

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 200 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.

PERIOD OF RECORD.--February 1925 to September 1951, October 1968 to current year.

REVISED RECORDS.--WSP 1171: 1926(M), 1927-28, 1929-32(M), 1933, 1934(M), 1935, 1937. WSP 1302: 1937(M), 1938(M). WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,129.87 ft above sea level. Prior to Sep. 1, 1938, nonrecording gage at same site and datum.

REMARKS.--No estimated daily discharges. Records good. There are discharges of about 5.8 ft³/s from industrial and municipal wastewater treatment plants upstream from station, originating from well fields. Maximum discharge, 28,900 ft³/s, from rating curve extended above 10,000 ft³/s on basis of slope-area measurement at gage height 15.47 ft. 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.--Floods in 1870 and 1877 reached a stage of about 18.8 ft, from information by observer in 1925.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,200 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Sep 6	2330	1,220	4.74	Sep 30	0700	*3,470	*7.33

Minimum discharge, 41 ft³/s, Aug 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	72	76	74	68	135	126	190	105	78	57	59	45
2	71	77	72	66	215	118	197	103	76	55	61	46
3	72	86	74	151	301	113	181	100	75	55	52	45
4	75	85	74	177	240	127	173	101	72	55	52	46
5	76	81	77	118	203	124	167	101	70	52	50	427
6	73	78	74	98	179	115	159	98	69	51	50	916
7	76	76	74	90	167	116	153	96	66	54	49	883
8	114	77	89	88	157	112	149	141	62	61	49	470
9	88	77	117	120	144	111	149	145	61	53	50	372
10	77	77	86	178	133	116	148	126	66	57	49	372
11	72	83	80	144	124	117	144	114	63	61	48	204
12	71	79	75	120	118	113	146	108	62	61	48	156
13	72	79	95	115	115	110	139	106	64	68	47	129
14	71	79	89	119	109	117	133	155	64	59	62	113
15	69	79	87	161	104	171	132	153	62	58	51	110
16	70	78	80	194	101	194	142	140	60	54	49	297
17	71	78	76	166	100	308	136	128	67	53	46	353
18	72	79	74	159	158	514	127	119	69	52	46	243
19	72	78	72	179	196	425	123	114	65	53	45	194
20	73	80	72	167	185	346	122	105	69	50	61	170
21	72	81	71	152	171	341	123	98	68	68	61	172
22	73	79	72	141	157	402	120	97	66	57	53	167
23	73	77	70	141	145	361	120	121	65	70	49	144
24	74	76	73	487	138	327	123	122	62	58	49	129
25	74	77	72	535	132	299	116	107	61	64	54	116
26	75	82	71	339	128	267	109	99	62	59	55	106
27	74	77	69	250	122	243	108	92	60	55	53	104
28	76	76	70	207	122	225	110	88	61	57	51	181
29	77	74	70	181	---	210	113	85	57	72	50	313
30	74	75	69	160	---	195	109	82	56	57	48	2390
31	76	---	68	145	---	183	---	80	---	55	47	---
TOTAL	2325	2356	2386	5416	4299	6646	4161	3429	1958	1791	1594	9413
MEAN	75.0	78.5	77.0	175	154	214	139	111	65.3	57.8	51.4	314
MAX	114	86	117	535	301	514	197	155	78	72	62	2390
MIN	69	74	68	66	100	110	108	80	56	50	45	45
CFSM	.35	.37	.36	.82	.72	1.01	.65	.52	.31	.27	.24	1.48
IN.	.41	.41	.42	.95	.75	1.17	.73	.60	.34	.31	.28	1.65

01627500 SOUTH RIVER AT HARRISTON, VA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 1951, 1969 - 1999, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	224	234	254	320	360	409	395	286	208	133	150	182
MAX	1048	1988	802	1252	2160	1407	1414	819	1454	520	925	1047
(WY)	1943	1986	1949	1996	1998	1936	1987	1989	1972	1972	1940	1996
MIN	46.5	54.0	53.8	64.9	57.0	102	93.1	83.2	65.3	47.3	42.1	41.0
(WY)	1931	1931	1932	1981	1931	1981	1981	1930	1999	1930	1930	1930

SUMMARY STATISTICS FOR 1998 CALENDAR YEAR FOR 1999 WATER YEAR WATER YEARS 1926 - 1951 1969 - 1999

ANNUAL TOTAL	181181	45774		
ANNUAL MEAN	496	125	264	
HIGHEST ANNUAL MEAN			516	1998
LOWEST ANNUAL MEAN			97.5	1981
HIGHEST DAILY MEAN	e6200	Feb 18	2390	Sep 30
LOWEST DAILY MEAN	68	Dec 31	45	aAug 19
ANNUAL SEVEN-DAY MINIMUM	70	Dec 25	47	Aug 29
INSTANTANEOUS PEAK FLOW			3470	Sep 30
INSTANTANEOUS PEAK STAGE			7.33	Sep 30
INSTANTANEOUS LOW FLOW			41	Aug 19
ANNUAL RUNOFF (CFSM)	2.34	.59		1.24
ANNUAL RUNOFF (INCHES)	31.79	8.03		16.90
10 PERCENT EXCEEDS	1210	195	492	
50 PERCENT EXCEEDS	169	85	157	
90 PERCENT EXCEEDS	74	54	69	

- a Also Sep 1, 3, 1999.
- b Probably result of regulation by mill then in existence upstream from station.
- c Peak discharge, 23,100 ft³/s.
- e Estimated.

