02146300 IRWIN CREEK NEAR CHARLOTTE, NC

LOCATION.--Lat 35°11'52", long 80°54'16", North American Datum of 1983, 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^2.

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^3/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^3/s. Flood of April 11, 1962, reached a stage of 15.18 ft, from floodmarks; discharge, 4,740 ft^3/s, on basis of slope-area measurement of peak flow.

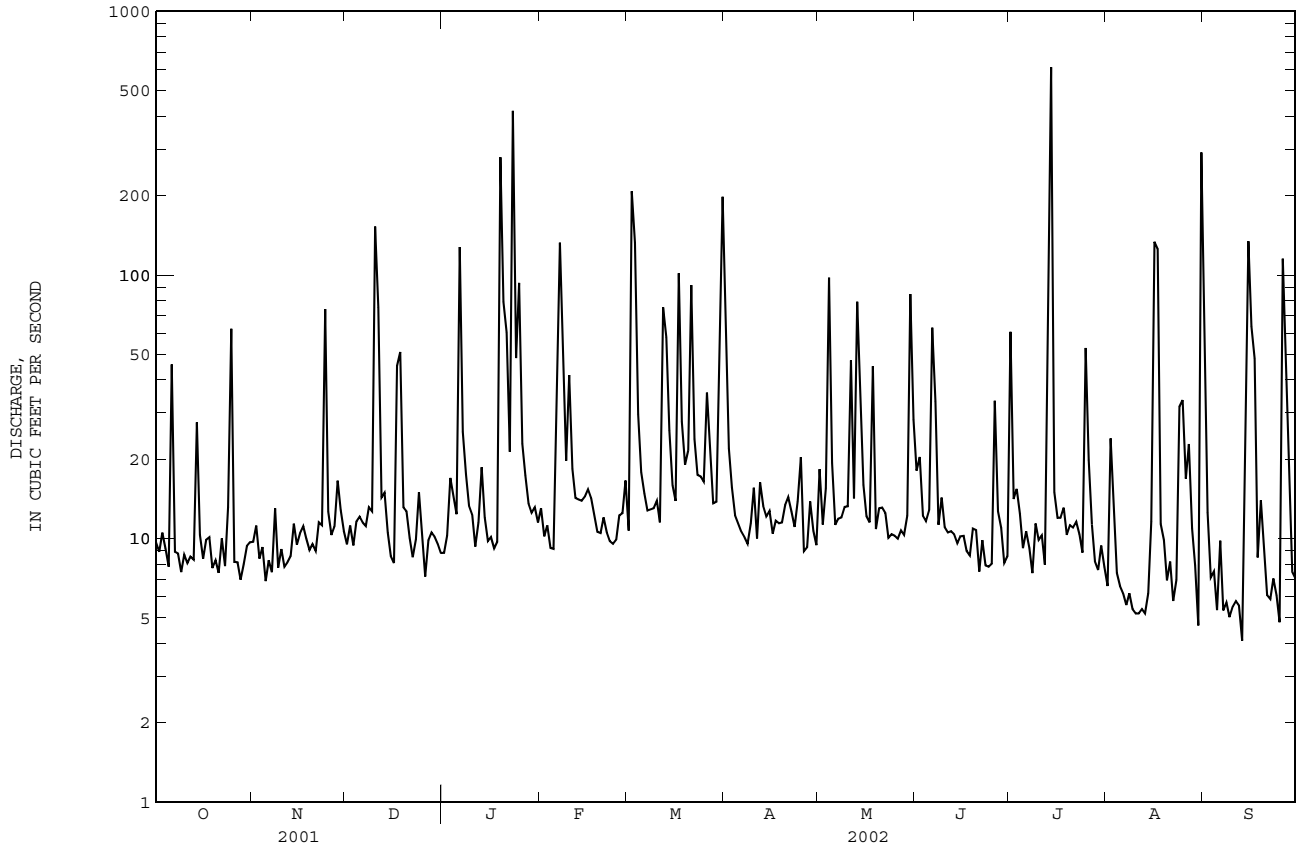
DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.7	9.7	9.5	8.8	13	11	91	18	18	61	e6.6	32
2	8.9	11	11	10	10	208	22	11	20	14	e24	13
3	11	8.4	9.4	17	11	133	16	16	12	15	e12	7.1
4	9.2	9.3	12	15	9.2	30	12	98	12	12	e7.4	7.5
5	7.8	6.9	12	12	9.1	18	11	19	13	9.2	e6.6	5.4
6	46	8.3	12	128	28	15	11	11	63	11	e6.2	9.8
7	8.9	7.5	11	25	133	13	10	12	33	9.2	e5.6	5.3
8	8.8	13	13	18	57	13	9.6	12	11	7.4	e6.2	5.7
9	7.5	7.8	13	13	20	13	11	13	14	11	e5.4	5.0
10	8.7	9.1	153	12	42	14	16	13	11	9.9	e5.2	5.5
11	8.1	7.8	76	9.3	18	12	10	47	11	10	e5.2	5.8
12	8.5	8.1	14	12	14	75	16	14	11	8.0	e5.4	5.6
13	8.3	8.6	15	19	14	58	13	79	10	121	e5.2	4.1
14	28	11	11	12	14	26	12	32	9.6	e614	e6.2	41
15	10	9.5	8.6	9.8	14	16	13	16	10	e15	12	134
16	8.4	10	8.1	10	15	14	10	12	10	e12	134	64
17	9.9	11	45	9.2	14	102	12	12	9.0	e12	126	48
18	10	10	51	9.7	12	28	11	45	8.6	13	11	8.5
19	7.7	9.0	13	280	11	19	12	11	11	10	9.9	14
20	8.3	9.5	13	79	10	22	13	13	11	11	6.9	8.9
21	7.4	9.0	10	60	12	92	14	13	7.5	11	8.2	6.1
22	10	12	8.5	21	11	24	13	13	9.9	12	5.8	5.9
23	7.9	11	9.9	420	9.8	17	11	10	7.9	10	7.0	7.1
24	13	74	15	48	9.5	17	14	10	7.8	8.8	32	6.1
25	63	13	10	93	9.9	16	20	10	8.0	53	33	4.8
26	8.2	10	7.2	23	12	36	8.9	10	33	20	17	115
27	8.1	11	9.9	17	12	23	9.3	11	13	11	23	38
28	7.0	17	11	14	17	14	14	10	11	e8.2	11	18
29	8.0	13	10	13	---	14	11	12	8.1	e7.6	7.9	7.5
30	9.4	11	9.5	13	---	36	9.4	85	8.6	e9.4	4.7	7.1
31	9.7	---	8.8	12	---	198	---	28	---	e7.8	292	---
TOTAL	385.4	366.5	620.4	1442.8	561.5	1327	456.2	716	423.0	1144.5	848.6	645.8
MEAN	12.43	12.22	20.01	46.54	20.05	42.81	15.21	23.10	14.10	36.92	27.37	21.53
MAX	63	74	153	420	133	208	91	98	63	614	292	134
MIN	7.0	6.9	7.2	8.8	9.1	11	8.9	10	7.5	7.4	4.7	4.1
CFSM	0.40	0.40	0.65	1.52	0.65	1.39	0.50	0.75	0.46	1.20	0.89	0.70
IN.	0.47	0.44	0.75	1.75	0.68	1.61	0.55	0.87	0.51	1.39	1.03	0.78

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2002, BY WATER YEAR (WY)

MEAN	36.89	35.53	39.69	58.51	63.01	68.87	42.50	39.25	35.10	34.32	32.88	32.77
MAX	157	137	107	123	124	161	93.5	204	123	215	118	135
(WY)	1991	1986	1984	1993	1979	1993	1998	1975	1982	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

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1962 - 2002	
ANNUAL TOTAL	8925.3		8937.7			
ANNUAL MEAN	24.45		24.49		43.35	
HIGHEST ANNUAL MEAN					78.6	1975
LOWEST ANNUAL MEAN					24.0	1981
HIGHEST DAILY MEAN	702	Mar 29	614	Jul 14	5010	Jul 23 1997
LOWEST DAILY MEAN	6.3	Aug 5	4.1	Sep 13	3.1	Sep 25 1983
ANNUAL SEVEN-DAY MINIMUM	7.9	Aug 3	5.3	Sep 7	3.5	Oct 5 1993
MAXIMUM PEAK FLOW			1790	Jul 13	11600*	Jul 23 1997
MAXIMUM PEAK STAGE			8.73	Jul 13	20.38	Jul 23 1997
INSTANTANEOUS LOW FLOW			3.4	Sep 11	2.8*	Jul 13 1986
ANNUAL RUNOFF (CFSM)	0.80		0.80		1.41	
ANNUAL RUNOFF (INCHES)	10.82		10.83		19.18	
10 PERCENT EXCEEDS	45		48		78	
50 PERCENT EXCEEDS	11		11		18	
90 PERCENT EXCEEDS	8.3		7.5		8.5	

e Estimated.
* See REMARKS.

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