

TENNESSEE RIVER BASIN

03488000 NORTH FORK HOLSTON RIVER NEAR SALTVILLE, VA

LOCATION.--Lat 36°53'48", long 81°44'47", Smyth County, Hydrologic Unit 06010101, on right bank 0.5 mi upstream from Cedar Branch bridge, 1.5 mi northeast of Saltville, 7.8 mi downstream from Laurel Creek, and at mile 85.0.

DRAINAGE AREA.--222 mi².

PERIOD OF RECORD.--June 1907 to December 1908 (published as "at Saltville"), October 1920 to current year. Monthly discharge only for some periods, published in WSP 1306.

REVISED RECORDS.--WSP 758: Drainage area. WSP 1113: 1944-47. WSP 1306: 1907(M), 1921-22(M), 1924-30(M), 1932-34(M), drainage area at site used 1907-8. WSP 1726: 1947, monthly and yearly runoff.

GAGE.--Water-stage recorder. Datum of gage is 1,703.53 ft above sea level. June 11, 1907, to Nov. 12, 1908, nonrecording gage on highway bridge 2.1 mi downstream at different datum. Nov. 2, 1920, to May 23, 1934, nonrecording gage on highway bridge 0.5 mi downstream at datum 7.74 ft lower.

REMARKS.--Records good except for period with ice effect, Jan. 7, which is fair. National Weather Service gage-height telemeter at station. Maximum discharge, 16,500 ft³/s, from rating curve extended above 13,000 ft³/s on basis of slope-area measurement of peak flow. Minimum discharge, 1.0 ft³/s, Oct. 15, 16, 1947, gage height, 0.13 ft, flow retarded by mine cave-in. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan 15	1445	*2,370	*4.71	No peak greater than base discharge.			

Minimum discharge, 21 ft³/s, Sep 26-27, gage height, 0.44 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	72	38	37	71	183	719	155	464	84	74	285	26
2	52	37	35	82	193	569	156	372	80	54	214	25
3	42	41	35	236	197	620	144	306	80	45	137	25
4	51	41	35	313	193	920	136	260	75	41	99	25
5	49	41	36	193	187	683	127	230	69	40	79	27
6	47	41	39	170	174	725	120	219	64	36	67	56
7	41	41	39	e150	175	775	114	206	60	33	58	66
8	58	39	62	129	195	640	111	309	56	32	54	50
9	68	38	212	232	185	528	112	368	54	30	60	40
10	64	37	155	493	179	473	111	318	51	43	55	36
11	51	46	95	339	170	389	369	267	48	75	49	32
12	43	46	72	240	164	333	900	228	44	90	45	28
13	40	47	129	188	164	308	508	206	43	122	42	27
14	37	46	232	180	149	317	366	368	42	88	49	27
15	35	43	160	1560	138	454	326	466	42	60	51	26
16	34	41	113	975	134	527	339	342	43	52	46	24
17	33	39	92	537	140	656	295	268	48	50	41	23
18	33	37	77	443	297	772	263	224	47	43	37	22
19	33	37	66	469	477	762	235	213	43	39	34	23
20	32	36	65	399	443	579	218	184	39	40	51	23
21	32	36	69	323	364	484	200	157	38	51	57	24
22	31	35	77	265	302	419	181	145	37	102	53	24
23	31	35	103	305	256	336	167	142	36	84	41	24
24	31	35	170	1260	234	291	166	156	35	64	36	22
25	32	35	178	1090	216	260	149	198	36	234	37	23
26	32	39	136	642	203	232	149	164	36	161	39	22
27	33	43	108	446	206	208	176	143	38	95	38	23
28	34	43	95	344	420	188	810	125	67	85	36	25
29	36	41	89	277	---	175	776	111	86	135	33	28
30	37	38	88	231	---	162	589	100	87	196	30	35
31	38	---	81	197	---	151	---	92	---	243	27	---
TOTAL	1282	1192	2980	12779	6338	14655	8468	7351	1608	2537	1980	881
MEAN	41.4	39.7	96.1	412	226	473	282	237	53.6	81.8	63.9	29.4
MAX	72	47	232	1560	477	920	900	466	87	243	285	66
MIN	31	35	35	71	134	151	111	92	35	30	27	22
CFSM	.19	.18	.43	1.86	1.02	2.13	1.27	1.07	.24	.37	.29	.13
IN.	.21	.20	.50	2.14	1.06	2.46	1.42	1.23	.27	.43	.33	.15

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STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1907 - 1909, 1921 - 1999 BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	114	167	327	472	572	606	448	372	224	124	117	86.1
MAX	916	1077	1178	1317	1500	1735	1311	858	1036	353	584	474
(WY)	1977	1978	1927	1957	1957	1955	1987	1990	1907	1938	1940	1989
MIN	24.9	27.5	32.4	49.9	98.0	121	116	80.4	46.3	33.6	25.2	25.8
(WY)	1954	1940	1940	1966	1934	1988	1995	1941	1930	1988	1988	1930

SUMMARY STATISTICS FOR 1998 CALENDAR YEAR FOR 1999 WATER YEAR WATER YEARS 1907 - 1909 1921 - 1999

ANNUAL TOTAL		122538		62051								
ANNUAL MEAN		336		170						300		
HIGHEST ANNUAL MEAN										457		1973
LOWEST ANNUAL MEAN										135		1988
HIGHEST DAILY MEAN			4480	Mar 21		1560	Jan 15		10900		Apr 5	1977
LOWEST DAILY MEAN			31	aSep 15		22	bSep 18		2.0		Oct 15	1947
ANNUAL SEVEN-DAY MINIMUM			31	Sep 14		23	Sep 18		21		Sep 8	1952
INSTANTANEOUS PEAK FLOW						2370	Jan 15		16500		Jan 29	1957
INSTANTANEOUS PEAK STAGE						4.71	Jan 15		13.57		Nov 6	1977
INSTANTANEOUS LOW FLOW						21	cSep 26		d1.0		fOct 15	1947
ANNUAL RUNOFF (CFSM)		1.51				.77			1.35			
ANNUAL RUNOFF (INCHES)		20.53				10.40			18.37			
10 PERCENT EXCEEDS		816				429			647			
50 PERCENT EXCEEDS		170				84			157			
90 PERCENT EXCEEDS		36				33			39			

a Also Sep 16-20, and Oct 22-24, 1998.

b Also Sep 24, 26, 1999.

c Also Sep 27, 1999.

d Flow retarded by mine cave-in.

e Estimated.

f Also Oct 16, 1947.

