

TENNESSEE RIVER BASIN

03474000 MIDDLE FORK HOLSTON RIVER AT SEVEN MILE FORD, VA

LOCATION.--Lat 36°48'26", long 81°37'20", Smyth County, Hydrologic Unit 06010102, on right bank at downstream side of bridge on U.S. Highway 11 at Seven Mile Ford, 0.3 mi upstream from Meade Creek, 3.3 mi downstream from Walker Creek, and at mile 32.1

DRAINAGE AREA.--132 mi².

PERIOD OF RECORD.--July 1942 to December 1981, January 1982 to September 1987 (annual maximum only), October 1987 to September 1989, October 1989 to September 1996 (annual maximum only), October 1996 to current year.

REVISED RECORDS.--WSP 973: 1942(m). WSP 1306: 1947(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,960.00 ft above sea level.

REMARKS.--No estimated daily discharges. Records good. Prior to April 1977, some diurnal fluctuation at low flow caused by mill 9 mi above station. Since May 1936, flow occasionally regulated by the filling or draining of Hungry Mother Lake on Hungry Mother Creek, capacity, about 1,600 acre-ft. Tennessee Valley Authority gage-height data logger at station, called at 6-hour intervals by computer at Knoxville, TN. Maximum discharge, 14,500 ft³/s. Minimum gage height, 0.89 ft, Sep. 8, 1988. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been made at this location.

COOPERATION.--Gage-height record of extremes were provided by Tennessee Valley Authority for the period Jan. 1, 1982, to Sep. 30, 1987, and Oct. 1, 1989 to Sep. 30, 1996.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 14	1500	*1,110	*2.83	No peak greater than base discharge.			

Minimum discharge, 26 ft³/s, Sep 18, 21, 24, gage height, 1.01 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	43	38	36	54	96	396	97	298	57	41	130	31
2	40	37	35	52	106	290	93	226	57	39	101	31
3	40	40	36	129	109	268	87	177	57	39	73	30
4	61	41	36	113	108	280	83	147	55	38	61	30
5	48	39	38	76	101	252	78	128	53	37	54	45
6	42	38	40	63	95	349	75	128	52	34	49	64
7	41	38	38	61	99	400	74	116	49	33	46	43
8	53	38	61	65	107	307	72	547	47	33	44	37
9	50	38	97	191	101	260	74	406	47	33	45	35
10	44	37	60	219	98	230	73	270	46	49	42	35
11	43	42	50	123	92	190	116	199	44	83	40	33
12	41	40	46	94	92	168	155	158	44	143	38	33
13	40	37	116	81	92	156	133	137	44	99	37	31
14	39	38	104	85	81	162	117	692	42	61	82	31
15	39	38	68	730	78	236	131	529	42	51	54	30
16	39	37	55	334	77	283	151	308	47	53	44	30
17	39	37	52	192	83	423	138	221	50	53	39	29
18	38	36	49	165	247	381	123	173	45	46	38	29
19	38	36	47	163	281	316	110	159	43	42	36	30
20	38	37	46	137	247	250	104	128	42	48	42	30
21	38	40	44	117	199	215	96	111	42	52	41	30
22	37	38	69	101	164	182	89	110	41	81	37	30
23	37	37	74	154	140	154	83	101	40	56	35	29
24	37	36	109	617	126	140	94	95	40	109	34	29
25	38	36	90	432	118	128	88	87	42	192	39	30
26	37	47	71	256	112	117	90	81	43	95	41	30
27	36	41	62	184	124	109	110	76	41	68	38	32
28	38	37	57	147	298	103	423	70	43	62	35	34
29	42	37	55	123	---	96	395	67	57	120	34	50
30	38	37	58	106	---	91	377	64	46	117	33	78
31	39	---	56	95	---	87	---	61	---	186	31	---
TOTAL	1273	1148	1855	5459	3671	7019	3929	6070	1398	2193	1493	1059
MEAN	41.1	38.3	59.8	176	131	226	131	196	46.6	70.7	48.2	35.3
MAX	61	47	116	730	298	423	423	692	57	192	130	78
MIN	36	36	35	52	77	87	72	61	40	33	31	29
CFSM	.31	.29	.45	1.33	.99	1.72	.99	1.48	.35	.54	.36	.27
IN.	.36	.32	.52	1.54	1.03	1.98	1.11	1.71	.39	.62	.42	.30

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STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 1981, 1988 - 1989, 1997 - 1999, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	70.6	93.9	164	233	298	310	245	207	122	82.5	75.0	64.8
MAX	298	580	534	708	870	844	630	433	294	207	210	256
(WY)	1977	1978	1973	1957	1957	1955	1977	1945	1979	1989	1947	1989
MIN	32.4	29.8	34.1	37.0	85.5	74.5	107	73.0	38.9	33.8	28.1	32.4
(WY)	1989	1954	1956	1966	1954	1988	1963	1964	1988	1988	1988	1988

SUMMARY STATISTICS FOR 1998 CALENDAR YEAR FOR 1999 WATER YEAR WATER YEARS 1942 - 1981
1988 - 1989
1997 - 1999

ANNUAL TOTAL		66143				36567				163		
ANNUAL MEAN		181				100				250		1973
HIGHEST ANNUAL MEAN										79.2		1988
LOWEST ANNUAL MEAN										5990		Apr 4 1977
HIGHEST DAILY MEAN			1470	Mar 21		730	Jan 15			20		bSep 26 1944
LOWEST DAILY MEAN			35	Dec 2		29	aSep 17			24		Sep 3 1960
ANNUAL SEVEN-DAY MINIMUM			36	Nov 28		30	Sep 17			14500		Nov 6 1977
INSTANTANEOUS PEAK FLOW						1110	May 14			10.75		Jan 29 1957
INSTANTANEOUS PEAK STAGE						2.83	May 14			9.0		Sep 26 1944
INSTANTANEOUS LOW FLOW						26	cSep 18			1.24		
ANNUAL RUNOFF (CFSM)			1.37			.76				16.81		
ANNUAL RUNOFF (INCHES)			18.64			10.31				337		
10 PERCENT EXCEEDS			433			223				58		
50 PERCENT EXCEEDS			104			58				92		
90 PERCENT EXCEEDS			38			36				37		

a Also Sep 18, 23, 24, 1999.
b Also Aug 2, 1964.
c Also Sep 21, 24, 1999.

