

## 05245100 LONG PRAIRIE RIVER AT LONG PRAIRIE, MN

LOCATION.--Lat 45°58'30", long 94°51'56", in NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 20, T. 129 N., R. 33 W., Todd County, Hydrologic Unit 07010108, on right bank 90 ft upstream from bridge on First Avenue at Long Prairie and 400 ft downstream from Venewitz Creek.

DRAINAGE AREA.--434 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,281.74 ft above sea level (NGVD of 1929).

REMARKS.--Records good except those for estimated daily discharges, which are fair to 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     | 116   | 113   | 88    | e56   | e40   | e76   | 215    | 146   | 281    | 94    | 76    | 71    |
| 2     | 114   | 111   | 88    | e60   | e40   | e76   | 198    | 140   | 310    | 91    | 86    | 68    |
| 3     | 112   | 108   | 84    | e58   | e37   | e76   | 187    | 135   | 316    | 98    | 86    | 67    |
| 4     | 110   | 108   | 85    | e52   | e36   | e77   | 177    | 131   | 292    | 93    | 86    | 65    |
| 5     | 108   | 106   | 87    | e47   | e37   | e77   | 170    | 128   | 267    | 91    | 85    | 83    |
| 6     | 106   | e82   | 88    | e45   | e39   | e78   | 165    | 126   | 250    | 109   | 86    | 91    |
| 7     | 104   | e76   | 88    | e47   | e41   | e80   | 162    | 121   | 226    | 117   | 97    | 81    |
| 8     | 103   | e82   | 87    | e52   | e41   | e78   | 159    | 119   | 206    | 111   | 96    | 82    |
| 9     | 103   | e94   | e79   | e55   | e43   | e75   | 153    | 118   | 196    | 108   | 94    | 81    |
| 10    | 106   | 105   | e72   | e56   | e43   | e72   | 149    | 117   | 193    | 102   | 97    | 75    |
| 11    | 117   | 114   | e54   | e56   | e44   | e72   | 143    | 112   | 191    | 110   | 100   | 74    |
| 12    | 125   | 120   | e45   | e57   | e44   | e73   | 139    | 117   | 187    | 108   | 99    | 70    |
| 13    | 128   | 105   | e51   | e56   | e45   | e75   | 134    | 137   | 180    | 115   | 96    | 66    |
| 14    | 129   | 104   | e57   | e55   | e46   | e81   | 129    | 151   | 177    | 114   | 91    | 65    |
| 15    | 128   | 105   | e64   | e56   | e42   | e82   | 126    | 140   | 172    | 109   | 85    | 96    |
| 16    | 123   | 100   | e67   | e55   | e46   | e85   | 125    | 131   | 166    | 106   | 81    | 118   |
| 17    | 117   | 100   | e69   | e53   | e49   | e89   | 125    | 142   | 161    | 100   | 77    | 112   |
| 18    | 114   | 104   | e68   | e50   | e53   | e93   | 175    | 160   | 153    | 93    | 73    | 120   |
| 19    | 111   | 103   | e67   | e48   | e55   | e96   | 177    | 168   | 145    | 89    | 71    | 116   |
| 20    | 110   | 101   | e65   | e45   | e56   | e101  | 177    | 159   | 138    | 85    | 68    | 110   |
| 21    | 110   | 97    | e65   | e43   | e58   | e105  | 223    | 148   | 131    | 82    | 67    | 143   |
| 22    | 110   | 90    | e64   | e43   | e61   | e112  | 257    | 140   | 126    | 78    | 67    | 168   |
| 23    | 108   | 59    | e61   | e43   | e65   | e116  | 257    | 138   | 123    | 76    | 62    | 193   |
| 24    | 108   | 46    | e59   | e43   | e69   | e124  | 222    | 141   | 123    | 74    | 65    | 219   |
| 25    | 107   | 80    | e59   | e44   | e70   | e134  | 199    | 148   | 118    | 72    | 64    | 229   |
| 26    | 106   | 100   | e67   | e44   | e73   | e154  | 184    | 161   | 112    | 70    | 67    | 230   |
| 27    | 107   | 100   | e71   | e41   | e73   | e225  | 172    | 180   | 111    | 68    | 70    | 218   |
| 28    | 112   | 93    | e67   | e39   | e74   | 341   | 164    | 190   | 108    | 69    | 72    | 196   |
| 29    | 112   | 91    | e64   | e37   | e75   | 349   | 158    | 183   | 105    | 70    | 71    | 172   |
| 30    | 115   | 88    | e59   | e34   | ---   | 311   | 155    | 191   | 100    | 72    | 77    | 155   |
| 31    | 117   | ---   | e56   | e37   | ---   | 249   | ---    | 226   | ---    | 75    | 72    | ---   |
| TOTAL | 3,496 | 2,885 | 2,145 | 1,507 | 1,495 | 3,832 | 5,176  | 4,544 | 5,364  | 2,849 | 2,484 | 3,634 |
| MEAN  | 113   | 96.2  | 69.2  | 48.6  | 51.6  | 124   | 173    | 147   | 179    | 91.9  | 80.1  | 121   |
| MAX   | 129   | 120   | 88    | 60    | 75    | 349   | 257    | 226   | 316    | 117   | 100   | 230   |
| MIN   | 103   | 46    | 45    | 34    | 36    | 72    | 125    | 112   | 100    | 68    | 62    | 65    |
| AC-FT | 6,930 | 5,720 | 4,250 | 2,990 | 2,970 | 7,600 | 10,270 | 9,010 | 10,640 | 5,650 | 4,930 | 7,210 |
| CFSM  | 0.26  | 0.22  | 0.16  | 0.11  | 0.12  | 0.28  | 0.40   | 0.34  | 0.41   | 0.21  | 0.18  | 0.28  |
| IN.   | 0.30  | 0.25  | 0.18  | 0.13  | 0.13  | 0.33  | 0.44   | 0.39  | 0.46   | 0.24  | 0.21  | 0.31  |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 2004, BY WATER YEAR (WY)

|      |        |        |        |        |        |        |        |        |        |        |        |        |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 130    | 117    | 76.2   | 63.0   | 66.3   | 168    | 369    | 280    | 238    | 207    | 140    | 122    |
| MAX  | 512    | 425    | 270    | 217    | 208    | 441    | 1,062  | 653    | 774    | 777    | 715    | 607    |
| (WY) | (1987) | (1972) | (1987) | (1987) | (1987) | (1985) | (2001) | (1986) | (2001) | (1972) | (1972) | (1986) |
| MIN  | 13.4   | 8.69   | 3.19   | 1.05   | 1.62   | 19.8   | 71.8   | 45.5   | 27.5   | 4.73   | 10.0   | 5.32   |
| (WY) | (1977) | (1977) | (1977) | (1977) | (1977) | (1989) | (1977) | (1977) | (1988) | (1988) | (1989) | (1976) |

05245100 LONG PRAIRIE RIVER AT LONG PRAIRIE, MN—Continued

| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |        | WATER YEARS 1972 - 2004 |              |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL             | 75,420                 |        | 39,411              |        | 165                     |              |
| ANNUAL MEAN              | 207                    |        | 108                 |        | 366                     |              |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 25.2                    |              |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 1977                    |              |
| HIGHEST DAILY MEAN       | 2,350                  | Jun 26 | 349                 | Mar 29 | 2,900                   | Jul 22, 1972 |
| LOWEST DAILY MEAN        | 45                     | Dec 12 | 34                  | Jan 30 | a0.84                   | Jan 12, 1977 |
| ANNUAL SEVEN-DAY MINIMUM | 51                     | Feb 5  | 37                  | Jan 29 | 0.84                    | Jan 12, 1977 |
| MAXIMUM PEAK FLOW        |                        |        | 355                 | Mar 29 | 3,270                   | Jul 22, 1972 |
| MAXIMUM PEAK STAGE       |                        |        | 4.09                | Mar 29 | 9.37                    | Jul 22, 1972 |
| INSTANTANEOUS LOW FLOW   |                        |        | a34                 | Jan 30 | a0.84                   | Jan 12, 1977 |
| ANNUAL RUNOFF (AC-FT)    | 149,600                |        | 78,170              |        | 119,500                 |              |
| ANNUAL RUNOFF (CFSM)     | 0.476                  |        | 0.248               |        | 0.380                   |              |
| ANNUAL RUNOFF (INCHES)   | 6.46                   |        | 3.38                |        | 5.16                    |              |
| 10 PERCENT EXCEEDS       | 397                    |        | 181                 |        | 367                     |              |
| 50 PERCENT EXCEEDS       | 117                    |        | 97                  |        | 106                     |              |
| 90 PERCENT EXCEEDS       | 59                     |        | 51                  |        | 28                      |              |

a Estimated daily-mean discharge, backwater from ice.

e Estimated.

