

Water-Data Report 2007

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.

GAGE.--Water-stage recorder. Elevation of gage is 740 ft above NGVD of 1929, from topographic map. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records fair.

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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	8.4	7.0	15	55	9.4	15	8.3	6.9	3.5	3.2	6.4	1.3
2	7.5	6.6	10	20	11	270	8.1	6.5	3.5	2.7	5.2	1.1
3	7.3	6.1	9.2	14	8.6	35	7.8	6.4	35	2.6	4.2	0.88
4	7.2	5.7	8.8	13	8.1	19	7.4	9.0	12	2.5	7.5	0.83
5	7.1	5.7	8.6	39	7.6	15	6.8	9.2	17	2.5	3.8	0.72
6	8.2	5.6	8.3	38	7.4	13	6.9	11	13	9.9	3.4	0.67
7	8.5	40	8.1	66	7.9	12	7.1	7.0	6.9	3.4	2.9	0.60
8	23	42	7.5	119	7.5	11	6.6	6.5	5.9	2.8	2.6	0.60
9	9.9	14	7.6	28	7.2	10	6.8	7.0	5.5	2.6	2.2	0.72
10	8.3	10	7.7	17	7.1	9.4	7.8	7.4	4.8	3.1	2.6	0.58
11	7.9	9.4	7.8	14	7.0	9.2	32	6.4	4.4	6.5	3.0	3.3
12	9.9	84	7.8	12	7.0	8.8	161	6.2	5.5	5.8	2.0	1.4
13	7.5	18	7.9	11	26	8.7	23	6.3	6.2	4.3	1.9	0.93
14	7.2	12	8.1	11	179	8.6	16	5.7	5.3	3.4	1.9	20
15	7.0	10	8.0	10	25	8.4	394	5.4	5.2	3.1	1.3	13
16	7.0	296	7.7	10	16	133	149	5.3	4.5	3.1	1.3	3.8
17	48	44	7.6	9.3	14	40	29	6.1	4.3	3.9	3.5	2.3
18	37	19	7.5	11	12	18	18	5.3	4.0	9.4	2.2	1.8
19	12	14	7.5	12	11	14	14	5.0	4.0	3.5	1.4	1.8
20	12	11	7.4	9.4	10	12	13	4.9	4.0	2.9	1.5	2.1
21	8.6	45	7.1	18	10	11	11	4.6	3.6	2.6	4.4	1.3
22	9.4	328	25	45	9.3	10	10	4.6	3.2	2.3	7.1	1.4
23	8.0	70	16	16	8.5	9.6	9.3	4.8	3.3	5.1	2.2	1.3
24	6.6	27	9.6	12	8.4	9.3	8.8	4.6	3.5	3.0	1.8	1.1
25	6.1	20	128	11	50	8.9	8.2	4.4	13	4.3	1.5	1.0
26	6.0	17	40	9.8	25	8.5	7.9	4.3	4.3	25	1.2	1.0
27	19	15	19	9.8	14	8.4	18	4.1	3.5	11	1.2	1.0
28	42	14	14	9.5	12	8.2	9.4	3.9	3.2	11	1.1	0.99
29	12	14	12	8.6	---	13	7.9	3.8	3.3	6.2	0.92	0.96
30	8.8	12	11	8.7	---	8.7	7.2	3.8	3.1	15	8.6	0.88
31	7.5	---	10	8.3	---	8.2	---	3.6	---	6.5	2.4	---
Total	384.9	1,222.1	459.8	675.4	526.0	773.9	1,020.3	180.0	198.5	173.2	93.22	69.36
Mean	12.4	40.7	14.8	21.8	18.8	25.0	34.0	5.81	6.62	5.59	3.01	2.31
Max	48	328	128	119	179	270	394	11	35	25	8.6	20
Min	6.0	5.6	7.1	8.3	7.0	8.2	6.6	3.6	3.1	2.3	0.92	0.58
Cfsm	0.78	2.56	0.93	1.37	1.18	1.57	2.14	0.37	0.42	0.35	0.19	0.15
In.	0.90	2.86	1.08	1.58	1.23	1.81	2.39	0.42	0.46	0.41	0.22	0.16

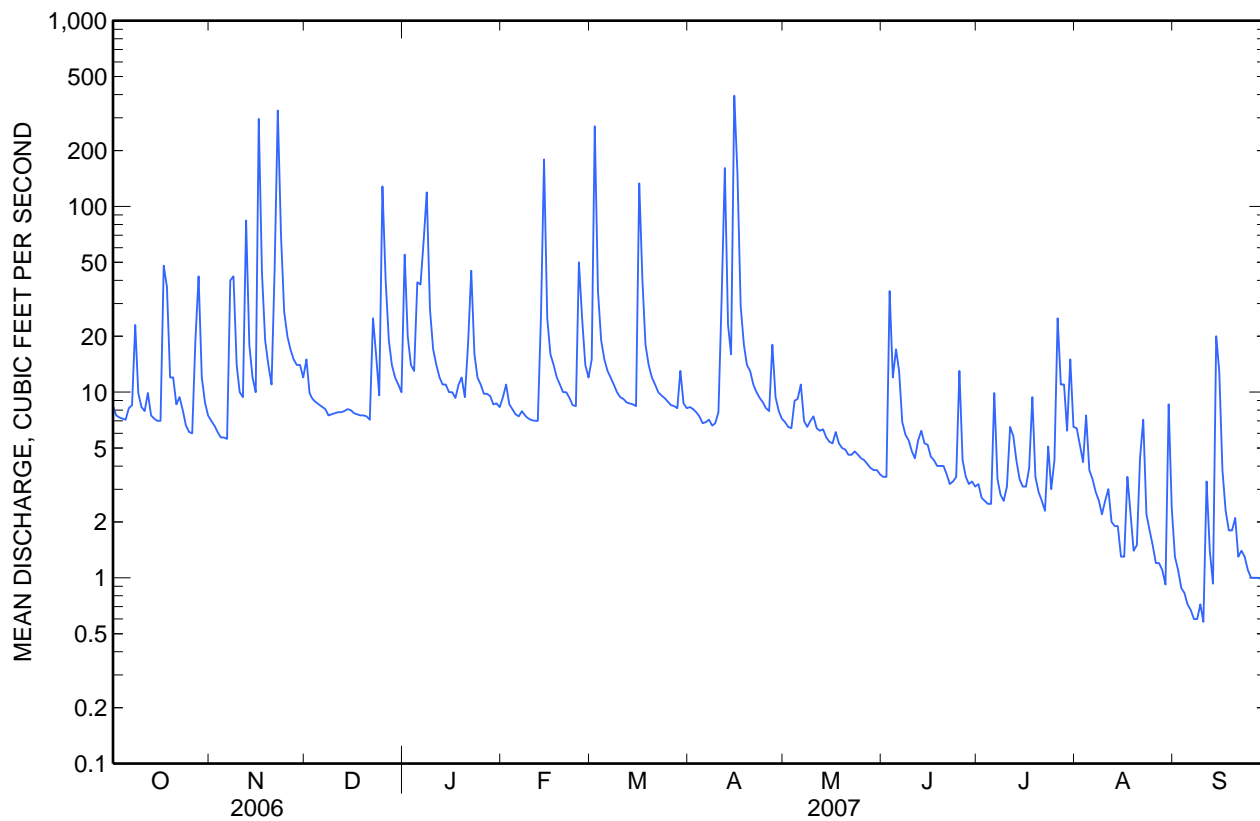
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2007, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	12.2	20.0	21.8	17.2	23.2	28.7	25.8	13.2	16.4	16.6	13.5	29.9
Max	31.8	43.6	45.7	21.9	45.0	74.3	70.2	46.6	45.9	35.4	58.2	79.5
(WY)	(2003)	(2003)	(2003)	(2000)	(2003)	(2003)	(2003)	(2003)	(2006)	(2003)	(2003)	(2000)
Min	5.62	5.08	8.86	9.75	9.21	7.96	5.46	3.32	4.68	4.11	3.01	1.67
(WY)	(2005)	(2002)	(2001)	(2004)	(2002)	(2006)	(2002)	(2002)	(2002)	(2002)	(2007)	(2005)

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SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 1999 - 2007	
Annual total	7,128.0		5,776.68			
Annual mean	19.5		15.8		20.0	
Highest annual mean					46.5	2003
Lowest annual mean					8.37	2002
Highest daily mean	393	Sep 14	394	Apr 15	827	Mar 20, 2003
Lowest daily mean	2.5	Aug 28	0.58	Sep 10	0.14	Aug 25, 2002
Annual seven-day minimum	2.7	Aug 23	0.67	Sep 4	0.38	Aug 8, 2002
Maximum peak flow			633	Apr 15	2,300	Sep 23, 2003
Maximum peak stage			8.03	Apr 15	10.66	Sep 23, 2003
Instantaneous low flow			0.52	Sep 10	0.06	Aug 14, 2002
Annual runoff (cfsm)	1.23		0.995		1.26	
Annual runoff (inches)	16.68		13.52		17.09	
10 percent exceeds	37		25		38	
50 percent exceeds	8.2		7.9		8.5	
90 percent exceeds	4.1		2.0		2.9	



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CLIMATOLOGICAL RECORDS

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

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

REMARKS.--Precipitation collected during freezing periods may not be accurately reflected in the 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	---	0.00	0.05	0.60	0.12	0.67	0.03	0.00	0.00	0.00	0.00	0.00
2	---	0.00	0.00	0.00	0.07	0.81	0.00	0.00	0.00	0.00	0.00	0.00
3	---	0.00	0.00	0.00	0.00	0.01	0.00	0.01	1.50	0.00	0.00	0.00
4	---	0.00	0.00	0.00	0.00	0.00	0.00	0.26	0.04	0.00	0.00	0.00
5	---	0.00	0.00	0.54	0.00	0.00	0.00	0.16	0.06	0.44	0.00	0.00
6	---	0.00	0.00	0.00	0.00	0.00	0.03	0.01	0.00	0.01	0.00	0.00
7	---	0.92	0.00	0.62	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00
8	---	0.10	0.00	0.32	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	0.02	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	0.12	0.02	0.00
11	---	0.57	0.00	0.00	0.00	0.00	1.18	0.00	0.03	0.20	0.00	0.00
12	---	0.23	0.00	0.00	0.00	0.00	0.98	0.02	0.00	0.00	0.00	0.00
13	---	0.00	0.02	0.00	1.41	0.00	0.00	0.00	0.27	0.00	0.00	0.00
14	---	0.00	0.00	0.00	0.05	0.00	0.55	0.00	0.01	0.00	0.00	0.89
15	---	0.00	0.00	0.00	0.00	0.00	2.42	0.00	0.02	0.00	0.00	0.01
16	---	1.76	0.00	0.00	0.00	1.57	0.00	0.13	0.00	0.06	0.00	0.00
17	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40	0.24	0.00
18	---	0.00	0.00	0.01	0.00	0.00	0.00	0.03	0.00	0.02	0.00	0.00
19	---	0.00	0.00	0.21	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00
20	---	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.02	0.00	0.00
21	---	1.28	0.00	0.55	0.02	0.02	0.01	0.00	0.00	0.00	0.29	0.00
22	---	0.94	0.66	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
23	---	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.20	0.00	0.00
24	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46	0.12	0.00	0.00
25	0.00	0.00	1.10	0.00	0.73	0.00	0.00	0.00	0.01	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.75	0.00	0.00
27	0.63	0.00	0.00	0.00	0.00	0.00	0.33	0.00	0.00	0.00	0.00	0.00
28	0.11	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.16	0.00	0.00
29	0.00	0.01	0.00	0.00	---	0.23	0.00	0.00	0.01	0.00	0.00	0.00
30	0.00	0.09	0.00	0.00	---	0.00	0.00	0.00	0.03	0.79	0.30	0.00
31	0.00	---	0.03	0.00	---	0.00	---	0.00	---	0.00	0.00	---
Total	---	5.90	1.86	2.96	2.40	3.32	5.56	0.70	2.49	3.29	0.86	0.90

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