

02085500 FLAT RIVER AT BAHAMA, NC

LOCATION.--Lat 36°10'58", long 78°52'44", Durham County, Hydrologic Unit 03020201, on right bank 0.5 mi upstream from Lake Michie, 1.2 mi upstream from bridge on Secondary Road 1616, 1.2 mi north of Bahama, and 1.5 mi upstream from Dial Creek.

DRAINAGE AREA.--149 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1925 to current year.

REVISED RECORDS.--WSP 1333: 1926, 1928(M), 1938, 1946. WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 346.85 ft above NGVD of 1929. Prior to Oct. 22, 1925, nonrecording gage at present site at 346.27 ft. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records fair except those above 150 ft³/s, which are poor. Prior to December 1962, some diurnal fluctuation and infrequent regulation at low flow caused by small mill 5 mi upstream. Maximum discharge for period of record from rating curve extended above 18,000 ft³/s, on basis of slope-conveyance measurement of peak flow; maximum gage height, 17.26 ft, from high-water mark inside gage shelter. Minimum discharge for period of record also occurred June 26, July 22, 2002.

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	60	77	88	90	120	70	866	61	41	10	34	216
2	57	66	74	86	104	68	370	68	33	7.7	193	106
3	55	61	66	85	597	72	183	304	30	7.0	565	70
4	53	57	63	85	547	73	137	161	29	7.2	122	50
5	51	55	90	87	244	68	115	109	168	8.0	37	39
6	50	56	133	97	204	66	103	85	65	6.9	52	35
7	49	57	100	92	679	65	96	72	34	5.9	37	76
8	48	66	82	82	311	59	91	63	23	5.2	22	282
9	54	59	73	80	187	56	87	59	22	4.1	14	539
10	63	56	137	83	152	54	81	55	16	3.4	9.9	134
11	66	53	1,630	80	129	52	79	51	14	2.8	7.9	61
12	76	53	361	78	118	51	96	48	20	2.6	9.3	41
13	62	51	200	83	157	49	396	46	27	2.6	16	33
14	56	48	1,020	85	127	47	362	44	17	3.3	743	29
15	76	47	696	81	109	47	304	42	14	2.5	472	28
16	86	47	319	77	113	56	171	41	14	1.9	139	37
17	61	47	301	73	127	106	130	75	15	1.7	61	37
18	53	49	401	78	113	98	114	65	15	2.3	39	353
19	49	69	225	97	124	72	104	47	12	2.1	29	215
20	48	256	168	89	118	63	95	43	9.2	3.3	24	77
21	46	129	139	78	102	58	88	40	7.3	1.9	19	44
22	46	90	125	74	87	54	82	38	6.4	3.6	17	35
23	43	75	118	74	75	50	76	36	6.7	5.3	15	30
24	42	67	118	72	73	48	71	37	8.3	5.5	13	26
25	41	64	125	72	69	46	68	34	7.9	8.7	12	23
26	42	64	113	77	65	46	68	30	9.4	8.2	10	22
27	45	61	104	81	66	45	77	41	10	5.3	8.7	22
28	52	61	101	77	82	45	79	58	12	5.7	7.9	24
29	250	167	96	76	80	44	65	40	15	18	7.4	32
30	185	124	96	90	---	43	61	36	12	166	1,820	33
31	97	---	94	150	---	48	---	40	---	44	1,670	---
TOTAL	2,062	2,232	7,456	2,609	5,079	1,819	4,715	1,969	713.2	362.7	6,226.1	2,749
MEAN	66.5	74.4	241	84.2	175	58.7	157	63.5	23.8	11.7	201	91.6
MAX	250	256	1,630	150	679	106	866	304	168	166	1,820	539
MIN	41	47	63	72	65	43	61	30	6.4	1.7	7.4	22
CFSM	0.45	0.50	1.61	0.56	1.18	0.39	1.05	0.43	0.16	0.08	1.35	0.61
IN.	0.51	0.56	1.86	0.65	1.27	0.45	1.18	0.49	0.18	0.09	1.55	0.69

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 2004, BY WATER YEAR (WY)

MEAN	68.0	94.5	132	219	270	288	225	114	80.4	85.9	75.2	86.8
MAX	561	489	421	761	758	948	656	573	551	798	431	984
(WY)	(1972)	(1986)	(1973)	(1936)	(1998)	(1998)	(2003)	(1978)	(1938)	(1975)	(1939)	(1996)
MIN	1.24	0.71	1.81	4.29	39.4	58.7	31.1	19.3	3.85	1.68	2.93	0.71
(WY)	(1942)	(1934)	(1934)	(1934)	(2002)	(2004)	(1942)	(2002)	(2002)	(2002)	(1977)	(1968)

02085500 FLAT RIVER AT BAHAMA, NC—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1925 - 2004	
ANNUAL TOTAL	108,832		37,992.0		144	
ANNUAL MEAN	298		104		347	
HIGHEST ANNUAL MEAN					2003	
LOWEST ANNUAL MEAN					25.2	
HIGHEST DAILY MEAN	5,680	Mar 20	1,820	Aug 30	21,800	Sep 6, 1996
LOWEST DAILY MEAN	24	Aug 30	1.7	Jul 17	0.17	Jun 25, 2002
ANNUAL SEVEN-DAY MINIMUM	29	Aug 24	2.2	Jul 15	0.24	Jun 19, 2002
MAXIMUM PEAK FLOW			5,880	Aug 30	33800*	Sep 6, 1996
MAXIMUM PEAK STAGE			7.67	Aug 30	17.26*	Sep 6, 1996
INSTANTANEOUS LOW FLOW			1.5	Jul 17	0.15*	Jun 25, 2002
ANNUAL RUNOFF (CFSM)	2.00		0.697		0.969	
ANNUAL RUNOFF (INCHES)	27.17		9.49		13.17	
10 PERCENT EXCEEDS	675		184		282	
50 PERCENT EXCEEDS	105		62		50	
90 PERCENT EXCEEDS	47		9.1		6.9	

* See REMARKS.

