

Water-Data Report 2007

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 NGVD of 1929 (levels by U.S. Army Corps of Engineers). August 19, 1949, to March 22, 1950, nonrecording gage and March 23, 1950, to March 25, 1969, water-stage recorder at site 0.2 mi upstream at 2.52 ft. March 26, 1969, to September 1973 water-stage recorder at present site and datum. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records good except those below 150 ft³/s, which are poor. 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 2006 TO SEPTEMBER 2007
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	55	78	194	202	213	88	51	28	21	16	13	22
2	48	68	178	231	508	721	50	27	19	19	14	19
3	44	57	157	190	403	912	48	26	81	19	11	19
4	41	51	153	167	281	473	46	26	71	19	8.5	18
5	39	49	139	177	210	266	41	31	48	17	7.5	17
6	41	47	134	818	165	197	40	226	55	17	8.2	16
7	52	96	127	1,110	148	159	41	102	37	40	9.1	16
8	65	377	113	669	133	138	37	79	34	29	8.9	15
9	100	263	106	443	120	122	37	80	30	24	7.5	16
10	122	187	101	314	111	112	36	74	29	23	6.1	16
11	91	133	97	241	103	104	37	77	31	22	58	15
12	80	139	93	199	99	96	41	59	29	25	87	15
13	64	189	92	174	96	91	36	88	25	18	35	15
14	55	147	91	156	138	87	35	72	29	17	27	18
15	47	125	91	144	122	84	363	61	33	17	25	36
16	41	158	86	136	109	84	753	48	36	18	21	22
17	39	252	81	124	101	123	379	42	28	20	15	17
18	68	180	79	124	97	107	206	130	21	80	11	15
19	67	136	77	150	89	90	145	90	18	34	12	21
20	62	110	75	135	86	84	115	75	20	17	12	23
21	51	264	74	122	83	79	98	55	24	15	13	27
22	49	2,020	79	377	81	76	83	43	19	12	28	24
23	52	3,350	1,120	381	77	73	70	39	15	11	21	17
24	40	2,100	1,170	270	69	71	61	32	15	10	28	16
25	34	1,180	756	210	77	65	54	31	14	11	21	23
26	31	618	1,120	169	107	59	48	29	18	8.7	22	23
27	33	387	989	147	95	55	46	23	16	8.4	23	23
28	299	304	521	152	90	52	40	17	13	16	77	21
29	209	254	323	154	---	54	35	17	14	17	31	13
30	121	217	255	137	---	60	31	22	19	11	30	17
31	90	---	213	125	---	55	---	24	---	14	29	---
Total	2,230	13,536	8,884	8,148	4,011	4,837	3,103	1,773	862	625.1	719.8	575
Mean	71.9	451	287	263	143	156	103	57.2	28.7	20.2	23.2	19.2
Max	299	3,350	1,170	1,110	508	912	753	226	81	80	87	36
Min	31	47	74	122	69	52	31	17	13	8.4	6.1	13
Cfsm	0.77	4.80	3.05	2.80	1.52	1.66	1.10	0.61	0.31	0.21	0.25	0.20
In.	0.88	5.36	3.52	3.22	1.59	1.91	1.23	0.70	0.34	0.25	0.28	0.23

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2007^a, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	92.7	74.5	98.9	152	170	176	115	72.2	94.4	119	110	130
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	32.4	33.1	27.7	21.0	16.4	11.3	7.21	6.25	4.25
(WY)	(1955)	(1955)	(1955)	(1955)	(1955)	(1955)	(1955)	(1957)	(1970)	(1993)	(1954)	(1954)

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SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 1949 - 2007 ^a	
Annual total	67,952		49,303.9			
Annual mean	186		135		117	
Highest annual mean					208	1972
Lowest annual mean					52.6	2002
Highest daily mean	4,010	Sep 2	3,350	Nov 23	10,100	Sep 16, 1999
Lowest daily mean	19	Jun 2	6.1	Aug 10	1.3	Aug 18, 2002
Annual seven-day minimum	22	May 30	8.0	Aug 4	2.0	Oct 4, 1954
Maximum peak flow			3,740	Nov 23	15,000	Sep 16, 1999
Maximum peak stage			19.18	Nov 23	25.12	Sep 16, 1999
Instantaneous low flow			4.4	Aug 10	0.62	Aug 19, 2002
Annual runoff (cfsm)	1.98		1.44		1.25	
Annual runoff (inches)	26.89		19.51		16.94	
10 percent exceeds	382		258		248	
50 percent exceeds	77		59		56	
90 percent exceeds	31		16		13	

^a See Period of Record.

