

TENNESSEE RIVER BASIN

03548500 HIWASSEE RIVER ABOVE MURPHY, NC

LOCATION.--Lat 35°04'49", long 84°00'10", Cherokee County, Hydrologic Unit 06020002, on right bank on U.S. Highway 64, 600 ft upstream from Will Scott Creek, 2.0 mi southeast of Murphy, and at mile 99.1.

DRAINAGE AREA.--406 mi².

PERIOD OF RECORD.--June 1896 to August 1897 (gage heights only), October 1897 to current year. Published as "Hiwassee River at Murphy" 1897-1940. Records published for both sites August 1939 to April 1940. Monthly discharge only for some periods, published in WSP 1306.

REVISED RECORD.--WSP 583: 1899(M). WSP 973: Drainage area. WSP 1003: 1943. WSP 1306: 1901-2, 1904-17, 1919(M), 1922(M), 1924-26(M). WSP 1706: 1899, 1907.

GAGE.--Water-stage recorder. Datum of gage is 1,538.23 ft above NGVD of 1929 (levels by Tennessee Valley Authority). Prior to Jan. 30, 1921, nonrecording gage at bridge 2.8 mi downstream at 1,507.83 ft. Jan. 30, 1921, to Nov. 8, 1926, nonrecording gage 2.8 mi downstream at 1,509.83 ft. Nov. 9, 1926, to Apr. 30, 1940, water-stage recorder 2.8 mi downstream at 1,510.03 ft. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records fair. Considerable diurnal fluctuation since 1924 caused by Mission power plant at Andrews Dam 7 mi upstream, normal regulated storage, about 75 ft³/s-day. Flow regulated since 1942 by Chatuge Lake (station 03546500) 22 mi upstream. Prior to regulation, maximum discharge: 23,100 ft³/s, Mar. 19, 1899, from rating curve extended above 5,000 ft³/s; gage height: 18.4 ft, from graph based on gage readings, site and datum then in use; minimum daily discharge: 10 ft³/s, Dec. 3, 1924, result of freezeup and filling of Lake Andrews, site and datum then in use. Minimum discharge for period of record also occurred Oct. 1, 2, 2000.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage observed is that of Mar. 19, 1899.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	260	248	267	385	1180	320	1710	820	365	425	913	536
2	616	230	254	588	845	340	1210	625	353	705	866	496
3	697	241	250	924	451	393	917	758	347	798	713	748
4	1120	228	522	740	733	354	747	2960	348	898	619	757
5	671	223	367	538	1100	384	655	1830	567	600	952	467
6	287	497	623	344	1060	334	601	1120	529	333	883	519
7	268	694	485	450	1430	327	558	883	409	303	666	527
8	688	500	235	310	1220	322	529	710	369	398	589	570
9	1050	311	247	269	765	353	451	685	342	561	570	639
10	979	303	409	272	550	351	478	615	338	601	580	856
11	635	378	480	288	507	320	420	569	316	349	555	945
12	558	360	350	256	752	416	406	528	313	703	498	718
13	250	639	357	268	964	507	532	550	315	669	559	325
14	302	842	368	257	1080	584	483	575	338	922	688	248
15	707	1160	354	732	772	404	470	490	323	700	480	339
16	1070	942	336	881	406	456	455	467	304	821	682	392
17	845	247	405	806	391	457	448	457	302	1060	493	535
18	395	213	897	708	379	443	449	587	289	1170	319	761
19	249	209	812	1080	364	427	441	490	275	1020	729	1070
20	265	402	814	1360	390	465	432	457	271	617	840	909
21	251	1240	966	1000	375	615	431	443	273	314	925	1980
22	725	681	555	817	359	553	439	413	270	688	908	2870
23	960	218	338	1650	343	504	414	443	261	924	716	1940
24	601	260	456	2280	340	514	410	410	294	765	593	1340
25	695	379	408	3630	335	451	500	398	341	766	593	1190
26	341	290	374	1700	353	473	410	385	380	845	605	1610
27	372	258	370	1320	327	552	389	454	372	802	788	1170
28	484	263	323	1170	329	490	393	512	304	483	688	933
29	792	228	312	1250	---	472	402	398	357	756	849	668
30	1050	358	496	1320	---	1520	367	377	327	677	476	903
31	608	---	653	1100	---	2070	---	398	---	746	428	---
TOTAL	18791	13042	14083	28693	18100	16171	16547	20807	10192	21419	20763	26961
MEAN	606.2	434.7	454.3	925.6	646.4	521.6	551.6	671.2	339.7	690.9	669.8	898.7
MAX	1120	1240	966	3630	1430	2070	1710	2960	567	1170	952	2870
MIN	249	209	235	256	327	320	367	377	261	303	319	248

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 2002,® BY WATER YEAR (WY)

	MEAN	526.2	584.6	926.5	1122	1198	1092	1027	918.8	884.0	874.9	861.8	717.4
MAX	1530	1654	2532	2462	3076	2784	2155	2033	1852	1517	1674	1628	
(WY)	1990	1990	1993	1974	1990	1990	1953	1953	1989	1989	1994	1943	
MIN	98.8	106	214	223	408	373	219	212	238	228	120	141	
(WY)	1953	1954	1948	1948	1954	1988	1986	1988	1953	1953	1953	1953	

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SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1942 - 2002 [®]	
ANNUAL TOTAL	184862		225569		893.1	
ANNUAL MEAN	506.5		618.0		1414	
HIGHEST ANNUAL MEAN					1990	
LOWEST ANNUAL MEAN					397	
HIGHEST DAILY MEAN	2460	Jan 19	3630	Jan 25	11600	Feb 16 1990
LOWEST DAILY MEAN	209	Nov 19	209	Nov 19	62	Oct 19 1952
ANNUAL SEVEN-DAY MINIMUM	251	Jul 16	268	Nov 27	80	Oct 18 1952
MAXIMUM PEAK FLOW			5260	May 4	18600	May 28 1973
MAXIMUM PEAK STAGE			7.33	May 4	13.88	May 28 1973
INSTANTANEOUS LOW FLOW			109	Sep 13	106*	Oct 2 1993
10 PERCENT EXCEEDS	862		1060		1610	
50 PERCENT EXCEEDS	424		496		782	
90 PERCENT EXCEEDS	264		288		228	

[®] Regulated period only (1942-2002). See REMARKS.
 * See REMARKS.

