

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. Minimum discharge for current water year also occurred Sept. 29, 30.

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 2004 TO SEPTEMBER 2005  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,320	640	1,940	1,130	999	1,460	1,740	1,340	927	1,510	1,450	1,920
2	1,210	647	1,650	1,090	976	1,280	2,160	1,120	1,950	1,560	1,240	1,440
3	1,140	1,270	1,410	1,070	1,450	1,190	2,160	1,070	1,510	1,240	1,090	1,230
4	1,050	2,360	1,280	1,050	1,350	1,140	1,950	1,020	1,310	1,400	1,060	1,090
5	991	1,960	1,180	1,040	1,170	1,130	1,730	989	1,110	1,350	1,060	995
6	946	1,210	1,590	1,030	1,090	1,070	1,550	982	1,060	1,140	1,160	928
7	926	1,020	3,170	1,020	1,030	1,040	1,520	959	1,260	3,740	1,160	893
8	888	936	2,650	1,110	1,010	1,750	2,110	937	2,060	3,570	1,980	861
9	847	846	2,650	1,070	1,000	1,490	1,870	923	2,060	2,080	1,610	830
10	839	815	3,610	1,000	997	1,300	1,610	961	1,620	2,450	1,560	794
11	817	789	2,600	980	940	1,200	1,460	1,060	1,750	3,060	1,210	766
12	795	2,050	2,120	963	914	1,150	1,390	909	2,990	7,240	1,060	745
13	900	2,030	1,870	984	917	1,090	1,640	959	7,730	4,480	1,130	714
14	819	1,330	1,660	2,990	1,100	1,130	2,040	902	3,920	3,420	1,470	694
15	783	1,140	1,510	1,730	1,230	1,050	1,640	970	2,270	3,630	1,180	678
16	750	1,050	1,430	1,430	1,070	1,120	1,480	975	1,750	2,710	1,020	736
17	724	983	1,370	1,270	1,020	1,230	1,380	874	1,510	2,280	1,120	746
18	722	938	1,290	1,160	969	1,140	1,320	835	1,340	1,940	1,250	661
19	866	901	1,250	1,110	933	1,050	1,260	839	1,640	1,810	1,720	636
20	874	872	1,170	1,080	997	1,020	1,210	2,630	1,340	2,100	1,220	615
21	763	844	1,120	1,060	1,980	995	1,140	2,470	1,320	1,810	1,030	599
22	721	832	1,100	1,030	2,680	1,010	1,150	1,540	1,260	1,580	940	587
23	706	946	2,930	991	1,780	1,970	1,600	1,280	1,150	1,430	985	575
24	713	2,470	2,530	931	1,690	1,650	1,300	1,130	1,060	1,290	1,280	561
25	702	3,150	1,770	968	1,490	1,340	1,180	1,040	986	1,210	1,010	542
26	684	1,870	1,540	979	1,330	1,230	1,130	978	958	1,130	909	546
27	672	1,470	1,400	953	1,240	1,170	1,170	947	1,520	1,060	864	609
28	670	1,470	1,300	908	1,560	2,960	1,090	925	2,050	1,060	824	543
29	694	1,260	1,250	961	---	2,270	1,070	901	1,680	1,650	811	531
30	663	1,160	1,210	1,270	---	1,740	1,230	906	1,510	2,070	4,210	532
31	652	---	1,170	1,080	---	1,590	---	890	---	1,390	4,230	---
TOTAL	25,847	39,259	54,720	35,438	34,912	41,955	45,280	34,261	54,601	68,390	42,843	23,597
MEAN	834	1,309	1,765	1,143	1,247	1,353	1,509	1,105	1,820	2,206	1,382	787
MAX	1,320	3,150	3,610	2,990	2,680	2,960	2,160	2,630	7,730	7,240	4,230	1,920
MIN	652	640	1,100	908	914	995	1,070	835	927	1,060	811	531
CFSM	1.91	3.00	4.05	2.62	2.86	3.10	3.46	2.53	4.17	5.06	3.17	1.80
IN.	2.21	3.35	4.67	3.02	2.98	3.58	3.86	2.92	4.66	5.84	3.66	2.01

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 2005, @ BY WATER YEAR (WY)

MEAN	642	809	1,045	1,337	1,555	1,699	1,508	1,176	932	724	646	621
MAX	2,557	2,169	2,231	2,570	3,718	3,372	2,746	2,573	2,061	2,206	1,670	2,817
(WY)	(1965)	(1980)	(1962)	(1946)	(1990)	(1990)	(1964)	(1976)	(1949)	(2005)	(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 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1944 - 2005 <sup>@</sup>	
ANNUAL TOTAL	398,067		501,103		1,058	
ANNUAL MEAN	1,088		1,373		495	
HIGHEST ANNUAL MEAN					1,565	1973
LOWEST ANNUAL MEAN					495	1986
HIGHEST DAILY MEAN	16,400	Sep 17	7,730	Jun 13	17,200	Oct 5, 1964
LOWEST DAILY MEAN	380	Aug 20	531	Sep 29	71	Nov 7, 1954
ANNUAL SEVEN-DAY MINIMUM	415	Aug 14	552	Sep 24	142	Oct 2, 1986
MAXIMUM PEAK FLOW			9,860	Jun 13	22,100	Oct 5, 1964
MAXIMUM PEAK STAGE			7.78	Jun 13	12.87	Oct 5, 1964
INSTANTANEOUS LOW FLOW			523*	Sep 26	52*	Nov 7, 1954
ANNUAL RUNOFF (CFSM)	2.49		3.15		2.43	
ANNUAL RUNOFF (INCHES)	33.96		42.75		32.97	
10 PERCENT EXCEEDS	1,680		2,100		1,910	
50 PERCENT EXCEEDS	840		1,140		820	
90 PERCENT EXCEEDS	465		776		364	

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

\* See REMARKS.

