

## 03453000 IVY RIVER NEAR MARSHALL, NC

LOCATION.--Lat 35°46'10", long 82°37'15", 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 NGVD of 1929 (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 2002 TO SEPTEMBER 2003  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54	89	73	192	145	392	158	170	197	130	249	65
2	47	75	69	194	132	352	174	173	169	391	145	56
3	42	68	68	224	123	305	169	165	162	242	212	55
4	39	63	70	212	228	261	163	148	176	171	179	94
5	38	64	289	193	206	234	203	311	148	178	149	83
6	37	78	272	175	176	563	191	2,610	136	446	111	60
7	39	79	200	158	172	475	190	1,780	507	480	129	57
8	40	68	161	146	145	380	184	941	499	255	106	57
9	34	63	139	138	135	319	362	604	325	273	109	56
10	33	62	125	127	140	268	1,450	444	244	241	90	52
11	46	255	275	113	139	233	1,420	360	205	184	94	51
12	41	348	217	103	135	208	902	297	253	154	84	50
13	37	274	277	e94	123	190	764	249	198	138	77	48
14	37	184	295	e88	162	183	587	219	222	190	74	46
15	37	143	230	e79	1,120	162	455	221	281	137	97	54
16	357	358	193	91	603	190	373	240	198	121	83	59
17	157	460	162	88	463	169	320	185	169	115	94	51
18	98	289	143	e77	339	176	651	183	179	101	74	45
19	76	211	131	e73	273	170	496	166	264	95	69	44
20	65	168	241	e75	235	506	411	152	193	94	67	43
21	61	213	198	103	223	459	394	173	160	129	70	44
22	56	208	168	e99	1,670	353	356	472	140	231	77	93
23	51	166	150	e85	1,400	289	308	404	126	269	71	385
24	49	141	364	81	685	245	271	323	115	154	63	107
25	50	124	429	150	493	213	253	261	107	125	61	76
26	49	110	322	116	439	193	233	238	101	108	59	67
27	48	104	256	e73	463	178	208	202	100	100	57	77
28	64	92	212	e75	448	161	189	180	100	93	62	161
29	102	84	182	109	---	152	173	204	96	87	78	85
30	139	81	161	178	---	170	163	228	91	100	61	73
31	117	---	147	156	---	173	---	231	---	189	82	---
TOTAL	2,140	4,722	6,219	3,865	11,015	8,322	12,171	12,534	5,861	5,721	3,033	2,294
MEAN	69.0	157	201	125	393	268	406	404	195	185	97.8	76.5
MAX	357	460	429	224	1,670	563	1,450	2,610	507	480	249	385
MIN	33	62	68	73	123	152	158	148	91	87	57	43

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1934 - 2003, <sup>@</sup> BY WATER YEAR (WY)

MEAN	75.5	91.7	132	211	262	308	242	160	111	98.3	86.7	60.5
MAX	367	229	407	636	563	848	574	404	272	280	444	141
(WY)	(1965)	(1950)	(1962)	(1937)	(1957)	(1963)	(1936)	(2003)	(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)

03453000 IVY RIVER NEAR MARSHALL, NC—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1934 - 2003 <sup>®</sup>	
ANNUAL TOTAL	45,269		77,897		152	
ANNUAL MEAN	124		213		232	
HIGHEST ANNUAL MEAN					92.1	
LOWEST ANNUAL MEAN					1941	
HIGHEST DAILY MEAN	1,760	Mar 17	2,610	May 6	8,010	Mar 12, 1963
LOWEST DAILY MEAN	15	Aug 23	33	Oct 10	8.5	Sep 2, 1953
ANNUAL SEVEN-DAY MINIMUM	17	Sep 8	37	Oct 4	9.8	Aug 28, 1953
MAXIMUM PEAK FLOW			4,040	May 6	14,400	Mar 26, 1965
MAXIMUM PEAK STAGE			11.41	May 6	17.21	Jan 14, 1995
INSTANTANEOUS LOW FLOW			18*	Sep 17	3.0*	Jan 20, 1940
10 PERCENT EXCEEDS	247		398		302	
50 PERCENT EXCEEDS	74		161		95	
90 PERCENT EXCEEDS	29		57		35	

e Estimated.  
<sup>®</sup> See PERIOD OF RECORD.  
 \* See REMARKS.

