

Water-Data Report 2007

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 (levels by U.S. Army Corps of Engineers). Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records good. Minimum discharge for period of record also occurred October 11, 1954. Minimum discharge for current water year also occurred September 14.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1908 reached a stage of 22.6 ft at old bridge site 1,000 ft upstream from gage. 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 2006 TO SEPTEMBER 2007
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	467	1,390	2,250	2,200	941	642	213	177	51	36	105	16
2	428	1,240	1,740	1,850	1,370	705	202	156	47	39	86	15
3	390	1,080	1,440	1,600	1,760	977	192	140	74	31	71	14
4	356	956	1,260	1,430	1,900	1,140	182	128	142	27	58	13
5	319	858	1,140	1,280	1,840	1,120	168	121	182	23	48	12
6	283	769	1,040	1,340	1,610	958	154	160	184	20	39	11
7	253	775	966	1,630	1,390	770	143	262	141	20	34	12
8	241	1,380	898	1,740	1,250	616	133	299	106	25	30	23
9	296	1,660	830	1,630	1,130	517	126	268	86	44	31	15
10	391	1,620	776	1,440	1,010	465	121	212	74	51	29	12
11	480	1,490	733	1,290	891	429	117	176	64	42	60	11
12	537	1,380	694	1,200	794	400	115	155	55	48	170	9.7
13	531	1,410	661	1,130	728	374	113	329	49	64	193	9.1
14	482	1,390	638	1,040	794	347	109	684	44	64	192	12
15	417	1,340	613	938	900	329	430	695	40	59	172	48
16	362	1,370	584	861	947	318	1,420	622	37	89	131	80
17	319	1,590	559	794	956	373	1,900	491	36	68	101	60
18	336	1,670	542	749	960	395	1,930	386	32	132	83	44
19	386	1,730	524	820	960	399	1,700	323	30	306	68	36
20	389	1,920	504	859	928	378	1,340	288	29	358	54	31
21	377	2,460	480	850	853	351	1,080	252	27	423	43	30
22	352	4,700	470	1,050	761	330	934	205	25	513	42	42
23	353	9,180	1,150	1,360	682	313	771	166	25	504	35	49
24	341	10,600	1,750	1,440	611	301	590	138	26	393	31	45
25	320	9,690	2,050	1,400	568	287	459	118	28	284	28	39
26	302	8,450	2,680	1,300	604	269	377	103	26	231	24	33
27	291	7,020	3,430	1,190	666	251	312	90	24	204	24	29
28	794	5,470	3,440	1,130	687	236	262	80	37	247	23	25
29	1,340	4,200	3,130	1,110	---	225	223	72	42	190	28	21
30	1,500	3,110	2,860	1,040	---	221	197	64	39	148	22	19
31	1,490	---	2,590	958	---	220	---	57	---	124	18	---
Total	15,123	91,898	42,422	38,649	28,491	14,656	16,013	7,417	1,802	4,807	2,073	815.8
Mean	488	3,063	1,368	1,247	1,018	473	534	239	60.1	155	66.9	27.2
Max	1,500	10,600	3,440	2,200	1,900	1,140	1,930	695	184	513	193	80
Min	241	769	470	749	568	220	109	57	24	20	18	9.1
Cfsm	0.81	5.11	2.28	2.08	1.70	0.79	0.89	0.40	0.10	0.26	0.11	0.05
In.	0.94	5.71	2.63	2.40	1.77	0.91	0.99	0.46	0.11	0.30	0.13	0.05

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2007, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	465	470	679	1,042	1,179	1,201	833	473	407	564	661	709
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	25.9	13.8	11.0
(WY)	(1955)	(1955)	(1955)	(1955)	(1955)	(1955)	(1986)	(1995)	(1994)	(1954)	(1954)	(1954)

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SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 1940 - 2007	
Annual total	414,561		264,166.8			
Annual mean	1,136		724		722	
Highest annual mean					1,243	1973
Lowest annual mean					279	1951
Highest daily mean	13,600	Sep 3	10,600	Nov 24	29,900	Sep 18, 1999
Lowest daily mean	55	Aug 5	9.1	Sep 13	5.3	Oct 10, 1954
Annual seven-day minimum	66	Jun 1	13	Sep 7	5.5	Oct 8, 1954
Maximum peak flow			10,900	Nov 24	30,700	Sep 18, 1999
Maximum peak stage			17.08	Nov 24	23.51	Sep 18, 1999
Instantaneous low flow			^a 8.9	Sep 13	^a 5.3	Oct 10, 1954
Annual runoff (cfsm)	1.90		1.21		1.21	
Annual runoff (inches)	25.75		16.41		16.39	
10 percent exceeds	2,280		1,610		1,690	
50 percent exceeds	568		336		406	
90 percent exceeds	125		29		59	

^a See Remarks.

