

JAMES RIVER BASIN

02036500 FINE CREEK AT FINE CREEK MILLS, VA

LOCATION.--Lat 37°35'52", long 77°49'12", Powhatan County, Hydrologic Unit 02080205, on right bank 75 ft downstream from bridge on State Highway 711 at Fine Creek Mills, 0.8 mi upstream from mouth, and 6.7 mi northeast of Powhatan.

DRAINAGE AREA.--22.1 mi².

PERIOD OF RECORD.--July 1944 to current year.

REVISED RECORDS.--WSP 1203: 1948. WSP 1303: 1945(M). WSP 1383: 1954. WSP 2104: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 156.59 ft above sea level. Prior to Oct. 28, 1953, nonrecording gage and crest-stage gage at site 75 ft upstream at same datum.

REMARKS.--Records good except those for periods of doubtful or no gage-height record, Oct. 1, 17-21, 30, Jan. 31 to Feb. 1, Jul. 28 to Aug. 1, Aug. 30 to Sep. 1, and periods with ice effect, Dec. 25-28, Dec. 30 to Jan. 1, and Jan. 7-10, which are fair. Maximum discharge, 4,180 ft³/s, from rating curve extended above 2,600 ft³/s. Minimum gage height, 1.53 ft, Sept. 30, Oct. 1, 1970. 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 FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Sep 17	0445	*372	*3.35	No other peak greater than base discharge.			
Minimum discharge, 0.24 ft ³ /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	e5.0	1.1	1.9	e7.5	e9.6	27	16	5.9	1.9	1.2	e.80	e.46
2	1.7	1.1	1.8	8.1	15	20	23	7.9	1.6	1.5	1.1	.59
3	.89	3.2	1.8	31	15	17	21	7.1	1.4	1.2	.56	.60
4	.70	3.9	2.0	29	12	23	17	5.6	1.6	.95	.45	1.2
5	.64	3.0	2.1	15	10	20	15	4.8	1.6	.77	.44	17
6	.66	2.3	2.2	8.2	9.1	17	12	4.9	1.5	.60	.49	12
7	.84	2.0	1.8	e7.6	8.7	18	12	4.7	1.4	.60	.48	12
8	1.5	1.7	2.1	e7.0	8.5	13	11	4.3	.77	.61	.60	10
9	2.0	1.7	17	e6.4	8.2	11	13	3.6	.72	.61	.75	7.0
10	1.5	2.2	9.9	e6.0	8.0	13	19	3.2	.73	.67	.58	4.6
11	.96	3.2	6.1	5.5	7.4	13	20	2.8	.75	.80	.59	2.5
12	.70	2.7	4.2	5.2	8.1	12	19	2.4	.82	1.0	.35	1.6
13	.64	2.3	34	5.1	11	10	15	2.3	1.2	.94	.41	1.1
14	.65	2.2	27	4.8	10	17	12	28	1.2	1.5	.49	.79
15	.61	2.2	14	9.5	9.4	74	11	32	1.1	1.4	.71	7.2
16	.64	2.1	8.2	9.8	8.3	79	15	17	1.2	.83	.64	161
17	e.70	2.5	5.5	7.8	7.9	45	13	10	1.5	.60	.53	268
18	e.66	2.6	3.8	17	18	30	11	7.7	1.8	.96	.48	75
19	e.64	2.5	2.9	19	21	22	11	6.1	1.5	.70	1.0	31
20	e.62	2.5	2.5	14	16	18	11	5.0	1.5	.39	5.0	17
21	e.65	3.6	2.6	9.8	13	25	8.9	4.1	1.8	.33	.53	12
22	.69	2.7	3.1	7.5	11	40	8.2	3.8	1.1	e.36	.44	13
23	.71	2.5	3.2	7.4	8.9	34	8.1	14	.97	.47	.55	9.6
24	.83	3.5	7.9	60	8.7	25	9.4	11	.73	.84	.86	7.4
25	.69	4.2	e7.3	102	8.9	21	7.7	9.2	.61	1.2	1.1	5.8
26	.64	4.5	e6.8	44	9.3	18	6.5	6.9	.82	.91	1.5	4.4
27	.71	3.5	e6.4	23	8.4	16	5.5	5.3	1.2	.57	.86	3.6
28	.97	2.9	e7.6	16	16	15	5.3	4.1	1.3	e.53	.68	18
29	.96	2.5	13	13	---	14	5.9	3.7	1.2	e.50	.61	31
30	e.92	2.1	e10	10	---	13	6.1	3.1	1.1	e.54	e.57	38
31	.97	---	e8.5	e9.8	---	12	---	2.2	---	e.64	e.50	---
TOTAL	30.99	79.0	227.2	526.0	305.4	732	368.6	232.7	36.62	24.72	24.65	773.44
MEAN	1.00	2.63	7.33	17.0	10.9	23.6	12.3	7.51	1.22	.80	.80	25.8
MAX	5.0	4.5	34	102	21	79	23	32	1.9	1.5	5.0	268
MIN	.61	1.1	1.8	4.8	7.4	10	5.3	2.2	.61	.33	.35	.46
CFSM	.05	.12	.33	.77	.49	1.07	.56	.34	.06	.04	.04	1.17
IN.	.05	.13	.38	.89	.51	1.23	.62	.39	.06	.04	.04	1.30

02036500 FINE CREEK AT FINE CREEK MILLS, VA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 1999, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	14.4	17.3	21.7	27.5	31.5	35.1	29.2	20.5	11.6	8.01	11.2	8.85
MAX	119	104	53.9	92.5	92.7	99.1	84.1	54.1	60.8	25.7	83.3	46.1
(WY)	1973	1986	1949	1978	1979	1994	1983	1978	1972	a1949	1955	1996
MIN	.47	2.63	5.60	6.38	8.76	11.4	7.63	3.21	1.22	.80	.74	.31
(WY)	1969	1999	1966	1955	1991	1985	1985	1991	1999	1999	1977	1968

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1945 - 1999	
ANNUAL TOTAL	9619.90		3361.32			
ANNUAL MEAN	26.4		9.21		19.7	
HIGHEST ANNUAL MEAN					40.7	
LOWEST ANNUAL MEAN					8.79	
HIGHEST DAILY MEAN	447	Mar 19	268	Sep 17	1880	Oct 21 1961
LOWEST DAILY MEAN	e.32	Sep 16	.33	Jul 21	.08	Oct 1 1968
ANNUAL SEVEN-DAY MINIMUM	e.45	Sep 12	.52	Aug 12	.10	Sep 25 1968
INSTANTANEOUS PEAK FLOW			372		4180	
INSTANTANEOUS PEAK STAGE			3.35		9.02	
INSTANTANEOUS LOW FLOW			.24		.08	
ANNUAL RUNOFF (CFSM)	1.19		.42		.89	
ANNUAL RUNOFF (INCHES)	16.19		5.66		12.10	
10 PERCENT EXCEEDS	55		19		38	
50 PERCENT EXCEEDS	7.6		4.1		11	
90 PERCENT EXCEEDS	.72		.61		2.2	

a Also 1975.
e Estimated.

