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 mi^2.

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.--Records fair except those for estimated daily discharges, which are poor. 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 ft^3/s-day. Maximum discharge for period of record, from rating curve extended above 28,000 ft^3/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 ft^3/s, Oct. 13, 1925.

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 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,620	1,700	1,130	2,260	1,280	3,220	1,460	1,750	1,660	1,960	1,620	1,230
2	1,520	1,400	1,120	2,290	1,150	2,930	1,550	1,750	1,960	4,240	1,560	1,410
3	1,450	1,100	1,170	2,140	1,100	2,520	1,520	1,690	1,720	2,660	1,220	1,080
4	1,160	1,050	1,340	1,910	2,180	2,460	1,430	1,470	1,790	2,210	1,250	1,890
5	1,110	1,050	3,070	2,170	1,800	2,310	1,930	2,980	1,580	2,040	1,480	1,560
6	841	2,090	e2,270	2,020	1,750	5,000	1,960	19,500	1,580	2,260	1,230	1,530
7	885	1,430	1,970	1,690	1,750	3,990	2,510	16,200	3,340	2,560	1,180	1,380
8	1,130	1,170	1,860	1,660	1,420	3,430	2,440	10,100	2,960	2,250	1,170	1,330
9	1,030	1,170	1,800	1,830	1,270	3,110	4,110	6,620	1,970	2,060	1,240	1,390
10	1,040	1,090	1,740	1,310	1,570	2,800	3,840	5,330	1,770	1,870	1,280	1,400
11	1,050	2,340	2,190	1,120	1,540	2,390	3,860	4,680	1,740	1,900	1,260	1,340
12	869	2,950	1,800	1,520	1,470	2,210	3,400	4,110	1,930	1,690	1,170	1,230
13	867	2,800	2,130	1,740	1,410	2,140	2,900	3,430	1,740	1,780	1,190	1,300
14	800	2,260	1,970	1,170	1,670	2,110	2,650	3,110	1,700	1,740	1,130	888
15	1,130	1,810	1,980	1,120	3,190	2,000	2,640	3,010	1,850	2,290	1,110	808
16	1,900	2,820	1,920	1,180	3,580	2,460	2,690	2,900	1,720	1,750	1,280	751
17	1,300	2,600	1,690	1,390	3,660	2,240	2,540	2,740	1,850	1,730	1,480	707
18	1,180	2,080	1,740	1,230	3,030	2,290	2,980	2,620	2,750	1,630	1,210	685
19	1,050	1,850	1,810	1,400	2,780	2,140	2,090	2,370	2,390	1,880	1,020	672
20	1,050	1,700	4,930	1,590	2,190	2,560	1,830	1,900	1,920	1,590	1,180	617
21	1,060	2,200	2,980	1,070	2,280	2,130	2,190	2,370	1,850	1,470	1,130	629
22	670	2,060	2,630	1,040	8,140	1,780	2,540	3,300	1,700	2,170	1,320	1,570
23	866	1,830	2,300	1,050	6,110	1,750	2,340	2,860	1,200	1,670	1,180	2,270
24	829	1,710	4,290	1,490	4,300	1,800	2,250	2,650	1,270	1,430	1,140	1,010
25	774	1,610	4,090	1,580	3,520	1,670	2,200	2,400	1,130	1,330	1,170	915
26	973	1,390	3,190	1,010	3,380	1,630	1,700	2,360	1,210	1,420	843	871
27	1,100	1,430	2,630	962	3,730	1,550	1,550	2,280	1,170	1,390	877	1,250
28	1,470	1,340	2,600	960	3,580	1,560	1,480	1,860	1,170	1,400	813	1,520
29	1,600	1,200	2,280	1,560	---	1,500	1,640	1,820	1,020	1,330	849	1,150
30	2,840	1,220	1,790	1,930	---	1,610	1,710	1,770	1,190	1,190	949	846
31	2,140	---	1,840	1,560	---	1,540	---	1,700	---	1,370	1,470	---
TOTAL	37,304	52,450	70,250	46,952	74,830	72,830	69,930	123,630	52,830	58,260	37,001	35,229
MEAN	1,203	1,748	2,266	1,515	2,672	2,349	2,331	3,988	1,761	1,879	1,194	1,174
MAX	2,840	2,950	4,930	2,290	8,140	5,000	4,110	19,500	3,340	4,240	1,620	2,270
MIN	670	1,050	1,120	960	1,100	1,500	1,430	1,470	1,020	1,190	813	617

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1898 - 2003,@ BY WATER YEAR (WY)

MEAN	923	1,058	1,587	2,006	2,275	2,570	2,229	1,761	1,401	1,244	1,150	955
MAX	3,654	2,899	3,704	4,819	5,847	6,504	4,843	3,988	3,199	3,379	4,251	3,589
(WY)	(1899)	(1907)	(1933)	(1937)	(1899)	(1899)	(1920)	(2003)	(1909)	(1916)	(1901)	(1898)
MIN	347	378	457	599	736	926	841	602	531	503	220	195
(WY)	(1932)	(1932)	(1940)	(1940)	(1941)	(1988)	(1986)	(1941)	(1941)	(1925)	(1925)	(1925)

03513000 TUCKASEGEE RIVER AT BRYSON CITY, NC—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1898 - 2003@	
ANNUAL TOTAL	498,262		731,496			
ANNUAL MEAN	1,365		2,004		1,592	
HIGHEST ANNUAL MEAN					2,576	1899
LOWEST ANNUAL MEAN					879	1986
HIGHEST DAILY MEAN	5,340	Jan 25	19,500	May 6	28,000	Mar 4, 1917
LOWEST DAILY MEAN	388	Sep 6	617	Sep 20	31*	Sep 9, 1925
ANNUAL SEVEN-DAY MINIMUM	468	Sep 6	696	Sep 15	97	Sep 4, 1925
MAXIMUM PEAK FLOW			30,800	May 6	61,600*	Aug 30, 1940
MAXIMUM PEAK STAGE			13.62	May 6	15.96	Aug 30, 1940
INSTANTANEOUS LOW FLOW			492	Sep 18	27*	Sep 10, 1925
10 PERCENT EXCEEDS	2,320		3,050		2,840	
50 PERCENT EXCEEDS	1,170		1,700		1,260	
90 PERCENT EXCEEDS	582		1,050		605	

e Estimated.
@ See PERIOD OF RECORD.
* See REMARKS.