

POTOMAC RIVER BASIN

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.

PERIOD OF RECORD.--October 1952 to current year.

REVISED RECORDS.--WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,296.20 ft above sea level.

REMARKS.--Records good except for period with ice effect, Jan. 5-7, which is fair. There is discharge of about 1.1 ft³/s from a wastewater treatment plant upstream from station, originating from well fields. Flow from 41 mi² upstream from station slightly regulated by flood-detention reservoirs (sixteen of which were built by Soil Conservation Service between 1954 and 1961). National Weather Service gage-height telemeter and Virginia Department of Emergency Services gage-height radio transmitter at station. Maximum discharge, 17,500 ft³/s, from rating curve extended above 4,200 ft³/s on basis of contracted-opening measurement at gage height 13.95 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.--Flood in October 1942 reached a stage of 14.3 ft, from floodmarks, discharge, 14,500 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Sep 6	1800	1,190	5.43	Sep 30	0130	*2,250	*6.90

Minimum discharge, 21 ft³/s, Sep 2, 3.

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	35	39	35	32	76	77	121	60	42	29	31	23
2	35	40	36	31	236	70	126	59	41	28	29	22
3	36	42	35	89	238	69	112	59	41	28	29	22
4	36	43	37	87	189	81	107	59	39	28	29	24
5	36	40	36	e47	154	74	101	58	37	28	28	591
6	37	38	35	e42	131	70	95	58	36	27	28	976
7	37	39	35	e41	119	71	91	57	35	29	28	732
8	43	39	37	40	110	66	89	84	35	29	28	385
9	43	39	44	82	96	67	88	84	34	28	28	278
10	38	39	42	128	86	72	86	71	34	29	27	221
11	37	41	37	80	79	70	87	66	34	29	26	146
12	37	40	36	66	76	68	89	63	35	30	26	106
13	36	39	39	64	73	66	81	63	34	32	26	82
14	37	39	45	65	67	71	77	74	33	31	28	69
15	37	39	42	103	64	113	77	76	33	29	27	69
16	37	39	38	119	62	135	88	66	33	28	26	308
17	37	39	36	93	62	220	79	62	36	28	25	289
18	37	39	36	97	111	287	72	61	38	28	24	198
19	37	39	33	112	136	247	70	59	35	27	25	154
20	37	39	33	96	120	210	70	57	35	28	28	126
21	37	39	33	84	108	208	72	54	36	31	27	134
22	37	38	33	74	98	243	71	54	36	49	26	124
23	37	37	33	76	91	223	69	72	35	33	25	99
24	37	37	33	262	85	208	75	67	34	31	24	82
25	38	37	33	292	82	193	64	63	33	35	25	70
26	39	39	33	197	78	173	62	56	33	32	25	63
27	38	39	33	142	74	157	61	53	32	28	25	65
28	37	38	33	111	75	144	64	52	30	30	24	218
29	40	37	32	94	---	132	66	49	30	33	24	367
30	39	36	33	83	---	121	61	45	30	32	23	1380
31	40	---	32	77	---	114	---	43	---	31	23	---
TOTAL	1164	1168	1108	3006	2976	4120	2471	1904	1049	938	817	7423
MEAN	37.5	38.9	35.7	97.0	106	133	82.4	61.4	35.0	30.3	26.4	247
MAX	43	43	45	292	238	287	126	84	42	49	31	1380
MIN	35	36	32	31	62	66	61	43	30	27	23	22
CFSM	.30	.31	.28	.76	.84	1.05	.65	.48	.28	.24	.21	1.95
IN.	.34	.34	.32	.88	.87	1.21	.72	.56	.31	.27	.24	2.17

01626000 SOUTH RIVER NEAR WAYNESBORO, VA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 1999, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	112	132	135	183	212	283	241	168	119	66.3	80.9	83.0
MAX	549	1214	355	767	1312	748	1062	485	875	305	700	546
(WY)	1973	1986	1997	1996	1998	1993	1987	1989	1972	1972	1955	1996
MIN	25.5	25.1	24.2	23.6	64.5	49.0	44.0	50.4	35.0	26.1	26.3	27.0
(WY)	1966	1966	1966	1966	1959	1981	1981	1981	1999	1966	1966	1970

SUMMARY STATISTICS FOR 1998 CALENDAR YEAR FOR 1999 WATER YEAR WATER YEARS 1953 - 1999

ANNUAL TOTAL	109403	28144	
ANNUAL MEAN	300	77.1	151
HIGHEST ANNUAL MEAN			312
LOWEST ANNUAL MEAN			47.5
HIGHEST DAILY MEAN	3930	Feb 18	1380
LOWEST DAILY MEAN	32	aDec 29	22
ANNUAL SEVEN-DAY MINIMUM	33	Dec 25	23
INSTANTANEOUS PEAK FLOW			2250
INSTANTANEOUS PEAK STAGE			6.90
INSTANTANEOUS LOW FLOW			21
ANNUAL RUNOFF (CFSM)	2.36	.61	1.19
ANNUAL RUNOFF (INCHES)	32.05	8.24	16.14
10 PERCENT EXCEEDS	755	134	300
50 PERCENT EXCEEDS	103	42	84
90 PERCENT EXCEEDS	37	28	33

- a Also Dec 31, 1998.
- b Also Sep 3, 1999.
- c Also Aug 29, 1999.
- d Also Feb 2, 1966.
- e Estimated.
- f Result of regulation from unknown source upstream from gage.

