

05353800 STRAIGHT RIVER NEAR FARIBAULT, MN

LOCATION.--Lat 44°15'29", long 93°13'51", in NW¹/₄SE¹/₄ sec. 9, T.109 N., R.20 W., Rice County, Hydrologic Unit 07040002, on right bank 50 ft downstream from highway bridge, 2.8 mi upstream from Falls Creek and 3.2 mi southeast of Faribault.

DRAINAGE AREA.--435 mi².

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,034.58 ft above sea level (NGVD of 1929).

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

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft³/s and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|--------|------|--------------------------------|------------------|--------|------|--------------------------------|------------------|
| May 30 | 1200 | 1,710 | 6.87 | Jul 11 | 2000 | 3,620 | 9.11 |
| Jun 12 | 0800 | *6,080 | *11.26 | Sep 17 | 2100 | 3,790 | 9.29 |

Minimum discharge, 16 ft³/s, Jan. 30, (estimated daily-mean, backwater from ice).

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 | e48 | e34 | e38 | e26 | e17 | e342 | 220 | 105 | 1,040 | 255 | 470 | 233 |
| 2 | e46 | e34 | e37 | e25 | e18 | e551 | 188 | 99 | 786 | 244 | 468 | 192 |
| 3 | e44 | e40 | e36 | e24 | e18 | e591 | 165 | 94 | 590 | 240 | 470 | 163 |
| 4 | e42 | e45 | e35 | e23 | e19 | e567 | 146 | 91 | 482 | 336 | 418 | 145 |
| 5 | e40 | e43 | e34 | e22 | e19 | e479 | 137 | 89 | 408 | 455 | 462 | 137 |
| 6 | e38 | e40 | e33 | e21 | e19 | e433 | 129 | 85 | 363 | 641 | 510 | 186 |
| 7 | e36 | e38 | e33 | e21 | e20 | e505 | 120 | 81 | 326 | 929 | 491 | 167 |
| 8 | e34 | e40 | e31 | e21 | e20 | e545 | 114 | 86 | 290 | 995 | 381 | 157 |
| 9 | e33 | e42 | e28 | e21 | e19 | e669 | 107 | 81 | 2,070 | 885 | 304 | 142 |
| 10 | e31 | e46 | e27 | e21 | e19 | e778 | 101 | 108 | 5,480 | 712 | 273 | 129 |
| 11 | e40 | e49 | e25 | e22 | e19 | 734 | 97 | 96 | 5,860 | 1,980 | 251 | 120 |
| 12 | e52 | e48 | e24 | e22 | e19 | 459 | 92 | 107 | 5,690 | 2,640 | 224 | 112 |
| 13 | e40 | e48 | e24 | e22 | e19 | 397 | 90 | 221 | 4,280 | 2,080 | 200 | 105 |
| 14 | e38 | e45 | e25 | e23 | e19 | 361 | 87 | 323 | 3,180 | 1,410 | 179 | 201 |
| 15 | e36 | e49 | e25 | e23 | e19 | 274 | 85 | 333 | 2,490 | 892 | 162 | 1,460 |
| 16 | e35 | e54 | e26 | e22 | e19 | 245 | 84 | 258 | 2,030 | 683 | 344 | e3,500 |
| 17 | e34 | e70 | e26 | e21 | e20 | 213 | 81 | 211 | 1,600 | 646 | 656 | e3,800 |
| 18 | e33 | e65 | e27 | e21 | e20 | 312 | 83 | 174 | 1,220 | 548 | 741 | e3,600 |
| 19 | e33 | e51 | e27 | e21 | e20 | 312 | 116 | 151 | 922 | 471 | 692 | e3,000 |
| 20 | e32 | e48 | e26 | e20 | e21 | 324 | 107 | 201 | 742 | 415 | 576 | e2,400 |
| 21 | e33 | e47 | e26 | e20 | e22 | 226 | 147 | 230 | 639 | 391 | 410 | e1,930 |
| 22 | e36 | e45 | e26 | e20 | e23 | 186 | 150 | 699 | 548 | 389 | 330 | e1,600 |
| 23 | e40 | e54 | e25 | e19 | e25 | 172 | 139 | 958 | 483 | 444 | 299 | e1,300 |
| 24 | e38 | e50 | e25 | e19 | e27 | 165 | 123 | 1,170 | 441 | 360 | 285 | e1,070 |
| 25 | e36 | e45 | e25 | e18 | e30 | 187 | 151 | 1,050 | 396 | 319 | 264 | e880 |
| 26 | e35 | e43 | e25 | e18 | e33 | 259 | 154 | 743 | 360 | 291 | 247 | e750 |
| 27 | e34 | e40 | e27 | e18 | e38 | 264 | 160 | 549 | 336 | 267 | 228 | e600 |
| 28 | e33 | e38 | e29 | e17 | e45 | 378 | 145 | 436 | 319 | 246 | 211 | e480 |
| 29 | e39 | e38 | e29 | e17 | e89 | 397 | 131 | 444 | 296 | 364 | 190 | e390 |
| 30 | e37 | e42 | e28 | e16 | --- | 317 | 115 | 1,230 | 273 | 377 | 305 | e360 |
| 31 | e36 | --- | e27 | e17 | --- | 257 | --- | 1,250 | --- | 451 | 265 | --- |
| TOTAL | 1,162 | 1,371 | 879 | 640 | 717 | 11,899 | 3,764 | 11,753 | 43,940 | 21,356 | 11,306 | 29,309 |
| MEAN | 37.5 | 45.7 | 28.4 | 20.6 | 24.7 | 384 | 125 | 379 | 1,465 | 689 | 365 | 977 |
| MAX | 52 | 70 | 38 | 26 | 89 | 778 | 220 | 1,250 | 5,860 | 2,640 | 741 | 3,800 |
| MIN | 31 | 34 | 24 | 16 | 18 | 165 | 81 | 81 | 273 | 240 | 162 | 105 |
| AC-FT | 2,300 | 2,720 | 1,740 | 1,270 | 1,420 | 23,600 | 7,470 | 23,310 | 87,150 | 42,360 | 22,430 | 58,130 |
| CFSM | 0.08 | 0.10 | 0.06 | 0.05 | 0.06 | 0.87 | 0.28 | 0.86 | 3.31 | 1.56 | 0.83 | 2.21 |
| IN. | 0.10 | 0.12 | 0.07 | 0.05 | 0.06 | 1.00 | 0.32 | 0.99 | 3.70 | 1.80 | 0.95 | 2.47 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2004, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 217 | 186 | 117 | 68.3 | 114 | 496 | 638 | 470 | 458 | 327 | 227 | 187 |
| MAX | 831 | 595 | 336 | 167 | 837 | 1,270 | 2,365 | 1,322 | 1,470 | 1,027 | 1,136 | 977 |
| (WY) | (1969) | (1971) | (1983) | (1992) | (1984) | (1973) | (2001) | (1999) | (2001) | (1993) | (1979) | (2004) |
| MIN | 17.0 | 15.1 | 11.0 | 11.0 | 12.9 | 26.4 | 70.2 | 58.1 | 45.8 | 26.2 | 16.2 | 16.0 |
| (WY) | (1977) | (1977) | (1977) | (1977) | (1968) | (1968) | (1977) | (1976) | (1976) | (1988) | (1976) | (1976) |

05353800 STRAIGHT RIVER NEAR FARIBAULT, MN—Continued

| SUMMARY STATISTICS | FOR 2003 CALENDAR YEAR | | FOR 2004 WATER YEAR | | WATER YEARS 1966 - 2004 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL | 61,928 | | 138,096 | | | |
| ANNUAL MEAN | 170 | | 377 | | 293 | |
| HIGHEST ANNUAL MEAN | | | | | 754 | 1993 |
| LOWEST ANNUAL MEAN | | | | | 43.9 | 1977 |
| HIGHEST DAILY MEAN | 2,720 | May 12 | 5,860 | Jun 11 | 5,860 | Jun 11, 2004 |
| LOWEST DAILY MEAN | 24 | Dec 12 | 16 | Jan 29 | a11 | Feb 18, 1968 |
| ANNUAL SEVEN-DAY MINIMUM | 25 | Dec 11 | 17 | Jan 25 | 11 | Feb 18, 1968 |
| MAXIMUM PEAK FLOW | | | 6,080 | Jun 12 | b6,080 | Jun 12, 2004 |
| MAXIMUM PEAK STAGE | | | 11.26 | Jun 12 | c12.74 | Mar 5, 1974 |
| INSTANTANEOUS LOW FLOW | | | d16 | Jan 30 | 10 | Oct 27, 1976 |
| ANNUAL RUNOFF (AC-FT) | 122,800 | | 273,900 | | 211,900 | |
| ANNUAL RUNOFF (CFSM) | 0.384 | | 0.854 | | 0.662 | |
| ANNUAL RUNOFF (INCHES) | 5.21 | | 11.62 | | 8.99 | |
| 10 PERCENT EXCEEDS | 383 | | 814 | | 712 | |
| 50 PERCENT EXCEEDS | 53 | | 126 | | 126 | |
| 90 PERCENT EXCEEDS | 34 | | 21 | | 32 | |

- a Many days in 1968, and 1977.
- b Gage height, 11.31 ft.
- c Backwater from ice.
- d Estimated daily-mean discharge, backwater from ice.
- e Estimated.

