

SANTEE RIVER BASIN

02146211 IRWIN CREEK AT STATESVILLE AVENUE AT CHARLOTTE, NC

LOCATION.--Lat 35°15'43", long 80°50'15", Mecklenburg County, Hydrologic Unit 03050103, on right bank 50 ft upstream from bridge on Statesville Avenue (U.S. Highway 21), 1,000 ft upstream from Kennedy Branch, 0.2 mi upstream from Interstate Highway 77, and 2.5 mi north of Trade and Tryon Street intersection in downtown Charlotte.

DRAINAGE AREA.--5.97 mi².

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1969-80, October 1981 to September 1994, November 1997 to current year.

REVISED RECORDS.--WDR NC-84-1: 1982.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 656.85 ft above sea level (levels by City of Charlotte). Radio telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. A 140-acre solid-waste landfill, used 1940 to 1970, is located just upstream from station. No flow for parts of Aug. 1,3,4, 1987, occurred as a result of upstream construction; minimum discharge not affected by construction: 0.12 ft³/s, Aug. 30,31, 1987. Minimum discharge for current water year also occurred Aug. 22.

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	1.0	.89	.94	1.0	1.5	1.8	6.0	1.6	6.4	.45	.37	.38
2	1.0	.86	.91	1.0	1.5	1.7	4.2	1.6	1.8	.55	.44	.28
3	.98	.88	.88	.95	1.4	6.9	4.6	1.6	1.1	.70	.49	26
4	.97	.86	.84	.97	1.4	35	3.5	1.5	.93	11	.59	27
5	.95	1.1	.90	1.0	1.5	5.9	2.9	1.5	.79	4.4	.47	2.5
6	.94	.84	.90	1.4	1.5	2.7	2.8	1.4	.73	1.1	.52	1.0
7	.92	.92	.91	3.3	1.5	1.9	2.8	1.4	.75	.67	e.40	.58
8	.86	.94	.88	7.2	1.5	1.7	2.6	1.4	2.2	1.1	e.42	.45
9	.84	5.1	.87	1.5	1.5	1.5	2.3	1.5	.84	.71	e.45	1.5
10	.89	3.4	.81	1.1	2.2	1.4	2.2	1.5	.68	.61	.38	.49
11	.92	1.2	.84	1.1	1.3	1.3	2.1	1.4	.64	.53	5.0	.38
12	.84	1.1	.85	5.7	2.7	3.0	2.0	2.0	.56	.53	.79	.34
13	.81	1.1	.97	3.0	2.6	2.3	13	1.2	19	.98	.30	.31
14	.83	7.3	2.4	2.0	3.5	1.4	3.0	1.2	4.4	.45	.29	.35
15	.81	1.7	1.0	2.1	1.8	22	2.8	1.2	1.3	.36	.25	.30
16	.80	1.3	5.6	1.8	1.8	4.8	2.2	1.2	.81	.37	.26	.35
17	.84	5.2	12	1.7	35	2.6	2.1	1.1	.62	.49	.24	.44
18	.81	1.6	1.9	3.3	3.1	1.9	2.0	1.2	.54	.77	2.3	.45
19	.84	8.9	2.5	20	2.0	1.6	1.9	1.1	.51	.61	.78	.50
20	.89	4.6	1.8	12	1.7	45	1.9	1.2	.51	.39	.24	6.1
21	.90	2.0	1.3	4.0	1.5	52	1.8	2.3	.48	.26	.18	.50
22	.87	1.4	1.3	2.1	11	6.1	1.8	5.6	6.0	.22	.20	.37
23	.83	1.3	1.1	1.7	2.8	3.6	1.9	1.8	1.8	.86	.22	.34
24	.87	1.2	1.1	1.5	2.0	2.7	2.8	6.0	.77	8.9	.50	68
25	.89	20	1.1	1.4	16	2.3	13	3.1	.97	2.3	.20	3.0
26	.90	3.4	1.0	1.4	4.6	2.0	2.4	8.2	4.5	4.4	.23	1.2
27	.89	1.6	1.1	1.4	2.6	1.9	1.9	1.6	.92	.62	.32	.79
28	.92	1.2	1.1	1.3	2.2	1.8	1.7	8.1	.81	.53	.53	.63
29	.84	1.0	1.1	1.3	---	118	1.6	5.7	.61	.49	.51	.53
30	.84	.98	1.0	2.9	---	29	1.7	1.5	.47	.43	.23	.47
31	.85	---	1.0	1.6	---	7.9	---	1.1	---	.36	.20	---
TOTAL	27.34	83.87	50.90	92.72	113.7	373.7	97.5	72.8	62.44	46.14	18.30	145.53
MEAN	.88	2.80	1.64	2.99	4.06	12.1	3.25	2.35	2.08	1.49	.59	4.85
MAX	1.0	20	12	20	35	118	13	8.2	19	11	5.0	68
MIN	.80	.84	.81	.95	1.3	1.3	1.6	1.1	.47	.22	.18	.28
IN.	.17	.52	.32	.58	.71	2.33	.61	.45	.39	.29	.11	.91

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 2001,® BY WATER YEAR (WY)

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	
MEAN	5.09	6.09	6.81	11.2	13.6	13.7	7.57	6.21	5.88	3.54	3.96	3.90										
MAX	23.8	27.9	21.3	22.9	38.8	30.6	16.0	16.5	24.9	8.15	11.3	16.2										
(WY)	1991	1986	1984	1993	1995	1993	1998	1990	1982	1984	1985	1987										
MIN	.88	1.08	1.64	2.99	4.06	2.99	2.71	1.94	.88	.93	.39	.47										
(WY)	2001	1982	2001	2001	2001	1985	1986	1986	1986	1986	1987	1983										

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1981 - 2001®

ANNUAL TOTAL	1840.19	1184.94	
ANNUAL MEAN	5.03	3.25	7.09
HIGHEST ANNUAL MEAN			10.7
LOWEST ANNUAL MEAN			3.25
HIGHEST DAILY MEAN	101	Sep 23	118
LOWEST DAILY MEAN	.44	Aug 16	.18
ANNUAL SEVEN-DAY MINIMUM	.65	Aug 11	.25
MAXIMUM PEAK FLOW			519
MAXIMUM PEAK STAGE			4.00
INSTANTANEOUS LOW FLOW			.14*
ANNUAL RUNOFF (INCHES)	11.47		7.38
10 PERCENT EXCEEDS	9.0		5.7
50 PERCENT EXCEEDS	1.7		1.2
90 PERCENT EXCEEDS	.78		.44

e Estimated.

® See PERIOD OF RECORD.

* See REMARKS.

02146211 IRWIN CREEK AT STATESVILLE AVENUE AT CHARLOTTE, NC--Continued

