

Water-Data Report 2007

**02102500 CAPE FEAR RIVER AT LILLINGTON, NC**

Cape Fear Basin  
Upper Cape Fear Subbasin

LOCATION.--Lat 35°24'22", long 78°48'48" referenced to North American Datum of 1983, Harnett County, NC, Hydrologic Unit 03030004, on right bank 60 ft downstream of bridge on U.S. Highway 401, 1,860 ft downstream of Southern Railway bridge, 0.5 mi north of Lillington, 1 mile downstream of Neal Creek, and at river mile 178.

DRAINAGE AREA.--3,464 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--December 1923 to current year.

REVISED RECORDS.--WSP 1002: 1930(M). WSP 1032: 1942(m). WSP 1303: 1944(M). WSP 1333: 1945. WSP 1383:

GAGE.--Water-stage recorder. Datum of gage is 104.62 ft above NGVD of 1929. December 6, 1923 to October 7, 1927, nonrecording gage and October 8, 1927 to December 2, 1975, water-stage recorder at site 60 ft upstream at bridge pier at same datum. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records good. Some regulation at high flows, December 1972 to August 1981, caused by temporary storage in B. Everett Jordan Lake. Flow regulated since September 1981 by B. Everett Jordan Lake (station 02098197). Diurnal fluctuation and slight regulation at low flow caused by power plants upstream from station. Fluctuation and regulation by Buckhorn Reservoir, 13 mi upstream from station, ended in December 1962. Prior to regulation, maximum discharge: 150,000 ft<sup>3</sup>/s, September 19, 1945, from rating curve extended above 76,000 ft<sup>3</sup>/s; gage height: 33.19 ft, from floodmark; minimum discharge: 11 ft<sup>3</sup>/s, October 14, 15, 1954; gage height: -0.17 ft. Minimum discharge for period of record also occurred on August 7, 2002.

## 02102500 CAPE FEAR RIVER AT LILLINGTON, NC—Continued

**DISCHARGE, CUBIC FEET PER SECOND**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**  
**DAILY MEAN VALUES**

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	552	1,160	12,900	5,800	1,420	3,630	2,070	1,010	560	853	539	476
2	464	1,110	9,140	6,300	2,180	8,280	1,990	893	554	601	463	535
3	506	1,070	9,420	6,720	3,090	15,900	1,490	782	870	520	603	581
4	512	1,030	8,770	6,080	2,560	12,700	1,470	778	889	489	592	428
5	512	1,030	4,770	5,710	1,950	6,560	1,360	771	632	472	557	373
6	512	971	1,740	8,570	2,430	7,210	1,030	730	603	567	553	359
7	521	817	1,560	10,800	2,370	6,930	978	725	644	560	506	367
8	622	4,010	1,470	10,700	2,300	6,500	939	728	573	529	515	343
9	608	5,850	1,430	14,300	2,270	4,560	923	738	550	527	508	319
10	568	4,320	1,350	10,200	2,200	4,410	867	729	577	531	510	305
11	563	3,220	1,330	9,470	2,140	4,320	853	676	570	631	494	322
12	575	3,580	1,270	8,690	2,070	4,190	1,980	699	561	683	495	336
13	543	5,050	1,040	7,710	1,490	2,790	5,710	1,080	580	588	480	327
14	577	4,930	1,030	5,120	4,590	1,960	3,440	1,290	609	556	498	351
15	539	4,200	1,020	2,600	9,890	1,920	2,900	1,120	591	529	518	686
16	480	6,170	1,010	2,500	5,960	2,950	16,300	1,240	591	539	482	408
17	538	9,510	1,010	2,380	6,230	11,600	14,900	1,160	595	509	475	348
18	830	6,640	983	2,340	5,640	7,270	11,100	1,080	615	664	504	354
19	2,040	7,090	978	2,440	5,340	4,210	10,600	605	663	587	482	354
20	1,660	7,150	947	2,550	5,160	5,670	12,100	555	653	522	482	363
21	1,810	6,910	904	2,540	5,050	5,340	11,900	566	614	524	502	360
22	1,670	18,200	984	3,760	4,760	5,130	11,500	590	589	534	486	342
23	1,610	24,800	3,310	5,900	2,410	4,950	11,200	600	562	529	469	316
24	1,560	19,400	5,300	4,920	2,270	4,140	11,100	575	548	526	446	300
25	1,440	16,100	5,930	5,080	2,220	4,050	8,320	566	527	531	423	299
26	621	6,200	19,400	4,580	3,420	3,950	1,660	594	521	527	400	299
27	574	9,080	14,100	4,330	5,220	3,460	1,160	594	521	515	393	296
28	737	14,500	9,860	4,180	4,380	1,730	1,120	585	598	530	404	292
29	1,080	14,300	6,860	3,630	---	1,790	1,080	571	640	553	406	283
30	1,150	14,000	6,220	1,690	---	1,890	1,040	585	1,080	569	372	272
31	991	---	5,920	1,360	---	2,170	---	591	---	640	379	---
<b>Total</b>	26,965	222,398	141,956	172,950	101,010	162,160	153,080	23,806	18,680	17,435	14,936	10,994
<b>Mean</b>	870	7,413	4,579	5,579	3,608	5,231	5,103	768	623	562	482	366
<b>Max</b>	2,040	24,800	19,400	14,300	9,890	15,900	16,300	1,290	1,080	853	603	686
<b>Min</b>	464	817	904	1,360	1,420	1,730	853	555	521	472	372	272
<b>Cfsm</b>	0.25	2.14	1.32	1.61	1.04	1.51	1.47	0.22	0.18	0.16	0.14	0.11
<b>In.</b>	0.29	2.39	1.52	1.86	1.08	1.74	1.64	0.26	0.20	0.19	0.16	0.12

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 2007<sup>a</sup>, BY WATER YEAR (WY)**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	1,910	2,168	2,929	4,828	5,754	6,952	4,944	2,418	2,250	1,705	1,701	1,989
<b>Max</b>	6,442	7,919	8,595	11,750	16,440	15,710	14,780	7,784	12,510	5,694	7,075	13,920
<b>(WY)</b>	(1990)	(1986)	(1984)	(1998)	(1998)	(1993)	(2003)	(1989)	(1982)	(1995)	(2003)	(1996)
<b>Min</b>	469	464	612	707	1,380	1,083	969	642	551	360	274	366
<b>(WY)</b>	(2006)	(2006)	(2002)	(2001)	(2006)	(2006)	(1985)	(2002)	(1999)	(2002)	(2002)	(2007)

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SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 1982 - 2007 <sup>a</sup>	
<b>Annual total</b>	868,406		1,066,370			
<b>Annual mean</b>	2,379		2,922		3,282	
<b>Highest annual mean</b>					7,146	2003
<b>Lowest annual mean</b>					1,013	2002
<b>Highest daily mean</b>	24,800	Nov 23	24,800	Nov 23	41,400	Sep 6, 1996
<b>Lowest daily mean</b>	464	Oct 2	272	Sep 30	155	Aug 6, 2002
<b>Annual seven-day minimum</b>	511	Oct 1	292	Sep 24	223	Oct 2, 1981
<b>Maximum peak flow</b>			29,700	Nov 23	51,800	Sep 7, 1996
<b>Maximum peak stage</b>			13.92	Nov 23	18.97	Sep 7, 1996
<b>Instantaneous low flow</b>			271	Sep 30	<sup>b</sup> 141	Aug 6, 2002
<b>Annual runoff (cfsm)</b>	0.687		0.843		0.947	
<b>Annual runoff (inches)</b>	9.33		11.45		12.87	
<b>10 percent exceeds</b>	5,790		8,420		9,410	
<b>50 percent exceeds</b>	1,140		1,020		1,250	
<b>90 percent exceeds</b>	590		467		589	

<sup>a</sup> Regulated period only (1981-2007). See Remarks.

<sup>b</sup> See Remarks.

