



Water-Data Report 2010

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 (annual maximum discharge).

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

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 all years affected by regulation. No flow occurs several days most years.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010
DAILY MEAN VALUES

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	2.1	250	14	23	45	16	28	10	270	26	3.7	4.4
2	2.0	25	462	19	211	21	24	9.8	126	9.1	3.7	4.1
3	2.2	13	291	16	162	42	21	13	53	6.3	3.4	1.8
4	2.1	9.3	42	15	63	23	20	14	18	4.2	4.4	2.5
5	11	8.3	27	15	1,270	19	18	10	13	4.7	12	3.3
6	6.2	7.6	21	14	439	17	17	9.2	10	2.8	105	3.1
7	3.0	7.4	18	13	67	16	16	7.4	42	3.2	152	1.2
8	2.6	7.1	35	14	41	16	20	8.1	11	2.7	11	2.8
9	2.0	7.1	721	12	47	15	26	7.3	8.1	3.3	7.1	3.1
10	2.2	146	76	12	37	15	16	5.4	7.5	4.2	5.4	1.4
11	2.6	1,190	32	12	26	19	14	8.0	7.7	3.5	4.5	2.8
12	3.5	342	23	11	23	71	14	11	6.8	257	2.6	3.0
13	9.7	66	41	11	32	380	13	8.5	23	54	2.4	1.9
14	7.8	29	29	11	29	94	13	8.1	34	32	3.9	1.5
15	14	20	21	10	39	36	13	7.0	8.8	11	63	3.2
16	8.4	16	18	11	29	24	13	97	5.5	29	21	1.7
17	4.7	13	16	703	21	20	12	177	5.2	42	6.8	2.4
18	4.4	14	81	72	19	18	12	43	4.9	36	3.9	1.2
19	3.1	17	269	33	18	16	10	65	4.4	11	1,290	3.5
20	3.1	12	60	25	17	15	13	17	5.2	6.5	130	1.6
21	3.1	11	30	80	16	21	17	14	4.3	7.9	23	2.2
22	2.8	13	22	77	86	63	12	16	3.0	4.3	15	3.5
23	2.8	131	18	29	34	21	11	10	3.5	4.8	11	3.2
24	34	29	16	211	31	16	10	12	3.9	3.0	8.9	3.1
25	9.0	18	1,240	1,350	33	15	48	17	5.6	4.3	8.2	1.5
26	3.6	16	221	80	21	15	15	9.5	5.1	6.2	10	5.1
27	46	41	51	39	19	13	13	8.2	3.0	4.7	9.2	107
28	195	15	34	31	17	111	35	18	4.4	25	6.2	107
29	15	13	25	26	---	994	13	91	3.0	9.2	5.3	40
30	8.4	12	21	37	---	78	9.7	15	110	3.3	5.4	59
31	11	---	34	e42	---	38	---	68	---	2.8	5.7	---
Total	427.4	2,498.8	4,009	3,054	2,892	2,278	516.7	814.5	809.9	624.0	1,943.7	382.1
Mean	13.8	83.3	129	98.5	103	73.5	17.2	26.3	27.0	20.1	62.7	12.7
Max	195	1,190	1,240	1,350	1,270	994	48	177	270	257	1,290	107
Min	2.0	7.1	14	10	16	13	9.7	5.4	3.0	2.7	2.4	1.2
Cfsm	0.44	2.64	4.11	3.13	3.28	2.33	0.55	0.83	0.86	0.64	1.99	0.40
In.	0.50	2.95	4.73	3.61	3.42	2.69	0.61	0.96	0.96	0.74	2.30	0.45

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2010, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	14.6	26.9	39.3	35.4	38.5	61.5	38.1	24.8	32.1	20.9	31.2	24.5
Max	37.5	87.2	129	98.5	103	146	163	146	96.6	56.5	119	86.3
(WY)	(2006)	(2007)	(2010)	(2010)	(2010)	(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 2009		Water Year 2010		Water Years 1999 - 2010	
Annual total	17,599.95		20,250.1			
Annual mean	48.2		55.5		32.3	
Highest annual mean					78.4	2003
Lowest annual mean					10.7	2002
Highest daily mean	1,240	Dec 25	1,350	Jan 25	2,920	Aug 27, 2008
Lowest daily mean	0.95	Sep 9	1.2	Sep 7	^a 0.00	Aug 23, 2008
Annual seven-day minimum	2.3	Sep 3	2.1	Sep 12	0.23	Aug 8, 2002
Maximum peak flow			2,820	Dec 25	4,670	Aug 27, 2008
Maximum peak stage			10.40	Dec 25	12.27	Aug 27, 2008
Instantaneous low flow			^a 0.00	Sep 7	^a 0.00	Sep 22, 2005
Annual runoff (cfsm)	1.53		1.76		1.03	
Annual runoff (inches)	20.78		23.91		13.93	
10 percent exceeds	77		88		52	
50 percent exceeds	13		14		9.9	
90 percent exceeds	3.7		3.1		2.5	

^a See Remarks.

