

**05284000 MILLE LACS LAKE AT COVE BAY NEAR ONAMIA, MN**

Upper Mississippi Basin  
Rum Subbasin

LOCATION.--Lat 46°06'36", long 93°37'08" referenced to North American Datum of 1927, in NE ¼ NE ¼ sec.21, T.42 N., R.26 W., Mille Lacs County, MN, Hydrologic Unit 07010207, in Minnesota Department of Natural Resources boathouse at Cove Bay boatlanding, 3.6 mi northeast of Onamia.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--June 1931 to current year. Monthend records for the period October 1939 to September 1953 published in WSP 1278 (fragmentary 1940-41). Published as "at Wealthwood" prior to October 1939, and as "at Garrison" October 1939 to September 1987 (gage heights collected at Wealthwood October 1939 to September 1941, but converted to gage datum at Garrison for publication).

GAGE.--Water-stage recorder. Datum of gage is 1,240.40 ft above sea level (NGVD of 1929, levels by Minnesota Department of Natural Resources). Gage readings have been converted to elevations above sea level. Prior to Oct. 1, 1941, nonrecording gage at Wealthwood, 17 mi north of present site, at various datums; gage readings were converted to elevations (adjustment of 1912). Oct. 1, 1941 to Sept. 30, 1958, water-stage recorder at Garrison, 16 mi northwest of present site at datum 1,240.50 ft (adjustment of 1912). To convert these readings to NGVD of 1929, subtract 0.10 ft. Oct. 1, 1958 to Sept. 30, 1987, water-stage recorder at Garrison at present datum.

REMARKS.--Records fair to poor. Water level affected by fixed-crest spillway constructed in 1953 at outlet of Ogechie Lake, 2.7 mi downstream from outlet of Mille Lacs Lake, with crest at elevation 10.10 ft., gage datum. Water level subject to fluctuation caused by seiches.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage-height, 13.64 ft, July 21, 2002, affected by seiche action; maximum daily, 13.03 ft, Aug. 22, 1972; minimum gage-height observed, 5.34 ft (present datum) Oct. 16-19, 1936.

EXTREMES FOR CURRENT YEAR.--Maximum gage-height, 10.99 ft, June 4, affected by seiche action; maximum daily gage-height, 10.57 ft, June 4, affected by seiche action; minimum daily gage-height, 9.50 ft, Sept 17, due in part to seiche. Minimum instantaneous value not available for the 2007 water year.

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**GAGE HEIGHT, FEET**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**  
**DAILY MEAN VALUES**

| Day         | Oct   | Nov  | Dec  | Jan  | Feb  | Mar   | Apr   | May   | Jun   | Jul   | Aug   | Sep  |
|-------------|-------|------|------|------|------|-------|-------|-------|-------|-------|-------|------|
| 1           | 9.96  | 9.79 | 9.69 | 9.78 | ---  | 9.92  | 10.21 | 10.46 | 10.39 | 10.17 | 9.97  | 9.73 |
| 2           | 9.99  | 9.79 | 9.71 | 9.78 | ---  | 9.96  | 10.22 | 10.42 | 10.48 | 10.19 | 10.01 | 9.78 |
| 3           | 10.04 | 9.73 | 9.69 | 9.78 | ---  | 9.96  | 10.28 | 10.39 | 10.53 | 10.24 | 9.94  | 9.74 |
| 4           | 10.09 | 9.73 | 9.68 | 9.79 | ---  | 9.96  | 10.32 | 10.38 | 10.57 | 10.25 | 9.88  | 9.76 |
| 5           | 10.02 | 9.72 | 9.67 | 9.80 | ---  | 9.96  | 10.31 | 10.35 | 10.50 | 10.24 | 9.89  | 9.72 |
| 6           | 9.92  | 9.72 | 9.68 | 9.80 | ---  | 9.96  | 10.31 | 10.30 | 10.42 | 10.21 | 9.90  | 9.75 |
| 7           | 9.90  | 9.72 | ---  | 9.79 | 9.80 | 9.97  | 10.31 | 10.41 | 10.45 | 10.17 | 9.89  | 9.92 |
| 8           | ---   | 9.76 | 9.67 | 9.80 | 9.80 | 9.97  | 10.30 | 10.42 | 10.52 | 10.22 | 9.84  | 9.85 |
| 9           | ---   | 9.84 | 9.68 | 9.80 | 9.80 | 9.96  | 10.30 | 10.43 | 10.42 | 10.19 | 9.86  | 9.84 |
| 10          | ---   | 9.82 | 9.68 | 9.80 | 9.80 | 9.97  | 10.29 | 10.45 | 10.44 | 10.24 | 9.84  | 9.75 |
| 11          | ---   | 9.68 | 9.68 | 9.80 | 9.80 | 9.96  | 10.30 | 10.45 | 10.41 | 10.16 | 9.85  | 9.91 |
| 12          | 10.08 | 9.65 | 9.69 | ---  | 9.81 | 9.97  | 10.30 | 10.41 | 10.43 | 10.17 | 9.91  | 9.65 |
| 13          | 10.14 | 9.71 | 9.68 | ---  | 9.80 | 9.97  | 10.30 | 10.35 | 10.42 | 10.05 | 9.81  | 9.67 |
| 14          | 9.95  | 9.65 | 9.68 | 9.80 | 9.80 | 9.98  | 10.30 | 10.40 | 10.41 | 10.12 | 9.91  | 9.75 |
| 15          | 9.85  | 9.74 | 9.68 | 9.80 | 9.80 | 9.98  | 10.30 | 10.50 | 10.42 | 10.06 | 9.86  | 9.53 |
| 16          | 9.84  | 9.72 | 9.68 | 9.79 | 9.80 | 9.97  | 10.30 | 10.43 | 10.46 | 10.05 | 9.88  | 9.51 |
| 17          | 9.91  | 9.74 | 9.67 | 9.79 | 9.80 | 9.97  | 10.32 | 10.35 | 10.38 | 10.06 | 9.83  | 9.50 |
| 18          | 9.98  | 9.73 | 9.67 | 9.80 | 9.80 | 9.97  | 10.32 | 10.31 | 10.40 | 10.08 | 9.73  | 9.58 |
| 19          | 9.88  | 9.70 | 9.67 | 9.79 | 9.80 | 9.97  | 10.31 | 10.38 | 10.46 | 10.09 | 9.71  | 9.66 |
| 20          | 9.88  | 9.66 | 9.67 | 9.78 | 9.80 | 9.97  | 10.31 | 10.35 | 10.39 | 10.01 | ---   | 9.54 |
| 21          | 9.93  | 9.68 | 9.69 | 9.80 | 9.80 | 9.97  | 10.34 | 10.31 | 10.36 | 9.97  | ---   | ---  |
| 22          | 9.91  | 9.67 | 9.69 | 9.80 | 9.79 | 9.97  | 10.36 | 10.30 | 10.31 | 9.95  | ---   | ---  |
| 23          | 9.90  | 9.69 | 9.69 | 9.80 | 9.80 | 9.97  | 10.41 | 10.36 | 10.32 | 9.98  | ---   | ---  |
| 24          | 9.83  | 9.68 | 9.68 | 9.80 | 9.82 | 9.97  | 10.41 | 10.40 | 10.32 | 9.98  | ---   | ---  |
| 25          | 9.80  | 9.69 | 9.69 | 9.79 | 9.89 | 10.01 | 10.42 | 10.37 | 10.27 | 9.96  | ---   | ---  |
| 26          | 9.81  | 9.70 | 9.68 | 9.80 | 9.89 | 10.03 | 10.42 | 10.33 | 10.30 | 10.04 | ---   | ---  |
| 27          | 9.84  | 9.69 | 9.69 | 9.80 | 9.88 | 10.04 | 10.43 | 10.37 | 10.35 | 10.10 | ---   | 9.81 |
| 28          | 9.86  | 9.71 | 9.69 | ---  | 9.89 | 10.07 | 10.42 | 10.32 | 10.29 | 10.04 | ---   | 9.74 |
| 29          | 9.80  | 9.76 | 9.70 | 9.80 | ---  | 10.08 | 10.43 | 10.34 | 10.25 | 10.01 | ---   | 9.63 |
| 30          | 9.83  | 9.73 | 9.71 | ---  | ---  | 10.13 | 10.41 | 10.37 | 10.23 | 10.0  | 9.75  | 9.74 |
| 31          | 9.85  | ---  | 9.77 | 9.80 | ---  | 10.17 | ---   | 10.40 | ---   | 9.97  | 9.79  | ---  |
| <b>Mean</b> | ---   | 9.72 | ---  | ---  | ---  | 9.99  | 10.33 | 10.38 | 10.40 | 10.10 | ---   | ---  |
| <b>Max</b>  | ---   | 9.84 | ---  | ---  | ---  | 10.17 | 10.43 | 10.50 | 10.57 | 10.25 | ---   | ---  |
| <b>Min</b>  | ---   | 9.65 | ---  | ---  | ---  | 9.92  | 10.21 | 10.30 | 10.23 | 9.95  | ---   | ---  |

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