

02103000 LITTLE RIVER AT MANCHESTER, NC

LOCATION.--Lat 35°11'36", long 78°59'08", Cumberland County, Hydrologic Unit 03030004, on left bank 5 ft downstream from bridge on Secondary Road 1451 (East Manchester Road), 0.3 mi above Tank Creek and 0.2 mi downstream from bridge on Highway 87/24 North of Manchester.

DRAINAGE AREA.--348 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1938 to September 1950, July 2002 to current year. Occasional discharge measurements September 1968 to June 2002.

GAGE.--Water-stage recorder. Elevation of gage is 122.16 ft above NGVD of 1929. Satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor.

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     | 377    | 609    | 285    | 272    | 315    | 1,610  | 303   | 178   | 106   | 125   | 165    | e1,010 |
| 2     | 348    | 481    | 274    | 267    | 294    | 1,370  | 318   | 341   | 95    | 137   | 163    | e980   |
| 3     | 314    | 388    | 268    | 266    | 371    | 847    | 308   | 829   | 91    | 121   | 173    | 550    |
| 4     | 293    | 348    | 275    | 274    | 414    | 820    | 289   | 1,190 | 138   | e110  | e166   | 400    |
| 5     | 285    | 353    | 349    | 433    | 399    | 735    | 268   | 1,560 | 252   | e92   | 126    | 295    |
| 6     | 277    | 347    | 368    | 594    | 410    | 945    | 248   | 738   | 178   | e78   | 139    | 235    |
| 7     | 274    | 352    | 361    | 455    | 581    | 738    | 239   | 479   | 160   | e68   | 116    | 233    |
| 8     | 298    | 350    | 328    | 401    | 547    | 517    | 233   | 370   | 147   | 84    | 91     | 1,320  |
| 9     | 380    | 339    | 304    | 351    | 526    | 456    | 225   | 298   | 132   | e150  | 78     | 2,030  |
| 10    | 426    | 332    | 376    | 333    | 489    | 434    | 299   | 251   | 130   | 131   | 67     | 2,630  |
| 11    | 437    | e328   | 670    | e310   | 430    | 415    | 477   | 224   | 122   | 90    | 65     | 1,740  |
| 12    | 418    | e324   | 751    | 304    | 415    | 406    | 481   | 206   | 120   | 105   | 65     | 895    |
| 13    | 400    | 320    | 1,150  | 358    | 520    | 393    | 553   | 199   | 112   | e96   | 197    | 658    |
| 14    | 405    | 296    | 1,080  | 387    | 563    | 381    | 595   | 179   | 106   | e94   | 283    | 718    |
| 15    | 446    | 283    | 917    | e360   | 635    | 385    | 681   | 165   | 108   | 82    | 452    | 514    |
| 16    | 434    | 271    | 700    | e340   | 623    | 414    | 544   | 158   | 117   | 63    | 531    | 498    |
| 17    | 422    | 269    | 648    | e320   | 574    | 511    | 339   | 151   | 115   | 55    | 350    | 809    |
| 18    | 362    | 269    | 602    | e340   | 564    | 699    | 293   | 145   | 121   | 60    | 260    | 1,020  |
| 19    | 327    | 357    | 553    | e420   | 508    | 482    | 265   | 138   | 108   | 72    | 519    | 712    |
| 20    | 311    | 471    | 509    | e350   | 454    | 417    | 246   | 142   | 93    | 78    | 415    | 609    |
| 21    | 297    | 474    | 458    | e300   | 414    | 397    | 227   | 137   | 86    | 74    | 292    | 630    |
| 22    | 285    | 448    | 429    | e280   | 380    | 369    | 216   | 129   | 84    | 61    | 544    | 406    |
| 23    | 268    | 394    | 410    | 270    | e360   | 340    | 204   | 154   | 81    | 68    | 264    | 344    |
| 24    | 255    | 349    | 338    | 268    | e340   | 349    | 192   | 263   | 92    | 69    | 182    | 400    |
| 25    | 257    | 326    | 325    | 350    | 331    | 458    | 183   | 238   | 102   | 60    | 149    | 385    |
| 26    | 250    | 309    | 316    | 359    | 336    | 422    | 180   | 171   | 446   | 59    | 133    | 277    |
| 27    | 260    | 298    | 301    | 369    | e700   | 296    | 213   | 134   | e260  | 53    | 124    | 291    |
| 28    | 319    | 301    | 290    | 377    | 845    | 277    | 208   | 111   | e190  | 149   | e112   | 568    |
| 29    | 769    | 301    | 283    | 387    | 1,350  | 269    | 195   | 98    | 140   | 130   | 124    | 386    |
| 30    | 750    | 292    | 283    | 396    | ---    | 266    | 182   | 145   | 121   | 122   | 963    | 409    |
| 31    | 723    | ---    | 279    | 330    | ---    | 281    | ---   | 123   | ---   | 148   | e1,020 | ---    |
| TOTAL | 11,667 | 10,579 | 14,480 | 10,821 | 14,688 | 16,699 | 9,204 | 9,644 | 4,153 | 2,884 | 8,328  | 21,952 |
| MEAN  | 376    | 353    | 467    | 349    | 506    | 539    | 307   | 311   | 138   | 93.0  | 269    | 732    |
| MAX   | 769    | 609    | 1,150  | 594    | 1,350  | 1,610  | 681   | 1,560 | 446   | 150   | 1,020  | 2,630  |
| MIN   | 250    | 269    | 268    | 266    | 294    | 266    | 180   | 98    | 81    | 53    | 65     | 233    |
| CFSM  | 1.08   | 1.01   | 1.34   | 1.00   | 1.46   | 1.55   | 0.88  | 0.89  | 0.40  | 0.27  | 0.77   | 2.10   |
| IN.   | 1.25   | 1.13   | 1.55   | 1.16   | 1.57   | 1.79   | 0.98  | 1.03  | 0.44  | 0.31  | 0.89   | 2.35   |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2004, @ BY WATER YEAR (WY)

|      |        |        |        |        |        |        |        |        |        |        |        |        |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 275    | 355    | 463    | 524    | 657    | 727    | 567    | 353    | 215    | 397    | 436    | 386    |
| MAX  | 547    | 946    | 942    | 949    | 1,340  | 1,420  | 1,135  | 693    | 784    | 845    | 1,556  | 1,532  |
| (WY) | (1946) | (1948) | (1949) | (1946) | (1948) | (1944) | (1944) | (2003) | (2003) | (2003) | (2003) | (1945) |
| MIN  | 33.7   | 70.2   | 166    | 192    | 218    | 402    | 265    | 145    | 91.1   | 39.2   | 37.6   | 46.2   |
| (WY) | (1941) | (1942) | (1941) | (1942) | (1941) | (1941) | (1950) | (1941) | (1941) | (2002) | (2002) | (1940) |

02103000 LITTLE RIVER AT MANCHESTER, NC—Continued

| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |        | WATER YEARS 1939 - 2004 <sup>@</sup> |              |
|--------------------------|------------------------|--------|---------------------|--------|--------------------------------------|--------------|
| ANNUAL TOTAL             | 280,273                |        | 135,099             |        | 452                                  |              |
| ANNUAL MEAN              | 768                    |        | 369                 |        | 229                                  |              |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 774                                  |              |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 229                                  |              |
| HIGHEST DAILY MEAN       | 5,010                  | Aug 11 | 2,630               | Sep 10 | 9,000                                | Sep 18, 1945 |
| LOWEST DAILY MEAN        | 250                    | Oct 26 | 53                  | Jul 27 | 19                                   | Aug 11, 2002 |
| ANNUAL SEVEN-DAY MINIMUM | 267                    | Oct 21 | 63                  | Jul 21 | 21                                   | Aug 8, 2002  |
| MAXIMUM PEAK FLOW        |                        |        | 2,850               | Sep 10 | 5,090                                | Aug 11, 2003 |
| MAXIMUM PEAK STAGE       |                        |        | 18.33               | Sep 10 | 24.72                                | Aug 11, 2003 |
| INSTANTANEOUS LOW FLOW   |                        |        | 49                  | Jul 17 | 16                                   | Aug 13, 2002 |
| ANNUAL RUNOFF (CFSM)     | 2.21                   |        | 1.06                |        | 1.30                                 |              |
| ANNUAL RUNOFF (INCHES)   | 29.96                  |        | 14.44               |        | 17.65                                |              |
| 10 PERCENT EXCEEDS       | 1,440                  |        | 686                 |        | 932                                  |              |
| 50 PERCENT EXCEEDS       | 576                    |        | 312                 |        | 336                                  |              |
| 90 PERCENT EXCEEDS       | 303                    |        | 106                 |        | 100                                  |              |

<sup>@</sup> See PERIOD OF RECORD.  
 e Estimated.

