

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.

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 17.6 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 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	36	39	38	40	170	160	89	36	36	73	40
2	35	36	41	38	41	112	52	245	32	37	46	36
3	34	37	39	38	162	65	46	71	32	83	e37	34
4	35	36	50	38	45	53	44	45	41	39	e35	33
5	34	36	59	79	42	42	43	40	33	64	e34	32
6	35	39	39	52	711	41	43	40	30	61	e35	44
7	36	37	37	39	125	39	43	39	31	34	e32	1,470
8	91	46	40	39	53	38	43	38	38	32	e32	1,550
9	55	36	37	47	47	37	42	37	111	32	e32	92
10	38	35	292	41	46	38	41	38	46	32	e32	54
11	211	36	68	38	44	36	42	37	33	55	e35	46
12	41	36	41	39	207	36	98	58	31	42	510	42
13	38	35	106	40	56	34	267	40	135	33	445	41
14	37	35	371	40	66	34	57	37	263	31	356	e36
15	36	36	55	40	98	43	46	38	76	30	61	e36
16	36	37	44	39	66	67	44	39	59	30	47	40
17	35	38	89	38	50	50	43	67	38	332	e41	699
18	35	39	46	61	45	49	42	45	34	868	e38	79
19	34	116	42	42	45	61	43	49	33	44	e56	47
20	35	43	39	39	45	43	42	36	31	e37	e41	43
21	35	37	39	39	44	69	41	35	262	e36	53	41
22	35	36	39	39	42	44	40	34	57	e32	42	40
23	34	36	40	39	43	42	41	33	450	e30	35	40
24	34	38	41	38	45	42	40	35	118	e28	34	37
25	34	40	39	44	41	42	43	33	441	e27	33	38
26	38	37	38	44	43	42	44	33	181	e27	33	37
27	40	37	38	50	112	42	47	33	45	627	33	418
28	101	40	38	59	197	42	40	35	39	79	32	1,710
29	145	41	38	49	161	42	39	36	36	504	115	83
30	40	38	39	44	---	59	39	32	35	51	235	54
31	37	---	38	41	---	248	---	80	---	41	269	---
TOTAL	1,539	1,205	2,001	1,351	2,762	1,802	1,695	1,547	2,827	3,434	2,932	6,992
MEAN	49.6	40.2	64.5	43.6	95.2	58.1	56.5	49.9	94.2	111	94.6	233
MAX	211	116	371	79	711	248	267	245	450	868	510	1,710
MIN	34	35	37	38	40	34	39	32	30	27	32	32
CFSM	1.17	0.94	1.52	1.02	2.24	1.36	1.33	1.17	2.21	2.60	2.22	5.47
IN.	1.34	1.05	1.75	1.18	2.41	1.57	1.48	1.35	2.47	3.00	2.56	6.11

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 2004, BY WATER YEAR (WY)

MEAN	70.1	69.4	69.9	105	109	120	89.1	77.3	77.3	74.0	75.5	70.4
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)

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SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1978 - 2004	
ANNUAL TOTAL	50,842		30,087			
ANNUAL MEAN	139		82.2		83.8	
HIGHEST ANNUAL MEAN					154	2003
LOWEST ANNUAL MEAN					51.7	1981
HIGHEST DAILY MEAN	3,310	May 22	1,710	Sep 28	6,160	Jul 23, 1997
LOWEST DAILY MEAN	29	Jan 11	27	Jul 25	15	Sep 20, 1981
ANNUAL SEVEN-DAY MINIMUM	30	Jan 10	31	Jul 20	15	May 28, 1994
MAXIMUM PEAK FLOW			6,950	Sep 8	13,600	Jul 23, 1997
MAXIMUM PEAK STAGE			11.35	Sep 8	15.06	Jul 23, 1997
INSTANTANEOUS LOW FLOW			18*	May 28	2.1*	Aug 15, 2002
ANNUAL RUNOFF (CFSM)	3.27		1.93		1.97	
ANNUAL RUNOFF (INCHES)	44.40		26.27		26.73	
10 PERCENT EXCEEDS	284		117		150	
50 PERCENT EXCEEDS	49		40		38	
90 PERCENT EXCEEDS	35		34		25	

* See REMARKS.

e Estimated.

