

ROANOKE RIVER BASIN

02056900 BLACKWATER RIVER NEAR ROCKY MOUNT, VA

LOCATION.--Lat 37°02'42", long 79°50'40", Franklin County, Hydrologic Unit 03010101, on right bank 45 ft downstream from bridge on State Highway 122, 3.0 mi northeast of Rocky Mount, and 4.1 mi upstream from Maggodee Creek.

DRAINAGE AREA.--115 mi².

PERIOD OF RECORD.--October 1976 to current year.

GAGE.--Water-stage recorder. Datum of gage is 876.45 ft above sea level.

REMARKS.--Records good except those for periods with ice effect, Jan. 2, 5-8, and periods with backwater from beaver dams, Jul. 30 to Aug. 25, and Sep. 1-26, which are fair. American Electric Power gage-height transmitter at station with recorder at Roanoke. Maximum discharge, 20,800 ft³/s, from rating curve extended above 7,000 ft³/s on basis of slope-area measurement of peak flow. Minimum gage height, 1.13 ft, July 21, 1986. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location by the Virginia Department of Environmental Quality - Water Division.

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

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Sep 30	0200	*1,420	*5.74	No peak greater than base discharge.			

Minimum daily discharge, 4.6 ft³/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	23	32	34	38	58	61	70	56	32	24	e13	e23
2	22	32	34	e36	131	55	92	51	31	24	e16	e21
3	21	34	34	72	121	55	71	49	30	24	e14	e20
4	21	36	34	123	90	77	67	48	32	25	e13	e19
5	24	37	34	e63	76	70	63	46	28	20	e12	e159
6	28	35	34	e48	69	65	61	46	27	18	e11	e592
7	34	33	35	e59	65	64	59	46	26	16	e10	e180
8	111	34	36	e50	64	60	57	65	25	34	e9.0	e74
9	79	34	68	53	58	61	55	67	23	28	e10	e54
10	41	36	54	86	56	64	56	52	21	19	e10	e63
11	32	44	38	68	54	63	196	47	20	16	e9.0	e50
12	29	47	35	51	53	59	225	44	20	20	e7.0	e36
13	29	38	91	53	53	57	119	42	23	69	e6.0	e27
14	28	36	99	59	50	67	98	119	20	50	e5.4	e23
15	27	36	54	86	48	195	89	175	19	41	e5.2	e33
16	27	35	44	95	48	183	97	98	20	33	e6.2	e35
17	28	34	40	68	50	125	81	80	27	27	e5.9	e31
18	28	35	36	92	92	107	73	70	36	23	e5.2	e30
19	27	34	35	96	106	94	70	72	26	23	e4.6	e29
20	28	35	35	72	81	84	68	61	23	27	e6.2	e25
21	28	36	35	62	70	89	65	55	25	23	e23	e26
22	27	35	34	56	63	100	63	53	30	75	e21	e28
23	26	34	34	58	60	82	60	50	28	41	e19	e27
24	28	35	44	227	59	78	58	46	24	27	e18	e24
25	30	35	51	172	58	75	55	43	22	21	e50	e23
26	30	36	44	107	57	71	54	42	24	18	104	e21
27	29	36	43	84	55	67	59	40	29	15	68	27
28	29	35	42	73	58	64	58	37	28	16	44	95
29	29	35	42	65	---	62	64	36	32	48	32	203
30	29	34	42	59	---	60	62	34	31	e20	28	657
31	30	---	40	55	---	58	---	33	---	e16	24	---
TOTAL	1002	1068	1355	2386	1903	2472	2365	1803	782	881	609.7	2655
MEAN	32.3	35.6	43.7	77.0	68.0	79.7	78.8	58.2	26.1	28.4	19.7	88.5
MAX	111	47	99	227	131	195	225	175	36	75	104	657
MIN	21	32	34	36	48	55	54	33	19	15	4.6	19
CFSM	.28	.31	.38	.67	.59	.69	.69	.51	.23	.25	.17	.77
IN.	.32	.35	.44	.77	.62	.80	.77	.58	.25	.28	.20	.86

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STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 1999, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	101	116	113	163	172	229	242	141	127	83.9	68.2	96.2
MAX	544	584	272	349	495	585	821	346	416	261	205	375
(WY)	1977	1986	1997	1996	1998	1993	1987	1978	1992	1989	1985	1979
MIN	26.5	29.1	43.7	47.0	66.1	60.1	65.3	53.6	26.1	24.6	12.4	23.0
(WY)	1992	1982	1999	1981	1989	1981	1981	1981	1999	1977	1981	1983

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR	FOR 1999 WATER YEAR	WATER YEARS 1977 - 1999
ANNUAL TOTAL	55643	19281.7	
ANNUAL MEAN	152	52.8	137
HIGHEST ANNUAL MEAN			234
LOWEST ANNUAL MEAN			46.1
HIGHEST DAILY MEAN	2390	Feb 4	5410
LOWEST DAILY MEAN	20	aSep 10	e4.6
ANNUAL SEVEN-DAY MINIMUM	21	Sep 9	5.5
INSTANTANEOUS PEAK FLOW			1420
INSTANTANEOUS PEAK STAGE			5.74
INSTANTANEOUS LOW FLOW			(b)
ANNUAL RUNOFF (CFSM)	1.33	.46	(b)
ANNUAL RUNOFF (INCHES)	18.00	6.24	1.20
10 PERCENT EXCEEDS	297	90	235
50 PERCENT EXCEEDS	70	40	88
90 PERCENT EXCEEDS	28	20	36

- a Also Sep 14, 1998.
- b Not determined.
- c Probably occurred Aug 19, 1999.
- e Estimated.

