

## 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. Minimum discharge for current water year also occurred Sept. 14, 15.

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 2004 TO SEPTEMBER 2005  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	11	19	13	16	48	39	52	92	36	17	6.9
2	17	11	13	13	15	27	44	18	273	17	12	8.7
3	41	14	12	13	132	23	26	16	30	13	48	6.6
4	18	131	12	13	31	21	25	17	19	11	21	7.5
5	13	23	12	13	20	20	24	15	15	11	20	7.1
6	13	12	56	13	18	18	23	20	20	12	10	7.7
7	11	12	27	13	17	19	27	16	59	81	10	6.7
8	11	11	14	12	17	176	24	15	25	17	257	8.4
9	12	11	43	12	16	31	22	15	31	11	99	7.2
10	12	9.6	341	12	18	25	20	158	47	12	24	6.9
11	11	9.9	32	12	15	22	22	59	27	43	17	5.4
12	11	78	20	14	15	21	180	47	16	21	e15	8.2
13	49	21	17	14	16	19	147	30	15	44	e12	6.7
14	13	12	14	246	52	32	185	17	14	15	e25	6.3
15	10	11	15	25	21	18	41	20	12	11	e16	6.2
16	11	11	14	19	17	136	30	15	12	9.0	e12	65
17	9.9	11	14	17	18	118	26	14	12	9.5	43	12
18	11	9.6	13	15	15	34	25	14	11	11	11	8.0
19	10	10	14	17	15	26	23	13	107	9.2	12	7.6
20	11	11	13	18	20	23	21	66	20	8.0	10	6.9
21	10	10	13	18	79	21	20	15	13	8.9	12	9.2
22	11	10	13	15	27	79	53	13	12	40	9.8	7.7
23	10	25	96	15	18	258	28	15	11	17	157	7.1
24	15	77	21	14	105	45	18	13	12	9.4	16	8.1
25	11	36	16	19	26	30	20	11	11	11	12	7.6
26	11	14	14	18	20	23	19	12	33	9.4	8.3	6.5
27	9.7	62	14	14	24	39	18	13	54	11	9.6	8.3
28	12	62	13	13	314	653	17	12	177	95	8.5	8.3
29	16	17	13	17	---	62	18	11	28	221	9.4	16
30	11	14	13	69	---	35	48	20	13	499	10	9.4
31	11	---	13	22	---	100	---	13	---	45	9.8	---
TOTAL	440.6	757.1	954	758	1,117	2,202	1,233	785	1,221	1,368.4	953.4	294.2
MEAN	14.2	25.2	30.8	24.5	39.9	71.0	41.1	25.3	40.7	44.1	30.8	9.81
MAX	49	131	341	246	314	653	185	158	273	499	257	65
MIN	9.7	9.6	12	12	15	18	17	11	11	8.0	8.3	5.4
CFSM	0.46	0.82	1.00	0.80	1.30	2.31	1.34	0.82	1.33	1.44	1.00	0.32
IN.	0.53	0.92	1.16	0.92	1.35	2.67	1.49	0.95	1.48	1.66	1.16	0.36

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2005, BY WATER YEAR (WY)

MEAN	36.6	35.0	40.0	56.0	61.9	69.6	44.3	41.3	38.1	35.4	34.3	33.7
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)

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SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1962 - 2005	
ANNUAL TOTAL	13,736.4		12,083.7		43.9	
ANNUAL MEAN	37.5		33.1		85.4	
HIGHEST ANNUAL MEAN					24.0	
LOWEST ANNUAL MEAN					1981	
HIGHEST DAILY MEAN	818	Sep 7	653	Mar 28	5,010	Jul 23, 1997
LOWEST DAILY MEAN	8.2	Jul 15	5.4	Sep 11	3.1	Sep 25, 1983
ANNUAL SEVEN-DAY MINIMUM	9.7	Aug 4	6.7	Sep 9	3.5	Oct 5, 1993
MAXIMUM PEAK FLOW			3,510	Jul 30	11,600*	Jul 23, 1997
MAXIMUM PEAK STAGE			12.18	Jul 30	20.38	Jul 23, 1997
INSTANTANEOUS LOW FLOW			4.3*	Sep 11	2.8*	Jul 13, 1986
ANNUAL RUNOFF (CFSM)	1.22		1.08		1.43	
ANNUAL RUNOFF (INCHES)	16.64		14.64		19.44	
10 PERCENT EXCEEDS	64		62		79	
50 PERCENT EXCEEDS	14		15		18	
90 PERCENT EXCEEDS	9.9		9.5		8.6	

\* See REMARKS.

e Estimated

