

Water-Data Report 2007

02095271 NORTH BUFFALO CREEK AT CHURCH STREET AT GREENSBORO, NC

Cape Fear Basin
Haw Subbasin

LOCATION.--Lat 36°05'52", long 79°46'57" referenced to North American Datum of 1983, Guilford County, NC, Hydrologic Unit 03030002, on right bank at upstream side of Church Street, and .1 mi upstream from Southern Railway bridge in Greensboro.

DRAINAGE AREA.--14.2 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--August 1998 to current year.

REVISED RECORDS.--

WDR NC-02-1B: 1998(M), 1999(M), 2000(M), 2001(M).

GAGE.--Water-stage recorder. Datum of gage is 738.52 ft above NGVD of 1929. Satellite telemetry at station.

REMARKS.--Records fair below 300 ft³/s. Records poor for those above 300 ft³/s, and those for estimated daily discharges.

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

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	3.2	3.1	74	131	13	31	6.5	5.5	2.9	2.9	1.9	2.4
2	2.5	3.4	7.0	29	13	357	7.8	4.8	2.8	2.2	1.9	1.4
3	2.5	3.3	4.9	10	8.1	18	7.7	4.4	65	2.0	2.1	1.1
4	2.7	3.0	5.8	9.3	8.0	12	7.0	13	94	1.8	2.2	1.9
5	2.7	3.7	4.3	112	6.0	9.5	5.6	11	36	2.4	2.2	1.1
6	4.1	3.1	4.1	76	6.9	8.7	5.2	12	13	14	3.1	1.4
7	12	134	4.2	105	7.5	7.8	6.8	5.5	4.0	1.8	2.2	1.3
8	71	81	4.2	139	6.9	7.4	6.0	5.0	3.7	1.6	2.3	1.4
9	3.6	6.3	4.2	16	6.6	7.0	5.3	8.1	3.4	1.4	1.7	1.5
10	2.8	4.0	e5.3	9.9	5.6	6.7	5.5	6.1	3.5	7.2	2.2	1.2
11	4.6	11	e5.3	7.3	5.2	6.5	72	4.2	3.2	7.3	1.9	1.5
12	51	143	e5.8	6.6	6.2	6.2	63	3.9	3.3	3.1	1.5	1.4
13	2.9	6.5	e5.8	5.8	108	6.4	8.3	4.1	9.8	1.6	1.3	0.96
14	2.5	4.7	e6.1	5.4	225	6.6	15	3.4	4.8	1.7	1.9	66
15	2.6	4.1	e6.2	5.0	13	6.2	401	3.4	4.6	1.5	1.3	10
16	2.5	334	e5.6	4.7	10	195	44	3.9	3.4	2.8	1.5	1.4
17	162	25	e5.5	4.4	9.2	19	12	5.8	2.7	15	3.1	0.98
18	45	6.6	e5.5	18	8.3	10	9.0	3.9	2.6	15	2.3	1.5
19	4.0	4.2	e5.6	8.6	7.8	8.6	8.0	3.2	3.1	1.6	1.2	0.91
20	12	3.5	e5.5	4.6	8.1	8.2	7.1	3.0	2.9	1.6	1.5	1.0
21	3.1	181	e5.8	50	7.8	7.7	6.4	2.9	2.2	1.3	16	1.2
22	25	380	104	51	7.1	7.2	5.8	2.9	2.4	1.3	5.4	0.94
23	3.9	82	59	10	6.5	7.1	5.5	5.9	1.9	2.2	1.7	1.4
24	2.9	18	14	8.2	5.7	6.6	5.8	3.1	3.5	1.2	1.9	3.0
25	2.8	11	212	7.7	126	6.1	4.9	2.7	19	9.7	1.6	1.1
26	3.2	9.0	74	7.6	16	6.3	4.8	2.6	2.7	18	1.4	1.0
27	78	8.0	33	7.1	9.2	6.3	23	2.9	31	3.5	1.6	0.81
28	86	6.1	20	6.8	7.8	6.3	5.9	2.7	7.5	47	2.3	0.91
29	4.1	6.3	17	6.7	---	16	4.6	2.6	25	5.1	1.4	0.76
30	3.3	13	18	6.7	---	6.7	4.6	2.8	2.8	4.3	6.8	0.82
31	3.3	---	20	6.4	---	6.7	---	2.7	---	2.3	1.9	---
Total	611.8	1,501.9	751.7	875.8	668.5	820.8	774.1	148.0	366.7	184.4	81.3	112.29
Mean	19.7	50.1	24.2	28.3	23.9	26.5	25.8	4.77	12.2	5.95	2.62	3.74
Max	162	380	212	139	225	357	401	13	94	47	16	66
Min	2.5	3.0	4.1	4.4	5.2	6.1	4.6	2.6	1.9	1.2	1.2	0.76
Cfsm	1.39	3.53	1.71	1.99	1.68	1.86	1.82	0.34	0.86	0.42	0.18	0.26
In.	1.60	3.93	1.97	2.29	1.75	2.15	2.03	0.39	0.96	0.48	0.21	0.29

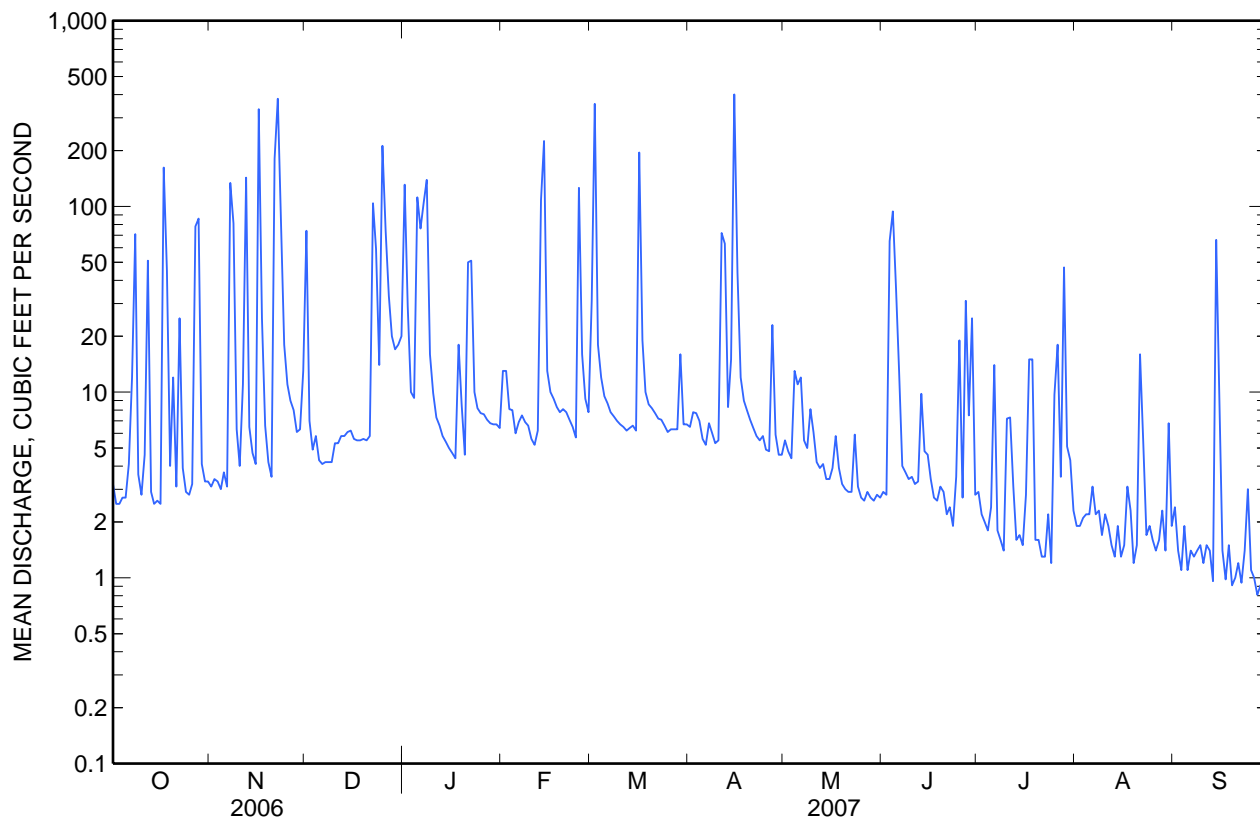
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2007, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	15.4	19.2	20.6	19.8	20.2	24.8	23.1	14.7	22.8	21.4	15.2	28.5
Max	52.1	50.1	33.8	29.4	38.2	67.5	65.5	47.6	44.1	36.8	37.0	63.8
(WY)	(2003)	(2007)	(2003)	(1999)	(2003)	(2003)	(2003)	(2003)	(2006)	(2001)	(2003)	(2004)
Min	4.71	3.99	10.1	7.64	9.64	7.16	6.20	4.77	9.73	5.95	2.62	3.23
(WY)	(1999)	(2002)	(2001)	(2004)	(2006)	(2006)	(2002)	(2007)	(2002)	(2007)	(2007)	(2005)

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SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 1998 - 2007	
Annual total	7,557.1		6,897.29			
Annual mean	20.7		18.9		20.7	
Highest annual mean					43.5	2003
Lowest annual mean					13.3	2002
Highest daily mean	380	Nov 22	401	Apr 15	850	Sep 23, 2003
Lowest daily mean	1.5	Jul 21	0.76	Sep 29	0.76	Sep 29, 2007
Annual seven-day minimum	2.5	May 19	1.1	Sep 16	1.1	Sep 16, 2007
Maximum peak flow			1,540	Feb 14	Not Determined	
Maximum peak stage			12.46	Feb 14	17.81	Sep 23, 2003
Instantaneous low flow			0.49	Sep 20	0.49	Sep 20, 2007
Annual runoff (cfsm)	1.46		1.33		1.45	
Annual runoff (inches)	19.80		18.07		19.76	
10 percent exceeds	59		46		47	
50 percent exceeds	5.0		5.5		7.0	
90 percent exceeds	2.7		1.5		2.9	



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CLIMATOLOGICAL RECORDS

PERIOD OF RECORD.--August 1998 to current year.

INSTRUMENTATION.--Tipping-bucket raingage. Satellite telemetry at station.

REMARKS.--Precipitation data collected during freezing periods may not be accurately reflected in daily record; consequently, winter record is poor.

PRECIPITATION, TOTAL, INCHES
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007
DAILY SUM VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	0.01	0.00	0.07	0.52	0.18	0.50	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.01	0.00	0.00	0.02	0.86	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.82	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.83	0.00	0.00	0.00
5	0.01	0.00	0.00	0.62	0.00	0.00	0.00	0.20	0.25	0.26	0.00	0.00
6	0.06	0.00	0.00	0.01	0.00	0.00	0.04	0.00	0.01	0.01	0.00	0.00
7	0.08	0.93	0.00	0.60	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00
8	0.22	0.09	0.00	0.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.00	0.00
11	0.38	0.44	0.00	0.00	0.00	0.00	1.01	0.00	0.02	0.23	0.00	0.00
12	0.02	0.31	0.00	0.00	0.00	0.00	0.38	0.01	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	1.16	0.00	0.00	0.00	0.17	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.06	0.00	0.58	0.00	0.00	0.00	0.00	0.69
15	0.00	0.00	0.00	0.00	0.00	0.00	1.58	0.00	0.00	0.00	0.00	0.00
16	0.00	1.28	0.00	0.00	0.00	1.33	0.00	0.08	0.00	0.44	0.00	0.00
17	1.04	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.84	0.12	0.01
18	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00
19	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00
21	0.00	1.54	0.00	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.36	0.00
22	0.14	0.85	0.67	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.09	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.14	0.00	0.00
25	0.00	0.00	0.90	0.00	0.76	0.00	0.00	0.00	0.02	0.03	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.00	0.00
27	0.61	0.00	0.00	0.00	0.00	0.00	0.30	0.00	0.00	0.00	0.00	0.00
28	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33	0.49	0.00	0.00
29	0.00	0.00	0.00	0.00	---	0.21	0.00	0.00	0.03	0.00	0.00	0.00
30	0.00	0.28	0.00	0.00	---	0.00	0.00	0.00	0.03	0.10	0.15	0.00
31	0.00	---	0.02	0.00	---	0.00	---	0.00	---	0.00	0.00	---
Total	2.79	5.73	1.66	2.35	2.19	2.91	3.92	0.68	2.80	3.05	0.65	0.70

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