

SANTEE RIVER BASIN

02146507 LITTLE SUGAR CREEK AT ARCHDALE DRIVE AT CHARLOTTE, NC

LOCATION.--Lat 35°08'52", long 80°51'29", 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 mi².

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 564.46 ft above sea level (levels by City of Charlotte). Radio telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. A daily average of 21.1 ft³/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 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	25	33	33	35	39	55	35	234	29	27	40
2	28	26	32	e32	34	38	40	35	49	40	28	26
3	27	26	32	e33	33	87	49	29	34	37	29	410
4	27	26	32	e32	33	384	40	32	39	380	28	357
5	22	31	33	e33	33	77	35	34	38	162	28	38
6	22	26	33	e32	32	47	36	33	39	34	28	31
7	45	29	32	33	32	46	37	34	32	30	28	29
8	22	27	33	92	32	41	35	35	44	37	30	27
9	21	66	32	40	31	41	34	34	35	34	28	69
10	21	67	32	35	43	40	35	34	32	31	27	35
11	22	28	33	35	32	40	34	33	31	29	39	31
12	21	27	33	92	54	67	34	32	31	28	34	29
13	21	27	33	54	46	74	112	32	327	34	120	30
14	20	99	53	36	82	41	43	31	127	31	33	30
15	20	32	38	35	36	320	41	32	35	27	28	26
16	22	31	97	35	34	63	41	32	32	24	27	24
17	29	78	178	35	401	47	37	30	32	26	33	28
18	26	31	41	44	48	43	37	32	31	26	67	25
19	25	135	42	213	41	41	36	31	31	47	53	25
20	25	55	e40	132	40	481	36	31	31	34	29	100
21	25	35	36	55	38	451	35	124	30	25	28	29
22	26	27	37	39	172	67	34	136	149	25	27	26
23	26	26	33	37	48	50	34	51	62	33	27	25
24	26	28	32	36	40	46	40	76	31	208	29	861
25	29	303	33	35	117	44	217	70	29	66	28	51
26	25	57	33	34	50	42	39	183	100	60	26	32
27	26	37	e32	35	41	41	35	33	37	29	26	33
28	26	35	35	34	41	40	34	126	102	27	26	32
29	25	34	32	35	---	1100	33	102	54	30	27	30
30	25	32	33	58	---	186	34	43	31	37	26	29
31	26	---	32	38	---	59	---	34	---	28	41	---
TOTAL	778	1506	1280	1542	1699	4183	1382	1629	1909	1688	1055	2558
MEAN	25.1	50.2	41.3	49.7	60.7	135	46.1	52.5	63.6	54.5	34.0	85.3
MAX	45	303	178	213	401	1100	217	183	327	380	120	861
MIN	20	25	32	32	31	38	33	29	29	24	26	24
CFSM	.59	1.18	.97	1.17	1.42	3.17	1.08	1.23	1.49	1.28	.80	2.00
IN.	.68	1.32	1.12	1.35	1.48	3.65	1.21	1.42	1.67	1.47	.92	2.23

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 2001, 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
MEAN	71.0	71.0	68.0	110	113	119	85.0	68.9	71.2	70.3	72.7	65.4												
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	44.8	40.0	30.8	33.8	20.5	27.2	29.5	21.7												
(WY)	2001	1982	1981	1981	1986	1985	1981	1986	1986	1986	1987	1986												

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR
ANNUAL TOTAL	26278	21209						
ANNUAL MEAN	71.8	58.1						
HIGHEST ANNUAL MEAN			110	1991				
LOWEST ANNUAL MEAN			51.7	1981				
HIGHEST DAILY MEAN	1420	Sep 23	1100	Mar 29	6160	Jul 23	1997	
LOWEST DAILY MEAN	20	Oct 14	20	Oct 14	15	Sep 20	1981	
ANNUAL SEVEN-DAY MINIMUM	21	Oct 9	21	Oct 9	15	May 28	1994	
MAXIMUM PEAK FLOW			3960	Mar 29	13600	Jul 23	1997	
MAXIMUM PEAK STAGE			9.15	Mar 29	15.06	Jul 23	1997	
INSTANTANEOUS LOW FLOW			9.6*	Jul 2	6.3*	Aug 18	2000	
ANNUAL RUNOFF (CFSM)	1.69		1.36		1.92			
ANNUAL RUNOFF (INCHES)	22.95		18.52		26.15			
10 PERCENT EXCEEDS	136		98		147			
50 PERCENT EXCEEDS	37		34		38			
90 PERCENT EXCEEDS	27		26		25			

e Estimated.
* See REMARKS.

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

