

## CAPE FEAR RIVER BASIN

02097464 MORGAN CREEK NEAR WHITE CROSS, NC

LOCATION.--Lat 35°55'25", long 79°06'56", 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 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

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

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

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Maximum discharge for period of record from rating curve extended above 2,700 ft<sup>3</sup>/s, by logarithmic plotting. Minimum discharge for period of record also occurred Sept. 13, 14. Minimum discharge for current water year also occurred Sept. 18, 19, 20.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	1.0	.75	1.7	1.8	2.6	112	3.2	41	.80	1.1	.41
2	1.4	1.1	.73	1.6	1.7	2.3	48	e3.1	22	.73	.94	.38
3	1.4	1.2	.74	1.6	1.6	2.5	24	e3.0	7.4	.71	.83	.34
4	1.3	1.2	.75	1.6	1.6	23	19	e2.9	4.1	.77	.76	.33
5	1.4	1.3	.69	1.6	2.2	18	16	e2.8	3.4	.82	.75	.31
6	1.4	1.2	.72	1.6	2.0	8.7	13	e2.8	2.8	.70	.61	.26
7	1.3	1.3	.72	1.7	1.8	5.5	12	e2.7	2.4	.65	.58	.22
8	1.2	1.3	.71	1.9	2.5	4.2	10	e2.7	2.3	1.2	.56	.19
9	1.3	1.3	.69	1.8	2.4	3.6	9.2	e2.6	2.2	1.2	.48	.15
10	1.3	1.4	.68	1.6	2.2	3.0	7.7	e2.5	1.9	1.3	.52	.14
11	1.3	1.9	.72	1.5	1.9	2.7	6.8	e2.4	1.7	.81	1.1	.15
12	1.2	2.2	.74	1.4	2.0	2.5	6.3	e2.4	1.6	.58	1.7	.15
13	1.0	2.2	.70	1.5	3.7	2.7	5.7	e2.8	2.3	.53	.67	.15
14	.97	2.8	.78	1.6	3.9	2.4	5.0	e2.6	6.6	.51	.70	.13
15	1.2	2.5	.76	1.7	3.7	3.1	4.8	e2.4	4.4	.50	.45	.10
16	1.3	1.8	.90	1.7	3.2	3.7	4.6	e7.0	2.3	.44	.36	.08
17	1.3	2.0	22	1.6	70	2.9	4.1	3.2	1.8	.41	.36	.07
18	1.4	2.0	5.0	1.7	17	2.5	4.2	3.2	1.5	.41	.41	.06
19	1.5	2.0	3.0	2.2	7.5	2.3	3.7	3.0	1.3	.40	.48	.06
20	1.4	2.5	2.9	16	4.7	7.0	3.7	2.9	1.2	.37	.56	.08
21	1.4	2.1	2.2	6.8	3.6	83	3.9	3.0	1.1	.38	.46	.19
22	1.3	1.7	2.4	3.4	3.4	19	3.9	3.3	1.3	.32	.36	.17
23	1.3	1.5	2.2	2.6	3.6	9.4	3.9	3.9	2.4	.28	.32	.14
24	1.2	1.4	2.1	2.2	4.2	6.0	3.8	3.3	2.0	.61	.50	.89
25	1.6	2.7	2.0	1.9	4.1	4.4	6.2	3.1	5.9	1.3	.41	.65
26	1.4	4.1	2.0	1.7	4.8	3.8	4.4	12	2.0	1.3	.35	.23
27	1.2	1.3	2.0	1.7	3.3	3.3	3.5	4.2	1.5	8.9	.29	.18
28	1.1	1.0	1.9	1.7	2.9	3.0	3.3	3.1	1.2	2.7	.31	.14
29	1.0	.84	1.9	1.6	---	93	3.1	3.2	.94	1.7	.26	.13
30	1.0	.80	1.8	2.1	---	151	3.0	2.6	.90	2.1	.32	.12
31	.98	---	1.8	2.2	---	47	---	2.2	---	1.4	.58	---
TOTAL	39.45	51.64	66.98	75.5	167.3	528.1	358.8	104.1	133.44	34.83	18.08	6.60
MEAN	1.27	1.72	2.16	2.44	5.97	17.0	12.0	3.36	4.45	1.12	.58	.22
MAX	1.6	4.1	22	16	70	151	112	12	41	8.9	1.7	.89
MIN	.97	.80	.68	1.4	1.6	2.3	3.0	2.2	.90	.28	.26	.06
CFSM	.15	.21	.26	.29	.72	2.04	1.43	.40	.53	.13	.07	.03
IN.	.18	.23	.30	.34	.75	2.35	1.60	.46	.59	.16	.08	.03

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2001, BY WATER YEAR (WY)

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	4.02	4.69	4.82	13.0	14.5	19.8	10.5	6.97	5.07	3.09	2.89	6.92	
MAX	13.1	15.3	13.2	33.4	39.7	53.0	18.2	30.1	19.9	12.3	18.7	40.4	
(WY)	1990	1996	1990	1998	1998	1998	1993	1989	1995	2000	1995	1999	
MIN	.26	.13	.51	2.44	3.68	5.14	2.33	.93	.54	.41	.091	.075	
(WY)	1999	1999	1999	2001	1999	1999	1995	1999	1999	1999	1999	1999	

## SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1989 - 2001

ANNUAL TOTAL	2286.40	1584.82	
ANNUAL MEAN	6.25	4.34	7.81
HIGHEST ANNUAL MEAN			12.5
LOWEST ANNUAL MEAN			4.34
HIGHEST DAILY MEAN	269	Jul 24	151
LOWEST DAILY MEAN	.48	Jul 19	.06
ANNUAL SEVEN-DAY MINIMUM	.55	Jul 16	.08
MAXIMUM PEAK FLOW			523
MAXIMUM PEAK STAGE			7.11
INSTANTANEOUS LOW FLOW			.06*
ANNUAL RUNOFF (CFSM)	.75		.52
ANNUAL RUNOFF (INCHES)	10.19		7.06
10 PERCENT EXCEEDS	14		6.1
50 PERCENT EXCEEDS	2.5		1.7
90 PERCENT EXCEEDS	.91		.36

e Estimated.

\* See REMARKS.

02097464 MORGAN CREEK NEAR WHITE CROSS, NC--Continued

