

POTOMAC RIVER BASIN

01656000 CEDAR RUN NEAR CATLETT, VA

LOCATION.--Lat 38°38'12", long 77°37'31", Fauquier County, Hydrologic Unit 02070010, on right bank 100 ft downstream from bridge on State Highway 806, 0.9 mi downstream from Licking Run, and 1.4 mi southeast of Catlett.

DRAINAGE AREA.--93.4 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1950 to December 1986, January 1986 to September 1989 (annual maximum only), October 1989 to current year.

REVISED RECORDS.--WSP 2103: Drainage area. WDR VA-79-1: 1973-77(P). WDR VA-95-1: 1972-94 (M).

GAGE.--Water-stage recorder. Datum of gage is 199.15 ft above sea level. July 1950 to December 1986, water-stage recorder at same site and datum.

REMARKS.--Records good except those for periods with ice effect, Dec. 25-28, Dec. 31 to Jan. 1, and Jan. 5-8, which are fair. Maximum discharge, 32,500 ft<sup>3</sup>/s, from rating curve extended above 7,000 ft<sup>3</sup>/s, on basis of contracted-opening measurement of peak flow. No flow at times in many years. 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 Oct 15, 1942, reached a stage of about 22 ft, discharge not determined, from information by local residents.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,800 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Sep 30	0730	*2,680	*10.04	No other peak greater than base discharge.			

Minimum discharge, 0.07 ft<sup>3</sup>/s, Aug 4, 7.

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	1.6	1.8	3.3	e4.4	31	112	46	12	1.0	28	1.2	.74
2	1.1	1.2	2.8	4.0	127	72	61	10	.82	12	.59	.64
3	.92	1.6	2.9	116	105	101	52	9.6	.75	2.5	.26	.60
4	1.3	8.0	3.7	63	70	339	80	9.3	.69	2.4	.08	.74
5	1.2	2.6	3.6	e21	52	131	117	9.9	1.6	1.6	.09	11
6	1.2	.97	3.3	e9.8	40	100	78	10	2.1	.74	.14	26
7	1.6	1.7	3.3	e7.3	37	88	59	11	1.4	.38	.08	24
8	33	1.4	4.0	e6.2	37	60	49	44	1.1	.19	.98	10
9	27	1.6	25	18	32	56	45	41	.77	.14	.72	3.7
10	6.7	2.4	15	34	28	66	89	25	.98	.52	.30	6.4
11	2.7	2.5	6.7	15	25	81	75	17	.86	.55	.15	7.3
12	1.9	5.1	4.5	11	25	103	87	14	.89	.81	.16	2.9
13	1.1	4.9	6.8	19	52	100	61	9.9	3.2	1.2	.13	1.7
14	.63	3.3	21	20	34	200	47	7.6	2.1	.96	.21	1.1
15	.74	3.2	9.4	100	27	1080	41	6.1	.90	.50	1.1	1.4
16	.82	2.5	6.0	85	24	525	42	4.5	1.2	.21	1.3	183
17	.73	2.8	5.1	34	24	271	37	3.9	1.3	.09	1.6	63
18	.87	2.8	5.2	145	273	188	33	3.7	.77	.31	1.1	15
19	.78	3.3	4.6	112	165	136	29	3.3	.37	1.7	.82	7.5
20	.69	4.1	3.9	48	100	107	26	2.8	1.1	.84	2.2	4.5
21	.86	4.0	4.0	56	70	166	31	2.7	5.5	.79	3.2	149
22	1.4	4.2	4.0	195	52	250	39	3.2	3.5	13	2.8	110
23	1.7	4.1	3.7	83	40	147	34	20	2.4	14	1.7	22
24	3.2	3.3	4.4	990	37	121	40	21	1.8	4.4	3.5	9.5
25	1.7	3.7	e4.2	364	35	105	30	29	1.2	2.3	2.1	5.0
26	2.0	4.2	e4.0	155	34	81	25	11	.48	2.0	9.6	2.8
27	.90	11	e3.7	98	31	69	22	7.2	.49	.97	29	2.6
28	1.3	5.2	e4.1	74	60	62	19	5.2	.59	8.8	9.4	131
29	1.6	3.7	4.8	58	---	55	15	3.5	.86	13	3.4	176
30	1.2	3.2	5.2	44	---	49	15	2.0	.68	4.2	1.6	1380
31	3.3	---	e4.7	36	---	43	---	1.6	---	2.3	.89	---
TOTAL	105.74	104.37	186.9	3025.7	1667	5064	1424	361.0	41.40	121.40	80.40	2359.12
MEAN	3.41	3.48	6.03	97.6	59.5	163	47.5	11.6	1.38	3.92	2.59	78.6
MAX	33	11	25	990	273	1080	117	44	5.5	28	29	1380
MIN	.63	.97	2.8	4.0	24	43	15	1.6	.37	.09	.08	.60
CFSM	.04	.04	.06	1.05	.64	1.75	.51	.12	.01	.04	.03	.84
IN.	.04	.04	.07	1.21	.66	2.02	.57	.14	.02	.05	.03	.94

01656000 CEDAR RUN NEAR CATLETT, VA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1987, 1990 - 1999, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	45.8	63.4	109	148	169	178	123	73.7	70.6	29.8	44.6	39.6
MAX	450	248	379	467	501	531	544	210	917	323	407	388
(WY)	1980	1973	1993	1978	1998	1993	1983	1971	1972	1956	1955	1975
MIN	.40	3.15	3.53	4.64	28.0	22.3	19.6	9.41	1.38	.74	.58	.37
(WY)	1987	1966	1966	1981	1954	1981	1985	1956	1999	1963	1966	1954

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR	FOR 1999 WATER YEAR	WATER YEARS 1951 - 1986 1990 - 1999
ANNUAL TOTAL	49855.23	14541.03	
ANNUAL MEAN	137 c	39.8	90.9
HIGHEST ANNUAL MEAN			171
LOWEST ANNUAL MEAN			27.6
HIGHEST DAILY MEAN	3710	Mar 21	1380
LOWEST DAILY MEAN	e.12	aSep 15	.08
ANNUAL SEVEN-DAY MINIMUM	e.14	Sep 10	.32
INSTANTANEOUS PEAK FLOW			2680
INSTANTANEOUS PEAK STAGE			10.04
INSTANTANEOUS LOW FLOW			.07
ANNUAL RUNOFF (CFSM)	1.46		.43
ANNUAL RUNOFF (INCHES)	19.86		5.79
10 PERCENT EXCEEDS	308		100
50 PERCENT EXCEEDS	21		5.1
90 PERCENT EXCEEDS	.90		.75

- a Also Sep 16, 1998.
- b Also Aug 7, 1999.
- c Many days in 1954, 1957, 1959, 1963-64, 1966, 1983, and 1993.
- d Many days in 1954, 1957, 1959, 1963-64, 1966, and 1983.
- e Estimated.
- f From floodmarks.
- g Many days in 1954, 1957, 1959, 1963-64, 1966, 1983, 1991, and 1993.

