

TENNESSEE RIVER BASIN

03478400 BEAVER CREEK AT BRISTOL, VA

LOCATION.--Lat 36°37'54", long 82°08'02", Bristol City, Hydrologic Unit 06010102, on right bank 50 ft upstream from bridge on State Highway 1405, 75 ft downstream from Goose Creek, 0.9 mi downstream from Clear Creek, 3.7 mi northeast of Bristol, VA post office, and at mile 20.6.

DRAINAGE AREA.--27.7 mi².

PERIOD OF RECORD.--July 1957 to current year. Published as "near Bristol" prior to October 1974.

GAGE.--Water-stage recorder. Datum of gage is 1,780.98 ft above sea level.

REMARKS.--No estimated daily discharges. Records good. Small diurnal fluctuation at low flow caused by withdrawal of water, which is returned to stream 600 ft upstream from station, for car-washing operation. Since September 1965, some regulation at high flow by flood-control reservoirs, capacity, 7,600 acre-ft. Maximum discharge, 1,600 ft³/s, from rating curve extended above 390 ft³/s on basis of slope-area measurement of peak flow. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1936 reached a stage of about 12 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 281 ft³/s, Aug 1, gage height, 5.42 ft; minimum discharge, 7.5 ft³/s, Sep 24, gage height, 2.63 ft.

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	13	12	10	13	34	43	32	36	19	20	30	9.8
2	12	12	10	15	33	40	29	33	21	18	23	9.7
3	12	13	10	34	31	76	28	32	20	17	17	9.5
4	13	12	10	22	30	77	27	31	19	16	16	9.2
5	13	12	11	19	28	66	26	29	18	16	15	11
6	12	11	11	17	27	64	25	36	18	15	15	13
7	13	11	11	16	29	59	25	32	18	21	15	11
8	24	11	27	18	28	54	25	49	18	16	15	9.9
9	16	11	24	28	27	57	25	37	21	15	15	14
10	14	12	15	24	26	54	24	33	29	27	14	21
11	14	14	13	21	25	50	52	31	21	26	14	12
12	13	12	16	19	26	47	37	29	19	50	14	11
13	13	11	44	18	25	45	32	31	18	27	14	10
14	13	11	24	27	24	46	30	31	18	22	13	10
15	13	11	18	64	24	51	37	28	18	20	12	9.9
16	13	11	15	40	24	48	32	27	21	19	12	9.5
17	13	11	15	33	29	45	30	26	19	18	11	9.3
18	13	11	13	42	39	44	29	26	18	18	12	9.3
19	13	11	13	36	48	42	28	30	17	17	11	9.2
20	13	12	13	32	54	41	28	26	16	18	30	12
21	13	11	12	30	45	42	26	24	16	18	15	16
22	12	11	21	28	41	39	26	25	16	17	13	8.9
23	12	11	19	45	40	38	25	24	15	17	12	8.7
24	12	11	34	74	37	37	25	24	16	18	12	8.1
25	12	11	23	55	37	36	24	22	19	17	12	8.1
26	12	13	19	46	35	34	26	22	17	16	12	8.0
27	12	11	16	41	34	33	53	21	19	16	12	8.3
28	12	11	16	39	46	31	60	20	23	15	11	8.5
29	12	10	14	37	---	30	45	20	28	15	11	11
30	12	10	15	34	---	30	40	20	22	16	10	10
31	12	---	14	33	---	29	---	19	---	15	9.8	---
TOTAL	406	342	526	1000	926	1428	951	874	577	596	447.8	315.9
MEAN	13.1	11.4	17.0	32.3	33.1	46.1	31.7	28.2	19.2	19.2	14.4	10.5
MAX	24	14	44	74	54	77	60	49	29	50	30	21
MIN	12	10	10	13	24	29	24	19	15	15	9.8	8.0
CFSM	.47	.41	.61	1.16	1.19	1.66	1.14	1.02	.69	.69	.52	.38
IN.	.55	.46	.71	1.34	1.24	1.92	1.28	1.17	.77	.80	.60	.42

03478400 BEAVER CREEK AT BRISTOL, VA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 1999, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	18.2	19.7	31.6	42.5	54.9	59.3	52.5	41.4	32.7	25.3	21.1	17.7
MAX	76.1	58.0	128	141	131	130	120	129	73.1	53.4	64.5	48.9
(WY)	1973	1978	1973	1974	1994	1963	1998	1958	1972	1972	1982	1982
MIN	8.08	10.3	9.13	8.92	19.5	19.7	19.3	17.7	13.0	10.2	9.96	9.23
(WY)	1970	1970	1966	1966	1981	1988	1985	1985	1988	1988	1988	1969

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR	FOR 1999 WATER YEAR	WATER YEARS 1958 - 1999
ANNUAL TOTAL	15928	8389.7	
ANNUAL MEAN	43.6	23.0	34.7
HIGHEST ANNUAL MEAN			62.8
LOWEST ANNUAL MEAN			16.2
HIGHEST DAILY MEAN	466	Apr 17	580
LOWEST DAILY MEAN	10	aNov 29	7.4
ANNUAL SEVEN-DAY MINIMUM	10	Nov 28	7.6
INSTANTANEOUS PEAK FLOW			1600
INSTANTANEOUS PEAK STAGE			9.94
INSTANTANEOUS LOW FLOW			3.4
ANNUAL RUNOFF (CFSM)	1.58	.83	1.25
ANNUAL RUNOFF (INCHES)	21.39	11.27	17.00
10 PERCENT EXCEEDS	80	41	63
50 PERCENT EXCEEDS	34	19	27
90 PERCENT EXCEEDS	12	11	12

a Also Nov 30 to Dec 4, 1998.
 b Also Sep 29, and Oct. 5, 15, 18, 19, 23, 24, 1969.

