



Water-Data Report 2009

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 streamgage.

REMARKS.--No estimated daily discharges. Records good. Minimum discharge for period of record and current water year affected by construction.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	4.6	2.7	9.2	3.5	4.1	327	7.9	4.8	6.5	4.1	8.0	3.1
2	3.9	2.7	4.4	3.7	13	95	9.2	53	6.0	4.7	5.8	2.8
3	3.7	3.1	4.2	3.6	18	18	9.4	10	6.0	7.5	4.2	2.9
4	3.9	4.7	3.8	52	4.8	11	5.8	22	174	3.6	3.9	3.0
5	3.8	2.9	3.2	5.7	4.4	8.5	5.4	407	411	3.5	40	3.1
6	3.6	2.8	3.3	251	4.5	7.2	6.2	104	26	3.4	38	2.6
7	3.4	2.5	3.1	69	4.2	6.5	5.3	24	10	3.0	5.1	2.6
8	73	2.7	3.0	11	4.3	6.1	4.8	9.5	7.8	2.8	4.7	2.6
9	17	2.4	3.3	6.9	4.1	5.6	5.2	7.3	6.5	177	4.2	3.0
10	5.2	2.8	49	5.9	4.1	5.2	69	6.9	6.1	12	4.4	8.6
11	4.2	2.6	186	8.1	9.6	5.0	44	26	9.5	4.9	4.6	2.8
12	3.8	2.4	83	5.2	11	4.7	6.5	6.8	40	3.6	5.6	2.4
13	3.7	3.9	7.2	5.3	4.2	9.5	8.2	5.4	9.4	4.3	4.8	2.3
14	3.5	47	7.9	5.0	6.7	34	47	5.2	8.2	3.9	5.5	2.3
15	3.5	27	11	4.9	4.4	76	7.1	27	5.7	3.8	4.2	3.1
16	3.1	3.8	5.7	4.6	20	15	5.7	9.4	5.2	4.2	429	3.2
17	28	3.1	4.7	4.6	4.8	9.2	5.9	13	78	6.2	11	4.5
18	19	3.2	4.3	5.3	45	6.5	5.8	17	18	5.3	4.9	2.5
19	3.8	2.7	4.2	4.9	8.1	15	5.1	6.9	7.5	3.1	4.2	8.6
20	3.6	2.9	11	6.8	4.7	17	66	6.6	5.8	3.3	12	61
21	3.4	2.6	31	4.8	4.2	6.0	6.9	6.2	5.2	3.3	4.5	3.7
22	3.3	2.6	5.1	4.4	4.1	5.8	5.7	6.4	5.6	140	12	3.5
23	3.0	2.7	4.1	4.2	4.0	5.5	5.2	6.3	5.4	147	5.6	4.2
24	3.0	3.2	4.1	4.1	4.1	5.5	5.2	80	4.7	55	4.7	4.6
25	11	13	5.5	3.9	3.9	9.2	4.9	345	4.6	5.1	3.4	4.4
26	3.9	3.3	3.9	4.1	4.1	14	4.7	27	4.8	4.4	3.3	32
27	3.5	2.7	4.9	4.4	11	38	4.6	12	4.8	4.5	3.2	15
28	3.0	2.6	6.6	19	125	179	4.7	43	4.4	225	3.7	3.2
29	2.8	5.1	5.6	6.9	---	27	4.5	20	4.4	167	3.1	2.7
30	2.7	126	4.0	4.5	---	8.9	4.6	7.8	4.0	22	2.9	2.7
31	2.4	---	3.8	4.3	---	7.7	---	7.0	---	20	6.2	---
Total	240.3	291.7	490.1	531.6	344.4	988.6	380.5	1,332.5	895.1	1,057.5	656.7	203.0
Mean	7.75	9.72	15.8	17.1	12.3	31.9	12.7	43.0	29.8	34.1	21.2	6.77
Max	73	126	186	251	125	327	69	407	411	225	429	61
Min	2.4	2.4	3.0	3.5	3.9	4.7	4.5	4.8	4.0	2.8	2.9	2.3
Cfsm	0.66	0.82	1.34	1.45	1.04	2.70	1.07	3.64	2.53	2.89	1.80	0.57
In.	0.76	0.92	1.55	1.68	1.09	3.12	1.20	4.20	2.82	3.33	2.07	0.64

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2009, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	14.6	14.5	14.9	19.3	19.8	23.0	19.8	16.9	20.2	23.8	22.8	19.0
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 2008		Water Year 2009		Water Years 1995 - 2009	
Annual total	7,124.5		7,412.0			
Annual mean	19.5		20.3		19.0	
Highest annual mean					37.0	2003
Lowest annual mean					10.3	2002
Highest daily mean	998	Aug 27	429	Aug 16	1,970	Jul 23, 1997
Lowest daily mean	2.1	Jun 17	2.3	Sep 13	1.0	Aug 11, 2002
Annual seven-day minimum	2.3	Jun 13	2.6	Nov 6	1.1	Aug 7, 2002
Maximum peak flow			3,950	Aug 16	5,310	Jul 23, 1997
Maximum peak stage			13.17	Aug 16	14.83	Jul 23, 1997
Instantaneous low flow			0.58	Dec 5	0.58	Dec 5, 2008
Annual runoff (cfsm)	1.65		1.72		1.61	
Annual runoff (inches)	22.46		23.37		21.92	
10 percent exceeds	37		41		37	
50 percent exceeds	4.3		5.1		5.4	
90 percent exceeds	2.7		3.0		2.7	

^a See Remarks.

