

Water-Data Report 2008

02093000 NEW RIVER NEAR GUM BRANCH, NC

Cape Fear Basin
New Subbasin

LOCATION.--Lat 34°50'57", long 77°31'10" referenced to North American Datum of 1983, Onslow County, NC, Hydrologic Unit 03030001, on right bank 5 ft downstream of Secondary Road 1314, 0.7 mi downstream of Jenkins Swamp, 1.8 mi southwest of Gum Branch, and 3.8 mi southeast of Richlands.

DRAINAGE AREA.--94 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--August 1949 to September 1973. July 1987 to current year.

GAGE.--Water-stage recorder. Datum of gage is at National Geodetic Vertical Datum of 1929. Nonrecording gage August 19, 1949 to March 22, 1950 and water-stage recorder March 23, 1950 to March 25, 1969, at site 0.2 mi upstream at datum 2.52 ft. Satellite telemetry at station.

REMARKS.--Records good except those daily discharges below 150 ft³/s and those for estimated daily discharges, which are fair. Maximum discharge for period of record from rating curve extended above 3,000 ft³/s by logarithmic plotting. Low flows affected by tide.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of 1908 reached a stage of about 18 ft at former site and datum, from information by local resident.

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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	23	23	14	32	29	e67	44	72	25	11	e15	31
2	25	16	13	24	39	e60	53	58	34	9.6	e15	30
3	24	21	13	19	33	e52	55	43	27	12	e14	25
4	18	37	13	18	29	52	63	44	26	13	e14	23
5	18	38	13	17	26	119	276	62	21	14	e13	27
6	20	29	12	17	27	87	825	142	22	16	e12	107
7	21	18	14	17	26	86	830	100	19	13	11	80
8	19	13	e14	14	24	170	379	74	22	12	20	35
9	21	13	13	16	24	134	224	62	19	10	19	33
10	22	13	13	18	24	93	178	99	16	13	22	51
11	19	13	12	19	23	76	152	104	15	11	103	36
12	16	14	13	22	23	68	130	168	16	12	32	32
13	18	13	14	22	113	60	124	113	15	13	114	33
14	19	12	13	20	126	53	91	90	15	14	111	35
15	19	14	12	18	84	49	77	76	17	36	65	35
16	17	13	39	18	68	84	68	61	15	18	35	44
17	13	16	27	18	57	61	62	48	15	15	27	36
18	12	e14	17	27	107	54	55	42	14	19	29	33
19	16	13	15	43	143	52	49	38	17	21	33	31
20	12	13	15	131	120	58	55	36	16	17	27	35
21	9.4	12	17	72	82	48	52	59	15	15	22	38
22	9.5	17	27	54	138	45	164	43	16	21	20	33
23	12	14	31	47	137	42	147	35	16	15	17	23
24	20	14	27	40	129	39	124	34	14	16	15	24
25	26	15	21	31	e120	36	90	33	14	13	15	33
26	35	18	25	29	e102	35	71	28	12	13	14	152
27	80	14	39	30	e88	34	72	25	11	15	24	123
28	56	14	29	27	80	32	134	25	10	19	75	93
29	40	14	27	26	73	31	149	42	11	16	84	68
30	39	10	26	30	---	30	97	31	11	17	47	85
31	30	---	39	26	---	38	---	26	---	e16	34	---
Total	728.9	498	617	942	2,094	1,945	4,890	1,913	516	475.6	1,098	1,464
Mean	23.5	16.6	19.9	30.4	72.2	62.7	163	61.7	17.2	15.3	35.4	48.8
Max	80	38	39	131	143	170	830	168	34	36	114	152
Min	9.4	10	12	14	23	30	44	25	10	9.6	11	23
Cfsm	0.25	0.18	0.21	0.32	0.77	0.67	1.73	0.66	0.18	0.16	0.38	0.52
In.	0.29	0.20	0.24	0.37	0.83	0.77	1.94	0.76	0.20	0.19	0.43	0.58

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2008^a, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	91.2	73.2	97.1	149	168	174	116	71.9	92.6	117	109	128
Max	553	451	287	374	584	418	377	188	423	717	734	1,110
(WY)	(1972)	(2007)	(2007)	(1993)	(1998)	(1959)	(1973)	(1969)	(1961)	(1962)	(1955)	(1999)
Min	2.01	4.30	13.3	30.4	33.1	27.7	21.0	16.4	11.3	7.21	6.25	4.25
(WY)	(1955)	(1955)	(1955)	(2008)	(1955)	(1955)	(1955)	(1957)	(1970)	(1993)	(1954)	(1954)

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SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 1949 - 2008 ^a	
Annual total	26,497.8		17,181.5			
Annual mean	72.6		46.9		116	
Highest annual mean					208	
Lowest annual mean					46.9	
Highest daily mean	1,110	Jan 7	830	Apr 7	10,100	Sep 16, 1999
Lowest daily mean	6.1	Aug 10	9.4	Oct 21	1.3	Aug 18, 2002
Annual seven-day minimum	8.0	Aug 4	11	Jun 26	2.0	Oct 4, 1954
Maximum peak flow			969	Apr 6	^b 15,000	Sep 16, 1999
Maximum peak stage			10.87	Apr 6	25.12	Sep 16, 1999
Instantaneous low flow			6.3	Oct 23	0.62	Aug 19, 2002
Annual runoff (cfs)	0.772		0.499		1.23	
Annual runoff (inches)	10.49		6.80		16.71	
10 percent exceeds	155		103		244	
50 percent exceeds	28		27		55	
90 percent exceeds	13		13		13	

^aSee Period of Record.^bSee Remarks.