

05079250 COUNTY DITCH 65 NEAR MAPLE BAY, MN

LOCATION.--Lat 47°36'43", long 96°16'45", in SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 29, T.148 N., R.44 W., Polk County, Hydrologic Unit 09020303, at culvert on State Highway 32, 3.0 miles west of Maple Bay.

DRAINAGE AREA.--10.4 mi².

PERIOD OF RECORD.--September 2002 to current year.

REVISED RECORDS.--WDR MN-04-1:2003

GAGE.--Water-stage recorder. Datum of gage is 1,138.95 ft above sea level (NAVD of 1988).

REMARKS.--Records fair except those for estimated daily discharges and discharges less than 1.0 ft³/s, which are poor.

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 | 0.65 | 82 | 1.6 | e0.08 | e0.00 | e0.00 | e24 | 1.9 | 3.1 | 6.7 | 0.02 | 1.4 |
| 2 | 0.60 | 40 | 1.5 | e0.07 | e0.00 | e0.00 | e22 | 1.8 | 3.4 | 4.8 | 0.02 | 0.10 |
| 3 | 0.55 | 29 | e1.5 | e0.06 | e0.00 | e0.00 | 21 | 1.5 | 6.5 | 7.6 | 0.02 | 0.16 |
| 4 | 0.57 | 22 | e1.4 | e0.05 | e0.00 | e0.00 | 21 | 1.4 | 7.7 | 6.0 | 0.02 | 0.04 |
| 5 | 0.51 | 17 | e1.4 | e0.04 | e0.00 | e0.00 | 19 | 1.3 | 18 | 4.0 | 0.01 | 0.43 |
| 6 | 0.51 | 14 | e1.3 | e0.04 | e0.00 | e0.00 | 15 | 1.3 | 25 | 2.9 | 0.00 | 2.2 |
| 7 | 0.49 | 12 | e1.3 | e0.03 | e0.00 | e0.00 | 15 | 1.3 | 18 | 2.1 | 0.00 | 1.7 |
| 8 | 0.48 | 10 | e1.2 | e0.03 | e0.00 | e0.00 | 12 | 1.4 | 29 | 1.7 | 0.00 | 0.78 |
| 9 | 0.47 | 8.9 | e1.2 | e0.02 | e0.00 | e0.00 | 11 | 2.8 | 20 | 1.3 | 0.00 | 1.1 |
| 10 | 0.39 | 8.1 | e1.2 | e0.02 | e0.00 | e0.00 | 11 | 2.7 | 13 | 0.91 | 0.00 | 2.8 |
| 11 | 0.37 | 6.3 | e1.1 | e0.02 | e0.00 | e0.00 | 22 | 2.1 | 17 | 0.82 | 0.00 | 1.7 |
| 12 | 0.36 | 5.4 | e1.1 | e0.02 | e0.00 | e0.00 | 33 | 1.7 | 48 | 1.2 | 0.00 | 1.1 |
| 13 | 0.36 | 5.1 | e1.0 | e0.02 | e0.00 | e0.00 | 34 | 1.9 | 38 | 1.2 | 0.00 | 0.78 |
| 14 | 0.38 | 4.8 | e1.0 | e0.01 | e0.00 | e0.00 | 23 | 3.1 | 45 | 1.1 | 0.00 | 0.73 |
| 15 | 0.53 | 4.6 | e0.97 | e0.01 | e0.00 | e0.00 | 16 | 2.7 | 36 | 0.97 | 0.00 | 0.62 |
| 16 | 0.62 | 4.7 | e0.93 | e0.01 | e0.00 | e0.00 | 13 | 2.2 | 24 | 0.85 | 0.00 | 0.51 |
| 17 | 0.52 | 4.5 | e0.90 | e0.01 | e0.00 | e0.00 | 11 | 1.8 | 14 | 0.65 | 0.20 | 0.45 |
| 18 | 0.49 | 4.3 | e0.86 | e0.01 | e0.00 | e0.00 | 8.6 | 1.6 | 9.7 | 0.68 | 0.89 | 0.43 |
| 19 | 0.61 | 4.0 | e0.80 | e0.01 | e0.00 | e0.00 | 7.3 | 1.4 | 6.9 | 0.63 | 2.2 | 0.32 |
| 20 | 0.65 | 4.5 | e0.72 | e0.00 | e0.00 | e0.01 | 6.2 | 1.2 | 4.7 | 0.43 | 1.9 | 0.29 |
| 21 | 0.60 | 4.3 | e0.61 | e0.00 | e0.00 | e0.07 | 5.0 | 2.9 | 3.6 | 0.34 | 0.77 | 0.27 |
| 22 | 0.63 | 4.2 | e0.50 | e0.00 | e0.00 | e0.30 | 4.4 | 3.9 | 2.6 | 0.22 | 0.40 | 0.25 |
| 23 | 2.9 | e4.0 | e0.41 | e0.00 | e0.00 | e0.50 | 3.6 | 2.8 | 2.1 | 0.14 | 0.24 | 0.22 |
| 24 | 4.8 | e3.5 | e0.34 | e0.00 | e0.00 | e0.40 | 3.1 | 2.2 | 2.1 | 0.09 | 0.16 | 0.17 |
| 25 | 5.6 | 3.0 | e0.28 | e0.00 | e0.00 | e0.30 | 2.9 | 2.9 | 1.6 | 0.20 | 0.39 | 0.21 |
| 26 | 4.0 | 3.0 | e0.24 | e0.00 | e0.00 | e0.45 | 2.8 | 4.3 | 1.6 | 0.34 | 0.63 | 0.15 |
| 27 | 3.1 | e2.6 | e0.20 | e0.00 | e0.00 | e2.0 | 2.4 | 4.6 | 1.8 | 0.23 | 0.42 | 0.10 |
| 28 | 2.8 | e2.1 | e0.17 | e0.00 | e0.00 | e22 | 2.2 | 7.1 | 1.6 | 0.16 | 0.38 | 0.12 |
| 29 | 11 | 1.7 | e0.14 | e0.00 | --- | e28 | 1.9 | 8.5 | 2.0 | 0.09 | 0.29 | 0.10 |
| 30 | 90 | 1.7 | e0.12 | e0.00 | --- | e31 | 1.8 | 7.0 | 5.5 | 0.04 | 0.21 | 0.08 |
| 31 | 96 | --- | e0.10 | e0.00 | --- | e29 | --- | 4.5 | --- | 0.03 | 1.5 | --- |
| TOTAL | 231.54 | 321.3 | 26.09 | 0.56 | 0.00 | 114.03 | 375.2 | 87.8 | 411.5 | 48.42 | 10.67 | 19.31 |
| MEAN | 7.47 | 10.7 | 0.84 | 0.02 | 0.00 | 3.68 | 12.5 | 2.83 | 13.7 | 1.56 | 0.34 | 0.64 |
| MAX | 96 | 82 | 1.6 | 0.08 | 0.00 | 31 | 34 | 8.5 | 48 | 7.6 | 2.2 | 2.8 |
| MIN | 0.36 | 1.7 | 0.10 | 0.00 | 0.00 | 0.00 | 1.8 | 1.2 | 1.6 | 0.03 | 0.00 | 0.04 |
| AC-FT | 459 | 637 | 52 | 1.1 | 0.00 | 226 | 744 | 174 | 816 | 96 | 21 | 38 |
| CFSM | 0.72 | 1.03 | 0.08 | 0.00 | 0.00 | 0.35 | 1.20 | 0.27 | 1.32 | 0.15 | 0.03 | 0.06 |
| IN. | 0.83 | 1.15 | 0.09 | 0.00 | 0.00 | 0.41 | 1.34 | 0.31 | 1.47 | 0.17 | 0.04 | 0.07 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2005, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 2.63 | 3.86 | 0.38 | 0.06 | 0.03 | 3.60 | 6.13 | 6.54 | 9.91 | 2.74 | 0.20 | 0.63 |
| MAX | 7.47 | 10.7 | 0.84 | 0.09 | 0.07 | 5.91 | 12.5 | 9.38 | 13.7 | 5.11 | 0.34 | 1.22 |
| (WY) | (2005) | (2005) | (2005) | (2003) | (2004) | (2004) | (2005) | (2004) | (2003) | (2004) | (2005) | (2004) |
| MIN | 0.03 | 0.07 | 0.07 | 0.02 | 0.00 | 1.20 | 2.36 | 2.83 | 2.29 | 1.54 | 0.03 | 0.01 |
| (WY) | (2004) | (2004) | (2004) | (2004) | (2005) | (2003) | (2003) | (2005) | (2004) | (2003) | (2003) | (2003) |

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| SUMMARY STATISTICS | FOR 2004 CALENDAR YEAR | | FOR 2005 WATER YEAR | | WATER YEARS 2002 - 2005 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL | 1,433.45 | | 1,646.42 | | 3.06 | |
| ANNUAL MEAN | 3.92 | | 4.51 | | 4.51 2005 | |
| HIGHEST ANNUAL MEAN | | | | | 2.32 2003 | |
| LOWEST ANNUAL MEAN | | | | | 96 Oct 31, 2004 | |
| HIGHEST DAILY MEAN | 96 | Oct 31 | 96 | Oct 31 | 96 | Oct 31, 2004 |
| LOWEST DAILY MEAN | 0.03 | Aug 5 | a0.00 | Jan 20 | b0.00 | Aug 22, 2003 |
| ANNUAL SEVEN-DAY MINIMUM | 0.04 | Jan 27 | 0.00 | Jan 20 | 0.00 | Sep 3, 2003 |
| MAXIMUM PEAK FLOW | | | c99 | Oct 30 | c99 | Oct 30, 2004 |
| MAXIMUM PEAK STAGE | | | d3.80 | Mar 28 | d4.37 | Mar 25, 2004 |
| INSTANTANEOUS LOW FLOW | | | f0.00 | Jan 20 | 0.00 | Aug 18, 2003 |
| ANNUAL RUNOFF (AC-FT) | 2,840 | | 3,270 | | 2,220 | |
| ANNUAL RUNOFF (CFSM) | 0.377 | | 0.434 | | 0.294 | |
| ANNUAL RUNOFF (INCHES) | 5.13 | | 5.89 | | 4.00 | |
| 10 PERCENT EXCEEDS | 8.8 | | 13 | | 7.7 | |
| 50 PERCENT EXCEEDS | 0.60 | | 0.78 | | 0.33 | |
| 90 PERCENT EXCEEDS | 0.05 | | 0.00 | | 0.02 | |

- a Many days.
- b Many days, several years.
- c Gage-height, 3.31 ft.
- d Backwater from ice.
- e Estimated.
- f Estimated, minimum daily.

