

Water-Data Report 2007

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(M).

GAGE.--Water-stage recorder. Elevation of gage is 1,260 ft above NGVD of 1929, from topographic map. Satellite telemetry at station.

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. Minimum discharge for current water year also occurred on September 14.

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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	451	447	127	1,020	80	267	193	181	124	88	85	420
2	84	119	104	544	79	382	184	168	111	83	85	71
3	80	105	97	116	74	272	179	159	109	90	87	67
4	78	101	93	102	72	242	218	157	108	81	82	63
5	76	98	91	140	70	227	187	677	107	81	81	62
6	101	97	88	147	70	220	184	785	107	81	80	59
7	79	119	82	231	377	212	182	178	103	492	79	58
8	76	157	78	1,270	456	208	178	169	104	589	78	58
9	74	143	77	460	144	201	176	163	103	87	76	58
10	72	124	76	328	106	198	177	161	98	87	75	58
11	72	117	76	137	106	198	185	158	97	111	74	59
12	69	113	75	128	107	205	192	158	96	92	74	59
13	65	106	76	121	114	189	179	153	102	84	73	58
14	64	102	74	113	118	170	633	150	112	82	73	128
15	64	316	73	108	105	175	771	149	105	81	72	80
16	66	538	72	108	103	445	207	151	99	80	73	64
17	169	240	72	99	104	761	199	148	99	80	64	63
18	106	176	71	97	105	739	231	143	97	85	64	64
19	91	147	70	93	105	473	222	580	101	82	63	66
20	147	142	69	89	107	210	195	721	110	89	62	65
21	103	152	68	133	159	205	673	141	99	82	59	65
22	90	142	127	155	126	197	816	138	97	78	59	64
23	81	132	94	119	121	193	452	136	95	77	58	64
24	76	127	79	109	119	190	188	136	95	81	58	64
25	73	123	87	102	157	188	188	134	108	87	59	63
26	93	120	87	95	137	184	215	507	101	88	60	62
27	199	118	80	92	139	187	261	617	98	89	60	62
28	231	114	75	89	158	185	202	137	102	136	63	62
29	171	111	75	83	---	184	195	134	98	99	60	60
30	152	138	81	81	---	180	190	131	95	91	62	60
31	136	---	147	77	---	179	---	131	---	89	62	---
Total	3,489	4,784	2,641	6,586	3,718	8,066	8,252	7,651	3,080	3,622	2,160	2,306
Mean	113	159	85.2	212	133	260	275	247	103	117	69.7	76.9
Max	451	538	147	1,270	456	761	816	785	124	589	87	420
Min	64	97	68	77	70	170	176	131	95	77	58	58

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2007, BY WATER YEAR (WY)

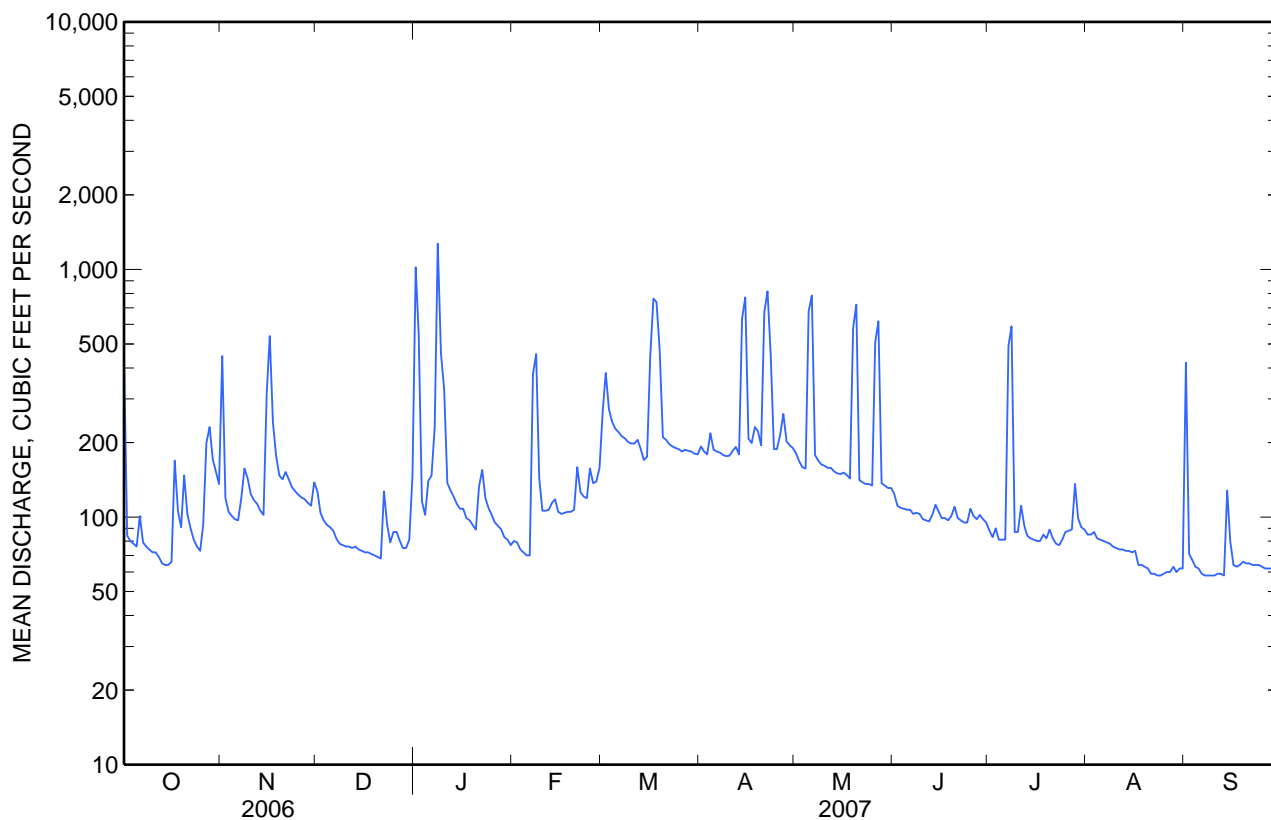
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	47.9	79.6	166	177	132	143	163	235	90.5	89.9	57.5	78.1
Max	113	159	733	589	216	260	275	889	154	131	95.6	165
(WY)	(2007)	(2007)	(2005)	(2002)	(2003)	(2007)	(2007)	(2003)	(2006)	(2003)	(2006)	(2004)
Min	12.1	26.7	31.5	65.8	77.3	79.7	64.3	53.2	52.5	41.0	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 2006		Water Year 2007		Water Years 2000 - 2007	
Annual total	52,994		56,355			
Annual mean	145		154		122	
Highest annual mean					176	2003
Lowest annual mean					54.9	2001
Highest daily mean	782	May 7	1,270	Jan 8	8,350	May 6, 2003
Lowest daily mean	64	Oct 14	58	Aug 23	9.1	Sep 17, 2000
Annual seven-day minimum	67	Oct 10	58	Sep 7	9.8	Sep 14, 2000
Maximum peak flow			3,310	Jan 1	^a 15,000	May 6, 2003
Maximum peak stage			6.36	Jan 1	13.30	May 6, 2003
Instantaneous low flow			^a 57	Sep 13	^a 8.8	Sep 16, 2000
10 percent exceeds	184		231		179	
50 percent exceeds	114		105		81	
90 percent exceeds	78		64		26	

^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 good. 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, 30.4°C, August 9; minimum recorded, 0.6°C, February 6.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	October			November			December			January		
1	22.3	17.3	19.5	17.0	14.0	15.5	14.7	10.8	13.7	11.4	9.4	10.5
2	19.9	17.2	18.7	16.1	11.3	13.7	10.8	8.5	9.3	9.5	7.7	8.9
3	20.7	17.6	19.1	11.3	9.0	10.2	9.8	8.7	9.2	7.7	6.2	7.1
4	21.5	18.5	19.9	10.1	8.1	9.2	8.7	5.4	6.8	9.9	7.2	8.3
5	21.5	18.7	20.1	10.8	8.5	9.7	5.9	4.4	5.3	12.1	9.9	11.2
6	20.7	18.1	19.6	11.9	9.4	10.6	7.4	5.1	6.1	12.0	10.8	11.4
7	18.3	16.0	17.2	13.2	11.9	12.6	7.3	4.5	6.5	11.6	9.9	10.8
8	17.6	15.4	16.6	13.1	12.8	13.0	4.5	2.3	2.9	11.6	7.8	9.9
9	19.5	16.4	17.8	14.1	12.6	13.3	3.3	1.6	2.5	8.6	6.5	7.5
10	20.1	17.4	18.7	14.3	12.3	13.3	4.5	2.7	3.6	8.2	5.9	7.2
11	20.5	18.3	19.2	14.4	12.4	13.5	5.9	4.2	5.0	6.6	4.9	5.8
12	19.3	16.8	18.1	12.4	9.6	11.0	8.2	5.4	6.6	9.4	6.6	8.0
13	16.8	13.5	14.9	10.6	8.6	9.7	9.7	8.1	8.9	11.0	9.0	9.9
14	14.0	11.2	12.7	11.2	9.3	10.3	8.8	7.4	8.1	12.1	10.5	11.2
15	13.7	10.5	12.3	12.4	10.8	11.6	8.5	7.1	7.8	12.9	11.6	12.3
16	13.9	13.0	13.5	12.8	11.0	12.2	8.3	7.0	7.8	12.4	7.0	9.8
17	15.3	13.8	14.7	11.0	9.9	10.4	8.6	7.1	8.0	7.0	5.6	6.3
18	18.0	15.3	16.6	10.5	9.0	9.9	8.9	7.4	8.2	6.6	5.9	6.2
19	17.5	16.6	17.1	10.3	9.1	9.8	9.3	7.9	8.6	7.3	5.7	6.7
20	17.1	13.9	15.5	9.2	8.3	8.8	9.8	8.3	9.2	5.8	4.5	5.3
21	14.7	12.7	13.8	8.3	7.1	7.8	11.1	9.6	10.3	7.0	5.5	6.1
22	15.1	13.6	14.2	9.7	7.7	8.6	12.3	11.0	11.7	8.0	7.0	7.5
23	13.9	10.7	11.9	9.8	8.1	9.0	12.0	9.9	11.5	7.3	5.8	6.6
24	11.2	9.6	10.3	10.0	8.2	9.1	9.9	8.2	8.9	6.0	4.5	5.4
25	10.8	8.3	9.6	10.4	8.8	9.6	10.6	9.1	9.8	5.5	4.3	5.1
26	13.8	10.3	11.8	10.3	8.7	9.6	10.5	7.5	9.2	4.7	3.2	4.1
27	14.2	13.7	13.9	10.2	8.7	9.5	7.5	6.4	6.9	6.0	3.3	4.6
28	14.0	12.7	13.5	12.5	10.0	11.4	6.7	5.5	6.2	6.1	3.2	5.3
29	13.6	11.4	12.6	13.4	11.7	12.6	6.8	5.3	6.2	3.2	1.1	2.1
30	14.5	12.2	13.4	14.3	13.3	13.8	9.5	6.7	7.9	4.5	2.4	3.4
31	15.3	13.6	14.4	---	---	---	11.5	9.5	10.6	3.3	1.2	2.4
Month	22.3	8.3	15.5	17.0	7.1	11.0	14.7	1.6	7.8	12.9	1.1	7.3

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TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	February			March			April			May		
1	4.0	2.7	3.3	9.6	8.4	9.0	17.4	16.6	17.0	20.3	15.7	18.1
2	4.7	3.7	4.3	9.8	7.9	8.9	19.8	15.8	17.5	19.5	16.9	18.4
3	3.7	2.2	3.0	9.6	7.0	8.2	18.5	14.9	16.9	19.6	17.7	18.6
4	3.3	1.6	2.4	8.0	5.8	6.8	18.2	15.2	16.9	20.0	17.8	19.0
5	2.3	0.8	1.6	8.1	4.6	6.5	15.2	11.2	13.0	19.4	16.8	18.0
6	3.1	0.6	1.8	9.3	6.1	7.7	12.1	9.4	10.9	19.2	17.2	18.0
7	7.5	3.1	5.4	9.9	6.6	8.3	10.4	7.4	8.7	20.2	15.6	17.7
8	6.7	5.5	6.0	10.5	6.9	8.8	11.0	6.7	8.7	20.2	15.6	17.9
9	5.5	3.2	4.1	11.1	7.8	9.5	10.1	7.7	8.9	21.3	16.1	18.7
10	3.8	2.0	2.9	11.3	9.0	10.1	12.1	8.0	10.0	22.4	18.0	20.1
11	4.5	1.9	3.2	13.0	9.9	11.2	12.6	10.9	11.6	23.6	19.1	21.3
12	6.8	3.5	5.1	11.7	8.3	10.2	15.0	10.4	12.4	21.7	20.0	20.7
13	7.9	6.4	7.2	11.7	8.7	10.5	13.0	10.5	11.6	23.2	18.8	20.8
14	7.6	3.5	5.8	13.4	11.1	12.2	12.8	10.8	11.9	22.5	19.3	20.9
15	4.2	2.3	3.2	13.4	11.8	12.6	12.8	8.9	11.6	23.0	19.3	21.1
16	3.9	1.8	2.8	13.1	8.9	11.3	13.0	8.1	10.2	21.2	19.0	20.0
17	2.9	2.1	2.5	8.9	7.0	8.0	14.1	9.7	11.8	21.1	17.4	19.2
18	3.9	1.8	2.8	9.7	6.7	8.0	12.9	10.4	11.9	20.1	16.9	18.5
19	5.0	2.0	3.6	11.1	6.9	8.9	13.8	11.2	12.5	19.9	15.3	17.6
20	6.8	4.4	5.5	11.5	10.1	10.7	15.2	10.1	12.6	20.6	17.3	18.6
21	9.8	6.8	8.2	13.6	10.1	11.7	14.6	11.4	13.1	21.1	15.1	18.0
22	9.9	7.4	8.4	14.4	11.4	12.9	15.4	11.9	13.4	22.3	17.5	19.8
23	8.3	6.0	7.2	14.8	11.2	13.1	17.5	13.3	15.3	22.4	18.7	20.6
24	7.6	5.4	6.7	15.7	12.1	13.9	16.4	14.9	15.6	23.6	19.2	21.3
25	10.7	7.4	9.1	16.5	12.4	14.5	19.1	15.1	17.0	24.0	19.6	21.7
26	10.2	8.0	9.0	16.2	13.9	15.2	18.1	16.3	16.8	22.8	20.4	21.6
27	9.9	7.3	8.6	17.3	14.4	15.9	17.5	15.8	16.5	23.5	20.9	22.0
28	9.6	6.5	8.2	16.8	14.7	15.9	16.0	14.1	14.9	24.6	19.7	22.0
29	---	---	---	17.1	14.9	16.2	18.6	13.4	15.8	25.1	20.3	22.6
30	---	---	---	18.1	15.2	16.5	19.4	13.9	16.7	24.7	20.5	22.6
31	---	---	---	18.3	15.2	16.7	---	---	---	24.6	20.6	22.6
Month	10.7	0.6	5.1	18.3	4.6	11.3	19.8	6.7	13.4	25.1	15.1	19.9

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TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	23.7	21.2	22.5	28.6	24.1	26.1	28.0	24.5	26.1	27.6	24.1	25.8
2	22.8	20.8	21.8	26.3	24.2	25.4	28.2	24.6	26.0	27.2	24.0	25.6
3	24.6	21.3	22.6	25.6	22.7	24.0	28.1	23.6	25.7	27.5	23.8	25.5
4	24.6	21.4	22.8	25.5	22.4	24.0	29.0	24.6	26.6	27.5	23.5	25.4
5	25.0	21.0	22.9	28.0	22.9	25.2	27.4	24.3	25.8	26.7	22.6	24.7
6	25.8	21.2	23.4	28.9	24.3	26.3	28.8	24.9	26.7	26.4	22.8	24.6
7	25.8	21.4	23.6	26.6	24.9	25.5	29.6	25.5	27.3	26.4	23.7	24.9
8	26.6	23.3	24.6	27.7	25.0	26.1	30.2	25.5	27.6	26.9	22.8	24.8
9	27.0	22.6	24.5	28.1	24.2	26.0	30.4	25.8	27.9	26.1	22.7	24.5
10	27.1	22.4	24.6	26.3	24.3	25.3	29.9	25.7	27.7	25.8	23.9	25.0
11	24.6	22.7	23.4	25.4	23.7	24.6	29.8	25.4	27.5	25.0	23.6	24.1
12	26.2	21.3	23.6	27.2	22.8	24.7	29.8	25.3	27.3	26.2	22.7	24.2
13	25.3	21.5	23.5	24.6	22.6	23.2	29.3	25.1	27.1	24.6	21.6	23.2
14	25.1	22.2	23.5	25.6	21.5	23.3	29.0	24.8	26.8	23.9	21.0	22.7
15	25.4	21.2	23.1	27.6	23.0	25.1	28.8	24.2	26.4	23.7	20.6	21.7
16	25.6	22.1	23.7	27.9	24.0	25.6	29.2	25.1	27.0	22.3	18.8	20.7
17	26.9	21.9	24.2	26.0	23.8	24.9	28.9	25.7	27.2	22.8	19.9	21.3
18	25.3	22.6	23.9	27.1	23.8	25.2	28.8	24.5	26.6	24.0	20.1	22.0
19	26.5	22.9	24.4	28.4	24.0	25.8	28.7	24.8	26.6	23.7	20.2	22.0
20	27.0	22.7	24.5	26.3	24.0	25.1	28.5	25.1	26.7	24.0	20.4	22.2
21	26.4	21.4	23.8	27.3	22.6	24.8	28.4	24.9	26.7	24.1	21.6	22.8
22	25.9	21.1	23.5	26.2	22.6	24.4	29.7	25.1	27.3	25.1	21.8	23.4
23	27.2	22.4	24.6	25.7	22.7	24.1	28.9	25.4	27.2	25.7	22.1	23.9
24	27.3	24.0	25.5	24.1	22.8	23.3	29.3	25.7	27.1	26.0	22.6	24.3
25	25.3	23.3	24.0	23.8	22.2	22.8	28.7	24.7	26.6	25.8	22.5	24.2
26	24.9	22.8	23.8	25.9	21.9	23.7	26.8	24.9	25.7	25.3	22.4	24.0
27	27.1	22.9	24.6	26.2	23.4	24.7	27.5	23.9	25.6	24.0	22.1	23.1
28	26.1	23.6	24.8	24.9	22.3	23.4	28.1	24.6	26.3	24.0	21.3	22.4
29	27.8	23.7	25.4	26.3	22.7	24.2	28.5	24.6	26.4	21.9	18.4	20.2
30	27.4	24.0	25.6	27.4	23.6	25.2	26.6	24.8	25.6	21.4	17.9	19.7
31	---	---	---	28.3	23.9	25.9	26.8	23.8	25.4	---	---	---
Month	27.8	20.8	23.9	28.9	21.5	24.8	30.4	23.6	26.7	27.6	17.9	23.4

	Max	Min	Mean
Year	30.4	0.6	15.9