

Water-Data Report 2008

02146409 LITTLE SUGAR CREEK AT MEDICAL CENTER DRIVE AT CHARLOTTE, NC

Santee Basin
Lower Catawba Subbasin

LOCATION.--Lat 35°12'13", long 80°50'13" referenced to North American Datum of 1983, Mecklenburg County, NC, Hydrologic Unit 03050103, on left bank upstream side of bridge at Medical Center Drive, 3.3 mi upstream from Briar Creek, and 1.3 mi south of city hall in Charlotte.

DRAINAGE AREA.--11.8 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1994 to current year. Fragmentary records 1964-1966, in the files of the North Carolina Water Science Center, Charlotte field office, as "Little Sugar Creek at Brunswick Avenue at Charlotte".

REVISED RECORDS.--WDR NC-96-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 612.82 ft above North American Vertical Datum of 1988, from levels. Radio telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Minimum discharge for period of record and current water year affected by construction.

02146409 LITTLE SUGAR CREEK AT MEDICAL CENTER DRIVE AT CHARLOTTE, NC—Continued

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	1.9	1.8	2.3	5.2	175	4.2	9.0	5.7	3.5	2.7	8.3	11
2	2.1	1.8	2.3	4.0	8.2	4.1	5.1	5.2	3.6	2.3	3.6	4.1
3	1.9	2.0	2.4	4.1	5.1	4.0	30	5.0	3.2	2.5	3.0	3.8
4	5.5	2.6	2.4	3.5	4.4	222	37	4.9	3.2	26	2.8	3.5
5	2.1	2.9	2.6	3.1	4.1	38	52	4.7	3.0	12	2.8	3.3
6	1.9	2.7	2.5	3.1	5.9	7.2	10	4.7	2.7	8.2	2.6	3.4
7	1.8	2.6	2.5	3.1	5.6	61	6.2	4.4	7.1	4.1	2.6	3.0
8	1.8	2.6	2.5	2.8	3.7	15	5.5	4.4	8.1	171	2.8	3.4
9	1.8	2.6	2.5	2.7	3.5	6.8	5.2	6.2	2.5	24	2.3	2.9
10	1.8	2.1	2.4	13	3.3	5.7	5.2	4.4	2.5	19	2.5	488
11	1.8	2.3	2.0	8.9	3.3	5.8	5.1	19	13	6.6	2.5	54
12	1.7	2.5	2.4	3.6	3.8	5.1	13	5.6	6.3	3.7	2.1	8.4
13	1.7	2.5	2.0	3.0	40	5.4	5.6	4.3	2.6	118	21	5.4
14	1.7	2.6	2.0	2.6	9.4	4.9	5.0	4.3	2.4	11	4.0	4.5
15	1.7	12	42	2.7	4.4	204	4.6	4.3	2.3	4.1	17	3.9
16	1.7	3.3	65	3.0	3.9	21	4.3	17	2.3	3.2	8.7	79
17	1.7	2.5	3.7	85	4.7	7.1	4.4	4.2	2.1	2.7	15	16
18	1.7	2.5	3.1	7.9	7.8	5.9	4.4	5.9	2.2	2.6	3.3	5.2
19	36	2.5	2.9	23	3.8	83	4.3	5.3	2.2	2.6	2.6	4.4
20	2.7	2.4	2.7	7.9	3.5	16	5.3	4.7	25	2.5	2.4	4.0
21	1.9	2.3	16	4.3	7.1	6.6	4.7	4.0	180	2.5	2.4	3.9
22	1.7	6.0	3.5	6.4	18	5.5	4.1	3.4	135	38	2.3	4.2
23	2.1	2.7	19	5.5	4.6	5.1	4.3	3.3	92	51	2.3	3.7
24	44	2.4	4.7	3.8	3.9	4.8	4.4	3.9	5.1	4.4	2.9	3.5
25	85	4.5	3.0	3.6	3.7	4.5	4.1	3.5	3.6	2.9	42	3.2
26	61	7.3	60	3.4	51	4.5	63	3.3	18	3.0	558	139
27	6.5	4.2	6.7	3.4	6.1	4.6	40	3.3	26	2.7	998	59
28	2.8	2.7	49	3.3	4.4	4.3	142	98	3.3	2.8	15	7.2
29	2.3	2.5	27	3.4	4.2	4.8	12	8.3	2.9	4.5	7.0	5.2
30	2.1	2.4	125	5.8	---	4.3	6.6	4.4	2.8	2.6	21	4.6
31	2.0	---	16	3.7	---	e10	---	3.8	---	72	11	---
Total	286.4	95.8	482.1	238.8	406.4	785.2	506.4	263.4	568.5	615.2	1,773.8	944.7
Mean	9.24	3.19	15.6	7.70	14.0	25.3	16.9	8.50	18.9	19.8	57.2	31.5
Max	85	12	125	85	175	222	142	98	180	171	998	488
Min	1.7	1.8	2.0	2.6	3.3	4.0	4.1	3.3	2.1	2.3	2.1	2.9
Cfs/m	0.78	0.27	1.32	0.65	1.19	2.15	1.43	0.72	1.61	1.68	4.85	2.67
In.	0.90	0.30	1.52	0.75	1.28	2.48	1.60	0.83	1.79	1.94	5.59	2.98

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	15.1	14.8	14.8	19.5	20.4	22.3	20.3	15.1	19.5	23.0	22.9	19.9
Max	28.9	54.2	35.0	48.5	36.9	54.8	57.3	70.8	57.3	81.8	57.2	61.5
(WY)	(1996)	(2007)	(2003)	(1998)	(1995)	(2003)	(2003)	(2003)	(2003)	(1997)	(2008)	(2004)
Min	3.88	3.19	6.02	5.94	6.64	6.80	4.67	4.37	3.38	9.61	4.65	5.11
(WY)	(2001)	(2008)	(2001)	(2004)	(2006)	(2006)	(2002)	(1999)	(2002)	(1999)	(1997)	(2005)

02146409 LITTLE SUGAR CREEK AT MEDICAL CENTER DRIVE AT CHARLOTTE, NC—Continued

SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 1995 - 2008	
Annual total	5,108.1		6,966.7			
Annual mean	14.0		19.0		19.0	
Highest annual mean					37.0	
Lowest annual mean					10.3	
Highest daily mean	465	Mar 2	998	Aug 27	1,970	Jul 23, 1997
Lowest daily mean	1.7	Oct 12	1.7	Oct 12	1.0	Aug 11, 2002
Annual seven-day minimum	1.7	Oct 12	1.7	Oct 12	1.1	Aug 7, 2002
Maximum peak flow			3,890	Aug 27	5,310	Jul 23, 1997
Maximum peak stage			13.09	Aug 27	14.83	Jul 23, 1997
Instantaneous low flow			^a 0.72	Dec 11	^a 0.72	Dec 11, 2007
Annual runoff (cfsm)	1.19		1.61		1.61	
Annual runoff (inches)	16.10		21.96		21.82	
10 percent exceeds	31		39		36	
50 percent exceeds	4.9		4.2		5.4	
90 percent exceeds	2.0		2.3		2.7	

^aSee Remarks.