

**03513000 TUCKASEGEE RIVER AT BRYSON CITY, NC**

Upper Tennessee Basin  
Tuckasegee Subbasin

LOCATION.--Lat 35°25'39", long 83°26'49" referenced to North American Datum of 1983, Swain County, NC, 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 river mile 12.6.

DRAINAGE AREA.--655 mi<sup>2</sup>.

**SURFACE-WATER 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). November 7, 1897, to February 2, 1914, and May 18, 1920, to June 27, 1927, nonrecording gage at bridge 400 ft upstream at datum of 1,716.54 ft. February 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 September 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, East Fork Lake and Wolf Creek Lake (Tennessee Creek Project lakes), and two small reservoirs with a combined capacity of 250 ft<sup>3</sup>/s-day. Maximum discharge for period of record, from rating curve extended above 28,000 ft<sup>3</sup>/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 September 10, 1925, caused by filling reservoir on Oconaluftee River. Minimum daily discharge during normal regulation: 186 ft<sup>3</sup>/s, Oct. 13, 1925. Minimum discharge for current water year also occurred on September 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.

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**DISCHARGE, CUBIC FEET PER SECOND**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**  
**DAILY MEAN VALUES**

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	840	1,140	1,590	5,100	1,340	1,980	1,170	840	657	517	1,380	619
2	764	1,410	1,880	2,940	1,300	4,510	1,420	815	642	489	1,150	508
3	755	1,170	1,750	2,430	1,170	2,870	1,130	812	626	458	853	483
4	732	1,020	1,460	2,210	1,010	2,150	1,430	892	566	474	724	400
5	712	989	1,080	2,320	957	1,750	1,220	1,020	592	464	548	287
6	833	961	1,130	2,420	996	1,440	1,130	1,120	592	415	501	270
7	656	966	1,110	2,480	947	1,390	1,060	899	577	471	597	263
8	702	1,660	1,180	4,250	1,090	1,290	941	924	493	518	532	278
9	876	1,540	1,140	3,090	958	1,220	928	949	561	390	539	287
10	735	1,320	1,100	2,720	977	1,140	905	831	521	497	524	252
11	690	1,220	1,080	2,450	958	1,120	938	887	443	786	542	252
12	817	1,310	916	2,240	940	1,050	1,260	1,070	438	847	425	262
13	693	1,160	944	2,190	914	1,030	1,060	938	535	521	351	255
14	667	1,080	894	2,090	1,100	1,030	1,300	866	538	580	324	678
15	640	1,650	871	2,010	1,020	1,070	1,690	857	681	495	380	1,400
16	636	4,740	854	1,890	958	3,310	1,200	810	564	462	397	498
17	3,120	3,020	833	1,500	795	2,430	1,190	859	484	527	364	417
18	2,450	2,470	819	1,580	818	2,140	1,120	697	488	613	368	320
19	1,490	2,140	832	1,550	844	1,440	1,150	716	784	702	346	447
20	1,580	1,580	826	1,540	838	1,320	1,180	717	1,030	652	305	348
21	1,470	1,410	831	1,760	1,310	1,260	1,040	668	557	630	313	341
22	1,290	1,600	1,520	2,240	1,280	1,210	986	637	465	484	407	353
23	1,160	1,640	1,900	1,930	1,170	1,180	973	711	543	483	395	312
24	1,020	1,280	1,490	1,820	988	1,220	924	634	469	562	372	275
25	1,040	1,260	1,590	1,620	1,310	1,010	916	614	426	682	468	308
26	1,020	1,230	1,500	1,530	1,270	1,090	1,020	697	523	795	461	328
27	1,370	1,200	1,370	1,420	1,160	1,020	1,120	689	555	744	391	342
28	2,360	1,170	1,520	1,400	1,360	996	960	639	595	1,200	364	322
29	1,790	1,200	1,440	1,330	---	1,000	916	604	743	940	437	274
30	1,380	1,100	1,330	1,330	---	1,020	861	601	846	729	514	292
31	1,250	---	1,720	1,270	---	885	---	605	---	1,020	570	---
<b>Total</b>	35,538	45,636	38,500	66,650	29,778	47,571	33,138	24,618	17,534	19,147	15,842	11,671
<b>Mean</b>	1,146	1,521	1,242	2,150	1,064	1,535	1,105	794	584	618	511	389
<b>Max</b>	3,120	4,740	1,900	5,100	1,360	4,510	1,690	1,120	1,030	1,200	1,380	1,400
<b>Min</b>	636	961	819	1,270	795	885	861	601	426	390	305	252

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1898 - 2007 <sup>a</sup>, BY WATER YEAR (WY)**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	928	1,079	1,600	2,005	2,252	2,534	2,204	1,743	1,395	1,249	1,146	988
<b>Max</b>	3,654	2,899	3,704	4,819	5,847	6,504	4,843	3,988	3,199	3,379	4,251	4,561
<b>(WY)</b>	(1899)	(1907)	(1933)	(1937)	(1899)	(1899)	(1920)	(2003)	(1909)	(1916)	(1901)	(2004)
<b>Min</b>	347	378	457	599	736	926	841	602	531	503	220	195
<b>(WY)</b>	(1932)	(1932)	(1940)	(1940)	(1941)	(1988)	(1986)	(1941)	(1941)	(1925)	(1925)	(1925)

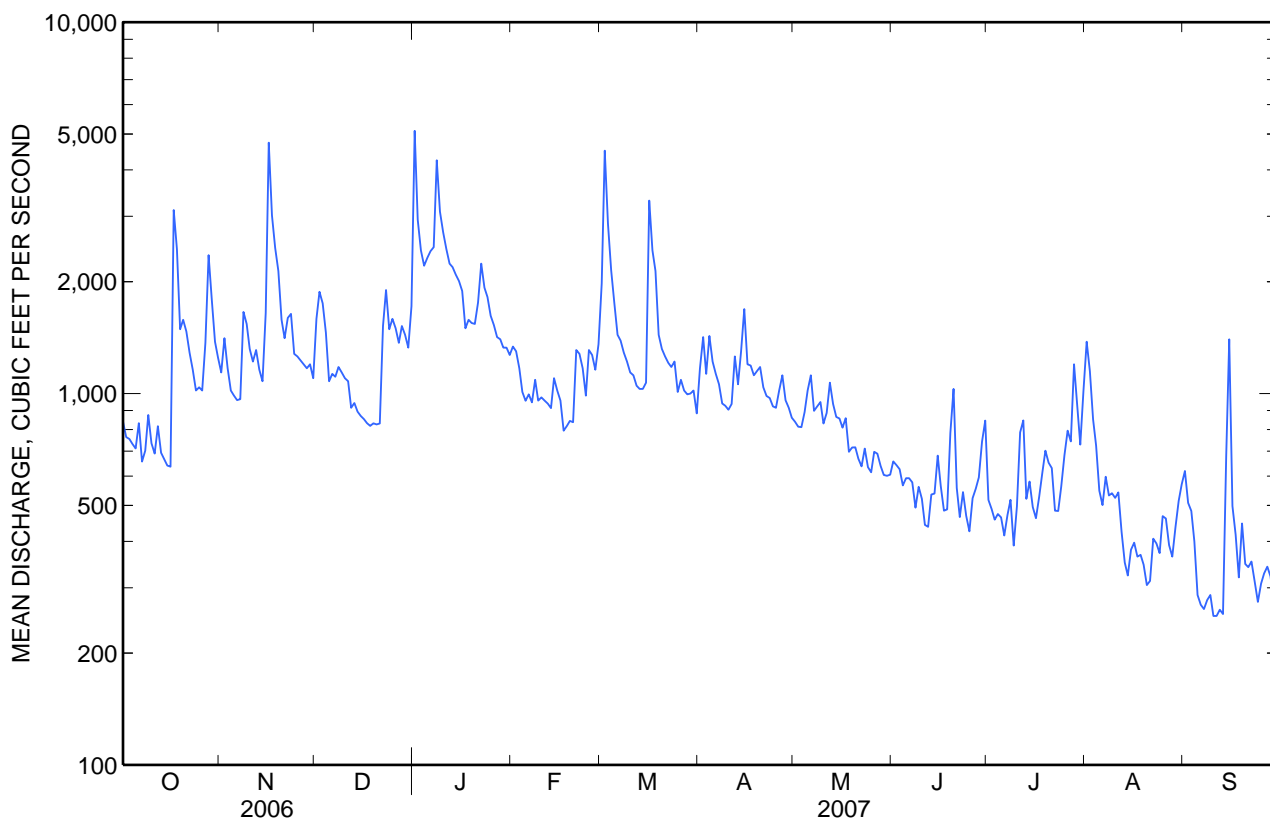
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SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 1898 - 2007 <sup>a</sup>	
<b>Annual total</b>	471,206		385,623			
<b>Annual mean</b>	1,291		1,057		1,589	
<b>Highest annual mean</b>					2,576	1899
<b>Lowest annual mean</b>					879	1986
<b>Highest daily mean</b>	7,500	Jan 18	5,100	Jan 1	<sup>b</sup> 28,000	Mar 4, 1917
<b>Lowest daily mean</b>	571	Aug 14	252	Sep 10	<sup>b</sup> 31	Sep 9, 1925
<b>Annual seven-day minimum</b>	648	Jun 16	264	Sep 7	97	Sep 4, 1925
<b>Maximum peak flow</b>			8,620	Jan 1	61,600	Aug 30, 1940
<b>Maximum peak stage</b>			6.61	Jan 1	15.96	Aug 30, 1940
<b>Instantaneous low flow</b>			<sup>b</sup> 236	Sep 11	<sup>b</sup> 27	Sep 10, 1925
<b>10 percent exceeds</b>	1,980		1,770		2,820	
<b>50 percent exceeds</b>	1,130		941		1,260	
<b>90 percent exceeds</b>	703		404		607	

<sup>a</sup> See Period of Record.

<sup>b</sup> See Remarks.



**03513000 TUCKASEGEE RIVER AT BRYSON CITY, NC—Continued****CLIMATOLOGICAL RECORDS**

PERIOD OF RECORD.--October 1999 to current year.

INSTRUMENTATION.--Tipping-bucket raingage and electronic datalogger. Satellite telemetry at station.

REMARKS.--Gage is operated in cooperation with Tennessee Valley Authority and the North Carolina Department of Environment and Natural Resources.  
Precipitation data collected during freezing periods may not be accurately reflected in daily record; consequently, winter record is poor.**PRECIPITATION, TOTAL, INCHES  
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007  
DAILY SUM VALUES**

<b>Day</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>
<b>1</b>	0.11	0.28	0.17	0.01	0.14	1.30	0.68	0.00	0.46	0.00	0.06	0.00
<b>2</b>	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>3</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.13	0.00	0.00	0.00
<b>4</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.54	0.02	0.00	0.00	0.00	0.00
<b>5</b>	0.20	0.00	0.00	0.31	0.00	0.00	0.00	0.67	0.00	0.01	0.00	0.00
<b>6</b>	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>7</b>	0.00	0.68	0.00	0.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>8</b>	0.00	0.02	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>9</b>	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>10</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.00	0.00
<b>11</b>	0.17	0.23	0.00	0.00	0.00	0.00	0.26	0.05	0.00	2.01	0.00	0.04
<b>12</b>	0.01	0.00	0.04	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00
<b>13</b>	0.00	0.00	0.09	0.00	0.07	0.00	0.00	0.00	0.00	0.01	0.00	0.00
<b>14</b>	0.00	0.00	0.00	0.00	0.16	0.00	0.18	0.00	0.01	0.00	0.00	1.45
<b>15</b>	0.00	1.23	0.00	0.08	0.00	0.46	0.04	0.00	0.05	0.00	0.00	0.01
<b>16</b>	0.58	0.16	0.00	0.01	0.00	1.46	0.00	0.10	0.00	0.00	0.00	0.00
<b>17</b>	1.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
<b>18</b>	0.00	0.00	0.00	0.02	0.03	0.00	0.00	0.00	0.11	0.38	0.00	0.00
<b>19</b>	0.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.88	0.01	0.00	0.00
<b>20</b>	0.00	0.00	0.00	0.00	0.28	0.00	0.00	0.00	0.01	0.92	0.00	0.00
<b>21</b>	0.00	0.00	0.00	0.95	0.42	0.00	0.00	0.00	0.00	0.00	0.54	0.00
<b>22</b>	0.02	0.00	0.75	0.00	0.01	0.00	0.00	0.00	0.00	0.34	0.00	0.00
<b>23</b>	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.01
<b>24</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31	0.25	0.00
<b>25</b>	0.00	0.00	0.30	0.00	0.54	0.00	0.00	0.00	0.11	0.41	0.00	0.00
<b>26</b>	0.00	0.00	0.06	0.00	0.00	0.00	0.13	0.00	0.00	0.00	0.00	0.00
<b>27</b>	0.75	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.12	0.00
<b>28</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.05	0.00	0.00
<b>29</b>	0.00	0.00	0.00	0.00	---	0.12	0.00	0.00	0.00	0.00	0.00	0.00
<b>30</b>	0.00	0.23	0.01	0.00	---	0.00	0.00	0.00	0.00	0.00	0.02	0.00
<b>31</b>	0.00	---	0.51	0.00	---	0.00	---	0.00	---	0.15	0.00	---
<b>Total</b>	4.09	2.83	1.96	2.42	1.68	3.34	1.94	0.86	3.76	5.94	1.00	1.51

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