

Water-Data Report 2008

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 (maximum discharge).

GAGE.--Water-stage recorder. Elevation of gage is 1,260 ft above National Geodetic Vertical Datum 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.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	62	58	68	983	1,100	223	152	138	137	79	86	83
2	58	58	73	772	1,090	207	146	132	108	69	62	86
3	57	405	86	558	1,050	193	476	475	101	69	60	72
4	59	69	76	520	729	1,710	492	575	97	68	58	69
5	61	61	74	435	701	3,160	554	128	93	74	58	67
6	58	63	73	433	2,180	1,830	707	125	90	74	57	67
7	58	60	72	363	1,810	1,650	358	123	95	70	56	67
8	57	59	73	87	1,340	1,960	169	124	91	69	56	66
9	57	59	77	89	963	2,780	158	136	87	85	55	78
10	57	59	76	121	703	1,260	153	485	85	78	55	76
11	56	59	74	690	1,060	698	151	610	96	78	54	71
12	56	59	73	957	1,300	178	152	139	76	72	54	68
13	56	60	73	468	850	169	142	128	83	102	54	70
14	56	61	77	591	478	165	140	127	87	88	53	68
15	57	89	74	584	165	622	139	129	86	74	53	76
16	56	64	84	578	458	611	137	222	82	85	60	71
17	56	61	76	608	528	354	135	480	84	79	378	69
18	79	60	74	596	260	410	134	628	80	77	94	68
19	64	61	75	587	471	2,200	522	135	80	76	58	67
20	71	60	74	576	813	2,600	575	144	79	76	61	66
21	58	61	101	568	1,010	1,060	135	146	79	77	60	66
22	57	105	81	574	1,160	839	132	130	79	131	59	65
23	68	69	98	577	1,140	268	131	125	78	146	59	64
24	94	63	86	571	1,120	259	129	123	77	135	58	64
25	64	62	82	565	1,130	177	128	120	76	134	62	63
26	61	89	85	557	1,220	169	135	118	75	178	135	63
27	60	76	285	552	1,180	165	137	119	78	144	108	63
28	58	67	1,440	547	1,150	402	175	149	79	138	97	64
29	58	64	3,190	550	962	979	152	136	92	133	85	63
30	58	63	995	595	---	949	143	121	81	83	80	62
31	58	---	970	567	---	711	---	128	---	89	78	---
Total	1,885	2,304	8,915	16,819	28,121	28,958	6,989	6,598	2,611	2,930	2,403	2,062
Mean	60.8	76.8	288	543	970	934	233	213	87.0	94.5	77.5	68.7
Max	94	405	3,190	983	2,180	3,160	707	628	137	178	378	86
Min	56	58	68	87	165	165	128	118	75	68	53	62

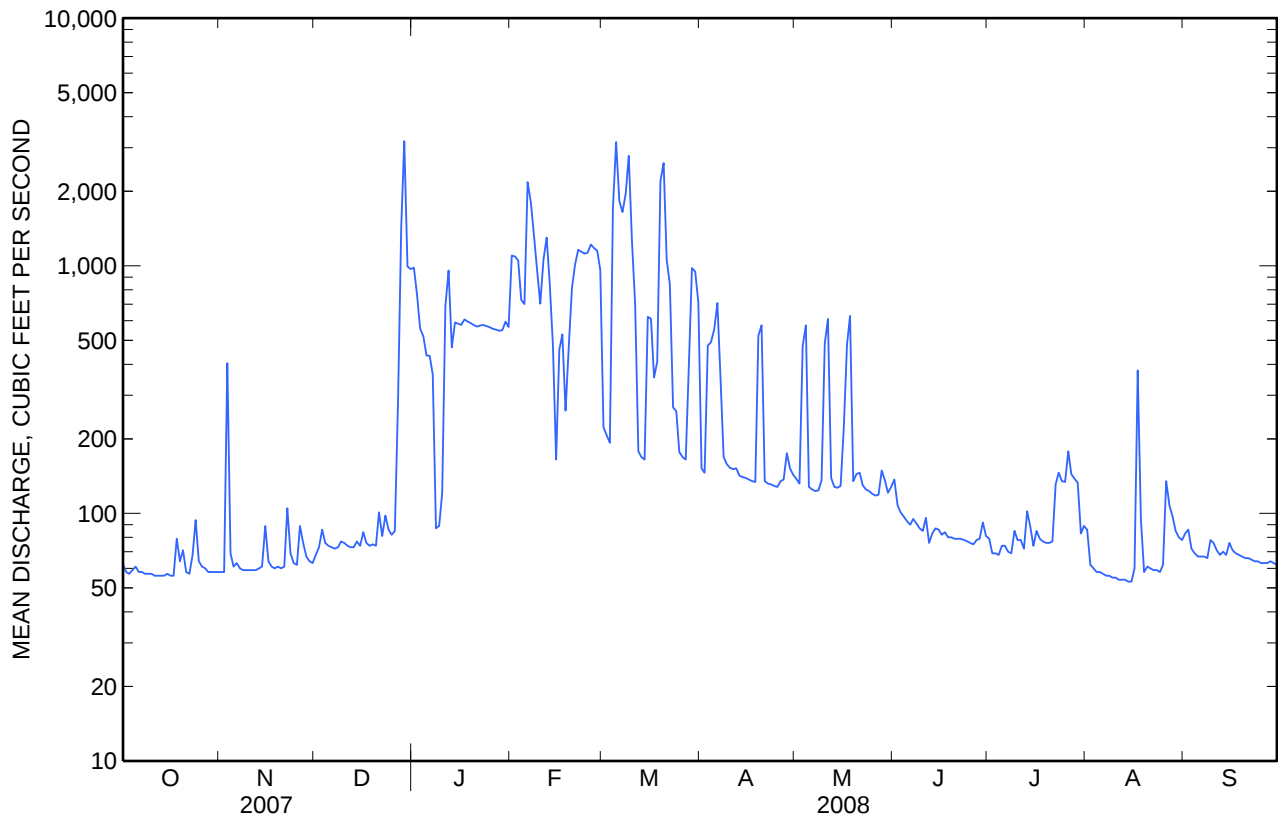
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	49.4	79.3	179	218	228	231	170	233	90.1	90.4	59.7	77.0
Max	113	159	733	589	970	934	275	889	154	131	95.6	165
(WY)	(2007)	(2007)	(2005)	(2002)	(2008)	(2008)	(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 2007		Water Year 2008		Water Years 2000 - 2008	
Annual total	58,545		110,595			
Annual mean	160		302		142	
Highest annual mean					302	2008
Lowest annual mean					54.9	2001
Highest daily mean	3,190	Dec 29	3,190	Dec 29	8,350	May 6, 2003
Lowest daily mean	56	Oct 11	53	Aug 14	9.1	Sep 17, 2000
Annual seven-day minimum	56	Oct 11	54	Aug 9	9.8	Sep 14, 2000
Maximum peak flow			5,930	Dec 28	^a 15,000	May 6, 2003
Maximum peak stage			7.96	Dec 28	13.30	May 6, 2003
Instantaneous low flow			48	Oct 18	^a 8.8	Sep 16, 2000
10 percent exceeds	235		880		198	
50 percent exceeds	95		90		82	
90 percent exceeds	59		59		28	

^aSee Remarks.

0351706800 CHEOAH RIVER NEAR BEARPEN GAP NEAR TAPOCO, NC—Continued**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, 28.8°C, August 6; minimum recorded, 4.6°C, December 18.

**TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
October			November			December			January			
1	21.4	17.9	19.7	16.0	13.3	14.7	9.7	7.3	8.5	9.8	8.5	9.4
2	21.8	18.3	20.1	16.5	14.5	15.5	12.0	9.2	10.4	8.5	6.9	7.8
3	22.1	19.5	20.8	17.7	13.5	15.5	12.2	8.4	10.7	7.8	6.4	7.1
4	23.6	21.3	22.4	15.5	12.3	13.6	8.4	7.0	7.6	8.3	6.8	7.4
5	24.1	21.9	22.8	14.2	11.5	12.9	9.4	6.9	8.1	9.4	7.4	8.3
6	24.0	21.0	22.6	14.1	11.3	13.2	8.6	7.2	7.8	10.3	8.8	9.4
7	24.0	21.2	22.7	11.3	9.6	10.3	9.5	7.2	8.2	10.4	8.8	9.5
8	24.0	21.2	22.7	10.9	8.6	9.8	11.4	9.5	10.6	11.8	9.9	10.9
9	23.4	21.4	22.6	12.0	9.5	10.8	12.7	11.4	12.0	11.9	10.1	11.4
10	22.9	20.4	21.9	12.1	10.6	11.4	13.5	12.1	12.8	11.2	9.8	10.4
11	20.4	17.5	18.5	11.2	9.2	10.4	13.2	11.9	12.7	11.1	9.1	10.5
12	18.1	15.6	16.9	12.4	10.1	11.3	13.1	12.1	12.6	9.8	8.8	9.2
13	17.9	14.9	16.5	13.2	11.7	12.4	14.3	12.6	13.4	9.5	7.5	8.6
14	18.5	15.4	17.0	15.4	13.1	14.2	13.4	10.9	12.3	8.9	7.6	8.2
15	19.4	16.5	18.0	15.3	9.9	12.6	11.2	9.8	10.6	8.0	7.1	7.6
16	20.2	17.8	19.0	9.9	8.4	9.2	11.3	7.0	9.6	8.3	6.8	7.5
17	20.6	18.7	19.7	9.9	7.4	8.7	7.0	5.3	5.9	8.5	7.0	7.8
18	22.2	19.8	20.7	12.6	9.8	11.3	6.0	4.6	5.4	8.8	7.7	8.2
19	21.4	19.5	20.6	13.5	12.0	12.7	7.6	6.0	6.9	7.8	6.8	7.5
20	19.5	16.5	18.4	13.4	11.8	12.7	8.8	7.2	7.9	6.8	5.5	6.0
21	17.4	14.6	16.2	14.0	11.8	12.9	10.3	8.8	9.6	7.3	5.5	6.3
22	18.0	15.9	17.0	13.8	11.2	12.9	11.1	9.0	10.0	7.9	6.7	7.4
23	20.1	18.0	19.0	11.2	8.1	9.7	12.0	8.9	11.1	8.2	7.4	7.7
24	19.4	18.0	18.5	8.7	6.7	7.8	8.9	7.0	7.6	7.4	5.6	6.9
25	18.3	16.8	17.6	11.6	8.6	10.1	7.2	6.6	6.9	7.2	5.2	6.1
26	17.7	15.9	16.8	13.3	11.6	12.6	8.4	7.1	7.7	7.8	6.5	7.0
27	17.2	15.8	16.5	12.8	9.8	11.6	10.9	8.4	9.5	7.8	6.3	6.9
28	16.5	14.7	15.7	9.8	8.1	9.0	11.0	9.9	10.3	8.2	6.0	7.0
29	15.4	13.2	14.5	9.7	8.1	9.0	10.9	10.0	10.6	9.0	7.4	8.0
30	14.8	12.6	13.9	9.1	7.7	8.5	10.4	10.0	10.2	8.4	6.0	6.9
31	14.3	11.9	13.4	---	---	---	10.4	9.4	9.9	7.8	5.8	6.8
Month	24.1	11.9	18.8	17.7	6.7	11.6	14.3	4.6	9.6	11.9	5.2	8.1

0351706800 CHEOAH RIVER NEAR BEARPEN GAP NEAR TAPOCO, NC—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	February			March			April			May		
1	7.9	6.8	7.4	9.6	6.7	7.9	16.7	12.2	14.2	18.3	14.1	16.1
2	8.2	6.5	7.2	9.4	6.1	8.0	15.8	13.6	14.8	20.3	16.1	18.0
3	8.3	6.8	7.5	10.9	7.4	9.3	14.1	12.2	12.9	18.5	17.0	17.6
4	8.7	7.9	8.2	11.3	8.6	10.5	14.1	12.2	13.1	19.2	16.5	17.5
5	10.3	8.4	9.3	8.7	7.8	8.2	13.2	12.5	12.8	19.3	14.2	16.7
6	10.4	8.2	9.4	9.9	7.7	8.5	14.9	12.2	13.3	19.6	14.8	17.2
7	8.7	7.4	8.0	9.2	8.0	8.7	16.4	12.4	14.4	19.5	16.4	17.9
8	8.9	7.2	7.9	9.0	7.3	8.0	17.3	13.6	15.5	20.3	18.0	19.0
9	9.4	7.5	8.3	8.4	7.2	7.6	17.9	14.0	15.9	21.2	17.6	19.2
10	8.8	6.8	7.7	9.8	7.0	8.1	17.8	14.6	16.2	20.2	18.3	19.1
11	8.4	5.9	7.0	9.0	7.4	8.1	18.6	16.0	17.1	20.6	17.3	18.9
12	9.1	7.5	8.3	9.8	6.0	7.9	18.7	15.6	16.8	18.2	15.1	16.6
13	8.7	6.2	7.5	10.8	7.3	9.1	15.6	12.9	14.1	19.2	14.4	16.8
14	8.0	6.0	6.8	10.4	8.7	9.6	12.9	10.9	11.6	17.6	16.3	16.7
15	8.5	5.6	7.1	9.8	9.4	9.6	14.8	9.9	12.0	17.0	16.2	16.5
16	9.8	8.0	8.6	10.4	8.0	9.2	15.5	10.4	12.9	17.6	16.3	16.7
17	9.6	8.3	8.9	10.4	7.3	8.8	16.8	11.8	14.2	19.1	14.3	16.6
18	9.3	7.8	8.7	10.3	8.5	9.3	17.7	13.0	15.3	18.1	16.4	17.2
19	7.9	6.3	7.2	10.3	8.8	9.9	17.0	15.5	16.1	19.8	14.9	17.2
20	8.9	6.9	7.8	9.6	7.7	8.5	16.3	14.2	15.2	20.9	17.6	18.7
21	8.3	7.4	7.9	11.1	7.8	9.2	17.4	12.0	14.7	20.1	16.2	17.9
22	8.8	8.0	8.3	11.9	8.9	10.0	18.9	14.0	16.4	19.8	15.2	17.5
23	8.4	7.5	8.1	10.4	7.5	8.8	19.7	15.5	17.5	21.2	16.6	18.6
24	8.4	7.3	7.8	8.9	6.6	7.8	19.5	16.5	18.1	21.8	18.4	19.8
25	9.5	7.7	8.3	9.9	5.8	7.8	19.9	17.3	18.6	22.2	17.6	19.8
26	9.3	7.2	8.5	10.8	8.0	9.3	19.4	17.5	18.6	21.8	18.6	20.0
27	7.2	6.2	6.7	12.0	9.4	10.7	18.7	17.4	17.9	23.1	19.3	21.0
28	8.2	6.2	6.9	12.3	10.8	11.5	17.4	15.5	16.7	21.5	19.3	20.5
29	7.9	6.8	7.2	11.3	10.5	10.9	16.4	12.9	14.7	22.9	19.4	20.8
30	---	---	---	12.1	10.8	11.3	16.9	11.9	14.4	22.6	19.8	21.1
31	---	---	---	12.7	11.0	11.6	---	---	---	23.9	20.7	22.0
Month	10.4	5.6	7.9	12.7	5.8	9.2	19.9	9.9	15.2	23.9	14.1	18.4

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TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	22.3	20.1	20.9	24.9	20.0	22.4	27.7	23.2	25.1	26.3	23.5	24.9
2	24.2	19.3	21.5	24.8	19.9	22.3	27.2	23.5	25.4	26.6	23.5	25.0
3	23.1	20.2	21.6	23.8	20.3	22.2	28.4	23.8	25.9	26.9	23.2	24.9
4	25.7	20.8	22.9	25.6	21.2	23.3	28.1	23.1	25.5	25.8	22.0	23.9
5	26.1	21.8	23.7	25.9	22.5	24.0	27.5	23.1	25.3	26.3	22.2	23.9
6	27.1	22.2	24.5	27.0	22.4	24.4	28.8	24.1	26.2	24.0	21.7	22.9
7	25.1	23.3	24.1	26.9	22.8	24.8	26.7	24.5	25.7	25.7	21.6	23.5
8	27.5	22.2	24.4	27.5	23.1	25.1	26.8	23.0	24.7	25.8	21.8	23.8
9	27.0	22.9	24.8	26.7	23.4	24.7	25.4	21.0	23.2	24.4	23.0	23.4
10	27.0	23.4	25.0	25.0	23.0	23.8	25.3	20.9	23.0	24.1	22.0	23.1
11	26.0	23.0	24.6	27.0	22.5	24.4	25.8	20.7	23.1	25.5	22.3	23.7
12	26.8	22.8	24.7	27.8	22.7	25.0	23.5	20.2	22.2	25.9	23.0	24.3
13	27.5	22.8	25.0	25.0	22.7	23.6	25.1	21.5	23.1	26.5	22.9	24.6
14	25.1	23.1	23.9	26.6	21.8	23.8	26.4	21.9	24.0	26.4	23.6	24.9
15	27.2	22.0	24.2	26.7	21.6	24.0	26.3	21.6	23.9	25.1	22.1	23.3
16	26.9	21.8	24.2	26.8	22.1	24.3	24.3	22.3	23.2	22.3	21.0	21.6
17	26.9	22.8	24.5	27.2	22.4	24.4	26.1	21.1	23.4	22.8	20.1	21.4
18	25.1	20.3	22.7	27.1	22.4	24.6	25.6	22.0	23.8	24.1	20.7	22.3
19	24.7	19.4	21.9	26.7	22.5	24.5	27.1	22.4	24.5	23.1	20.2	21.7
20	22.6	19.7	21.3	27.1	22.4	24.6	26.7	22.6	24.6	23.0	19.6	21.3
21	23.8	20.4	22.0	28.6	23.7	25.7	26.4	22.3	24.3	23.3	20.1	21.6
22	25.9	21.0	23.2	26.9	23.4	24.9	26.1	22.4	24.2	23.3	20.0	21.6
23	25.9	21.2	23.5	26.5	22.9	24.5	27.3	23.3	25.0	22.7	19.4	21.1
24	26.2	20.9	23.4	26.6	23.0	24.9	25.6	23.1	24.4	22.1	19.0	20.5
25	26.2	20.8	23.3	24.8	23.2	24.0	25.1	23.5	24.3	20.6	17.4	19.2
26	25.3	21.2	23.3	24.3	22.7	23.5	24.1	21.2	22.6	19.7	17.9	18.9
27	25.9	22.5	24.0	27.8	23.6	25.4	23.2	21.2	22.2	20.4	18.9	19.6
28	27.1	22.2	24.4	26.5	23.8	25.4	24.2	22.3	23.0	22.6	19.6	20.9
29	24.6	22.7	23.6	27.5	23.9	25.7	25.4	21.5	23.3	22.5	19.6	20.9
30	24.6	22.0	23.1	28.5	24.1	26.0	26.2	22.1	24.0	21.2	18.4	20.0
31	---	---	---	26.0	24.1	24.9	26.7	23.0	24.7	---	---	---
Month	27.5	19.3	23.5	28.6	19.9	24.4	28.8	20.2	24.1	26.9	17.4	22.4

	Max	Min	Mean
Year	28.8	4.6	16.1