

TENNESSEE RIVER BASIN

03513000 TUCKASEGEE RIVER AT BRYSON CITY, NC

LOCATION.--Lat 35°25'40", long 83°26'51", Swain County, Hydrologic Unit 06010203, on left bank 400 ft downstream of bridge on Secondary Road 1364, Everett Street, in Bryson City, 0.6 mi downstream of Deep Creek, and at mile 12.6.

DRAINAGE AREA.--655 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1897 to December 1981, October 1983 to January 1995, April 1996 to current year. Monthly discharge only for some periods, published in WSP 1306.

REVISED RECORDS.--WSP 523: 1916, 1918-20. WSP 823: Drainage area. WSP 1306: 1898-1913. WSP 1336: 1907, 1915(M), 1916-20, 1921-29(M), 1933-34(M).

GAGE.--Water-stage recorder. Datum of gage is 1,714.54 ft above NGVD of 1929 (levels by Tennessee Valley Authority). Nov. 7, 1897, to Feb. 2, 1914, and May 18, 1920, to June 27, 1927, nonrecording gage at bridge 400 ft upstream at datum of 1,716.54 ft. Feb. 3, 1914, to May 17, 1920, water-stage recorder at site 200 ft upstream at datum of 1,716.54 ft. June 28, 1927, to Sept. 30, 1960, water-stage recorder at present site at datum of 1,716.54 ft. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records fair. Considerable diurnal fluctuation caused by power plants upstream from station. Flow regulated by Thorpe Reservoir, Cedar Cliff Lake, Bear Creek Lake, Tennessee Creek project lakes (stations 03507111, 03507131), and two small reservoirs with a combined capacity of 250 ft³/s-day. Maximum discharge for period of record, from rating curve extended above 28,000 ft³/s on basis of slope-area measurement of peak flow. Minimum discharge for period of record and minimum daily discharge for period of record also occurred Sept. 10, 1925, caused by filling reservoir on Oconaluftee River. Minimum daily discharge during normal regulation: 186 ft³/s, Oct. 13, 1925. Minimum discharge for current water year also occurred Aug. 13.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 1840, Mar. 6, 1867, and June 1876 reached stages of 22, 19, and 19 ft, respectively, present site and datum, from studies by Tennessee Valley Authority; discharge not determined. The flood in May 1840 exceeded all other observed floods at this location.

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	1090	631	852	839	1490	1080	3280	2230	956	791	574	794
2	1160	679	758	1200	1390	1020	2440	1800	908	744	552	668
3	817	749	779	1200	1310	1670	2140	1850	815	804	552	646
4	1200	633	755	1190	1260	1110	2050	3940	1000	923	544	641
5	749	554	583	1110	1270	1060	1750	3500	1350	766	517	563
6	1240	450	669	745	1220	1050	1530	2610	1240	708	470	388
7	988	442	649	868	1740	1060	1500	1990	1130	669	499	461
8	929	833	747	1210	1440	1020	1380	1780	921	626	506	498
9	766	645	724	1180	1310	831	1850	1640	851	667	516	491
10	722	742	1250	1160	1270	869	1970	1660	804	683	481	496
11	712	612	1570	840	1240	831	1510	1490	977	787	501	511
12	755	567	1220	766	1190	1040	1490	1160	969	927	506	434
13	972	625	1470	722	1140	1210	1570	1440	1000	806	491	777
14	1130	690	1690	648	1160	1080	1470	1840	1030	1050	489	1070
15	1380	586	1460	639	1080	1020	1530	1500	857	789	555	1050
16	720	607	1300	571	1110	1140	1330	1520	748	800	583	818
17	719	570	1290	565	1090	3220	1420	1430	700	797	566	484
18	577	538	2390	635	1200	3240	1430	1970	692	707	579	424
19	542	618	1840	2460	1120	2510	1370	1420	731	714	581	424
20	652	621	1540	3100	1170	1890	1420	1160	659	794	585	668
21	1160	603	1330	1960	1200	2020	1350	1080	686	712	542	1880
22	1100	629	1340	1570	1320	1910	1290	1150	656	696	536	2760
23	557	649	1440	4800	1330	1560	1240	1040	655	722	514	1760
24	499	785	1710	4990	1320	1350	1200	1270	651	672	570	1560
25	522	1210	1450	5340	1200	1230	1320	1070	727	861	484	1520
26	507	939	1470	3430	1130	1800	1200	957	943	876	625	2540
27	481	903	1440	2580	1030	1880	1220	1240	1020	728	1320	3750
28	483	1080	1300	2170	1030	1790	1100	1220	1020	702	1020	3030
29	483	940	1340	1900	---	1720	1300	1280	764	685	712	2120
30	718	807	1250	1710	---	2520	1240	1120	820	738	708	1800
31	511	---	1300	1650	---	3220	---	1170	---	687	767	---
TOTAL	24841	20937	38906	53748	34760	48951	46890	50527	26280	23631	18445	35026
MEAN	801.3	697.9	1255	1734	1241	1579	1563	1630	876.0	762.3	595.0	1168
MAX	1380	1210	2390	5340	1740	3240	3280	3940	1350	1050	1320	3750
MIN	481	442	583	565	1030	831	1100	957	651	626	470	388

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1898 - 2002,® BY WATER YEAR (WY)

	MEAN	MAX	(WY)	MIN	(WY)
1898	920.1	3654	1899	347	1932
1899	1052	2899	1907	378	1932
1900	1581	3704	1933	457	1940
1901	2010	4819	1937	599	1940
1902	2271	5847	1899	736	1941
1903	2572	6504	1899	926	1988
1904	2228	4843	1920	841	1986
1905	1740	3744	1984	602	1941
1906	1397	3199	1909	531	1941
1907	1238	3379	1916	503	1925
1908	1150	4251	1901	220	1925
1909	952.4	3589	1898	195	

03513000 TUCKASEGEE RIVER AT BRYSON CITY, NC--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1898 - 2002 [®]	
ANNUAL TOTAL	398811		422942		1588	
ANNUAL MEAN	1093		1159		2576	
HIGHEST ANNUAL MEAN					879	
LOWEST ANNUAL MEAN					28000	
HIGHEST DAILY MEAN	5190	Jan 19	5340	Jan 25	28000	Mar 4 1917
LOWEST DAILY MEAN	442	Nov 7	388	Sep 6	31*	Sep 9 1925
ANNUAL SEVEN-DAY MINIMUM	505	Oct 23	468	Sep 6	97	Sep 4 1925
MAXIMUM PEAK FLOW			8200		61600*	Aug 30 1940
MAXIMUM PEAK STAGE			6.35		15.96	Aug 30 1940
INSTANTANEOUS LOW FLOW			343*		27*	Sep 10 1925
10 PERCENT EXCEEDS	1650		1880		2840	
50 PERCENT EXCEEDS	984		1030		1250	
90 PERCENT EXCEEDS	588		549		602	

[®] See PERIOD OF RECORD.
 * See REMARKS.

