

TENNESSEE RIVER BASIN

03471500 SOUTH FORK HOLSTON RIVER AT RIVERSIDE, NEAR CHILHOWIE, VA

LOCATION.--Lat 36°45'37", long 81°37'53", Smyth County, Hydrologic Unit 06010102, on right bank 400 ft upstream from highway bridge at Riverside, 900 ft upstream from Spring Branch, 3.2 mi downstream from Redstone Branch, 4.0 mi southeast of Chilhowie, and at mile 97.2.

DRAINAGE AREA.--76.1 mi².

PERIOD OF RECORD.--October 1920 to December 1931, July 1942 to current year. Monthly discharge only for some periods, published in WSP 1306. Prior to October 1924, published as "near Chilhowie." June 1907 to December 1909, at site 4.5 mi downstream also published as "near Chilhowie"; records not equivalent.

REVISED RECORDS.--WSP 1033: 1943-44(m). WSP 1306: Drainage area, 1921-31(M).

GAGE.--Water-stage recorder. Datum of gage is 2,106.77 ft above sea level. Nov. 1, 1920, to Nov. 14, 1931, nonrecording gage at site 400 ft downstream at same datum.

REMARKS.--Records good except for period with ice effect, Jan. 5-6, which is fair. Prior to August 1951, diurnal fluctuation at low flow caused by mill 500 ft upstream from station. Maximum discharge, 9,600 ft³/s, from rating curve extended above 3,700 ft³/s on basis of slope-area measurement of peak flow. Minimum discharge recorded, 2 ft³/s, but may have been less in 1925 and 1926 before installation of water-stage recorder. 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 650 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 14	1445	*540	*3.65	No peak greater than base discharge.			

Minimum discharge, 13 ft³/s, Sep 24, gage height, 1.10 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	23	23	23	28	80	159	69	244	51	28	82	22
2	23	23	23	27	138	151	66	192	49	27	92	21
3	23	24	23	53	147	148	62	154	49	26	77	21
4	25	24	23	50	133	146	60	128	46	26	62	20
5	24	24	24	e41	112	138	58	111	45	25	53	30
6	23	23	24	e35	97	158	56	104	43	25	47	50
7	22	24	24	32	91	233	54	99	42	24	42	34
8	27	23	29	31	87	199	52	422	40	24	39	28
9	27	24	37	65	79	172	52	338	39	24	39	26
10	25	23	30	87	75	150	51	232	37	34	35	25
11	24	26	26	62	70	127	77	176	36	53	33	23
12	24	25	26	53	68	113	113	143	35	88	31	23
13	24	25	44	48	65	106	103	125	34	79	30	22
14	23	25	44	51	60	109	92	393	33	50	39	22
15	23	25	32	238	57	119	100	324	33	40	31	22
16	23	24	29	177	55	116	121	214	36	37	29	21
17	23	24	28	117	55	157	120	164	38	37	27	21
18	22	23	27	101	72	216	108	136	34	33	26	20
19	22	24	26	90	84	228	96	124	33	34	25	20
20	23	25	26	82	90	188	88	105	32	35	32	20
21	22	26	26	75	87	164	80	93	32	39	29	21
22	22	25	32	69	82	144	74	89	31	68	26	21
23	22	24	34	80	78	125	69	83	30	43	25	20
24	22	24	38	306	75	113	66	78	31	43	24	21
25	22	23	35	275	72	103	62	73	32	110	25	20
26	23	26	32	178	68	94	62	68	33	69	29	19
27	24	25	29	132	66	87	70	64	32	51	27	21
28	23	24	29	107	96	81	271	60	32	44	25	22
29	24	24	28	90	---	76	288	56	30	52	23	27
30	23	23	29	79	---	72	287	54	29	53	23	54
31	23	---	29	70	---	68	---	52	---	93	22	---
TOTAL	723	725	909	2929	2339	4260	2927	4698	1097	1414	1149	737
MEAN	23.3	24.2	29.3	94.5	83.5	137	97.6	152	36.6	45.6	37.1	24.6
MAX	27	26	44	306	147	233	288	422	51	110	92	54
MIN	22	23	23	27	55	68	51	52	29	24	22	19
CFSM	.31	.32	.39	1.24	1.10	1.81	1.28	1.99	.48	.60	.49	.32
IN.	.35	.35	.44	1.43	1.14	2.08	1.43	2.30	.54	.69	.56	.36

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STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 - 1932, 1942 - 1999 BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	49.5	69.0	110	154	204	209	170	140	90.9	58.7	54.7	44.6
MAX	162	409	272	353	508	512	570	278	322	172	209	254
(WY)	1990	1978	1973	1996	1957	1955	1987	1945	1923	1989	1942	1989
MIN	18.7	17.6	25.8	28.8	57.2	51.3	52.6	49.1	31.1	22.5	17.5	20.6
(WY)	1932	1932	1956	1956	1931	1988	1986	1926	1988	1988	1988	1988

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR	FOR 1999 WATER YEAR	WATER YEARS 1921 - 1932 1942 - 1999
ANNUAL TOTAL	47836	23907	
ANNUAL MEAN	131	65.5	112
HIGHEST ANNUAL MEAN			162
LOWEST ANNUAL MEAN			53.8
HIGHEST DAILY MEAN	1070	aFeb 17	4040
LOWEST DAILY MEAN	22	bOct 7	8.0
ANNUAL SEVEN-DAY MINIMUM	22	Oct 18	15
INSTANTANEOUS PEAK FLOW		540	9600
INSTANTANEOUS PEAK STAGE		3.65	10.20
INSTANTANEOUS LOW FLOW		13	2.0
ANNUAL RUNOFF (CFSM)	1.72	.86	1.48
ANNUAL RUNOFF (INCHES)	23.38	11.69	20.05
10 PERCENT EXCEEDS	302	140	227
50 PERCENT EXCEEDS	66	39	70
90 PERCENT EXCEEDS	24	23	27

a Also Feb 18, 1998.
 b Also Oct 18, 19, 21-25, 1998.
 c Also Oct 15, 1943, Aug 9, 11, 1944, and Oct 19, 1945.
 e Estimated.

