

02146300 IRWIN CREEK NEAR CHARLOTTE, NC

LOCATION.--Lat 35°11'52", long 80°54'16", Mecklenburg County, Hydrologic Unit 03050103, on left bank at sewage-disposal plant of city of Charlotte, 2,200 ft upstream from Southern Railway bridge, 0.7 mi upstream from Taggart Creek, and 4.2 mi southwest of city hall, Charlotte.

DRAINAGE AREA.--30.7 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1962 to current year. Prior to October 1963, published as "Sugar (Irwin) Creek at Charlotte".

REVISED RECORDS.--WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 590.87 ft above North American Vertical Datum of 1988. Radio telemetry at station.

REMARKS.--Records good, except those for estimated daily discharges which are poor. Maximum discharge for period of record from rating curve extended above 7,500 ft<sup>3</sup>/s on basis of step-backwater computation. Minimum discharge for period of record also occurred July 14, 1986.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Apr. 6, 1936, reached a stage of about 17.3 ft at site 400 ft downstream, from information by plant employee. Peak may have been affected by failure of Lakewood Dam, 5 mi upstream. Flood of Jan. 6, 1962, reached a stage of 14.32 ft, from floodmarks; discharge, 4,120 ft<sup>3</sup>/s. Flood of April 11, 1962, reached a stage of 15.18 ft, from floodmarks; discharge, 4,740 ft<sup>3</sup>/s, on basis of slope-area measurement of peak flow.

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	12	11	9.7	12	12	67	86	52	15	17	22	13
2	11	10	11	13	13	42	19	179	11	14	17	11
3	11	12	11	12	86	27	15	46	9.8	38	11	9.7
4	12	13	17	11	20	21	14	19	14	14	11	9.8
5	11	12	22	47	15	19	13	15	8.6	27	11	9.7
6	11	13	12	23	363	19	13	13	9.7	22	11	26
7	12	12	10	13	79	17	13	13	12	11	8.7	818
8	36	16	11	11	26	16	15	12	11	9.6	9.2	788
9	21	11	9.8	17	19	16	11	12	19	10	8.6	43
10	13	11	151	13	18	16	13	20	9.5	9.7	8.6	22
11	104	12	31	12	17	14	13	13	8.9	27	11	17
12	15	13	15	12	104	14	62	20	8.9	10	382	17
13	11	10	55	12	27	14	185	13	68	9.6	208	15
14	12	10	195	13	31	14	29	14	252	9.0	166	16
15	12	11	26	12	57	17	18	12	47	8.2	28	12
16	12	10	17	11	31	28	15	10	37	8.4	16	13
17	10	10	43	11	19	15	14	44	12	206	13	247
18	11	10	17	27	19	21	25	28	10	279	12	30
19	10	58	15	14	17	22	14	17	9.8	14	32	16
20	11	14	14	11	17	e13	13	12	9.8	13	13	13
21	10	11	13	11	15	22	12	10	341	10	16	9.9
22	11	10	16	12	15	13	12	13	28	11	14	10
23	10	10	13	12	15	15	12	14	201	9.9	11	12
24	11	10	13	11	e15	12	11	14	52	9.0	10	10
25	9.0	11	12	16	14	14	11	11	459	8.7	11	8.9
26	10	11	12	14	23	13	17	11	161	10	9.9	9.8
27	11	10	12	20	72	12	16	12	29	307	8.7	212
28	39	17	12	25	99	12	12	13	19	18	9.6	687
29	61	12	12	19	79	12	9.7	12	14	91	36	37
30	13	9.7	13	16	---	24	11	9.8	13	18	53	22
31	12	---	11	14	---	121	---	52	---	13	104	---
TOTAL	555.0	390.7	831.5	477	1,337	702	723.7	735.8	1,900.0	1,262.1	1,282.3	3,164.8
MEAN	17.9	13.0	26.8	15.4	46.1	22.6	24.1	23.7	63.3	40.7	41.4	105
MAX	104	58	195	47	363	121	185	179	459	307	382	818
MIN	9.0	9.7	9.7	11	12	12	9.7	9.8	8.6	8.2	8.6	8.9
CFSM	0.58	0.42	0.87	0.50	1.50	0.74	0.79	0.77	2.06	1.33	1.35	3.44
IN.	0.67	0.47	1.01	0.58	1.62	0.85	0.88	0.89	2.30	1.53	1.55	3.83

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2004, BY WATER YEAR (WY)

MEAN	37.1	35.3	40.2	56.7	62.4	69.5	44.4	41.7	38.1	35.2	34.4	34.2
MAX	157	137	107	123	124	161	139	204	134	215	118	135
(WY)	(1991)	(1986)	(1984)	(1993)	(1979)	(1993)	(2003)	(1975)	(2003)	(1997)	(1995)	(1975)
MIN	7.35	9.32	10.2	13.4	20.1	18.5	14.9	14.0	6.95	6.67	7.97	6.00
(WY)	(2001)	(1982)	(1966)	(1981)	(2002)	(1985)	(1981)	(1986)	(1986)	(1986)	(1987)	(1983)

SANTEE RIVER BASIN

02146300 IRWIN CREEK NEAR CHARLOTTE, NC—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1962 - 2004	
ANNUAL TOTAL	27,199.2		13,361.9		44.2	
ANNUAL MEAN	74.5		36.5		85.4	
HIGHEST ANNUAL MEAN					2003	
LOWEST ANNUAL MEAN					1981	
HIGHEST DAILY MEAN	2,100	May 22	818	Sep 7	5,010	Jul 23, 1997
LOWEST DAILY MEAN	9.0	Oct 25	8.2	Jul 15	3.1	Sep 25, 1983
ANNUAL SEVEN-DAY MINIMUM	10	Oct 19	9.7	Aug 4	3.5	Oct 5, 1993
MAXIMUM PEAK FLOW			3,660	Jul 18	11,600*	Jul 23, 1997
MAXIMUM PEAK STAGE			12.44	Jul 18	20.38	Jul 23, 1997
INSTANTANEOUS LOW FLOW			6.5	Jul 15	2.8*	Jul 13, 1986
ANNUAL RUNOFF (CFSM)	2.43		1.19		1.44	
ANNUAL RUNOFF (INCHES)	32.96		16.19		19.56	
10 PERCENT EXCEEDS	147		59		80	
50 PERCENT EXCEEDS	26		13		18	
90 PERCENT EXCEEDS	11		10		8.6	

\* See REMARKS.

e Estimated.

