

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 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.--No estimated daily discharges. Records poor. Maximum discharge for period of record from rating curve extended above 2,700 ft³/s, by logarithmic plotting. No flow many days June to Sept. 2002.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.11	0.15	0.12	0.18	2.5	2.9	12	0.67	0.05	0.04	0.01	0.57
2	0.09	0.16	0.14	0.23	2.8	4.1	4.6	0.83	0.05	0.04	0.01	0.12
3	0.08	0.17	0.14	0.28	2.6	8.8	3.0	0.84	0.03	0.04	0.01	0.01
4	0.08	0.15	0.12	0.42	3.2	5.3	2.2	1.7	0.03	0.04	0.01	0.02
5	0.07	0.12	0.09	0.43	3.7	3.6	1.9	2.2	0.02	0.06	0.01	0.02
6	0.08	0.12	0.08	0.41	4.0	3.1	1.8	1.4	0.02	0.04	0.01	0.01
7	0.10	0.11	0.09	0.51	20	3.0	1.6	0.79	0.03	0.03	0.01	0.01
8	0.08	0.12	0.12	0.70	10	2.9	1.5	0.67	0.03	0.03	0.00	0.00
9	0.08	0.13	0.11	0.82	5.4	3.1	1.6	0.64	0.04	0.02	0.00	0.00
10	0.09	0.12	0.17	0.96	4.0	3.3	1.9	0.46	0.02	0.03	0.00	0.00
11	0.09	0.13	1.4	2.5	3.4	2.7	1.7	0.17	0.01	0.03	0.00	0.00
12	0.08	0.14	0.29	2.0	2.8	3.0	1.5	0.66	0.01	0.02	0.00	0.01
13	0.07	0.14	0.23	1.9	2.7	3.7	1.5	0.48	0.01	0.01	0.00	0.01
14	0.24	0.13	0.20	1.3	2.2	3.5	1.4	2.1	0.01	0.01	0.00	0.01
15	0.67	0.12	0.19	1.1	2.1	3.1	1.4	2.0	0.01	0.02	0.01	0.02
16	0.30	0.14	0.19	0.94	2.3	3.1	1.3	1.4	0.00	0.02	0.01	0.03
17	0.14	0.14	0.25	0.87	2.5	4.9	1.3	1.2	0.00	0.01	0.02	0.02
18	0.07	0.14	0.46	0.84	2.4	8.0	1.2	1.6	0.00	0.01	0.02	0.03
19	0.10	0.14	0.40	18	2.0	6.3	1.2	0.60	0.00	0.00	0.01	0.02
20	0.10	0.13	0.29	22	2.1	5.6	1.7	0.31	0.00	0.00	0.01	0.03
21	0.09	0.12	0.25	7.4	2.3	8.4	1.6	0.55	0.00	0.00	0.01	0.03
22	0.09	0.11	0.22	5.9	1.9	7.6	1.5	0.23	0.01	0.00	0.01	0.02
23	0.10	0.12	0.22	68	2.0	4.7	1.4	0.08	0.01	0.01	0.01	0.02
24	0.09	0.19	0.37	24	2.2	3.7	0.98	0.03	0.00	0.11	0.00	0.02
25	0.09	0.24	0.31	17	2.2	3.2	1.3	0.07	0.00	0.16	0.01	0.02
26	0.10	0.23	0.38	8.3	2.4	2.8	1.1	0.14	0.00	0.22	0.00	0.02
27	0.12	0.20	0.34	5.1	2.9	3.1	1.1	0.15	0.01	0.12	0.01	0.02
28	0.12	0.14	0.33	3.7	2.9	2.4	1.5	0.07	0.09	0.06	0.01	0.03
29	0.13	0.10	0.52	3.0	---	2.2	0.99	0.06	0.32	0.02	0.02	0.02
30	0.12	0.11	0.31	2.6	---	2.2	0.88	0.06	0.11	0.01	0.03	0.01
31	0.13	---	0.21	2.3	---	3.2	---	0.08	---	0.01	0.13	---
TOTAL	3.90	4.26	8.54	203.69	101.5	127.5	58.65	22.24	0.92	1.22	0.39	1.15
MEAN	0.126	0.142	0.275	6.571	3.625	4.113	1.955	0.717	0.031	0.039	0.013	0.038
MAX	0.67	0.24	1.4	68	20	8.8	12	2.2	0.32	0.22	0.13	0.57
MIN	0.07	0.10	0.08	0.18	1.9	2.2	0.88	0.03	0.00	0.00	0.00	0.00
CFSM	0.02	0.02	0.03	0.79	0.43	0.49	0.23	0.09	0.00	0.00	0.00	0.00
IN.	0.02	0.02	0.04	0.91	0.45	0.57	0.26	0.10	0.00	0.01	0.00	0.01

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2002, BY WATER YEAR (WY)

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	3.717	4.365	4.498	12.56	13.71	18.69	9.896	6.524	4.706	2.874	2.687	6.429		
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	0.13	0.13	0.28	2.44	3.63	4.11	1.95	0.72	0.031	0.039	0.013	0.038		
(WY)	2002	1999	2002	2001	2002	2002	2002	2002	2002	2002	2002	2002		

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1989 - 2002

ANNUAL TOTAL	1443.45	533.96	
ANNUAL MEAN	3.955	1.463	
HIGHEST ANNUAL MEAN			12.5 1998
LOWEST ANNUAL MEAN			1.46 2002
HIGHEST DAILY MEAN	151 Mar 30	68 Jan 23	737 Sep 6 1996
LOWEST DAILY MEAN	0.06 Sep 18	0.00 Jun 16	0.00 Jun 16 2002
ANNUAL SEVEN-DAY MINIMUM	0.08 Oct 3	0.00 Aug 8	0.00 Aug 8 2002
MAXIMUM PEAK FLOW		236 Jan 23	3100* Aug 27 1995
MAXIMUM PEAK STAGE		5.57 Jan 23	11.20 Aug 27 1995
INSTANTANEOUS LOW FLOW		0.00* Jun 16	0.00* Jun 16 2002
ANNUAL RUNOFF (CFSM)	0.47	0.18	0.88
ANNUAL RUNOFF (INCHES)	6.43	2.38	11.91
10 PERCENT EXCEEDS	5.9	3.2	14
50 PERCENT EXCEEDS	1.3	0.14	2.7
90 PERCENT EXCEEDS	0.12	0.01	0.20

* See REMARKS.

02097464 MORGAN CREEK NEAR WHITE CROSS, NC--Continued

