

Water-Data Report 2010

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: 1928-29, 1935, 1937, maximum discharge; 1928-29, 1935, 1937, daily discharge. WSP 1503: 1923-26, 1930, 1932-33, 1938-39, maximum discharge; 1924-28, 1930, daily discharge; 1939, peak discharge. WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,203.87 ft above National Geodetic Vertical Datum 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 streamgage.

REMARKS.--Records good except those for estimated daily discharges, which are fair. 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 September 24, 26.

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 2009 TO SEPTEMBER 2010
DAILY MEAN VALUES

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	118	277	111	200	209	143	210	94	83	49	38	50
2	105	250	203	182	242	141	186	93	103	45	37	46
3	97	203	512	e170	298	140	169	138	146	42	37	43
4	86	175	272	e160	243	130	168	174	120	41	36	41
5	89	156	221	e150	297	122	160	123	212	39	65	38
6	91	141	191	e140	365	118	151	110	118	36	122	37
7	81	129	168	e132	282	116	153	102	98	34	73	36
8	75	120	161	e125	246	119	147	96	79	36	50	36
9	71	111	760	e119	e225	140	236	89	68	43	44	e38
10	69	124	478	e115	e204	169	167	84	64	42	40	e36
11	68	897	307	e111	e189	206	149	85	59	41	69	e35
12	66	610	244	e109	e177	312	141	87	55	40	77	e38
13	70	363	278	e107	e168	861	136	82	53	46	59	e36
14	92	272	310	e105	e160	457	133	84	54	42	130	e35
15	164	222	250	105	e154	335	128	113	62	38	281	e34
16	118	191	217	104	e149	283	124	127	83	39	251	e33
17	102	170	193	689	e145	251	115	127	70	37	124	e32
18	91	160	193	527	e141	221	104	130	59	39	226	32
19	85	226	205	401	e138	186	100	105	55	41	150	30
20	81	205	179	338	e136	169	98	91	53	50	130	29
21	76	172	158	350	e134	175	104	88	50	41	105	28
22	75	160	152	368	161	2,120	100	97	56	36	157	27
23	74	170	153	363	220	645	93	91	47	33	116	26
24	508	160	157	659	222	412	94	81	45	30	90	27
25	293	147	982	2,720	196	329	144	112	46	29	80	26
26	189	138	949	772	173	284	134	109	55	28	73	32
27	172	131	432	472	162	246	111	87	51	126	66	56
28	351	121	326	357	156	251	114	78	129	88	74	71
29	255	113	264	296	---	304	105	79	74	56	71	55
30	202	111	226	282	---	251	97	78	54	45	59	80
31	185	---	209	236	---	228	---	83	---	40	53	---
Total	4,199	6,425	9,461	10,964	5,592	9,864	4,071	3,117	2,301	1,372	2,983	1,163
Mean	135	214	305	354	200	318	136	101	76.7	44.3	96.2	38.8
Max	508	897	982	2,720	365	2,120	236	174	212	126	281	80
Min	66	111	111	104	134	116	93	78	45	28	36	26
Cfsm	2.03	3.21	4.58	5.30	2.99	4.77	2.03	1.51	1.15	0.66	1.44	0.58
In.	2.34	3.58	5.28	6.11	3.12	5.50	2.27	1.74	1.28	0.77	1.66	0.65

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 2010, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	122	139	142	177	187	229	198	146	127	97.6	117	126
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 2009		Water Year 2010		Water Years 1922 - 2010	
Annual total	60,474		61,512			
Annual mean	166		169		150	
Highest annual mean					259	2004
Lowest annual mean					77.6	1988
Highest daily mean	1,110	Jan 7	2,720	Jan 25	16,600	Sep 8, 2004
Lowest daily mean	35	Sep 15	26	Sep 23	8.0	Sep 7, 1925
Annual seven-day minimum	40	Aug 8	28	Sep 19	10	Aug 22, 1925
Maximum peak flow			4,560	Jan 25	^a 42,400	Sep 8, 2004
Maximum peak stage			5.91	Jan 25	^a 13.68	Sep 8, 2004
Instantaneous low flow			^a 25	Sep 23	^a 2.0	Jan 9, 1956
Annual runoff (cfsm)	2.48		2.53		2.25	
Annual runoff (inches)	33.73		34.31		30.63	
10 percent exceeds	302		300		266	
50 percent exceeds	125		120		99	
90 percent exceeds	51		39		38	

^a See Remarks.

