

Water-Data Report 2007

**0214291555 LONG CREEK NEAR RHYNE, NC**

Santee Basin  
Upper Catawba Subbasin

LOCATION.--Lat 35°18'02", long 80°58'22" referenced to North American Datum of 1983, Mecklenburg County, NC, Hydrologic Unit 03050101, on right bank 1.6 mi downstream of Gum Branch, 0.6 mi upstream from bridge on North Carolina Highway 27 and 0.55 mi northwest of Rhyne.

DRAINAGE AREA.--31.5 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--October 1998 to current year.

REVISED RECORDS.--WDR NC-04-1: 2001(M).

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage 612.45 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. Frequent diversions during summer months for irrigation by upstream golf course. Minimum discharge for current water year and period of record affected by regulation. No flow also occurred on September 23, 25, 26, 27, 30, October 2, 4, 5, 2005. Minimum discharge for current water year also occurred September 30.

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**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	5.2	6.4	14	77	40	346	12	11	3.9	21	5.9	4.6
2	4.5	6.2	12	33	46	1,690	23	11	3.6	5.1	4.2	6.2
3	4.6	6.0	11	18	22	79	11	11	16	4.2	3.3	2.3
4	3.8	6.2	11	15	16	39	9.9	13	8.4	3.4	3.5	1.7
5	4.1	6.4	11	56	15	28	9.8	15	4.4	3.4	2.1	0.89
6	4.2	6.8	10	77	14	22	8.8	13	4.5	2.3	1.7	1.0
7	5.8	63	10	272	14	20	9.0	11	3.2	2.7	2.3	0.98
8	22	139	9.9	555	14	19	8.9	11	4.2	2.6	1.7	1.3
9	10	20	9.7	65	13	17	8.7	10	6.2	52	0.91	e0.46
10	6.2	12	9.8	34	13	16	8.2	10	3.3	369	1.2	e0.70
11	5.5	10	10	24	12	15	14	9.1	4.5	17	1.0	e0.58
12	26	83	9.5	20	12	14	149	15	6.4	13	0.94	0.79
13	6.9	17	11	18	78	14	24	12	8.0	7.6	1.1	e0.60
14	5.3	13	10	17	286	14	23	8.5	40	5.3	0.74	6.0
15	4.6	13	10	16	38	14	704	8.2	20	13	0.72	13
16	4.4	572	10	15	24	185	146	7.2	7.0	22	1.5	2.7
17	221	52	9.8	13	19	52	39	7.5	4.8	7.0	2.1	1.8
18	118	22	9.8	16	17	22	26	6.2	3.7	13	0.81	1.6
19	15	15	10	19	15	17	26	6.3	3.1	6.8	1.5	0.98
20	10	13	10	14	15	16	53	6.4	4.0	4.4	1.1	1.4
21	7.8	97	9.2	27	15	14	22	5.8	2.5	3.9	1.9	0.71
22	6.8	1,190	93	126	14	14	18	5.4	2.4	3.5	0.55	1.7
23	6.8	111	42	30	13	13	16	5.7	1.3	2.2	1.8	0.55
24	5.8	39	16	21	13	13	15	5.8	1.9	3.0	6.7	1.4
25	5.8	24	357	18	237	11	14	6.1	270	2.8	2.6	0.35
26	5.7	18	78	16	74	11	13	5.2	17	3.1	70	0.56
27	16	16	28	15	31	11	53	5.7	8.1	2.0	59	0.92
28	57	14	18	14	22	10	19	4.3	8.1	158	5.4	0.40
29	11	13	15	13	---	10	14	4.5	4.9	10	3.2	0.66
30	7.4	12	14	13	---	10	13	4.0	4.9	9.5	4.5	0.29
31	6.7	---	19	13	---	9.4	---	3.8	---	9.0	2.6	---
<b>Total</b>	623.9	2,616.0	897.7	1,680	1,142	2,765.4	1,510.3	258.7	480.3	781.8	196.57	57.12
<b>Mean</b>	20.1	87.2	29.0	54.2	40.8	89.2	50.3	8.35	16.0	25.2	6.34	1.90
<b>Max</b>	221	1,190	357	555	286	1,690	704	15	270	369	70	13
<b>Min</b>	3.8	6.0	9.2	13	12	9.4	8.2	3.8	1.3	2.0	0.55	0.29
<b>Cfsm</b>	0.64	2.77	0.92	1.72	1.29	2.83	1.60	0.26	0.51	0.80	0.20	0.06
<b>In.</b>	0.74	3.09	1.06	1.98	1.35	3.27	1.78	0.31	0.57	0.92	0.23	0.07

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2007, BY WATER YEAR (WY)**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	16.5	24.1	30.3	30.2	35.2	56.8	40.5	24.7	31.9	20.4	19.7	26.4
<b>Max</b>	37.5	87.2	87.5	54.2	68.8	146	163	146	96.6	56.5	66.5	86.3
<b>(WY)</b>	(2006)	(2007)	(2003)	(2007)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2006)	(2006)
<b>Min</b>	1.60	3.29	6.29	9.69	13.9	13.0	9.02	7.61	5.00	4.66	1.43	1.60
<b>(WY)</b>	(2002)	(2002)	(2002)	(2001)	(2002)	(1999)	(2002)	(2001)	(2002)	(2001)	(2001)	(2005)

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SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 1999 - 2007	
<b>Annual total</b>	13,517.2		13,009.79			
<b>Annual mean</b>	37.0		35.6		29.7	
<b>Highest annual mean</b>					78.4	2003
<b>Lowest annual mean</b>					10.7	2002
<b>Highest daily mean</b>	1,190	Nov 22	1,690	Mar 2	2,390	May 22, 2003
<b>Lowest daily mean</b>	1.8	Aug 4	0.29	Sep 30	0.12	Sep 13, 2002
<b>Annual seven-day minimum</b>	3.0	Jul 29	0.65	Sep 24	0.23	Aug 8, 2002
<b>Maximum peak flow</b>			3,080	Mar 2	3,570	May 22, 2003
<b>Maximum peak stage</b>			11.44	Mar 2	12.04	May 22, 2003
<b>Instantaneous low flow</b>			<sup>a</sup> 0.03	Jun 24	<sup>a</sup> 0.00	Sep 22, 2005
<b>Annual runoff (cfsm)</b>	1.18		1.13		0.942	
<b>Annual runoff (inches)</b>	15.96		15.36		12.79	
<b>10 percent exceeds</b>	72		54		50	
<b>50 percent exceeds</b>	11		11		9.7	
<b>90 percent exceeds</b>	4.6		1.7		2.4	

<sup>a</sup> See Remarks.

