

POTOMAC RIVER BASIN

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.

PERIOD OF RECORD.--October 1925 to October 1972, May 1975 to current year. Monthly discharge only for some periods, published in WSP 1302.

REVISED RECORDS.--WSP 1171: 1936(M). WSP 1302: 1928-29(M), 1932-34(M), 1937-38(M). WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,103.49 ft above sea level. Prior to Dec. 12, 1938, nonrecording gage at site 3.0 mi downstream at different datum.

REMARKS.--No estimated daily discharges. Records good. At a point 26.8 mi upstream from station, there is an aqueduct tunnel diversion of about 2.2 ft³/s from Staunton Dam Reservoir by city of Staunton for industrial and municipal use. Diurnal fluctuation at low and medium flow caused by wastewater treatment plant and diversions for industrial, municipal, and irrigation at points upstream. Maximum discharge, 70,400 ft³/s, from rating curve extended above 16,000 ft³/s on basis of slope-area measurements at gage heights 32.4 ft and 36.3 ft and contracted-opening measurements at gage heights 35.85 ft and 36.3 ft. Minimum discharge, 16 ft³/s, result of temporary dam upstream. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

COOPERATION.--Records were provided by the Virginia Department of Environmental Quality - Water Division.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1852, that of Jun. 18, 1949.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Sep 6	1830	*1,880	*5.38	No peak greater than base discharge.			

Minimum discharge, 24 ft³/s, Jul 19.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	74	65	64	53	170	144	259	109	106	50	38	48
2	70	68	64	54	184	134	242	110	105	46	44	45
3	73	70	64	93	169	135	222	112	101	40	40	42
4	77	72	66	100	169	140	218	109	97	40	38	43
5	79	67	64	74	167	130	211	109	90	39	37	311
6	76	66	63	68	163	133	193	110	94	40	36	902
7	77	66	64	67	163	133	182	110	94	47	33	1270
8	129	65	79	70	163	148	171	371	85	49	33	913
9	92	67	105	142	152	183	168	372	82	40	39	613
10	81	62	71	139	146	206	162	293	76	35	36	410
11	79	63	67	89	141	200	162	245	76	33	34	259
12	78	63	62	110	140	194	159	221	73	37	34	195
13	73	66	81	170	134	183	147	204	70	48	36	162
14	75	65	75	141	129	207	143	254	78	40	80	142
15	74	64	68	176	127	276	142	283	71	36	33	134
16	73	63	66	164	123	310	142	304	66	35	36	215
17	70	60	63	129	120	504	134	326	80	31	35	177
18	71	59	62	129	187	1140	129	304	75	30	34	134
19	71	61	59	133	182	1260	127	280	64	32	34	127
20	66	64	58	121	193	992	124	240	69	30	86	128
21	67	63	59	116	182	858	123	210	78	32	46	210
22	69	62	56	113	178	841	123	193	68	45	41	162
23	67	64	57	123	176	765	125	192	61	41	46	134
24	67	60	60	377	174	685	129	188	58	60	52	126
25	67	58	59	508	166	582	121	164	53	48	68	122
26	69	62	55	526	159	498	120	151	52	44	62	117
27	66	59	54	403	146	433	116	137	52	40	76	117
28	66	62	58	317	148	383	114	129	58	44	54	146
29	64	63	57	258	---	339	116	120	49	66	53	165
30	66	67	57	215	---	296	114	113	50	46	49	1010
31	65	---	55	183	---	266	---	111	---	43	48	---
TOTAL	2291	1916	1992	5361	4451	12698	4638	6174	2227	1287	1411	8579
MEAN	73.9	63.9	64.3	173	159	410	155	199	74.2	41.5	45.5	286
MAX	129	72	105	526	193	1260	259	372	106	66	86	1270
MIN	64	58	54	53	120	130	114	109	49	30	33	42
CFSM	.19	.17	.17	.46	.42	1.08	.41	.53	.20	.11	.12	.75
IN.	.22	.19	.20	.53	.44	1.25	.46	.61	.22	.13	.14	.84

01622000 NORTH RIVER NEAR BURKETOWN, VA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1926 - 1973, 1976 - 1999, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	247	282	331	444	526	716	608	490	331	198	238	226
MAX	1500	2080	1087	1777	1841	1932	1831	1486	1704	809	1102	3130
(WY)	1943	1986	1935	1996	1998	1936	1987	1942	1949	1949	1949	1996
MIN	38.1	36.5	39.2	53.5	47.9	136	107	106	72.7	41.5	41.0	34.2
(WY)	1931	1931	1966	1966	1931	1981	1981	1930	1977	1999	1964	1930

SUMMARY STATISTICS FOR 1998 CALENDAR YEAR FOR 1999 WATER YEAR WATER YEARS 1926 - 1973 1976 - 1999

ANNUAL TOTAL		218393		53025								
ANNUAL MEAN		598		145						385		
HIGHEST ANNUAL MEAN										871		1996
LOWEST ANNUAL MEAN										145		1999
HIGHEST DAILY MEAN			6120	Mar 21		1270	Sep 7		e32000		Sep 7	1996
LOWEST DAILY MEAN			54	Dec 27		30	aJul 18			22	Sep 24	1930
ANNUAL SEVEN-DAY MINIMUM			56	Dec 25		32	Jul 15			30	Dec 20	1930
INSTANTANEOUS PEAK FLOW						1880	Sep 6		70400		Sep 6	1996
INSTANTANEOUS PEAK STAGE						5.38	Sep 6		b36.70		Sep 6	1996
INSTANTANEOUS LOW FLOW						24	Jul 19		c16		Nov 23	1965
ANNUAL RUNOFF (CFSM)		1.58				.38				1.02		
ANNUAL RUNOFF (INCHES)		21.44				5.20				13.80		
10 PERCENT EXCEEDS		1580				270				825		
50 PERCENT EXCEEDS		176				85				204		
90 PERCENT EXCEEDS		64				42				64		

- a Also Jul 20, 1999.
- b From high-water mark in gage house.
- c Result of temporary dam upstream.
- e Estimated.

