

SANTEE RIVER BASIN

02146507 LITTLE SUGAR CREEK AT ARCHDALE DRIVE AT CHARLOTTE, NC

LOCATION.--Lat 35°08'53", long 80°51'28", North American Datum of 1983, Mecklenburg County, Hydrologic Unit 03050103, on left bank at downstream side of bridge on Archdale Drive (Secondary Road 3657) in Charlotte, 0.7 mi downstream of Little Hope Creek, and 5.0 mi south of city hall, Charlotte.

DRAINAGE AREA.--42.6 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1978 to current year.

GAGE.--Water-stage recorder. Datum of gage is 563.69, North American Vertical Datum of 1988. Radio telemetry at station.

REMARKS.--No estimated daily discharges. Records fair. A daily average of 21.2 ft<sup>3</sup>/s of treated sewage effluent from Little Sugar Creek wastewater treatment plant was discharged into the stream 0.4 mi upstream from gage. Minimum discharge for period of record and current water year affected by regulation.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 22, 1975, reached a stage of about 12.7 ft, from floodmarks, discharge, 7,360 ft<sup>3</sup>/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	30	34	33	40	33	156	59	28	80	28	64
2	30	63	31	34	33	449	57	48	30	30	86	28
3	30	38	30	45	32	248	61	61	25	23	45	27
4	30	29	31	51	28	54	52	226	23	30	24	33
5	31	30	30	42	28	42	51	43	23	22	23	35
6	129	31	32	412	53	38	48	33	89	21	23	37
7	36	36	28	60	243	36	48	32	68	20	23	21
8	31	31	27	40	85	35	48	32	25	21	21	20
9	31	31	25	35	38	34	49	32	23	22	21	21
10	30	30	373	35	67	35	61	34	24	21	20	22
11	31	29	161	34	42	34	51	54	24	22	21	22
12	30	30	39	35	35	129	57	30	22	22	20	21
13	28	31	42	52	36	113	56	177	21	189	21	21
14	49	29	39	34	34	50	49	55	22	764	22	68
15	37	30	35	34	34	42	51	30	21	35	37	269
16	29	29	35	33	35	38	51	32	21	25	243	136
17	28	29	81	34	33	222	49	30	22	25	507	68
18	28	29	115	33	32	53	48	87	22	24	46	27
19	28	29	38	658	32	41	48	32	22	24	27	26
20	28	30	36	170	34	47	47	27	23	23	25	24
21	29	30	36	116	35	198	46	28	22	22	23	23
22	29	29	34	50	29	54	42	29	22	24	24	23
23	30	30	34	743	31	46	39	30	22	25	26	23
24	29	127	41	84	31	44	39	28	23	93	56	23
25	151	34	33	211	31	43	50	27	23	199	67	23
26	31	32	31	48	31	50	46	27	93	42	38	152
27	28	32	33	40	30	51	46	27	31	26	48	52
28	28	34	34	38	30	42	46	27	23	23	45	36
29	29	31	32	35	---	43	46	28	24	23	28	25
30	32	34	32	35	---	73	46	434	29	23	23	23
31	30	---	32	34	---	191	---	67	---	23	969	---
TOTAL	1170	1057	1634	3338	1242	2608	1584	1906	890	1966	2630	1393
MEAN	37.74	35.23	52.71	107.7	44.36	84.13	52.80	61.48	29.67	63.42	84.84	46.43
MAX	151	127	373	743	243	449	156	434	93	764	969	269
MIN	28	29	25	33	28	33	39	27	21	20	20	20
CFSM	0.89	0.83	1.24	2.53	1.04	1.97	1.24	1.44	0.70	1.49	1.99	1.09
IN.	1.02	0.92	1.43	2.91	1.08	2.28	1.38	1.66	0.78	1.72	2.30	1.22

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 2002, BY WATER YEAR (WY)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	69.67	69.52	67.38	109.6	110.5	117.4	83.25	68.56	69.51	70.07	73.16	64.59													
MAX	258	197	164	207	194	245	205	119	152	310	227	147													
(WY)	1991	1986	1984	1978	1979	1993	1998	1985	1992	1997	1995	1979													
MIN	25.1	22.6	32.8	31.6	44.4	40.0	30.8	33.8	20.5	27.2	29.5	21.7													
(WY)	2001	1982	1981	1981	2002	1985	1981	1986	1986	1986	1987	1986													

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1978 - 2002

ANNUAL TOTAL	21506	21418	
ANNUAL MEAN	58.92	58.68	80.99
HIGHEST ANNUAL MEAN			110
LOWEST ANNUAL MEAN			51.7
HIGHEST DAILY MEAN	1100	969	6160
LOWEST DAILY MEAN	24	20	15
ANNUAL SEVEN-DAY MINIMUM	27	21	15
MAXIMUM PEAK FLOW		3770	13600
MAXIMUM PEAK STAGE		8.98	15.06
INSTANTANEOUS LOW FLOW		2.1*	2.1*
ANNUAL RUNOFF (CFSM)	1.38	1.38	1.90
ANNUAL RUNOFF (INCHES)	18.78	18.70	25.83
10 PERCENT EXCEEDS	101	88	145
50 PERCENT EXCEEDS	34	33	37
90 PERCENT EXCEEDS	28	23	25

\* See REMARKS.

02146507 LITTLE SUGAR CREEK AT ARCHDALE DRIVE AT CHARLOTTE, NC--Continued

