

02138500 LINVILLE RIVER NEAR NEBO, NC

LOCATION.--Lat 35°47'41", long 81°53'24", Burke County, Hydrologic Unit 03050101, in Pisgah National Forest on right bank 370 ft upstream from bridge on State 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 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1907 to August 1908 (fragmentary). June 1922 to current year. 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 Aug. 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 State Highway 126 at 1,204.87 ft. Oct. 1, 1970, to Sept. 30, 1973, at present site at 1,204.87 ft. Oct. 1, 1973, to Aug. 25, 1981, at present site at 1,204.87 ft. Satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Maximum discharge for current water year and period of record, from rating curve extended above 12,000 ft<sup>3</sup>/s on basis of slope area measurement. Maximum gage-height for current water year and 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 Aug. 22.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 1916 reached a stage of about 11 ft at former site and datum; discharge, 34,600 ft<sup>3</sup>/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges associated with the remnants of Hurricanes Frances and Ivan:

| Date  | Time    | Discharge (ft <sup>3</sup> /s) | Gage height (ft) | Date   | Time | Discharge (ft <sup>3</sup> /s) | Gage height (ft) |
|-------|---------|--------------------------------|------------------|--------|------|--------------------------------|------------------|
| Sep 8 | unknown | 42,400                         | 13.68            | Sep 17 | 0945 | 23,500                         | 11.26            |

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY   | OCT   | NOV    | DEC   | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL   | AUG   | SEP     |
|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------|
| 1     | 82    | 75     | 133   | e122  | e83   | 139   | 147   | 100   | 145   | 103   | 77    | 75      |
| 2     | 76    | 73     | 124   | e120  | e80   | 151   | 136   | 101   | 110   | 104   | 87    | 3,160   |
| 3     | 70    | 70     | 116   | e118  | e108  | 201   | 124   | 98    | 96    | 109   | 103   | 812     |
| 4     | 67    | 69     | 119   | e117  | e140  | 202   | 116   | 91    | 195   | 109   | 84    | 326     |
| 5     | 66    | 79     | 134   | e125  | e110  | 187   | 100   | 86    | 226   | 119   | 66    | 214     |
| 6     | 64    | 118    | 140   | e119  | e270  | 187   | 95    | 82    | 147   | 106   | 56    | 171     |
| 7     | 62    | 140    | 124   | e108  | 589   | 215   | 91    | 78    | 123   | 91    | 52    | 3,350   |
| 8     | 63    | 117    | 113   | e104  | 285   | 177   | 89    | 74    | 122   | 80    | 47    | e16,600 |
| 9     | 103   | 104    | 109   | e107  | 213   | 162   | 86    | 110   | 126   | 73    | 45    | e1,810  |
| 10    | 208   | 92     | 185   | e106  | 185   | 154   | 83    | 112   | 134   | 68    | 43    | e832    |
| 11    | 185   | 85     | 531   | e93   | 168   | 145   | 81    | 98    | 122   | 76    | 43    | e567    |
| 12    | 144   | 83     | 271   | e90   | 162   | 136   | 116   | 94    | 105   | 92    | 66    | 416     |
| 13    | 120   | 82     | 213   | 91    | 154   | 128   | 508   | 157   | 288   | 80    | 84    | 322     |
| 14    | 110   | 76     | 203   | 88    | 148   | 123   | 519   | 156   | 212   | 70    | 67    | 272     |
| 15    | 111   | 71     | 187   | 87    | 146   | 123   | 283   | 127   | 174   | 61    | 55    | 222     |
| 16    | 98    | 68     | 167   | 85    | 142   | 136   | 229   | 112   | 197   | 55    | 47    | 275     |
| 17    | 92    | 69     | 205   | 82    | 131   | 141   | 184   | 113   | 207   | 54    | 46    | 9,750   |
| 18    | 86    | 70     | 206   | 96    | 124   | 142   | 151   | 112   | 158   | 157   | 44    | 2,380   |
| 19    | 82    | 5,420  | 180   | 101   | 122   | 158   | 141   | 290   | 138   | 88    | 42    | 812     |
| 20    | 78    | 1,010  | 165   | e91   | 124   | 144   | 134   | 144   | 124   | 72    | 39    | 497     |
| 21    | 75    | 475    | e152  | e88   | 142   | 137   | 130   | 117   | 123   | 61    | 34    | 359     |
| 22    | 75    | 314    | e145  | e86   | 162   | 131   | 115   | 230   | 156   | 56    | 35    | 253     |
| 23    | 72    | 240    | 137   | e86   | 154   | 124   | 107   | 150   | 133   | 53    | 38    | 228     |
| 24    | 69    | 208    | 179   | e83   | 152   | 120   | 103   | 239   | 114   | 51    | 46    | 182     |
| 25    | 67    | 187    | 184   | e88   | 152   | 116   | 100   | 150   | 117   | 66    | 45    | 154     |
| 26    | 70    | 159    | 155   | e91   | 149   | 112   | 122   | 128   | 199   | 65    | 43    | 179     |
| 27    | 120   | 146    | 144   | e93   | 150   | 109   | 162   | 133   | 158   | 90    | 39    | 199     |
| 28    | 115   | 157    | 137   | e85   | 140   | 107   | 124   | 122   | 133   | 107   | 46    | 1,620   |
| 29    | 101   | 165    | 131   | e80   | 137   | 104   | 110   | 109   | 119   | 84    | 47    | 671     |
| 30    | 89    | 145    | 135   | e87   | ---   | 105   | 102   | 109   | 109   | 69    | 46    | 398     |
| 31    | 82    | ---    | e135  | e85   | ---   | 130   | ---   | 127   | ---   | 79    | 46    | ---     |
| TOTAL | 2,902 | 10,167 | 5,259 | 3,002 | 4,822 | 4,446 | 4,588 | 3,949 | 4,510 | 2,548 | 1,658 | 47,106  |
| MEAN  | 93.6  | 339    | 170   | 96.8  | 166   | 143   | 153   | 127   | 150   | 82.2  | 53.5  | 1,570   |
| MAX   | 208   | 5,420  | 531   | 125   | 589   | 215   | 519   | 290   | 288   | 157   | 103   | 16,600  |
| MIN   | 62    | 68     | 109   | 80    | 80    | 104   | 81    | 74    | 96    | 51    | 34    | 75      |
| CFSM  | 1.40  | 5.08   | 2.54  | 1.45  | 2.49  | 2.15  | 2.29  | 1.91  | 2.25  | 1.23  | 0.80  | 23.5    |
| IN.   | 1.62  | 5.67   | 2.93  | 1.67  | 2.69  | 2.48  | 2.56  | 2.20  | 2.52  | 1.42  | 0.92  | 26.27   |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 2004, BY WATER YEAR (WY)

|      |        |        |        |        |        |        |        |        |        |        |        |        |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 122    | 138    | 138    | 174    | 191    | 230    | 201    | 148    | 129    | 98.4   | 118    | 128    |
| 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) |

02138500 LINVILLE RIVER NEAR NEBO, NC—Continued

| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |        | WATER YEARS 1922 - 2004 |              |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL             | 75,341                 |        | 94,957              |        | 151                     |              |
| ANNUAL MEAN              | 206                    |        | 259                 |        | 77.6                    |              |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 259                     | 2004         |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 77.6                    | 1988         |
| HIGHEST DAILY MEAN       | 5,420                  | Nov 19 | 16,600              | Sep 8  | 16,600                  | Sep 8, 2004  |
| LOWEST DAILY MEAN        | 51                     | Sep 21 | 34                  | Aug 21 | 8.0                     | Sep 7, 1925  |
| ANNUAL SEVEN-DAY MINIMUM | 59                     | Sep 15 | 40                  | Aug 17 | 10                      | Aug 22, 1925 |
| MAXIMUM PEAK FLOW        |                        |        | 42,400*             | Sep 8  | 42,400*                 | Sep 8, 2004  |
| MAXIMUM PEAK STAGE       |                        |        | 13.68*              | Sep 8  | 13.68*                  | Sep 8, 2004  |
| INSTANTANEOUS LOW FLOW   |                        |        | 34*                 | Aug 21 | 2.0*                    | Jan 9, 1956  |
| ANNUAL RUNOFF (CFSM)     | 3.09                   |        | 3.89                |        | 2.26                    |              |
| ANNUAL RUNOFF (INCHES)   | 42.02                  |        | 52.96               |        | 30.76                   |              |
| 10 PERCENT EXCEEDS       | 319                    |        | 239                 |        | 267                     |              |
| 50 PERCENT EXCEEDS       | 138                    |        | 118                 |        | 99                      |              |
| 90 PERCENT EXCEEDS       | 74                     |        | 66                  |        | 38                      |              |

\* See REMARKS.  
e Estimated.

