

Water-Data Report 2007

02093877 BRUSH CREEK AT MUIRFIELD ROAD NEAR GREENSBORO, NC

Cape Fear Basin
Haw Subbasin

LOCATION.--Lat 36°07'41", long 79°55'26" referenced to North American Datum of 1983, Guilford County, NC, Hydrologic Unit 03030002, on right bank on downstream side of culvert on Muirfield Road and 1.8 mi upstream from Lake Higgins.

DRAINAGE AREA.--5.30 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--April 2004 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 790 ft above NGVD of 1929, from topographic map. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records poor. Minimum discharge for current water year also occurred September 29.

02093877 BRUSH CREEK AT MUIRFIELD ROAD NEAR GREENSBORO, NC—Continued

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	2.2	1.9	3.4	19	3.5	5.7	3.3	2.7	1.3	1.1	1.1	0.96
2	2.1	1.9	2.6	6.9	4.1	79	3.1	2.6	1.2	0.99	1.1	0.94
3	2.1	1.8	2.4	4.3	3.2	8.9	2.8	2.5	9.9	1.0	1.1	0.87
4	2.0	1.9	2.4	3.8	2.9	5.9	2.8	3.2	2.1	0.90	1.3	0.85
5	2.0	2.0	2.3	10	3.0	4.8	2.6	3.0	1.7	0.88	1.1	0.86
6	2.2	1.9	2.4	11	2.9	4.3	2.6	3.1	1.9	2.1	1.1	0.83
7	2.1	11	2.3	19	3.1	3.8	2.8	2.6	1.2	1.0	1.1	0.73
8	6.2	11	2.2	46	2.9	3.7	2.8	2.3	1.1	0.97	1.0	0.76
9	2.4	3.1	2.3	9.3	2.9	3.5	2.7	2.4	1.1	0.97	0.94	0.77
10	2.1	2.3	2.3	5.4	2.8	3.4	2.7	2.4	1.2	1.0	0.98	0.72
11	2.1	2.4	2.5	4.3	2.7	3.2	14	2.1	1.8	2.3	0.96	0.64
12	2.2	25	2.4	3.9	2.8	3.5	61	2.2	1.8	1.7	1.00	0.72
13	2.0	4.5	2.5	3.7	10	4.2	8.3	2.1	1.4	1.1	0.98	0.75
14	1.9	3.4	2.4	3.5	49	3.6	6.0	1.9	1.4	1.0	0.96	3.5
15	1.9	3.4	2.5	3.6	8.1	3.5	136	2.0	1.4	0.98	0.99	2.4
16	1.9	184	2.3	3.4	5.8	44	41	1.8	1.2	0.96	0.95	0.93
17	15	18	2.3	3.0	4.6	12	11	2.0	1.2	1.5	1.1	0.76
18	9.4	6.2	2.3	3.7	4.2	5.8	7.1	1.8	1.1	3.6	0.96	0.69
19	2.7	4.5	2.3	3.8	4.0	4.8	5.7	1.7	1.0	1.3	0.92	0.69
20	3.0	3.6	2.4	3.0	4.0	4.4	5.1	1.7	1.1	1.3	0.91	0.64
21	2.0	17	2.4	6.3	3.9	4.1	5.1	1.8	0.99	1.2	1.5	0.68
22	2.1	114	6.6	15	3.6	3.7	4.4	1.8	0.94	1.1	1.8	0.73
23	2.0	20	4.1	4.7	3.3	3.6	4.1	1.7	1.0	5.8	1.2	0.69
24	1.9	6.3	2.5	3.8	3.2	3.5	3.9	1.6	1.1	1.5	1.2	0.62
25	1.8	4.2	42	3.5	15	3.4	3.7	1.6	2.7	2.2	1.1	0.58
26	1.8	3.5	12	3.3	6.8	3.1	3.4	1.6	1.2	3.5	1.0	0.57
27	5.6	3.1	5.6	3.2	4.3	3.2	5.8	1.6	1.1	2.2	1.0	0.62
28	13	2.9	4.4	3.2	3.9	3.1	3.5	1.5	1.1	1.7	0.97	0.60
29	3.0	2.7	3.8	3.0	---	5.1	3.0	1.5	1.0	1.5	0.94	0.57
30	2.1	2.9	8.8	3.0	---	3.3	2.8	1.4	1.0	1.3	1.9	0.62
31	2.0	---	3.8	3.0	---	3.1	---	1.3	---	1.2	1.2	---
Total	104.8	470.4	144.5	222.6	170.5	251.2	363.1	63.5	48.23	49.85	34.36	26.29
Mean	3.38	15.7	4.66	7.18	6.09	8.10	12.1	2.05	1.61	1.61	1.11	0.88
Max	15	184	42	46	49	79	136	3.2	9.9	5.8	1.9	3.5
Min	1.8	1.8	2.2	3.0	2.7	3.1	2.6	1.3	0.94	0.88	0.91	0.57
Cfsm	0.64	2.96	0.88	1.35	1.15	1.53	2.28	0.39	0.30	0.30	0.21	0.17
In.	0.74	3.30	1.01	1.56	1.20	1.76	2.55	0.45	0.34	0.35	0.24	0.18

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2004 - 2007, BY WATER YEAR (WY)

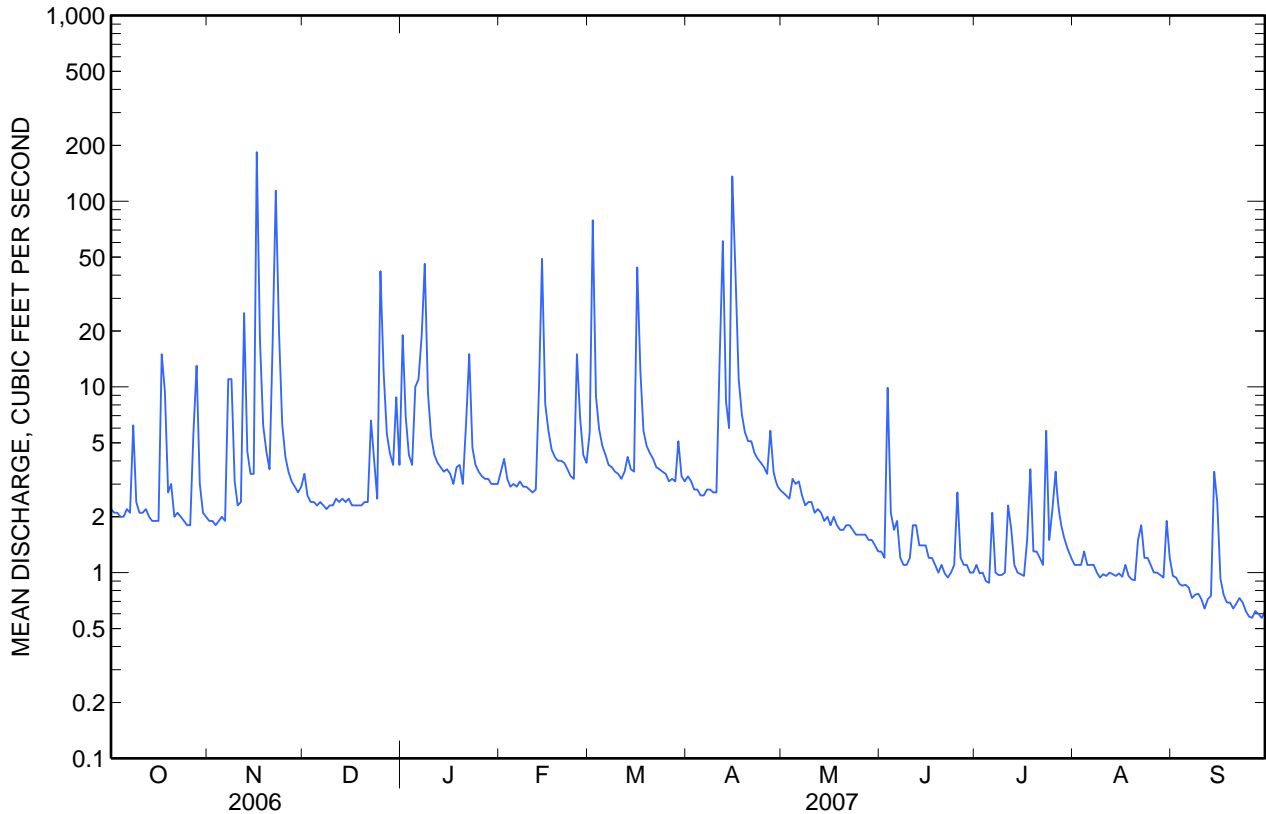
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	2.69	10.2	8.68	6.27	5.53	6.53	6.84	2.79	6.93	7.08	2.69	8.19
Max	3.38	15.7	11.4	7.18	6.09	8.58	12.1	3.47	19.2	13.4	4.17	17.5
(WY)	(2007)	(2007)	(2006)	(2007)	(2007)	(2005)	(2007)	(2004)	(2006)	(2006)	(2006)	(2004)
Min	2.03	6.17	4.66	5.18	4.51	2.91	3.04	2.05	1.61	1.61	1.11	0.88
(WY)	(2006)	(2006)	(2007)	(2005)	(2006)	(2006)	(2006)	(2007)	(2007)	(2007)	(2007)	(2007)

02093877 BRUSH CREEK AT MUIRFIELD ROAD NEAR GREENSBORO, NC—Continued

SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 2004 - 2007	
Annual total	2,827.64		1,949.33			
Annual mean	7.75		5.34		5.99	
Highest annual mean					7.42	2006
Lowest annual mean					5.21	2005
Highest daily mean	267	Jun 27	184	Nov 16	267	Jun 27, 2006
Lowest daily mean	0.71	Aug 29	0.57	Sep 26	0.57	Sep 26, 2007
Annual seven-day minimum	0.79	Aug 23	0.60	Sep 24	0.60	Sep 24, 2007
Maximum peak flow			NOT DETERMINED		NOT DETERMINED	
Maximum peak stage			8.06	Nov 16	9.06	Jun 27, 2006
Instantaneous low flow			^a 0.48	Sep 26	0.35	Oct 4, 2005
Annual runoff (cfsm)	1.46		1.01		1.13	
Annual runoff (inches)	19.85		13.68		15.36	
10 percent exceeds	12		7.5		9.8	
50 percent exceeds	2.7		2.4		2.9	
90 percent exceeds	1.3		0.96		1.0	

^a See Remarks.



02093877 BRUSH CREEK AT MUIRFIELD ROAD NEAR GREENSBORO, NC—Continued

CLIMATOLOGICAL RECORDS

PERIOD OF RECORD.--April 2004 to current year.

INSTRUMENTATION.--Tipping bucket raingage and data collection platform. 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 2006 TO SEPTEMBER 2007
DAILY SUM VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	0.02	0.00	0.08	0.63	0.13	0.67	0.08	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.05	0.75	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.69	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.05	0.00	0.00	0.00
5	0.12	0.00	0.00	0.49	0.00	0.00	0.00	0.13	0.10	0.33	0.00	0.00
6	0.01	0.00	0.00	0.01	0.00	0.00	0.04	0.01	0.01	0.01	0.00	0.00
7	0.06	0.70	0.00	0.56	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00
8	0.27	0.07	0.00	0.48	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	0.00	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	0.00	0.11	0.06	0.00
11	0.03	0.49	0.00	0.00	0.00	0.00	1.11	0.00	0.13	0.49	0.00	0.00
12	0.01	0.20	0.00	0.00	0.00	0.00	0.81	0.04	0.01	0.00	0.00	0.00
13	0.00	0.00	0.02	0.00	0.83	0.00	0.00	0.00	0.13	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.04	0.00	0.64	0.00	0.00	0.00	0.00	0.87
15	0.00	0.00	0.00	0.00	0.00	0.00	1.72	0.00	0.02	0.00	0.00	0.00
16	0.00	2.14	0.00	0.00	0.00	0.80	0.00	0.12	0.03	0.06	0.00	0.00
17	1.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41	0.16	0.00
18	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.00
19	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00
20	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
21	0.00	0.59	0.00	0.15	0.02	0.00	0.00	0.00	0.00	0.00	0.26	0.00
22	0.10	0.44	0.57	0.14	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	0.00	0.01	0.01	0.42	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.56	0.23	0.00	0.00
25	0.00	0.00	0.69	0.00	0.60	0.00	0.00	0.00	0.02	0.01	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.00	0.00
27	0.69	0.00	0.00	0.00	0.00	0.00	0.30	0.00	0.00	0.00	0.00	0.00
28	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.00
29	0.00	0.00	0.00	0.00	---	0.16	0.00	0.00	0.02	0.00	0.00	0.00
30	0.00	0.07	0.00	0.00	---	0.00	0.00	0.00	0.04	0.02	0.09	0.00
31	0.00	---	0.02	0.00	---	0.00	---	0.00	---	0.00	0.00	---
Total	2.66	4.70	1.38	2.57	1.67	2.38	4.71	0.54	1.84	2.47	0.58	0.87

