

**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, daily discharges. WSP 823: Drainage area. WSP 1306: 1898-1929, 1933-34, maximum discharges. WSP 1336: 1898, 1900-1906, 1908-1915, 1917-1929, 1932, 1934, maximum discharges; 1906, 1915, 1916-1918, daily discharges.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,714.54 ft above National Geodetic Vertical Datum 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 streamgage.

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 Lake, Cedar Cliff Lake, Bear Creek Lake, Tennessee Creek Lake, and Wolf Creek Lake, 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, October 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.

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**DISCHARGE, CUBIC FEET PER SECOND**  
**WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010**  
**DAILY MEAN VALUES**

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	1,310	3,590	1,720	e2,710	2,630	1,860	2,050	2,080	1,860	1,120	793	508
2	1,240	2,980	2,890	e2,570	2,740	1,920	1,980	1,970	1,640	696	621	492
3	1,410	2,580	3,280	e2,410	2,700	1,780	1,940	4,810	1,250	745	592	479
4	1,350	2,420	2,590	e2,340	2,650	1,710	1,870	3,520	994	729	633	527
5	1,990	2,250	2,350	e2,290	6,660	2,110	1,690	2,630	1,320	658	721	513
6	1,900	2,110	2,090	e2,180	8,070	2,080	1,610	2,330	1,500	678	950	462
7	1,870	1,770	1,820	e2,170	6,000	2,070	1,560	2,010	1,220	683	708	420
8	1,530	1,780	2,150	e2,140	5,120	1,620	2,250	1,970	962	659	609	381
9	1,350	1,710	10,200	e2,010	4,750	1,620	2,600	1,740	1,180	596	564	409
10	1,560	2,370	4,860	e2,030	4,390	1,640	2,100	1,600	1,490	740	567	373
11	1,360	6,900	3,680	e2,020	2,950	1,820	1,830	1,680	1,340	609	628	1,010
12	1,500	4,290	3,170	1,760	2,640	2,200	1,620	1,620	1,420	960	738	1,360
13	1,510	3,410	3,680	1,330	2,970	3,040	1,330	1,550	1,280	1,050	581	557
14	1,970	2,970	3,440	1,320	2,830	2,670	1,280	1,280	1,120	874	697	447
15	2,470	2,670	3,140	1,440	2,400	2,120	1,440	1,450	812	743	827	414
16	2,450	2,480	2,900	1,890	2,240	2,210	1,400	1,480	1,200	732	758	397
17	2,100	2,350	2,710	2,840	2,130	1,810	1,390	1,450	1,110	960	866	403
18	1,880	2,770	3,000	2,610	2,050	1,910	1,280	1,260	850	822	909	422
19	1,650	2,550	3,290	2,210	2,020	1,840	1,240	1,230	1,070	1,090	1,080	435
20	1,580	2,380	2,860	2,320	2,360	1,970	1,480	1,420	851	1,000	858	379
21	1,660	2,280	2,610	2,780	2,340	2,000	1,540	1,480	729	1,030	1,290	365
22	1,310	2,230	2,530	2,950	2,190	2,510	1,090	1,400	801	819	1,770	356
23	1,430	2,200	2,420	2,230	2,120	2,070	1,070	1,230	851	725	923	492
24	2,460	2,100	2,410	3,530	2,040	1,920	1,620	1,240	848	709	815	372
25	2,030	2,060	5,930	8,100	1,950	1,850	3,890	1,100	1,010	660	841	384
26	1,490	2,040	5,660	4,480	1,900	2,370	2,830	1,120	1,060	707	818	1,110
27	1,890	1,950	4,450	3,630	2,450	2,120	2,820	914	888	799	710	1,730
28	3,710	1,870	3,320	3,200	2,450	2,270	2,420	932	955	711	820	1,440
29	2,720	1,830	3,050	2,960	---	2,470	2,130	1,170	909	754	691	924
30	2,420	2,020	2,830	3,220	---	2,060	2,010	1,150	1,110	671	659	1,160
31	2,380	---	2,860	2,850	---	1,920	---	1,150	---	715	638	---
<b>Total</b>	57,480	76,910	103,890	82,520	87,740	63,560	55,360	51,966	33,630	24,444	24,675	18,721
<b>Mean</b>	1,854	2,564	3,351	2,662	3,134	2,050	1,845	1,676	1,121	789	796	624
<b>Max</b>	3,710	6,900	10,200	8,100	8,070	3,040	3,890	4,810	1,860	1,120	1,770	1,730
<b>Min</b>	1,240	1,710	1,720	1,320	1,900	1,620	1,070	914	729	596	564	356

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1898 - 2010 <sup>a</sup>, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	926	1,082	1,611	2,002	2,245	2,519	2,188	1,741	1,383	1,234	1,136	987
<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>	322	378	457	599	736	926	841	602	531	503	220	195
<b>(WY)</b>	(2009)	(1932)	(1940)	(1940)	(1941)	(1988)	(1986)	(1941)	(1941)	(1925)	(1925)	(1925)

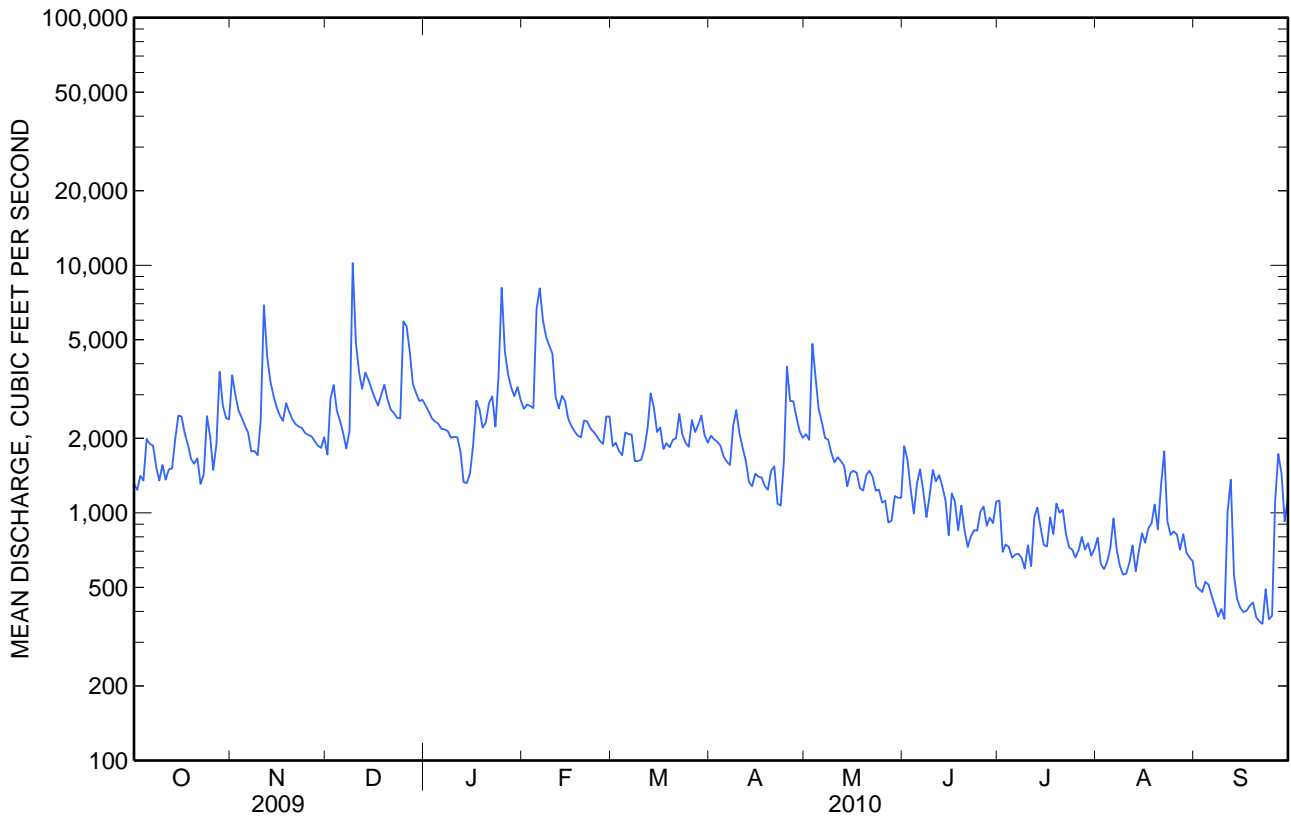
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SUMMARY STATISTICS

	Calendar Year 2009		Water Year 2010		Water Years 1898 - 2010 <sup>a</sup>	
<b>Annual total</b>	636,929		680,896			
<b>Annual mean</b>	1,745		1,865		1,584	
<b>Highest annual mean</b>					2,576	1899
<b>Lowest annual mean</b>					879	1986
<b>Highest daily mean</b>	10,200	Dec 9	10,200	Dec 9	28,000	Mar 4, 1917
<b>Lowest daily mean</b>	426	Sep 14	356	Sep 22	<sup>b</sup> 31	Sep 9, 1925
<b>Annual seven-day minimum</b>	513	Sep 8	394	Sep 16	97	Sep 4, 1925
<b>Maximum peak flow</b>			19,200	Dec 9	<sup>b</sup> 61,600	Aug 30, 1940
<b>Maximum peak stage</b>			10.31	Dec 9	15.96	Aug 30, 1940
<b>Instantaneous low flow</b>			347	Sep 22	<sup>b</sup> 27	Sep 10, 1925
<b>10 percent exceeds</b>	2,970		2,990		2,810	
<b>50 percent exceeds</b>	1,450		1,730		1,260	
<b>90 percent exceeds</b>	706		659		600	

<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.**PRECIPITATION, TOTAL, INCHES  
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010  
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>	0.00	0.01	0.00	0.00	---	0.00	0.00	0.00	0.02	0.00	0.03	0.00
<b>2</b>	0.00	0.00	0.89	0.00	---	0.24	0.00	0.00	0.00	0.00	0.00	0.00
<b>3</b>	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.93	0.37	0.00	0.00	0.00
<b>4</b>	0.16	0.02	0.00	0.00	0.29	0.00	0.00	0.00	0.34	0.00	0.00	0.00
<b>5</b>	0.64	0.00	0.13	0.00	1.57	0.00	0.00	0.00	0.04	0.00	0.20	0.00
<b>6</b>	0.28	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.06	0.00	0.01	0.00
<b>7</b>	0.05	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>8</b>	0.00	0.00	0.96	0.00	0.00	0.00	1.23	0.00	0.00	0.00	0.00	0.15
<b>9</b>	0.55	0.00	1.26	0.00	0.11	0.00	0.00	0.00	0.25	0.00	0.00	0.00
<b>10</b>	0.02	2.02	0.00	0.00	0.00	0.00	0.00	0.09	0.40	0.00	0.00	0.00
<b>11</b>	0.00	0.84	0.00	0.00	0.00	0.17	0.00	0.03	0.00	0.00	0.00	2.67
<b>12</b>	0.33	0.00	0.00	0.00	0.00	0.39	0.00	0.03	0.00	0.62	0.01	0.01
<b>13</b>	0.00	0.00	0.44	0.00	0.12	0.16	0.00	0.00	0.01	0.41	0.00	0.00
<b>14</b>	0.66	0.00	0.00	0.00	0.07	0.17	0.00	0.00	0.00	0.00	0.00	0.00
<b>15</b>	0.55	0.00	0.01	0.00	0.15	0.00	0.00	0.05	0.08	0.02	0.00	0.00
<b>16</b>	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.24	0.00	0.00	0.14	0.00
<b>17</b>	0.00	0.16	0.00	0.61	0.00	0.00	0.00	0.10	0.00	0.00	0.09	0.00
<b>18</b>	0.02	0.44	---	0.01	0.00	0.00	0.00	0.00	0.00	0.39	0.00	0.00
<b>19</b>	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.10	0.54	0.44	0.00
<b>20</b>	0.00	0.00	0.00	0.30	0.00	0.00	0.31	0.00	0.00	0.07	0.00	0.00
<b>21</b>	0.00	0.00	0.00	0.36	0.00	0.30	0.01	0.09	0.00	0.02	0.81	0.00
<b>22</b>	0.00	0.12	0.00	0.09	0.26	0.03	0.00	0.05	0.00	0.00	0.00	0.00
<b>23</b>	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>24</b>	0.04	0.00	0.14	1.15	0.00	0.00	1.00	0.02	0.00	0.00	0.00	0.00
<b>25</b>	0.00	0.00	1.27	0.15	0.00	0.06	0.51	0.02	0.01	0.00	0.00	0.02
<b>26</b>	0.01	0.00	0.00	0.00	0.00	0.08	0.19	0.00	0.00	0.15	0.00	1.15
<b>27</b>	0.99	0.00	0.00	0.00	0.00	0.00	0.26	0.00	0.00	0.01	0.00	0.68
<b>28</b>	0.01	0.00	0.00	0.00	0.00	0.28	0.00	0.10	0.61	0.02	0.00	0.01
<b>29</b>	0.00	0.00	0.00	---	---	0.05	0.00	0.00	0.00	0.07	0.00	0.47
<b>30</b>	0.00	0.55	0.08	---	---	0.00	0.00	0.00	0.00	0.05	0.00	0.04
<b>31</b>	0.92	---	0.17	---	---	0.00	---	0.48	---	0.67	0.00	---
<b>Total</b>	5.35	4.16	---	---	---	1.93	3.51	3.23	2.29	3.04	1.73	5.20

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

