

CAPE FEAR RIVER BASIN

207

02097464 MORGAN CREEK NEAR WHITE CROSS, NC

LOCATION--Lat 35°55'26", long 79°06'55", Orange County, Hydrologic Unit 03020002, at downstream side of culvert on State Highway 54, 2 mi upstream from University Lake, and 3.5 mi east of White Cross.

DRAINAGE AREA.--8.35 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1988 to current year.

GAGE--Water-stage recorder. Elevation of gage is 420 ft above NGVD of 1929, from topographic map. Satellite telemetry at station.

REMARKS.--Records fair except those above 100 ft³/s and those for estimated daily discharges, which are poor. Maximum discharge for period of record from rating curve extended above 2,700 ft³/s, by logarithmic plotting. No flow occurred several days in June to Oct. 2002.

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	0.00	1.4	e1.3	9.6	11	32	18	6.0	10	2.7	6.1	1.1
2	0.00	3.1	e1.2	9.0	7.6	38	14	5.7	5.8	55	17	0.94
3	0.00	4.0	e1.1	10	6.3	24	11	5.5	5.1	25	6.4	0.74
4	0.00	2.1	e1.0	10	6.6	18	9.6	5.3	5.9	11	2.8	0.87
5	0.00	1.2	36	7.7	6.0	18	9.2	5.9	5.3	6.7	3.4	2.6
6	0.00	11	14	6.7	5.4	47	9.2	7.4	4.5	4.9	3.9	0.91
7	0.00	4.7	11	5.9	37	26	63	6.4	10	4.5	2.6	0.76
8	0.00	2.7	9.2	5.9	20	18	34	5.8	21	3.7	8.6	0.85
9	0.00	2.2	11	5.7	12	15	251	5.2	9.6	3.1	4.7	0.86
10	0.01	2.2	12	5.4	13	12	462	5.1	6.3	2.8	3.1	0.76
11	120	3.7	25	4.8	11	10	76	5.1	4.6	2.7	3.7	0.66
12	5.2	16	20	4.5	8.6	9.3	32	5.2	5.1	3.5	2.2	0.64
13	1.0	14	73	e4.3	7.2	9.1	21	4.7	4.9	2.6	1.8	0.66
14	1.2	3.4	38	e4.4	6.6	9.3	15	5.5	4.2	5.9	1.6	0.73
15	1.2	2.0	18	e4.3	7.2	8.1	11	6.8	4.5	3.3	1.5	0.75
16	7.6	2.3	13	e3.9	7.6	52	9.6	9.7	8.8	2.7	1.4	0.70
17	1.9	21	9.3	e4.2	8.3	25	8.2	6.6	6.2	2.7	1.3	0.66
18	0.76	5.9	7.7	e4.0	13	18	7.5	7.5	5.5	2.3	1.2	3.1
19	e0.60	1.5	7.3	e3.9	20	13	7.9	13	7.6	2.1	1.1	5.2
20	e0.50	1.9	14	e3.7	17	344	6.8	8.0	24	2.0	1.1	1.4
21	e0.44	5.1	10	e3.7	13	52	6.1	8.2	12	1.8	1.1	0.93
22	e0.40	4.1	7.7	e3.8	59	26	5.9	41	6.5	5.1	1.5	0.97
23	e0.38	3.7	6.6	e3.9	39	21	4.6	34	4.8	10	1.9	23
24	e0.36	2.7	18	e3.7	19	18	5.0	19	3.7	3.8	1.3	3.3
25	e0.34	e2.4	40	e3.4	13	14	7.1	42	3.2	2.6	0.94	1.6
26	e0.40	e2.0	20	e3.4	11	12	15	22	2.8	2.1	0.88	1.2
27	e0.38	e1.8	13	e3.4	98	11	18	12	2.6	1.9	0.79	1.1
28	e5.0	e1.7	9.9	e3.2	74	9.8	7.9	9.4	2.5	1.7	0.69	0.98
29	15	e1.5	8.5	e3.5	---	9.7	6.3	7.7	2.5	1.6	0.66	0.87
30	7.5	e1.4	7.4	e14	---	49	6.1	7.1	2.4	2.2	0.66	0.80
31	2.6	---	6.8	21	---	29	---	7.8	---	2.1	0.72	---
TOTAL	172.77	132.7	471.0	184.9	557.4	997.3	1,158.0	340.6	201.9	184.1	86.64	59.64
MEAN	5.57	4.42	15.2	5.96	19.9	32.2	38.6	11.0	6.73	5.94	2.79	1.99
MAX	120	21	73	21	98	344	462	42	24	55	17	23
MIN	0.00	1.2	1.0	3.2	5.4	8.1	4.6	4.7	2.4	1.6	0.66	0.64
CFSM	0.67	0.53	1.82	0.71	2.38	3.85	4.62	1.32	0.81	0.71	0.33	0.24
IN.	0.77	0.59	2.10	0.82	2.48	4.44	5.16	1.52	0.90	0.82	0.39	0.27

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2003, BY WATER YEAR (WY)

CAPE FEAR RIVER BASIN

02097464 MORGAN CREEK NEAR WHITE CROSS, NC—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR	FOR 2003 WATER YEAR	WATER YEARS 1989 - 2003
ANNUAL TOTAL	1,293.73	4,546.95	
ANNUAL MEAN	3.54	12.5	7.69
HIGHEST ANNUAL MEAN			12.5
LOWEST ANNUAL MEAN			1.46
HIGHEST DAILY MEAN	120	Oct 11	737
LOWEST DAILY MEAN	0.00	Jun 16	Sep 6, 1996
ANNUAL SEVEN-DAY MINIMUM	0.00	Aug 8	Jun 16, 2002
MAXIMUM PEAK FLOW			3,100*
MAXIMUM PEAK STAGE		9.40	11.20
INSTANTANEOUS LOW FLOW		0.00*	0.00*
ANNUAL RUNOFF (CFSM)	0.42	1.49	0.92
ANNUAL RUNOFF (INCHES)	5.76	20.26	12.51
10 PERCENT EXCEEDS	8.4	22	15
50 PERCENT EXCEEDS	1.0	5.5	2.8
90 PERCENT EXCEEDS	0.01	0.83	0.23

e Estimated.

* See REMARKS.

