

ROANOKE RIVER BASIN

02070000 NORTH MAYO RIVER NEAR SPENCER, VA

LOCATION.--Lat 36°33'58", long 79°59'14", Henry County, Hydrologic Unit 03010103, on left bank 800 ft downstream from bridge on State Highway 629 at Moores Mill, 2.1 mi downstream from Horse Pasture Creek, and 3.8 mi southeast of Spencer.

DRAINAGE AREA.--108 mi².

PERIOD OF RECORD.--October 1928 to current year. Monthly discharge only for some periods, published in WSP 1303.

REVISED RECORDS.--WSP 1303: 1929-32(M), 1934(M).

GAGE.--Water-stage recorder. Datum of gage is 730.94 ft above sea level (levels by U.S. Army Corps of Engineers). Prior to Jan. 23, 1936, nonrecording gage at site 800 ft upstream at datum 1.50 ft higher. July 25 to Sept. 27, 1936, nonrecording gage at present site and datum.

REMARKS.--Records good except for period of no gage-height record, Oct. 1-7, which is fair. Maximum discharge, 17,200 ft³/s, from rating curve extended above 7,200 ft³/s on basis of slope-area measurement at gage height 13.41 ft and velocity-area study. Minimum gage height, 1.08 ft, Oct. 8, 1954. 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 FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,400 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Sep 29	2300	*1,160	*4.33	No peak greater than base discharge.			

Minimum discharge, 17 ft³/s, Aug 19-20.

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	e45	49	53	71	95	101	118	123	53	46	43	36
2	e42	50	53	69	236	88	143	97	52	69	39	35
3	e40	52	53	116	170	87	109	87	52	50	35	34
4	e43	54	53	149	127	98	98	81	50	48	33	32
5	e50	53	53	101	109	88	90	78	49	43	32	197
6	e53	52	54	126	101	87	86	76	48	40	31	275
7	e56	52	54	98	97	85	84	75	48	37	30	117
8	81	52	55	86	94	80	82	87	46	38	28	73
9	71	53	95	93	88	80	81	74	44	39	28	88
10	54	54	72	104	86	83	80	69	43	36	27	71
11	52	75	60	90	84	80	85	66	42	48	26	54
12	51	73	58	84	83	77	97	65	43	52	24	48
13	50	58	323	81	82	76	80	63	42	93	23	46
14	50	55	178	81	78	84	78	141	41	70	23	45
15	50	55	101	97	77	221	81	152	43	61	23	53
16	49	54	86	98	77	183	95	92	46	51	22	75
17	53	54	77	87	77	128	81	80	56	46	20	51
18	52	53	72	130	130	111	77	75	50	44	19	46
19	50	53	70	138	122	101	76	118	43	42	17	45
20	50	53	69	106	105	95	75	89	44	40	25	44
21	49	53	68	95	93	110	74	75	53	46	38	44
22	47	52	68	89	87	120	73	70	52	133	25	53
23	46	52	66	122	84	100	71	67	47	58	22	46
24	48	53	102	525	85	98	70	64	44	48	24	43
25	49	53	121	270	84	95	68	61	44	57	148	42
26	49	55	89	152	82	90	68	61	50	45	117	41
27	49	55	84	122	80	86	72	60	49	40	63	76
28	49	53	82	110	89	83	82	57	51	50	49	245
29	50	53	80	101	---	82	105	56	50	150	44	419
30	49	53	76	94	---	80	214	55	45	75	39	590
31	50	---	72	89	---	78	---	54	---	50	37	---
TOTAL	1577	1636	2597	3774	2802	3055	2693	2468	1420	1745	1154	3064
MEAN	50.9	54.5	83.8	122	100	98.5	89.8	79.6	47.3	56.3	37.2	102
MAX	81	75	323	525	236	221	214	152	56	150	148	590
MIN	40	49	53	69	77	76	68	54	41	36	17	32
CFSM	.47	.50	.78	1.13	.93	.91	.83	.74	.44	.52	.34	.95
IN.	.54	.56	.89	1.30	.97	1.05	.93	.85	.49	.60	.40	1.06

02070000 NORTH MAYO RIVER NEAR SPENCER, VA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 1935, 1937 - 1999, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	114	106	123	147	158	183	166	137	124	105	98.8	104
MAX	498	392	256	368	364	479	523	329	470	320	446	462
(WY)	1938	1986	1997	1937	1960	1993	1987	1972	1972	1989	1985	1987
MIN	30.4	33.8	43.5	40.6	49.6	85.5	67.1	58.0	45.0	35.2	26.0	25.7
(WY)	1932	1932	1956	1956	1931	1981	1967	1956	1956	1956	1981	1954

SUMMARY STATISTICS FOR 1998 CALENDAR YEAR FOR 1999 WATER YEAR WATER YEARS 1929 - 1935 1937 - 1999

ANNUAL TOTAL		50454		27985								
ANNUAL MEAN		138		76.7						130		
HIGHEST ANNUAL MEAN										218		1987
LOWEST ANNUAL MEAN										62.6		1956
HIGHEST DAILY MEAN				1740	Jan 28		590	Sep 30		7460	Aug 18	1985
LOWEST DAILY MEAN				e40	Oct 3		17	Aug 19		15	Aug 15	1956
ANNUAL SEVEN-DAY MINIMUM				44	Sep 28		21	Aug 13		18	Aug 9	1956
INSTANTANEOUS PEAK FLOW							1160	Sep 29		17200	Oct 9	1947
INSTANTANEOUS PEAK STAGE							4.33	Sep 29		15.80	Oct 9	1947
INSTANTANEOUS LOW FLOW							17	aAug 19		15	bAug 11	1956
ANNUAL RUNOFF (CFSM)			1.28				.71			1.21		
ANNUAL RUNOFF (INCHES)			17.38				9.64			16.39		
10 PERCENT EXCEEDS			236				117			201		
50 PERCENT EXCEEDS			93				67			96		
90 PERCENT EXCEEDS			50				40			51		

a Also Aug 20, 1999.
 b Also Aug 15, 1956.
 e Estimated.

