

03568000 TENNESSEE RIVER AT CHATTANOOGA, TN

LOCATION.--Lat 35°05'12", long 85°16'42", Hamilton County, 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, approximately.

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 regulated since 1936 by many upstream reservoirs (see p. 358 and Water Resources Data for adjoining states).

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, 160,000 ft³/s, Sept. 18; maximum gage height, 30.90 ft, Sept. 17; minimum daily discharge, 1,090 ft³/s, May 18; minimum gage height, 11.15 ft, Oct. 14.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34,700	36,800	49,900	44,100	23,600	13,100	23,500	6,960	25,000	51,100	26,000	33,200
2	33,100	34,100	49,900	45,000	27,500	17,400	19,500	5,790	25,200	53,400	30,100	26,400
3	40,100	33,900	53,600	39,600	28,800	12,400	6,660	22,400	26,700	39,200	27,100	34,500
4	37,000	33,100	60,700	39,100	40,300	24,300	3,940	5,520	19,900	37,500	28,300	35,900
5	30,000	35,300	63,500	43,200	47,200	40,100	5,220	7,430	21,400	37,200	29,400	31,200
6	31,200	32,500	65,600	50,100	74,400	47,800	6,380	11,000	28,900	35,400	31,500	33,900
7	39,100	39,900	64,600	58,200	87,900	59,600	4,730	13,000	30,000	29,600	23,600	33,100
8	37,000	42,600	64,800	60,000	79,900	70,800	6,450	6,840	19,100	31,600	16,500	37,400
9	37,000	40,100	64,800	61,800	74,800	68,400	5,100	10,100	26,600	27,700	32,500	32,400
10	30,500	37,400	65,200	48,500	73,600	68,100	4,270	11,200	29,600	22,000	24,800	35,500
11	24,600	38,100	66,500	49,000	72,300	57,500	3,830	10,300	28,500	11,000	29,900	42,600
12	32,500	38,400	63,000	48,600	68,100	43,500	5,190	11,200	25,500	29,900	26,500	39,700
13	36,600	40,900	56,300	46,100	58,400	37,000	5,970	12,000	23,700	26,600	30,900	49,500
14	30,300	34,400	56,800	42,800	52,000	36,500	5,850	11,800	28,300	25,300	27,600	60,900
15	40,500	38,600	57,800	41,800	51,600	39,800	4,050	5,560	15,500	21,300	15,800	71,500
16	36,400	38,100	57,500	41,600	52,900	32,700	4,470	4,650	27,700	24,700	22,300	87,900
17	33,800	31,200	58,000	42,800	52,600	37,800	5,460	6,450	29,500	13,800	32,700	143,000
18	29,200	39,400	58,000	42,300	48,500	32,800	4,460	1,090	30,000	10,300	31,500	153,000
19	30,300	44,500	54,900	40,100	41,200	30,400	10,300	1,670	30,100	33,600	27,400	145,000
20	36,600	43,900	49,900	46,600	41,300	15,700	12,100	7,520	26,200	18,800	32,700	123,000
21	38,200	48,000	49,700	52,100	29,000	16,200	13,000	12,000	28,100	27,600	28,500	77,900
22	35,100	56,100	47,800	48,500	20,300	31,800	13,900	6,490	15,300	20,900	17,100	62,300
23	33,700	55,900	46,100	42,800	41,700	29,500	12,700	3,410	24,300	26,000	38,100	55,900
24	34,200	55,900	46,200	42,900	41,500	29,700	10,300	15,700	35,600	14,000	28,600	54,700
25	32,100	57,600	45,700	29,900	37,700	24,200	10,700	8,680	42,400	13,600	27,100	54,800
26	29,800	61,000	45,500	36,300	41,900	31,400	11,400	4,550	44,000	28,300	23,700	54,200
27	30,900	61,500	45,200	47,500	38,100	10,900	12,600	7,040	41,500	16,600	28,600	52,500
28	30,200	55,900	44,600	45,000	38,700	6,020	15,400	10,100	42,800	18,200	35,400	49,600
29	30,400	46,600	44,500	40,100	26,400	6,820	12,200	6,940	37,900	24,600	26,200	44,900
30	35,600	55,200	44,800	42,900	---	7,430	13,700	4,240	35,800	27,900	36,800	45,200
31	34,400	---	44,400	23,600	---	19,700	---	11,200	---	26,200	30,700	---
TOTAL	1,045,100	1,306,900	1,685,800	1,382,900	1,412,200	999,370	273,330	262,830	865,100	823,900	867,900	1,801,600
MEAN	33,710	43,560	54,380	44,610	48,700	32,240	9,111	8,478	28,840	26,580	28,000	60,050
MAX	40,500	61,500	66,500	61,800	87,900	70,800	23,500	22,400	44,000	53,400	38,100	153,000
MIN	24,600	31,200	44,400	23,600	20,300	6,020	3,830	1,090	15,300	10,300	15,800	26,400

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 2004, BY WATER YEAR (WY)

	29,200	34,250	43,900	48,310	50,140	46,180	28,250	28,870	29,590	29,710	31,490	29,250
MEAN	29,200	34,250	43,900	48,310	50,140	46,180	28,250	28,870	29,590	29,710	31,490	29,250
MAX	63,270	68,330	94,270	127,900	132,800	98,850	107,800	87,890	65,280	49,670	43,580	60,050
(WY)	(1990)	(1958)	(1973)	(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	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		*WATER YEARS 1954 - 2004	
ANNUAL TOTAL	18,181,000		12,726,930		35,710	
ANNUAL MEAN	49,810		34,770		53,260	
HIGHEST ANNUAL MEAN					15,070	
LOWEST ANNUAL MEAN					1988	
HIGHEST DAILY MEAN	226,000	May 8	153,000	Sep 18	251,000	Mar 18, 1973
LOWEST DAILY MEAN	11,700	Apr 6	1,090	May 18	1,090	May 18, 2004
ANNUAL SEVEN-DAY MINIMUM	16,600	Apr 2	4,800	Apr 10	4,800	Apr 10, 2004
MAXIMUM PEAK FLOW			160,000	Sep 18	267,000	Mar 18, 1973
MAXIMUM PEAK STAGE			30.90	Sep 17	38.98	Mar 18, 1973
10 PERCENT EXCEEDS	74,400		58,000		58,400	
50 PERCENT EXCEEDS	43,000		33,100		31,300	
90 PERCENT EXCEEDS	30,100		8,330		15,500	

* Regulated period only.

