

Water-Data Report 2008

02138500 LINVILLE RIVER NEAR NEBO, NC

Santee Basin
Upper Catawba Subbasin

LOCATION.--Lat 35°47'41", long 81°53'24" referenced to North American Datum of 1983, Burke County, NC, Hydrologic Unit 03050101, in Pisgah National Forest on right bank 370 ft upstream from bridge on North Carolina Highway 126, 0.2 mi downstream of Shooks Creek, 0.5 mi upstream from Lake James, 2.0 mi northeast of Longtown, and 6.0 mi northeast of Nebo.

DRAINAGE AREA.--66.7 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--June 1922 to current year. May 1907 to August 1908 (fragmentary). Prior to 1908 published as "Linville River at Fonta Flora" and as "Linville River at Branch" 1923-70. Records for October to December 1908 "Linville River at Fonta Flora" published in WSP 242 have been found to be unreliable and should not be used.

REVISED RECORDS.--WSP 892: 1929, 1935, 1937. WSP 1503: 1923(M), 1924-28, 1930, 1932-33(M), 1938(M), 1939(P). WDR NC-80-1: Drainage area. See also PERIOD OF RECORD.

GAGE.--Water-stage recorder. Datum of gage is 1,203.87 ft above NGVD of 1929. May 1907 to August 1908, nonrecording gage about 1.2 mi downstream at different datum. June 1922 to August 27, 1937, nonrecording gage and Aug. 28, 1937, to Sept. 30, 1970, water-stage recorder at site on right bank 20 ft downstream of bridge on North Carolina Highway 126 at 1,204.87 ft. October 1, 1970, to September 30, 1973, at present site at 1,204.87 ft. October 1, 1973, to August 25, 1981, at present site at 1,204.87 ft. Satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Maximum discharge for period of record, from rating curve extended above 12,000 ft³/s on basis of slope area measurement. Maximum gage-height for period of record from high-water mark at gage. Minimum discharge for period of record, result of freezeup. Minimum discharge for current water year also occurred August 13.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 1916 reached a stage of about 11 ft at former site and datum; discharge, 34,600 ft³/s.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	19	69	35	166	118	108	97	85	53	41	25	258
2	19	65	36	125	211	121	107	88	43	32	35	189
3	19	61	39	95	144	117	81	85	36	28	24	113
4	21	58	37	89	161	1,120	116	73	48	27	22	144
5	132	55	40	93	360	1,590	134	81	39	28	21	90
6	164	50	45	96	248	465	284	69	34	26	19	80
7	61	52	32	e89	243	405	207	70	32	35	20	69
8	45	49	34	82	188	481	175	70	97	32	18	55
9	35	43	39	73	155	347	150	75	88	44	17	96
10	37	46	39	74	132	264	123	76	52	91	18	110
11	27	44	37	107	124	238	129	66	124	127	18	82
12	27	43	35	133	101	196	114	74	81	78	14	72
13	30	42	35	102	104	168	115	69	45	52	27	72
14	25	43	37	92	107	147	107	66	47	51	19	62
15	24	50	38	85	87	148	100	67	64	60	18	58
16	27	56	60	e79	92	219	94	85	64	39	18	59
17	28	48	75	e87	82	152	91	85	42	36	18	67
18	25	37	54	94	288	162	86	66	50	41	18	56
19	30	42	43	88	202	200	86	77	30	29	17	52
20	40	42	39	e84	148	334	119	67	30	26	16	47
21	45	41	52	e79	137	214	99	74	40	25	16	46
22	38	38	57	e74	121	176	86	51	31	27	15	43
23	34	45	144	69	117	156	80	56	67	26	15	34
24	130	39	266	e68	101	143	77	55	49	26	15	40
25	619	34	131	e66	97	129	77	49	40	23	15	34
26	426	48	103	61	111	117	75	49	33	22	239	40
27	222	51	100	58	122	116	71	51	42	32	3,030	454
28	130	44	95	e58	103	120	124	49	39	32	762	253
29	111	46	180	55	89	128	144	64	45	30	389	147
30	86	48	165	58	---	104	94	70	37	37	202	110
31	80	---	205	61	---	98	---	40	---	31	149	---
Total	2,756	1,429	2,327	2,640	4,293	8,483	3,442	2,102	1,522	1,234	5,249	3,032
Mean	88.9	47.6	75.1	85.2	148	274	115	67.8	50.7	39.8	169	101
Max	619	69	266	166	360	1,590	284	88	124	127	3,030	454
Min	19	34	32	55	82	98	71	40	30	22	14	34
Cfsm	1.33	0.71	1.13	1.28	2.22	4.10	1.72	1.02	0.76	0.60	2.54	1.52
In.	1.54	0.80	1.30	1.47	2.39	4.73	1.92	1.17	0.85	0.69	2.93	1.69

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	122	139	139	175	188	228	199	145	127	98.7	118	127
Max	433	678	349	664	569	632	479	369	598	449	1,084	1,570
(WY)	(1937)	(1978)	(1984)	(1995)	(1998)	(1979)	(1983)	(1976)	(1972)	(1989)	(1940)	(2004)
Min	18.9	27.8	30.9	31.8	60.8	74.3	62.0	48.9	33.7	23.0	15.5	13.8
(WY)	(1955)	(1932)	(1940)	(1940)	(1941)	(1988)	(1986)	(1941)	(1941)	(1930)	(1925)	(1925)

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SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 1922 - 2008	
Annual total	32,166		38,509			
Annual mean	88.1		105		150	
Highest annual mean					259	2004
Lowest annual mean					77.6	1988
Highest daily mean	1,080	Jan 1	3,030	Aug 27	16,600	Sep 8, 2004
Lowest daily mean	15	Aug 23	14	Aug 12	8.0	Sep 7, 1925
Annual seven-day minimum	20	Aug 17	16	Aug 19	10	Aug 22, 1925
Maximum peak flow			5,220	Aug 27	^a 42,400	Sep 8, 2004
Maximum peak stage			6.15	Aug 27	^a 13.68	Sep 8, 2004
Instantaneous low flow			^a 13	Aug 12	^a 2.0	Jan 9, 1956
Annual runoff (cfs)	1.32		1.58		2.25	
Annual runoff (inches)	17.94		21.48		30.62	
10 percent exceeds	161		182		266	
50 percent exceeds	56		67		99	
90 percent exceeds	26		26		38	

^aSee Remarks.