

03503000 LITTLE TENNESSEE RIVER AT NEEDMORE, NC

LOCATION.--Lat 35°20'11", long 83°31'37", Swain County, Hydrologic Unit 06010202, on left bank on Secondary Road 1113, 0.8 mi downstream of DeHart Creek, 0.8 mi north of Needmore, 2.4 mi downstream of Brush Creek, 6.3 mi downstream of Tellico Creek, and at mile 92.9.

DRAINAGE AREA.--436 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1943 to December 1981, October 1983 to current year. Monthly discharge only for some periods, published in WSP 1306.

GAGE.--Water-stage recorder. Datum of gage is 1,761.19 ft above NGVD of 1929 (levels by Tennessee Valley Authority). Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records fair. Considerable diurnal fluctuation caused by Porters Bend power plant at Lake Emory, 20 mi upstream. Minimum discharge for period of record also occurred Nov. 8, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Floods of October 1898 and Aug. 30, 1940, reached stages of about 13 and 11.5 ft, respectively, from flood profiles by Tennessee Valley Authority.

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	662	553	1,190	961	871	892	761	692	688	730	903	673
2	666	545	1,080	936	889	979	730	800	531	714	874	553
3	598	536	1,010	923	2,060	1,130	721	964	499	782	992	548
4	590	530	1,130	915	1,420	994	708	752	487	747	699	438
5	601	910	1,350	1,100	1,210	947	699	702	473	642	613	407
6	596	1,320	1,170	1,300	2,890	1,250	692	674	459	645	605	382
7	570	1,150	1,080	1,060	3,860	1,250	681	641	464	573	526	1,370
8	606	848	1,030	988	2,140	1,060	675	625	470	517	493	10,400
9	617	751	981	965	1,670	1,010	668	675	524	491	469	5,710
10	585	689	1,570	935	1,490	988	671	673	536	512	455	2,370
11	627	662	2,470	902	1,350	932	658	613	494	471	459	1,700
12	631	641	1,560	884	1,540	899	665	604	480	498	523	1,360
13	558	630	1,330	874	1,480	863	1,920	644	503	506	537	1,170
14	558	596	1,470	862	1,320	826	1,440	796	518	463	458	1,060
15	561	596	1,350	862	1,300	860	936	636	875	444	431	956
16	543	589	1,220	841	1,340	998	830	613	989	408	444	1,200
17	530	603	1,380	827	1,200	954	765	627	671	431	383	16,400
18	536	600	1,260	914	1,140	893	722	639	558	763	412	11,800
19	525	6,640	1,190	929	1,100	885	694	660	505	487	400	4,610
20	519	3,780	1,130	852	1,080	852	686	599	457	429	380	3,090
21	514	1,790	1,060	831	1,070	890	669	594	445	404	587	2,340
22	508	1,390	1,030	820	1,030	826	646	583	465	392	499	1,840
23	495	1,180	1,010	811	1,000	792	633	587	464	401	424	1,690
24	493	1,140	1,260	802	992	783	622	572	496	385	412	1,540
25	492	1,230	1,130	1,000	973	772	615	552	555	445	442	1,400
26	595	1,060	1,040	1,520	960	758	1,060	525	1,000	672	408	1,300
27	1,270	1,040	996	1,150	976	748	1,110	512	620	1,220	396	1,230
28	774	1,690	972	1,020	947	744	782	506	703	750	440	3,440
29	644	1,720	946	962	923	731	708	507	743	571	450	1,990
30	593	1,320	1,110	942	---	759	682	567	627	893	440	1,550
31	568	---	1,020	911	---	801	---	844	---	1,360	412	---
TOTAL	18,625	36,729	37,525	29,599	40,221	28,066	23,849	19,978	17,299	18,746	15,966	84,517
MEAN	601	1,224	1,210	955	1,387	905	795	644	577	605	515	2,817
MAX	1,270	6,640	2,470	1,520	3,860	1,250	1,920	964	1,000	1,360	992	16,400
MIN	492	530	946	802	871	731	615	506	445	385	380	382
CFSM	1.38	2.81	2.78	2.19	3.18	2.08	1.82	1.48	1.32	1.39	1.18	6.46
IN.	1.59	3.13	3.20	2.53	3.43	2.39	2.03	1.70	1.48	1.60	1.36	7.21

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 2004, @ BY WATER YEAR (WY)

MEAN	638	801	1,033	1,340	1,560	1,704	1,508	1,177	917	699	634	618
MAX	2,557	2,169	2,231	2,570	3,718	3,372	2,746	2,573	2,061	2,136	1,670	2,817
(WY)	(1965)	(1980)	(1962)	(1946)	(1990)	(1990)	(1964)	(1976)	(1949)	(1989)	(1967)	(2004)
MIN	192	282	368	349	660	596	553	458	351	238	213	201
(WY)	(1955)	(1955)	(1966)	(1981)	(1986)	(1988)	(1986)	(2001)	(1988)	(1986)	(1986)	(1999)

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SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1944 - 2004 <sup>@</sup>	
ANNUAL TOTAL	468,386		371,120		1,053	
ANNUAL MEAN	1,283		1,014		1,565	
HIGHEST ANNUAL MEAN					495	1973
LOWEST ANNUAL MEAN					1986	
HIGHEST DAILY MEAN	9,070	May 7	16,400	Sep 17	17,200	Oct 5, 1964
LOWEST DAILY MEAN	492	Oct 25	380	Aug 20	71	Nov 7, 1954
ANNUAL SEVEN-DAY MINIMUM	507	Oct 19	415	Aug 14	142	Oct 2, 1986
MAXIMUM PEAK FLOW			20,900	Sep 17	22,100	Oct 5, 1964
MAXIMUM PEAK STAGE			12.33	Sep 17	12.87	Oct 5, 1964
INSTANTANEOUS LOW FLOW			302	Jul 23	52*	Nov 7, 1954
ANNUAL RUNOFF (CFSM)	2.94		2.33		2.41	
ANNUAL RUNOFF (INCHES)	39.96		31.66		32.81	
10 PERCENT EXCEEDS	1,900		1,410		1,900	
50 PERCENT EXCEEDS	1,140		760		810	
90 PERCENT EXCEEDS	599		465		362	

<sup>@</sup> See PERIOD OF RECORD.

\* See REMARKS.

