

Water-Data Report 2011

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 streamgage.

REMARKS.--Records poor. 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. Minimum discharge for current water year also occurred July 25, 28, 29, 30.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
DAILY MEAN VALUES
[*e*, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	1.2	0.52	26	4.4	1.2	6.8	1.8	2.1	0.98	0.70	0.98	1.2
2	0.75	0.67	1.3	4.9	19	1.9	2.2	2.0	0.94	0.61	0.62	39
3	0.84	0.74	0.88	1.4	2.0	1.5	2.2	9.0	0.90	0.56	0.49	3.2
4	0.78	5.1	0.96	1.1	32	1.4	2.3	14	0.88	2.3	0.45	0.87
5	0.57	0.93	0.88	1.0	69	1.7	12	1.6	0.93	0.91	e800	24
6	0.58	0.66	0.69	1.2	5.5	40	1.8	1.7	0.87	2.9	8.7	6.8
7	0.57	0.56	0.67	1.1	2.8	5.3	1.4	1.4	0.80	0.50	3.6	1.1
8	0.54	0.54	0.70	1.0	2.2	2.3	1.4	1.4	0.72	10	5.8	0.70
9	0.53	0.54	0.70	0.93	1.9	29	8.3	1.4	1.8	5.6	1.7	0.59
10	0.67	0.53	0.70	1.4	1.8	20	1.3	1.3	6.5	0.88	0.73	0.50
11	0.81	0.55	0.72	3.0	1.6	4.1	1.5	5.8	1.9	0.65	0.65	0.46
12	0.62	0.55	3.6	2.2	1.5	2.4	1.7	2.0	3.7	0.52	1.3	0.56
13	0.63	0.56	1.0	1.5	1.5	2.2	1.8	1.3	1.2	0.59	5.6	0.61
14	0.71	0.59	0.78	1.3	1.6	2.3	1.7	2.2	0.71	0.84	22	0.60
15	0.64	0.55	0.72	1.2	1.4	2.8	1.7	1.6	0.67	0.50	5.6	0.58
16	0.60	0.56	1.1	1.2	1.3	2.7	24	20	0.73	0.63	0.95	0.56
17	0.64	0.59	1.6	1.2	1.3	1.8	1.6	101	0.63	0.46	0.66	0.58
18	0.66	0.57	1.0	1.4	1.3	2.7	1.6	4.1	0.61	0.42	0.55	0.59
19	0.63	0.60	0.89	1.3	1.3	3.1	1.5	2.1	0.62	0.41	0.51	0.61
20	0.94	0.63	0.78	1.1	1.2	2.8	1.3	1.7	0.59	0.37	0.62	0.63
21	0.53	0.64	0.77	1.2	1.2	2.6	1.4	1.5	1.8	0.37	1.4	13
22	0.78	0.67	0.78	1.1	1.2	1.9	4.5	1.5	7.6	0.37	1.9	2.4
23	0.92	0.77	0.75	1.1	1.1	1.9	1.6	1.5	0.86	0.35	0.45	104
24	1.1	0.63	0.78	1.1	1.2	2.6	1.4	1.2	0.78	0.36	0.44	17
25	10	0.58	1.1	1.1	1.2	2.0	1.4	1.2	0.70	0.37	0.46	39
26	1.0	1.5	3.3	5.1	1.1	29	1.4	1.1	0.53	0.40	0.58	23
27	9.9	0.80	1.3	1.8	1.1	35	1.4	8.8	0.51	0.41	0.71	35
28	2.3	0.63	1.0	1.4	29	22	2.9	2.4	16	0.48	0.86	37
29	0.71	0.57	0.96	1.3	---	6.3	2.2	1.3	8.7	0.34	0.85	2.7
30	0.59	1.0	0.91	1.2	---	56	2.1	1.1	0.92	0.33	0.87	1.7
31	0.55	---	0.96	1.2	---	2.3	---	1.0	---	38	0.82	---
Total	42.29	24.33	58.28	51.43	188.5	298.4	93.4	200.3	65.08	72.13	870.85	358.54
Mean	1.36	0.81	1.88	1.66	6.73	9.63	3.11	6.46	2.17	2.33	28.1	12.0
Max	10	5.1	26	5.1	69	56	24	101	16	38	800	104
Min	0.53	0.52	0.67	0.93	1.1	1.4	1.3	1.0	0.51	0.33	0.44	0.46
Cfsm	0.23	0.14	0.31	0.28	1.13	1.61	0.52	1.08	0.36	0.39	4.71	2.00
In.	0.26	0.15	0.36	0.32	1.17	1.86	0.58	1.25	0.41	0.45	5.43	2.23

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 2011^a, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	4.33	5.98	6.83	9.94	11.7	13.0	6.86	5.82	6.79	4.17	6.79	5.57
Max	23.8	27.8	21.3	22.9	38.8	30.6	16.0	16.5	24.9	8.15	28.1	28.0
(WY)	(1991)	(1986)	(1984)	(1993)	(1995)	(1993)	(1998)	(1990)	(1982)	(1984)	(2011)	(2004)
Min	0.88	0.47	1.64	1.66	2.42	2.58	2.47	1.62	0.89	0.93	0.39	0.47
(WY)	(2001)	(2008)	(2001)	(2011)	(2006)	(2006)	(2006)	(2007)	(1986)	(1986)	(1987)	(1983)

02146211 IRWIN CREEK AT STATESVILLE AVENUE AT CHARLOTTE, NC—Continued**SUMMARY STATISTICS**

	Calendar Year 2010	Water Year 2011	Water Years 1981 - 2011^a
Annual total	2,906.52	2,323.53	
Annual mean	7.96	6.37	7.07
Highest annual mean			10.7
Lowest annual mean			3.25
Highest daily mean	279 Aug 6	800 Aug 5	800 Aug 5, 2011
Lowest daily mean	0.52 Nov 1	0.33 Jul 30	0.16 Aug 1, 1986
Annual seven-day minimum	0.55 Nov 7	0.37 Jul 20	0.25 Aug 20, 2001
Maximum peak flow		Not determined	Not determined
Maximum peak stage		13.26 Aug 5	13.26 Aug 5, 2011
Instantaneous low flow		b0.32 Jul 23	b0.00 Aug 1, 1987
Annual runoff (cfsm)	1.33	1.07	1.18
Annual runoff (inches)	18.11	14.48	16.09
10 percent exceeds	10	8.7	13
50 percent exceeds	2.0	1.2	2.1
90 percent exceeds	0.64	0.55	0.65

^a See Period of Record.

b See Remarks.

