

Water-Data Report 2008

0214645080 TRIBUTARY TO BRIAR CREEK AT RUNNYMEDE LANE AT CHARLOTTE, NC

Santee Basin
Lower Catawba Subbasin

LOCATION.--Lat 35°10'01", long 80°50'12" referenced to North American Datum of 1983, Mecklenburg County, NC, Hydrologic Unit 03050103, on right bank upstream of culvert on Runnymede Lane, 3.5 mi south of city hall in Charlotte.

DRAINAGE AREA.--1.19 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--June 2005 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 584.62 ft above North American Vertical Datum of 1988 (from levels). Radio telemetry at site.

REMARKS.--Records fair, except those for estimated daily discharges, which are poor. Maximum discharge for all years from rating curve extended above 100 ft³/s on basis of culvert computation of peak flow. Minimum discharge for period of record also occurred June 26, 2005, July 22, 2006, July 6, 7, 2007, September 13, 2007.

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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	0.07	0.15	0.30	0.49	12	0.48	0.88	0.52	0.38	0.15	0.23	0.44
2	0.08	0.14	0.29	0.47	0.80	0.49	0.79	0.48	0.43	0.12	0.21	0.32
3	0.08	0.16	0.29	0.48	0.61	0.51	1.4	0.47	0.36	0.12	0.22	0.32
4	0.22	0.15	0.30	0.48	0.53	21	1.9	0.44	0.36	0.11	0.22	0.35
5	0.09	0.14	0.31	0.51	0.50	2.9	1.9	0.47	0.34	1.3	0.22	0.41
6	0.09	0.15	0.31	0.44	0.56	0.89	0.86	0.46	0.37	7.3	0.17	0.39
7	0.09	0.17	0.33	0.43	0.48	4.1	0.80	0.52	0.28	0.20	0.18	0.41
8	0.10	0.15	0.32	0.44	0.51	1.7	0.74	0.47	0.28	17	0.18	0.37
9	0.10	0.16	0.32	0.44	0.53	0.89	0.74	0.49	0.29	0.69	0.16	0.39
10	0.13	0.16	0.32	0.71	0.53	0.73	0.76	0.42	0.29	0.40	0.23	3.4
11	0.13	0.18	0.33	0.78	0.58	0.68	0.76	0.93	1.5	0.21	0.16	0.85
12	0.16	0.19	0.34	0.47	0.99	0.66	2.7	0.44	0.39	0.17	0.17	0.16
13	0.16	0.18	0.35	0.48	2.0	0.64	0.65	0.43	0.29	22	2.7	0.15
14	0.14	0.20	0.36	0.47	0.63	0.64	0.59	0.41	0.26	1.4	0.25	0.15
15	0.13	0.43	1.7	0.45	0.49	15	0.60	0.41	0.24	0.32	0.27	0.13
16	0.13	0.21	3.3	0.47	0.50	1.8	0.60	0.73	0.24	0.27	0.25	6.9
17	0.14	0.23	0.48	6.1	0.55	0.96	0.61	0.41	0.24	0.23	1.4	0.61
18	0.12	0.26	0.59	0.65	0.96	0.88	0.62	0.61	0.21	0.24	0.21	0.17
19	1.4	0.25	0.69	1.7	0.52	4.1	0.61	0.44	0.17	0.19	0.15	0.15
20	0.10	0.26	0.68	0.64	e0.48	1.2	0.61	0.49	5.2	0.19	0.16	0.17
21	0.10	0.26	1.2	0.46	e1.1	0.87	0.59	0.46	3.9	0.19	0.15	0.18
22	0.11	0.37	0.36	0.66	1.9	0.87	0.61	0.41	4.1	3.3	0.11	0.18
23	0.13	0.26	1.1	0.48	0.64	0.73	0.58	0.42	1.5	2.4	0.12	0.19
24	1.8	0.29	0.40	0.44	0.58	0.71	0.51	0.45	0.21	0.40	0.14	0.21
25	2.1	0.50	0.36	0.44	0.59	0.71	0.50	0.44	0.19	0.23	1.2	0.25
26	2.5	e0.50	3.1	0.60	3.1	0.72	8.1	0.46	0.41	0.23	59	9.5
27	0.24	e0.33	0.42	0.41	0.60	0.72	6.5	0.45	0.32	0.22	e136	4.0
28	0.15	e0.27	2.8	0.43	0.52	0.72	13	4.3	0.18	0.19	0.79	0.33
29	0.15	e0.25	0.91	0.43	0.49	0.73	1.1	0.48	0.15	0.27	1.6	0.22
30	0.15	e0.34	7.3	0.58	---	0.73	0.58	0.40	0.17	0.23	0.66	0.20
31	0.15	---	0.84	0.40	---	1.3	---	0.40	---	0.20	0.39	---
Total	11.24	7.29	30.70	22.43	34.27	69.06	51.19	18.71	23.25	60.47	207.90	31.50
Mean	0.36	0.24	0.99	0.72	1.18	2.23	1.71	0.60	0.78	1.95	6.71	1.05
Max	2.5	0.50	7.3	6.1	12	21	13	4.3	5.2	22	136	9.5
Min	0.07	0.14	0.29	0.40	0.48	0.48	0.50	0.40	0.15	0.11	0.11	0.13
Cfsm	0.30	0.20	0.83	0.61	0.99	1.87	1.43	0.51	0.65	1.64	5.64	0.88
In.	0.35	0.23	0.96	0.70	1.07	2.16	1.60	0.58	0.73	1.89	6.50	0.98

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2005 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	1.12	2.37	2.41	1.60	1.20	2.05	1.13	0.40	1.34	1.84	3.04	0.75
Max	1.55	5.11	4.39	2.43	1.63	3.35	1.71	0.60	2.26	3.65	6.71	1.65
(WY)	(2006)	(2007)	(2006)	(2007)	(2007)	(2007)	(2008)	(2008)	(2006)	(2005)	(2008)	(2006)
Min	0.36	0.24	0.99	0.72	0.81	0.58	0.62	0.28	0.77	0.85	0.08	0.08
(WY)	(2008)	(2008)	(2008)	(2008)	(2006)	(2006)	(2006)	(2006)	(2008)	(2006)	(2007)	(2007)

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SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 2005 - 2008	
Annual total	378.39		568.01			
Annual mean	1.04		1.55		1.60	
Highest annual mean					1.65	2006
Lowest annual mean					1.55	2008
Highest daily mean	62	Mar 2	136	Aug 27	136	Aug 27, 2008
Lowest daily mean	0.04	Jun 28	0.07	Oct 1	0.04	Jun 25, 2005
Annual seven-day minimum	0.05	Sep 6	0.10	Oct 1	0.05	Sep 6, 2007
Maximum peak flow			^a 860	Aug 27	^a 860	Aug 27, 2008
Maximum peak stage			12.66	Aug 27	12.66	Aug 27, 2008
Instantaneous low flow			0.06	Oct 5	^a 0.03	Jun 25, 2005
Annual runoff (cfs)	0.871		1.30		1.35	
Annual runoff (inches)	11.83		17.76		18.28	
10 percent exceeds	1.9		1.9		2.8	
50 percent exceeds	0.23		0.44		0.37	
90 percent exceeds	0.05		0.15		0.10	

^aSee Remarks.