



Water-Data Report 2010

0209399200 HORSE PEN CREEK AT U.S. HIGHWAY 220 NEAR GREENSBORO, NC

Cape Fear Basin
Haw Subbasin

LOCATION.--Lat 36°08'16", long 79°51'36" referenced to North American Datum of 1983, Guilford County, NC, Hydrologic Unit 03030002, on right bank, 300 ft downstream from U.S. Highway 220 bridge, 2.9 mi upstream from Lake Brandt dam and 6.3 mi northwest of Greensboro.

DRAINAGE AREA.--15.9 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--June 1999 to current year.

REVISED RECORDS.--WDR-US-2008: 2000-2001(maximum discharge, maximum gage height), 2003-2007 (maximum discharge, maximum gage height)

GAGE.--Water-stage recorder. Datum of gage is 739.9 ft above National Geodetic Vertical Datum of 1929. Satellite telemetry at streamgage.

REMARKS.--No estimated daily discharges. Records fair. Maximum discharge for period of record also occurred September 23, 2003. Minimum discharge for current water year also occurred September 14.

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

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	4.1	211	10	15	19	8.9	23	6.2	9.9	2.4	7.3	2.2
2	2.9	38	59	12	43	13	20	6.1	7.1	2.2	4.7	2.2
3	2.2	16	67	10	86	19	17	6.7	9.3	2.1	4.6	2.1
4	1.5	11	22	9.6	42	13	16	6.8	6.1	2.0	3.9	1.9
5	2.8	8.0	35	9.1	234	9.9	15	5.8	5.4	1.9	4.4	1.8
6	2.2	6.8	21	8.7	166	8.9	13	5.4	4.8	1.8	8.8	1.9
7	2.1	5.6	14	8.3	43	8.4	12	5.1	4.7	1.7	3.4	1.9
8	1.6	5.1	14	9.0	28	8.2	28	4.8	3.9	1.7	3.0	2.1
9	1.9	4.7	177	7.6	25	8.0	65	4.3	3.8	1.7	2.8	2.5
10	26	14	38	7.2	30	8.2	22	4.2	3.9	1.8	2.6	1.8
11	6.8	393	21	7.0	18	9.4	17	4.5	3.6	1.7	15	2.0
12	9.9	755	16	7.7	15	19	15	5.1	3.3	2.7	136	2.3
13	12	84	52	6.8	17	111	12	5.1	38	40	18	1.9
14	7.4	35	31	6.8	15	43	11	4.6	18	150	11	1.6
15	16	20	18	6.8	18	18	11	4.4	23	19	9.1	1.6
16	8.0	15	14	6.8	16	14	9.8	37	54	13	6.4	1.7
17	6.6	12	11	162	12	11	9.5	75	20	162	5.0	1.8
18	4.7	10	11	38	12	10	9.1	43	10	45	8.2	2.0
19	4.0	12	31	20	11	9.0	8.6	18	7.1	18	11	2.2
20	3.8	9.3	34	15	10	8.2	8.1	12	5.7	21	6.6	2.4
21	3.3	7.8	29	32	11	8.0	9.7	9.3	4.7	15	4.6	2.1
22	2.9	7.1	23	52	23	10	8.2	9.8	4.1	9.1	4.0	2.3
23	4.9	99	18	20	14	7.9	7.8	41	3.7	7.1	3.6	3.5
24	14	36	16	19	22	7.0	7.8	18	3.4	5.7	3.2	2.0
25	8.6	19	234	497	19	6.9	26	18	3.4	4.6	3.1	1.7
26	6.0	16	91	46	12	10	11	9.5	3.0	4.0	3.0	12
27	25	19	32	24	11	11	8.2	7.4	2.8	15	2.7	29
28	102	12	21	17	9.7	82	7.3	8.7	2.6	11	2.8	15
29	15	10	17	14	---	368	6.7	38	2.4	5.9	2.6	28
30	9.8	9.8	14	19	---	53	6.4	11	2.4	4.4	2.4	617
31	6.6	---	19	17	---	31	---	13	---	4.5	2.3	---
Total	324.6	1,901.2	1,210	1,130.4	981.7	952.9	441.2	447.8	274.1	578.0	306.1	752.5
Mean	10.5	63.4	39.0	36.5	35.1	30.7	14.7	14.4	9.14	18.6	9.87	25.1
Max	102	755	234	497	234	368	65	75	54	162	136	617
Min	1.5	4.7	10	6.8	9.7	6.9	6.4	4.2	2.4	1.7	2.3	1.6
Cfsm	0.66	3.99	2.45	2.29	2.21	1.93	0.92	0.91	0.57	1.17	0.62	1.58
In.	0.76	4.45	2.83	2.64	2.30	2.23	1.03	1.05	0.64	1.35	0.72	1.76

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2010, BY WATER YEAR (WY)

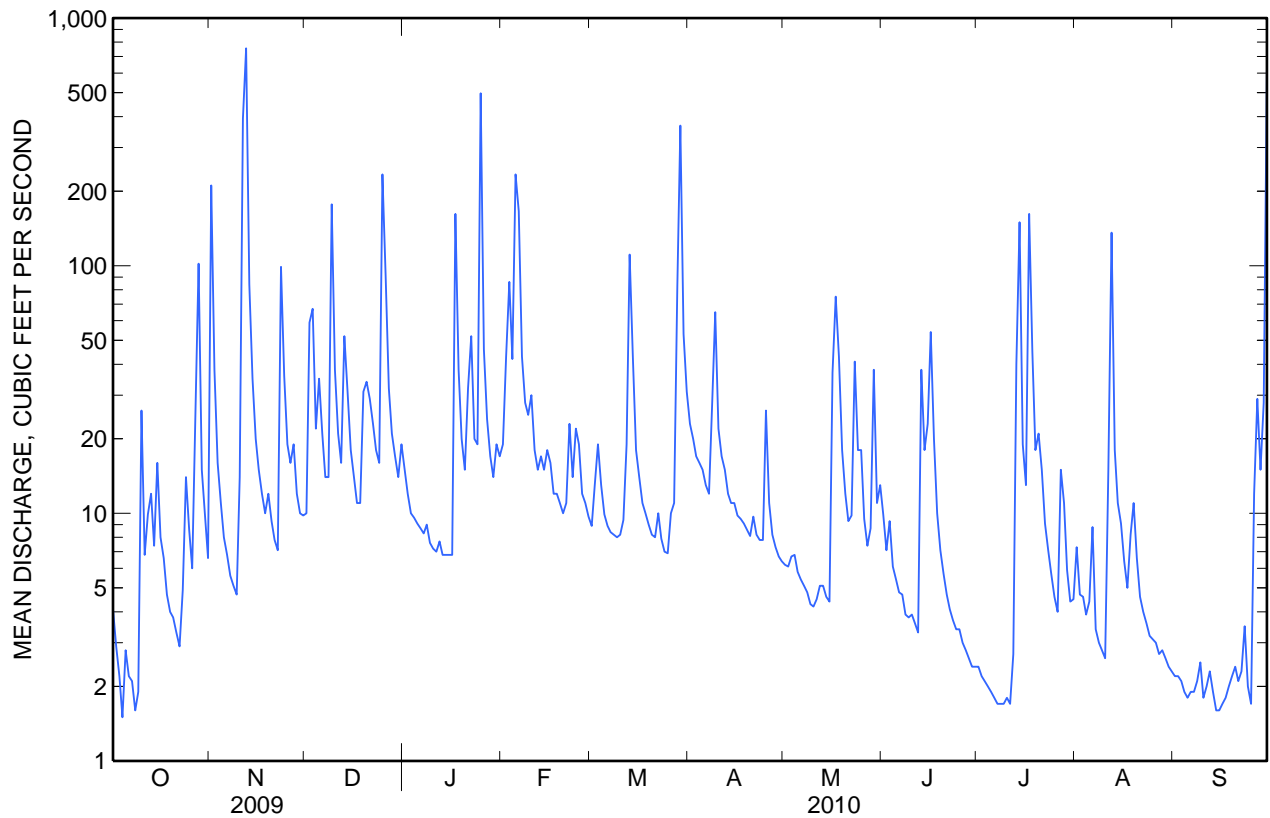
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	11.9	21.6	22.5	18.1	22.0	28.6	24.7	13.2	16.1	14.6	14.0	26.7
Max	31.8	63.4	45.7	36.5	45.0	74.3	70.2	46.6	45.9	35.4	58.2	79.5
(WY)	(2003)	(2010)	(2003)	(2010)	(2003)	(2003)	(2003)	(2003)	(2006)	(2003)	(2003)	(2000)
Min	4.82	4.81	8.86	8.52	7.54	7.96	5.46	3.32	4.68	2.60	2.76	1.67
(WY)	(2009)	(2008)	(2001)	(2008)	(2009)	(2006)	(2002)	(2002)	(2002)	(2009)	(2009)	(2005)

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SUMMARY STATISTICS

	Calendar Year 2009		Water Year 2010		Water Years 1999 - 2010	
Annual total	7,326.37		9,300.5			
Annual mean	20.1		25.5		19.5	
Highest annual mean					46.5	2003
Lowest annual mean					8.37	2002
Highest daily mean	755	Nov 12	755	Nov 12	827	Mar 20, 2003
Lowest daily mean	0.69	Aug 19	1.5	Oct 4	0.14	Aug 25, 2002
Annual seven-day minimum	1.2	Sep 3	1.8	Jul 5	0.38	Aug 8, 2002
Maximum peak flow			1,650	Sep 30	^a 2,800	Sep 15, 2000
Maximum peak stage			9.53	Sep 30	10.66	Sep 23, 2003
Instantaneous low flow			^a 1.3	Oct 5	0.06	Aug 14, 2002
Annual runoff (cfsm)	1.26		1.60		1.23	
Annual runoff (inches)	17.14		21.76		16.68	
10 percent exceeds	35		41		37	
50 percent exceeds	6.8		9.8		8.1	
90 percent exceeds	1.7		2.3		2.5	

^a See Remarks.



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CLIMATOLOGICAL RECORDS

PERIOD OF RECORD.--August 1999 to current year.

REVISED RECORDS.--WDR-US-2009: 2006 monthly and daily totals.

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

REMARKS.--Precipitation collected during freezing periods may not be accurately reflected in the 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	1.62	0.00	0.01	---	0.00	0.00	0.00	0.00	0.00	0.12	0.00
2	0.00	0.00	0.95	0.00	---	---	0.00	0.00	0.10	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	---	---	0.00	0.05	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	0.11	0.00	0.36	0.00	---	0.00	0.00	0.00	0.00	0.00	0.19	0.00
6	0.01	0.00	0.00	0.00	---	0.00	0.00	0.00	0.01	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.47	0.03	0.00	0.00	0.94	0.00	0.00	0.00	0.00	0.05
9	0.00	0.00	0.69	0.00	0.17	0.00	0.09	0.00	0.01	0.05	0.00	0.00
10	0.60	0.70	0.00	0.00	0.02	0.01	0.00	0.00	0.00	0.01	0.01	0.00
11	0.00	2.92	0.00	0.00	0.00	0.10	0.00	0.02	0.00	0.00	1.52	0.14
12	0.31	2.16	0.01	0.00	---	0.55	0.00	0.00	0.00	0.21	0.05	0.01
13	0.00	0.04	0.62	0.00	---	0.80	0.00	0.00	0.74	2.56	0.00	0.00
14	0.15	0.00	0.01	0.00	0.00	0.01	0.00	0.01	0.07	0.00	0.00	0.00
15	0.19	0.00	0.00	0.00	0.15	0.00	0.00	0.18	0.95	0.00	0.03	0.00
16	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.15	1.08	0.08	0.00	0.00
17	0.00	0.00	0.00	1.35	0.00	0.00	0.00	1.18	0.01	1.38	0.14	0.00
18	0.00	0.03	---	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.29	0.00
19	0.00	0.08	---	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.22	0.00
20	0.00	0.00	0.00	0.05	0.00	0.00	0.04	0.00	0.00	0.43	0.00	0.00
21	0.00	0.00	0.00	0.56	0.00	0.06	0.10	0.01	0.00	0.00	0.00	0.00
22	0.00	0.13	0.00	0.06	0.26	0.05	0.00	0.12	0.00	0.00	---	0.38
23	0.00	1.03	0.00	0.00	0.00	0.00	0.00	0.41	0.00	0.00	---	0.01
24	0.27	0.01	0.00	1.10	0.29	0.00	0.11	0.12	0.04	0.00	---	0.00
25	0.00	0.02	1.37	1.18	0.00	0.00	0.29	0.00	0.01	0.00	---	0.00
26	0.00	0.18	0.02	0.00	0.00	0.24	0.00	0.00	0.00	0.00	---	0.63
27	1.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	---	0.68
28	0.08	0.00	0.00	0.00	0.00	2.65	0.00	0.93	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	---	---	0.51	0.00	0.04	0.00	0.00	0.00	1.13
30	0.00	0.10	0.03	---	---	0.00	0.00	0.00	0.00	0.00	0.00	3.95
31	0.22	---	0.14	---	---	0.00	---	0.16	---	0.22	0.00	---
Total	3.21	9.02	---	---	---	---	1.57	3.50	3.02	5.09	---	6.98

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