

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 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	868	541	1,080	1,340	798	1,260	510	769	797	1,980	1,000	653
2	736	452	1,320	1,400	685	1,080	448	867	952	3,650	862	920
3	655	422	1,090	1,600	616	1,090	439	613	941	2,320	783	1,090
4	529	432	913	1,420	1,100	1,320	437	577	1,060	1,790	1,140	938
5	502	495	1,750	1,000	1,680	1,110	620	831	929	1,640	1,220	1,180
6	497	653	1,480	948	1,870	2,380	538	5,910	899	1,670	1,340	703
7	774	597	1,270	1,230	1,970	2,120	608	7,270	1,410	2,010	1,310	327
8	811	522	1,180	1,190	1,120	1,370	629	3,140	1,850	1,670	1,270	728
9	474	467	1,240	1,310	692	1,100	875	2,240	1,700	1,590	1,070	882
10	660	483	1,180	1,290	723	1,400	1,090	2,310	1,760	1,790	723	717
11	1,300	719	1,290	1,270	892	1,100	1,090	2,240	1,740	1,840	1,100	824
12	885	802	1,270	1,060	862	1,180	872	1,810	1,400	1,410	1,090	773
13	444	788	1,220	1,100	1,380	923	736	1,800	1,590	1,450	1,210	320
14	854	916	1,380	1,130	1,310	984	672	1,780	1,220	1,830	1,110	278
15	1,170	683	1,020	1,220	1,490	813	603	1,820	1,040	1,710	1,250	559
16	943	1,170	1,340	1,170	1,220	644	580	1,940	1,220	1,690	991	1,090
17	385	1,120	1,230	1,030	1,220	775	594	1,350	1,510	1,790	833	1,000
18	328	1,120	1,180	1,420	1,010	951	818	1,040	1,710	1,590	911	1,090
19	308	877	1,350	766	872	947	655	1,290	1,700	981	1,150	1,210
20	314	759	1,510	943	777	952	610	1,060	2,150	511	1,150	790
21	849	1,260	1,430	1,060	739	930	800	1,420	1,090	897	1,160	265
22	1,100	1,440	1,380	1,140	2,110	585	752	4,160	454	1,590	1,150	1,250
23	1,150	1,370	1,280	1,240	1,710	550	678	2,910	669	964	1,080	1,720
24	1,420	1,040	2,370	1,480	1,280	796	626	2,780	1,120	901	1,090	1,470
25	1,180	941	2,110	831	1,060	799	594	2,600	1,080	916	1,120	1,240
26	477	1,310	1,530	426	1,090	515	619	2,490	1,190	800	1,230	1,420
27	296	1,220	1,570	448	1,800	1,030	546	1,740	1,250	743	1,120	1,790
28	926	1,190	1,480	440	1,730	1,340	517	1,380	736	1,080	1,240	1,650
29	1,140	1,090	1,200	1,010	---	830	499	1,100	379	1,230	1,160	1,590
30	1,130	901	1,550	1,340	---	555	594	1,040	985	1,210	941	1,120
31	682	---	1,160	974	---	694	---	1,000	---	990	628	---
TOTAL	23,787	25,780	42,353	34,226	33,806	32,123	19,649	63,277	36,531	46,233	33,432	29,587
MEAN	767	859	1,366	1,104	1,207	1,036	655	2,041	1,218	1,491	1,078	986
MAX	1,420	1,440	2,370	1,600	2,110	2,380	1,090	7,270	2,150	3,650	1,340	1,790
MIN	296	422	913	426	616	515	437	577	379	511	628	265

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 2003, [@] BY WATER YEAR (WY)

MEAN	530	589	934	1,122	1,198	1,091	1,021	937	889	885	865	722
MAX	1,530	1,654	2,532	2,462	3,076	2,784	2,155	2,041	1,852	1,517	1,674	1,628
(WY)	(1990)	(1990)	(1993)	(1974)	(1990)	(1990)	(1953)	(2003)	(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 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1942 - 2003 [@]	
ANNUAL TOTAL	271,573		420,784			
ANNUAL MEAN	744		1,153		897	
HIGHEST ANNUAL MEAN					1,414	1990
LOWEST ANNUAL MEAN					397	1988
HIGHEST DAILY MEAN	3,630	Jan 25	7,270	May 7	11,600	Feb 16, 1990
LOWEST DAILY MEAN	248	Sep 14	265	Sep 21	62	Oct 19, 1952
ANNUAL SEVEN-DAY MINIMUM	274	Jan 8	510	Nov 2	80	Oct 18, 1952
MAXIMUM PEAK FLOW			12,000	May 7	18,600	May 28, 1973
MAXIMUM PEAK STAGE			11.11	May 7	13.88	May 28, 1973
INSTANTANEOUS LOW FLOW			185	Oct 27	106*	Oct 2, 1993
10 PERCENT EXCEEDS	1,310		1,770		1,620	
50 PERCENT EXCEEDS	597		1,090		789	
90 PERCENT EXCEEDS	329		540		230	

[@] Regulated period only (1942-2003). See REMARKS.

* See REMARKS.

