

02105769 CAPE FEAR RIVER AT LOCK 1 NEAR KELLY, NC

LOCATION.--Lat 34°24'16", long 78°17'37", Bladen County, Hydrologic Unit 03030005, on right bank near upstream end of Lock 1, 1.3 mi upstream from Natmore Creek, 2.0 mi upstream from bridge on State Highway 11, 4.6 mi southeast of Kelly, and at river mile 67.

DRAINAGE AREA.--5,255 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1969 to current year.

REVISED RECORDS.--WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder with concrete lock and dam control. Datum of gage is 2.90 ft below NGVD of 1929 (U.S. Army Corps of Engineers bench mark). Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records fair. Slight regulation at high flow December 1972 to August 1981, caused by storage in B. Everett Jordan Lake. Flow regulated since September 1981 by B. Everett Jordan Lake (station 02098197). Slight diurnal fluctuation and some regulation for short periods at low flow caused by power plants upstream from station. The City of Wilmington diverted an average of 26.3 ft³/s for municipal water supply, most of which was returned downstream of station as treated effluent. Prior to regulation, maximum discharge: 57,000 ft³/s, March 3, 1979; gage height: 24.92 ft, from floodmarks. Minimum discharge prior to regulation, 406 ft³/s, July 1, 1981. Minimum discharge for period of record not determined due to fish lockage.

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	6,370	6,420	2,550	3,190	3,180	9,320	2,300	1,870	2,360	2,840	3,940	14,600
2	3,640	5,540	2,530	3,100	3,400	9,970	2,390	1,990	2,280	3,280	5,470	16,100
3	2,540	4,460	2,580	3,010	3,510	10,300	2,620	4,190	1,800	3,060	4,310	15,700
4	2,230	3,610	2,570	2,960	3,930	10,000	3,110	9,180	1,330	2,680	3,260	14,400
5	2,040	3,140	2,760	2,930	5,870	9,920	3,330	11,300	1,370	2,460	2,880	11,600
6	1,880	2,930	3,040	3,080	8,390	9,240	3,030	10,400	2,420	2,140	2,860	7,480
7	1,630	2,920	3,230	3,350	8,560	7,330	2,920	9,140	2,700	1,720	3,090	4,530
8	1,720	3,030	3,200	3,430	7,330	5,970	3,190	8,050	2,150	1,630	2,810	4,060
9	1,870	2,990	3,160	3,410	8,430	5,250	3,280	6,460	1,820	1,790	2,400	8,800
10	1,980	2,890	3,030	3,370	9,320	5,120	3,070	5,270	1,580	1,730	1,830	16,400
11	2,150	2,660	3,800	3,230	9,230	4,770	3,140	3,750	1,870	1,680	1,300	19,100
12	2,190	2,620	6,730	3,090	8,880	4,490	4,720	2,730	2,110	1,680	1,080	20,600
13	2,150	2,540	8,830	3,000	7,960	4,320	5,610	2,420	2,230	1,700	1,570	21,200
14	2,210	2,290	9,580	2,990	7,620	3,940	6,170	2,310	2,070	1,820	2,740	20,600
15	2,370	2,050	10,400	3,020	8,790	3,640	6,200	2,130	1,880	1,800	5,120	16,900
16	2,480	1,950	11,700	3,000	8,830	3,560	6,800	2,030	1,640	1,460	9,200	10,700
17	2,440	1,960	12,200	3,000	8,650	4,080	7,920	1,850	1,690	1,220	12,800	6,820
18	2,410	1,930	12,100	3,030	8,870	5,690	6,410	1,490	1,960	1,180	11,200	6,300
19	2,230	1,930	11,700	3,150	8,840	7,040	4,500	1,250	2,440	1,140	8,830	7,760
20	1,910	2,610	11,800	3,190	9,800	7,480	3,620	1,200	2,530	1,150	9,390	8,030
21	1,760	3,530	11,000	3,400	8,640	7,970	3,550	1,260	2,400	1,230	9,400	7,920
22	2,390	3,860	9,360	3,420	6,700	8,080	3,670	1,320	2,250	1,610	7,140	8,870
23	3,050	4,030	8,090	3,230	5,860	7,360	3,390	1,310	1,980	1,610	6,840	7,850
24	3,130	3,790	5,850	2,950	5,430	5,170	2,710	1,790	1,760	1,520	7,460	5,900
25	2,490	3,290	4,770	2,740	5,160	3,650	2,160	2,730	1,600	1,560	5,800	3,940
26	1,770	2,950	4,400	2,680	5,150	3,130	1,870	2,800	1,670	1,590	4,010	2,900
27	1,710	2,770	4,050	2,880	5,800	3,010	2,180	2,470	2,990	1,480	2,980	2,520
28	1,910	2,580	3,810	3,010	7,510	2,760	2,300	1,950	3,540	1,370	2,520	2,410
29	3,660	2,580	3,590	3,120	8,680	2,490	2,200	1,430	2,880	1,510	2,280	2,870
30	6,300	2,630	3,390	3,090	---	2,360	1,950	1,280	2,550	1,870	2,900	6,310
31	6,770	---	3,230	3,080	---	2,320	---	1,530	---	2,070	8,480	---
TOTAL	83,380	92,480	189,030	96,130	208,320	179,730	110,310	108,880	63,850	55,580	155,890	303,170
MEAN	2,690	3,083	6,098	3,101	7,183	5,798	3,677	3,512	2,128	1,793	5,029	10,110
MAX	6,770	6,420	12,200	3,430	9,800	10,300	7,920	11,300	3,540	3,280	12,800	21,200
MIN	1,630	1,930	2,530	2,680	3,180	2,320	1,870	1,200	1,330	1,140	1,080	2,410

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 2004,* BY WATER YEAR (WY)

MEAN	3,560	3,443	4,751	7,895	9,450	10,960	8,144	4,117	3,861	3,175	3,385	4,126
MAX	15,080	11,390	11,050	17,180	27,780	23,830	21,650	12,110	15,070	10,860	13,400	22,580
(WY)	(2000)	(1996)	(1984)	(1998)	(1998)	(1998)	(2003)	(1989)	(1982)	(1995)	(2003)	(1996)
MIN	1,023	1,062	1,111	1,717	2,992	3,016	1,667	968	874	802	776	985
(WY)	(1999)	(2002)	(2002)	(2001)	(2001)	(2002)	(1986)	(2002)	(2002)	(2002)	(2002)	(1990)

CAPE FEAR RIVER BASIN

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SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1982 - 2004*	
ANNUAL TOTAL	3,546,260		1,646,750		5,551	
ANNUAL MEAN	9,716		4,499		10,740	
HIGHEST ANNUAL MEAN					1,833	
LOWEST ANNUAL MEAN					47,600	
HIGHEST DAILY MEAN	42,800	Apr 15	21,200	Sep 13	47,600	Sep 11, 1996
LOWEST DAILY MEAN	1,630	Oct 7	1,080	Aug 12	179	Aug 10, 2002
ANNUAL SEVEN-DAY MINIMUM	1,900	Oct 5	1,280	Jul 16	350	Aug 7, 2002
MAXIMUM PEAK FLOW			21,300	Sep 13	48,300	Sep 11, 1996
MAXIMUM PEAK STAGE			20.48	Sep 13	24.29	Sep 11, 1996
INSTANTANEOUS LOW FLOW			1,030	Aug 12	NOT DETERMINED*	
10 PERCENT EXCEEDS	21,400		9,210		14,800	
50 PERCENT EXCEEDS	7,330		3,080		2,840	
90 PERCENT EXCEEDS	2,200		1,690		1,050	

* Regulated period only (1982-2004). See REMARKS.

