



Water-Data Report 2010

**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 left bank at downstream side of Church Street, and .1 mi upstream from Southern Railway bridge in Greensboro.

DRAINAGE AREA.--14.2 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

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

REVISED RECORDS.--WDR NC-02-1B: 1998-2001 (annual maximum discharge).

GAGE.--Water-stage recorder. Datum of gage is 738.52 ft above National Geodetic Vertical Datum of 1929. Satellite telemetry at streamgage.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Minimum discharge for the current water year also occurred September 20, 21. The previously unpublished maximum discharges for water years 2003 and 2008 are determined to be 3,520 ft<sup>3</sup>/s, September 23, 2003, gage height 17.81 ft, and 3,250 ft<sup>3</sup>/s, August 27, 2008, gage height 17.20 ft.

## 02095271 NORTH BUFFALO CREEK AT CHURCH STREET AT GREENSBORO, NC—Continued

**DISCHARGE, CUBIC FEET PER SECOND**  
**WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010**  
**DAILY MEAN VALUES**

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	2.2	192	7.1	12	26	6.4	10	5.9	7.3	2.9	11	1.8
2	2.1	8.9	134	9.6	75	15	9.4	5.4	6.0	2.6	3.9	1.7
3	1.7	3.8	41	8.9	82	16	8.6	7.7	6.9	3.0	3.3	e1.8
4	1.6	2.9	12	8.7	30	7.4	8.5	5.6	4.4	2.5	3.3	e1.7
5	5.6	3.0	37	8.4	407	6.8	14	4.6	4.1	2.9	17	1.9
6	2.7	2.3	12	8.1	e116	5.8	8.5	5.2	7.1	2.7	10	1.9
7	1.9	2.1	8.2	8.1	e23	5.5	7.1	5.0	7.9	2.9	2.6	2.0
8	1.9	2.4	17	9.8	16	5.4	59	4.3	3.7	2.9	2.2	1.7
9	2.4	2.4	181	e6.3	21	5.4	47	4.4	3.8	12	2.5	1.9
10	22	40	19	e5.9	20	5.7	8.6	4.1	3.6	6.8	2.4	1.4
11	2.7	e800	11	e5.9	9.6	8.0	7.1	4.7	3.4	3.0	86	2.3
12	21	e1,300	8.8	e5.9	8.9	26	7.1	4.7	4.0	6.4	287	1.8
13	8.3	60	53	e5.8	16	123	6.7	4.4	83	220	7.4	1.9
14	7.2	17	21	e5.7	9.0	42	6.3	4.4	9.7	340	6.6	1.7
15	24	10	12	e5.6	17	8.9	6.3	4.7	49	7.7	4.6	1.8
16	4.1	8.4	8.5	e7.0	9.9	7.0	6.3	83	137	5.7	3.6	2.0
17	2.4	6.3	7.8	e279	6.8	6.6	6.1	144	11	196	3.2	1.3
18	1.9	5.6	8.0	e15	6.8	6.1	5.9	50	4.5	17	6.8	1.3
19	1.8	9.9	47	e9.6	6.0	5.7	5.9	12	3.9	5.7	8.4	1.0
20	2.3	5.6	36	e8.3	6.0	5.4	6.1	6.5	4.1	55	3.2	1.1
21	2.0	4.5	23	45	5.7	5.7	12	5.8	3.6	11	2.6	1.2
22	1.8	4.7	17	43	37	8.8	5.9	12	3.3	4.7	2.5	1.2
23	1.7	149	14	13	8.4	6.4	6.7	55	3.4	4.2	2.5	1.2
24	17	20	12	20	25	5.0	6.5	15	3.8	4.1	2.4	1.1
25	3.7	9.4	354	641	12	4.9	38	8.9	3.9	3.8	2.4	1.1
26	1.6	14	42	24	7.8	10	7.4	5.4	3.7	3.5	2.1	24
27	72	21	20	21	7.1	8.2	5.5	4.9	3.3	56	1.9	59
28	115	6.1	14	14	6.9	130	5.4	38	3.2	8.1	1.9	23
29	4.1	6.0	10	12	---	293	4.9	58	3.3	4.2	1.9	51
30	2.6	8.1	10	e13	---	21	5.3	5.4	3.4	3.8	e1.7	752
31	2.8	---	25	e13	---	13	---	34	---	6.9	1.7	---
<b>Total</b>	344.1	2,725.4	1,222.4	1,292.6	1,021.9	824.1	342.1	613.0	399.3	1,008.0	498.6	948.8
<b>Mean</b>	11.1	90.8	39.4	41.7	36.5	26.6	11.4	19.8	13.3	32.5	16.1	31.6
<b>Max</b>	115	1,300	354	641	407	293	59	144	137	340	287	752
<b>Min</b>	1.6	2.1	7.1	5.6	5.7	4.9	4.9	4.1	3.2	2.5	1.7	1.0
<b>Cfsm</b>	0.78	6.40	2.78	2.94	2.57	1.87	0.80	1.39	0.94	2.29	1.13	2.23
<b>In.</b>	0.90	7.14	3.20	3.39	2.68	2.16	0.90	1.61	1.05	2.64	1.31	2.49

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2010, BY WATER YEAR (WY)**

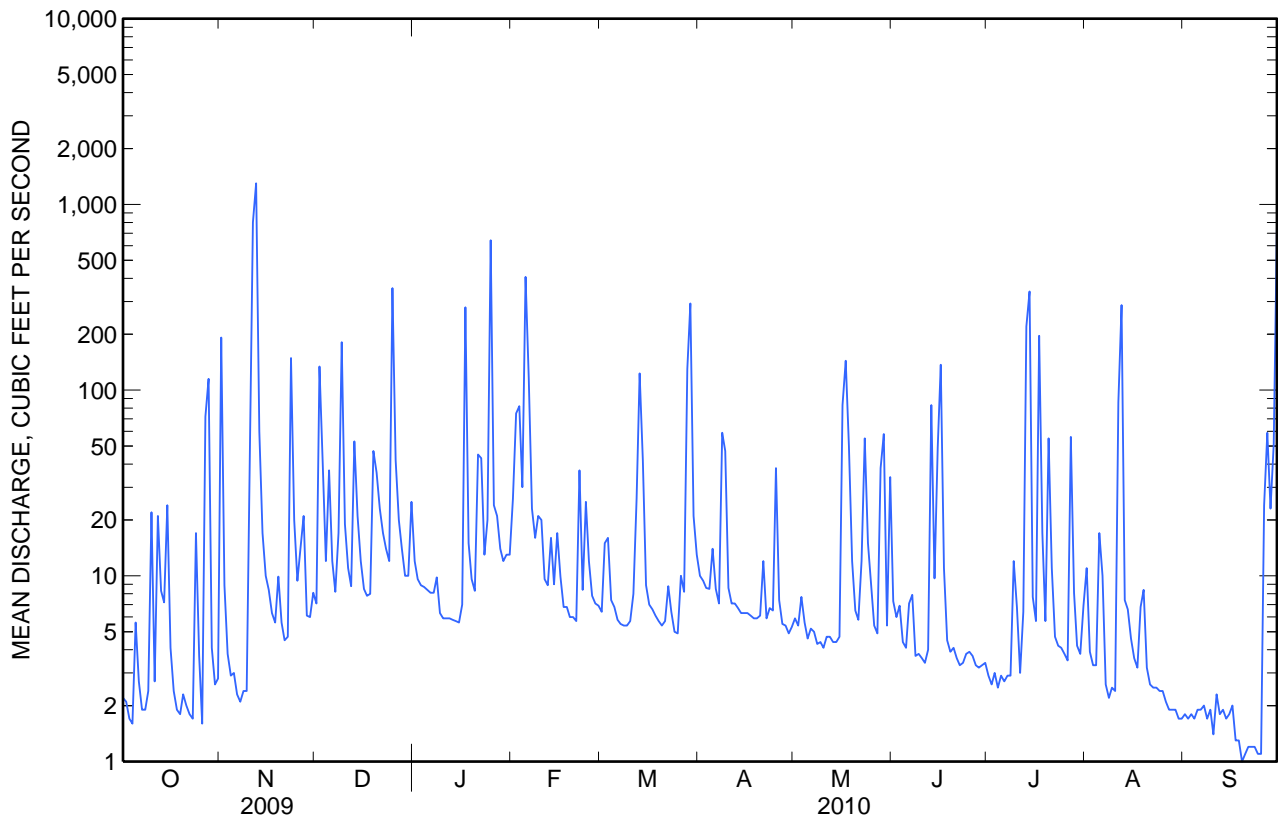
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	14.6	23.4	22.0	20.4	20.3	25.1	22.3	15.8	23.8	20.7	16.8	27.1
<b>Max</b>	52.1	90.8	39.4	41.7	38.2	67.5	65.5	47.6	45.2	36.8	41.6	63.8
<b>(WY)</b>	(2003)	(2010)	(2010)	(2010)	(2003)	(2003)	(2003)	(2003)	(2009)	(2001)	(2008)	(2004)
<b>Min</b>	4.71	3.99	10.1	6.57	9.64	7.16	6.20	4.77	9.73	5.95	2.62	3.23
<b>(WY)</b>	(1999)	(2002)	(2001)	(2008)	(2006)	(2006)	(2002)	(2007)	(2002)	(2007)	(2007)	(2005)

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SUMMARY STATISTICS

	Calendar Year 2009		Water Year 2010		Water Years 1998 - 2010	
<b>Annual total</b>	9,688.53		11,240.3			
<b>Annual mean</b>	26.5		30.8		21.2	
<b>Highest annual mean</b>					43.5 2003	
<b>Lowest annual mean</b>					13.3 2002	
<b>Highest daily mean</b>	1,300	Nov 12	1,300	Nov 12	1,300	Nov 12, 2009
<b>Lowest daily mean</b>	0.85	Sep 13	1.0	Sep 19	0.72	Oct 15, 2007
<b>Annual seven-day minimum</b>	1.1	Sep 9	1.1	Sep 19	0.83	Oct 10, 2007
<b>Maximum peak flow</b>			2,590	Jan 25	3,520	Sep 23, 2003
<b>Maximum peak stage</b>			15.56	Jan 25	17.81	Sep 23, 2003
<b>Instantaneous low flow</b>			<sup>a</sup> 0.94	Sep 19	0.49	Sep 20, 2007
<b>Annual runoff (cfsm)</b>	1.87		2.17		1.49	
<b>Annual runoff (inches)</b>	25.38		29.45		20.25	
<b>10 percent exceeds</b>	46		52		46	
<b>50 percent exceeds</b>	6.0		6.7		6.6	
<b>90 percent exceeds</b>	2.2		2.0		2.6	

<sup>a</sup> See Remarks.



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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.

**PRECIPITATION, TOTAL, INCHES**  
**WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010**  
**DAILY SUM VALUES**

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	0.00	1.26	0.00	0.00	---	0.00	0.00	0.00	0.01	0.00	0.04	0.00
2	0.00	0.00	0.97	0.00	---	---	0.00	0.00	0.07	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	---	---	0.00	0.01	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00
5	0.13	0.00	0.28	0.00	---	0.00	0.00	0.00	0.00	0.00	0.21	0.00
6	0.01	0.00	0.00	0.00	---	0.00	0.00	0.00	0.05	0.00	0.00	0.00
7	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.49	0.02	0.00	0.00	0.64	0.00	0.00	0.00	0.00	0.05
9	0.00	0.00	0.58	0.00	0.14	0.00	0.01	0.00	0.00	0.24	0.00	0.00
10	0.25	0.73	0.00	0.00	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	---	0.00	0.00	0.00	0.08	0.00	0.03	0.00	0.00	1.71	0.12
12	0.35	---	0.00	0.00	---	0.37	0.00	0.00	0.00	0.11	0.04	0.01
13	0.00	0.19	0.42	0.00	---	0.61	0.00	0.00	0.48	3.22	0.00	0.00
14	0.10	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.04	0.06	0.00	0.00
15	0.22	0.00	0.00	0.00	0.10	0.00	0.00	0.39	0.28	0.00	0.00	0.00
16	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.30	1.57	0.04	0.00	0.00
17	0.00	0.00	0.00	1.03	0.00	0.00	0.00	1.44	0.00	1.24	0.05	0.00
18	0.00	0.01	---	0.00	0.00	0.00	0.00	0.28	0.00	0.00	0.11	0.00
19	0.00	0.02	---	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.12	0.00
20	0.00	0.00	0.00	0.07	0.00	0.00	0.01	0.00	0.00	0.28	0.00	0.00
21	0.00	0.00	0.00	0.48	0.00	0.01	0.12	0.00	0.00	0.00	0.00	0.00
22	0.00	0.16	0.00	0.03	0.28	0.02	0.00	0.22	0.00	0.00	0.00	0.00
23	0.01	0.84	0.00	0.00	0.00	0.00	0.00	0.52	0.00	0.00	0.00	0.00
24	0.22	0.00	0.00	0.47	0.25	0.00	0.10	0.23	0.00	0.00	0.00	0.00
25	0.00	0.00	1.39	0.86	0.00	0.00	0.26	0.00	0.00	0.00	0.01	0.00
26	0.00	0.18	0.01	0.00	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.42
27	1.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.00	0.67
28	0.13	0.00	0.00	0.00	0.00	1.32	0.00	0.79	0.00	0.00	0.00	0.01
29	0.00	0.00	0.00	---	---	0.43	0.00	0.08	0.00	0.00	0.00	0.86
30	0.00	0.08	0.04	---	---	0.00	0.00	0.00	0.00	0.00	0.00	2.82
31	0.04	---	0.14	---	---	0.00	---	0.40	---	0.14	0.00	---
<b>Total</b>	2.66	---	---	---	---	---	1.14	4.79	2.50	5.45	2.31	4.96

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