

Water-Data Report 2008

0208732885 MARSH CREEK NEAR NEW HOPE, NC

Neuse Basin
Upper Neuse Subbasin

LOCATION.--Lat 35°49'01", long 78°35'35" referenced to North American Datum of 1983, Wake County, NC, Hydrologic Unit 03020201, at right upstream wingwall, on bridge at Stoneybrook Road, 0.2 mi downstream of U.S. Highway 401, and 2.9 mi southwest of New Hope.

DRAINAGE AREA.--6.84 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--January 1984 to current year.

REVISED RECORDS.--WDR NC-96-1: 1995 (maximum discharge).

GAGE.--Water-stage recorder. Datum of gage is 196.63 ft above NGVD of 1929. November 7, 2007 to September 30, 2008, at site 0.4 mi downstream at datum 8.00 ft lower. Satellite telemetry at station.

REMARKS.--Records poor. Maximum discharge for period of record from rating curve extension above 1,300 ft³/s, on basis of indirect measurement of peak flow. Minimum discharge for period of record, no flow, also occurred August 5, 1999 and October 1-3, 2005. Minimum discharge for the current water year, partial no flow, also occurred October 13, 14, 15.

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

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	0.47	1.4	0.88	e10	e59	2.1	e20	4.9	1.7	4.0	0.37	3.9
2	0.56	1.6	0.82	e4.8	e6.1	e2.3	e14	5.1	3.6	2.5	0.34	2.0
3	0.61	1.1	e2.4	e2.8	e1.8	2.2	e9.3	4.1	2.0	1.6	0.35	1.1
4	0.73	1.1	0.89	e2.2	e1.5	e2.3	e26	3.0	1.7	2.3	0.36	0.91
5	4.5	1.1	0.82	e2.0	1.9	e11	e169	2.7	1.5	4.6	0.46	10
6	1.5	e0.90	0.87	e1.9	2.0	e2.5	e18	2.4	1.2	32	0.49	279
7	1.2	e0.78	0.85	e1.8	2.0	e76	e7.8	2.2	1.1	20	0.49	9.7
8	0.77	e0.80	0.83	e1.7	1.9	e9.5	e4.0	2.9	0.95	3.5	0.56	4.0
9	0.41	0.79	0.83	e1.7	1.9	e3.1	e3.5	18	0.82	42	0.47	2.7
10	0.25	0.83	0.86	e1.6	1.9	e2.7	e3.3	5.6	0.76	17	1.2	26
11	0.21	0.82	0.85	e1.5	1.8	2.5	e3.2	27	0.80	4.1	0.50	7.1
12	0.04	0.80	0.89	e1.4	1.8	2.4	e3.0	23	0.72	2.1	0.26	e4.5
13	0.06	0.82	0.85	e1.3	e52	2.3	e2.8	5.3	0.83	1.3	0.89	e3.0
14	0.17	0.82	0.95	e1.3	e5.1	2.3	e2.5	4.1	0.85	48	0.72	2.3
15	0.12	e6.2	e3.8	e1.6	e2.3	e50	2.3	5.5	17	9.9	0.58	e1.7
16	0.33	e1.2	e30	e1.3	e1.8	e7.1	2.0	20	3.5	3.3	0.73	e65
17	0.32	e1.1	e3.4	e15	2.1	e2.4	1.9	11	12	1.7	0.34	9.2
18	17	e0.90	e1.5	e3.0	e14	2.6	1.9	26	2.0	3.1	0.33	3.2
19	12	0.97	1.3	e12	e3.1	e2.5	1.8	13	1.2	2.3	0.29	1.7
20	4.4	0.91	1.1	e3.2	e1.9	e2.5	5.3	20	0.97	1.1	11	1.1
21	2.4	0.85	1.1	e2.4	2.2	2.4	3.4	9.5	11	0.80	4.6	0.95
22	1.5	0.81	0.97	e2.2	e4.2	2.4	17	4.0	10	1.4	1.7	0.86
23	0.68	0.82	e1.8	e4.5	e2.1	2.1	11	3.1	8.2	2.1	0.79	0.78
24	55	0.75	e1.5	e2.2	2.4	2.1	4.6	3.8	4.3	2.0	0.51	0.67
25	29	0.74	e1.2	e1.8	2.3	2.0	3.5	3.2	1.9	1.0	0.40	1.5
26	53	e4.2	e26	e1.6	e22	2.0	2.7	2.0	1.1	0.78	2.0	112
27	185	e1.7	e4.9	e1.4	e13	1.9	146	1.7	7.6	0.61	119	54
28	5.3	0.98	e1.7	e1.3	e2.8	1.9	166	5.6	5.9	0.53	19	12
29	2.6	0.97	e1.0	e1.4	2.3	2.1	24	3.5	7.7	0.45	8.5	3.7
30	1.9	1.1	e18	e2.2	---	e2.9	7.7	2.3	39	0.90	5.3	2.5
31	1.4	---	e68	e1.7	---	e95	---	1.9	---	0.58	11	---
Mean	12.4	1.26	5.83	3.06	7.56	9.91	22.9	7.95	5.06	7.02	6.24	20.9
Max	185	6.2	68	15	59	95	169	27	39	48	119	279
Min	0.04	0.74	0.82	1.3	1.5	1.9	1.8	1.7	0.72	0.45	0.26	0.67
In.	2.09	0.21	0.98	0.52	1.19	1.67	3.74	1.34	0.83	1.18	1.05	3.41

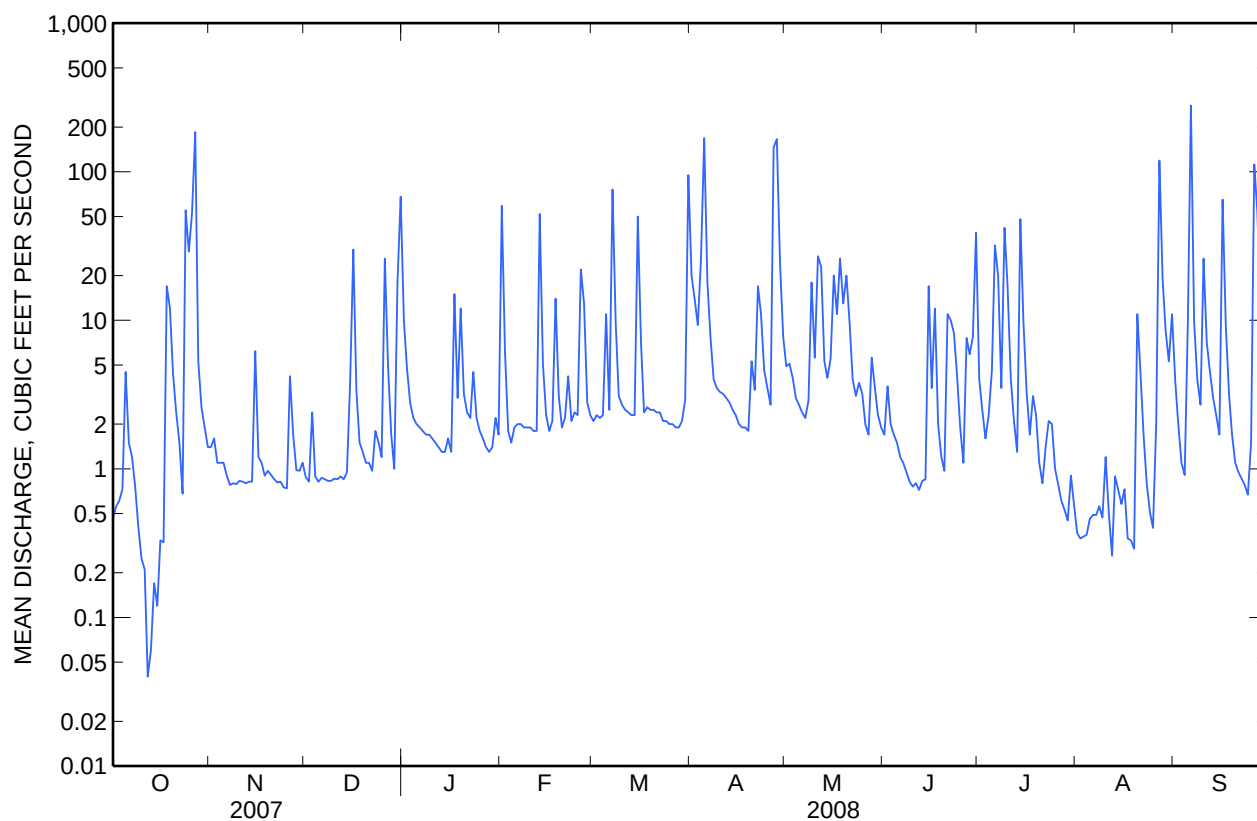
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	7.86	8.13	7.51	11.3	10.6	12.8	9.92	7.68	9.21	8.74	10.0	10.9
Max	28.2	22.9	16.2	30.3	22.0	31.9	22.9	25.9	32.1	25.0	38.0	67.4
(WY)	(2003)	(2007)	(2003)	(1998)	(1998)	(1998)	(2008)	(1984)	(2006)	(1997)	(1986)	(1999)
Min	1.39	1.26	2.02	3.06	2.77	3.23	2.08	2.05	1.29	2.44	1.26	0.64
(WY)	(2001)	(2008)	(1995)	(2008)	(1991)	(2006)	(1986)	(2002)	(1993)	(1987)	(2007)	(2005)

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SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 1984 - 2008	
Annual mean	5.47		9.15		9.45	
Highest annual mean					16.3	2003
Lowest annual mean					5.18	1985
Highest daily mean	185	Oct 27	279	Sep 6	890	Sep 6, 1996
Lowest daily mean	0.04	Oct 12	0.04	Oct 12	0.00	Aug 3, 1999
Annual seven-day minimum	0.15	Sep 7	0.17	Oct 10	0.00	Sep 28, 2005
Maximum peak flow			975	Oct 27	^a 3,900	Sep 6, 1996
Maximum peak stage			12.07	Apr 27	13.33	Sep 6, 1996
Instantaneous low flow			^a 0.00	Oct 12	^a 0.00	Aug 3, 1999
Annual runoff (inches)	10.86		18.20		18.78	
10 percent exceeds	10		18		18	
50 percent exceeds	1.9		2.1		3.2	
90 percent exceeds	0.54		0.72		1.2	

^aSee Remarks.

0208732885 MARSH CREEK NEAR NEW HOPE, NC—Continued**CLIMATOLOGICAL RECORDS**

PERIOD OF RECORD.--September 1985 to current year. Records from September 1985 to September 1999 are unpublished and available from the USGS Water Science Center, Raleigh, NC.

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 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	0.46	0.00	0.02	0.00	0.00	0.00	0.00	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	0.04	0.00	0.00	0.00	0.30	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.52	0.30	0.00	0.00	0.23	0.00	0.00
5	0.27	0.00	0.00	0.00	0.00	0.01	0.72	0.01	0.00	0.09	0.00	0.54
6	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.01	0.00	0.78	0.00	2.47
7	0.00	0.00	0.00	0.00	0.00	1.06	0.01	0.00	0.00	0.01	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.07	0.00	0.00	0.01	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.00	0.61	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.02	0.44	1.16
11	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.91	0.00	0.02	0.00	0.01
12	0.00	0.00	0.00	0.00	0.02	0.00	0.08	0.02	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.74	0.00	0.00	0.00	0.00	0.00	0.25	0.00
14	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	1.09	0.01	0.00
15	0.00	0.56	0.94	0.00	0.00	0.75	0.00	0.21	0.41	0.00	0.15	0.00
16	0.00	0.00	0.23	0.00	0.00	0.00	0.00	0.28	0.00	0.00	0.00	0.75
17	0.00	0.00	0.00	0.51	0.00	0.00	0.00	0.00	0.55	0.08	0.00	0.00
18	0.74	0.00	0.00	0.00	0.38	0.00	0.00	0.56	0.00	0.09	0.00	0.01
19	0.24	0.01	0.01	0.32	0.00	0.10	0.00	0.01	0.00	0.01	0.00	0.00
20	0.00	0.00	0.00	0.03	0.00	0.01	0.30	0.22	0.00	0.00	0.25	0.00
21	0.00	0.00	0.00	0.00	0.03	0.00	0.01	0.01	0.13	0.00	0.01	0.00
22	0.00	0.00	0.00	0.08	0.19	0.00	0.48	0.00	0.02	0.04	0.00	0.00
23	0.00	0.00	0.13	0.01	0.00	0.00	0.00	0.00	0.12	0.19	0.00	0.00
24	1.97	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.01	0.02	0.00	0.00
25	0.09	0.08	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.22
26	1.08	0.15	0.92	0.00	0.62	0.00	0.00	0.00	0.00	0.00	0.28	1.05
27	2.02	0.00	0.00	0.00	0.00	0.00	2.32	0.00	0.10	0.00	2.22	0.12
28	0.00	0.00	0.01	0.00	0.00	0.00	0.88	0.21	0.01	0.00	0.34	0.00
29	0.00	0.00	0.03	0.00	0.00	0.07	0.01	0.00	0.46	0.00	0.00	0.00
30	0.00	0.00	1.71	0.10	---	0.37	0.00	0.00	0.28	0.00	0.18	0.00
31	0.00	---	0.01	0.00	---	0.89	---	0.00	---	0.00	0.02	---
Total	6.41	0.81	4.03	1.06	2.48	3.85	5.51	2.77	2.10	3.28	4.16	6.33

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