

TENNESSEE RIVER BASIN

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 mi².

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 sea level (levels by Tennessee Valley Authority). Satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. 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 Oct. 12, 20.

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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	206	192	395	e374	592	876	1060	581	555	1050	676	397
2	208	193	400	e369	551	808	949	524	810	725	478	438
3	223	193	377	e364	525	784	926	518	539	627	491	429
4	222	194	380	e355	508	886	924	512	482	723	525	462
5	219	195	357	e350	497	858	855	462	435	647	480	465
6	218	219	339	e345	481	777	832	507	439	590	492	376
7	214	204	321	e340	471	732	801	427	448	498	415	331
8	202	236	350	372	455	700	775	476	511	490	567	314
9	202	1080	311	417	455	674	747	468	535	475	475	296
10	202	2100	321	e354	524	652	729	482	451	450	425	294
11	159	618	323	e340	514	628	701	449	452	432	513	325
12	155	448	315	401	504	636	692	508	424	400	455	328
13	169	386	319	477	527	987	788	453	379	377	550	281
14	196	362	502	399	622	803	854	394	358	359	826	279
15	196	334	533	393	642	1120	759	395	347	351	603	268
16	197	335	546	386	668	1290	777	401	362	338	486	254
17	189	372	1620	371	1250	1050	727	387	325	327	413	249
18	184	372	944	453	967	935	696	378	316	321	424	251
19	192	359	722	2560	785	872	666	379	293	324	384	255
20	194	352	625	3020	710	959	615	378	277	331	369	605
21	200	335	541	1340	677	1430	638	379	339	362	340	637
22	194	321	501	944	806	1140	598	405	342	321	315	397
23	195	312	e467	796	849	1060	591	475	528	303	310	341
24	196	312	e440	714	733	984	589	414	315	323	295	1750
25	197	790	e430	653	1200	943	563	555	332	318	283	1330
26	213	1040	e424	595	1800	889	559	607	1050	484	317	640
27	207	615	420	566	1170	847	525	429	1190	367	318	509
28	200	507	421	542	973	819	521	427	803	351	303	446
29	201	448	416	523	---	900	516	526	622	723	304	395
30	192	421	396	692	---	1730	516	462	1350	698	329	370
31	192	---	e384	694	---	1200	---	429	---	548	331	---
TOTAL	6134	13845	14840	20499	20456	28969	21489	14187	15609	14633	13492	13712
MEAN	198	462	479	661	731	934	716	458	520	472	435	457
MAX	223	2100	1620	3020	1800	1730	1060	607	1350	1050	826	1750
MIN	155	192	311	340	455	628	516	378	277	303	283	249
CFSM	.45	1.06	1.10	1.52	1.68	2.14	1.64	1.05	1.19	1.08	1.00	1.05
IN.	.52	1.18	1.27	1.75	1.75	2.47	1.83	1.21	1.33	1.25	1.15	1.17

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 2001,[®] BY WATER YEAR (WY)

MEAN	643	797	1035	1361	1580	1737	1532	1167	920	691	638	572
MAX	2557	2169	2231	2570	3718	3372	2746	2573	2061	2136	1670	1605
(WY)	1965	1980	1962	1946	1990	1990	1964	1976	1949	1989	1967	1950
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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1944 - 2001 [®]	
ANNUAL TOTAL	206125		197865		1056	
ANNUAL MEAN	563		542		1565	
HIGHEST ANNUAL MEAN					1973	
LOWEST ANNUAL MEAN					1986	
HIGHEST DAILY MEAN	5680	Apr 4	3020	Jan 20	17200	Oct 5 1964
LOWEST DAILY MEAN	140	Sep 20	155	Oct 12	71	Nov 7 1954
ANNUAL SEVEN-DAY MINIMUM	148	Sep 14	180	Oct 11	142	Oct 2 1986
MAXIMUM PEAK FLOW			4960	Jan 19	22100	Oct 5 1964
MAXIMUM PEAK STAGE			5.61	Jan 19	12.87	Oct 5 1964
INSTANTANEOUS LOW FLOW			154*	Oct 11	52*	Nov 7 1954
ANNUAL RUNOFF (CFSM)	1.29		1.24		2.42	
ANNUAL RUNOFF (INCHES)	17.59		16.88		32.92	
10 PERCENT EXCEEDS	996		930		1910	
50 PERCENT EXCEEDS	448		453		803	
90 PERCENT EXCEEDS	196		221		357	

e Estimated.
[®] See PERIOD OF RECORD.
 * See REMARKS.

