

## 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 mi<sup>2</sup>.

## 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.--Records 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 ft<sup>3</sup>/s, on basis of slope-conveyance measurement of peak flow; maximum gage height, 17.26 ft, from high-water mark inside gage shelter.

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	25	17	139	79	197	648	178	112	e24	e27	e6.1	e2.4
2	22	17	127	77	148	297	263	e95	30	e23	e6.0	e1.9
3	21	17	110	76	144	200	310	e72	44	e17	e5.9	e1.6
4	20	70	97	76	402	158	177	e60	62	e15	e5.3	e1.4
5	19	145	89	77	248	139	137	e52	47	e15	e4.8	e1.1
6	e19	58	83	75	178	132	121	e61	38	e14	e4.5	e0.90
7	e17	36	85	74	145	122	125	e58	33	e16	e3.9	e0.80
8	e15	30	87	71	130	193	194	e53	30	e18	e3.1	e0.70
9	14	26	86	72	122	300	149	e49	42	e24	e23	e0.70
10	14	23	4,560	70	129	175	120	e42	e204	e24	e16	e0.80
11	13	22	916	70	133	143	104	e42	e76	e17	e10	e0.70
12	e13	117	403	68	110	134	95	46	e46	e13	e7.5	e0.60
13	e158	1,340	262	71	102	124	110	46	e37	e12	e6.6	e0.50
14	e120	293	192	2,920	101	114	151	43	e35	e10	e5.7	e0.50
15	e95	166	154	821	124	109	108	42	e36	e9.7	e5.0	e0.50
16	e71	120	131	353	127	114	89	41	e34	e8.9	e4.1	e0.50
17	e54	102	120	242	111	747	81	40	e28	e8.6	e16	e0.40
18	e47	89	113	179	98	707	78	e37	e25	e7.8	e30	e0.40
19	e39	82	106	145	89	347	e75	e39	e24	e7.0	e20	e0.30
20	e106	77	100	133	85	244	e73	e99	e23	e6.3	e12	e0.40
21	e66	72	90	133	87	191	e74	57	e22	e5.6	e9.1	e0.60
22	39	69	87	128	91	159	e72	47	e21	e5.5	e7.0	e0.60
23	29	74	95	126	88	193	e77	e40	e21	e6.4	e5.8	e0.50
24	26	198	175	109	104	331	e77	38	e20	e5.4	e5.8	e0.40
25	24	377	135	104	216	231	e68	37	e19	e4.6	e5.1	e0.40
26	23	204	106	114	145	181	60	36	e18	e4.4	e4.4	e0.30
27	22	128	95	116	114	159	e66	e33	e18	e4.6	e4.0	e0.30
28	e21	493	86	97	586	1,270	56	e30	e34	e3.7	e3.5	e0.30
29	20	307	83	86	---	729	56	e25	e46	e3.8	e3.0	e0.30
30	19	177	83	132	---	319	e79	e24	e37	e5.3	e2.6	e0.20
31	18	---	81	323	---	218	---	e23	---	e6.3	e2.7	---
TOTAL	1,209	4,946	9,076	7,217	4,354	9,128	3,423	1,519	1,174	348.9	248.5	21.00
MEAN	39.0	165	293	233	156	294	114	49.0	39.1	11.3	8.02	0.70
MAX	158	1,340	4,560	2,920	586	1,270	310	112	204	27	30	2.4
MIN	13	17	81	68	85	109	56	23	18	3.7	2.6	0.20
CFSM	0.26	1.11	1.96	1.56	1.04	1.98	0.77	0.33	0.26	0.08	0.05	0.00
IN.	0.30	1.23	2.27	1.80	1.09	2.28	0.85	0.38	0.29	0.09	0.06	0.01

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 2005, BY WATER YEAR (WY)

MEAN	67.7	95.4	134	220	268	288	223	113	79.8	85.0	74.4	85.7
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	0.70
(WY)	(1942)	(1934)	(1934)	(1934)	(2002)	(2004)	(1942)	(2002)	(2002)	(2002)	(1977)	(2005)

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SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1925 - 2005	
ANNUAL TOTAL	41,473.0		42,664.40		144	
ANNUAL MEAN	113		117		347	
HIGHEST ANNUAL MEAN					25.2	
LOWEST ANNUAL MEAN					2002	
HIGHEST DAILY MEAN	4,560	Dec 10	4,560	Dec 10	21,800	Sep 6, 1996
LOWEST DAILY MEAN	1.7	Jul 17	0.20	Sep 30	0.17	Jun 25, 2002
ANNUAL SEVEN-DAY MINIMUM	2.2	Jul 15	0.31	Sep 24	0.24	Jun 19, 2002
MAXIMUM PEAK FLOW			7,560	Dec 10	33,800*	Sep 6, 1996
MAXIMUM PEAK STAGE			8.55	Dec 10	17.26*	Sep 6, 1996
INSTANTANEOUS LOW FLOW			NOT DETERMINED		0.15*	Jun 25, 2002
ANNUAL RUNOFF (CFSM)	0.760		0.784		0.967	
ANNUAL RUNOFF (INCHES)	10.35		10.65		13.14	
10 PERCENT EXCEEDS	184		199		280	
50 PERCENT EXCEEDS	65		61		50	
90 PERCENT EXCEEDS	9.1		3.8		6.9	

\* See REMARKS.

e Estimated.

