

Water-Data Report 2008

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 mi².

SURFACE-WATER RECORDS

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

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

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage 612.45 ft above North American Vertical Datum of 1988, from levels. Radio telemetry at station.

REMARKS.--No estimated daily discharges. Records fair. 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, October 4, 7, 10, 2007 August 22-24, 2008.

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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	0.01	2.7	3.3	15	234	11	20	12	5.9	2.0	34	12
2	0.58	2.8	2.9	8.6	44	9.7	14	10	5.3	1.8	6.5	9.0
3	0.23	2.2	2.9	6.6	18	9.0	16	8.4	6.1	1.6	3.4	8.1
4	0.02	2.8	3.0	5.7	13	134	52	8.4	4.3	115	1.7	7.1
5	0.73	3.0	3.3	5.5	11	226	209	7.8	4.1	92	1.5	6.9
6	0.25	3.0	3.7	5.2	9.6	35	71	7.0	2.4	63	2.0	6.2
7	0.42	2.8	3.0	4.8	8.8	112	34	6.7	2.9	13	1.8	5.3
8	0.72	2.6	2.7	4.4	7.8	61	23	6.1	3.1	78	0.87	3.6
9	0.31	1.9	2.9	4.2	7.5	28	18	25	3.9	74	0.68	12
10	0.02	2.9	2.8	10	7.0	20	16	9.6	2.7	45	0.65	113
11	0.61	2.7	3.6	18	7.7	18	14	15	1.2	32	0.65	166
12	0.65	2.6	2.6	8.6	8.3	15	29	22	4.4	9.7	0.82	21
13	1.1	2.5	2.6	5.5	15	12	19	7.4	1.7	6.5	1.7	12
14	0.68	2.7	2.8	5.0	27	12	14	3.3	3.1	5.5	3.2	8.3
15	0.09	3.7	6.7	4.6	11	312	13	3.4	3.6	3.5	2.0	6.7
16	0.86	6.3	67	4.2	9.0	209	12	14	2.8	3.8	1.4	179
17	0.93	3.9	9.2	91	8.5	42	10	5.4	4.2	2.7	0.87	57
18	0.87	3.0	5.7	35	16	26	9.9	3.9	1.5	2.3	1.6	17
19	1.4	2.8	4.7	23	9.9	60	9.5	11	1.4	2.7	0.80	11
20	5.3	2.8	4.5	28	8.4	94	10	64	1.6	1.2	0.82	7.5
21	3.3	3.6	10	11	8.5	30	9.6	60	4.2	2.3	0.64	6.6
22	2.4	24	8.2	8.9	17	22	9.3	13	22	21	0.36	5.9
23	2.7	7.5	18	9.3	13	18	8.3	8.5	195	33	0.00	5.1
24	5.1	3.5	15	7.8	9.8	16	8.3	5.7	14	4.7	0.00	3.6
25	47	2.8	6.6	6.8	9.0	14	8.4	5.5	6.4	2.9	0.42	4.2
26	47	3.2	45	6.6	53	14	11	4.4	4.4	1.9	547	102
27	17	4.7	16	6.3	26	13	19	3.6	6.8	3.0	2,920	164
28	5.3	3.4	25	6.4	14	13	113	113	27	4.4	92	25
29	3.8	2.8	70	6.1	12	12	44	48	9.0	19	30	14
30	3.3	3.1	151	6.4	---	13	16	15	4.2	4.5	18	9.4
31	2.8	---	79	6.0	---	17	---	9.0	---	160	14	---
Total	155.48	118.3	583.7	374.5	643.8	1,627.7	860.3	536.1	359.2	812.0	3,689.38	1,008.5
Mean	5.02	3.94	18.8	12.1	22.2	52.5	28.7	17.3	12.0	26.2	119	33.6
Max	47	24	151	91	234	312	209	113	195	160	2,920	179
Min	0.01	1.9	2.6	4.2	7.0	9.0	8.3	3.3	1.2	1.2	0.00	3.6
Cfsm	0.16	0.13	0.60	0.38	0.70	1.67	0.91	0.55	0.38	0.83	3.78	1.07
In.	0.18	0.14	0.69	0.44	0.76	1.92	1.02	0.63	0.42	0.96	4.36	1.19

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	15.3	22.1	29.2	28.3	33.9	56.3	39.3	23.9	29.9	20.9	29.6	27.1
Max	37.5	87.2	87.5	54.2	68.8	146	163	146	96.6	56.5	119	86.3
(WY)	(2006)	(2007)	(2003)	(2007)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2008)	(2006)
Min	1.60	3.29	6.29	9.69	13.9	13.0	9.02	7.61	5.00	4.66	1.43	1.60
(WY)	(2002)	(2002)	(2002)	(2001)	(2002)	(1999)	(2002)	(2001)	(2002)	(2001)	(2001)	(2005)

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SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 1999 - 2008	
Annual total	9,729.67		10,768.96			
Annual mean	26.7		29.4		29.6	
Highest annual mean					78.4	2003
Lowest annual mean					10.7	2002
Highest daily mean	1,690	Mar 2	2,920	Aug 27	2,920	Aug 27, 2008
Lowest daily mean	0.01	Oct 1	0.00	Aug 23	0.00	Aug 23, 2008
Annual seven-day minimum	0.30	Sep 30	0.32	Oct 1	0.23	Aug 8, 2002
Maximum peak flow			4,670	Aug 27	4,670	Aug 27, 2008
Maximum peak stage			12.27	Aug 27	12.27	Aug 27, 2008
Instantaneous low flow			^a 0.00	Oct 4	^a 0.00	Sep 22, 2005
Annual runoff (cfs)	0.846		0.934		0.941	
Annual runoff (inches)	11.49		12.72		12.78	
10 percent exceeds	40		54		50	
50 percent exceeds	6.7		7.2		9.4	
90 percent exceeds	0.94		1.5		2.3	

^aSee Remarks.