

RAPPAHANNOCK RIVER BASIN

01666500 ROBINSON RIVER NEAR LOCUST DALE, VA

LOCATION.--Lat 38°19'30", long 78°05'45", Madison County, Hydrologic Unit 02080103, on right bank 100 ft upstream from bridge on State Highway 614, 1.1 mi upstream from Great Run, 1.7 mi upstream from mouth, 2.0 mi southeast of Locust Dale, and 3.4 mi downstream from Crooked Run.

DRAINAGE AREA.--179 mi².

PERIOD OF RECORD.--July 1943 to current year. Prior to October 1965, published as Robertson River near Locust Dale.

REVISED RECORDS.--WSP 1171: 1948(M). WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 283.70 ft above sea level.

REMARKS.--Records good except those for period with ice effect, Jan. 5-8, and period of doubtful gage-height record, Jul. 9-19, which are fair. 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 23.9 ft, from floodmarks, discharge, about 44,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,700 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan 24	1500	1,990	8.30	Sep 30	0600	*13,800	*18.80

Minimum discharge, 2.4 ft³/s, Aug 13.

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	19	41	50	62	169	165	167	92	52	20	10	15
2	18	41	48	77	263	139	179	89	50	21	8.5	13
3	19	46	48	330	249	143	161	87	47	50	7.1	11
4	19	56	49	305	208	341	157	86	43	38	5.7	11
5	22	47	50	e140	186	239	164	86	41	23	4.5	36
6	25	45	50	e120	173	216	150	87	39	18	5.3	287
7	29	46	50	e110	166	211	143	88	38	14	5.9	363
8	156	45	57	e100	165	186	138	218	36	22	4.8	147
9	154	47	124	134	150	187	139	144	32	e18	4.1	478
10	68	48	94	233	143	190	156	105	29	e15	5.1	334
11	52	55	75	158	135	181	144	93	31	e12	4.3	151
12	46	60	65	113	133	201	149	87	32	e11	3.1	104
13	42	51	80	122	131	190	135	83	32	e13	2.6	83
14	40	50	96	129	121	257	128	97	35	e17	3.9	70
15	37	50	75	344	117	716	127	99	32	e14	3.5	71
16	36	48	70	268	116	483	136	83	27	e11	7.6	422
17	36	48	66	176	116	343	123	80	28	e9.5	6.4	293
18	36	48	63	271	225	336	118	77	35	e8.5	4.4	182
19	36	48	60	286	237	330	115	75	31	e8.4	3.4	141
20	37	51	59	190	187	287	113	71	30	8.9	45	118
21	35	51	58	159	169	314	112	67	43	9.8	31	298
22	35	48	58	149	152	376	115	65	39	111	15	278
23	34	48	56	161	141	305	111	98	32	40	11	199
24	37	49	60	1150	136	279	130	99	27	24	9.3	159
25	38	48	59	735	133	255	115	89	24	42	10	133
26	39	53	62	459	130	228	108	76	23	23	22	112
27	39	57	75	346	124	211	105	70	22	16	153	103
28	39	50	61	285	144	199	100	65	26	13	50	217
29	40	49	60	239	---	185	99	62	26	13	30	889
30	39	49	60	206	---	173	96	59	21	14	22	7900
31	40	---	56	183	---	163	---	55	---	13	17	---
TOTAL	1342	1473	1994	7740	4519	8029	3933	2732	1003	671.1	515.5	13618
MEAN	43.3	49.1	64.3	250	161	259	131	88.1	33.4	21.6	16.6	454
MAX	156	60	124	1150	263	716	179	218	52	111	153	7900
MIN	18	41	48	62	116	139	96	55	21	8.4	2.6	11
CFSM	.24	.27	.36	1.39	.90	1.45	.73	.49	.19	.12	.09	2.54
IN.	.28	.31	.41	1.61	.94	1.67	.82	.57	.21	.14	.11	2.83

01666500 ROBINSON RIVER NEAR LOCUST DALE, VA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 1999, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	170	216	232	276	307	350	308	251	212	128	138	164
MAX	783	1350	624	752	1254	980	989	625	1154	522	1063	1119
(WY)	1991	1986	1973	1978	1998	1993	1983	1989	1995	1949	1955	1996
MIN	18.5	35.1	32.0	47.5	105	105	89.3	70.9	33.4	21.3	12.2	8.05
(WY)	1964	1966	1966	1966	1977	1981	1981	1977	1999	1944	1963	1954

SUMMARY STATISTICS FOR 1998 CALENDAR YEAR FOR 1999 WATER YEAR WATER YEARS 1944 - 1999

ANNUAL TOTAL	127141	47569.6	
ANNUAL MEAN	348	130	229
HIGHEST ANNUAL MEAN			445
LOWEST ANNUAL MEAN			95.6
HIGHEST DAILY MEAN	5570	May 8	7900 Sep 30
LOWEST DAILY MEAN	18	aSep 30	2.6 Aug 13
ANNUAL SEVEN-DAY MINIMUM	19	Sep 29	3.8 Aug 9
INSTANTANEOUS PEAK FLOW			13800 Sep 30
INSTANTANEOUS PEAK STAGE			18.80 Sep 30
INSTANTANEOUS LOW FLOW			2.4 Aug 13
ANNUAL RUNOFF (CFSM)	1.95	.73	1.2
ANNUAL RUNOFF (INCHES)	26.42	9.89	17.36
10 PERCENT EXCEEDS	730	243	428
50 PERCENT EXCEEDS	127	67	149
90 PERCENT EXCEEDS	35	13	40

- a Also Oct 2, 1998.
- b Also Sep 27, 1954.
- c Backwater from debris.
- d Also Sep 12, 1954.
- e Estimated.

