

Water-Data Report 2011

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 affected by construction.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	3.5	3.0	114	19	5.6	16	7.8	4.4	3.5	3.1	4.7	2.0
2	2.6	3.1	4.9	23	74	6.5	6.2	4.5	3.4	2.9	3.1	67
3	2.6	3.3	4.0	e4.4	6.1	5.7	5.7	24	3.5	2.8	2.8	8.1
4	3.1	27	4.9	e3.6	101	5.4	5.7	56	3.3	12	2.7	2.4
5	2.4	4.4	4.8	4.6	94	8.0	50	5.3	3.3	7.5	867	83
6	2.4	3.4	3.9	5.5	8.9	110	6.2	5.6	3.3	24	14	23
7	2.5	3.3	3.8	4.8	6.6	10	5.7	4.6	3.2	3.5	6.3	4.3
8	2.4	3.2	3.8	4.6	5.9	6.7	5.5	4.4	3.2	8.7	19	3.3
9	2.4	3.4	3.9	4.4	5.3	95	45	4.3	19	16	8.9	2.6
10	2.5	3.1	3.7	6.7	5.2	37	12	4.1	e21	3.2	3.1	2.4
11	2.7	3.1	4.0	13	5.1	9.6	5.9	26	34	3.5	10	2.3
12	2.8	3.3	21	8.8	4.9	7.0	5.9	12	14	2.9	4.4	2.2
13	2.8	3.1	4.9	7.0	5.1	6.3	5.2	4.8	4.5	2.8	20	2.3
14	3.8	3.1	4.1	5.7	5.2	6.1	5.2	13	3.3	3.5	30	2.3
15	2.9	3.1	4.0	5.3	5.1	8.1	5.1	7.3	3.9	3.4	15	2.2
16	3.1	3.5	6.7	5.0	5.1	8.6	85	19	4.0	3.3	3.6	2.2
17	2.5	3.5	8.1	5.3	5.0	5.7	7.6	288	3.3	2.7	3.0	2.3
18	2.5	3.4	5.2	6.2	5.0	5.6	5.5	8.7	3.8	2.7	2.6	2.3
19	2.6	3.4	4.8	5.3	4.9	5.4	5.3	5.6	3.6	2.6	2.5	2.4
20	4.5	3.3	4.1	6.0	5.0	5.3	5.2	4.7	3.3	2.8	2.5	2.5
21	3.0	3.3	4.2	5.3	5.2	5.4	4.9	4.3	50	3.5	3.8	20
22	2.6	3.4	4.2	4.8	5.0	5.2	22	4.3	61	3.3	9.6	8.9
23	2.6	3.6	4.0	4.9	5.0	5.1	6.6	4.3	3.8	2.4	2.5	384
24	2.7	4.2	4.0	4.7	4.9	8.7	5.0	3.9	8.2	2.3	2.3	69
25	21	3.5	6.9	5.2	5.5	5.0	4.7	3.7	3.7	2.4	2.4	210
26	8.1	6.3	17	25	5.1	50	4.9	3.7	3.0	3.4	2.5	82
27	56	3.9	6.1	6.4	4.9	49	4.6	54	3.1	2.5	2.1	145
28	20	3.4	4.9	4.8	117	20	14	7.7	74	2.4	1.9	194
29	3.5	3.5	4.8	4.8	---	6.8	4.8	3.9	26	2.5	2.0	8.6
30	3.1	6.6	4.7	4.5	---	133	4.4	3.7	3.6	2.5	2.0	5.7
31	3.0	---	4.6	4.5	---	12	---	3.6	---	143	2.1	---
Total	182.2	131.7	284.0	223.1	515.6	668.2	361.6	603.4	380.8	284.1	1,058.4	1,348.3
Mean	5.88	4.39	9.16	7.20	18.4	21.6	12.1	19.5	12.7	9.16	34.1	44.9
Max	56	27	114	25	117	133	85	288	74	143	867	384
Min	2.4	3.0	3.7	3.6	4.9	5.0	4.4	3.6	3.0	2.3	1.9	2.0
Cfsm	0.50	0.37	0.78	0.61	1.56	1.83	1.02	1.65	1.08	0.78	2.89	3.81
In.	0.57	0.42	0.90	0.70	1.63	2.11	1.14	1.90	1.20	0.90	3.34	4.25

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2011, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	13.7	15.3	16.0	19.7	20.7	23.1	18.7	16.9	20.6	23.1	24.1	20.0
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	9.16	4.65	5.11
(WY)	(2001)	(2008)	(2001)	(2004)	(2006)	(2006)	(2002)	(1999)	(2002)	(2011)	(1997)	(2005)

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

	Calendar Year 2010	Water Year 2011	Water Years 1995 - 2011	
Annual total	7,478.0	6,041.4		
Annual mean	20.5	16.6	19.3	
Highest annual mean			37.0	2003
Lowest annual mean			10.3	2002
Highest daily mean	519	Aug 19	867	Aug 5
Lowest daily mean	1.9	Sep 24	1.9	Aug 28
Annual seven-day minimum	2.0	Sep 19	2.1	Aug 26
Maximum peak flow			4,390	Aug 5
Maximum peak stage			13.78	Aug 5
Instantaneous low flow			1.7	Sep 1
Annual runoff (cfsm)	1.74	1.40		1.64
Annual runoff (inches)	23.57	19.05		22.24
10 percent exceeds	29	25		37
50 percent exceeds	6.9	4.8		5.4
90 percent exceeds	2.7	2.5		2.7

^a See Remarks.

