980	8.12	835
1967	Mar. 7, 1967	15.67	2,520	1981	Apr. 20, 1981	8.22	856
1968	Mar. 12, 1968	8.24	888	1982	Sept. 14, 1982	18.83	3,310
1969	Jan. 20, 1969	7.07	654	1983	May 16, 1983	7.32	667
1970	Dec. 30, 1969	11.92	1,620	1984	May 7, 1984	15.13	2,370
1971	May 7, 1971	9.58	1,160	1985	Feb. 1, 1985	6.46	466
1972	Feb. 24, 1972	8.76	992	1986	Feb. 17, 1986	8.69	934
1973	Mar. 16, 1973	10.29	1,300	1987	Apr. 8, 1987	8.91	981
1974	Jan. 11, 1974	11.20	1,480	1988	Dec. 25, 1987	6.32	436
1975	May 18, 1975	19.44	3,460	1989	June 17, 1989	10.27	1,270
1976	Mar. 29, 1976	8.70	980	1990	Oct. 17, 1989	13.80	2,050

a Approximate.

b From information by U.S. Army Corps of Engineers; approximate gage height.

c From information by local residents.

BIG SANDY RIVER BASIN

03208850 POUND RIVER BELOW BOLD CAMP CREEK, AT POUND, VA

LOCATION.--Lat 37°07'19", long 82°35'55", Wise County, Hydrologic Unit 05070202, at Pound, on left bank 1,000 ft upstream from bridge on State Highway 83, 0.3 mi downstream from Bold Camp Creek, and 0.5 mi downstream from Indian Creek.

DRAINAGE AREA.--61.2 mi².

GAGE.--Water-stage recorder. Datum of gage is 1,527.36 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,840 ft³/s and extended above.

BANKFULL STAGE.--16 ft.

REMARKS.--Some regulation since August 1966 by North Fork Pound River Lake 2.6 mi upstream.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1957	Jan. 29, 1957	30.80	-	1978	Jan. 26, 1978	15.41	2,390
1963	Mar. 12, 1963	28.20	-	1979	Dec. 9, 1978	13.73	1,890
1966	Feb. 13, 1966	14.79	2,640	1980	July 11, 1980	11.53	1,240
1967	Mar. 7, 1967	21.51	4,570	1981	Apr. 20, 1981	11.27	1,170
1968	Mar. 12, 1968	13.00	1,670	1982	Sept. 14, 1982	23.64	5,440
1969	Jan. 20, 1969	10.44	1,060	1983	May 16, 1983	10.30	929
1970	Dec. 30, 1969	17.50	3,040	1984	May 7, 1984	20.05	3,980
1971	May 7, 1971	14.46	2,110	1985	Feb. 1, 1985	11.18	1,150
1972	Feb. 24, 1972	13.62	1,860	1986	Feb. 17, 1986	12.26	1,450
1973	Mar. 16, 1973	15.80	2,510	1987	Apr. 8, 1987	12.63	1,550
1974	Jan. 11, 1974	16.62	2,760	1988	Dec. 25, 1987	9.60	759
1975	May 18, 1975	25.64	6,290	1989	June 17, 1989	13.56	1,820
1976	Mar. 30, 1976	13.33	1,770	1990	Oct. 17, 1989	17.79	3,160
1977	Apr. 4, 1977	23.44	5,350				

a From high-water marks, information by U.S. Army Corps of Engineers; approximate gage height.

03208900 POUND RIVER NEAR GEORGES FORK, VA

LOCATION.--Lat 37°09'51", long 82°31'30", Dickenson County, Hydrologic Unit 05070202, on right bank 50 ft upstream from bridge on State Highway 624, 150 ft upstream from Camp Creek, and 2.6 mi northwest of Georges Fork.

DRAINAGE AREA.--82.5 mi².

GAGE.--Water-stage recorder. Datum of gage is 1,470.39 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 3,500 ft³/s and extended above.

BANKFULL STAGE.--16 ft.

REMARKS.--Some regulation since August 1966 by North Fork Pound River Lake 13 mi upstream.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1957	Jan. 29, 1957	a16.20	-	1977	Apr. 4, 1977	14.02	9,430
1963	Mar. 12, 1963	a14.40	-	1978	Jan. 26, 1978	9.27	3,770
1964	Apr. 4, 1964	6.68	1,620	1979	Dec. 9, 1978	8.33	2,830
1965	Mar. 26, 1965	9.10	3,590	1980	Mar. 21, 1980	6.59	1,470
1966	Feb. 13, 1966	7.97	2,550	1981	Apr. 20, 1981	6.91	1,680
1967	Mar. 7, 1967	12.06	6,870	1982	Sept. 14, 1982	12.57	7,480
1968	Mar. 12, 1968	7.51	2,160	1983	May 16, 1983	6.48	1,410
1969	Jan. 20, 1969	6.54	1,520	1984	May 7, 1984	11.82	6,110
1970	Dec. 31, 1969	10.11	4,620	1985	Feb. 1, 1985	6.42	1,270
1971	May 7, 1971	8.50	3,000	1986	Feb. 17, 1986	7.28	1,770
1972	Feb. 25, 1972	8.34	2,860	1987	Apr. 8, 1987	7.62	2,000
1973	Mar. 16, 1973	9.35	3,840	1988	Dec. 25, 1987	6.03	1,070
1974	Jan. 11, 1974	10.05	4,560	1989	Sept. 16, 1989	7.48	1,900
1975	May 18, 1975	14.91	10,900	1990	Oct. 17, 1989	10.55	4,560
1976	Mar. 30, 1976	8.29	2,790				

a From information by local residents.

BIG SANDY RIVER BASIN

03208950 CRANES NEST RIVER NEAR CLINTWOOD, VA

LOCATION.--Lat 37°07'26", long 82°26'20", Dickenson County, Hydrologic Unit 05070202, on left bank on State Highway 649, 500 ft downstream from Clinchfield Railway bridge, 1,000 ft downstream from Rush Creek, and 2.1 mi southeast of Clintwood.

DRAINAGE AREA.--66.5 mi².

GAGE.--Water-stage recorder. Datum of gage is 1,440.30 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 3,100 ft³/s and extended above on basis of slope-area measurement of 18,000 ft³/s.

BANKFULL STAGE.--20 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1957	Jan. 29, 1957	a20.0	-	1977	Apr. 4, 1977	26.09	18,000
1964	June 1, 1964	7.99	1,390	1978	Jan. 26, 1978	15.39	4,870
1965	Mar. 26, 1965	12.41	3,140	1979	Dec. 9, 1978	12.17	3,030
1966	May 1, 1966	7.55	1,270	1980	Nov. 26, 1979	7.64	1,280
1967	Mar. 7, 1967	19.86	7,120	1981	Apr. 20, 1981	6.81	1,020
1968	Mar. 12, 1968	10.14	2,150	1982	Sept. 14, 1982	14.03	4,040
1969	Jan. 20, 1969	5.32	670	1983	Feb. 2, 1983	6.42	911
1970	Dec. 31, 1969	16.21	5,050	1984	May 7, 1984	16.85	5,990
1971	May 7, 1971	12.30	3,100	1985	Feb. 1, 1985	7.88	1,360
1972	Jan. 21, 1972	11.23	2,590	1986	Feb. 18, 1986	8.06	1,420
1973	Mar. 16, 1973	14.73	4,310	1987	Apr. 8, 1987	9.35	1,870
1974	Jan. 11, 1974	14.54	4,220	1988	Dec. 25, 1987	6.26	866
1975	Mar. 30, 1975	14.59	4,240	1989	May 5, 1989	9.87	2,060
1976	Mar. 30, 1976	9.57	1,940	1990	Oct. 17, 1989	11.99	2,950

a Approximate.

03209000 POUND RIVER BELOW FLANNAGAN DAM, NEAR HAYSI, VA

LOCATION.--Lat 37°14'13", long 82°20'36", Dickenson County, Hydrologic Unit 05070202, on right bank 1,100 ft upstream from Blacklog Branch, 1,700 ft downstream from John W. Flannagan Dam, 1.4 mi upstream from mouth, and 3.4 mi northwest of Haysi.

DRAINAGE AREA.--221 mi².

GAGE.--Water-stage recorder. Datum of gage is 1,200.00 ft above National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark). Prior to Dec. 20, 1939, nonrecording gage at site 3.8 mi upstream at different datum (drainage area, 217 mi²). Dec. 20, 1939, to Sept. 30, 1963, water-stage recorder at site 4.6 mi upstream at datum 79.91 ft higher (drainage area, 212 mi²).

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,750 ft³/s and extended above for 1927-39 site. Since 1939, defined by current-meter measurements below 10,000 ft³/s and extended above on basis of slope-area measurement at 27,600 ft³/s.

BANKFULL STAGE.--11 ft.

REMARKS.--Flow regulated since March 1965 by John W. Flannagan Reservoir 1,700 ft upstream and since August 1966 by North Fork Pound River Lake 33 mi upstream. There is a possibility that some water will bypass station if reservoir fills completely and overflows across spillway; this water will go down Cane Branch and return to Pound River about 4,600 feet below gage.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1920	-	a14.5	21,800	1959	Jan. 22, 1959	11.24	6,730
1927	Dec. 21, 1926	14.0	19,900	1960	Nov. 28, 1959	11.47	7,250
1928	Apr. 30, 1928	9.5	7,800	1961	Feb. 25, 1961	11.80	7,790
1929	Mar. 23, 1929	16.5	30,000	1962	Feb. 28, 1962	12.82	10,000
1930	Oct. 22, 1929	10.7	10,400	1963	Mar. 12, 1963	-	b16,000
1931	Apr. 22, 1931	8.0	5,100	1964	Mar. 5, 1964	7.05	3,480
1932	Jan. 29, 1932	11.6	12,700	1965	Jan. 11, 1965	7.41	3,960
1933	Dec. 28, 1932	10.0	8,800	1966	Feb. 17, 1966	7.55	4,200
1934	Mar. 3, 1934	10.0	8,800	1967	Mar. 14, 1967	7.41	3,970
1935	Mar. 31, 1935	9.6	8,000	1968	Mar. 14, 1968	6.66	3,090
1936	Mar. 24, 1936	11.2	11,600	1969	Jan. 20, 1969	6.83	3,280
1937	Feb. 9, 1937	11.4	12,100	1970	May 2, 1970	7.45	4,020
1938	July 14, 1938	10.5	10,000	1971	May 9, 1971	7.62	3,840
1939	Feb. 3, 1939	13.5	18,200	1972	Feb. 27, 1972	7.51	3,710
1940	July 17, 1940	9.85	3,700	1973	Dec. 12, 1972	7.51	3,710
1941	July 16, 1941	9.02	2,980	1974	Nov. 29, 1973	7.76	4,010
1942	July 8, 1942	15.55	17,700	1975	May 19, 1975	7.83	4,100
1943	Apr. 19, 1943	12.80	10,000	1976	Dec. 31, 1975	6.29	2,490
1944	Feb. 18, 1944	14.68	15,100	1977	Apr. 8, 1977	8.20	4,540
1945	Feb. 17, 1945	12.27	8,800	1978	Nov. 9, 1977	7.73	3,980
1946	Jan. 8, 1946	15.50	17,400	1979	Jan. 22, 1979	7.76	4,010
1947	Jan. 20, 1947	11.21	6,340	1980	Mar. 21, 1980	6.54	2,740
1948	Feb. 14, 1948	13.10	10,800	1981	June 7, 1981	5.49	1,740
1949	Mar. 18, 1949	11.76	7,620	1982	Sept. 15, 1982	7.13	3,300
1950	Jan. 30, 1950	12.55	9,520	1983	May 17, 1983	6.04	2,240
1951	Dec. 7, 1950	11.77	7,620	1984	May 12, 1984	7.79	4,040
1952	Jan. 22, 1952	11.80	7,620	1985	Feb. 4, 1985	6.18	2,360
1953	May 19, 1953	13.00	10,500	1986	Feb. 19, 1986	7.28	3,460

BIG SANDY RIVER BASIN

03209000 POUND RIVER BELOW FLANNAGAN DAM, NEAR HAYSI, VA--Continued

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1954	Jan. 16, 1954	9.10	3,150	1987	Apr. 18, 1987	7.75	3,990
1955	Mar. 16, 1955	13.17	11,000	1988	Apr. 8, 1988	5.50	1,750
1956	Apr. 16, 1956	13.73	12,300	1989	May 8, 1989	7.85	4,110
1957	Jan. 29, 1957	18.65	27,300	1990	Oct. 20, 1989	7.84	4,100
1958	May 6, 1958	12.75	9,880				

a From information by local residents.

b Mean daily discharge; peak discharge is known to be greater than the value shown.

BIG SANDY RIVER BASIN

03209200 RUSSELL FORK AT BARTLICK, VA

LOCATION.--Lat 37°14'45", long 82°19'25", Dickenson County, Hydrologic Unit 05070202, on left bank at Bartlick just upstream from bridge on State Highway 611, 0.2 mi downstream from Pound River, and 1.1 mi upstream from Fall Branch.

DRAINAGE AREA.--526 mi².

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,165.00 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current meter measurements below 10,500 ft³/s and extended above on basis of flow-over-dam computations of 47,000 ft³/s and 50,000 ft³/s.

BANKFULL STAGE.--Not determined.

REMARKS.--Flow regulated since March 1965 by John W. Flannagan Reservoir 1.9 mi upstream and since August 1966 by North Fork Pound River Lake 35 mi upstream.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1957	Jan. 29, 1957	30.00	-	1977	Apr. 4, 1977	27.55	50,000
1963	Mar. 12, 1963	24.83	47,000	1978	Jan. 26, 1978	19.80	26,700
1964	Mar. 5, 1964	12.67	7,150	1979	Dec. 9, 1978	15.98	15,200
1965	Jan. 10, 1965	15.82	15,000	1980	Nov. 26, 1979	13.55	8,680
1966	May 1, 1966	12.72	7,150	1981	Apr. 20, 1981	12.43	6,260
1967	Mar. 7, 1967	20.97	32,700	1982	Sept. 14, 1982	13.43	8,310
1968	May 27, 1968	15.90	13,400	1983	Apr. 24, 1983	11.94	5,280
1969	Jan. 20, 1969	12.40	5,720	1984	May 7, 1984	21.76	27,700
1970	Apr. 28, 1970	17.33	17,100	1985	Feb. 1, 1985	13.65	6,530
1971	May 7, 1971	15.49	12,400	1986	Feb. 19, 1986	12.99	5,550
1972	Jan. 21, 1972	16.31	16,200	1987	July 11, 1987	15.64	10,100
1973	Mar. 16, 1973	18.13	21,800	1988	Dec. 25, 1987	11.08	3,070
1974	Jan. 11, 1974	17.88	20,900	1989	May 6, 1989	15.37	9,570
1975	Mar. 30, 1975	18.70	23,800	1990	Oct. 19, 1989	14.91	8,690
1976	Jan. 1, 1976	12.93	7,260				

a From information by local resident.

BIG SANDY RIVER BASIN

393

03213577 KERSHAW BRANCH NEAR HURLEY, VA

LOCATION.--Lat 37°27'01", long 82°00'40", Buchanan County, Hydrologic Unit 05070201, on right bank 0.5 mi upstream from Guess Fork and 2.1 mi north of Hurley.

DRAINAGE AREA.--0.60 mi².

GAGE.--Water-stage recorder. Datum of gage is 1,140 ft above National Geodetic Vertical Datum of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 4.2 ft³/s and extended above.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1981	June 6, 1981	2.95	97	1982	Aug. 8, 1982	2.35	39

BIG SANDY RIVER BASIN

03213590 KNOX CREEK AT KELSA, VA

LOCATION.--Lat 37°27'02", long 82°03'34", Buchanan County, Hydrologic Unit 05070201, on downstream end of center bridge pier on State Highway 697, 0.3 mi downstream from Pawpaw Creek, 0.8 mi northeast of Kelsa, and 10.0 mi upstream from mouth.

DRAINAGE AREA.--84.3 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 945 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to 1982, water-stage recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 300 ft³/s and extended above on basis of slope-area measurement at 11,600 ft³/s.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1981	June 6, 1981	16.86	9,350	1986	Feb. 18, 1986	8.08	2,160
1982	Feb. 3, 1982	7.24	1,720	1987	June 2, 1987	11.18	4,220
1983	Dec. 16, 1982	8.96	2,690	1988	Dec. 25, 1987	5.04	720
1984	May 7, 1984	20.2	13,000	1989	May 6, 1989	8.52	2,410
1985	Feb. 1, 1985	7.86	2,040	1990	Oct. 17, 1989	16.40	9,230

TENNESSEE RIVER BASIN

03470900 SLEMP CREEK TRIBUTARY NEAR SUGAR GROVE, VA

LOCATION.--Lat 36°48'30", long 81°24'15", Smyth County, Hydrologic Unit 06010102, at culvert on State Highway 16, 2.4 mi north of Sugar Grove.

DRAINAGE AREA.--0.36 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--5 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1966	Feb. 13, 1966	4.3	18	1971	-	<5.00	<35
1967	-	<5.00	<35	1972	-	<5.00	<35
1968	-	<5.00	<35	1973	-	<5.00	<35
1969	-	<5.00	<35	1974	-	<5.00	<35
1970	-	<5.00	<35	1975	-	<5.00	<35

< Less than.

TENNESSEE RIVER BASIN

03471100 DICKEY CREEK AT SUGAR GROVE, VA

LOCATION.--Lat 36°46'22", long 81°25'10", Smyth County, Hydrologic Unit 06010102, at bridge on State Highway 16, 0.4 mi southwest of Sugar Grove.

DRAINAGE AREA.--7.28 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 2,565 ft above National Geodetic Vertical Datum of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 162 ft³/s and extended above.

BANKFULL STAGE.--18 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1967	Nov. 2, 1966	15.92	264	1973	May 28, 1973	15.85	254
1968	Mar. 12, 1968	15.66	227	1974	June 27, 1974	16.35	330
1969	Feb. 2, 1969	14.62	107	1975	Mar. 30, 1975	14.90	135
1970	Apr. 28, 1970	16.01	276	1976	Dec. 31, 1975	14.59	104
1971	Aug. 11, 1971	15.82	250	1977	Apr. 4, 1977	16.75	410
1972	June 21, 1972	17.05	475				

03471200 SOUTH FORK HOLSTON RIVER AT TEAS, VA

LOCATION.--Lat 36°46'22", long 81°27'08", Smyth County, Hydrologic Unit 06010102, at Teas, on right downstream pier of bridge on State Highway 601, and 0.1 mi downstream from Mullins Branch.

DRAINAGE AREA.--31.1 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 2,496.98 ft above National Geodetic Vertical Datum of 1929. Moved to present location on new bridge on June 12, 1979, at same datum.

STAGE-DISCHARGE RELATION.--Prior to June 1979, defined by current-meter measurements below 32 ft³/s and extended above on basis of slope-area measurement at 5,400 ft³/s. After June 1979, stage-discharge relation not defined.

BANKFULL STAGE.--15 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1967	Nov. 2, 1966	a13.38	950	1979	Sept. 5, 1979	12.59	-
1968	Mar. 13, 1968	a13.41	1,000	1980	Nov. 26, 1979	11.22	-
1969	July 21, 1969	a13.64	1,150	1981	-	<10.88	-
1970	Dec. 31, 1969	a13.85	1,450	1982	Jan. 4, 1982	11.49	-
1971	Aug. 11, 1971	a14.42	1,900	1983	Feb. 2, 1983	11.88	-
1972	June 21, 1972	a14.35	1,800	1984	May 7, 1984	12.64	-
1973	Mar. 17, 1973	a13.89	1,400	1985	-	<10.88	-
1974	June 27, 1974	a13.64	1,200	1986	-	<10.88	-
1975	-	<a13.00	<800	1987	Apr. 16, 1987	12.00	-
1976	-	<a13.00	<800	1988	-	<10.88	<60
1977	Apr. 5, 1977	a14.45	1,950	1989	Sept. 22, 1989	15.27	3,780
1978	Nov. 6, 1977	a16.38	5,410	1990	Jan. 1, 1990	11.75	500

< Less than.

a Prior to bridge reconstruction.

TENNESSEE RIVER BASIN

03471500 SOUTH FORK HOLSTON RIVER AT RIVERSIDE, NEAR CHILHOWIE, VA

LOCATION.--Lat 36°45'37", Long 81°37'53", Smyth County, Hydrologic Unit 06010102, on right bank 400 ft upstream from highway bridge at Riverside, 900 ft upstream from Spring Branch, 3.2 mi downstream from Redstone Branch, 4.0 mi southeast of Chilhowie, and at mile 97.2.

DRAINAGE AREA.--76.1 mi².

GAGE.--Water-stage recorder since July 28, 1942. Datum of gage is 2,106.77 ft above National Geodetic Vertical Datum of 1929. June 10, 1907, to Dec. 31, 1910, nonrecording gage at site 4.5 mi downstream at different datum. Nov. 1, 1920, to Nov. 14, 1931, nonrecording gage at site 400 ft downstream at same datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 3,600 ft³/s and extended above on basis of indirect measurement at 9,600 ft³/s.

BANKFULL STAGE.--8 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1908	Jan. 12, 1908	-	4,400	1960	Mar. 30, 1960	6.20	2,100
1909	Feb. 10, 1909	-	2,100	1961	May 12, 1961	6.71	2,450
1921	Feb. 10, 1921	4.4	1,420	1962	Dec. 18, 1961	8.27	3,780
1922	Jan. 21, 1922	5.0	1,880	1963	Mar. 12, 1963	6.82	2,520
1923	June 12, 1923	9.0	6,000	1964	Mar. 5, 1964	7.16	2,830
1924	Sept. 30, 1924	5.0	1,880	1965	Mar. 26, 1965	7.46	3,070
1925	Dec. 9, 1924	3.7	960	1966	Feb. 13, 1966	6.50	2,310
1926	Feb. 14, 1926	4.5	1,450	1967	Nov. 2, 1966	5.10	1,420
1927	Feb. 23, 1927	5.7	2,430	1968	Mar. 13, 1968	4.93	1,320
1928	Sept. 2, 1928	4.0	1,100	1969	Feb. 2, 1969	4.22	960
1929	Mar. 5, 1929	5.0	1,820	1970	Apr. 28, 1970	5.60	1,720
1930	Oct. 2, 1929	4.6	1,520	1971	May 7, 1971	5.15	1,450
1931	Apr. 4, 1931	5.0	1,820	1972	June 21, 1972	6.26	2,140
1942	Aug. 9, 1942	4.58	1,200	1973	Mar. 17, 1973	5.65	1,750
1943	Dec. 30, 1942	5.80	1,870	1974	June 28, 1974	7.54	3,100
1944	Feb. 18, 1944	6.62	2,380	1975	Mar. 14, 1975	5.76	1,820
1945	May 18, 1945	6.58	2,380	1976	Jan. 1, 1976	5.08	1,410
1946	Jan. 8, 1946	5.84	1,870	1977	Apr. 5, 1977	8.89	5,240
1947	Aug. 4, 1947	6.99	2,660	1978	Nov. 6, 1977	10.20	9,600
1948	Feb. 14, 1948	5.87	1,930	1979	Jan. 21, 1979	5.57	2,040
1949	Apr. 13, 1949	5.04	1,410	1980	Mar. 21, 1980	4.67	1,360
1950	Feb. 2, 1950	4.97	1,270	1981	May 27, 1981	4.49	1,250
1951	Dec. 7, 1950	7.84	3,270	1982	Jan. 4, 1982	5.56	2,040
1952	Jan. 28, 1952	3.25	541	1983	Feb. 2, 1983	5.17	1,730
1953	Feb. 21, 1953	5.25	1,450	1984	May 7, 1984	6.49	2,900
1954	Jan. 22, 1954	6.53	2,280	1985	July 27, 1985	3.77	842
1955	Mar. 18, 1955	6.88	2,580	1986	Mar. 15, 1986	4.09	1,020
1956	Apr. 16, 1956	6.20	2,070	1987	Apr. 16, 1987	6.35	2,760
1957	Jan. 29, 1957	8.32	3,800	1988	Feb. 4, 1988	4.38	1,190
1958	Aug. 1, 1958	8.18	3,670	1989	Sept. 22, 1989	8.19	4,980
1959	Jan. 22, 1959	5.10	1,420	1990	Jan. 1, 1990	5.19	1,740

03472000 SOUTH FORK HOLSTON RIVER NEAR CHILHOWIE, VA

LOCATION.--Lat 36°44'35", long 81°41'20", Smyth County, Hydrologic Unit 06010102, 100 ft below Cole suspension footbridge, just upstream from mouth of Grosses Creek, and 4.5 mi south of Chilhowie.

DRAINAGE AREA.--89.5 mi².

GAGE.--Nonrecording gage (staff gage). Datum of gage is 2,030 ft above National Geodetic Vertical Datum of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 400 ft³/s.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1907	June 11, 1907	5.0	6,500	1909	Feb. 10, 1909	3.0	2,100
1908	Jan. 12, 1908	4.2	4,400				

TENNESSEE RIVER BASIN

03472500 BEAVERDAM CREEK AT DAMASCUS, VA

LOCATION.--Lat 36°37'40", long 81°47'28", Washington County, Hydrologic Unit 06010102, at Damascus, on right bank 350 ft west of State Highway 716, in old plant area of Mobay Chemical Corporation, and 0.6 mi upstream from mouth.

DRAINAGE AREA.--56.0 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,946.66 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1959, water-stage recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 2,600 ft³/s and extended above on the basis of two indirect measurements at 4,200 ft³/s.

BANKFULL STAGE.--3 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1901	May 1901	a6.9	-	1969	Feb. 2, 1969	3.90	1,720
1940	Aug. 14, 1940	a6.5	-	1970	Dec. 31, 1969	4.47	2,460
1948	Feb. 14, 1948	3.50	1,270	1971	May 7, 1971	3.62	1,390
1949	Dec. 4, 1948	3.57	1,360	1972	Feb. 26, 1972	4.24	2,160
1950	Jan. 30, 1950	4.04	1,870	1973	Dec. 10, 1972	4.64	2,680
1951	Dec. 7, 1950	2.65	690	1974	Apr. 4, 1974	5.07	3,240
1952	Dec. 21, 1951	3.17	995	1975	Mar. 30, 1975	5.38	3,670
1953	Feb. 21, 1953	3.80	1,590	1976	Jan. 1, 1976	3.84	1,640
1954	Jan. 22, 1954	4.60	2,880	1977	Apr. 5, 1977	6.04	4,660
1955	Mar. 18, 1955	5.75	4,200	1978	Oct. 2, 1977	8.45	6,000
1956	Apr. 16, 1956	5.14	3,350	1979	Jan. 21, 1979	3.83	1,510
1957	Jan. 29, 1957	5.75	4,200	1980	Mar. 21, 1980	4.04	1,680
1958	Dec. 8, 1957	3.24	1,060	1981	Apr. 20, 1981	4.85	2,360
1959	Jan. 22, 1959	4.06	1,920	1982	Feb. 3, 1982	4.80	2,320
1960	Mar. 30, 1960	4.15	2,040	1983	Dec. 16, 1982	3.38	1,170
1961	June 15, 1961	5.30	3,560	1984	May 7, 1984	6.55	4,050
1962	Dec. 18, 1961	4.05	1,920	1985	Feb. 1, 1985	3.60	1,300
1963	Mar. 12, 1963	5.24	3,490	1986	Mar. 15, 1986	3.36	1,150
1964	Mar. 5, 1964	3.82	1,590	1987	Apr. 23, 1987	5.33	2,830
1965	Mar. 26, 1965	5.27	3,490	1988	Feb. 4, 1986	4.90	2,410
1966	Feb. 13, 1966	4.52	2,500	1989	Feb. 21, 1989	3.57	1,310
1967	Oct. 19, 1966	3.31	1,110	1990	Mar. 17, 1990	4.33	1,910
1968	Mar. 12, 1968	4.60	2,630				

a From information in reports of the Tennessee Valley Authority.

03473000 SOUTH FORK HOLSTON RIVER NEAR DAMASCUS, VA
(Formerly published as South Fork Holston River at Vestal)

LOCATION.--Lat 36°39'06", long 81°50'39", Washington County, Hydrologic Unit 06010102, on right bank 500 ft upstream from bridge on U.S. Highway 58, 0.7 mi downstream from Laurel Creek, 3.2 mi northwest of Damascus, 4.9 mi upstream from Middle Fork, and at mile 77.2.

DRAINAGE AREA.--301 mi².

GAGE.--Water-stage recorder. Datum of gage is 1,792.30 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 10,000 ft³/s and extended above on the basis of contracted-opening measurement at 15,100 ft³/s and slope-area measurement at 22,000 ft³/s.

BANKFULL STAGE.--9 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1867	March 1867	a20.0	26,500	1961	June 15, 1961	11.30	8,080
1932	Feb. 3, 1932	10.58	6,760	1962	Dec. 18, 1961	10.40	6,760
1933	May 10, 1933	9.63	5,470	1963	Mar. 12, 1963	13.12	11,000
1934	Mar. 5, 1934	7.65	3,040	1964	Mar. 5, 1964	11.12	7,760
1935	Mar. 26, 1935	13.26	10,700	1965	Mar. 26, 1965	13.14	11,000
1936	Mar. 24, 1936	10.30	6,370	1966	Apr. 13, 1966	11.09	7,760
1937	Feb. 10, 1937	7.61	3,210	1967	Oct. 19, 1966	8.09	3,750
1938	July 21, 1938	10.60	6,760	1968	Mar. 13, 1968	9.31	5,230
1939	Mar. 6, 1939	9.48	5,470	1969	Feb. 2, 1969	8.89	4,670
1940	Aug. 14, 1940	13.25	10,600	1970	Apr. 28, 1970	11.54	8,460
1941	July 16, 1941	7.55	3,210	1971	May 7, 1971	9.30	5,220
1942	Aug. 9, 1942	10.37	6,500	1972	Feb. 26, 1972	9.85	5,990
1943	Dec. 30, 1942	11.15	7,600	1973	Mar. 17, 1973	10.94	7,520
1944	Feb. 18, 1944	11.58	8,160	1974	Apr. 4, 1974	11.68	8,720
1945	Feb. 17, 1945	9.58	5,470	1975	Mar. 30, 1975	12.40	9,840
1946	Jan. 8, 1946	11.10	7,460	1976	Jan. 1, 1976	9.11	5,140
1947	Jan. 20, 1947	12.1	8,900	1977	Apr. 5, 1977	17.11	22,000
1948	Feb. 14, 1948	10.0	5,980	1978	Oct. 2, 1977	15.82	17,900
1949	Dec. 4, 1948	9.28	5,110	1979	Jan. 21, 1979	9.83	6,080
1950	Feb. 2, 1950	10.18	6,240	1980	Mar. 21, 1980	9.42	5,550
1951	Dec. 7, 1950	10.08	6,110	1981	May 21, 1981	9.03	5,040
1952	Dec. 21, 1951	8.40	4,080	1982	Feb. 3, 1982	9.77	5,990
1953	Feb. 21, 1953	9.62	5,470	1983	Dec. 16, 1982	8.01	3,860
1954	Jan. 22, 1954	12.40	9,350	1984	May 7, 1984	15.67	17,700
1955	Mar. 18, 1955	13.73	11,400	1985	Feb. 2, 1985	8.13	3,970
1956	Apr. 16, 1956	12.50	9,500	1986	Mar. 15, 1986	7.67	3,480
1957	Jan. 29, 1957	15.35	15,100	1987	Apr. 16, 1987	11.67	8,840
1958	Aug. 2, 1958	9.85	5,990	1988	Feb. 4, 1988	9.72	5,910
1959	Jan. 22, 1959	9.37	5,360	1989	Sept. 22, 1989	10.75	7,380
1960	Mar. 30, 1960	10.20	6,480	1990	Mar. 17, 1990	9.64	5,810

a From reports of Tennessee Valley Authority.

TENNESSEE RIVER BASIN

03473500 MIDDLE FORK HOLSTON RIVER AT GROSECLOSE, VA

LOCATION.--Lat 36°53'19", long 81°20'51", Smyth County, Hydrologic Unit 06010102, 10 ft downstream from culverts on State Highway 679 at Groseclose, 0.2 mi upstream from Rocky Spring Branch, and 10 mi northeast of Marion.

DRAINAGE AREA.--7.39 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 2,442.86 ft above National Geodetic Vertical Datum of 1929. Prior to Sept. 30, 1957, water-stage recorder at present site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 300 ft³/s and extended above on basis of slope-area measurement at 820 ft³/s.

BANKFULL STAGE.--9 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1948	Feb. 13, 1948	4.34	217	1970	Jan. 29, 1970	3.24	87
1949	July 13, 1949	4.07	171	1971	May 7, 1971	3.90	156
1950	July 26, 1950	6.18	520	1972	June 21, 1972	5.20	339
1951	Dec. 7, 1950	4.30	210	1973	Dec. 10, 1972	4.11	180
1952	July 5, 1952	4.08	181	1974	June 27, 1974	3.51	113
1953	July 6, 1953	7.42	813	1975	Mar. 30, 1975	4.17	188
1954	July 21, 1954	4.06	178	1976	June 30, 1976	3.75	140
1955	Mar. 18, 1955	4.50	234	1977	Apr. 4, 1977	5.03	314
1956	Apr. 16, 1956	3.99	167	1978	Nov. 6, 1977	4.28	203
1957	Jan. 29, 1957	5.00	309	1979	Feb. 24, 1979	3.93	159
1958	May 6, 1958	4.66	256	1980	Mar. 21, 1980	3.06	72
1960	Mar. 30, 1960	4.71	264	1981	June 4, 1981	2.96	64
1961	May 12, 1961	6.70	631	1982	Feb. 3, 1982	3.61	124
1962	Dec. 18, 1961	4.48	234	1983	June 4, 1983	3.13	77
1963	Mar. 12, 1963	5.17	332	1984	May 7, 1984	3.79	144
1964	Mar. 5, 1964	5.50	387	1985	Feb. 1, 1985	2.51	34
1965	Mar. 26, 1965	4.80	279	1986	Nov. 30, 1985	3.16	80
1966	Feb. 13, 1966	4.55	242	1987	Apr. 16, 1987	4.27	216
1967	Mar. 7, 1967	3.34	96	1988	Feb. 4, 1988	2.69	46
1968	Mar. 13, 1968	3.40	102	1989	Sept. 22, 1989	5.41	398
1969	Feb. 2, 1969	3.30	92	1990	Jan. 1, 1990	3.43	112

03473600 MIDDLE FORK HOLSTON RIVER NEAR GROSECLOSE, VA

LOCATION.--Lat 36°53'10", long 81°22'25", Smyth County, Hydrologic Unit 06010102, at bridge on U.S. Highway 11, 1.5 mi west of Groseclose.

DRAINAGE AREA.--13.3 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 2,379.26 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Not developed.

BANKFULL STAGE.--12 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1967	-	<11.53	-	1973	Mar. 16, 1973	12.39	-
1968	-	<11.53	-	1974	-	<11.53	-
1969	-	<11.53	-	1975	-	<11.53	-
1970	Dec. 30, 1969	11.58	-	1976	-	<11.53	-
1971	-	<11.53	-	1977	Apr. 4, 1977	13.34	-
1972	Sept. 30, 1972	11.87	-	1978	Nov. 6, 1977	14.84	-

< Less than.

TENNESSEE RIVER BASIN

03473800 STALEY CREEK NEAR MARION, VA

LOCATION.--Lat 36°49'25", long 81°28'25", Smyth County, Hydrologic Unit 06010102, at bridge on State Highway 688, 2 mi southeast of Marion.

DRAINAGE AREA.--8.33 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 2,326.33 ft above National Geodetic Vertical Datum of 1929 (levels by Tennessee Valley Authority). July 13, 1965, to Feb. 21, 1974, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 480 ft³/s and contracted-opening measurements at 150 ft³/s and 360 ft³/s.

BANKFULL STAGE.--3 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1951	Dec. 7, 1950	4.3	460	1965	Oct. 16, 1964	3.65	295
1952	-	-	a150	1966	Feb. 13, 1966	2.83	170
1953	July 6, 1953	2.95	190	1967	Nov. 2, 1966	2.77	170
1954	-	-	a150	1968	Mar. 13, 1968	2.72	160
1955	Mar. 18, 1955	3.78	320	1969	-	<2.3	<120
1956	Apr. 16, 1956	3.23	230	1970	Dec. 31, 1969	3.27	231
1957	Jan. 29, 1957	4.04	400	1971	May 7, 1971	3.05	202
1958	May 6, 1958	3.38	250	1972	Feb. 26, 1972	3.47	280
1959	Jan. 22, 1959	2.71	160	1973	Dec. 10, 1972	3.27	231
1960	Feb. 5, 1960	2.66	155	1974	June 27, 1974	3.07	204
1961	May 12, 1961	3.09	210	1975	Mar. 30, 1975	3.11	209
1962	May 27, 1962	2.95	191	1976	Dec. 31, 1975	2.61	110
1963	Mar. 12, 1963	3.51	272	1977	Apr. 4, 1977	4.52	515
1964	Mar. 5, 1964	3.39	250				

< Less than.

a Estimated.

TENNESSEE RIVER BASIN

03474000 MIDDLE FORK HOLSTON RIVER AT SEVEN MILE FORD, VA

LOCATION.--Lat 36°48'26", long 81°37'20", Smyth County, Hydrologic Unit 06010102, on right bank at downstream side of bridge on U.S. Highway 11 at Seven Mile Ford, 0.3 mi upstream from Meade Creek, 3.3 mi downstream from Walker Creek, and 32.1 mi upstream from mouth.

DRAINAGE AREA.--132 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,960.00 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1981, water-stage recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 14,000 ft³/s.

BANKFULL STAGE.--7 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1942	Aug. 9, 1942	8.30	4,290	1967	Mar. 7, 1967	3.92	2,680
1943	Dec. 30, 1942	7.77	3,840	1968	Mar. 13, 1968	3.71	2,260
1944	Feb. 18, 1944	8.98	4,980	1969	Feb. 2, 1969	3.17	1,480
1945	Feb. 17, 1945	7.74	3,750	1970	Dec. 31, 1969	4.19	3,280
1946	Jan. 7, 1946	8.30	4,290	1971	May 7, 1971	4.29	3,500
1947	Aug. 4, 1947	9.86	6,570	1972	Sept. 30, 1972	5.71	5,720
1948	Feb. 14, 1948	7.33	3,390	1973	Dec. 10, 1972	6.15	6,240
1949	Dec. 3, 1948	6.38	2,610	1974	Jan. 1, 1974	3.80	2,440
1950	Feb. 2, 1950	7.28	3,190	1975	Mar. 30, 1975	6.15	6,240
1951	Dec. 7, 1950	7.44	3,280	1976	Jan. 1, 1976	3.47	1,860
1952	Jan. 28, 1952	5.14	1,540	1977	Apr. 5, 1977	8.54	10,900
1953	July 7, 1953	6.54	2,540	1978	Nov. 6, 1977	10.33	14,500
1954	Jan. 22, 1954	8.08	3,910	1979	Jan. 21, 1979	3.72	2,280
1955	Mar. 18, 1955	8.28	4,600	1980	Mar. 21, 1980	3.46	1,840
1956	Apr. 16, 1956	8.62	5,020	1981	June 5, 1981	3.67	2,200
1957	Jan. 29, 1957	10.75	7,680	1982	June 13, 1982	4.06	2,960
1958	May 6, 1958	5.67	1,820	1983	Dec. 16, 1982	3.26	1,580
1959	Apr. 12, 1959	6.65	2,540	1984	May 7, 1984	7.07	8,030
1960	Mar. 30, 1960	6.30	2,290	1985	Feb. 1, 1985	3.61	2,100
1961	May 12, 1961	10.35	7,220	1986	May 17, 1986	3.14	1,440
1962	Dec. 18, 1961	5.53	4,880	1987	Apr. 16, 1987	4.20	3,260
1963	Mar. 12, 1963	6.08	5,800	1988	Feb. 4, 1988	3.20	1,510
1964	Mar. 5, 1964	3.88	2,200	1989	Sept. 22, 1989	5.14	4,860
1965	Mar. 26, 1965	4.90	4,590	1990	Jan. 1, 1990	4.65	4,070
1966	Feb. 13, 1966	3.71	2,260				

TENNESSEE RIVER BASIN

403

03474500 MIDDLE FORK HOLSTON RIVER AT CHILHOWIE, VA

LOCATION.--Lat 36°47'45", long 81°40'50", Smyth County, Hydrologic Unit 06010102, at highway bridge at Chilhowie.

DRAINAGE AREA.--155 mi².

GAGE.--Nonrecording gage (chain gage). Datum of gage is 1,930 ft above National Geodetic Vertical Datum of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 4,700 ft³/s and extended above by logarithmic plotting.

BANKFULL STAGE.--8 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1907	June 13, 1907	11.0	9,300	1925	Dec. 9, 1924	4.3	1,720
1908	Apr. 1, 1908	6.2	3,000	1926	Feb. 15, 1926	5.0	2,140
1909	Apr. 30, 1909	7.4	4,100	1927	Dec. 25, 1926	11.0	9,300
1921	Feb. 10, 1921	6.0	2,620	1928	Dec. 16, 1927	5.2	2,280
1922	Jan. 21, 1922	7.5	4,200	1929	June 26, 1929	7.5	4,200
1923	June 21, 1923	11.4	10,000	1930	Oct. 2, 1929	7.0	3,700
1924	Sept. 30, 1924	7.5	3,930	1931	Apr. 4, 1931	7.5	4,200

TENNESSEE RIVER BASIN

03474700 HUTTON CREEK NEAR CHILHOWIE, VA

LOCATION.--Lat 36°47'00", long 81°44'05", Washington County, Hydrologic Unit 06010102, on left downstream wingwall of bridge on U.S. Highway 11, 3.3 mi southwest of Chilhowie, and 1.4 mi upstream from mouth.

DRAINAGE AREA.--8.32 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 120 ft³/s and extended above.

BANKFULL STAGE.--12 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1967	-	<10.48	<186	1979	June 23, 1979	13.92	1,740
1968	-	<10.48	<186	1980	-	<10.50	<190
1969	Feb. 2, 1969	9.74	81	1981	June 4, 1981	10.72	234
1970	-	<10.48	<186	1982	Feb. 3, 1982	10.89	268
1971	-	<10.48	<186	1983	-	<10.50	<190
1972	Sept. 30, 1972	12.07	624	1984	May 7, 1984	11.89	562
1973	Dec. 10, 1972	12.14	649	1985	Feb. 1, 1985	10.86	262
1974	Dec. 26, 1973	10.70	230	1986	-	<10.50	<190
1975	Mar. 14, 1975	11.53	449	1987	Apr. 16, 1987	11.24	362
1976	June 20, 1976	10.68	226	1988	-	<10.50	<190
1977	Apr. 4, 1977	12.15	652	1989	Sept. 22, 1989	10.77	244
1978	Nov. 7, 1977	11.27	371	1990	Mar. 17, 1990	10.92	274

< Less than.

TENNESSEE RIVER BASIN

03474800 HALL CREEK NEAR GLADE SPRING, VA

LOCATION.--Lat 36°45'47", long 81°48'15", Washington County, Hydrologic Unit 06010102, on right downstream wingwall of bridge on U.S. Highway 11, 2.0 mi upstream from Tattle Branch, and 2.5 mi southwest of Glade Spring.

DRAINAGE AREA.--7.90 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 50 ft³/s and extended above.

BANKFULL STAGE.--13 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1967	-	<9.60	<200	1979	Jan. 21, 1979	10.84	772
1968	-	<9.60	<200	1980	Sept. 25, 1980	10.48	548
1969	-	<9.60	<200	1981	June 4, 1981	10.17	408
1970	Apr. 28, 1970	10.07	360	1982	Feb. 3, 1982	10.17	408
1971	-	<9.60	<200	1983	-	<9.60	<200
1972	Sept. 30, 1972	11.38	1,200	1984	May 7, 1984	11.19	1,050
1973	Dec. 10, 1972	10.64	644	1985	-	<9.60	<200
1974	-	<9.6	<200	1986	-	<9.60	<200
1975	Mar. 30, 1975	10.53	578	1987	Apr. 16, 1987	10.74	704
1976	-	<9.6	<200	1988	-	<9.60	<200
1977	Apr. 4, 1977	10.87	796	1989	Sept. 22, 1989	11.51	1,310
1978	Nov. 7, 1977	11.37	1,220	1990	Mar. 17, 1990	9.81	264

< Less than.

03475000 MIDDLE FORK HOLSTON RIVER NEAR MEADOWVIEW, VA

LOCATION.--Lat 36°42'47", long 81°49'08", Washington County, Hydrologic Unit 06010102, on left bank 48 ft downstream from bridge on State Highway 803, 0.9 mi upstream from Cedar Creek, 4.1 mi southeast of Meadowview, and at mile 13.2.

DRAINAGE AREA.--211 mi².

GAGE.--Water-stage recorder. Datum of gage is 1,820.22 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 11,000 ft³/s and extended above by logarithmic plotting.

BANKFULL STAGE.--6 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1932	Feb. 3, 1932	8.40	5,010	1952	Jan. 28, 1952	5.42	1,960
1933	Dec. 28, 1932	7.00	3,500	1953	Mar. 4, 1953	6.47	3,000
1934	Aug. 24, 1934	6.55	3,100	1957	Jan. 29, 1957	11.8	10,000
1935	Jan. 23, 1935	8.59	5,360	1973	Dec. 10, 1972	11.0	8,540
1936	Apr. 6, 1936	7.53	4,060	1975	Mar. 30, 1975	10.37	7,410
1937	Feb. 10, 1937	6.29	2,780	1977	Apr. 5, 1977	12.57	11,000
1938	Oct. 28, 1937	6.47	2,980	1978	Nov. 7, 1977	13.41	12,500
1939	Mar. 6, 1939	5.40	1,910	1979	Jan. 21, 1979	7.93	3,930
1940	Aug. 14, 1940	8.00	4,570	1980	Mar. 21, 1980	6.97	3,040
1941	July 6, 1941	4.83	1,520	1981	June 5, 1981	6.53	2,680
1942	Aug. 9, 1942	8.82	5,450	1982	Feb. 3, 1982	8.01	4,100
1943	Dec. 30, 1942	8.29	4,900	1983	Dec. 16, 1982	6.30	2,500
1944	Feb. 18, 1944	9.80	6,650	1984	May 7, 1984	10.30	7,260
1945	Feb. 18, 1945	8.13	4,680	1985	Feb. 1, 1985	7.66	3,690
1946	Jan. 8, 1946	8.90	5,570	1986	Mar. 15, 1986	5.63	1,990
1947	Aug. 4, 1947	9.28	6,050	1987	Apr. 17, 1987	8.72	4,990
1948	Feb. 14, 1948	7.7	4,240	1988	Feb. 4, 1988	6.46	2,630
1949	Dec. 4, 1948	6.80	3,300	1989	Sept. 23, 1989	8.40	4,580
1950	Feb. 2, 1950	8.22	4,790	1990	Jan. 1, 1990	8.74	5,010
1951	Dec. 8, 1950	7.23	3,700				

a From high-water mark, information by Tennessee Valley Authority.

TENNESSEE RIVER BASIN

03475600 CEDAR CREEK NEAR MEADOWVIEW, VA

LOCATION.--Lat 36°44'50", long 81°51'20", Washington County, Hydrologic Unit 06010102, on left downstream wingwall of culvert on U.S. Highway 11, 1.2 mi south of Meadowview, and 2.5 mi upstream from mouth.

DRAINAGE AREA.--3.38 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 2,034.66 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1967	Mar. 7, 1967	6.08	37	1979	Jan. 21, 1979	6.19	41
1968	May 27, 1968	6.94	68	1980	Sept. 25, 1980	6.14	39
1969	-	<5.90	<32	1981	June 4, 1981	6.02	36
1970	Apr. 28, 1970	6.42	48	1982	Aug. 9, 1982	6.40	47
1971	July 10, 1971	7.54	92	1983	Dec. 16, 1982	5.74	27
1972	Sept. 30, 1972	6.83	63	1984	May 7, 1984	7.06	72
1973	Dec. 10, 1972	6.51	50	1985	Feb. 1, 1985	5.56	22
1974	July 10, 1974	6.67	57	1986	Mar. 15, 1986	5.62	24
1975	Mar. 14, 1975	6.24	42	1987	Apr. 16, 1987	6.49	50
1976	Dec. 31, 1975	6.48	49	1988	-	<5.30	<15
1977	Apr. 4, 1977	7.51	90	1989	Sept. 22, 1989	5.89	32
1978	Apr. 26, 1978	6.25	42	1990	Mar. 17, 1990	6.17	40

< Less than.

03475700 SPRING CREEK NEAR ABINGDON, VA

LOCATION.--Lat 36°40'43", long 82°02'29", Washington County, Hydrologic Unit 06010102, on right upstream and left downstream wingwall of culvert on U.S. Highway 11, 1.5 mi upstream from Sinking Creek, and 3.8 mi southwest of Abingdon.

DRAINAGE AREA.--2.99 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,977.54 ft above National Geodetic Vertical Datum of 1929. Aug. 12, 1970, to Nov. 3, 1978, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1971	July 10, 1971	3.43	74	1981	June 5, 1981	3.71	101
1972	Sept. 30, 1972	6.05	402	1982	Aug. 9, 1982	5.34	296
1973	Dec. 10, 1972	5.10	260	1983	June 4, 1983	4.15	145
1974	Jan. 11, 1974	3.75	105	1984	May 7, 1984	4.27	157
1975	Mar. 14, 1975	4.57	187	1985	July 28, 1985	3.07	46
1976	June 20, 1976	3.77	107	1986	Nov. 30, 1985	3.68	98
1977	Apr. 4, 1977	5.30	290	1987	Apr. 23, 1987	4.15	145
1978	Jan. 26, 1978	3.77	107	1988	Apr. 24, 1988	4.41	171
1979	Jan. 21, 1979	3.20	56	1989	Sept. 22, 1989	4.65	195
1980	Mar. 21, 1980	3.00	40	1990	Jan. 1, 1990	3.84	114

TENNESSEE RIVER BASIN

03477500 BEAVER CREEK NEAR WALLACE, VA

LOCATION.--Lat 36°38'25", long 82°06'42", Washington County, Hydrologic Unit 06010102, on left bank 0.4 mi upstream from Clear Creek, 1.3 mi southeast of Wallace, and 3.8 mi northeast of Bristol.

DRAINAGE AREA.--13.7 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,808.93 ft above National Geodetic Vertical Datum of 1929. Prior to October 1957, water-stage recorder and concrete control at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 250 ft³/s and extended above by logarithmic plotting on basis of velocity-area studies.

BANKFULL STAGE.--4 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1946	Feb. 10, 1946	4.50	206	1956	Apr. 15, 1956	4.27	186
1947	Jan. 20, 1947	4.85	246	1957	Apr. 8, 1957	4.55	286
1948	July 15, 1948	5.94	383	1958	May 6, 1958	-	274
1949	Aug. 13, 1949	5.02	264	1959	Mar. 27, 1959	2.83	104
1950	May 26, 1950	4.81	241	1960	July 1, 1960	-	120
1951	Aug. 9, 1951	4.93	258	1961	Feb. 25, 1961	4.34	262
1952	Mar. 11, 1952	2.73	79	1962	Feb. 28, 1962	4.10	232
1953	Mar. 4, 1953	4.04	170	1963	Mar. 12, 1963	4.63	298
1954	Jan. 22, 1954	3.16	103	1964	Apr. 7, 1964	1.99	38
1955	Mar. 18, 1955	4.58	220	1965	Mar. 26, 1965	3.36	153

03478400 BEAVER CREEK AT BRISTOL, VA

LOCATION.--Lat 36°37'54", long 82°08'02", Bristol City, Hydrologic Unit 06010102, on right bank 50 ft upstream from bridge on State Highway 1405, 75 ft downstream from Goose Creek, 0.9 mi downstream from Clear Creek, 3.7 mi northeast of Bristol, VA post office, and at mile 20.6.

DRAINAGE AREA.--27.7 mi².

GAGE.--Water-stage recorder. Datum of gage is 1,780.98 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 380 ft³/s and extended above on basis of slope-area measurement at 1,600 ft³/s.

BANKFULL STAGE.--8 ft.

REMARKS.--Since September 1965, some regulation at high flow by flood-control reservoirs.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1936	-	a12.0	-	1972	Sept. 30, 1972	8.03	1,070
1940	August 1940	b11.5	-	1973	Dec. 10, 1972	7.43	569
1948	-	b9.0	-	1974	Jan. 11, 1974	6.63	442
1953	March 1953	b10.0	-	1975	Mar. 30, 1975	7.83	639
1957	January 1957	c7.1	-	1976	Feb. 13, 1976	4.85	208
1958	May 8, 1958	6.98	795	1977	Apr. 5, 1977	7.61	683
1959	Mar. 27, 1959	4.76	310	1978	Oct. 2, 1977	9.94	1,600
1960	July 1, 1960	4.62	280	1979	Jan. 21, 1979	5.37	278
1961	Feb. 25, 1961	5.82	520	1980	Mar. 21, 1980	4.99	233
1962	Feb. 28, 1962	5.41	440	1981	June 6, 1981	6.88	509
1963	Mar. 12, 1963	7.25	850	1982	Aug. 9, 1982	6.12	376
1964	Apr. 7, 1964	4.41	241	1983	Nov. 28, 1982	4.85	212
1965	Apr. 9, 1965	5.76	510	1984	May 7, 1984	6.97	524
1966	Apr. 13, 1966	5.07	370	1985	Feb. 1, 1985	4.89	216
1967	Oct. 18, 1966	3.91	166	1986	Nov. 30, 1985	4.74	199
1968	Dec. 22, 1967	4.06	184	1987	Apr. 15, 1987	6.09	372
1969	July 18, 1969	4.31	224	1988	Feb. 4, 1988	4.41	162
1970	Apr. 28, 1970	6.11	1,080	1989	Sept. 26, 1989	4.90	216
1971	May 7, 1971	5.51	462	1990	Mar. 17, 1990	4.94	221

a From information by local resident; approximate gage height.

b From information by local resident.

c From information by local resident; average of three high-water marks.

TENNESSEE RIVER BASIN

03487800 LICK CREEK NEAR CHATHAM HILL, VA

LOCATION.--Lat 36°57'44", long 81°28'21", Smyth County, Hydrologic Unit 06010101, on left bank 270 ft upstream from bridge on State Highway 42, 2.9 mi northeast of Chatham Hill, and 1.6 mi upstream from mouth.

DRAINAGE AREA.--25.5 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 2,076.97 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1968, water-stage recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 600 ft³/s and extended above on basis of contracted-opening measurement at 2,600 ft³/s.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1966	Feb. 13, 1966	5.40	1,110	1979	Jan. 21, 1979	6.31	1,600
1967	Mar. 7, 1967	6.30	1,590	1980	July 11, 1980	5.98	1,400
1968	May 27, 1968	5.42	1,120	1981	May 28, 1981	4.45	638
1969	Feb. 2, 1969	4.28	570	1982	Jan. 4, 1982	5.52	1,170
1970	Dec. 30, 1969	6.66	1,810	1983	Mar. 21, 1983	4.44	633
1971	May 7, 1971	5.25	1,040	1984	May 7, 1984	6.58	1,760
1972	Sept. 30, 1972	6.65	1,800	1985	Feb. 1, 1985	5.64	1,230
1973	Dec. 10, 1972	7.85	2,520	1986	Mar. 15, 1986	5.51	1,160
1974	Apr. 4, 1974	4.93	875	1987	Apr. 25, 1987	5.15	985
1975	Mar. 14, 1975	6.53	1,730	1988	Jan. 20, 1988	4.40	615
1976	Dec. 31, 1975	5.65	1,240	1989	Sept. 22, 1989	6.09	1,460
1977	Apr. 4, 1977	6.50	1,710	1990	Jan. 1, 1990	6.30	1,590
1978	Nov. 7, 1977	8.09	2,660				

TENNESSEE RIVER BASIN

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03487850 POSSUM JAW CREEK NEAR CHATHAM HILL, VA

LOCATION.--Lat 36°57'41", long 81°27'52", Smyth County, Hydrologic Unit 06010101, at bridge on State Highway 42, 3.3 mi east of Chatham Hill.

DRAINAGE AREA.--4.36 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 2,084.80 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurement at 8 ft³/s and contracted-opening measurement at 750 ft³/s.

BANKFULL STAGE.--11 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1967	Mar. 7, 1967	9.67	392	1973	Dec. 10, 1972	10.24	547
1968	Mar. 12, 1968	9.45	340	1974	Mar. 20, 1974	8.96	242
1969	Feb. 2, 1969	8.57	164	1975	Mar. 14, 1975	10.03	484
1970	Dec. 30, 1969	9.78	416	1976	Dec. 31, 1975	9.34	318
1971	May 7, 1971	9.28	306	1977	Apr. 4, 1977	10.46	613
1972	Aug. 18, 1972	10.54	639	1978	Nov. 6, 1977	10.94	779

TENNESSEE RIVER BASIN

03487900 SPROUTS CREEK NEAR CHATHAM HILL, VA

LOCATION.--Lat 36°58'10", long 81°30'32", Smyth County, Hydrologic Unit 06010101, at culvert on State Highway 42, 1.2 mi northeast of Chatham Hill.

DRAINAGE AREA.--7.64 mi².

GAGE.--Water-stage recorder (flood-hydrograph recorder). Datum of gage is 2,110 ft above National Geodetic Vertical Datum of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--4 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1967	Mar. 7, 1967	3.90	210	1973	Dec. 10, 1972	5.50	420
1968	Aug. 14, 1968	3.95	215	1974	Dec. 26, 1973	3.75	190
1969	Sept. 8, 1969	3.25	125	1975	Mar. 14, 1975	5.67	440
1970	Dec. 30, 1969	5.20	375	1976	Dec. 31, 1975	3.53	175
1971	May 7, 1971	3.55	175	1977	Apr. 4, 1977	6.80	630
1972	Aug. 18, 1972	6.20	530				

TENNESSEE RIVER BASIN

03488000 NORTH FORK HOLSTON RIVER NEAR SALTVILLE, VA

LOCATION.--Lat 36°53'48", long 81°44'47", Smyth County, Hydrologic Unit 06010101, on right bank 0.5 mi upstream from Cedar Branch bridge, 1.5 mi northeast of Saltville, 7.8 mi downstream from Laurel Creek, and at mile 85.0.

DRAINAGE AREA.--222 mi².

GAGE.--Water-stage recorder. Datum of gage is 1,703.53 ft above National Geodetic Vertical Datum of 1929. June 11, 1907, to Nov. 12, 1908, nonrecording gage on highway bridge 2.1 mi downstream at different datum. Nov. 2, 1920, to May 23, 1934, nonrecording gage on highway bridge 0.5 mi downstream at datum 7.74 ft lower.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 13,000 ft³/s and extended above on basis of slope-area measurement at 16,500 ft³/s.

BANKFULL STAGE.--7 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1862	February 1862	a15	a22,000	1955	Mar. 16, 1955	9.42	10,300
1907	June 14, 1907	b13.0	8,400	1956	Apr. 16, 1956	9.05	9,560
1908	Apr. 2, 1908	b12.1	7,400	1957	Jan. 29, 1957	13.20	16,500
1921	Dec. 15, 1920	b9.27	4,480	1958	Mar. 31, 1958	6.28	5,000
1922	Mar. 15, 1922	b8.9	4,160	1959	Apr. 13, 1959	6.04	4,640
1923	Feb. 3, 1923	b13.97	8,220	1960	Mar. 31, 1960	5.74	4,250
1924	Sept. 30, 1924	b11.0	5,840	1961	Feb. 25, 1961	11.15	12,500
1925	Jan. 11, 1925	b9.0	4,310	1962	Dec. 18, 1961	8.88	8,650
1926	Jan. 18, 1926	b9.2	4,490	1963	Mar. 12, 1963	12.15	14,500
1927	Dec. 21, 1926	b12.0	6,700	1964	Mar. 5, 1964	4.96	3,340
1928	Dec. 16, 1927	b7.0	2,640	1965	Mar. 26, 1965	7.70	6,880
1929	Feb. 27, 1929	b8.1	3,520	1966	Feb. 14, 1966	6.00	4,500
1930	Nov. 18, 1929	b7.9	3,360	1967	Mar. 7, 1967	7.26	6,260
1931	Apr. 4, 1931	b10.10	5,440	1968	May 27, 1968	5.58	3,910
1932	Jan. 30, 1932	b9.4	4,750	1969	Feb. 2, 1969	4.95	3,090
1933	Dec. 28, 1932	b9.9	5,240	1970	Dec. 31, 1969	10.37	11,000
1934	Mar. 3, 1934	b8.7	4,120	1971	May 7, 1971	7.40	6,460
1935	Jan. 23, 1935	7.49	7,990	1972	Sept. 30, 1972	8.25	7,550
1936	Apr. 6, 1936	6.50	6,290	1973	Dec. 10, 1972	11.98	13,200
1937	Jan. 20, 1937	5.46	4,650	1974	Dec. 26, 1973	6.52	5,130
1938	Oct. 28, 1937	6.08	5,660	1975	Mar. 14, 1975	10.68	11,100
1939	Feb. 3, 1939	4.12	2,530	1976	Jan. 1, 1976	7.56	6,580
1940	Aug. 14, 1940	6.23	5,840	1977	Apr. 5, 1977	12.98	14,900
1941	July 6, 1941	5.58	4,790	1978	Nov. 6, 1977	13.57	15,900
1942	June 20, 1942	6.73	6,740	1979	Jan. 21, 1979	10.04	10,100
1943	Dec. 30, 1942	6.46	6,380	1980	Mar. 21, 1980	6.44	4,820
1944	Feb. 18, 1944	10.15	13,100	1981	May 28, 1981	7.66	5,540
1945	Feb. 17, 1945	6.83	5,840	1982	Feb. 3, 1982	8.34	6,470
1946	Jan. 8, 1946	8.26	8,370	1983	Nov. 29, 1982	5.44	3,070

TENNESSEE RIVER BASIN

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03488000 NORTH FORK HOLSTON RIVER NEAR SALTVILLE, VA--Continued

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1947	Jan. 20, 1947	7.91	7,690	1984	May 7, 1984	10.51	10,100
1948	Feb. 14, 1948	8.0	7,860	1985	Feb. 1, 1985	7.25	5,150
1949	Dec. 4, 1948	6.76	5,840	1986	May 14, 1986	5.93	3,590
1950	Feb. 2, 1950	7.13	6,330	1987	Apr. 17, 1987	7.74	5,790
1951	Dec. 8, 1950	6.24	4,920	1988	Jan. 20, 1988	4.61	2,280
1952	Jan. 23, 1952	4.91	3,210	1989	Sept. 23, 1989	7.00	4,830
1953	May 19, 1953	6.68	5,680	1990	Jan. 1, 1990	9.80	8,860
1954	Jan. 22, 1954	7.19	6,500				

a From report by Tennessee Valley Authority, present site and datum.

b At different site and datum.

TENNESSEE RIVER BASIN

03488445 BRUMLEY CREEK NEAR HANSONVILLE, VA

LOCATION.--Lat 36°51'21", long 82°02'43", Washington County, Hydrologic Unit 06010101, on left bank 1.0 mi upstream from Little Brumley Creek, 1.1 mi downstream from Shovel Hollow Branch, 6.1 mi northeast of Hansonville, and at mile 8.7.

DRAINAGE AREA.--4.29 mi².

GAGE.--Water-stage recorder. Datum of gage is 3,371.95 ft above National Geodetic Vertical Datum of 1929 (Appalachian Power Company bench mark).

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 23 ft³/s and extended above.

BANKFULL STAGE.--2.5 ft.

REMARKS.--Some regulation at high flow by Hidden Valley Lake 1.7 mi upstream.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1979a	July 28, 1979	2.28	104	1981	May 20, 1981	2.15	73
1980	Mar. 21, 1980	2.31	107				

a Partial year, July through September.

TENNESSEE RIVER BASIN

03488450 BRUMLEY CREEK AT BRUMLEY GAP, VA

LOCATION.--Lat 36°47'30", long 82°01'10", Washington County, Hydrologic Unit 06010101, on left downstream wingwall of bridge on State Highway 611, 0.2 mi upstream from mouth, 0.8 mi southeast of Brumley Gap, and 2.7 mi downstream from Lee Creek.

DRAINAGE AREA.--21.1 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,489.16 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1981, water-stage recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 120 ft³/s and extended above.

BANKFULL STAGE.--6 ft.

REMARKS.--Some regulation at high flow by Hidden Valley Lake 10.1 mi upstream.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1979a	July 28, 1979	4.70	600	1985	Feb. 2, 1985	5.12	768
1980	Mar. 21, 1980	5.10	760	1986	Nov. 29, 1985	5.06	743
1981	May 20, 1981	3.94	374	1987	Apr. 16, 1987	4.92	685
1982	June 13, 1982	4.94	693	1988	Feb. 4, 1988	5.16	784
1983	Nov. 29, 1982	4.16	433	1989	May 6, 1989	4.86	661
1984	May 7, 1984	6.60	1,500	1990	Jan. 1, 1990	4.76	622

a Partial year, July through September.

03488500 NORTH FORK HOLSTON RIVER AT HOLSTON, VA

LOCATION.--Lat 36°46'29", long 82°04'22", Washington County, Hydrologic Unit 06010101, at bridge on U.S. Highway 19, 0.5 mi east of Holston.

DRAINAGE AREA.--402 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,437.11 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1959, water-stage recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 12,000 ft³/s and extended above on basis of slope-area measurements at 24,000 ft³/s and 27,000 ft³/s.

BANKFULL STAGE.--9 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1952	Jan. 23, 1952	7.90	4,680	1965	Mar. 26, 1965	10.86	10,000
1953	May 19, 1953	10.61	8,090	1966	July 30, 1966	9.25	7,080
1954	Jan. 23, 1954	10.24	7,570	1967	June 2, 1967	9.81	8,040
1955	Mar. 17, 1955	12.15	11,400	1968	May 27, 1968	7.47	4,850
1956	Apr. 16, 1956	12.93	12,800	1969	Feb. 2, 1969	7.90	5,370
1957	Jan. 29, 1957	16.50	24,300	1970	Dec. 31, 1969	14.00	17,000
1958	May 6, 1958	10.56	9,410	1971	May 7, 1971	11.89	12,000
1959	Apr. 13, 1959	9.11	6,940	1972	Sept. 30, 1972	10.37	9,070
1960	May 30, 1960	8.54	6,150	1973	Dec. 10, 1972	14.89	19,500
1961	Feb. 26, 1961	13.71	16,200	1974	Dec. 26, 1973	10.58	9,440
1962	Dec. 18, 1961	11.44	10,700	1975	Mar. 30, 1975	14.20	17,600
1963	Mar. 12, 1963	15.28	20,700	1976	Jan. 1, 1976	9.90	8,220
1964	Mar. 5, 1964	9.66	7,860	1977	Apr. 5, 1977	18.60	27,000

TENNESSEE RIVER BASIN

03489500 NORTH FORK HOLSTON RIVER AT MENDOTA, VA

LOCATION.--Lat 36°42'00", long 82°19'10", Washington County, Hydrologic Unit 06010101, on right bank at Barkers Mill, 0.6 mi southwest of Mendota.

DRAINAGE AREA.--493 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,329.66 ft above National Geodetic Vertical Datum of 1929 (levels by National Weather Service).

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 15,000 ft³/s and extended above.

BANKFULL STAGE.--8 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1921	Dec. 14, 1920	9.95	9,640	1927	Dec. 22, 1926	13.6	17,800
1922	Jan. 21, 1922	11.2	12,300	1928	Dec. 16, 1927	7.2	5,000
1923	Feb. 3, 1923	14.4	19,600	1929	Feb. 28, 1929	9.2	8,120
1924	Jan. 1, 1924	10.0	9,740	1930	Feb. 5, 1930	7.2	4,770
1925	Jan. 12, 1925	9.4	8,580	1931	Apr. 5, 1931	11.4	12,700
1926	Feb. 16, 1926	8.6	7,170				

TENNESSEE RIVER BASIN

03489700 FLEENOR BRANCH NEAR BRISTOL, VA

LOCATION.--Lat 36°38'10", long 82°15'20", Washington County, Hydrologic Unit 06010101, at culvert on U.S. Highways 58 and 421, 5.0 mi northwest of Bristol.

DRAINAGE AREA.--0.59 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--5 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1966	July 30, 1966	5.15	67	1971	-	<4.31	<30
1967	-	<5.00	<60	1972	June 21, 1972	4.53	37
1968	-	<5.00	<60	1973	July 14, 1973	5.56	89
1969	-	<5.00	<60	1974	-	<4.31	<30
1970	-	<5.00	<60	1975	Mar. 30, 1975	4.50	36

< Less than.

03489800 COVE CREEK NEAR SHELLEYS, VA

LOCATION.--Lat 36°39'13", long 82°21'16", Scott County, Hydrologic Unit 06010101, on right downstream wingwall of bridge on U.S. Highways 58 and 421, 1.5 mi northwest of Shelleys.

DRAINAGE AREA.--17.3 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,381.53 ft above National Geodetic Vertical Datum of 1929. Sept. 15, 1965, to Nov. 2, 1978, flood-hydrograph recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurement below 800 ft³/s and extended above on basis of contracted-opening measurement at 1,260 ft³/s.

BANKFULL STAGE.--5 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1951	Dec. 7, 1950	3.13	a190	1971	May 7, 1971	6.20	a1,020
1952	Mar. 23, 1952	5.25	600	1972	Apr. 12, 1972	6.55	a1,200
1953	May 19, 1953	6.03	a940	1973	Dec. 10, 1972	7.00	1,470
1954	Jan. 22, 1954	5.25	600	1974	Apr. 4, 1974	6.20	a1,020
1955	Mar. 18, 1955	6.15	a1,000	1975	Mar. 14, 1975	6.40	a1,120
1956	Apr. 16, 1956	6.65	1,260	1976	June 2, 1976	5.93	a885
1957	Jan. 29, 1957	5.78	810	1977	Apr. 5, 1977	6.41	1,120
1958	May 5, 1958	b5.85	a440	1978	Oct. 2, 1977	7.28	1,670
1959	Mar. 27, 1959	5.58	a710	1979	Jan. 21, 1979	5.87	855
1960	Nov. 28, 1959	5.25	a600	1980	Mar. 21, 1980	5.91	875
1961	Feb. 25, 1961	5.90	a870	1981	June 6, 1981	6.94	1,430
1962	Dec. 18, 1961	5.94	a890	1982	Feb. 3, 1982	5.58	722
1963	Mar. 12, 1963	8.40	2,500	1983	Nov. 29, 1982	4.98	517
1964	Mar. 5, 1964	5.70	a770	1984	May 7, 1984	6.81	1,360
1965	Apr. 9, 1965	5.95	a900	1985	Feb. 1, 1985	6.04	940
1966	Apr. 13, 1966	5.73	a780	1986	Nov. 30, 1985	6.02	930
1967	Oct. 19, 1966	5.23	a590	1987	Jan. 19, 1987	6.17	1,000
1968	Dec. 22, 1967	5.54	710	1988	Feb. 4, 1988	5.43	662
1969	July 21, 1969	5.00	a520	1989	June 17, 1989	5.79	815
1970	Apr. 28, 1970	6.33	a1,080	1990	Jan. 1, 1990	5.20	580

a Revised.

b Suspected backwater from unknown source.

TENNESSEE RIVER BASIN

03489850 COVE CREEK NEAR HILTON, VA

LOCATION.--Lat 36°39'08", long 82°21'53", Scott County, Hydrologic Unit 06010101, at bridge on State Highway 803, 7.2 mi east of Hilton.
 DRAINAGE AREA.--17.6 mi².
 GAGE.--Water-stage recorder. Datum of gage is 1,354.40 ft above National Geodetic Vertical Datum of 1929.
 STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 300 ft³/s and extended above.
 BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1966a	Apr. 13, 1966	5.13	1,180	1973	Dec. 10, 1972	5.76	1,500
1967	Oct. 19, 1966	3.87	628	1974	Jan. 11, 1974	4.68	966
1968	Dec. 22, 1967	4.06	704	1975	Mar. 14, 1975	5.26	1,240
1969	July 21, 1969	3.82	608	1976	Dec. 31, 1975	4.32	808
1970	Dec. 31, 1969	5.70	1,480	1977	Apr. 5, 1977	5.27	1,240
1971	May 7, 1971	5.19	1,200	1978	Oct. 2, 1977	6.16	1,740
1972	Apr. 12, 1972	5.42	1,320				

a Partial year, March through September.

TENNESSEE RIVER BASIN

03469870 BIG MOCCASIN CREEK AT COLLINWOOD, NEAR HANSONVILLE, VA

LOCATION.--Lat 36°44'16", long 82°19'25", Russell County, Hydrologic Unit 06010101, at Collinwood, on left downstream wingwall of bridge on State Highway 612, and 50 ft downstream from Meade Branch.
 DRAINAGE AREA.--41.9 mi².
 GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,796.34 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1968, water-stage recorder at same site and datum.
 STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 400 ft³/s and extended above on basis of contracted-opening measurement at 2,600 ft³/s.
 BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1966a	July 30, 1966	4.57	1,760	1979	Jan. 21, 1979	5.08	2,160
1967	Mar. 7, 1967	4.59	1,770	1980	Mar. 21, 1980	4.36	1,600
1968	Dec. 22, 1967	4.24	1,520	1981	June 6, 1981	2.70	550
1969	Feb. 2, 1969	3.47	982	1982	Feb. 3, 1982	4.94	2,050
1970	Apr. 28, 1970	5.95	2,860	1983	Nov. 29, 1982	2.62	510
1971	May 7, 1971	5.77	2,720	1984	May 7, 1984	6.19	3,070
1972	June 21, 1972	4.47	1,680	1985	Feb. 1, 1985	5.04	2,130
1973	Dec. 10, 1972	5.84	2,770	1986	Mar. 15, 1986	2.57	485
1974	Dec. 26, 1973	5.35	2,380	1987	Apr. 16, 1987	4.34	1,590
1975	Mar. 30, 1975	6.85	3,660	1988	Feb. 4, 1988	3.28	868
1976	Dec. 31, 1975	3.88	1,270	1989	June 17, 1989	4.16	1,460
1977	Apr. 5, 1977	6.83	3,650	1990	Jan. 1, 1990	3.81	1,220
1978	Jan. 26, 1978	6.41	3,270				

a Partial year, March through September.

03489900 BIG MOCCASIN CREEK NEAR GATE CITY, VA

LOCATION.--Lat 36°38'47", long 82°33'12", Scott County, Hydrologic Unit 06010101, at bridge on State Highway 71, 1.6 mi east of Gate City.

DRAINAGE AREA.--79.6 mi².

GAGE.--Water-stage recorder. Datum of gage is 1,267.64 ft above National Geodetic Vertical Datum of 1929. Oct. 1, 1959, to Mar. 1, 1966, nonrecording gage at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 3,000 ft³/s and extended above.

BANKFULL STAGE.--7 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1953	May 19, 1953	7.67	2,550	1966	Apr. 13, 1966	6.28	1,710
1954	Jan. 22, 1954	5.98	1,700	1967	Mar. 7, 1967	-	a2,700
1955	Mar. 16, 1955	6.72	2,220	1968	Dec. 23, 1967	6.27	1,690
1956	Apr. 16, 1956	7.95	3,110	1969	Feb. 2, 1969	5.35	1,280
1957	Jan. 29, 1957	8.36	3,340	1970	Apr. 28, 1970	9.47	4,170
1958	May 6, 1958	8.84	3,570	1971	May 7, 1971	8.04	2,930
1959	Jan. 22, 1959	6.48	1,830	1972	June 21, 1972	6.24	1,670
1960	Nov. 28, 1959	5.66	1,420	1973	Mar. 17, 1973	8.62	3,400
1961	Feb. 25, 1961	7.58	2,600	1974	Jan. 1, 1974	7.62	2,610
1962	Dec. 18, 1961	6.98	2,180	1975	Mar. 30, 1975	9.57	4,270
1963	Mar. 12, 1963	10.15	4,900	1976	Dec. 31, 1975	5.70	1,420
1964	Mar. 5, 1964	5.60	1,370	1977	Apr. 5, 1977	9.88	4,580
1965	Mar. 26, 1965	7.14	2,250				

a Mean daily discharge; peak discharge is known to be greater than value shown.

TENNESSEE RIVER BASIN

03490000 NORTH FORK HOLSTON RIVER NEAR GATE CITY, VA

LOCATION.--Lat 36°36'31", long 82°34'05", Scott County, Hydrologic Unit 06010101, on left bank 75 ft upstream from bridge on U.S. Highway 23, 1.6 mi downstream from Big Moccasin Creek, 2.1 mi southeast of Gate City, and 8.8 mi upstream from mouth.

DRAINAGE AREA.--672 mi².

GAGE.--Water-stage recorder. Datum of gage is 1,197.56 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 31,000 ft³/s and extended above on basis of slope-area measurement at 41,000 ft³/s.

BANKFULL STAGE.--6 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1862	February 1862	22.5	54,000	1961	Feb. 26, 1961	12.96	19,200
1932	Jan. 30, 1932	10.64	13,400	1962	Dec. 18, 1961	11.29	15,100
1933	Dec. 29, 1932	10.24	12,600	1963	Mar. 12, 1963	16.42	30,000
1934	Mar. 4, 1934	8.98	10,000	1964	Mar. 5, 1964	9.34	10,400
1935	Mar. 26, 1935	10.65	13,400	1965	Mar. 27, 1965	11.42	15,200
1936	Jan. 20, 1936	10.29	13,200	1966	Apr. 13, 1966	9.56	11,000
1937	Feb. 10, 1937	9.28	10,900	1967	Mar. 7, 1967	9.99	11,900
1938	July 21, 1938	9.04	10,100	1968	Dec. 23, 1967	8.48	8,650
1939	Feb. 4, 1939	8.46	8,960	1969	Feb. 2, 1969	8.66	9,030
1940	Aug. 14, 1940	14.75	23,700	1970	Apr. 28, 1970	14.32	23,400
1941	Mar. 12, 1941	7.20	6,440	1971	May 7, 1971	13.59	21,200
1942	Aug. 9, 1942	9.22	10,400	1972	Jan. 29, 1972	9.71	11,300
1943	Dec. 30, 1942	11.60	15,800	1973	Dec. 11, 1972	15.62	27,400
1944	Feb. 18, 1944	14.44	22,700	1974	Jan. 1, 1974	11.48	15,400
1945	Feb. 18, 1945	10.16	12,600	1975	Mar. 30, 1975	15.83	28,100
1946	Jan. 8, 1946	13.70	21,000	1976	Jan. 1, 1976	9.51	10,800
1947	Jan. 16, 1947	12.10	17,000	1977	Apr. 5, 1977	19.79	41,000
1948	Feb. 14, 1948	12.10	17,000	1978	Jan. 26, 1978	14.42	23,600
1949	Dec. 4, 1948	9.84	11,700	1979	Jan. 22, 1979	13.75	21,700
1950	Feb. 2, 1950	12.75	18,700	1980	Mar. 21, 1980	10.66	13,400
1951	Dec. 8, 1950	8.85	9,540	1981	May 29, 1981	8.68	9,050
1952	Dec. 21, 1951	8.22	8,220	1982	Feb. 4, 1982	11.01	14,300
1953	May 20, 1953	11.64	15,800	1983	Nov. 29, 1982	7.97	7,600
1954	Jan. 23, 1954	9.77	11,900	1984	May 8, 1984	15.27	26,100
1955	Mar. 17, 1955	11.66	16,100	1985	Feb. 2, 1985	11.45	15,400
1956	Apr. 16, 1956	14.10	22,000	1986	Nov. 30, 1985	10.23	12,400
1957	Jan. 30, 1957	16.73	28,700	1987	Apr. 17, 1987	12.28	17,600
1958	May 7, 1958	13.95	21,600	1988	Feb. 4, 1988	7.68	7,040
1959	Apr. 13, 1959	9.05	10,200	1989	June 17, 1989	8.58	8,840
1960	Nov. 25, 1959	8.14	8,320	1990	Jan. 1, 1990	11.35	15,100

a From report by Tennessee Valley Authority.

03521000 CLINCH RIVER AT CEDAR BLUFF, VA

LOCATION.--Lat 37°05'20", long 81°46'00", Tazewell County, Hydrologic Unit 06010205, at highway bridge at mouth of Indian Creek in town of Cedar Bluff, 400 ft upstream from Middle Creek, and 1.1 mi east of Richlands.

DRAINAGE AREA.--125 mi², includes that of Indian Creek.

GAGE.--Nonrecording gage (staff gage). Datum of gage is 1,940 ft above National Geodetic Vertical Datum of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 750 ft³/s and extended above. Unknown effects from backwater from Indian Creek.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1901	June 1901	a16	-	1946	Jan. 8, 1946	c7.4	4,800
1944b	June 6, 1944	2.62	615	1957	Apr. 16, 1957	c14.41	-
1945	Feb. 17, 1945	7.3	4,700				

a From high-water mark in Banes Mill at Cedar Bluff.

b Partial year, May through September.

c From high-water mark.

TENNESSEE RIVER BASIN

03521500 CLINCH RIVER AT RICHLANDS, VA

LOCATION.--Lat 37°05'10", long 81°46'52", Tazewell County, Hydrologic Unit 06010205, on right bank 1.0 mi southeast of Richlands, 1.6 mi downstream from Middle Creek, 2.2 mi upstream from Big Creek, and at mile 321.0.

DRAINAGE AREA.--137 mi².

GAGE.--Water-stage recorder. Datum of gage is 1,924.08 ft above National Geodetic Vertical Datum of 1929. Prior to Aug. 6, 1950, nonrecording gage at bridge 1.1 mi downstream at datum 6.53 ft lower.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements at site in use 1945-50. Subsequent to 1950, defined by current-meter measurements below 4,800 ft³/s and extended above by contracted-opening measurement at 9,600 ft³/s.

BANKFULL STAGE.--11 ft.

REMARKS.--Tennessee Valley Authority Report No. 0-5923 contains accounts of other floods prior to 1944 in addition to the outstanding floods published herein.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1901	June 22, 1901	a21.3	a11,500	1968	May 27, 1968	9.65	3,480
1944	Feb. 18, 1944	a13.7	a5,500	1969	July 11, 1969	5.34	1,330
1946	Jan. 8, 1946	b10.1	3,860	1970	Dec. 31, 1969	10.34	3,840
1947	Jan. 15, 1947	b10.60	4,130	1971	May 7, 1971	11.27	4,360
1948	Feb. 14, 1948	b10.1	3,860	1972	Apr. 14, 1972	14.65	6,420
1949	Dec. 4, 1948	b10.5	4,080	1973	Mar. 16, 1973	11.65	4,590
1950	Feb. 2, 1950	b11.3	4,520	1974	Mar. 21, 1974	9.20	3,250
1951	Dec. 8, 1950	7.84	2,500	1975	Mar. 14, 1975	12.44	5,060
1952	Jan. 22, 1952	8.35	2,630	1976	Jan. 1, 1976	7.68	2,490
1953	May 19, 1953	13.23	5,080	1977	Apr. 5, 1977	16.06	7,340
1954	Jan. 22, 1954	7.42	2,180	1978	Jan. 26, 1978	16.10	7,370
1955	Mar. 1, 1955	12.51	4,700	1979	Jan. 21, 1979	11.15	4,290
1956	Apr. 16, 1956	10.54	3,650	1980	Jan. 23, 1980	7.23	2,260
1957	Jan. 29, 1957	19.3	9,640	1981	June 1, 1981	8.38	2,810
1958	May 6, 1958	10.70	3,750	1982	Feb. 3, 1982	9.05	3,150
1959	Jan. 22, 1959	7.75	2,360	1983	Dec. 16, 1982	6.84	2,070
1960	Nov. 24, 1959	6.68	1,860	1984	May 7, 1984	14.70	6,450
1961	Feb. 25, 1961	11.79	4,340	1985	Feb. 1, 1985	10.38	3,680
1962	Dec. 18, 1961	9.22	3,250	1986	Nov. 29, 1985	6.70	2,000
1963	Mar. 12, 1963	16.09	7,370	1987	Apr. 25, 1987	9.94	3,620
1964	Apr. 8, 1964	5.64	1,450	1988	Feb. 4, 1988	4.11	802
1965	Mar. 26, 1965	10.36	3,870	1989	May 6, 1989	10.23	3,770
1966	May 1, 1966	6.91	2,100	1990	Feb. 10, 1990	6.86	3,050
1967	Mar. 7, 1967	10.82	4,100				

a From report by Tennessee Valley Authority; from high-water marks, present site and datum.

b At different datum at site 1.1 mi downstream.

03522000 LITTLE RIVER AT WARDELL, VA

LOCATION.--Lat 37°02'16", long 81°47'52", Tazewell County, Hydrologic Unit 06010205, on right bank 50 ft upstream from Katie Branch, 0.5 mi downstream from Indian Creek, 0.5 mi northwest of Wardell, and 16.0 mi upstream from mouth.

DRAINAGE AREA.--103 mi².

GAGE.--Water-stage recorder. Datum of gage is 2,033.01 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,000 ft³/s and extended above on basis of slope-area measurement at 1,800 ft³/s.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1950	Feb. 2, 1950	8.05	1,830	1952	Mar. 11, 1952	7.00	1,580
1951	Dec. 7, 1950	6.21	1,370	1957	Jan. 29, 1957	a14.34	-

a From high-water mark.

TENNESSEE RIVER BASIN

03523000 BIG CEDAR CREEK NEAR LEBANON, VA
(Previously published as Cedar Creek near Lebanon)

LOCATION.--Lat 36°54'29", long 82°02'20", Russell County, Hydrologic Unit 06010205, 200 ft upstream from bridge on U.S. Highway 19, 2.3 mi east of Lebanon.

DRAINAGE AREA.--51.5 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,928.96 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1959, water-stage recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 2,300 ft³/s and extended above on basis of contracted-opening measurement at 2,700 ft³/s.

BANKFULL STAGE.--4 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1953	May 19, 1953	4.20	2,600	1966	July 30, 1966	3.65	2,250
1954	Jan. 22, 1954	3.47	1,980	1967	Mar. 7, 1967	3.85	2,390
1955	Mar. 16, 1955	4.27	2,650	1968	Dec. 22, 1967	3.34	1,710
1956	Apr. 16, 1956	4.02	2,510	1969	Sept. 3, 1969	3.25	1,530
1957	Jan. 29, 1957	4.48	2,740	1970	Dec. 30, 1969	4.12	2,560
1958	May 6, 1958	3.81	2,400	1971	May 7, 1971	3.80	2,390
1959	Jan. 22, 1959	3.65	2,250	1972	Sept. 30, 1972	3.95	2,480
1960	Nov. 24, 1959	2.80	750	1973	Mar. 17, 1973	4.56	2,780
1961	Feb. 25, 1961	4.43	2,700	1974	Dec. 26, 1973	3.80	2,390
1962	Dec. 18, 1961	3.42	1,870	1975	Mar. 30, 1975	4.35	2,680
1963	Mar. 12, 1963	5.26	3,320	1976	June 2, 1976	4.42	2,710
1964	Mar. 5, 1964	2.82	782	1977	Apr. 5, 1977	5.83	4,000
1965	Mar. 26, 1965	3.74	2,300				

TENNESSEE RIVER BASIN

03523500 THOMPSON CREEK NEAR COULWOOD, VA

LOCATION.--Lat 36°59'21", long 82°03'44", Russell County, Hydrologic Unit 06010205, 0.5 mi southwest of Coulwood, 4,500 ft upstream from Breezers Branch, and 3.3 mi upstream from mouth.

DRAINAGE AREA.--14.0 mi².

GAGE.--Water-stage recorder. Datum of gage is 1,573.22 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 300 ft³/s and extended above.

BANKFULL STAGE.--4 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1942a	Aug. 9, 1942	4.15	376	1946	Jan. 8, 1946	3.46	276
1943	Dec. 29, 1942	4.18	384	1947	Aug. 19, 1947	4.13	376
1944	Feb. 17, 1944	5.37	628	1948	Apr. 7, 1948	3.37	262
1945	Feb. 17, 1945	3.75	315	1949	Dec. 3, 1948	4.06	359

a Partial year, December through September.

03524000 CLINCH RIVER AT CLEVELAND, VA

LOCATION.--Lat 36°56'41", Long 82°09'18", Russell County, Hydrologic Unit 06010205, on right bank 500 ft upstream from highway bridge at Cleveland, 0.5 mi downstream from Muddy Hollow, 2.3 mi downstream from Weaver Creek, 4.4 mi downstream from Thompson Creek, and at mile 271.6.

DRAINAGE AREA.--528 mi².

GAGE.--Water-stage recorder. Datum of gage is 1,500.24 ft above National Geodetic Vertical Datum of 1929. Prior to Nov. 1, 1931, nonrecording gage on highway bridge 500 ft downstream at datum 1.0 ft lower.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 26,000 ft³/s and extended above on basis of contracted-opening measurement at 31,000 ft³/s.

BANKFULL STAGE.--16 ft.

REMARKS.--Flood of 1862 approximately 5 ft lower than flood of Jan. 30, 1957, at site 1 mi downstream, information and high-water mark from local resident.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1862	February 1862	a22.8	27,500	1954	Jan. 23, 1954	10.47	6,980
1902	Mar. 1, 1902	a20.3	22,300	1955	Mar. 7, 1955	16.35	15,500
1907	June 14, 1907	a20.3	22,300	1956	Apr. 16, 1956	15.38	14,000
1918	Jan. 29, 1918	a19.9	21,500	1957	Jan. 30, 1957	24.40	31,000
1921	Jan. 15, 1921	b9.8	6,860	1958	May 6, 1958	15.58	13,900
1922	Mar. 10, 1922	b12.0	9,640	1959	Jan. 22, 1959	11.20	7,840
1923	June 13, 1923	b17.2	16,400	1960	Nov. 25, 1959	9.71	6,170
1924	Jan. 1, 1924	b13.0	11,400	1961	Feb. 26, 1961	15.82	14,300
1925	Dec. 9, 1924	b10.7	8,480	1962	Dec. 18, 1961	13.45	11,000
1926	Feb. 15, 1926	b11.0	8,340	1963	Mar. 12, 1963	22.70	27,200
1927	Dec. 22, 1926	b20.1	20,400	1964	Mar. 5, 1964	10.03	6,900
1928	Apr. 30, 1928	b8.43	5,200	1965	Mar. 27, 1965	14.00	11,700
1929	Mar. 6, 1929	b11.4	8,860	1966	May 2, 1966	10.27	7,260
1930	Feb. 3, 1930	b8.7	5,540	1967	Mar. 7, 1967	16.75	13,700
1931	Apr. 4, 1931	b11.0	8,340	1968	Dec. 22, 1967	10.57	6,570
1932	Jan. 30, 1932	14.38	11,700	1969	Feb. 2, 1969	8.55	4,600
1933	Dec. 28, 1932	11.82	8,830	1970	Dec. 31, 1969	18.63	16,100
1934	Mar. 3, 1934	11.62	8,610	1971	May 7, 1971	18.82	16,400
1935	Apr. 1, 1935	14.12	11,400	1972	Apr. 15, 1972	16.77	13,700
1936	Jan. 19, 1936	12.48	10,400	1973	Mar. 17, 1973	19.94	20,500
1937	Feb. 9, 1937	11.24	8,750	1974	Dec. 26, 1973	15.25	12,200
1938	Oct. 28, 1937	13.38	11,500	1975	Mar. 30, 1975	18.88	18,400
1939	Feb. 3, 1939	12.58	10,500	1976	Jan. 1, 1976	9.68	5,680
1940	Aug. 14, 1940	20.60	22,500	1977	Apr. 5, 1977	26.40	34,500
1941	Mar. 12, 1941	8.92	6,000	1978	Jan. 26, 1978	20.67	21,200
1942	Aug. 9, 1942	9.92	7,190	1979	Jan. 21, 1979	17.85	16,200
1943	Dec. 30, 1942	12.01	9,710	1980	Jan. 23, 1980	10.19	6,190

TENNESSEE RIVER BASIN

03524000 CLINCH RIVER AT CLEVELAND, VA--Continued

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1944	Feb. 18, 1944	17.95	18,200	1981	May 29, 1981	8.66	4,700
1945	Feb. 18, 1945	12.43	9,920	1982	Feb. 4, 1982	11.90	8,100
1946	Jan. 8, 1946	16.30	15,400	1983	Dec. 16, 1982	8.64	5,060
1947	Jan. 16, 1947	16.10	15,200	1984	May 7, 1984	19.46	18,700
1948	Feb. 14, 1948	15.1	13,600	1985	Feb. 2, 1985	13.66	10,000
1949	Dec. 4, 1948	12.26	9,360	1986	Nov. 29, 1985	9.22	5,500
1950	Feb. 2, 1950	16.53	15,600	1987	Apr. 17, 1987	16.10	13,300
1951	Dec. 8, 1950	9.74	6,050	1988	Feb. 5, 1988	5.61	2,430
1952	Mar. 11, 1952	10.30	6,740	1989	May 6, 1989	13.01	9,290
1953	May 20, 1953	16.66	16,000	1990	Feb. 10, 1990	11.40	7,590

a Information from report by Tennessee Valley Authority.

b At different datum at site 500 ft downstream.

03524500 GUEST RIVER AT COEBURN, VA

LOCATION.--Lat 36°55'45", long 82°27'23", Wise County, Hydrologic Unit 06010205, on right bank 30 ft downstream from bridge on State Highway 72, 1.0 mi southeast of Coeburn, 1.4 mi upstream from Jaybird Branch, 1.8 mi downstream from Pine Camp Creek, and 6.3 mi upstream from mouth.

DRAINAGE AREA.--97.3 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,025.80 ft above National Geodetic Vertical Datum of 1929. October 1949 to September 1959 and October 1979 to September 1981, water-stage recorder, and October 1960 to September 1978, nonrecording gage (crest-stage gage), at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 3,500 ft³/s and extended above on basis of slope-area measurements at 5,900 ft³/s and 18,000 ft³/s.

BANKFULL STAGE.--6 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1950	Jan. 31, 1950	9.93	3,300	1971	May 7, 1971	9.88	3,220
1951	Dec. 8, 1950	9.18	2,500	1972	Jan. 5, 1972	8.54	2,340
1952	Mar. 23, 1952	9.02	2,400	1973	Mar. 17, 1973	13.21	5,570
1953	Feb. 21, 1953	9.30	2,550	1974	Jan. 11, 1974	10.96	3,970
1954	Jan. 16, 1954	6.83	1,510	1975	Mar. 30, 1975	11.17	4,120
1955	Mar. 16, 1955	10.26	3,620	1976	Mar. 30, 1976	8.29	2,200
1956	Apr. 16, 1956	10.83	4,020	1977	Apr. 5, 1977	20.95	18,000
1957	Jan. 29, 1957	14.20	6,360	1978	Jan. 26, 1978	11.11	4,080
1958	May 7, 1958	8.05	2,080	1979	Jan. 21, 1979	10.00	3,300
1959	Jan. 22, 1959	8.89	2,560	1980	Mar. 21, 1980	7.10	1,740
1960	Mar. 30, 1960	6.61	1,440	1981	Feb. 11, 1981	8.85	1,670
1961	Feb. 25, 1961	9.96	3,300	1982	Sept. 14, 1982	9.48	2,980
1962	Feb. 28, 1962	9.44	2,880	1983	Dec. 16, 1982	6.32	1,450
1963	Mar. 12, 1963	15.87	7,720	1984	May 7, 1984	12.25	4,900
1964	Mar. 5, 1964	8.96	2,620	1985	Feb. 1, 1985	6.65	1,590
1965	Mar. 26, 1965	10.53	3,650	1986	Feb. 18, 1986	7.61	2,020
1966	Feb. 13, 1966	8.15	2,160	1987	Jan. 19, 1987	7.16	1,810
1967	Mar. 7, 1967	15.01	7,000	1988	Feb. 4, 1988	6.70	1,610
1968	Mar. 12, 1968	8.13	2,110	1989	May 6, 1989	9.71	3,120
1969	Feb. 2, 1969	5.43	965	1990	Feb. 10, 1990	8.93	2,680
1970	Dec. 31, 1969	15.27	7,220				

TENNESSEE RIVER BASIN

03524900 STONY CREEK AT KA, VA

LOCATION.--Lat 36°48'57", long 82°37'02", Scott County, Hydrologic Unit 06010205, at Ka, on left bank 300 ft upstream from bridge on State Highway 619, 600 ft downstream from Straight Fork, and 4.2 mi upstream from mouth.

DRAINAGE AREA.--30.9 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,510 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Oct. 1, 1981, water-stage recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 300 ft³/s and extended above.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1981	June 6, 1981	4.39	771	1986	Nov. 29, 1985	6.17	3,650
1982	Sept. 14, 1982	7.23	7,620	1987	Jan. 19, 1987	5.94	3,060
1983	Dec. 16, 1982	5.33	1,890	1988	Feb. 4, 1988	5.73	2,610
1984	May 7, 1984	7.31	8,010	1989	May 6, 1989	5.90	2,970
1985	-	<5.03	<1,450	1990	Feb. 10, 1990	6.00	3,200

< Less than.

03525000 STONY CREEK AT FORT BLACKMORE, VA

LOCATION.--Lat 36°46'30", long 82°34'50", Scott County, Hydrologic Unit 06010205, 1,000 ft upstream from bridge on State Highway 66, at Fort Blackmore.

DRAINAGE AREA.--41.4 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,269.78 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1952, water-stage recorder at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 1,200 ft³/s and extended above on basis of slope-area measurement at 4,700 ft³/s.

BANKFULL STAGE.--9 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1918	Jan. 28, 1918	a9.0	12,000	1963	Mar. 12, 1963	8.46	3,900
1950	Jan. 30, 1950	5.85	2,030	1964	Mar. 5, 1964	6.19	2,270
1951	Dec. 7, 1950	5.30	1,730	1965	Mar. 26, 1965	6.64	2,520
1952	Mar. 23, 1952	5.57	1,910	1966	Feb. 13, 1966	5.41	1,790
1953	February 1953	6.08	2,220	1967	Mar. 7, 1967	7.83	7,690
1954	-	-	b1,000	1968	Mar. 12, 1968	4.44	1,440
1955	-	-	b1,500	1969	Feb. 2, 1969	3.91	928
1956	Apr. 16, 1956	6.55	2,550	1970	Dec. 30, 1969	8.04	8,640
1957	Jan. 29, 1957	6.12	2,220	1971	May 7, 1971	4.85	1,850
1958	May 6, 1958	6.40	2,410	1972	Jan. 20, 1972	3.63	728
1959	Mar. 27, 1959	4.64	1,340	1973	Mar. 17, 1973	6.60	4,700
1960	Nov. 28, 1959	5.60	1,910	1974	Jan. 11, 1974	5.37	2,560
1961	Feb. 25, 1961	6.25	2,270	1975	Mar. 30, 1975	5.88	2,080
1962	Feb. 28, 1962	5.81	2,030	1976	May 30, 1976	5.47	1,830

a From information in reports of the Tennessee Valley Authority.

b Estimated.

TENNESSEE RIVER BASIN

03525500 CLINCH RIVER AT CLINCHPORT, VA

LOCATION.--Lat 36°40'25", long 82°44'50", Scott County, Hydrologic Unit 06010205, at Clinchport, 500 ft upstream from Virginia and Southwestern Railroad (Southern Railway) bridge and 0.2 mi downstream from Stock Creek.

DRAINAGE AREA.--986 mi².

GAGE.--Nonrecording gage (staff gage). Datum of gage is 1,210 ft above National Geodetic Vertical Datum of 1929, approximated on basis of unadjusted levels.

STAGE-DISCHARGE RELATION.--Determined from current-meter measurements below 1,500 ft³/s.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1907	June 14, 1907	19.5	33,000	1909	May 1, 1909	10.5	15,000
1908	Apr. 2, 1908	12.5	19,000				

TENNESSEE RIVER BASIN

03525800 COPPER CREEK TRIBUTARY NEAR DICKENSONVILLE, VA

LOCATION.--Lat 36°49'50", long 82°12'40", Russell County, Hydrologic Unit 06010205, at culvert on U.S. Highway Alternate 58, 1.1 mi southeast of Dickensonville.

DRAINAGE AREA.--0.99 mi².

GAGE.--Water-stage recorder (flood hydrograph recorder). Datum of gage is not determined.

STAGE-DISCHARGE RELATION.--Defined by computation of flow through culvert.

BANKFULL STAGE.--3 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1967	-	<4.00	<60	1972	Apr. 12, 1972	4.90	96
1968	-	<4.00	<60	1973	Mar. 16, 1973	5.50	125
1969	-	<4.00	<60	1974	Dec. 26, 1973	5.05	102
1970	-	<4.00	<60	1975	Mar. 30, 1975	6.45	177
1971	July 29, 1971	5.49	124				

< Less than.

03526000 COPPER CREEK NEAR GATE CITY, VA

LOCATION.--Lat 36°40'26", long 82°33'57", Scott County, Hydrologic Unit 06010205, on right bank 50 ft upstream from bridge on State Highway 619, 0.2 mi upstream from Plank Camp Creek, 1.1 mi downstream from Obeys Creek, and 2.6 mi northeast of Gate City.

DRAINAGE AREA.--106 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,301.95 ft above National Geodetic Vertical Datum of 1929 (Virginia Department of Transportation bench mark). Prior to Aug. 29, 1953, nonrecording gage, and Aug. 30, 1953, to Sept. 30, 1972, water-stage recorder, at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 3,500 ft³/s and extended above.

BANKFULL STAGE.--7 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1948	Feb. 14, 1948	10.1	3,310	1970	Apr. 28, 1970	12.59	6,230
1949	Dec. 3, 1948	10.3	3,490	1971	May 7, 1971	10.82	3,960
1950	Jan. 30, 1950	13.0	6,800	1972	Apr. 12, 1972	8.94	2,400
1951	Dec. 8, 1950	8.0	1,590	1973	Mar. 17, 1973	11.67	4,940
1952	Jan. 28, 1952	8.46	1,980	1974	Jan. 1, 1974	10.76	3,890
1953	May 19, 1953	9.76	3,040	1975	Mar. 30, 1975	13.17	7,040
1954	Jan. 16, 1954	7.59	1,340	1976	Dec. 31, 1975	8.39	2,020
1955	Mar. 16, 1955	9.50	2,780	1977	Apr. 5, 1977	13.57	7,660
1956	Apr. 16, 1956	10.35	3,580	1978	Jan. 26, 1978	12.36	5,900
1957	Jan. 30, 1957	9.98	3,200	1979	Jan. 21, 1979	9.93	3,160
1958	May 6, 1958	10.98	4,100	1980	Mar. 21, 1980	9.02	2,450
1959	Jan. 22, 1959	9.40	2,720	1981	June 6, 1981	6.63	1,080
1960	Nov. 28, 1959	8.33	2,060	1982	Feb. 3, 1982	9.17	2,560
1961	Feb. 25, 1961	9.61	2,870	1983	Apr. 25, 1983	7.77	1,670
1962	Feb. 28, 1962	8.77	2,360	1984	May 7, 1984	12.00	5,400
1963	Mar. 12, 1963	13.14	6,940	1985	Feb. 2, 1985	9.65	2,910
1964	Mar. 15, 1964	7.55	1,640	1986	Nov. 29, 1985	7.62	1,590
1965	Mar. 26, 1965	9.67	2,950	1987	Apr. 16, 1987	8.61	2,170
1966	July 30, 1966	8.78	2,360	1988	Feb. 4, 1988	7.48	1,510
1967	Mar. 7, 1967	9.93	3,160	1989	June 17, 1989	10.03	3,250
1968	Dec. 22, 1967	8.49	2,170	1990	Mar. 17, 1990	8.68	2,220
1969	June 15, 1969	7.88	1,810				

TENNESSEE RIVER BASIN

03527000 CLINCH RIVER AT SPEERS FERRY, VA

LOCATION.--Lat 36°38'55", long 82°45'02", Scott County, Hydrologic Unit 06010205, on right bank 200 ft downstream from bridge on U.S. Highway 58, 0.5 mi downstream from Copper Creek, 0.8 mi northwest of Speers Ferry, 1.8 mi south of Clinchport, and 211.0 mi upstream from mouth.

DRAINAGE AREA.--1,126 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,196.52 ft above National Geodetic Vertical Datum of 1929. Prior to Nov. 23, 1926, nonrecording gage at site 400 ft upstream at datum 1.50 ft higher. Nov. 23, 1926, to Nov. 6, 1931, nonrecording gage; Nov. 7, 1931, to Sept. 30, 1976, and Oct. 1, 1978, to Sept. 30, 1981, water-stage recorder; and Oct. 1, 1976, to Sept. 30, 1978, crest-stage gage, at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 44,000 ft³/s and extended above on basis of slope-area measurements at 49,000 ft³/s and 89,000 ft³/s.

BANKFULL STAGE.--20 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1862	February 1862	a33.0	-	1955	Mar. 17, 1955	20.67	25,600
1902	Feb. 28, 1902	b26.6	-	1956	Apr. 16, 1956	21.90	28,400
1921	Dec. 14, 1920	9.35	10,500	1957	Jan. 30, 1957	28.92	45,300
1922	Mar. 10, 1922	14.7	19,200	1958	May 7, 1958	23.95	33,100
1923	Feb. 3, 1923	24.35	37,200	1959	Jan. 22, 1959	15.70	15,800
1924	Jan. 1, 1924	15.2	20,400	1960	Nov. 28, 1959	15.04	14,600
1925	Dec. 9, 1924	18.0	25,400	1961	Feb. 26, 1961	19.81	23,700
1926	Feb. 15, 1926	11.75	14,700	1962	Mar. 1, 1962	19.32	22,600
1927	Dec. 22, 1926	24.70	35,000	1963	Mar. 12, 1963	29.93	46,800
1928	May 1, 1928	10.6	9,560	1964	Mar. 5, 1964	14.55	13,300
1929	Mar. 24, 1929	20.6	25,400	1965	Mar. 26, 1965	21.00	25,300
1930	Nov. 18, 1929	14.0	13,600	1966	May 2, 1966	14.94	13,700
1931	Apr. 5, 1931	12.3	11,500	1967	Mar. 7, 1967	24.43	33,500
1932	Jan. 30, 1932	23.10	30,500	1968	Dec. 23, 1967	14.37	13,000
1933	Dec. 29, 1932	17.30	18,000	1969	Feb. 3, 1969	12.58	10,700
1934	Mar. 4, 1934	16.50	17,000	1970	Dec. 31, 1969	27.43	40,700
1935	Apr. 2, 1935	17.80	20,500	1971	May 8, 1971	23.61	31,600
1936	Apr. 7, 1936	17.51	20,700	1972	Jan. 22, 1972	18.56	19,600
1937	Jan. 19, 1937	18.42	22,700	1973	Mar. 17, 1973	28.19	42,600
1938	Oct. 29, 1937	13.78	13,900	1974	Jan. 11, 1974	22.50	28,900
1939	Feb. 4, 1939	18.54	23,900	1975	Mar. 30, 1975	25.19	35,400
1940	Aug. 15, 1940	20.98	25,100	1976	Mar. 30, 1976	15.38	14,300
1941	Mar. 12, 1941	10.29	8,240	1977	Apr. 5, 1977	36.69	89,000
1942	Aug. 9, 1942	17.50	18,600	1978	Jan. 26, 1978	27.23	40,300
1943	Dec. 30, 1942	17.89	20,700	1979	Jan. 21, 1979	22.77	29,500
1944	Feb. 18, 1944	23.15	30,700	1980	Mar. 21, 1980	15.38	14,300
1945	Feb. 18, 1945	15.86	16,600	1981	June 7, 1981	10.38	8,230
1946	Jan. 8, 1946	23.5	31,000	1982	Feb. 18, 1982	16.10	15,300

03527000 CLINCH RIVER AT SPEERS FERRY, VA--Continued

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1947	Jan. 16, 1947	22.40	29,400	1983	Apr. 25, 1983	11.14	9,110
1948	Feb. 14, 1948	22.70	30,000	1984	May 7, 1984	26.54	37,900
1949	Dec. 4, 1948	14.60	13,900	1985	Feb. 2, 1985	18.11	18,700
1950	Feb. 2, 1950	23.10	31,100	1986	Nov. 29, 1985	14.64	13,400
1951	Dec. 8, 1950	14.58	13,900	1987	Apr. 17, 1987	20.55	23,700
1952	Mar. 23, 1952	15.43	15,300	1988	Feb. 5, 1988	10.85	8,770
1953	May 20, 1953	19.76	23,700	1989	May 6, 1989	20.42	23,400
1954	Jan. 23, 1954	12.95	11,600	1990	Feb. 10, 1990	17.65	17,900

a From reports of the Tennessee Valley Authority, present site and datum.

b From records of the National Weather Service, at site 400 ft upstream and at datum about 1 ft higher.

TENNESSEE RIVER BASIN

03527500 NORTH FORK CLINCH RIVER AT DUFFIELD, VA

LOCATION.--Lat 36°42'40", long 82°47'45", Scott County, Hydrologic Unit 06010205, on right bank at upstream side of bridge on U.S. Highways 58 and 421, 0.2 mi downstream from Spurlock Branch, 0.5 mi south of Duffield, and 1.6 mi upstream from Harris Branch.

DRAINAGE AREA.--23.1 mi².

GAGE.--Water-stage recorder. Datum of gage is 1,314.14 ft above National Geodetic Vertical Datum of 1929. Nov. 16, 1950, to Sept. 30, 1952, crest-stage gage at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 700 ft³/s.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1953	Feb. 21, 1953	7.32	782	1957	Jan. 28, 1957	7.34	789
1954	Jan. 16, 1954	6.82	702	1958	May 6, 1958	7.46	811
1955	Mar. 16, 1955	7.24	766	1959	Jan. 21, 1959	6.85	705
1956	Apr. 15, 1956	7.40	800				

TENNESSEE RIVER BASIN

03529500 POWELL RIVER AT BIG STONE GAP, VA

LOCATION.--Lat 36°52'08", long 82°46'32", Wise County, Hydrologic Unit 06010206, on right bank 10 ft upstream from bridge on U.S. Highway 23 at Big Stone Gap, 1 mi upstream from South Fork Powell River, 2.5 mi downstream from Pigeon Creek, and at mile 179.2.

DRAINAGE AREA.--112 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,459.07 ft above National Geodetic Vertical Datum of 1929. Prior to Apr. 27, 1948, nonrecording gage; Apr. 27, 1948, to Sept. 30, 1959, and Oct. 1, 1979, to Sept. 30, 1981, water-stage recorder; and Oct. 1, 1959, to Sept. 30, 1977, crest-stage gage, at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 2,800 ft³/s and extended above on basis of slope-area measurements at 10,000 ft³/s and 24,000 ft³/s.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1945	Feb. 13, 1945	6.00	4,900	1968	Mar. 12, 1968	5.18	a3,200
1946	Jan. 7, 1946	9.8	a9,200	1969	Jan. 20, 1969	3.68	a1,680
1947	Jan. 15, 1947	7.0	a5,300	1970	Dec. 30, 1969	10.39	a10,100
1948	Feb. 13, 1948	9.34	a8,510	1971	May 7, 1971	6.24	a4,390
1949	Mar. 18, 1949	6.25	4,800	1972	Jan. 20, 1972	5.74	a3,810
1950	Jan. 30, 1950	6.36	4,960	1973	Mar. 16, 1973	7.83	a6,340
1951	Dec. 7, 1950	6.27	4,800	1974	Nov. 27, 1973	7.86	a6,420
1952	Dec. 15, 1951	6.97	a5,260	1975	Mar. 30, 1975	6.83	a5,100
1953	Feb. 21, 1953	7.04	a5,350	1976	Mar. 30, 1976	5.53	3,740
1954	Jan. 16, 1954	4.89	2,880	1977	Apr. 5, 1977	16.50	24,000
1955	Mar. 16, 1955	6.62	5,360	1979	Dec. 9, 1978	7.10	4,940
1956	Apr. 15, 1956	7.95	a6,540	1980	Mar. 21, 1980	5.71	3,310
1957	Jan. 29, 1957	9.67	a9,000	1981	June 6, 1981	4.50	2,040
1958	May 6, 1958	5.70	a3,770	1982	Sept. 14, 1982	7.83	5,950
1959	Jan. 21, 1959	6.71	a4,950	1983	May 23, 1983	4.69	2,220
1960	Mar. 30, 1960	5.98	a4,080	1984	May 7, 1984	10.93	11,300
1961	Feb. 25, 1961	6.27	a4,420	1985	Feb. 1, 1985	4.71	2,240
1962	Feb. 28, 1962	6.88	a5,160	1986	Feb. 18, 1986	6.08	3,700
1963	Mar. 12, 1963	13.72	a16,800	1987	Nov. 9, 1986	5.93	3,530
1964	Mar. 15, 1964	5.67	a3,740	1988	Dec. 25, 1987	4.98	2,500
1965	Mar. 26, 1965	6.94	a5,230	1989	June 16, 1989	7.92	6,080
1966	Feb. 13, 1966	8.92	a7,890	1990	Feb. 10, 1990	6.87	4,640
1967	Mar. 7, 1967	10.82	a10,700				

a Revised.

03530000 SOUTH FORK POWELL RIVER AT BIG STONE GAP, VA

LOCATION.--Lat 36°51'54", long 82°46'16", Wise County, Hydrologic Unit 06010206, at bridge on U.S. Highway 23, at Big Stone Gap.

DRAINAGE AREA.--40 mi², approximately.

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,470 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to September 1947, nonrecording gage at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 2,500 ft³/s and extended above on basis of slope-area measurements at 4,500 ft³/s and 8,000 ft³/s.

BANKFULL STAGE.--6 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1945	Feb. 13, 1945	7.8	2,960	1963	Mar. 12, 1963	9.94	4,800
1946	Jan. 7, 1946	8.0	3,100	1964	Mar. 15, 1964	6.05	1,780
1947	Jan. 15, 1947	7.25	2,540	1965	Mar. 26, 1965	7.90	3,030
1951	Dec. 7, 1950	6.9	2,330	1966	Feb. 13, 1966	5.50	1,480
1952	Dec. 15, 1951	6.40	2,020	1967	Mar. 7, 1967	9.20	4,100
1953	Feb. 21, 1953	6.65	2,140	1968	Mar. 12, 1968	5.50	1,480
1954	-	-	a1,000	1969	Jan. 20, 1969	3.60	550
1955	-	-	a2,000	1970	Dec. 30, 1969	9.72	4,620
1956	Apr. 16, 1956	7.05	2,400	1971	July 20, 1971	8.18	3,230
1957	Jan. 29, 1957	8.62	3,550	1972	Jan. 21, 1972	b5.30	1,380
1958	May 6, 1958	6.10	1,840	1973	Mar. 16, 1973	7.85	3,000
1959	Mar. 27, 1959	4.84	1,130	1974	June 22, 1974	8.27	3,290
1960	Nov. 28, 1959	6.08	1,840	1975	Mar. 30, 1975	7.10	2,470
1961	Feb. 25, 1961	6.80	2,260	1977	Apr. 5, 1977	12.43	8,000
1962	Feb. 28, 1962	6.60	2,140				

a Estimated.

b Corrected.

TENNESSEE RIVER BASIN

03530500 NORTH FORK POWELL RIVER AT PENNINGTON GAP, VA

LOCATION.--Lat 36°46'26", long 83°01'59", Lee County, Hydrologic Unit 06010206, near right bank on downstream side of bridge on State Highway 621, 0.8 mi north of Pennington Gap, 1.3 mi downstream from Straight Creek, and 4.7 mi upstream from mouth.

DRAINAGE AREA.--71.4 mi².

GAGE.--Nonrecording gage (crest-stage gage). Datum of gage is 1,363.02 ft above National Geodetic Vertical Datum of 1929. Prior to Dec. 7, 1949, staff gage; Dec. 7, 1949, to Sept. 30, 1951, wire-weight gage; Oct. 1, 1951, to Sept. 30, 1977, crest-stage gage; Oct. 1, 1978, to Sept. 30, 1981, water-stage recorder, at same site and datum.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 2,300 ft³/s and extended above on basis of slope-area measurements at 4,500 ft³/s, 9,700 ft³/s, and 17,000 ft³/s.

BANKFULL STAGE.--8 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1945	Feb. 13, 1945	7.6	3,760	1968	Dec. 22, 1967	5.69	2,620
1946	Jan. 7, 1946	12.1	9,700	1969	Jan. 20, 1969	4.50	1,700
1947	Jan. 15, 1947	7.9	3,940	1970	Dec. 30, 1969	12.60	8,300
1948	Feb. 14, 1948	9.5	5,400	1971	May 7, 1971	7.85	3,910
1949	Jan. 5, 1949	7.7	3,820	1972	July 30, 1972	7.33	3,600
1950	Dec. 13, 1949	10.0	6,100	1973	Mar. 16, 1973	10.82	7,410
1951	Feb. 1, 1951	7.1	3,460	1974	Nov. 27, 1973	10.20	6,420
1952	Dec. 15, 1951	8.45	4,250	1975	Mar. 30, 1975	8.84	4,640
1953	Jan. 22, 1953	8.20	4,150	1976	Mar. 30, 1976	4.80	1,940
1954	Jan. 16, 1954	6.00	3,000	1977	Apr. 5, 1977	16.14	17,000
1955	Mar. 16, 1955	7.45	3,800	1979	Dec. 4, 1978	7.66	3,460
1956	Apr. 16, 1956	8.12	4,100	1980	Mar. 21, 1980	7.17	3,040
1957	Jan. 29, 1957	8.70	4,430	1981	June 6, 1981	7.45	3,290
1958	May 6, 1958	8.00	4,050	1982	Jan. 14, 1982	6.42	2,440
1959	Jan. 22, 1959	8.60	4,420	1983	May 23, 1983	5.07	1,530
1960	Nov. 28, 1959	6.82	3,280	1984	May 7, 1984	10.64	7,020
1961	Feb. 25, 1961	7.65	3,760	1985	Feb. 1, 1985	5.35	1,700
1962	Feb. 28, 1962	8.10	4,070	1986	Feb. 18, 1986	6.31	2,360
1963	Mar. 12, 1963	13.65	13,100	1987	Nov. 9, 1986	7.53	3,360
1964	Mar. 15, 1964	6.15	2,850	1988	Dec. 25, 1987	6.71	2,660
1965	Mar. 26, 1965	8.55	4,420	1989	June 16, 1989	7.97	3,770
1966	Mar. 13, 1966	11.60	8,780	1990	Feb. 10, 1990	6.56	2,550
1967	Mar. 7, 1967	11.08	7,880				

03531000 POWELL RIVER NEAR PENNINGTON GAP, VA

LOCATION.--Lat 36°44'04", long 82°59'56", Lee County, Hydrologic Unit 06010206, at highway bridge 1,000 ft downstream from North Fork and 3 mi southeast of Pennington Gap.

DRAINAGE AREA.--290 mi².

GAGE.--Nonrecording gage (chain gage). Datum of gage is 1,320 ft above National Geodetic Vertical Datum of 1929, from topographic map.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 4,300 ft³/s and extended above.

BANKFULL STAGE.--Not determined.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1921	Dec. 14, 1920	13.0	9,900	1927	Dec. 21, 1926	22.60	22,000
1922	Mar. 10, 1922	13.4	11,600	1928	June 29, 1928	17.38	15,200
1923	Feb. 3, 1923	19.5	18,000	1929	Mar. 23, 1929	27.66	28,900
1924	Feb. 20, 1924	10.74	8,310	1930	May 19, 1930	12.98	9,900
1925	Feb. 15, 1925	17.0	14,700	1931	Apr. 22, 1931	11.2	7,740
1926	Oct. 25, 1925	16.0	13,500				

TENNESSEE RIVER BASIN

03531500 POWELL RIVER NEAR JONESVILLE, VA

LOCATION.--Lat 36°39'43", long 83°05'42", Lee County, Hydrologic Unit 06010206, on right bank 175 ft downstream from highway bridge, 2 mi southeast of Jonesville, 10 mi upstream from Wallen Creek, and at mile 143.1.

DRAINAGE AREA.--319 mi².

GAGE.--Water-stage recorder. Datum of gage is 1,259.08 ft above National Geodetic Vertical Datum of 1929.

STAGE-DISCHARGE RELATION.--Defined by current-meter measurements below 20,000 ft³/s and extended above on basis of slope-area measurement at 57,000 ft³/s.

BANKFULL STAGE.--15 ft.

Annual maximum stages and discharges

Water year	Date	Gage height (feet)	Discharge (ft ³ /s)	Water year	Date	Gage height (feet)	Discharge (ft ³ /s)
1918	January 1918	33.0	-	1961	Feb. 25, 1961	17.79	10,100
1932	Jan. 30, 1932	25.64	22,900	1962	Feb. 28, 1962	19.16	11,200
1933	Dec. 28, 1932	16.43	9,230	1963	Mar. 12, 1963	33.36	31,100
1934	Mar. 3, 1934	17.93	10,500	1964	Mar. 15, 1964	14.73	8,000
1935	Mar. 12, 1935	18.37	11,000	1965	Mar. 26, 1965	21.60	13,800
1936	Apr. 6, 1936	22.07	16,200	1966	Feb. 13, 1966	21.70	13,900
1937	Feb. 9, 1937	22.59	17,000	1967	Mar. 7, 1967	29.03	22,800
1938	Mar. 3, 1938	11.32	5,660	1968	Dec. 22, 1967	12.44	6,540
1939	Feb. 3, 1939	24.28	20,200	1969	Jan. 20, 1969	8.95	4,270
1940	Apr. 20, 1940	14.02	7,470	1970	Dec. 31, 1969	32.16	28,400
1941	July 13, 1941	8.72	4,010	1971	May 7, 1971	19.94	11,900
1942	Aug. 9, 1942	14.09	7,540	1972	Jan. 21, 1972	16.81	9,440
1943	Apr. 19, 1943	18.58	11,300	1973	Mar. 17, 1973	26.75	19,700
1944	Feb. 18, 1944	25.64	22,900	1974	Nov. 28, 1973	24.95	17,500
1945	Feb. 13, 1945	16.48	9,310	1975	Mar. 30, 1975	20.10	12,100
1946	Jan. 8, 1946	30.8	30,000	1976	Mar. 30, 1976	18.52	10,600
1947	Jan. 16, 1947	20.65	13,800	1977	Apr. 5, 1977	44.32	57,000
1948	Feb. 14, 1948	25.85	20,600	1978	Oct. 2, 1977	22.21	14,400
1949	Jan. 6, 1949	17.07	9,800	1979	Jan. 21, 1979	18.70	10,800
1950	Jan. 31, 1950	22.53	16,500	1980	Mar. 21, 1980	15.98	8,860
1951	Dec. 8, 1950	16.20	9,010	1981	June 7, 1981	13.02	6,910
1952	Dec. 15, 1951	20.74	14,000	1982	Sept. 14, 1982	14.30	7,720
1953	Feb. 21, 1953	19.45	11,400	1983	May 23, 1983	11.20	5,680
1954	Jan. 16, 1954	14.27	7,680	1984	May 7, 1984	25.59	18,400
1955	Mar. 16, 1955	19.38	11,400	1985	Feb. 1, 1985	11.14	5,640
1956	Apr. 16, 1956	23.53	15,800	1986	Feb. 18, 1986	15.34	8,430
1957	Jan. 30, 1957	26.87	19,800	1987	Nov. 9, 1986	15.10	8,270
1958	Dec. 8, 1957	18.64	10,700	1988	Dec. 25, 1987	11.78	6,050
1959	Jan. 22, 1959	18.86	10,900	1989	June 16, 1989	17.62	10,000
1960	Nov. 28, 1959	16.47	9,220	1990	Feb. 10, 1990	16.28	9,090

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