

03568000 TENNESSEE RIVER AT CHATTANOOGA, TN

Middle Tennessee-Hiwassee Basin
Middle Tennessee-Chickamauga Subbasin

LOCATION.--Lat 35°05'12.13", long 85°16'42.50" referenced to North American Datum of 1927, Hamilton County, TN, Hydrologic Unit 06020001, 0.5 mi downstream from South Chickamauga Creek, 3.0 mi downstream from Chickamauga Dam, 3.5 mi upstream from Walnut Street Bridge in Chattanooga, and at mile 467.6.

DRAINAGE AREA.--21,400 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--April 1874 to current year. Monthly discharges only for some periods, published in WSP 1306. July 1930 to December 1935, published as "at Hales Bar, near Chattanooga." Gage-height records collected in this vicinity since 1874 are contained in reports of U.S. Weather Bureau.

REVISED RECORDS.--WSP 353: 1874-1912. WSP 783: 1917. WSP 823: 1875(M). WSP 973: 1942. WSP 1306: 1916(M). WSP 1386: 1932-34 (station at Hales Bar near Chattanooga).

GAGE.--Water-stage recorder. Datum of gage is 621.12 ft above NGVD of 1929. Prior to Feb. 1, 1939, nonrecording or recording gages at several sites from 7.0 mi upstream from Chattanooga to Hales Bar Dam 33 mi downstream at or within 0.2 ft of present datum, except nonrecording gage at Bridgeport, AL, 49.9 mi downstream at different datum Oct. 22, 1913, to Feb. 28, 1915, and Oct. 1, 1918, to Jan. 5, 1921. Auxiliary gages at several sites parts of periods since Feb. 28, 1915. Present auxiliary gage at site 2.2 mi downstream from base gage at same datum.

REMARKS.--Records fair. Flow almost completely regulated by many upstream reservoirs.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 410,000 ft³/s, Mar. 1, 1875, gage height, 53.8 ft, present datum, at Walnut Street, from rating curve extended above 250,000 ft³/s; minimum daily, 1,090 ft³/s, May 18, 2004; minimum gage height, 0.0 ft, Sept. 11-14, 1881, Sept. 19, 1883.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 57.9 ft, Mar. 11, 1867, present datum at Walnut Street, discharge about 459,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 63,800 ft³/s, Jan. 23; maximum gage height, 18.29 ft, Jan. 24; minimum daily discharge, 9,580 ft³/s, May 20; minimum gage height, 11.16 ft, Sept. 19.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	41,300	34,800	34,900	14,400	45,500	31,500	16,200	27,900	29,700	17,000	36,300	32,400
2	26,400	32,200	28,400	13,700	37,400	20,700	15,500	31,200	16,200	18,400	32,700	17,500
3	33,000	27,500	26,400	25,600	35,600	33,900	16,200	26,600	14,000	25,900	28,300	20,400
4	37,100	24,100	16,400	31,900	18,800	17,200	13,700	26,500	14,800	20,400	26,400	23,000
5	34,300	19,800	26,300	35,000	24,800	33,600	13,300	21,200	21,800	14,300	20,000	32,900
6	34,700	22,700	33,100	39,400	41,400	35,900	13,400	14,100	18,900	19,300	20,900	26,500
7	32,800	31,800	36,400	33,000	39,900	37,500	13,500	15,100	17,900	27,200	27,800	23,400
8	18,800	23,200	35,800	30,400	40,600	31,000	19,100	19,700	27,800	29,600	24,600	28,700
9	26,800	24,700	35,900	31,300	35,900	30,400	16,400	23,800	26,100	25,400	24,200	29,500
10	34,900	26,100	36,300	31,300	35,000	14,600	32,600	23,800	19,700	26,300	24,600	24,400
11	38,200	28,000	30,300	30,200	33,600	15,500	27,500	23,200	20,000	20,800	24,700	28,500
12	35,700	15,800	24,700	16,200	43,700	18,900	25,200	13,700	31,500	22,300	24,500	28,300
13	31,800	15,900	34,300	31,200	43,000	17,100	27,100	10,700	17,400	21,200	25,500	27,000
14	34,700	23,900	38,200	34,400	41,900	20,000	27,000	10,700	17,100	26,300	25,200	29,300
15	19,700	22,500	32,500	30,600	23,100	23,200	15,300	16,200	16,700	28,600	24,900	29,700
16	14,700	20,100	35,200	39,700	17,600	28,400	15,700	17,000	18,800	25,300	25,400	30,400
17	24,800	34,800	40,800	41,500	17,300	17,600	25,000	10,800	17,900	25,100	26,200	30,100
18	32,200	34,800	28,500	46,500	30,500	13,300	25,800	14,700	18,400	20,300	26,100	30,600
19	28,700	35,000	28,000	51,100	42,500	12,600	19,500	9,700	22,500	17,000	25,500	19,500
20	27,400	23,400	33,900	54,200	42,800	15,200	23,800	9,580	16,100	17,200	23,700	18,300
21	28,900	32,600	42,200	54,500	37,400	32,400	16,600	12,600	18,300	18,700	30,400	16,300
22	19,800	18,600	33,100	57,800	36,000	19,200	17,300	14,800	21,300	17,400	28,300	13,800
23	16,400	39,600	33,400	61,900	15,300	19,900	18,800	14,800	23,900	18,600	26,900	20,400
24	30,800	35,000	12,400	61,600	23,700	18,600	26,000	16,400	12,900	17,400	27,200	33,300
25	33,800	30,400	17,600	54,100	24,200	14,000	36,500	16,900	18,800	16,300	23,700	31,900
26	27,100	12,600	33,700	46,100	34,100	16,500	40,400	21,900	22,100	17,500	20,800	30,800
27	31,300	15,400	33,400	45,400	42,900	16,500	26,500	19,200	19,100	16,800	19,600	30,900
28	31,400	15,800	12,500	45,300	26,600	16,500	24,900	18,600	27,500	17,900	32,800	31,500
29	26,000	27,500	23,700	45,800	---	15,300	30,600	17,600	16,600	22,200	22,600	31,200
30	24,300	32,800	22,600	45,900	---	15,100	20,300	18,700	28,400	21,400	26,600	28,300
31	24,600	---	16,900	45,600	---	12,200	---	18,700	---	29,800	25,700	---
Total	902,400	781,400	917,800	1,225,600	931,100	664,300	659,700	556,380	612,200	661,900	802,100	798,800
Mean	29,110	26,050	29,610	39,540	33,250	21,430	21,990	17,950	20,410	21,350	25,870	26,630
Max	41,300	39,600	42,200	61,900	45,500	37,500	40,400	31,200	31,500	29,800	36,300	33,300
Min	14,700	12,600	12,400	13,700	15,300	12,200	13,300	9,580	12,900	14,300	19,600	13,800

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 2006, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	29,410	34,490	44,580	48,220	49,740	45,580	28,280	28,660	29,540	29,800	31,500	29,410
Max	63,270	68,330	94,310	127,900	132,800	98,850	107,800	87,890	65,280	49,670	43,580	60,050
(WY)	(1990)	(1958)	(2005)	(1974)	(1957)	(1963)	(1994)	(1984)	(1989)	(1989)	(2003)	(2004)
Min	16,690	16,340	13,660	17,370	20,520	14,380	7,503	7,805	11,310	11,230	12,740	14,090
(WY)	(1984)	(1988)	(1988)	(1986)	(2000)	(1988)	(1986)	(1988)	(1988)	(1988)	(1988)	(1968)

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SUMMARY STATISTICS

	Calendar Year 2005		Water Year 2006		*Water Years 1954 - 2006	
Annual total	13,475,100		9,513,680			
Annual mean	36,920		26,060		35,720	
Highest annual mean					53,260	1973
Lowest annual mean					15,070	1988
Highest daily mean	73,100	Jan 15	61,900	Jan 23	251,000	Mar 18, 1973
Lowest daily mean	12,400	Dec 24	9,580	May 20	1,090	May 18, 2004
Annual seven-day minimum	21,200	Apr 23	12,400	May 17	4,800	Apr 10, 2004
Maximum peak flow			63,800	Jan 23	267,000	Mar 18, 1973
Maximum peak stage			18.29	Jan 24	38.98	Mar 18, 1973
10 percent exceeds	50,300		37,400		58,100	
50 percent exceeds	36,300		25,400		31,300	
90 percent exceeds	22,600		15,300		15,700	

^a Regulated period only

