

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 mi².

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.--No estimated daily discharges. Records good. 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. Minimum discharge for current water year also occurred Aug. 24.

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 ft³/s). An outstanding but lesser flood occurred in July, 1916 (stage and discharge unknown).

EXTREMES FOR CURRENT YEAR.--Peak discharges associated with the remnants of Hurricanes Frances and Ivan:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Sep 8	1015	3,880	9.56	Sep 17	0830	9,310	14.21

REVISIONS.--The maximum discharges for some water years have been revised, as shown in the following table. They supercede figures published in the reports for 1994 through 2003.

Water Year	Date	Discharge (ft ³ /s)	Gage height (ft)	Water Year	Date	Discharge (ft ³ /s)	Gage height (ft)
1994	Aug. 17, 1994	4,600	10.32	1999	May 8, 1999	2,050	7.24
1995	Jan. 14, 1995	14,100	17.21	2000	Apr. 4, 2000	3,150	8.72
1996	Jan. 27, 1996	10,800	15.25	2001	July 30, 2001	4,140	9.84
1997	Feb. 28, 1997	3,500	9.13	2002	Mar. 17, 2002	6,120	11.73
1998	Jan. 8, 1998	9,920	14.63	2003	May 6, 2003	5,760	11.41

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	63	56	95	138	95	105	214	197	181	70	64	115
2	63	57	86	132	90	116	205	197	127	72	147	170
3	57	54	82	131	199	134	203	186	106	143	141	134
4	56	53	87	129	184	123	197	163	108	92	78	95
5	54	57	98	195	160	122	181	151	100	90	64	77
6	53	102	96	220	945	226	167	142	86	219	84	67
7	51	127	87	170	788	216	161	130	81	131	57	283
8	49	87	82	155	440	198	158	123	78	91	50	2,330
9	52	74	78	148	323	174	152	119	81	77	47	961
10	55	68	143	135	265	159	138	116	86	62	45	432
11	55	65	237	120	222	143	132	106	80	60	44	268
12	53	63	164	125	238	133	160	105	71	71	113	189
13	51	64	141	110	239	122	1,050	100	73	59	79	147
14	49	57	148	105	218	116	680	113	72	55	58	121
15	58	56	137	101	228	116	444	97	71	51	51	104
16	51	56	123	94	230	157	349	100	80	45	62	96
17	50	56	171	91	201	136	289	153	92	45	48	4,430
18	49	55	154	137	183	286	244	117	71	125	47	1,630
19	48	1,500	154	135	167	334	214	137	64	57	44	652
20	47	463	136	114	156	277	193	110	64	50	42	399
21	47	257	125	111	154	277	180	98	64	45	46	284
22	46	180	136	105	137	227	162	90	80	42	49	215
23	44	145	152	98	128	195	149	133	75	46	43	171
24	45	129	445	97	126	175	141	99	89	42	50	145
25	44	118	325	101	125	158	134	87	95	60	64	128
26	49	104	240	111	116	146	342	81	154	121	46	115
27	135	96	196	114	119	137	364	134	99	278	46	106
28	96	117	170	105	114	128	289	102	86	122	44	333
29	75	119	153	104	108	123	241	94	76	79	59	223
30	65	99	178	101	---	127	214	108	70	75	198	163
31	61	---	152	92	---	210	---	266	---	75	210	---
TOTAL	1,771	4,534	4,771	3,824	6,698	5,296	7,747	3,954	2,660	2,650	2,220	14,583
MEAN	57.1	151	154	123	231	171	258	128	88.7	85.5	71.6	486
MAX	135	1,500	445	220	945	334	1,050	266	181	278	210	4,430
MIN	44	53	78	91	90	105	132	81	64	42	42	67

03453000 IVY RIVER NEAR MARSHALL, NC—Continued

DISCHARGE, CUBIC FEET PER SECOND—CONTINUED
 WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1934 - 2004, [@] BY WATER YEAR (WY)												
MEAN	75.1	92.9	132	209	261	306	242	159	111	98.1	86.4	68.8
MAX	367	229	407	636	563	848	574	404	272	280	444	486
(WY)	(1965)	(1950)	(1962)	(1937)	(1957)	(1963)	(1936)	(2003)	(1950)	(1949)	(1940)	(2004)
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 2003 CALENDAR YEAR				FOR 2004 WATER YEAR			WATER YEARS 1934 - 2004 [@]	
ANNUAL TOTAL				75,892			60,708			153		
ANNUAL MEAN				208			166			232		
HIGHEST ANNUAL MEAN										92.1		
LOWEST ANNUAL MEAN										92.1		
HIGHEST DAILY MEAN				2,610			May 6			4,430		
LOWEST DAILY MEAN				43			Sep 20			42		
ANNUAL SEVEN-DAY MINIMUM				46			Oct 19			46		
MAXIMUM PEAK FLOW							9,310			Sep 17		
MAXIMUM PEAK STAGE							14.21			Sep 17		
INSTANTANEOUS LOW FLOW							18*			Oct 10		
10 PERCENT EXCEEDS				407			242			300		
50 PERCENT EXCEEDS				146			116			95		
90 PERCENT EXCEEDS				56			51			35		

[@] See PERIOD OF RECORD.

* See REMARKS.

