

Water-Data Report 2008

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 mi².

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.--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 ft³/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 ft³/s.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	23	31	50	161	404	244	188	204	162	57	85	46
2	23	31	48	132	362	219	188	188	145	51	62	40
3	23	31	71	112	269	206	179	181	127	49	57	37
4	24	30	56	101	298	825	202	171	118	47	52	33
5	27	30	51	94	268	1,010	321	158	110	46	48	31
6	25	38	49	89	251	555	550	148	103	54	46	29
7	23	35	47	82	222	468	398	142	96	54	45	30
8	23	32	47	78	197	445	319	141	90	45	45	28
9	23	32	65	82	176	369	275	206	87	63	40	40
10	25	32	63	110	156	321	247	210	83	63	39	37
11	23	31	54	486	143	287	235	299	80	56	38	34
12	22	32	51	275	135	260	302	229	83	46	35	31
13	22	32	53	196	172	235	244	195	75	69	36	30
14	22	36	58	157	142	232	224	178	84	66	36	28
15	22	134	60	135	132	522	208	181	91	48	35	58
16	22	56	123	119	126	626	193	231	75	44	32	38
17	22	45	86	167	214	440	183	191	71	47	33	34
18	23	41	71	154	604	360	175	189	67	41	31	33
19	35	40	66	138	357	464	222	209	67	38	29	29
20	35	38	62	123	279	538	190	238	65	37	28	28
21	26	39	84	110	239	443	176	256	64	35	26	27
22	25	176	77	126	240	377	168	188	64	58	22	26
23	52	85	115	152	219	320	160	173	61	69	20	25
24	127	61	119	133	195	283	153	215	57	47	18	24
25	51	54	106	120	183	254	154	166	54	40	24	23
26	40	83	109	115	328	234	159	150	52	46	227	23
27	36	85	90	108	290	219	171	146	51	49	150	24
28	34	65	296	101	250	206	352	184	56	41	80	25
29	33	57	381	99	230	236	266	159	85	225	60	23
30	32	53	240	175	---	217	227	142	74	81	49	23
31	31	---	204	137	---	196	---	133	---	80	48	---
Total	974	1,565	3,052	4,367	7,081	11,611	7,029	5,801	2,497	1,792	1,576	937
Mean	31.4	52.2	98.5	141	244	375	234	187	83.2	57.8	50.8	31.2
Max	127	176	381	486	604	1,010	550	299	162	225	227	58
Min	22	30	47	78	126	196	153	133	51	35	18	23
Cfsm	0.30	0.50	0.95	1.35	2.35	3.60	2.25	1.80	0.80	0.56	0.49	0.30
In.	0.35	0.56	1.09	1.56	2.53	4.15	2.51	2.07	0.89	0.64	0.56	0.34

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1904 - 2008^a, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	98.1	161	287	390	444	449	360	261	188	167	133	103
Max	442	685	1,045	936	1,022	1,379	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)

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SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 1904 - 2008 ^a	
Annual total	40,798		48,282			
Annual mean	112		132		252	
Highest annual mean					379	
Lowest annual mean					111	
Highest daily mean	958	Jan 1	1,010	Mar 5	8,190	Feb 16, 1995
Lowest daily mean	19	Sep 10	18	Aug 24	12	Aug 27, 1925
Annual seven-day minimum	21	Sep 5	22	Oct 11	13	Aug 24, 1925
Maximum peak flow			1,730	Mar 4	^b 18,000	Nov 19, 1906
Maximum peak stage			6.01	Mar 4	20.50	Nov 19, 1906
Instantaneous low flow			17	Aug 24	^b 12	Aug 27, 1925
Annual runoff (cfs)	1.07		1.27		2.43	
Annual runoff (inches)	14.59		17.27		32.97	
10 percent exceeds	224		276		490	
50 percent exceeds	68		83		175	
90 percent exceeds	26		28		58	

^aSee Period of Record.^bSee Remarks.