

POTOMAC RIVER BASIN

01622000 NORTH RIVER NEAR BURKETOWN, VA

LOCATION.--Lat 38°20'25", long 78°54'49", NAD83, 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 2.6 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 June 18, 1949.

PEAK DISCHARGES 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)
Mar 21	1830	*2,700	*6.49	No other peak greater than base discharge.			

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	431	100	123	171	551	198	1320	176	360	133	280	97
2	367	97	128	162	543	201	1260	169	320	137	211	84
3	307	95	128	153	496	200	1110	161	279	128	158	82
4	265	96	137	148	442	203	971	157	248	121	129	81
5	262	94	132	144	400	218	838	157	403	125	117	80
6	252	92	132	140	358	210	749	157	362	120	107	76
7	218	91	132	133	317	203	691	154	368	111	98	75
8	190	91	131	139	287	201	636	149	387	135	94	74
9	180	94	128	134	263	193	581	146	373	128	93	71
10	167	135	123	127	247	188	615	142	336	120	103	75
11	157	118	123	125	230	183	1480	141	292	112	228	78
12	151	110	119	122	217	183	1430	140	256	108	219	73
13	147	125	117	118	202	185	1210	139	262	102	272	70
14	142	144	146	113	197	185	993	140	569	98	196	70
15	137	144	153	115	193	192	815	135	443	98	165	69
16	134	144	185	112	191	226	680	139	389	104	138	66
17	130	141	633	112	205	248	574	143	307	94	122	69
18	127	136	1070	111	194	290	493	146	247	93	110	66
19	124	131	932	137	197	339	426	204	205	150	105	66
20	123	127	752	186	195	362	376	224	182	108	104	65
21	120	122	585	246	195	1450	344	332	172	102	95	67
22	115	118	474	283	199	2060	316	1180	187	94	90	62
23	113	117	384	300	200	1510	290	1840	178	96	91	61
24	110	109	331	303	194	1240	262	1540	220	84	122	68
25	111	115	292	295	195	1040	244	1190	209	82	87	118
26	108	125	250	273	202	863	228	1100	182	82	87	73
27	109	119	240	261	195	710	214	1020	164	88	122	68
28	107	114	226	243	195	595	200	861	151	81	90	67
29	103	113	210	230	---	547	191	675	141	225	84	62
30	103	118	197	325	---	1170	184	531	138	268	120	60
31	101	---	181	470	---	1350	---	426	---	317	140	---
TOTAL	5211	3475	8894	5931	7500	16943	19721	13814	8330	3844	4177	2193
MEAN	168	116	287	191	268	547	657	446	278	124	135	73.1
MAX	431	144	1070	470	551	2060	1480	1840	569	317	280	118
MIN	101	91	117	111	191	183	184	135	138	81	84	60
CFSM	.44	.31	.76	.50	.71	1.44	1.73	1.18	.73	.33	.36	.19
IN.	.51	.34	.87	.58	.74	1.66	1.94	1.36	.82	.38	.41	.22

01622000 NORTH RIVER NEAR BURKETOWN, VA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1926 - 1973, 1975 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	246	280	331	436	520	711	607	488	334	197	237	227
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 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1927 - 1972 1976 - 2001

ANNUAL TOTAL		115324		100033								
ANNUAL MEAN		315		274						383		
HIGHEST ANNUAL MEAN										871		1996
LOWEST ANNUAL MEAN										145		1999
HIGHEST DAILY MEAN			1420	May 23	2060	Mar 22			e32000		Sep 7	1996
LOWEST DAILY MEAN			91	aNov 7	60	Sep 30				22	Sep 24	1930
ANNUAL SEVEN-DAY MINIMUM			93	Nov 3	65	Sep 18				30	Dec 20	1930
MAXIMUM PEAK FLOW					2700	Mar 21				70400	Sep 6	1996
MAXIMUM PEAK STAGE					6.49	Mar 21				b36.70	Sep 6	1996
INSTANTANEOUS LOW FLOW					56	cSep 20				d16	Nov 23	1965
ANNUAL RUNOFF (CFM)		.83			.72							1.01
ANNUAL RUNOFF (INCHES)		11.32			9.82							13.73
10 PERCENT EXCEEDS		751			603							822
50 PERCENT EXCEEDS		194			158							203
90 PERCENT EXCEEDS		109			89							64

- a Also Nov. 8, 2000.
- b From high-water mark in gage house.
- c Also Sept. 29, 30, 2001.
- d Result of temporary dam upstream.
- e Estimated.

