

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. Datum of gage is 739.9 ft above National Geodetic Vertical Datum of 1929. Satellite telemetry at station.

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

REVISIONS.--The maximum discharges for some water years have been revised as shown in the following table. They supercede figures published in the reports for water years 2000, 2001, 2003, 2004, 2005, 2006, 2007.

Water year	Date	Discharge, (ft ³ /s)	Gage Height (ft)
2000	September 15, 2000	2,780	10.64
2001	March 30, 2001	466	7.60
2003	September 23, 2003	2,800	10.66
2004	July 18, 2004	1,690	9.57
2005	December 10, 2005	1,050	8.81
2006	June 27, 2006	1,210	9.02
2007	April 15, 2007	577	8.03

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	0.87	6.4	3.3	24	83	5.6	41	15	20	14	5.3	6.1
2	0.93	4.9	3.4	16	31	5.1	18	11	9.5	9.6	1.3	5.4
3	1.1	3.9	3.3	12	18	4.9	29	10	6.2	5.3	1.2	4.3
4	1.0	3.6	3.0	9.7	25	40	73	10	4.5	3.2	0.89	3.4
5	1.1	3.4	3.1	8.8	25	138	164	7.1	4.1	7.1	0.82	3.0
6	1.1	3.2	3.0	8.0	14	28	127	6.7	3.8	12	0.80	81
7	1.3	3.0	3.0	6.9	10	46	39	6.0	3.8	4.3	0.73	16
8	0.91	3.3	3.1	6.2	8.4	92	24	5.0	3.5	3.4	0.69	7.9
9	0.90	3.3	3.1	5.9	8.0	32	18	53	2.9	13	0.63	5.4
10	0.85	3.2	3.3	6.4	7.0	19	15	11	1.9	8.4	1.3	7.3
11	0.70	3.1	3.2	8.2	6.0	16	12	12	1.8	7.7	0.85	23
12	0.69	3.1	3.2	5.6	5.7	14	10	13	6.6	3.3	0.61	12
13	0.89	3.1	3.2	4.9	28	10	9.1	7.0	3.9	3.6	0.81	6.2
14	0.94	3.5	2.8	4.4	24	8.7	8.1	6.0	2.9	3.3	2.0	4.3
15	0.96	24	3.8	4.2	14	27	8.0	6.4	5.4	1.9	0.86	3.4
16	0.99	7.2	32	3.9	10	26	6.9	11	2.5	1.5	0.75	114
17	1.0	4.6	8.2	28	8.3	12	6.7	6.0	1.8	1.3	0.64	33
18	1.0	4.2	5.0	18	9.9	9.8	7.0	8.9	1.5	1.2	0.65	14
19	22	4.0	4.3	12	6.8	12	7.5	12	1.4	1.3	0.63	8.5
20	6.7	3.9	3.7	10	5.6	31	61	6.5	1.3	1.5	0.58	6.1
21	2.5	3.6	6.8	7.3	5.1	11	44	5.7	1.3	1.2	6.1	4.6
22	2.0	8.8	4.6	6.6	5.7	9.2	23	5.1	9.7	0.97	1.0	3.9
23	1.6	4.5	21	7.2	5.5	7.2	17	4.6	25	2.8	0.77	3.4
24	7.9	3.8	13	6.0	5.7	7.9	13	4.6	5.6	6.8	0.65	3.1
25	86	3.8	6.5	4.8	7.6	6.4	10	4.3	2.6	1.3	0.64	2.9
26	252	5.4	24	4.8	23	6.3	8.8	4.0	2.0	1.1	11	80
27	88	4.5	12	4.7	13	7.0	12	4.0	1.6	1.00	805	37
28	22	3.8	20	4.3	7.3	7.1	141	7.1	1.5	0.88	143	15
29	14	3.6	35	4.3	6.0	16	50	5.3	4.4	1.0	25	8.9
30	9.7	3.5	98	6.7	---	9.5	21	4.2	92	0.87	20	6.7
31	7.6	---	64	4.3	---	24	---	39	---	1.7	11	---
Total	539.23	144.2	405.9	264.1	426.6	688.7	1,024.1	311.5	235.0	126.52	1,046.20	529.8
Mean	17.4	4.81	13.1	8.52	14.7	22.2	34.1	10.0	7.83	4.08	33.7	17.7
Max	252	24	98	28	83	138	164	53	92	14	805	114
Min	0.69	3.0	2.8	3.9	5.1	4.9	6.7	4.0	1.3	0.87	0.58	2.9
Cfs/m	1.09	0.30	0.82	0.54	0.93	1.40	2.15	0.63	0.49	0.26	2.12	1.11
In.	1.26	0.34	0.95	0.62	1.00	1.61	2.40	0.73	0.55	0.30	2.45	1.24

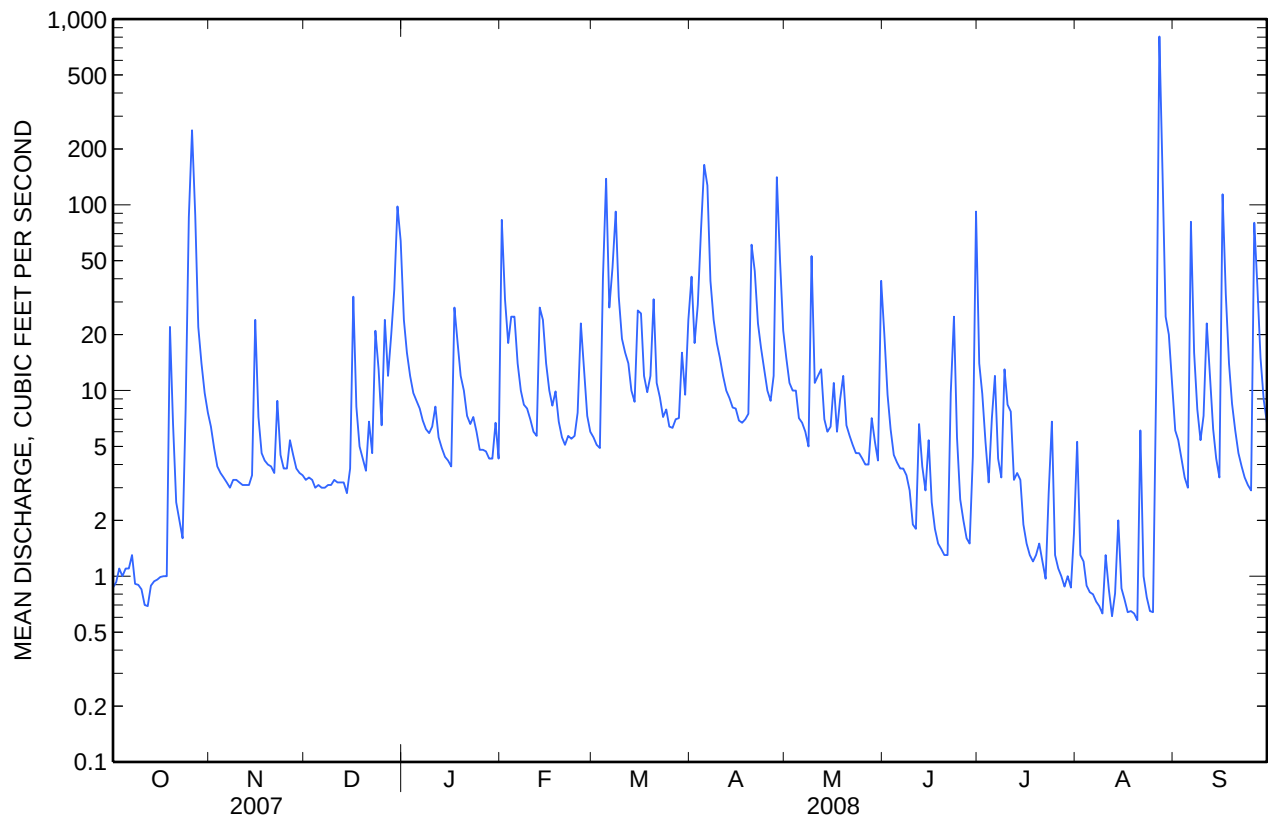
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	12.8	18.3	20.8	16.2	22.2	28.0	26.8	12.8	15.6	15.4	15.5	28.7
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	4.81	8.86	8.52	9.21	7.96	5.46	3.32	4.68	4.08	3.01	1.67
(WY)	(2005)	(2008)	(2001)	(2008)	(2002)	(2006)	(2002)	(2002)	(2002)	(2008)	(2007)	(2005)

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SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 1999 - 2008	
Annual total	4,799.21		5,741.85			
Annual mean	13.1		15.7		19.5	
Highest annual mean					46.5	2003
Lowest annual mean					8.37	2002
Highest daily mean	394	Apr 15	805	Aug 27	827	Mar 20, 2003
Lowest daily mean	0.58	Sep 10	0.58	Aug 20	0.14	Aug 25, 2002
Annual seven-day minimum	0.67	Sep 4	0.80	Aug 6	0.38	Aug 8, 2002
Maximum peak flow			1,950	Aug 27	^a 2,800	Sep 15, 2000
Maximum peak stage			9.85	Aug 27	10.66	Sep 23, 2003
Instantaneous low flow			0.54	Aug 20	0.06	Aug 14, 2002
Annual runoff (cfs)	0.827		0.987		1.23	
Annual runoff (inches)	11.23		13.43		16.68	
10 percent exceeds	20		28		37	
50 percent exceeds	5.9		6.0		8.2	
90 percent exceeds	1.2		1.0		2.6	

^aSee Remarks.

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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 2007 TO SEPTEMBER 2008
DAILY SUM VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	0.00	0.00	0.00	0.00	1.11	0.00	0.25	0.00	0.00	0.01	0.01	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.08	0.00	0.67	0.08	0.00	0.00	0.00	0.00
4	0.04	0.00	0.00	0.00	0.31	1.47	0.84	0.01	0.00	0.12	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.00	0.00	0.04	0.00	0.00
6	0.00	0.01	0.00	0.00	0.00	0.00	0.53	0.00	0.00	0.09	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.48	0.00	0.00	0.00	0.01	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.46	0.00	0.59	0.00	0.02	0.00	0.01
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.30	0.00	0.39	0.00	0.01
10	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.01	0.04	0.10
11	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.17	0.00	0.02	0.00	0.25
12	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.77	0.00	0.00	0.01
13	0.00	0.01	0.00	0.00	0.40	0.00	0.00	0.00	0.01	0.09	0.15	0.00
14	0.00	0.00	0.00	0.00	0.24	0.00	0.01	0.00	0.18	0.04	0.00	0.00
15	0.00	0.55	0.54	0.00	0.00	0.55	0.00	0.14	0.00	0.00	0.04	0.00
16	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.00	1.69
17	0.00	0.00	0.00	0.55	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.01
18	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.36	0.10	0.00	0.00	0.00
19	0.70	0.02	0.00	0.00	0.00	0.20	0.13	0.01	0.00	0.01	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.17	0.81	0.09	0.00	0.00	0.16	0.00
21	0.00	0.00	0.16	0.00	0.00	0.00	0.28	0.00	0.00	0.00	0.25	0.00
22	0.00	0.15	0.00	0.06	0.04	0.00	0.02	0.00	0.62	0.00	0.00	0.00
23	0.18	0.00	0.44	0.00	0.01	0.00	0.00	0.00	0.05	0.22	0.00	0.00
24	0.31	0.00	0.00	0.00	0.09	0.07	0.00	0.03	0.01	0.01	0.00	0.00
25	1.46	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.05
26	2.77	0.03	0.43	0.00	0.30	0.00	0.00	0.00	0.01	0.00	0.90	1.34
27	0.01	0.00	0.00	0.00	0.00	0.00	0.43	0.17	0.00	0.00	5.99	0.11
28	0.00	0.00	0.60	0.00	0.00	0.00	1.35	0.21	0.00	0.00	0.00	0.01
29	0.00	0.00	0.03	0.00	0.00	0.38	0.01	0.00	0.81	0.07	0.00	0.00
30	0.00	0.00	1.12	0.07	---	0.04	0.00	0.00	0.52	0.00	0.03	0.14
31	0.00	---	0.01	0.00	---	0.41	---	1.29	---	0.55	0.00	---
Total	5.47	0.81	3.58	0.95	2.73	4.23	5.54	3.58	3.08	1.70	7.60	3.73

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