

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 mi².

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

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

REMARKS.--No estimated daily discharges. Records fair. A daily average of 19.5 ft³/s of treated sewage effluent from 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 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49	32	43	34	36	70	75	102	172	631	50	29
2	48	32	36	33	36	52	80	44	541	101	42	29
3	59	37	29	33	254	48	57	42	62	43	42	28
4	57	239	34	34	56	44	53	41	46	38	41	27
5	43	46	33	33	44	44	51	41	42	37	35	26
6	40	33	90	33	40	42	49	51	51	36	33	27
7	40	32	61	33	39	42	61	42	485	643	31	27
8	38	31	37	32	39	291	58	40	71	73	132	27
9	36	30	51	32	39	57	52	40	53	36	439	28
10	36	30	428	32	39	48	47	572	64	34	79	26
11	35	29	52	33	37	47	47	165	60	78	43	25
12	37	160	41	31	36	46	425	249	51	51	41	25
13	299	47	37	32	37	45	387	95	45	67	37	25
14	36	32	36	604	112	64	316	47	45	46	143	26
15	33	32	36	48	49	45	66	43	44	37	48	25
16	30	31	35	39	39	260	61	43	43	36	38	83
17	29	32	35	37	39	184	58	41	42	35	70	38
18	31	32	35	35	32	65	56	40	41	53	41	27
19	32	31	34	35	30	55	53	39	47	41	35	25
20	30	32	34	37	38	51	51	198	46	107	37	26
21	30	31	34	35	123	48	49	45	41	52	36	26
22	30	31	34	34	45	177	94	40	41	111	36	27
23	30	68	137	34	35	302	65	40	40	50	540	24
24	36	150	43	33	178	68	45	39	39	34	52	26
25	33	64	35	34	43	55	44	38	39	34	36	25
26	31	36	34	36	36	51	45	37	84	38	32	26
27	31	101	36	35	42	64	45	37	54	33	30	28
28	33	128	34	33	564	847	44	36	353	121	30	26
29	34	39	33	38	---	83	39	35	54	606	30	38
30	33	37	33	109	---	61	101	59	44	705	31	31
31	32	---	34	44	---	219	---	39	---	109	33	---
TOTAL	1,391	1,685	1,704	1,725	2,137	3,575	2,674	2,420	2,840	4,116	2,343	876
MEAN	44.9	56.2	55.0	55.6	76.3	115	89.1	78.1	94.7	133	75.6	29.2
MAX	299	239	428	604	564	847	425	572	541	705	540	83
MIN	29	29	29	31	30	42	39	35	39	33	30	24
CFSM	1.05	1.32	1.29	1.31	1.79	2.71	2.09	1.83	2.22	3.12	1.77	0.69
IN.	1.21	1.47	1.49	1.51	1.87	3.12	2.34	2.11	2.48	3.59	2.05	0.76

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 2005, BY WATER YEAR (WY)

MEAN	69.2	68.9	69.3	103	108	119	89.1	77.3	77.9	76.1	75.5	68.9
MAX	258	197	164	207	194	245	257	322	256	310	227	233
(WY)	(1991)	(1986)	(1984)	(1978)	(1979)	(1993)	(2003)	(2003)	(2003)	(1997)	(1995)	(2004)
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)

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

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1978 - 2005	
ANNUAL TOTAL	30,122		27,486		83.5	
ANNUAL MEAN	82.3		75.3		51.7	
HIGHEST ANNUAL MEAN					154	2003
LOWEST ANNUAL MEAN					51.7	1981
HIGHEST DAILY MEAN	1,710	Sep 28	847	Mar 28	6,160	Jul 23, 1997
LOWEST DAILY MEAN	27	Jul 25	24	Sep 23	15	Sep 20, 1981
ANNUAL SEVEN-DAY MINIMUM	30	Oct 16	26	Sep 19	15	May 28, 1994
MAXIMUM PEAK FLOW			5,080	Aug 23	13,600	Jul 23, 1997
MAXIMUM PEAK STAGE			10.06	Aug 23	15.06	Jul 23, 1997
INSTANTANEOUS LOW FLOW			8.7*	Sep 23	2.1*	Aug 15, 2002
ANNUAL RUNOFF (CFSM)	1.93		1.77		1.96	
ANNUAL RUNOFF (INCHES)	26.30		24.00		26.63	
10 PERCENT EXCEEDS	130		130		150	
50 PERCENT EXCEEDS	40		40		38	
90 PERCENT EXCEEDS	32		30		25	

* See REMARKS.

