

## TENNESSEE RIVER BASIN

03550000 VALLEY RIVER AT TOMOTLA, NC

LOCATION.--Lat 35°08'20", long 83°58'50", Cherokee County, Hydrologic Unit 06020002, on right bank at site of former bridge on Secondary Road 1473 at Tomotla, 600 ft upstream from bridge on U.S. Highways 19 and 74, 0.2 mi upstream from Rogers Creek, 4.7 mi northeast of Murphy, and at mile 6.6.

DRAINAGE AREA.--104 mi<sup>2</sup>.

PERIOD OF RECORD.--June 1904 to December 1909, January 1914 to April 1917, October 1918 to current year.

REVISED RECORDS.--WSP 503: 1905-9, 1915-17. WSP 823: Drainage area. WSP 1306: 1917(M), 1920(M), 1922(M), 1925(M), 1930(M), 1933(M). WSP 1626: 1907(M). WDR NC-91-1: 1979-1994(M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,556.46 ft above NGVD of 1929 (levels by Tennessee Valley Authority). Prior to May 11, 1934, nonrecording gage at same site and datum. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records good. Maximum discharge for period of record, from flood profile by Tennessee Valley Authority, from rating curve extended above 5,800 ft<sup>3</sup>/s on basis of slope-conveyance study. Minimum discharge for period of record occurred several days in Aug. and Sept. 1925.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of September 1898 reached a stage of 21.2 ft, from floodmark by Tennessee Valley Authority; discharge, about 20,000 ft<sup>3</sup>/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	78	63	111	120	311	147	832	361	148	96	77	112
2	76	63	99	115	273	176	602	266	142	139	79	111
3	73	62	91	113	253	229	474	456	136	140	76	116
4	71	62	86	107	246	191	396	1370	142	152	68	85
5	69	60	82	105	221	176	346	885	168	115	65	75
6	80	58	80	135	264	170	311	549	216	95	61	68
7	74	58	80	128	419	165	286	423	190	87	57	63
8	69	58	83	114	370	160	269	356	145	87	54	59
9	67	58	107	110	324	183	313	318	134	80	53	56
10	68	57	170	110	295	183	308	305	127	91	52	53
11	65	57	263	123	270	166	277	272	121	99	50	50
12	70	55	182	116	249	248	263	250	117	225	49	49
13	73	55	180	112	233	279	255	274	113	201	47	47
14	104	55	208	108	218	259	250	263	115	206	45	71
15	92	55	192	106	209	235	240	231	115	164	73	99
16	76	55	168	103	202	301	230	213	108	150	103	73
17	72	54	231	101	192	324	256	205	105	117	97	63
18	69	54	348	106	183	337	226	324	100	104	108	69
19	69	53	259	636	177	312	214	244	100	95	98	72
20	69	53	210	789	201	340	206	221	120	91	77	63
21	67	52	178	596	188	373	199	207	124	94	63	1150
22	65	52	158	468	176	332	193	196	99	106	57	1580
23	65	55	189	1230	170	298	181	186	95	136	55	561
24	65	86	244	1430	165	271	177	177	96	96	54	320
25	79	224	202	1760	159	250	219	168	107	171	63	321
26	68	122	181	910	167	306	182	162	100	128	61	607
27	64	96	164	595	157	325	176	188	103	132	194	611
28	64	86	151	454	150	284	180	196	117	99	119	496
29	64	81	143	377	---	261	180	167	125	90	117	343
30	64	127	132	325	---	709	165	160	114	83	91	263
31	64	---	126	290	---	987	---	159	---	82	122	---
TOTAL	2213	2126	5098	11892	6442	8977	8406	9752	3742	3751	2385	7706
MEAN	71.39	70.87	164.5	383.6	230.1	289.6	280.2	314.6	124.7	121.0	76.94	256.9
MAX	104	224	348	1760	419	987	832	1370	216	225	194	1580
MIN	64	52	80	101	150	147	165	159	95	80	45	47
CFSM	0.69	0.68	1.58	3.69	2.21	2.78	2.69	3.02	1.20	1.16	0.74	2.47
IN.	0.79	0.76	1.82	4.25	2.30	3.21	3.01	3.49	1.34	1.34	0.85	2.76

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1904 - 2002,<sup>®</sup> BY WATER YEAR (WY)

MEAN	97.89	156.2	286.5	397.1	451.8	457.8	366.6	260.6	190.9	167.3	135.4	103.1
MAX	442	685	1045	936	1022	1379	835	755	607	443	563	434
(WY)	1907	1930	1933	1974	1957	1917	1936	1929	1989	1949	1920	1928
MIN	25.2	38.6	57.4	69.9	92.7	155	135	88.9	44.8	42.4	24.6	21.3
(WY)	1955	1934	1934	1981	1941	1988	1986	1941	1988	1988	1925	1925

03550000 VALLEY RIVER AT TOMOTLA, NC--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1904 - 2002 <sup>®</sup>	
ANNUAL TOTAL	60944		72490		255.0	
ANNUAL MEAN	167.0		198.6		379	
HIGHEST ANNUAL MEAN					1922	
LOWEST ANNUAL MEAN					111	
HIGHEST DAILY MEAN	1330	Jan 19	1760	Jan 25	8190	Feb 16 1995
LOWEST DAILY MEAN	52	Nov 21	45	Aug 14	12	Aug 27 1925
ANNUAL SEVEN-DAY MINIMUM	53	Nov 16	50	Aug 8	13	Aug 24 1925
MAXIMUM PEAK FLOW			3170	Sep 22	18000*	Nov 19 1906
MAXIMUM PEAK STAGE			9.01	Sep 22	20.50	Nov 19 1906
INSTANTANEOUS LOW FLOW			44	Aug 14	12*	Aug 27 1925
ANNUAL RUNOFF (CFSM)	1.61		1.91		2.45	
ANNUAL RUNOFF (INCHES)	21.80		25.93		33.31	
10 PERCENT EXCEEDS	290		341		497	
50 PERCENT EXCEEDS	127		136		176	
90 PERCENT EXCEEDS	67		61		59	

<sup>®</sup> See PERIOD OF RECORD.

\* See REMARKS.

