

## 02146507 LITTLE SUGAR CREEK AT ARCHDALE DRIVE AT CHARLOTTE, NC

LOCATION.--Lat 35°08'53", long 80°51'28", 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.--Records fair except those for estimated daily discharges which are poor. A daily average of 22.6 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 2002 TO SEPTEMBER 2003  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	27	28	53	44	207	53	43	92	56	50	71
2	24	26	29	37	38	223	48	59	56	575	47	43
3	24	26	29	69	36	70	45	59	303	69	215	42
4	23	26	47	35	69	59	44	54	150	50	528	74
5	23	209	636	32	36	81	73	46	70	47	519	51
6	22	298	69	32	62	1,060	59	720	81	46	89	40
7	24	37	46	31	252	103	1,400	90	2,640	45	58	39
8	24	31	39	32	45	67	240	62	e900	44	91	39
9	23	28	35	32	39	60	785	49	e300	103	92	40
10	23	28	34	31	99	55	2,430	45	e98	59	75	37
11	886	210	239	29	41	52	330	45	e70	204	51	39
12	35	669	45	29	36	51	116	43	e250	68	58	38
13	477	74	728	30	34	49	73	42	71	680	75	38
14	41	40	89	30	48	48	62	39	56	101	279	37
15	197	34	46	29	52	158	55	489	53	54	77	37
16	556	466	40	30	54	720	51	112	496	49	138	36
17	38	222	38	42	101	84	49	47	456	261	60	36
18	30	50	35	32	118	111	865	80	705	52	56	35
19	27	40	34	30	59	83	214	64	206	376	45	37
20	26	36	241	30	46	2,620	79	44	82	76	44	35
21	48	33	43	36	41	156	72	1,110	62	53	42	35
22	93	32	37	35	539	77	62	3,310	56	67	149	134
23	29	31	35	45	106	61	52	335	53	56	48	291
24	27	30	880	39	60	54	50	200	51	45	41	42
25	27	30	486	36	54	49	94	976	48	43	40	38
26	31	30	59	37	90	47	111	190	48	84	41	38
27	26	29	44	35	372	49	56	1,120	47	53	40	42
28	193	29	39	32	100	46	47	116	80	43	39	63
29	61	28	36	41	---	46	46	72	50	398	41	36
30	36	29	34	493	---	475	46	62	47	267	302	36
31	29	---	35	83	---	72	---	251	---	82	133	---
TOTAL	3,146	2,878	4,255	1,607	2,671	7,093	7,707	9,974	7,677	4,206	3,563	1,599
MEAN	101	95.9	137	51.8	95.4	229	257	322	256	136	115	53.3
MAX	886	669	880	493	539	2,620	2,430	3,310	2,640	680	528	291
MIN	22	26	28	29	34	46	44	39	47	43	39	35
CFSM	2.38	2.25	3.22	1.22	2.24	5.37	6.03	7.55	6.01	3.18	2.70	1.25
IN.	2.75	2.51	3.72	1.40	2.33	6.19	6.73	8.71	6.70	3.67	3.11	1.40

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 2003, BY WATER YEAR (WY)

	70.9	70.5	70.1	107	110	122	90.4	78.3	76.7	72.6	74.8	64.2
MEAN	70.9	70.5	70.1	107	110	122	90.4	78.3	76.7	72.6	74.8	64.2
MAX	258	197	164	207	194	245	257	322	256	310	227	147
(WY)	(1991)	(1986)	(1984)	(1978)	(1979)	(1993)	(2003)	(2003)	(2003)	(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)

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SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1978 - 2003	
ANNUAL TOTAL	27,836		56,376		83.9	
ANNUAL MEAN	76.3		154		154	
HIGHEST ANNUAL MEAN					51.7	
LOWEST ANNUAL MEAN					1981	
HIGHEST DAILY MEAN	969	Aug 31	3,310	May 22	6,160	Jul 23, 1997
LOWEST DAILY MEAN	20	Jul 7	22	Oct 6	15	Sep 20, 1981
ANNUAL SEVEN-DAY MINIMUM	21	Aug 8	23	Oct 4	15	May 28, 1994
MAXIMUM PEAK FLOW			13,400	Jun 7	13,600	Jul 23, 1997
MAXIMUM PEAK STAGE			14.79	Jun 7	15.06	Jul 23, 1997
INSTANTANEOUS LOW FLOW			9.6	Oct 1	2.1*	Aug 15, 2002
ANNUAL RUNOFF (CFSM)	1.79		3.63		1.97	
ANNUAL RUNOFF (INCHES)	24.31		49.23		26.75	
10 PERCENT EXCEEDS	182		374		151	
50 PERCENT EXCEEDS	35		50		38	
90 PERCENT EXCEEDS	23		30		25	

e Estimated.  
 \* See REMARKS.

