

POTOMAC RIVER BASIN

01634500 CEDAR CREEK NEAR WINCHESTER, VA

LOCATION.--Lat 39°04'52", long 7°819'47", Frederick County, Hydrologic Unit 02070006, on left bank 0.2 mi upstream from Fawcett Run, 0.3 mi upstream from bridge on State Highway 628, 1.3 mi downstream from Froman Run, and 11.4 mi southwest of Winchester.

DRAINAGE AREA.--103 mi².

PERIOD OF RECORD.--June 1937 to current year.

REVISED RECORDS.--WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 647.09 ft above sea level.

REMARKS.--Records good except those for periods with ice effect, Dec. 25, 27, Jan. 1, 2, 6, and periods of no gage-height record, Jan. 24-26, and May 10 to Jun. 23, which are fair. Maximum discharge, 22,000 ft³/s, from rating curve extended above 15,000 ft³/s. Minimum discharge, 1.5 ft³/s, result of freezeup. Minimum gage height, 1.04 ft, Feb. 19, 1941, result of freezeup. 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 of Mar. 17, 1936, reached a stage of about 25 ft, discharge, about 18,000 ft³/s, from information by local residents.

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)
Mar 17	2300	*711	*4.06	No peak greater than base discharge.			

Minimum discharge, 2.6 ft³/s, Aug 5-6.

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	10	14	12	e13	23	23	66	42	e16	8.7	9.4	4.8
2	9.1	13	12	e12	26	21	72	40	e15	18	5.9	5.0
3	9.6	14	12	23	27	21	62	38	e14	22	5.2	4.6
4	13	14	12	42	23	159	60	38	e13	12	4.5	5.7
5	14	13	12	26	21	95	66	36	e13	9.3	4.5	36
6	13	13	12	e22	20	80	60	35	e12	7.5	4.1	188
7	14	12	12	19	20	85	54	35	e11	6.8	4.2	154
8	20	13	13	17	22	67	50	72	e11	6.3	4.0	93
9	23	13	18	25	22	62	50	73	e10	6.1	4.7	42
10	16	13	18	50	22	72	60	e53	e9.8	6.1	4.5	30
11	14	13	14	28	19	58	99	e45	e9.4	6.3	4.2	21
12	13	13	13	24	19	55	153	e42	e9.3	6.2	3.9	17
13	12	13	13	34	20	67	112	e38	e9.9	6.1	3.7	14
14	13	12	14	47	19	83	93	e35	e11	6.2	4.4	13
15	12	13	14	37	17	86	85	e39	e10	6.0	4.1	14
16	12	12	13	29	18	121	82	e40	e10	5.7	4.8	148
17	13	12	13	33	18	339	70	e35	e12	5.0	4.0	105
18	12	12	13	49	26	537	62	e32	e13	4.9	3.7	53
19	12	11	12	67	36	329	56	e28	e12	5.0	3.4	38
20	12	12	12	37	30	204	55	e24	e11	4.6	3.6	32
21	11	12	12	36	26	199	55	e23	e10	4.5	8.1	39
22	12	11	12	76	23	331	62	e22	e11	6.6	7.2	46
23	13	11	12	52	21	212	57	e50	e11	7.4	5.1	35
24	13	11	12	e185	23	167	76	e54	9.9	5.3	5.1	29
25	13	11	e11	e116	22	136	65	e41	9.3	5.3	16	24
26	12	12	12	e60	21	111	59	e31	8.9	4.9	10	21
27	12	13	e12	49	20	95	55	e23	8.5	4.1	13	19
28	12	12	13	40	22	84	51	e20	8.7	5.1	12	20
29	13	12	14	33	---	75	48	e18	9.3	6.5	7.9	23
30	13	12	14	28	---	67	45	e17	8.7	6.5	5.9	247
31	13	---	14	25	---	60	---	e16	---	9.5	5.1	---
TOTAL	403.7	372	402	1334	626	4101	2040	1135	327.7	224.5	186.2	1521.1
MEAN	13.0	12.4	13.0	43.0	22.4	132	68.0	36.6	10.9	7.24	6.01	50.7
MAX	23	14	18	185	36	537	153	73	16	22	16	247
MIN	9.1	11	11	12	17	21	45	16	8.5	4.1	3.4	4.6
CFSM	.13	.12	.13	.42	.22	1.28	.66	.36	.11	.07	.06	.49
IN.	.15	.13	.15	.48	.23	1.48	.74	.41	.12	.08	.07	.55

01634500 CEDAR CREEK NEAR WINCHESTER, VA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 1999, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	60.6	69.1	90.6	115	146	206	174	128	83.8	32.7	39.0	39.6
MAX	777	500	320	545	520	708	600	382	664	181	420	523
(WY)	1943	1986	1973	1996	1998	1993	1983	1988	1972	1978	1955	1996
MIN	6.01	8.64	7.95	10.2	21.5	38.2	37.0	24.5	10.5	6.06	4.52	6.95
(WY)	1964	1966	1966	1966	1959	1981	1947	1969	1969	1966	1957	1986

SUMMARY STATISTICS FOR 1998 CALENDAR YEAR FOR 1999 WATER YEAR WATER YEARS 1938 - 1999

ANNUAL TOTAL	56743.3	12673.2	
ANNUAL MEAN	155	34.7	98.4
HIGHEST ANNUAL MEAN			214 1996
LOWEST ANNUAL MEAN			28.3 1969
HIGHEST DAILY MEAN	2330	Mar 21	537 Mar 18 e13900 Oct 15 1942
LOWEST DAILY MEAN	9.1	Oct 2	3.4 Aug 19 2.8 aSep 7 1964
ANNUAL SEVEN-DAY MINIMUM	9.9	Sep 1	4.0 Aug 14 3.0 bSep 2 1966
INSTANTANEOUS PEAK FLOW			711 Mar 17 22000 Oct 15 1942
INSTANTANEOUS PEAK STAGE			4.06 Mar 17 c27.00 Oct 15 1942
INSTANTANEOUS LOW FLOW			2.6 dAug 5 f1.5 Feb 2 1992
ANNUAL RUNOFF (CFSM)	1.51		.34 .96
ANNUAL RUNOFF (INCHES)	20.49		4.58 12.98
10 PERCENT EXCEEDS	415		74 211
50 PERCENT EXCEEDS	33		14 42
90 PERCENT EXCEEDS	12		5.8 10

- a Also Sep 3, 4, 7, 8, 1966.
- b Also Sep 3, 1966.
- c From floodmarks.
- d Also Aug 6, 1999.
- e Estimated.
- f Result of freezeup.

