

## 02112120 ROARING RIVER NEAR ROARING RIVER, NC

LOCATION.--Lat 36°15'01", long 81°02'40", Wilkes County, Hydrologic Unit 03040101, on left bank at downstream end of old bridge pier, 800 ft upstream from bridge on Secondary Road 1990, 3.8 mi northwest of Roaring River, and 4.1 mi upstream from mouth.

DRAINAGE AREA.--128 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Occasional low-flow measurements water years 1925, 1947, 1949-56, 1963. April 1964 to current year.

REVISED RECORDS.--WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 964.85 ft above NGVD of 1929. Prior to May 1, 1964, nonrecording gage on downstream side of bridge at same site and datum. Satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Maximum discharge for period of record, from rating curve extended above 2,400 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow at gage heights 22.54, 14.40, and 10.83 ft. Minimum discharge for period of record also occurred Aug. 15, 24, 25, Sept. 11, 12, 13, 14, 2002.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of 1916 reached a stage of about 28 ft; estimated discharge, 45,000 ft<sup>3</sup>/s. The flood of August 1940 reached a stage of about 24 ft; estimated discharge, 31,000 ft<sup>3</sup>/s, from information by local residents and rating curve extended as explained above. A discharge of 24 ft<sup>3</sup>/s was measured Sept. 18, 1956.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL   | AUG   | SEP   |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1     | 298   | 165   | 248   | 200   | 176   | 259   | 274   | 184   | 131   | 160   | 175   | 92    |
| 2     | 268   | 161   | 210   | 193   | 168   | 195   | 443   | 173   | 271   | 142   | 136   | 86    |
| 3     | 260   | 160   | 199   | 189   | 215   | 179   | 352   | 168   | 201   | 135   | 127   | 83    |
| 4     | 238   | 224   | 189   | 187   | 208   | 172   | 301   | 163   | 172   | 135   | 125   | 79    |
| 5     | 212   | 199   | 181   | 185   | 190   | 178   | 273   | 162   | 159   | 137   | 113   | 78    |
| 6     | 200   | 176   | 181   | 183   | 182   | 178   | 252   | 162   | 159   | 165   | 113   | 76    |
| 7     | 191   | 168   | 189   | 179   | 177   | 171   | 248   | 157   | 161   | 380   | 140   | 76    |
| 8     | 184   | 162   | 178   | 181   | 176   | 187   | 288   | 153   | 151   | 391   | 166   | 74    |
| 9     | 180   | 153   | 276   | 174   | 173   | 168   | 253   | 149   | 201   | 189   | 147   | 73    |
| 10    | 176   | 150   | 400   | 170   | 172   | 162   | 233   | 153   | 168   | 156   | 171   | 72    |
| 11    | 169   | 150   | 314   | 168   | 161   | 160   | 223   | 169   | 153   | 148   | 133   | 71    |
| 12    | 167   | 265   | 258   | 167   | 158   | 156   | 217   | 157   | 144   | 211   | 118   | 69    |
| 13    | 260   | 243   | 229   | 191   | 159   | 151   | 270   | 165   | 171   | 197   | 110   | 68    |
| 14    | 259   | 191   | 206   | 1,270 | 174   | 164   | 385   | 167   | 172   | 277   | 124   | 67    |
| 15    | 188   | 178   | 193   | 382   | 163   | 149   | 270   | 221   | 146   | 214   | 179   | 69    |
| 16    | 172   | 171   | 187   | 287   | 160   | 158   | 240   | 181   | 134   | 239   | 149   | 67    |
| 17    | 163   | 165   | 183   | 242   | 153   | 186   | 226   | 159   | 126   | 265   | 154   | 70    |
| 18    | 157   | 162   | 179   | 213   | 147   | 169   | 216   | 153   | 123   | 198   | 172   | 68    |
| 19    | 166   | 157   | 175   | 213   | 144   | 164   | 208   | 175   | 127   | 175   | 162   | 65    |
| 20    | 164   | 153   | e173  | 199   | 146   | 159   | 200   | 231   | 136   | 201   | 133   | 64    |
| 21    | 160   | 148   | e170  | 195   | 156   | 154   | 193   | 198   | 138   | 211   | 120   | 64    |
| 22    | 161   | 146   | e167  | 188   | 148   | 152   | 214   | 164   | 133   | 181   | 107   | 63    |
| 23    | 169   | 162   | 959   | 180   | 143   | 375   | 241   | 156   | 120   | 151   | 104   | 64    |
| 24    | 187   | 472   | 546   | e176  | 171   | 271   | 196   | 148   | 116   | 134   | 105   | 62    |
| 25    | 172   | 462   | 360   | 173   | 156   | 209   | 188   | 142   | 115   | 129   | 101   | 62    |
| 26    | 162   | 274   | 296   | 173   | 146   | 191   | 184   | 139   | 115   | 122   | 98    | 71    |
| 27    | 168   | 230   | 259   | 165   | 142   | 196   | 189   | 135   | 118   | 116   | 97    | 77    |
| 28    | 185   | 227   | 236   | 155   | 298   | 1,210 | 176   | 134   | 120   | 117   | 95    | 66    |
| 29    | 194   | 197   | 227   | 163   | ---   | 557   | 215   | 132   | 135   | 133   | 92    | 67    |
| 30    | 185   | 189   | 217   | 195   | ---   | 374   | 195   | 131   | 160   | 141   | 103   | 64    |
| 31    | 173   | ---   | 207   | 192   | ---   | 306   | ---   | 128   | ---   | 306   | 124   | ---   |
| TOTAL | 5,988 | 6,060 | 7,992 | 7,128 | 4,762 | 7,460 | 7,363 | 5,009 | 4,476 | 5,856 | 3,993 | 2,127 |
| MEAN  | 193   | 202   | 258   | 230   | 170   | 241   | 245   | 162   | 149   | 189   | 129   | 70.9  |
| MAX   | 298   | 472   | 959   | 1,270 | 298   | 1,210 | 443   | 231   | 271   | 391   | 179   | 92    |
| MIN   | 157   | 146   | 167   | 155   | 142   | 149   | 176   | 128   | 115   | 116   | 92    | 62    |
| CFSM  | 1.51  | 1.58  | 2.01  | 1.80  | 1.33  | 1.88  | 1.92  | 1.26  | 1.17  | 1.48  | 1.01  | 0.55  |
| IN.   | 1.74  | 1.76  | 2.32  | 2.07  | 1.38  | 2.17  | 2.14  | 1.46  | 1.30  | 1.70  | 1.16  | 0.62  |

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2005, BY WATER YEAR (WY)

|      |        |        |        |        |        |        |        |        |        |        |        |        |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 147    | 159    | 173    | 197    | 216    | 255    | 250    | 204    | 189    | 154    | 146    | 143    |
| MAX  | 422    | 426    | 389    | 406    | 413    | 610    | 637    | 430    | 453    | 349    | 461    | 449    |
| (WY) | (1977) | (1978) | (1997) | (1996) | (1990) | (1993) | (1980) | (1991) | (2003) | (1989) | (1994) | (2004) |
| MIN  | 42.0   | 46.9   | 59.2   | 70.2   | 67.4   | 97.4   | 100    | 66.2   | 39.5   | 48.3   | 23.6   | 48.2   |
| (WY) | (2001) | (2002) | (2001) | (2001) | (2001) | (1988) | (1986) | (2002) | (2002) | (2002) | (2002) | (2001) |

02112120 ROARING RIVER NEAR ROARING RIVER, NC—Continued

| SUMMARY STATISTICS       | FOR 2004 CALENDAR YEAR |        | FOR 2005 WATER YEAR |        | WATER YEARS 1964 - 2005 |              |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL             | 73,418                 |        | 68,214              |        | 186                     |              |
| ANNUAL MEAN              | 201                    |        | 187                 |        | 269                     |              |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 69.8                    | 1993         |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 202                     | 2002         |
| HIGHEST DAILY MEAN       | 3,050                  | Sep 8  | 1,270               | Jan 14 | 7,460                   | Aug 17, 1994 |
| LOWEST DAILY MEAN        | 83                     | Sep 6  | 62                  | Sep 24 | 14                      | Aug 15, 2002 |
| ANNUAL SEVEN-DAY MINIMUM | 94                     | Aug 31 | 63                  | Sep 19 | 16                      | Aug 9, 2002  |
| MAXIMUM PEAK FLOW        |                        |        | 3,610               | Jan 14 | 26,600*                 | Oct 17, 1975 |
| MAXIMUM PEAK STAGE       |                        |        | 7.21                | Jan 14 | 22.54*                  | Oct 17, 1975 |
| INSTANTANEOUS LOW FLOW   |                        |        | 60                  | Sep 25 | 14*                     | Aug 14, 2002 |
| ANNUAL RUNOFF (CFSM)     | 1.57                   |        | 1.46                |        | 1.46                    |              |
| ANNUAL RUNOFF (INCHES)   | 21.34                  |        | 19.82               |        | 19.78                   |              |
| 10 PERCENT EXCEEDS       | 266                    |        | 266                 |        | 305                     |              |
| 50 PERCENT EXCEEDS       | 164                    |        | 170                 |        | 142                     |              |
| 90 PERCENT EXCEEDS       | 105                    |        | 104                 |        | 74                      |              |

\* See REMARKS.

e Estimated.

