

Water-Data Report 2007

**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 mi<sup>2</sup>.

**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.--Records fair except those for estimated daily discharges and those above 500 ft<sup>3</sup>/s, which are poor. Maximum discharge for period of record and current water year from rating curve extended above 500 ft<sup>3</sup>/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.

## 0214627970 STEWART CREEK AT STATE STREET AT CHARLOTTE, NC—Continued

**DISCHARGE, CUBIC FEET PER SECOND**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**  
**DAILY MEAN VALUES**

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	6.2	4.8	10	33	27	200	9.2	7.5	6.9	7.6	4.5	14
2	6.6	5.3	11	11	13	558	8.5	6.0	5.3	6.9	5.1	7.2
3	6.1	4.4	10	9.3	9.6	19	8.1	6.1	15	6.2	5.6	4.0
4	6.3	5.2	10	8.8	8.8	13	7.2	7.1	8.4	5.8	6.2	5.6
5	4.8	4.7	7.6	38	8.5	11	7.3	8.5	5.7	5.7	5.6	6.2
6	7.7	6.0	8.4	e18	7.4	11	6.8	7.0	5.5	7.6	7.1	5.3
7	6.1	51	7.2	e62	7.5	11	7.4	6.8	6.4	6.0	7.8	4.7
8	24	31	8.3	e37	8.1	10	7.5	6.1	7.8	4.9	6.0	5.5
9	5.3	9.1	7.9	18	7.7	11	7.8	6.5	6.7	31	6.3	4.6
10	5.9	7.6	8.3	13	6.5	10	6.8	6.5	5.3	12	7.4	4.6
11	6.3	16	7.1	12	8.5	9.9	27	6.7	9.4	13	7.0	4.2
12	7.2	29	8.6	10	6.3	9.4	51	9.1	11	7.2	6.9	3.8
13	4.6	6.7	7.2	10	83	8.3	9.9	6.7	7.2	7.8	6.4	4.6
14	4.8	6.2	7.7	9.7	36	8.8	30	7.3	18	6.8	6.1	10
15	5.7	34	7.3	12	12	9.4	138	8.5	7.9	39	6.1	7.1
16	6.5	196	8.2	9.7	9.6	51	18	6.8	8.1	9.0	6.1	4.8
17	118	15	7.3	7.5	9.3	12	13	9.3	6.2	9.4	5.5	4.1
18	15	12	8.5	11	8.4	9.8	11	6.3	6.1	13	6.2	4.4
19	7.7	12	7.0	8.2	9.1	9.4	25	6.0	7.0	6.8	5.5	4.2
20	6.1	10	8.1	8.0	9.2	8.9	16	6.8	7.4	6.9	5.9	4.0
21	5.4	103	8.0	32	7.3	9.0	8.4	7.6	6.6	5.7	6.6	3.8
22	5.3	358	56	24	8.1	9.2	8.7	6.0	6.2	5.0	8.2	4.0
23	5.4	26	13	9.0	7.8	8.6	11	7.9	6.1	5.8	17	4.8
24	5.2	15	9.6	8.9	7.1	8.5	7.0	7.1	6.5	5.6	9.0	4.7
25	5.0	11	111	8.2	57	7.5	6.9	7.8	39	5.3	5.5	4.3
26	6.3	9.3	17	7.4	13	8.3	7.8	6.2	9.5	5.8	39	3.6
27	23	11	10	7.5	11	9.2	22	6.3	7.0	51	12	3.2
28	25	11	9.4	8.0	8.9	9.5	7.7	7.2	5.3	17	5.1	4.0
29	5.5	11	8.7	7.7	---	11	6.5	6.7	6.3	7.1	5.7	4.3
30	5.6	9.7	11	8.2	---	7.8	6.6	5.7	8.9	7.2	6.5	3.4
31	5.9	---	16	7.5	---	7.5	---	7.0	---	6.6	5.4	---
<b>Total</b>	358.5	1,031.0	435.4	474.6	415.7	1,087.0	508.1	217.1	262.7	334.7	243.3	153.0
<b>Mean</b>	11.6	34.4	14.0	15.3	14.8	35.1	16.9	7.00	8.76	10.8	7.85	5.10
<b>Max</b>	118	358	111	62	83	558	138	9.3	39	51	39	14
<b>Min</b>	4.6	4.4	7.0	7.4	6.3	7.5	6.5	5.7	5.3	4.9	4.5	3.2
<b>Cfsm</b>	1.25	3.71	1.52	1.65	1.60	3.78	1.83	0.76	0.94	1.16	0.85	0.55
<b>In.</b>	1.44	4.14	1.75	1.90	1.67	4.36	2.04	0.87	1.05	1.34	0.98	0.61

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2007, BY WATER YEAR (WY)**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	12.0	14.1	14.6	11.9	13.1	23.3	16.6	15.9	17.3	16.4	16.6	15.2
<b>Max</b>	28.0	34.4	25.6	16.8	19.3	49.7	49.0	58.9	49.8	28.9	42.3	34.2
<b>(WY)</b>	(2003)	(2007)	(2003)	(2002)	(2003)	(2003)	(2003)	(2003)	(2003)	(2006)	(2003)	(2004)
<b>Min</b>	6.25	6.96	9.46	7.24	7.74	7.77	7.07	7.00	7.75	8.41	6.37	5.10
<b>(WY)</b>	(2005)	(2004)	(2001)	(2004)	(2006)	(2006)	(2002)	(2007)	(2000)	(2001)	(2001)	(2007)

0214627970 STEWART CREEK AT STATE STREET AT CHARLOTTE, NC—Continued

SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 2000 - 2007	
Annual total	6,394.8		5,521.1			
Annual mean	17.5		15.1		15.8	
Highest annual mean					32.6	2003
Lowest annual mean					10.6	2002
Highest daily mean	483	Jul 23	558	Mar 2	923	May 22, 2003
Lowest daily mean	3.5	Jul 20	3.2	Sep 27	3.2	Sep 27, 2007
Annual seven-day minimum	4.5	Jul 15	3.9	Sep 24	3.8	Jul 19, 2004
Maximum peak flow			<sup>a</sup> 3,210	Mar 2	<sup>a</sup> 4,020	Jul 23, 2006
Maximum peak stage			9.75	Mar 2	11.84	Jul 23, 2006
Instantaneous low flow			<sup>a</sup> 2.0	Aug 20	<sup>a</sup> 1.6	Aug 6, 2002
Annual runoff (cfsm)	1.89		1.63		1.71	
Annual runoff (inches)	25.66		22.16		23.18	
10 percent exceeds	25		23		23	
50 percent exceeds	6.9		7.7		7.6	
90 percent exceeds	5.0		5.3		5.2	

<sup>a</sup> See Remarks.

