

Water-Data Report 2010

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 Medical Center Drive bridge, 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 streamgage.

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 2009 TO SEPTEMBER 2010
DAILY MEAN VALUES

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	2.8	156	8.9	8.7	20	8.0	8.9	6.0	509	8.5	25	2.6
2	2.7	4.4	175	7.9	97	22	8.4	5.8	44	6.0	8.6	2.5
3	2.6	3.2	28	7.9	26	24	8.1	13	11	5.3	10	2.5
4	2.6	3.1	11	8.0	13	9.7	7.8	6.3	6.3	5.3	8.4	2.4
5	29	2.8	11	7.6	460	8.2	7.8	5.5	5.6	5.3	20	2.4
6	3.8	2.6	9.0	7.4	47	7.9	7.7	5.3	6.6	5.3	124	2.4
7	2.9	2.5	7.9	7.5	16	7.9	7.6	5.1	8.2	5.3	106	2.5
8	2.4	2.5	83	7.5	13	7.9	14	5.0	4.9	5.4	11	2.3
9	2.8	2.6	180	7.3	12	7.9	12	4.6	4.8	5.3	10	2.3
10	2.8	150	15	7.2	11	8.9	7.5	4.6	15	6.8	9.2	2.1
11	2.6	516	10	7.7	9.5	17	7.4	9.0	5.2	11	8.3	4.2
12	8.9	115	9.4	7.2	9.7	156	7.1	5.3	4.6	286	8.1	2.6
13	4.0	16	e18	7.0	16	79	7.1	4.9	78	14	7.9	2.2
14	12	9.7	e11	6.7	10	38	6.9	4.6	9.8	9.5	25	3.3
15	8.8	7.9	8.8	6.7	28	12	7.0	4.3	29	6.7	31	2.2
16	4.1	7.4	7.9	13	10	9.8	7.1	5.0	7.3	32	9.7	2.1
17	4.8	6.8	7.8	207	9.0	9.1	6.9	62	5.2	21	8.2	2.1
18	3.1	11	100	13	8.8	8.8	6.4	10	5.0	9.8	8.0	2.0
19	2.9	7.6	48	9.2	8.4	8.4	6.5	7.5	4.9	7.6	519	2.0
20	2.8	6.7	12	8.2	8.2	8.0	7.3	5.5	4.7	6.6	17	2.1
21	2.9	6.5	9.4	69	8.0	21	10	6.1	4.9	6.4	5.2	2.0
22	2.9	16	8.5	19	77	27	6.6	6.7	5.0	7.1	3.7	2.0
23	3.0	73	8.0	9.8	12	9.2	6.3	4.4	5.0	6.9	3.3	2.0
24	8.6	9.0	7.6	194	16	8.2	8.7	8.8	5.1	7.0	3.1	1.9
25	3.4	7.8	342	449	17	8.0	47	5.3	4.7	9.4	3.1	1.9
26	2.7	7.9	22	17	8.9	8.2	7.1	4.2	4.9	7.9	14	46
27	107	11	12	11	8.6	7.7	23	4.0	5.8	241	3.6	77
28	31	6.8	9.8	9.6	8.3	57	12	33	5.9	28	2.9	40
29	3.3	6.5	8.7	9.5	---	195	6.4	39	4.9	11	2.7	57
30	2.8	9.9	9.4	16	---	13	6.2	4.5	211	8.7	2.8	30
31	5.9	---	22	28	---	9.7	---	108	---	26	2.7	---
Total	281.9	1,188.2	1,221.1	1,194.6	988.4	822.5	292.8	403.3	1,026.3	822.1	1,021.5	308.6
Mean	9.09	39.6	39.4	38.5	35.3	26.5	9.76	13.0	34.2	26.5	33.0	10.3
Max	107	516	342	449	460	195	47	108	509	286	519	77
Min	2.4	2.5	7.6	6.7	8.0	7.7	6.2	4.0	4.6	5.3	2.7	1.9
Cfsm	0.77	3.36	3.34	3.27	2.99	2.25	0.83	1.10	2.90	2.25	2.79	0.87
In.	0.89	3.75	3.85	3.77	3.12	2.59	0.92	1.27	3.24	2.59	3.22	0.97

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2010, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	14.2	16.0	16.4	20.5	20.8	23.2	19.1	16.7	21.1	23.9	23.4	18.5
Max	28.9	54.2	39.4	48.5	36.9	54.8	57.3	70.8	57.3	81.8	57.2	61.5
(WY)	(1996)	(2007)	(2010)	(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 2009		Water Year 2010		Water Years 1995 - 2010	
Annual total	9,081.1		9,571.3			
Annual mean	24.9		26.2		19.5	
Highest annual mean					37.0	2003
Lowest annual mean					10.3	2002
Highest daily mean	516	Nov 11	519	Aug 19	1,970	Jul 23, 1997
Lowest daily mean	2.3	Sep 13	1.9	Sep 24	1.0	Aug 11, 2002
Annual seven-day minimum	2.8	Sep 28	2.0	Sep 19	1.1	Aug 7, 2002
Maximum peak flow			4,300	Aug 19	5,310	Jul 23, 1997
Maximum peak stage			13.66	Aug 19	14.83	Jul 23, 1997
Instantaneous low flow			^a 1.7	May 28	^a 0.58	Dec 5, 2008
Annual runoff (cfsm)	2.11		2.22		1.65	
Annual runoff (inches)	28.63		30.17		22.44	
10 percent exceeds	52		47		38	
50 percent exceeds	6.0		8.0		5.5	
90 percent exceeds	3.0		2.8		2.7	

^a See Remarks.

