

## TENNESSEE RIVER BASIN

03453000 IVY RIVER NEAR MARSHALL, NC

LOCATION.--Lat 35°46'10", long 82°37'16", Madison County, Hydrologic Unit 06010105, on right bank 0.2 mi downstream from bridge on U.S. Highway 25-70, 1.9 mi upstream from mouth, and 4.0 mi southeast of Marshall.

DRAINAGE AREA.--158 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1933 to September 1973. July 1, 1994 to current year. Monthly discharge only for some periods, published in WSP 1306.

GAGE.--Water-stage recorder. Datum of gage is 1,700.41 ft above sea level (levels by Tennessee Valley Authority). Satellite telemetry at station.

REVISED RECORDS.--WSP 803: 1934(M), 1935. WSP 1910: 1936(P), 1937(M), 1940(M), 1946(M), 1957(P).

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Considerable low flow regulation, at times, caused by small power plant at Ivy Dam, 0.4 mi upstream. Minimum discharge for period of record and current water year affected by regulation.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June, 1876, reached a stage of 16.0 ft, from studies by Tennessee Valley Authority (discharge 14,000 ft<sup>3</sup>/s). An outstanding but lesser flood occurred in July, 1916 (stage and discharge unknown).

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	32	23	39	45	64	106	379	85	69	105	208	94
2	30	28	38	44	61	96	328	81	103	81	150	85
3	29	26	38	e60	56	94	306	75	74	73	120	94
4	28	27	36	e60	55	165	304	71	63	265	375	118
5	28	27	35	e36	55	165	264	83	59	263	266	88
6	27	26	35	38	53	149	233	75	53	122	179	68
7	26	27	34	43	51	133	208	72	53	91	121	59
8	24	28	34	43	50	120	185	66	89	83	125	53
9	26	66	33	45	49	117	167	66	79	94	94	49
10	26	170	32	40	67	105	154	63	66	75	75	185
11	26	65	33	e32	57	97	133	60	159	66	143	86
12	26	49	33	48	59	94	125	60	86	59	108	62
13	24	43	31	50	60	132	235	60	71	55	239	55
14	28	41	39	45	114	110	206	54	62	51	182	51
15	25	37	40	48	124	148	206	52	79	48	116	47
16	25	37	40	48	128	157	197	51	71	46	88	44
17	25	42	165	44	322	137	176	50	60	44	72	42
18	25	38	88	89	208	121	163	49	52	43	68	41
19	25	37	72	527	157	108	150	53	48	46	59	40
20	25	39	56	456	128	122	139	78	46	59	61	61
21	25	36	69	235	115	329	130	60	64	53	51	50
22	26	30	57	164	122	266	119	58	54	48	45	42
23	26	36	52	129	115	231	112	67	93	43	45	40
24	26	34	60	112	103	196	108	52	67	40	119	115
25	26	53	54	94	150	169	106	122	61	60	57	95
26	40	69	53	80	175	147	96	87	113	142	48	63
27	32	53	48	79	139	130	90	61	121	253	45	54
28	28	47	45	68	121	115	85	54	294	255	43	48
29	27	45	49	65	---	206	83	59	123	1060	42	45
30	27	39	39	78	---	530	86	51	100	1210	104	43
31	26	---	37	71	---	405	---	49	---	375	66	---
TOTAL	839	1318	1514	3016	2958	5200	5273	2024	2532	5308	3514	2017
MEAN	27.1	43.9	48.8	97.3	106	168	176	65.3	84.4	171	113	67.2
MAX	40	170	165	527	322	530	379	122	294	1210	375	185
MIN	24	23	31	32	49	94	83	49	46	40	42	40
CFSM	.17	.28	.31	.62	.67	1.06	1.11	.41	.53	1.08	.72	.43
IN.	.20	.31	.36	.71	.70	1.22	1.24	.48	.60	1.25	.83	.47

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1934 - 2001,® BY WATER YEAR (WY)

	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	76.4	91.5	132	213	263	310	240	156	111	97.4	87.6	60.3																																																								
MAX	367	229	407	636	563	848	574	328	272	280	444	141																																																								
(WY)	1965	1950	1962	1937	1957	1963	1936	1946	1950	1949	1940	1949																																																								
MIN	19.3	28.9	39.8	46.4	60.9	129	76.1	58.6	43.3	29.8	22.8	20.5																																																								
(WY)	1953	1940	1940	1940	1941	1970	1942	1941	1953	1952	1956	1998																																																								

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1934 - 2001®	
ANNUAL TOTAL	38932		35513			
ANNUAL MEAN	106		97.3		152	
HIGHEST ANNUAL MEAN					232	
LOWEST ANNUAL MEAN					92.1	
HIGHEST DAILY MEAN	1720	Apr 4	1210	Jul 30	8010	Mar 12 1963
LOWEST DAILY MEAN	21	Sep 19	23	Nov 1	8.5	Sep 2 1953
ANNUAL SEVEN-DAY MINIMUM	25	Oct 15	25	Oct 15	9.8	Aug 28 1953
MAXIMUM PEAK FLOW			3210		Jul 30	14400
MAXIMUM PEAK STAGE			9.84		Jul 30	17.21
INSTANTANEOUS LOW FLOW			5.8*		Oct 23	3.0*
ANNUAL RUNOFF (CFSM)	.67		.62		.96	
ANNUAL RUNOFF (INCHES)	9.17		8.36		13.10	
10 PERCENT EXCEEDS	218		185		299	
50 PERCENT EXCEEDS	65		63		95	
90 PERCENT EXCEEDS	28		30		35	

e Estimated.

® See PERIOD OF RECORD.

\* See REMARKS.

03453000 IVY RIVER NEAR MARSHALL, NC--Continued

