

Water-Data Report 2007

**03550000 VALLEY RIVER AT TOMOTLA, NC**

Middle Tennessee-Hiwassee Basin  
Hiwassee Subbasin

LOCATION.--Lat 35°08'20", long 83°58'50" referenced to North American Datum of 1983, Cherokee County, NC, 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 river mile 6.6.

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

**SURFACE-WATER RECORDS**

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-97-1: 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.--Records good except those for estimated daily discharges, which are fair. 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 August and September 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.

## 03550000 VALLEY RIVER AT TOMOTLA, NC—Continued

**DISCHARGE, CUBIC FEET PER SECOND**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**  
**DAILY MEAN VALUES**  
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	74	130	185	958	183	377	172	110	63	46	81	60
2	67	126	171	491	181	684	181	106	64	44	84	32
3	63	111	154	346	166	447	155	103	62	53	81	28
4	60	104	142	283	156	331	252	103	61	44	58	26
5	58	98	133	322	149	275	201	157	58	40	51	23
6	75	94	128	375	e147	243	182	150	56	40	58	22
7	59	117	123	429	e145	222	171	121	53	46	68	21
8	56	157	115	779	142	206	161	113	53	55	50	21
9	54	125	112	534	138	193	155	110	53	70	44	20
10	53	116	110	404	134	183	150	105	49	52	40	19
11	57	117	108	327	131	176	148	106	48	357	38	20
12	113	133	106	286	130	166	162	128	49	127	35	26
13	63	118	110	257	142	160	142	110	47	75	34	22
14	55	113	103	236	166	156	144	99	53	65	32	305
15	53	378	101	222	140	153	171	94	57	73	30	126
16	54	1,090	98	223	132	402	151	93	51	65	28	54
17	542	540	95	199	130	294	143	94	47	54	28	44
18	358	347	93	199	132	248	139	86	44	58	27	40
19	183	267	92	195	127	224	136	83	80	56	25	37
20	199	222	91	181	130	209	131	81	196	77	25	34
21	145	191	89	275	149	197	127	78	67	58	24	32
22	126	173	223	416	144	186	123	76	58	50	29	32
23	110	157	206	316	135	178	119	73	53	e49	23	30
24	99	146	164	275	131	170	119	72	49	59	22	29
25	92	137	192	247	234	162	118	70	55	64	23	29
26	87	130	216	225	212	156	128	69	60	64	22	28
27	203	124	204	210	187	152	135	67	66	51	33	28
28	419	121	186	201	173	146	121	65	60	109	28	28
29	230	121	170	183	---	145	116	63	57	79	30	26
30	173	159	161	177	---	145	112	61	54	61	32	23
31	146	---	347	168	---	139	---	59	---	54	41	---
<b>Total</b>	4,126	5,962	4,528	9,939	4,266	7,125	4,465	2,905	1,823	2,195	1,224	1,265
<b>Mean</b>	133	199	146	321	152	230	149	93.7	60.8	70.8	39.5	42.2
<b>Max</b>	542	1,090	347	958	234	684	252	157	196	357	84	305
<b>Min</b>	53	94	89	168	127	139	112	59	44	40	22	19
<b>Cfsm</b>	1.28	1.91	1.40	3.08	1.46	2.21	1.43	0.90	0.58	0.68	0.38	0.41
<b>In.</b>	1.48	2.13	1.62	3.56	1.53	2.55	1.60	1.04	0.65	0.79	0.44	0.45

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1904 - 2007 <sup>a</sup>, BY WATER YEAR (WY)**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	98.8	162	289	393	446	450	361	261	189	168	134	104
<b>Max</b>	442	685	1,045	936	1,022	1,379	835	755	607	443	563	434
<b>(WY)</b>	(1907)	(1930)	(1933)	(1974)	(1957)	(1917)	(1936)	(1929)	(1989)	(1949)	(1920)	(1928)
<b>Min</b>	25.2	38.6	57.4	69.9	92.7	155	135	88.9	44.8	42.4	24.6	21.3
<b>(WY)</b>	(1955)	(1934)	(1934)	(1981)	(1941)	(1988)	(1986)	(1941)	(1988)	(1988)	(1925)	(1925)

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SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 1904 - 2007 <sup>a</sup>	
Annual total	60,520		49,823			
Annual mean	166		137		254	
Highest annual mean					379	1922
Lowest annual mean					111	1988
Highest daily mean	1,450	Jan 18	1,090	Nov 16	8,190	Feb 16, 1995
Lowest daily mean	30	Aug 27	19	Sep 10	12	Aug 27, 1925
Annual seven-day minimum	37	Aug 23	21	Sep 5	13	Aug 24, 1925
Maximum peak flow			1,520	Jan 1	<sup>b</sup> 18,000	Nov 19, 1906
Maximum peak stage			5.49	Jan 1	20.50	Nov 19, 1906
Instantaneous low flow			18	Sep 11	<sup>b</sup> 12	Aug 27, 1925
Annual runoff (cfsm)	1.59		1.31		2.44	
Annual runoff (inches)	21.65		17.82		33.14	
10 percent exceeds	301		250		491	
50 percent exceeds	136		113		176	
90 percent exceeds	48		32		59	

<sup>a</sup> See Period of Record.

<sup>b</sup> See Remarks.

