

Water-Data Report 2008

02108000 NORTHEAST CAPE FEAR RIVER NEAR CHINQUAPIN, NC

Cape Fear Basin
Northeast Cape Fear Subbasin

LOCATION.--Lat 34°49'44", long 77°49'56" referenced to North American Datum of 1983, Duplin County, NC, Hydrologic Unit 03030007, on right bank 540 ft downstream of bridge on North Carolina Highway 41, 0.5 mi downstream of Muddy Creek, and 1.2 mi west of Chinquapin.

DRAINAGE AREA.--599 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--July 1940 to current year.

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

GAGE.--Water-stage recorder. Datum of gage is 17.28 ft above NGVD of 1929. Satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Minimum discharge for period of record also occurred October 11, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1908 reached a stage of 22.6 ft at old bridge site 1,000 ft upstream from current gage site. Flood in 1928 reached a stage 0.8 ft lower than the flood in 1908, from information by North Carolina State Highway Commission.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	16	569	45	911	309	1,100	340	388	110	18	36	112
2	14	447	44	919	329	941	479	382	102	15	35	110
3	14	367	43	855	339	787	520	355	89	13	26	108
4	14	305	43	731	342	684	564	313	79	11	29	105
5	13	242	45	629	338	714	758	284	69	10	29	95
6	13	191	45	558	322	862	1,940	300	62	10	21	221
7	13	155	46	493	305	964	3,440	257	55	9.2	15	e384
8	13	128	46	433	295	1,120	3,800	224	49	8.9	14	e544
9	15	111	47	385	283	1,250	3,550	205	43	9.0	11	665
10	14	96	48	339	270	1,400	3,100	221	37	13	8.6	752
11	13	86	48	309	251	1,590	2,610	273	33	11	32	831
12	12	76	49	297	232	1,670	2,150	310	29	12	49	914
13	12	69	48	285	274	1,640	1,690	300	26	14	51	968
14	12	65	50	264	510	1,460	1,280	277	26	12	79	1,020
15	11	60	50	244	703	1,200	1,000	246	34	14	89	1,030
16	10	59	62	223	763	993	796	215	33	11	87	984
17	9.7	63	130	212	727	839	648	193	29	20	99	868
18	10	60	175	224	788	728	547	168	25	36	81	770
19	11	58	201	243	1,230	656	474	147	23	20	66	681
20	10	56	208	489	1,580	607	438	137	20	13	55	607
21	8.9	54	209	661	1,780	562	429	161	18	10	50	534
22	9.1	52	259	692	1,990	519	462	156	18	8.7	44	451
23	9.3	49	303	673	2,320	478	540	135	17	10	34	368
24	9.0	47	325	629	2,390	443	586	123	19	17	25	296
25	13	42	331	567	2,370	418	565	119	23	20	19	243
26	122	41	350	512	2,030	399	491	109	22	13	15	368
27	545	43	520	470	1,640	372	425	96	21	11	13	584
28	914	46	605	422	1,410	342	428	90	26	11	14	746
29	1,060	46	685	379	1,260	316	449	122	27	20	22	840
30	973	45	745	349	---	295	413	125	22	30	53	906
31	768	---	843	326	---	299	---	118	---	31	103	---
Total	4,681.0	3,728	6,648	14,723	27,380	25,648	34,912	6,549	1,186	461.8	1,304.6	17,105
Mean	151	124	214	475	944	827	1,164	211	39.5	14.9	42.1	570
Max	1,060	569	843	919	2,390	1,670	3,800	388	110	36	103	1,030
Min	8.9	41	43	212	232	295	340	90	17	8.7	8.6	95
Cfs/m	0.25	0.21	0.36	0.79	1.58	1.38	1.94	0.35	0.07	0.02	0.07	0.95
In.	0.29	0.23	0.41	0.91	1.70	1.59	2.17	0.41	0.07	0.03	0.08	1.06

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	461	465	672	1,033	1,175	1,195	838	469	402	556	652	707
Max	3,237	3,063	2,225	2,548	4,399	3,506	2,958	1,901	1,953	3,922	2,681	7,329
(WY)	(2000)	(2007)	(1949)	(1993)	(1998)	(1983)	(1973)	(1969)	(1961)	(1962)	(1955)	(1999)
Min	7.59	15.6	59.6	158	249	261	145	64.9	17.3	14.9	13.8	11.0
(WY)	(1955)	(1955)	(1955)	(1955)	(1955)	(1955)	(1986)	(1995)	(1994)	(2008)	(1954)	(1954)

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SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 1940 - 2008	
Annual total	129,780.8		144,326.4			
Annual mean	356		394		718	
Highest annual mean					1,243	1973
Lowest annual mean					279	1951
Highest daily mean	2,200	Jan 1	3,800	Apr 8	29,900	Sep 18, 1999
Lowest daily mean	8.9	Oct 21	8.6	Aug 10	5.3	Oct 10, 1954
Annual seven-day minimum	9.6	Oct 18	9.6	Oct 18	5.5	Oct 8, 1954
Maximum peak flow			3,850	Apr 8	30,700	Sep 18, 1999
Maximum peak stage			12.47	Apr 8	23.51	Sep 18, 1999
Instantaneous low flow			7.3	Jul 23	^a 5.3	Oct 10, 1954
Annual runoff (cfs)	0.594		0.658		1.20	
Annual runoff (inches)	8.06		8.96		16.28	
10 percent exceeds	1,070		970		1,680	
50 percent exceeds	132		206		402	
90 percent exceeds	16		13		57	

^aSee Remarks.