



Water-Data Report 2010

0351706800 CHEOAH RIVER NEAR BEARPEN GAP NEAR TAPOCO, NC

Upper Tennessee Basin
Lower Little Tennessee Subbasin

LOCATION.--Lat 35°26'18", long 83°55'08" referenced to North American Datum of 1983, Graham County, NC, Hydrologic Unit 06010204, on right bank, 93 ft downstream of U.S. Forest Service bridge number 62 on Slickrock Road, 1.7 mi upstream of mouth, and 1.2 mi east southeast of Tapoco.

DRAINAGE AREA.--206 mi².

SURFACE-WATER RECORDS

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

REVISED RECORDS.--WDR NC-04-1: 2002 (annual maximum discharge).

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 1,260 ft above National Geodetic Vertical Datum of 1929, from topographic map. Satellite telemetry at streamgage.

REMARKS.--No estimated daily discharges. Records fair. Considerable regulation at times caused by Santeetlah Dam, 10.3 mi upstream. Water from Santeetlah Lake, 10.3 mi upstream, is diverted to hydro powerplant on the Little Tennessee River, which bypasses gage. Maximum discharge for period of record, from rating curve extended above 5,000 ft³/s on basis of step-backwater computation of peak flow. Minimum discharge for period of record also occurred September 17, 20, 2000.

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

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	124	265	1,060	1,140	279	218	258	214	172	95	117	79
2	117	202	1,060	1,120	343	225	252	208	172	93	95	84
3	110	172	1,500	1,110	331	219	244	629	131	93	91	90
4	107	156	1,420	1,030	1,270	218	237	350	123	92	87	90
5	156	146	1,120	826	4,060	216	231	280	122	90	109	89
6	124	138	864	547	4,640	213	225	249	133	90	108	87
7	140	522	647	170	1,580	212	219	231	133	89	88	85
8	120	128	744	167	1,320	211	309	685	119	88	85	86
9	114	122	3,350	163	774	216	277	773	168	89	81	87
10	121	259	2,230	163	658	219	739	215	198	94	80	85
11	112	1,080	1,750	160	521	227	834	204	148	90	87	148
12	124	1,220	1,160	159	387	280	508	199	133	141	83	143
13	120	1,040	1,510	155	368	291	226	196	125	123	81	93
14	143	864	1,630	155	353	262	221	197	119	105	89	90
15	230	845	1,200	155	354	265	215	209	140	93	86	89
16	224	835	1,110	155	333	249	213	208	127	112	80	88
17	203	829	1,110	215	318	240	209	206	118	101	86	87
18	169	1,360	1,630	190	308	236	206	194	114	117	85	443
19	150	1,700	1,980	174	304	228	202	187	115	123	88	87
20	138	1,030	1,310	190	571	666	208	188	110	107	83	84
21	129	1,010	1,270	276	487	642	205	184	106	97	105	86
22	124	999	1,210	255	307	447	197	610	106	93	90	84
23	128	987	1,040	216	267	251	196	690	104	91	84	83
24	132	975	1,050	620	254	245	731	162	104	90	81	82
25	119	1,010	1,680	718	244	242	908	162	102	89	80	82
26	115	1,040	1,960	348	237	249	261	161	543	88	84	107
27	166	1,030	1,730	271	232	238	256	156	651	107	82	161
28	205	1,010	1,610	241	224	295	247	165	101	102	83	118
29	157	1,020	1,160	230	---	300	230	157	99	117	81	95
30	144	1,080	1,150	1,410	---	276	221	156	97	117	81	116
31	221	---	1,150	601	---	264	---	166	---	124	80	---
Total	4,486	23,074	43,395	13,330	21,324	8,560	9,485	8,591	4,733	3,140	2,720	3,228
Mean	145	769	1,400	430	762	276	316	277	158	101	87.7	108
Max	230	1,700	3,350	1,410	4,640	666	908	773	651	141	117	443
Min	107	122	647	155	224	211	196	156	97	88	80	79

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2010, BY WATER YEAR (WY)

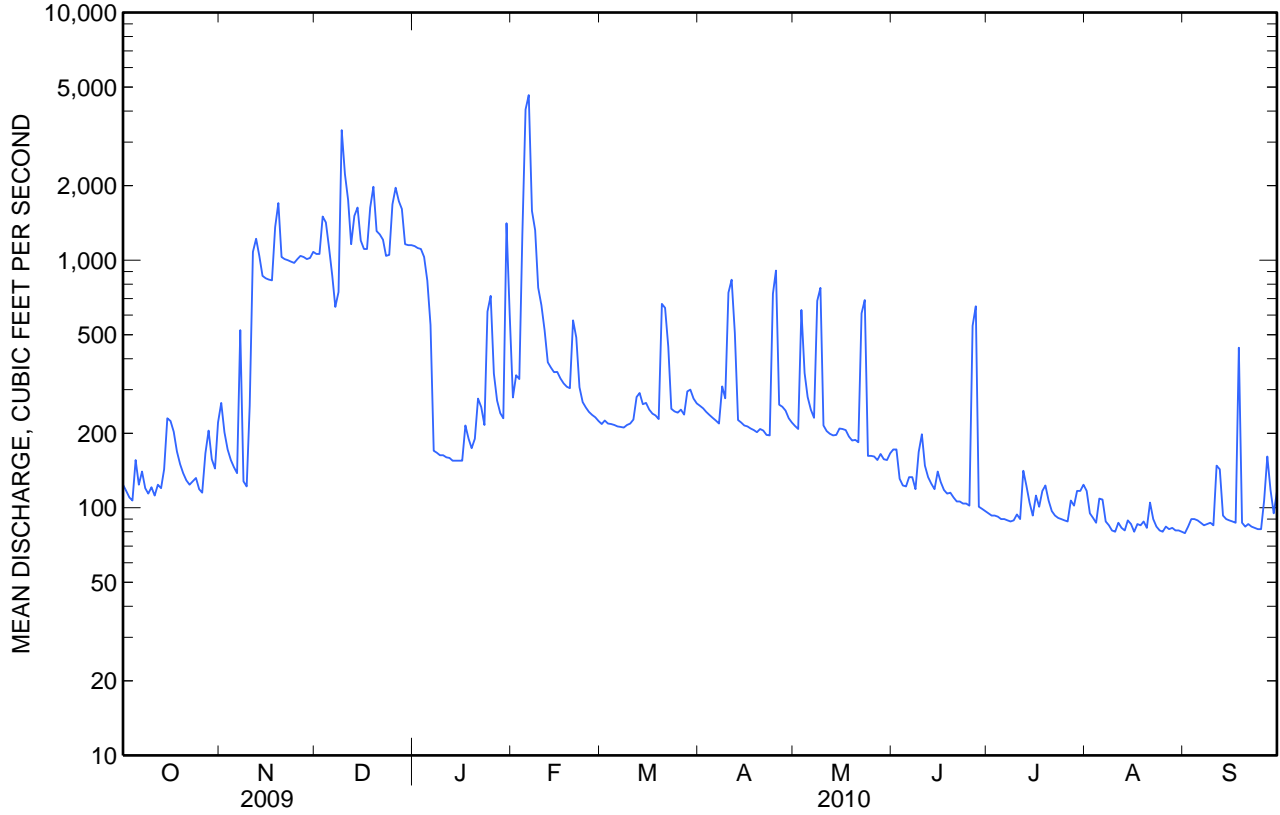
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	60.4	142	288	251	273	235	196	257	104	94.5	66.6	85.6
Max	145	769	1,400	589	970	934	316	889	173	131	107	165
(WY)	(2010)	(2010)	(2010)	(2002)	(2008)	(2008)	(2010)	(2003)	(2009)	(2003)	(2009)	(2004)
Min	12.1	26.7	31.5	65.8	77.3	79.7	64.3	53.2	52.5	41.0	22.7	19.9
(WY)	(2001)	(2000)	(2000)	(2000)	(2000)	(2000)	(2001)	(2001)	(2002)	(2002)	(2002)	(2000)

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SUMMARY STATISTICS

	Calendar Year 2009		Water Year 2010		Water Years 2000 - 2010	
Annual total	134,965		146,066			
Annual mean	370		400		171	
Highest annual mean					400	2010
Lowest annual mean					54.9	2001
Highest daily mean	5,110	Jan 7	4,640	Feb 6	8,350	May 6, 2003
Lowest daily mean	85	Aug 16	79	Sep 1	9.1	Sep 17, 2000
Annual seven-day minimum	89	Aug 12	81	Aug 26	9.8	Sep 14, 2000
Maximum peak flow			5,480	Feb 5	^a 15,000	May 6, 2003
Maximum peak stage			7.70	Feb 5	13.30	May 6, 2003
Instantaneous low flow			56	Jul 27	^a 8.8	Sep 16, 2000
10 percent exceeds	1,050		1,090		262	
50 percent exceeds	176		202		91	
90 percent exceeds	105		88		32	

^a See Remarks.



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WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: October 1999 to current year.

INSTRUMENTATION.--Temperature probe since October 1999. Satellite telemetry at station.

REMARKS.--Records fair to excellent. Station operated in cooperation with Tapoco, Inc.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum recorded, 30.4°C, August 9, 2007; minimum recorded, 0°C, periodically in winter months.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum recorded, 30.0°C, August 13; minimum recorded, 0.9°C, January 9.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	October			November			December			January		
1	18.4	15.7	17.1	14.4	12.9	13.6	13.1	11.8	12.3	8.7	7.0	8.1
2	18.1	17.1	17.5	13.5	11.9	12.7	13.0	11.6	12.3	7.2	6.3	6.8
3	18.2	16.0	17.1	13.4	11.5	12.5	12.7	12.0	12.3	6.7	5.9	6.2
4	16.6	15.3	16.0	13.1	11.1	12.2	12.4	11.9	12.0	6.4	5.8	6.0
5	17.5	15.8	16.6	12.7	11.4	12.1	11.9	10.7	11.3	6.2	5.1	5.7
6	19.2	17.3	18.2	11.8	9.9	11.0	11.2	10.0	10.6	5.8	4.4	5.2
7	19.9	17.5	18.8	16.1	10.3	13.1	11.3	9.7	10.5	4.4	2.7	3.3
8	18.1	15.7	17.1	13.7	11.3	12.3	11.6	11.0	11.3	3.7	1.6	2.4
9	20.4	17.7	18.9	13.2	11.5	12.4	12.0	11.0	11.6	2.3	0.9	1.6
10	19.4	18.0	18.8	13.4	13.1	13.3	11.3	9.9	10.5	2.7	1.8	2.2
11	18.8	17.4	18.1	14.8	13.1	13.8	10.3	9.3	9.8	3.5	1.2	2.2
12	18.0	17.4	17.7	15.1	14.2	14.6	10.0	9.1	9.6	4.0	3.1	3.7
13	19.4	17.3	18.3	15.4	13.9	14.5	11.2	9.9	10.6	3.4	1.8	2.7
14	18.7	17.4	18.2	15.6	14.0	14.7	11.5	10.8	11.1	4.1	2.5	3.3
15	17.4	16.8	17.1	15.4	13.8	14.5	11.5	10.3	11.2	5.4	3.6	4.5
16	16.8	14.5	15.7	15.2	13.5	14.3	10.3	9.4	9.9	6.3	4.8	5.4
17	14.5	12.1	13.2	15.1	14.0	14.6	10.3	9.2	9.7	7.4	6.1	6.8
18	12.3	11.1	11.8	15.3	14.6	14.9	9.9	8.9	9.6	7.9	6.8	7.4
19	12.4	9.9	11.2	14.9	14.0	14.5	9.9	9.2	9.7	7.4	5.6	6.6
20	13.5	11.0	12.2	14.6	13.5	13.9	9.2	8.9	9.0	8.5	7.4	8.0
21	14.3	11.9	13.1	14.6	13.3	13.8	9.5	8.5	8.9	9.3	8.2	8.7
22	15.0	13.0	14.0	14.1	13.4	13.7	9.6	8.8	9.1	8.9	8.2	8.7
23	16.7	14.6	15.8	14.7	13.8	14.2	9.9	8.7	9.2	8.9	7.2	8.1
24	16.4	14.3	15.9	14.7	13.8	14.3	10.1	8.7	9.4	9.6	8.2	8.9
25	14.3	12.6	13.5	14.6	13.3	14.0	10.2	9.3	9.9	9.5	7.2	8.8
26	14.6	12.4	13.5	13.7	12.6	13.2	9.4	8.7	9.1	7.2	5.5	6.2
27	14.6	14.3	14.4	13.1	12.3	12.7	9.5	8.4	8.9	6.2	4.9	5.6
28	15.5	14.1	14.7	13.4	11.9	12.5	8.9	7.8	8.4	7.4	5.4	6.3
29	15.3	13.7	14.6	13.6	12.3	12.9	8.2	7.5	7.8	6.8	4.5	5.6
30	15.9	14.8	15.4	13.4	12.2	13.1	8.7	7.6	8.1	6.2	4.5	5.4
31	16.4	14.4	15.8	---	---	---	8.8	8.3	8.6	5.4	4.5	5.0
Month	20.4	9.9	15.8	16.1	9.9	13.5	13.1	7.5	10.1	9.6	0.9	5.7

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TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	February			March			April			May		
1	6.0	3.9	5.0	6.1	4.0	5.1	13.9	9.0	11.5	19.4	16.1	17.5
2	6.7	5.8	6.2	5.8	4.3	4.9	15.1	10.4	12.9	21.2	17.4	19.1
3	7.0	5.9	6.3	5.0	3.8	4.4	15.0	12.7	13.9	20.0	16.5	17.6
4	6.3	5.1	5.8	6.4	4.3	5.2	16.4	12.3	14.3	19.4	15.7	17.4
5	6.6	6.1	6.4	6.7	3.7	5.2	17.2	12.6	14.9	19.6	15.1	17.4
6	6.5	5.8	6.1	7.0	3.6	5.4	18.0	13.7	15.9	20.7	16.3	18.5
7	6.0	5.6	5.8	6.7	3.9	5.5	18.4	15.2	16.7	21.4	16.8	19.2
8	6.8	5.5	6.1	8.3	4.9	6.5	16.9	13.7	15.3	20.1	16.7	18.8
9	7.1	5.7	6.5	8.6	5.7	7.4	15.4	11.9	13.5	18.6	15.6	17.1
10	5.7	4.0	4.6	8.7	7.6	8.3	14.5	10.5	12.8	15.7	13.4	14.8
11	5.4	4.1	4.7	8.7	7.7	8.1	15.6	12.2	13.7	17.2	15.0	16.0
12	4.9	4.1	4.5	9.2	7.9	8.6	17.3	12.5	14.6	19.0	16.6	17.5
13	4.9	3.3	4.2	8.7	7.8	8.2	17.5	12.9	15.2	20.3	17.0	18.6
14	5.2	3.9	4.5	7.9	7.2	7.5	18.2	13.5	16.0	20.7	18.2	19.5
15	5.6	4.2	5.1	7.5	7.0	7.2	19.0	14.8	17.0	20.5	18.0	19.4
16	4.2	3.0	3.6	8.4	6.6	7.5	19.0	14.8	17.1	19.7	18.2	19.1
17	4.4	3.1	3.8	8.0	6.9	7.5	18.3	15.3	16.8	20.9	18.1	19.2
18	5.7	3.5	4.6	10.5	7.3	8.6	16.9	12.9	15.2	20.8	18.2	19.4
19	6.5	3.9	5.2	10.6	6.8	8.8	15.4	12.5	14.2	20.1	17.5	18.9
20	6.6	3.8	5.2	9.7	7.1	8.5	14.9	13.4	14.1	21.2	16.5	18.9
21	7.4	4.4	5.8	9.1	7.9	8.4	17.2	13.4	15.1	20.2	18.7	19.6
22	7.9	6.1	6.9	8.8	7.5	8.0	16.8	12.8	15.1	21.4	18.6	19.8
23	7.8	5.9	7.0	11.1	6.9	8.8	18.0	14.7	16.4	22.5	19.4	20.6
24	5.9	4.4	5.4	12.2	7.6	10	17.7	16.1	16.7	22.1	18.0	20.1
25	4.4	2.9	3.6	11.3	9.0	10.0	18.3	15.9	16.9	23.3	19.5	21.1
26	5.1	2.5	3.8	10.2	8.6	9.5	16.4	14.6	15.4	23.6	19.5	21.2
27	5.9	3.0	4.6	11.7	6.9	9.2	14.6	13.3	14.1	23.1	19.5	21.4
28	5.5	4.2	4.6	10.8	10.0	10.3	15.9	12.2	13.9	22.0	20.2	21.1
29	---	---	---	10.2	8.9	9.5	16.9	12.0	14.5	24.0	19.3	21.4
30	---	---	---	12.4	8.5	10.1	18.7	14.1	16.3	22.8	20.7	21.9
31	---	---	---	12.6	7.9	10.4	---	---	---	22.2	20.8	21.5
Month	7.9	2.5	5.2	12.6	3.6	7.8	19.0	9.0	15.0	24.0	13.4	19.1

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TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	23.0	20.6	21.8	27.6	23.0	25.1	27.6	24.2	25.6	26.4	22.5	24.4
2	22.8	20.9	21.6	26.1	23.0	24.4	28.1	24.9	26.3	26.3	22.6	24.5
3	24.9	20.3	22.4	27.2	23.2	25.0	28.4	24.9	26.5	26.1	23.1	24.6
4	23.5	21.6	22.5	27.6	24.1	25.7	29.6	25.5	27.4	24.7	22.0	23.5
5	24.0	21.5	22.7	28.1	23.8	25.8	29.2	25.1	27.3	23.4	19.7	21.6
6	23.8	21.6	22.4	28.0	23.5	25.7	27.0	24.2	25.4	23.8	19.9	21.8
7	23.9	19.9	21.8	28.5	23.8	26.0	28.5	24.2	26.0	24.3	20.8	22.7
8	24.4	20.1	22.0	28.9	24.4	26.5	28.4	24.1	26.1	24.4	22.9	23.5
9	22.5	20.3	21.5	26.9	24.8	25.9	28.7	24.9	26.7	24.1	22.4	23.2
10	22.8	19.4	21.0	28.5	24.5	26.2	29.8	25.6	27.5	23.5	21.6	22.5
11	24.9	20.8	22.6	28.4	24.1	26.1	29.2	26.0	27.6	22.9	21.2	22.0
12	24.5	21.9	22.9	26.4	23.3	24.6	29.5	25.8	27.4	23.9	20.7	22.2
13	26.4	22.2	24.1	25.1	23.2	24.0	30.0	25.7	27.7	23.4	20.1	21.7
14	27.1	22.9	24.8	28.1	23.5	25.4	27.7	25.7	26.6	23.4	19.9	21.6
15	25.3	23.0	23.9	27.6	24.0	25.7	29.0	24.9	26.7	23.9	20.5	22.2
16	25.4	21.9	23.5	27.7	23.9	25.6	28.9	25.9	27.3	23.3	21.3	22.3
17	26.9	22.8	24.6	26.8	23.9	25.1	27.0	25.4	26.2	24.9	22.1	23.3
18	25.9	22.8	24.3	27.4	24.1	25.6	27.6	24.8	26.0	25.4	21.4	23.4
19	26.4	23.0	24.6	27.0	23.8	25.1	27.2	25.5	26.1	24.8	21.7	23.3
20	27.9	23.7	25.5	27.2	24.0	25.4	28.9	24.6	26.6	24.6	21.4	23.0
21	27.5	22.8	25.1	28.3	24.5	26.2	27.2	24.6	25.9	24.3	21.6	23.1
22	27.8	23.5	25.6	28.5	24.8	26.6	27.8	24.1	25.7	24.9	22.5	23.6
23	27.6	24.1	25.7	29.4	24.9	26.9	28.0	24.3	25.9	25.0	22.1	23.6
24	28.3	24.1	26.1	29.3	25.3	27.2	26.7	23.4	25.0	24.2	22.1	23.2
25	28.8	24.7	26.5	29.6	26.2	27.7	26.6	23.2	24.8	23.4	22.0	22.7
26	27.7	24.7	26.1	29.3	26.1	27.5	26.3	23.0	24.6	22.8	20.8	21.7
27	28.4	25.9	26.9	28.9	25.5	27.0	26.3	23.1	24.8	20.8	18.9	20.0
28	28.5	24.0	26.1	28.2	26.0	27.0	27.7	24.0	25.6	20.8	18.4	19.4
29	28.1	24.9	26.3	28.3	24.9	26.7	26.8	23.9	25.2	21.1	18.3	19.7
30	26.5	23.7	25.0	28.8	25.2	26.9	27.0	23.9	25.3	20.3	19.3	19.9
31	---	---	---	26.7	24.5	25.6	26.8	23.0	24.8	---	---	---
Month	28.8	19.4	24.0	29.6	23.0	25.9	30.0	23.0	26.1	26.4	18.3	22.5

	Max	Min	Mean
Year	30.0	0.9	16.0