

Water-Data Report 2007

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 also occurred on August 8-14, 2002. Minimum discharge for current water year also occurred September 30.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007
DAILY MEAN VALUES

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	3.8	4.5	18	67	59	273	8.4	5.8	3.9	13	3.8	9.4
2	3.8	5.6	7.0	11	20	465	7.2	5.7	4.2	3.6	3.4	4.9
3	3.7	6.7	6.1	8.0	10	15	5.1	5.5	31	3.2	3.3	2.4
4	3.7	6.6	6.2	7.4	9.1	9.4	5.0	7.0	4.8	3.1	3.1	2.3
5	3.6	6.9	6.0	123	8.7	7.7	4.9	8.7	3.8	3.0	2.9	2.2
6	7.8	7.0	5.9	31	8.6	7.0	4.9	6.6	3.9	4.2	4.4	2.1
7	5.7	108	6.1	69	9.2	6.6	4.8	5.0	4.2	11	3.6	2.0
8	69	49	5.6	156	9.6	6.3	4.7	4.9	3.4	4.3	2.7	2.0
9	6.1	9.5	5.7	14	8.5	5.8	4.9	9.0	3.5	15	2.8	2.0
10	5.6	8.2	5.6	10	8.4	5.7	4.9	e7.2	3.1	6.5	2.9	2.0
11	4.4	76	5.9	8.9	8.3	5.6	29	4.9	8.1	15	2.7	1.9
12	7.3	107	5.5	8.2	7.7	5.6	75	8.2	32	7.6	2.4	1.9
13	3.8	8.9	5.7	7.9	129	5.5	6.8	6.2	20	3.2	2.4	2.1
14	3.7	7.5	5.5	7.7	45	5.5	23	5.1	51	3.0	2.3	112
15	3.6	32	5.6	7.7	9.4	5.5	185	4.7	e8.1	49	2.2	22
16	3.7	281	5.4	7.3	8.1	55	14	4.5	e5.1	8.1	2.3	3.1
17	241	12	5.2	6.5	7.4	7.9	7.6	4.4	3.7	6.7	2.3	2.4
18	25	8.5	5.4	16	7.0	6.0	7.0	4.4	3.4	21	2.3	2.2
19	6.4	7.4	5.3	9.3	6.7	5.6	37	4.3	3.4	3.5	2.2	2.1
20	5.1	7.0	5.2	7.5	6.8	5.6	21	4.3	3.7	3.0	2.2	2.0
21	5.2	231	5.6	58	6.8	5.4	7.4	4.3	3.0	2.8	3.2	2.1
22	5.3	549	110	36	6.7	5.5	6.5	4.2	3.0	2.6	10	2.1
23	4.2	26	14	9.4	6.3	5.4	6.1	4.0	3.1	2.5	29	2.0
24	3.9	12	7.0	8.0	6.1	5.2	5.9	4.3	62	2.6	9.9	2.0
25	3.7	9.1	160	7.5	95	5.1	6.0	4.0	136	2.6	2.6	2.0
26	3.6	7.9	15	7.0	11	5.1	6.1	4.0	17	2.6	31	1.9
27	57	7.7	8.8	6.9	6.9	6.3	30	3.9	10	142	9.9	2.1
28	52	7.2	7.8	6.8	6.1	5.7	6.6	3.8	3.9	38	3.1	1.9
29	5.8	6.9	7.0	6.5	---	9.4	5.8	3.6	3.5	40	2.6	1.9
30	5.2	10	6.9	8.3	---	5.4	5.8	3.6	20	12	9.7	1.8
31	5.0	---	20	8.3	---	5.2	---	3.7	---	5.6	11	---
Total	567.7	1,626.1	489.0	746.1	531.4	973.0	546.4	159.8	465.8	440.3	178.2	202.8
Mean	18.3	54.2	15.8	24.1	19.0	31.4	18.2	5.15	15.5	14.2	5.75	6.76
Max	241	549	160	156	129	465	185	9.0	136	142	31	112
Min	3.6	4.5	5.2	6.5	6.1	5.1	4.7	3.6	3.0	2.5	2.2	1.8
Cfsm	1.55	4.59	1.34	2.04	1.61	2.66	1.54	0.44	1.32	1.20	0.49	0.57
In.	1.79	5.13	1.54	2.35	1.68	3.07	1.72	0.50	1.47	1.39	0.56	0.64

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2007, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	15.5	15.7	14.8	20.4	20.9	22.1	20.5	15.6	19.5	23.3	20.3	19.0
Max	28.9	54.2	35.0	48.5	36.9	54.8	57.3	70.8	57.3	81.8	50.0	61.5
(WY)	(1996)	(2007)	(2003)	(1998)	(1995)	(2003)	(2003)	(2003)	(2003)	(1997)	(1995)	(2004)
Min	3.88	3.85	6.02	5.94	6.64	6.80	4.67	4.37	3.38	9.61	4.65	5.11
(WY)	(2001)	(2002)	(2001)	(2004)	(2006)	(2006)	(2002)	(1999)	(2002)	(1999)	(1997)	(2005)

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SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 1995 - 2007	
Annual total	7,628.5		6,926.6			
Annual mean	20.9		19.0		18.9	
Highest annual mean					37.0	2003
Lowest annual mean					10.3	2002
Highest daily mean	549	Nov 22	549	Nov 22	1,970	Jul 23, 1997
Lowest daily mean	2.5	Aug 4	1.8	Sep 30	1.0	Aug 11, 2002
Annual seven-day minimum	2.8	Jul 29	1.9	Sep 24	1.1	Aug 7, 2002
Maximum peak flow			2,410	Mar 2	5,310	Jul 23, 1997
Maximum peak stage			10.68	Mar 2	14.83	Jul 23, 1997
Instantaneous low flow			^a 1.7	Sep 28	^a 1.0	Aug 7, 2002
Annual runoff (cfsm)	1.77		1.61		1.61	
Annual runoff (inches)	24.05		21.84		21.81	
10 percent exceeds	44		36		36	
50 percent exceeds	5.4		6.1		5.5	
90 percent exceeds	3.4		2.6		2.8	

^a See Remarks.

