

Water-Data Report 2008

0214627970 STEWART CREEK AT STATE STREET AT CHARLOTTE, NC

Santee Basin
Lower Catawba Subbasin

LOCATION.--Lat 35°14'25", long 80°52'06" referenced to North American Datum of 1983, Mecklenburg County, NC, Hydrologic Unit 03050103, on right upstream side of culvert at State Street, 0.7 mi northwest of U.S. Interstate 77, 1.1 mi upstream of Irwin Creek and 2.1 miles northwest of city hall, Charlotte.

DRAINAGE AREA.--9.27 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--June 2000 to current year.

GAGE.--Water-stage recorder. Datum of gage is 630.54 ft above North American Vertical Datum of 1988. Radio telemetry at station.

REMARKS.--No estimated daily discharges. Records fair except those above 1,000 ft³/s, which are poor. Maximum discharge for period of record and current water year from rating curve extended above 1,000 ft³/s on basis of culvert computation of peak flow. Minimum discharge for period of record and current water year affected by regulation of unknown origin.

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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	3.8	8.4	4.4	7.3	76	5.7	7.0	7.7	6.9	5.7	9.3	7.8
2	3.6	7.8	4.5	5.8	10	6.1	5.8	8.1	7.6	6.3	6.8	6.5
3	3.6	6.3	5.3	4.4	8.0	5.0	16	6.8	6.5	6.4	6.5	7.5
4	4.3	4.2	7.1	5.9	6.9	87	39	7.2	7.4	156	5.4	6.9
5	4.3	4.6	6.3	6.9	6.9	23	38	8.6	7.5	13	5.3	7.0
6	3.6	4.6	6.5	6.0	6.2	8.0	13	7.4	6.7	7.4	7.5	6.6
7	4.3	3.5	5.3	6.4	6.4	30	7.2	7.8	6.8	7.7	6.5	6.8
8	3.9	4.6	5.7	4.9	6.7	13	7.5	7.6	9.3	77	5.9	6.4
9	3.4	5.9	6.8	4.9	5.8	8.4	10	7.2	6.0	15	6.4	6.1
10	4.5	3.7	7.3	7.4	6.9	6.7	8.7	6.4	6.8	24	6.1	69
11	4.2	3.8	6.5	11	6.3	6.6	6.9	13	13	9.7	5.0	20
12	3.5	4.6	4.0	6.4	6.3	6.3	9.3	9.1	7.7	6.6	5.9	8.6
13	4.3	4.6	3.6	5.6	12	6.1	6.4	7.1	7.0	6.3	7.0	6.6
14	3.6	5.7	4.4	5.1	6.4	7.0	7.5	6.4	7.2	5.4	5.6	6.8
15	5.3	8.6	23	6.0	6.7	125	6.3	6.8	6.0	5.7	6.2	6.0
16	5.3	6.1	30	5.7	5.7	21	5.0	13	6.2	5.5	6.9	26
17	4.0	2.8	5.5	41	6.3	8.8	5.2	7.2	6.2	5.3	6.2	11
18	3.4	3.8	5.2	8.7	8.3	6.8	6.1	8.9	6.9	5.8	6.0	6.8
19	7.1	4.3	4.6	13	6.2	34	5.4	8.5	6.1	4.9	5.4	7.1
20	4.0	7.1	4.5	8.3	5.2	17	6.5	7.4	6.0	4.9	5.0	7.0
21	3.8	7.8	10	6.2	6.7	9.7	5.5	6.3	6.9	5.1	5.1	6.6
22	4.6	8.6	5.3	6.8	11	8.6	5.5	6.9	72	30	5.6	5.9
23	6.0	5.2	14	5.5	6.1	7.7	5.3	6.1	29	16	5.9	6.2
24	13	5.0	6.3	5.3	6.4	6.8	5.3	7.2	8.4	5.0	5.4	5.5
25	25	4.5	5.1	5.0	5.6	6.0	5.8	6.4	7.4	5.0	16	4.6
26	27	7.6	20	5.8	24	6.0	27	6.8	16	5.7	333	48
27	7.1	8.3	5.3	6.2	6.7	6.0	10	8.3	11	5.0	674	26
28	5.2	7.6	24	5.9	6.5	6.1	46	37	7.1	5.3	13	6.8
29	5.7	5.8	21	4.9	6.2	7.6	11	9.8	6.7	5.6	8.5	5.9
30	4.6	4.9	69	4.7	---	6.5	7.9	7.8	6.1	4.7	10	5.5
31	3.8	---	14	5.2	---	8.2	---	8.0	---	69	7.6	---
Total	189.8	170.3	344.5	232.2	288.4	510.7	346.1	272.8	314.4	535.0	1,209.0	357.5
Mean	6.12	5.68	11.1	7.49	9.94	16.5	11.5	8.80	10.5	17.3	39.0	11.9
Max	27	8.6	69	41	76	125	46	37	72	156	674	69
Min	3.4	2.8	3.6	4.4	5.2	5.0	5.0	6.1	6.0	4.7	5.0	4.6
Cfsm	0.66	0.61	1.20	0.81	1.07	1.78	1.24	0.95	1.13	1.86	4.21	1.29
In.	0.76	0.68	1.38	0.93	1.16	2.05	1.39	1.09	1.26	2.15	4.85	1.43

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	11.3	13.0	14.1	11.4	12.7	22.5	16.0	15.0	16.5	16.5	19.1	14.9
Max	28.0	34.4	25.6	16.8	19.3	49.7	49.0	58.9	49.8	28.9	42.3	34.2
(WY)	(2003)	(2007)	(2003)	(2002)	(2003)	(2003)	(2003)	(2003)	(2003)	(2006)	(2003)	(2004)
Min	6.12	5.68	9.46	7.24	7.74	7.77	7.07	7.00	7.75	8.41	6.37	5.10
(WY)	(2008)	(2008)	(2001)	(2004)	(2006)	(2006)	(2002)	(2007)	(2000)	(2001)	(2001)	(2007)

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SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 2000 - 2008	
Annual total	4,400.8		4,770.7			
Annual mean	12.1		13.0		15.3	
Highest annual mean					32.6	2003
Lowest annual mean					10.6	2002
Highest daily mean	558	Mar 2	674	Aug 27	923	May 22, 2003
Lowest daily mean	2.8	Nov 17	2.8	Nov 17	2.8	Nov 17, 2007
Annual seven-day minimum	3.7	Sep 26	3.9	Oct 6	3.7	Sep 26, 2007
Maximum peak flow			^a 3,090	Aug 27	^a 4,020	Jul 23, 2006
Maximum peak stage			9.10	Aug 27	11.84	Jul 23, 2006
Instantaneous low flow			^a 1.8	Nov 19	^a 1.6	Aug 6, 2002
Annual runoff (cfs)	1.30		1.41		1.65	
Annual runoff (inches)	17.66		19.14		22.48	
10 percent exceeds	18		18		22	
50 percent exceeds	7.1		6.5		7.4	
90 percent exceeds	4.3		4.6		5.1	

^aSee Remarks.