

SANTEE RIVER BASIN

02146300 IRWIN CREEK NEAR CHARLOTTE, NC

LOCATION.--Lat 35°11'50", long 80°54'18", 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 mi².

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 591.53 ft above sea level (levels by City of Charlotte). Radio telemetry at station.

REMARKS.--No estimated daily discharges. Records good. Maximum discharge for period of record from rating curve extended above 7,500 ft³/s on basis of step-backwater computation. Minimum discharge for period of record also occurred July 14, 1986. Minimum discharge for current water year also occurred Oct. 19.

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 ft³/s. Flood of April 11, 1962, reached a stage of 15.18 ft, from floodmarks; discharge, 4,740 ft³/s, on basis of slope-area measurement of peak flow.

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	8.6	8.7	12	9.1	11	15	33	14	86	10	8.7	9.9
2	8.8	8.6	11	9.2	10	12	22	13	20	9.5	9.4	7.6
3	7.2	8.1	11	11	11	49	29	12	12	13	7.0	192
4	7.8	7.1	10	11	9.1	184	22	12	11	70	8.9	159
5	8.4	8.9	11	10	10	38	20	12	10	43	6.3	16
6	8.2	7.2	12	11	10	18	19	10	11	12	8.4	13
7	7.4	9.5	11	11	12	15	20	11	9.1	9.7	7.9	11
8	7.8	5.7	10	52	10	13	19	14	19	15	8.2	15
9	6.2	35	8.1	13	9.9	13	19	15	8.8	10	8.6	35
10	7.5	38	7.0	11	17	12	17	8.5	9.3	9.3	7.7	13
11	7.9	10	7.3	9.6	9.7	11	17	10	8.1	9.9	16	9.3
12	6.5	7.7	8.4	45	20	28	14	9.9	8.7	10	13	9.2
13	6.3	7.0	11	19	19	28	68	11	56	16	15	9.1
14	6.7	50	25	12	32	13	17	8.3	31	10	9.6	12
15	6.3	12	9.9	11	13	148	19	9.0	12	7.2	19	7.7
16	7.1	7.7	41	12	10	31	14	10	10	10	11	8.9
17	7.6	38	74	11	209	17	14	10	9.6	8.5	7.2	9.1
18	4.1	10	13	19	18	14	11	9.6	10	10	20	9.6
19	7.6	68	15	107	15	13	12	12	11	16	14	9.1
20	10	28	15	80	14	262	12	17	10	8.0	7.7	63
21	7.1	11	10	25	13	272	12	36	13	9.4	8.2	11
22	6.7	8.2	11	15	79	42	11	64	58	6.6	7.2	9.6
23	10	9.7	10	15	18	26	13	19	24	15	8.0	9.6
24	6.9	7.7	8.1	13	14	23	16	51	9.5	92	11	451
25	6.0	121	9.0	12	91	20	95	28	9.6	25	10	25
26	7.6	23	8.9	11	27	18	17	75	92	29	8.4	11
27	6.8	12	9.0	12	17	17	14	11	15	8.7	7.7	12
28	6.0	12	8.4	11	16	16	12	68	20	9.6	8.5	11
29	8.5	11	9.1	10	---	702	11	49	11	8.7	8.7	9.2
30	7.2	13	8.7	25	---	135	12	12	9.7	9.1	10	8.0
31	7.2	---	8.4	13	---	43	---	12	---	8.3	10	---
TOTAL	228.0	603.8	423.3	635.9	744.7	2248	631	653.3	624.4	528.5	311.3	1175.9
MEAN	7.35	20.1	13.7	20.5	26.6	72.5	21.0	21.1	20.8	17.0	10.0	39.2
MAX	10	121	74	107	209	702	95	75	92	92	20	451
MIN	4.1	5.7	7.0	9.1	9.1	11	11	8.3	8.1	6.6	6.3	7.6
CFSM	.24	.66	.44	.67	.87	2.36	.69	.69	.68	.56	.33	1.28
IN.	.28	.73	.51	.77	.90	2.72	.76	.79	.76	.64	.38	1.42

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2001, BY WATER YEAR (WY)

	MEAN	MAX	(WY)	MIN	(WY)
MEAN	37.5	36.1	40.2	58.8	64.1
MAX	157	137	107	123	124
(WY)	1991	1986	1984	1993	1979
MIN	7.35	9.32	10.2	13.4	20.7
(WY)	2001	1982	1966	1981	1968

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1962 - 2001	
ANNUAL TOTAL	10882.2		8808.1			
ANNUAL MEAN	29.7		24.1		43.8	
HIGHEST ANNUAL MEAN					78.6	
LOWEST ANNUAL MEAN					24.0	
HIGHEST DAILY MEAN	413	Mar 20	702	Mar 29	5010	Jul 23 1997
LOWEST DAILY MEAN	4.1	Oct 18	4.1	Oct 18	3.1	Sep 25 1983
ANNUAL SEVEN-DAY MINIMUM	6.2	Sep 10	6.4	Oct 12	3.5	Oct 5 1993
MAXIMUM PEAK FLOW			2700		11600*	
MAXIMUM PEAK STAGE			10.70		20.38	
INSTANTANEOUS LOW FLOW			3.9*		2.8*	
ANNUAL RUNOFF (CFSM)	.97		.79		1.43	
ANNUAL RUNOFF (INCHES)	13.19		10.67		19.40	
10 PERCENT EXCEEDS	55		43		78	
50 PERCENT EXCEEDS	14		11		18	
90 PERCENT EXCEEDS	7.2		7.7		8.6	

* See REMARKS.

02146300 IRWIN CREEK NEAR CHARLOTTE, NC--Continued

