

Water-Data Report 2007

**02146470 LITTLE HOPE CREEK AT SENECA PLACE AT CHARLOTTE, NC**

Santee Basin  
Lower Catawba Subbasin

LOCATION.--Lat 35°09'52", long 80°51'11" referenced to North American Datum of 1983, Mecklenburg County, NC, Hydrologic Unit 03050103, on right bank at downstream side of bridge on Seneca Place, 0.8 mi upstream from mouth, and 4 mi south of city hall in Charlotte.

DRAINAGE AREA.--2.63 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--Water years 1967 to 1970 (annual maximums only), December 1982 to September 1990, October 1994 to current year.

REVISED RECORDS.--WDR NC-85-1: 1984 (P). WDR NC-88-1: Drainage area.

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Datum of gage is 597.32 ft above North American Vertical Datum of 1988, from levels. Radio telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. No flow occurred periodically in 1986, 1987, 1988, 2001, 2002, 2007. Maximum discharge for period of record from rating curve extended above 1,700 ft<sup>3</sup>/s.

## 02146470 LITTLE HOPE CREEK AT SENECA PLACE 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	0.42	0.44	1.7	10	11	52	0.90	1.0	0.35	0.81	0.47	0.15
2	0.39	0.44	0.82	1.6	2.8	76	0.91	0.80	0.39	0.44	0.30	0.10
3	0.39	0.50	0.75	1.2	1.3	2.3	0.72	0.74	5.6	0.46	0.23	0.07
4	0.40	0.50	0.74	1.1	1.2	1.6	0.72	0.73	0.70	0.42	0.24	0.05
5	0.46	0.48	0.72	19	1.3	1.3	0.66	2.0	0.53	0.32	0.20	0.08
6	0.52	0.46	0.68	3.9	1.1	1.2	0.65	0.99	0.39	0.30	0.24	0.04
7	0.55	15	0.69	9.0	1.1	1.1	0.65	0.76	0.37	3.0	0.32	0.01
8	9.5	6.1	0.65	21	1.1	1.0	0.62	0.79	0.42	0.67	0.35	0.02
9	0.73	0.78	0.61	2.2	1.0	1.0	0.65	4.3	0.40	9.4	0.30	0.16
10	0.51	0.61	0.59	1.5	0.95	0.95	0.66	1.5	0.42	1.5	0.28	0.12
11	0.51	19	0.65	1.3	0.95	0.93	3.3	0.95	4.7	0.66	0.25	0.03
12	1.4	11	0.65	1.2	0.96	0.86	5.6	1.3	1.9	0.74	0.23	0.00
13	0.56	1.0	0.66	1.1	e18	0.86	0.81	0.96	1.6	0.32	0.19	0.00
14	0.52	0.79	0.66	1.1	5.5	0.89	4.7	0.77	4.3	0.32	0.13	5.1
15	0.44	7.9	0.66	1.1	1.5	0.86	23	0.77	0.93	2.2	0.13	2.2
16	0.44	41	0.62	1.0	1.3	7.5	1.6	0.71	0.56	0.74	0.13	0.14
17	33	1.6	0.59	0.95	1.3	1.1	1.2	0.69	0.60	0.79	0.11	0.14
18	1.7	1.1	0.59	2.2	1.1	0.87	1.1	0.61	0.53	5.1	0.11	0.12
19	0.49	0.93	0.59	1.2	1.0	0.86	9.1	0.60	0.44	e0.30	0.08	0.08
20	0.46	0.81	0.60	0.95	1.1	0.83	2.9	0.58	0.61	e0.20	0.06	0.09
21	0.41	41	0.57	11	1.2	0.80	1.2	0.58	0.46	e0.15	0.40	0.08
22	0.53	95	16	5.1	0.97	0.78	1.1	0.56	0.43	e0.12	0.88	0.08
23	0.36	3.4	1.5	1.4	0.86	0.79	1.1	0.51	0.39	e0.10	0.79	0.07
24	0.42	1.8	0.98	1.3	0.86	0.80	1.1	0.44	14	e0.10	0.19	0.05
25	0.46	1.3	28	1.2	14	0.76	1.2	0.42	19	e0.10	0.16	0.01
26	0.44	1.1	2.4	1.1	1.6	0.74	1.3	0.46	1.1	0.31	0.37	0.00
27	9.4	0.98	1.4	1.0	1.2	0.72	5.3	0.43	0.70	20	0.43	0.00
28	4.7	0.95	1.2	1.1	1.1	0.69	1.0	0.40	0.59	2.3	0.08	0.00
29	0.60	0.86	1.1	0.96	---	1.5	0.87	0.44	0.52	0.77	0.49	0.00
30	0.49	1.7	0.95	0.95	---	0.83	0.85	0.39	2.5	1.3	0.38	0.00
31	0.46	---	3.3	0.95	---	0.85	---	0.36	---	0.51	4.7	---
<b>Total</b>	71.66	258.53	71.62	108.66	77.35	163.27	75.47	26.54	65.43	54.45	13.22	8.99
<b>Mean</b>	2.31	8.62	2.31	3.51	2.76	5.27	2.52	0.86	2.18	1.76	0.43	0.30
<b>Max</b>	33	95	28	21	18	76	23	4.3	19	20	4.7	5.1
<b>Min</b>	0.36	0.44	0.57	0.95	0.86	0.69	0.62	0.36	0.35	0.10	0.06	0.00
<b>Cfsm</b>	0.88	3.28	0.88	1.33	1.05	2.00	0.96	0.33	0.83	0.67	0.16	0.11
<b>In.</b>	1.01	3.66	1.01	1.54	1.09	2.31	1.07	0.38	0.93	0.77	0.19	0.13

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 2007<sup>a</sup>, BY WATER YEAR (WY)**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	2.18	2.91	2.96	3.80	4.61	4.37	3.30	2.97	2.99	2.94	3.10	2.39
<b>Max</b>	5.05	10.5	10.5	9.46	8.96	9.67	10.9	15.5	12.6	13.8	11.0	8.17
<b>(WY)</b>	(1990)	(1986)	(1984)	(1998)	(1990)	(2003)	(2003)	(2003)	(2003)	(1997)	(2006)	(1989)
<b>Min</b>	0.26	0.58	1.09	0.85	0.91	1.03	0.66	0.84	0.22	0.31	0.19	0.30
<b>(WY)</b>	(2001)	(2004)	(2001)	(2004)	(2002)	(1985)	(2002)	(2006)	(1986)	(1986)	(1987)	(2007)

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SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 1983 - 2007 <sup>a</sup>	
Annual total	1,261.10		995.19			
Annual mean	3.46		2.73		3.21	
Highest annual mean					6.32	2003
Lowest annual mean					1.66	2001
Highest daily mean	120	Aug 15	95	Nov 22	282	Jul 23, 1997
Lowest daily mean	0.10	Jul 18	0.00	Sep 12	0.00	Jul 14, 1986
Annual seven-day minimum	0.18	Jul 12	0.01	Sep 24	0.00	Jul 14, 1986
Maximum peak flow			853	Mar 2	<sup>b</sup> 2,590	Jun 7, 2003
Maximum peak stage			6.84	Mar 2	9.89	Jun 7, 2003
Instantaneous low flow			<sup>b</sup> 0.00	Sep 7	<sup>b</sup> 0.00	Jul 14, 1986
Annual runoff (cfsm)	1.31		1.04		1.22	
Annual runoff (inches)	17.84		14.08		16.56	
10 percent exceeds	5.4		5.1		5.9	
50 percent exceeds	0.79		0.78		0.86	
90 percent exceeds	0.35		0.14		0.24	

<sup>a</sup> See Period of Record.

<sup>b</sup> See Remarks.

