

02051000 NORTH MEHERRIN RIVER NEAR LUNENBURG, VA

LOCATION.--Lat 36°59'53", long 78°21'03", Lunenburg County, Hydrologic Unit 03010204, on right bank at upstream side of bridge on State Highway 40, 0.5 mi downstream from Tusekiah Creek, 4.6 mi upstream from Juniper Creek, and 5.2 mi northwest of Lunenburg.

DRAINAGE AREA.--55.6 mi².

PERIOD OF RECORD.--August 1946 to September 1980, October 1981 to current year.

REVISED RECORDS.--WSP 1303: 1947(M), 1949(M). WSP 2104: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 333.7 ft above sea level (levels by U.S. Army Corps of Engineers). Prior to Jul. 5, 1951, nonrecording gage at same site and datum. Jul. 5, 1951 to Jul. 11, 1980, water-stage recorder at site 20 ft downstream at same datum.

REMARKS.--Records good except those for periods of doubtful or no gage-height record, Dec. 2-9, Feb. 3, and period with ice effect, Jan. 6, which are fair. Maximum discharge, 14,400 ft³/s, from rating curve extended above 2,320 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.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in August 1940 reached a stage of 48 ft, from information by local resident.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,200 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr 11	1530	2,620	14.10	Sep 16	0815	*3,120	*15.89

Minimum discharge, 0.18 ft³/s, Aug 21, 22.

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	.74	4.2	5.4	14	23	24	76	29	7.0	3.7	2.5	.81
2	.79	4.2	e5.6	12	53	20	83	23	6.5	3.5	2.2	.81
3	.62	4.8	e5.3	661	e47	19	44	20	6.1	3.5	1.9	.79
4	6.2	5.5	e5.2	97	34	26	36	19	5.8	2.9	1.6	88
5	4.8	5.4	e5.1	39	28	23	41	18	5.3	2.4	1.4	323
6	2.3	5.1	e5.4	e28	24	20	31	18	4.9	1.9	1.3	93
7	1.9	4.8	e5.3	23	23	20	28	17	4.8	2.1	1.2	29
8	4.1	4.6	e11	21	24	18	25	15	4.5	5.6	1.0	21
9	10	4.9	e16	19	22	18	32	14	4.2	3.3	.86	15
10	4.5	5.1	13	17	21	20	132	13	3.8	2.5	.77	8.7
11	3.0	5.7	7.4	15	19	20	914	12	3.6	3.2	.69	5.9
12	2.5	6.4	5.5	15	20	19	222	11	3.7	2.9	.68	4.6
13	2.4	5.8	137	14	22	17	76	155	3.9	9.4	.63	3.7
14	2.3	5.4	41	14	20	91	52	428	4.5	17	.57	3.4
15	2.2	5.4	15	43	18	555	47	117	5.6	15	.55	14
16	2.2	5.6	11	42	18	135	84	42	6.7	7.0	.47	1630
17	2.3	5.6	9.3	26	18	63	51	28	5.7	4.6	.45	96
18	2.3	5.4	8.6	72	43	45	39	23	5.5	3.7	.43	32
19	2.3	5.4	7.8	91	47	36	34	19	4.8	3.1	.33	19
20	2.4	5.5	7.6	41	31	30	30	17	4.1	2.8	.26	14
21	2.5	5.8	7.5	29	25	91	26	15	4.7	2.4	.19	30
22	2.4	5.4	7.5	24	22	156	25	13	5.4	2.3	.21	58
23	2.5	5.3	7.5	23	20	59	23	13	4.9	2.2	.22	22
24	2.8	5.4	24	872	20	43	22	12	4.0	7.0	.24	14
25	3.0	5.4	32	187	19	36	22	10	3.4	63	.74	11
26	3.2	5.7	18	65	19	32	19	10	3.2	12	12	9.0
27	3.2	6.1	15	47	18	28	19	9.7	3.3	6.4	10	11
28	3.3	5.7	25	37	20	25	21	9.0	4.5	4.5	4.0	69
29	3.5	5.4	27	31	---	24	32	8.4	9.3	3.8	2.3	73
30	3.7	5.4	22	26	---	23	44	7.9	4.8	3.2	1.3	123
31	3.9	---	17	24	---	21	---	7.4	---	3.0	.90	---
TOTAL	93.85	160.4	530.0	2669	718	1757	2330	1153.4	148.5	209.9	51.89	2822.71
MEAN	3.03	5.35	17.1	86.1	25.6	56.7	77.7	37.2	4.95	6.77	1.67	94.1
MAX	10	6.4	137	872	53	555	914	428	9.3	63	12	1630
MIN	.62	4.2	5.1	12	18	17	19	7.4	3.2	1.9	.19	.79
CFSM	.05	.10	.31	1.55	.46	1.02	1.40	.67	.09	.12	.03	1.69
IN.	.06	.11	.35	1.79	.48	1.18	1.56	.77	.10	.14	.03	1.89

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STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 1980, 1982 - 1999, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	33.2	45.4	53.3	72.2	90.4	96.9	77.6	46.0	27.1	20.5	19.1	28.2
MAX	442	299	186	194	249	293	223	161	154	98.6	138	292
(WY)	1972	1986	1949	1978	1979	1975	1978	1971	1968	1975	1955	1979
MIN	1.70	4.37	7.22	12.7	18.7	32.8	15.3	11.2	3.97	2.72	1.67	.16
(WY)	1994	1992	1966	1955	1968	1985	1995	1964	1964	1957	1999	1954
SUMMARY STATISTICS				FOR 1998 CALENDAR YEAR			FOR 1999 WATER YEAR			WATER YEARS	1947 - 1980	
											1982 - 1999	
ANNUAL TOTAL			21798.04				12644.65					
ANNUAL MEAN			59.7				34.6				50.6	
HIGHEST ANNUAL MEAN											98.8	1972
LOWEST ANNUAL MEAN											21.2	1992
HIGHEST DAILY MEAN		2480	Mar 19		1630	Sep 16			6710	Oct 23	1971	
LOWEST DAILY MEAN		.62	Oct 3		.19	Aug 21			.00	aSep 5	1954	
ANNUAL SEVEN-DAY MINIMUM		.74	Sep 13		.27	Aug 18			.00	aSep 5	1954	
INSTANTANEOUS PEAK FLOW				3120	Sep 16			14400	Oct 23	1971		
INSTANTANEOUS PEAK STAGE					15.89	Sep 16			28.30	Oct 23	1971	
INSTANTANEOUS LOW FLOW					.18	bAug 21			.00	aSep 5	1954	
ANNUAL RUNOFF (CFSM)		1.07			.62				.91			
ANNUAL RUNOFF (INCHES)		14.58			8.46				12.36			
10 PERCENT EXCEEDS		122			52				93			
50 PERCENT EXCEEDS		15			11				20			
90 PERCENT EXCEEDS		2.2			2.2				3.8			

a Also Sep 6-21 and Oct 8-14, 1954.

b Also Aug 22, 1999.

e Estimated.

