

03453000 IVY RIVER NEAR MARSHALL, NC

LOCATION.--Lat 35°46'11", 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). WDR NC-04-1: 1994-2003(M).

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

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	138	74	216	141	117	257	278	232	112	152	230	137
2	121	71	185	134	111	222	631	213	132	143	169	115
3	112	75	170	129	134	207	887	200	116	149	183	97
4	103	225	157	125	134	193	652	184	116	131	159	87
5	92	206	145	122	126	187	523	173	102	116	115	82
6	86	146	156	124	122	173	421	166	115	111	123	73
7	82	122	190	121	120	165	356	157	112	292	135	72
8	76	108	164	118	120	274	345	150	246	325	185	65
9	75	96	349	111	122	238	313	141	163	205	194	65
10	72	89	418	107	125	225	267	166	177	163	169	61
11	69	84	441	105	116	214	242	173	151	163	126	58
12	68	263	386	102	111	201	226	143	138	185	107	56
13	96	267	318	122	116	185	288	134	283	176	92	54
14	79	196	263	1,200	156	184	518	134	209	210	101	52
15	74	163	223	499	148	166	409	186	156	220	87	53
16	68	142	197	357	142	173	343	168	133	184	85	56
17	64	128	180	277	138	197	296	145	119	216	80	76
18	63	115	166	219	127	183	262	136	113	181	146	60
19	93	108	160	199	121	175	236	129	144	197	168	47
20	100	101	e147	185	130	169	216	252	178	310	105	49
21	78	94	e143	173	781	162	203	197	197	226	89	46
22	74	89	141	159	660	160	333	169	145	169	78	47
23	69	103	379	e149	429	443	384	163	128	151	154	43
24	74	585	334	e144	356	384	327	149	115	127	132	44
25	72	520	262	139	299	326	289	139	112	114	109	43
26	67	e455	226	133	251	280	268	130	97	103	91	48
27	69	e385	197	123	222	249	262	123	167	96	83	60
28	78	e320	176	112	246	412	236	118	150	115	82	49
29	84	e250	166	114	---	405	251	115	186	127	75	46
30	93	178	158	126	---	356	251	110	197	128	184	47
31	79	---	149	121	---	313	---	104	---	167	208	---
TOTAL	2,568	5,758	6,962	5,990	5,780	7,478	10,513	4,899	4,509	5,352	4,044	1,888
MEAN	82.8	192	225	193	206	241	350	158	150	173	130	62.9
MAX	138	585	441	1,200	781	443	887	252	283	325	230	137
MIN	63	71	141	102	111	160	203	104	97	96	75	43

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1934 - 2005, @BY WATER YEAR (WY)

MEAN	75.3	94.9	134	209	260	304	244	159	112	99.5	87.3	68.7
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)

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SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1934 - 2005 [@]	
ANNUAL TOTAL	64,920		65,741		153	
ANNUAL MEAN	177		180		92.1	
HIGHEST ANNUAL MEAN					232	1936
LOWEST ANNUAL MEAN					92.1	1941
HIGHEST DAILY MEAN	4,430	Sep 17	1,200	Jan 14	8,010	Mar 12, 1963
LOWEST DAILY MEAN	42	Jul 22	43	Sep 23	8.5	Sep 2, 1953
ANNUAL SEVEN-DAY MINIMUM	46	Aug 17	46	Sep 19	9.8	Aug 28, 1953
MAXIMUM PEAK FLOW			2,470	Jan 14	14,400	Mar 26, 1965
MAXIMUM PEAK STAGE			7.84	Jan 14	17.21	Jan 14, 1995
INSTANTANEOUS LOW FLOW			1.8*	Oct 9	1.8*	Oct 9, 2004
10 PERCENT EXCEEDS	280		325		300	
50 PERCENT EXCEEDS	123		147		97	
90 PERCENT EXCEEDS	64		74		35	

[@] See PERIOD OF RECORD.

* See REMARKS.

e Estimated.

