

02146211 IRWIN CREEK AT STATESVILLE AVENUE AT CHARLOTTE, NC

Santee Basin
Lower Catawba Subbasin

LOCATION.--Lat 35°15'43", long 80°50'13" referenced to North American Datum of 1983, Mecklenburg County, NC, Hydrologic Unit 03050103, on left bank, at upstream side of bridge on U.S. Highway 21 (Statesville Ave) 1,000 ft upstream of Kennedy Branch, 0.2 mi upstream of Interstate Highway 77 and 2.5 mi north of Trade and Tryon Streets intersection, downtown Charlotte.

DRAINAGE AREA.--5.97 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1969-80, October 1981 to September 1994, November 1997 to September 2001, June 2004 to current water year.

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

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Datum of gage is 656.04 ft above North American Vertical Datum of 1988. Radio telemetry at station.

REMARKS.--No estimated daily discharges. Records fair. A 140-acre solid-waste landfill, used 1940 to 1970, is located just upstream from station. No flow for parts of August 1, 3, 4, 1987, occurred as a result of upstream construction; minimum discharge not affected by construction: 0.11 ft³/s, August 21, 2008.

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

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	0.57	0.41	0.38	2.2	55	1.6	3.5	1.9	0.80	0.58	1.7	1.7
2	0.27	0.37	0.38	1.5	4.8	1.5	2.3	1.8	0.74	0.56	0.61	0.84
3	0.18	0.37	0.40	1.3	2.3	1.5	8.2	1.7	0.71	0.63	0.49	0.75
4	0.21	0.38	0.41	1.2	1.8	57	20	1.7	0.71	27	0.40	0.71
5	0.30	0.37	0.41	1.1	1.7	21	30	1.6	0.69	3.3	0.36	0.65
6	0.32	0.40	0.41	1.1	1.6	3.7	7.9	1.6	0.71	0.76	0.36	0.65
7	0.32	0.67	0.41	1.1	1.5	18	4.1	1.6	0.66	0.56	0.32	0.60
8	0.29	0.42	0.46	1.1	1.4	6.3	3.6	3.2	0.62	65	0.26	0.60
9	0.34	0.42	0.47	1.1	1.3	2.9	3.2	5.0	0.57	6.7	0.25	0.62
10	0.47	0.48	0.49	1.5	1.3	2.3	2.7	6.9	0.55	11	0.23	246
11	0.49	0.60	0.46	2.0	1.2	2.1	2.4	7.0	0.52	2.1	0.23	26
12	0.35	0.40	0.49	1.2	1.3	2.0	3.3	2.4	0.48	0.91	0.33	3.3
13	0.31	0.43	0.51	1.1	3.8	1.9	2.4	2.3	0.47	0.92	0.86	1.7
14	0.37	0.43	0.50	1.1	2.1	1.8	2.2	2.4	0.42	0.69	0.33	1.3
15	0.37	0.92	11	1.1	1.4	61	2.2	4.2	0.45	0.55	0.47	1.1
16	0.33	0.36	16	1.00	1.4	13	2.0	5.2	0.44	0.50	0.58	26
17	0.22	0.32	1.1	23	1.3	4.0	2.2	1.6	0.45	0.48	0.62	5.3
18	0.30	0.35	0.83	3.7	2.0	3.1	2.0	1.9	0.43	0.48	0.26	1.8
19	2.1	0.35	0.77	5.7	1.3	19	1.9	1.6	0.40	0.47	0.34	1.3
20	0.28	0.36	0.72	2.9	1.3	8.8	1.9	1.5	0.48	0.47	0.29	1.1
21	0.26	0.37	2.9	1.6	1.8	3.6	1.8	1.6	90	0.48	0.23	0.99
22	0.25	0.83	0.96	1.7	3.4	2.9	1.8	1.4	54	6.3	0.21	0.93
23	0.28	0.45	6.6	1.6	1.6	2.5	1.8	1.3	29	13	0.25	0.91
24	5.7	0.36	1.5	1.4	1.4	2.3	1.8	1.4	1.1	0.53	0.28	0.84
25	19	0.41	1.0	1.3	1.3	2.1	1.7	1.3	0.67	0.33	0.85	0.82
26	13	0.74	15	1.2	15	2.1	6.1	1.2	3.6	0.30	194	31
27	1.5	0.56	1.9	1.2	2.9	2.1	3.2	1.2	2.3	0.36	429	19
28	0.59	0.47	13	1.2	1.9	2.1	31	16	0.74	0.38	5.4	2.1
29	0.43	0.60	9.9	1.2	1.7	2.4	4.1	2.0	0.59	0.58	4.0	1.4
30	0.38	0.47	50	1.3	---	1.9	2.1	1.1	0.63	0.49	3.2	1.1
31	0.40	---	8.7	1.1	---	4.7	---	0.90	---	33	10	---
Total	50.18	14.07	148.06	70.80	120.8	261.2	163.4	86.50	193.93	179.41	656.71	381.11
Mean	1.62	0.47	4.78	2.28	4.17	8.43	5.45	2.79	6.46	5.79	21.2	12.7
Max	19	0.92	50	23	55	61	31	16	90	65	429	246
Min	0.18	0.32	0.38	1.0	1.2	1.5	1.7	0.90	0.40	0.30	0.21	0.60
Cfsm	0.27	0.08	0.80	0.38	0.70	1.41	0.91	0.47	1.08	0.97	3.55	2.13
In.	0.31	0.09	0.92	0.44	0.75	1.63	1.02	0.54	1.21	1.12	4.09	2.37

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 2008^a, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	4.70	6.25	6.76	10.1	12.1	13.2	7.27	5.56	6.61	3.91	5.64	5.57
Max	23.8	27.8	21.3	22.9	38.8	35.0	16.0	16.5	24.9	8.16	21.2	28.0
(WY)	(1991)	(1986)	(1984)	(1993)	(1995)	(1995)	(1998)	(1990)	(1982)	(1984)	(2008)	(2004)
Min	0.88	0.47	1.64	2.28	2.42	2.58	2.47	1.62	0.89	0.93	0.39	0.47
(WY)	(2001)	(2008)	(2001)	(2008)	(2006)	(2006)	(2006)	(2007)	(1986)	(1986)	(1987)	(1983)

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

SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 1981 - 2008 ^a	
Annual total	2,056.83		2,326.17			
Annual mean	5.64		6.36		7.25	
Highest annual mean					12.7	2004
Lowest annual mean					1.19	2002
Highest daily mean	328	Mar 2	429	Aug 27	429	Aug 27, 2008
Lowest daily mean	0.18	Oct 3	0.18	Oct 3	0.00	Nov 18, 1984
Annual seven-day minimum	0.27	Sep 28	0.27	Aug 18	0.25	Aug 20, 2001
Maximum peak flow			2,370	Sep 10	2,370	Sep 10, 2008
Maximum peak stage			9.06	Sep 10	9.06	Sep 10, 2008
Instantaneous low flow			0.11	Aug 21	^b 0.00	Aug 1, 1987
Annual runoff (cfs)	0.944		1.06		1.22	
Annual runoff (inches)	12.82		14.49		16.51	
10 percent exceeds	11		9.9		13	
50 percent exceeds	1.4		1.2		2.2	
90 percent exceeds	0.35		0.36		0.67	

^aSee Period of Record.^bSee Remarks.