

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.

PERIOD OF RECORD.--October 1962 to current year.

REVISED RECORDS.--WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 183.76 ft above sea level. Prior to Sep. 30, 1964, nonrecording gage at same site and datum.

REMARKS.--Records good except for period with backwater from beaver dam, Oct. 10 to Dec. 7, which is poor, and those for periods with ice effect, Dec. 26, 27, Dec. 31 to Jan. 1, 5 and 6, and period of doubtful gage-height record, Apr. 2-5, which are fair. Maximum discharge, 10,900 ft³/s, from rating curve extended above 3,400 ft³/s. Maximum discharge, 10,900 ft³/s, from rating curve extended above 3,400 ft³/s. Several measurements of water temperature were made during the year.

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

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 900 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar 16	0730	*1,250	*8.41	No other peak greater than base discharge.			

Minimum discharge, 0.09 ft³/s, Aug 13.

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	.96	e.52	e3.0	e8.5	19	93	36	15	2.7	2.2	.66	.90
2	.68	e.60	2.8	7.8	28	81	e50	14	2.4	1.9	.36	.70
3	.51	e1.1	2.2	34	52	50	e55	14	2.2	1.8	.20	.68
4	.50	e1.4	1.7	93	45	175	e47	14	1.9	1.7	.18	.72
5	.50	e1.3	1.4	e30	32	216	e44	14	1.8	1.6	.15	2.2
6	.50	e1.1	1.5	e18	26	80	42	14	1.7	1.5	.13	4.3
7	.50	e1.0	1.6	14	23	58	36	15	1.8	1.2	.12	6.3
8	.78	e1.5	2.7	12	22	48	33	15	1.8	1.0	.13	4.3
9	1.7	e1.9	6.4	14	20	40	32	14	1.6	.89	.13	3.4
10	e1.3	e1.7	17	15	19	41	48	12	1.5	.86	.11	2.3
11	e1.1	e2.3	10	15	18	42	60	10	1.5	.92	.12	1.6
12	e1.0	e2.7	6.2	13	18	52	48	9.3	1.3	.84	.12	1.2
13	e.90	e2.6	7.2	13	20	70	42	9.1	1.3	1.2	.10	1.4
14	e.88	e2.7	12	12	21	109	35	7.6	1.4	.72	.18	.86
15	e.90	e2.5	13	15	20	671	31	7.5	1.3	.68	.29	3.0
16	e.80	e2.4	8.7	31	19	1070	31	7.2	1.2	.59	.35	73
17	e.75	e2.3	6.6	34	18	263	30	6.6	1.1	.64	.39	119
18	e.70	e2.8	5.5	28	47	118	27	6.7	1.5	.45	.39	52
19	e.68	e3.3	4.9	66	112	80	24	5.9	1.2	.39	.36	20
20	e.69	e3.0	4.3	51	64	60	23	5.8	1.3	.36	.87	10
21	e.70	e4.0	4.0	29	41	73	23	5.1	1.6	.57	1.1	6.6
22	e.75	e3.7	3.6	21	31	192	24	5.0	1.7	.57	.77	6.5
23	e.70	e3.4	3.7	18	26	140	24	5.1	1.5	.62	.87	7.2
24	e.64	e3.2	4.6	110	23	87	24	6.1	1.4	.94	.91	6.3
25	e.60	e3.6	5.6	413	22	80	23	5.9	1.3	1.3	1.1	5.5
26	e.68	e4.5	e5.3	114	23	69	21	5.2	1.7	1.0	1.5	4.3
27	e.66	e4.2	e5.1	53	21	55	19	4.5	1.3	.79	1.8	3.4
28	e.62	e3.7	6.2	37	28	48	18	4.0	1.1	.93	1.4	5.0
29	e.58	e3.5	7.9	29	---	44	17	3.6	1.7	1.3	1.1	56
30	e.55	e3.2	9.3	24	---	40	16	3.4	4.4	1.1	1.1	467
31	e.52	---	e8.9	20	---	36	---	3.0	---	.87	1.0	---
TOTAL	23.33	75.72	182.9	1392.3	858	4281	983	267.6	50.2	31.43	17.99	875.66
MEAN	.75	2.52	5.90	44.9	30.6	138	32.8	8.63	1.67	1.01	.58	29.2
MAX	1.7	4.5	17	413	112	1070	60	15	4.4	2.2	1.8	467
MIN	.50	.52	1.4	7.8	18	36	16	3.0	1.1	.36	.10	.68
CFSM	.01	.03	.08	.58	.40	1.78	.42	.11	.02	.01	.01	.38
IN.	.01	.04	.09	.67	.41	2.06	.47	.13	.02	.02	.01	.42

01673800 PO RIVER NEAR SPOTSYLVANIA, VA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 1999, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	43.5	65.0	85.6	119	137	157	113	76.9	50.9	28.6	24.5	25.9
MAX	275	278	210	326	560	566	397	221	490	145	207	268
(WY)	1980	1994	1997	1978	1998	1994	1983	1972	1972	1984	1969	1975
MIN	.24	.85	5.90	10.4	30.6	25.2	27.1	8.63	1.67	1.01	.25	.26
(WY)	1992	1992	1999	1981	1999	1981	1981	1999	1999	1999	1963	1991

SUMMARY STATISTICS FOR 1998 CALENDAR YEAR FOR 1999 WATER YEAR WATER YEARS 1963 - 1999

ANNUAL TOTAL	45462.56	9039.13	
ANNUAL MEAN	125	24.8	76.9
HIGHEST ANNUAL MEAN			164 1972
LOWEST ANNUAL MEAN			18.7 1981
HIGHEST DAILY MEAN	3040 Feb 5	1070 Mar 16	8160 Jun 22 1972
LOWEST DAILY MEAN	.50 aOct 4	.10 Aug 13	.04 Sep 23 1991
ANNUAL SEVEN-DAY MINIMUM	.57 Oct 2	.12 Aug 7	.06 Oct 6 1986
INSTANTANEOUS PEAK FLOW		1250 Mar 16	10900 Jun 22 1972
INSTANTANEOUS PEAK STAGE		8.41 Mar 16	19.03 Jun 22 1972
INSTANTANEOUS LOW FLOW		.09 Aug 13	.03 Sep 23 1991
ANNUAL RUNOFF (CFSM)	1.61	.32	.99
ANNUAL RUNOFF (INCHES)	21.85	4.34	13.51
10 PERCENT EXCEEDS	232	52	150
50 PERCENT EXCEEDS	22	4.3	35
90 PERCENT EXCEEDS	.97	.62	2.5

a Also Oct 5-7, 1998.
e Estimated.

