

Water-Data Report 2008

0214642825 BRIAR CREEK NEAR CHARLOTTE, NC

Santee Basin
Lower Catawba Subbasin

LOCATION.--Lat 35°14'10", long 80°46'16" referenced to North American Datum of 1983, Mecklenburg County, NC, Hydrologic Unit 03050103, 400 ft upstream from bridge on Shamrock Drive, and 4 mi northwest of city hall in Charlotte.

DRAINAGE AREA.--5.2 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--April 1998 to current year.

REVISED RECORDS.--WDR NC-2003-1B: 1998-2002 (daily discharges).

GAGE.--Water-stage recorder, crest-stage gage and concrete control. Datum of gage is 672.00 ft, North American Vertical Datum of 1988, from levels. Radio telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Maximum discharge for period of record and current water year from rating curve extended above 800 ft³/s by culvert computation of peak flow. No flow occurs most years. Minimum discharge for current water year, no flow, also occurred October 1-19, August 11-13, 20-25.

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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	0.00	0.24	0.02	0.67	30	0.68	2.5	0.97	0.13	0.03	0.87	1.7
2	0.00	0.22	0.03	0.40	1.3	0.63	1.7	0.99	0.15	0.03	0.12	0.91
3	0.00	0.24	0.04	0.31	0.55	0.77	6.1	0.94	0.22	0.02	0.21	1.1
4	0.00	0.33	e0.14	0.09	0.40	91	4.7	1.1	0.25	1.3	0.12	1.2
5	0.00	0.34	e0.35	0.09	0.34	14	7.3	1.1	0.15	0.55	0.09	1.1
6	0.00	0.36	0.13	0.13	0.53	2.3	2.4	1.0	0.14	3.9	0.07	1.4
7	0.00	0.37	0.14	0.15	0.63	11	1.6	1.1	0.32	0.16	0.02	1.2
8	0.00	0.48	1.1	0.17	0.48	3.9	1.4	0.92	0.45	37	0.01	3.0
9	0.00	0.48	0.78	0.15	0.48	1.7	1.5	1.1	0.58	2.6	0.01	1.4
10	0.00	0.40	0.12	1.9	0.43	1.5	1.4	1.1	0.62	e0.50	0.01	112
11	0.00	0.34	0.47	1.2	0.46	1.4	1.5	2.4	7.6	e0.10	0.01	12
12	0.00	0.37	0.71	0.19	1.6	1.4	2.7	1.0	0.92	0.02	0.00	2.3
13	0.00	0.48	0.29	0.14	8.1	1.4	1.4	1.2	0.07	41	3.4	1.3
14	0.00	0.48	0.34	0.16	1.9	1.5	1.3	1.3	0.55	1.9	0.20	0.93
15	0.00	2.1	3.4	0.15	0.54	56	1.2	1.7	0.66	0.14	0.46	0.87
16	0.00	0.41	11	0.15	0.48	5.6	1.2	3.1	0.50	0.03	0.37	17
17	0.00	0.13	0.80	15	0.51	1.9	1.2	1.00	0.48	0.07	1.6	3.8
18	0.00	0.09	0.54	1.4	1.6	1.4	1.2	1.4	0.45	0.13	0.06	1.1
19	3.9	0.14	0.56	3.4	0.39	14	1.4	1.1	0.45	0.15	0.01	0.97
20	0.05	0.13	0.58	1.2	0.34	3.8	1.8	0.88	1.3	0.08	0.01	1.2
21	0.01	0.16	2.4	0.41	0.64	1.6	1.1	1.0	16	0.13	0.00	1.7
22	0.01	0.76	0.49	0.63	3.1	1.6	1.1	0.82	29	2.3	0.00	2.1
23	0.02	0.39	2.5	0.71	0.80	1.5	1.1	0.98	9.0	9.3	0.00	1.9
24	12	0.24	e0.38	0.51	0.62	1.5	1.1	1.3	0.13	0.49	0.00	1.7
25	26	0.22	e0.27	0.48	0.63	1.4	1.3	1.3	0.02	0.24	8.3	2.4
26	13	1.1	e9.9	0.58	6.6	1.4	9.6	1.4	0.21	0.39	187	27
27	1.1	0.66	1.4	0.62	0.89	1.4	6.4	1.5	1.3	0.56	677	12
28	0.30	0.32	9.9	0.49	0.48	1.5	22	10	0.08	0.52	6.8	1.3
29	0.24	0.15	6.6	0.53	0.44	1.7	2.6	1.0	0.05	0.84	2.3	0.79
30	0.24	0.06	24	1.1	---	1.5	1.2	0.27	0.03	0.49	2.0	0.62
31	0.24	---	3.4	0.31	---	3.7	---	0.16	---	11	2.0	---
Total	57.11	12.19	82.78	33.42	65.26	234.68	93.0	45.13	71.81	115.97	893.05	217.99
Mean	1.84	0.41	2.67	1.08	2.25	7.57	3.10	1.46	2.39	3.74	28.8	7.27
Max	26	2.1	24	15	30	91	22	10	29	41	677	112
Min	0.00	0.06	0.02	0.09	0.34	0.63	1.1	0.16	0.02	0.02	0.00	0.62
Cfsm	0.35	0.08	0.51	0.21	0.43	1.46	0.60	0.28	0.46	0.72	5.54	1.40
In.	0.41	0.09	0.59	0.24	0.47	1.68	0.67	0.32	0.51	0.83	6.39	1.56

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	3.03	4.17	4.43	4.98	4.93	8.01	6.86	5.09	5.22	4.72	6.49	6.46
Max	7.12	20.7	10.6	12.0	7.54	21.6	22.2	30.3	25.3	13.2	28.8	24.4
(WY)	(2000)	(2007)	(2003)	(1999)	(2007)	(2003)	(2003)	(2003)	(2003)	(2005)	(2008)	(2004)
Min	0.41	0.41	1.08	1.08	1.78	2.61	1.36	1.46	0.33	1.25	0.29	0.45
(WY)	(2001)	(2008)	(2002)	(2008)	(2002)	(2006)	(2002)	(2008)	(2002)	(2007)	(2001)	(2007)

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SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 1998 - 2008	
Annual total	1,435.14		1,922.39			
Annual mean	3.93		5.25		5.36	
Highest annual mean					12.7	2003
Lowest annual mean					1.96	2002
Highest daily mean	223	Mar 2	677	Aug 27	677	Aug 27, 2008
Lowest daily mean	0.00	Sep 11	0.00	Oct 1	0.00	Aug 17, 1999
Annual seven-day minimum	0.00	Sep 24	0.00	Oct 1	0.00	Aug 4, 2002
Maximum peak flow			3,480	Aug 27	3,480	Aug 27, 2008
Maximum peak stage			9.43	Aug 27	9.43	Aug 27, 2008
Instantaneous low flow			^a 0.00	Oct 1	^a 0.00	Aug 18, 1999
Annual runoff (cfs)	0.756		1.01		1.03	
Annual runoff (inches)	10.27		13.75		14.01	
10 percent exceeds	6.5		6.7		8.5	
50 percent exceeds	1.3		0.71		1.6	
90 percent exceeds	0.01		0.02		0.14	

^aSee Remarks.