

HIGHLIGHTS

Valley Branch Watershed – Lake Levels, 2011

October 1, 2011

September was the first dry month since April, with just 0.71 inches of precipitation (at Lake Jane), which is more than the airport. All lake levels were down with Long Lake and Eagle Point down 2.08 feet and 1.85 feet respectively. Even the West Lakeland storage area was down 1.48 feet.

On a yearly basis, all lakes, except Long Lake, were higher than a year ago. Horseshoe Lake is 6.67 higher than in 2010.

Storage values in the Project 1007 lakes showed an increase in storage of 800 acre feet since last month, but 1691 acre feet less storage than October 2010..

| | Acres | Overflow Elev. | Level | Acre ft. Storage | | Total |
|-----------|-------|----------------|--------|------------------|---|--------|
| Long Lake | 90 | 937.50 | 937.60 | -9.00 | } | -6.00 |
| O+D | 220 | 928.35 | 928.70 | -77.00 | | |
| Jane | 160 | 922.35 | 921.85 | 80.00 | | |
| Eagle Pt. | 130 | 894.00 | 894.23 | -29.90 | } | -93.54 |
| Elmo | 274 | 884.10 | 884.26 | -43.84 | | |
| Horseshoe | 60 | 875.20 | 875.53 | -19.80 | | |

| | | Tri Lakes | Lower Lakes | Total |
|----------|---------|-----------|-------------|-------|
| | 8/1/10 | 886 | 940 | 1826 |
| | 9/1/10 | 913 | 950 | 1863 |
| | 10/1/10 | 697 | 894 | 1591 |
| Storage | 11/1/10 | 780 | 923 | 1703 |
| Below | 4/1/11 | 310 | 262 | 572 |
| Overflow | 5/1/11 | -130 | 232 | 102 |
| | 6/1/11 | -73 | 46 | -27 |
| | 7/1/11 | -104 | -108 | -212 |
| | 8/1/11 | -482 | -588 | -1070 |
| | 9/1/11 | -335 | -565 | -900 |
| | 10/1/11 | -6 | -94 | -100 |

VALLEY BRANCH WATER LEVELS

| DATE | LONG | O-D | JANE | SUNFISH POINT | EAGLE | ELMO | HORSE- SHOE | DOWN | CLOVER- DALE | Mc- DONALD | Goetschel POND | GRAVEL PIT | WLSS LOWER | |
|-------------|--------|--------|--------|------------------|--------|--------|----------------|--------|-----------------|---------------|-------------------|---------------|---------------|--------|
| 2007 | | | | | | | | | | | | | | |
| 1/1 | 937.13 | 927.69 | 921.31 | <893 | 884.20 | 874.01 | 886.13 | 901.73 | | | 886.91 | 864.70 | 852.20 | |
| 2/1 | 936.79 | 927.34 | 921.29 | <893 | 884.20 | 874.16 | 886.41 | 901.34 | | | 887.06 | | | |
| 3/1 | 936.77 | 927.31 | 921.38 | <893 | 884.24 | 874.19 | 886.00 | 901.39 | | | 886.59 | | | |
| 4/1 | 938.38 | 927.78 | 921.70 | 894.73 | 884.46 | 875.90 | 889.73 | 902.49 | | | 887.31 | 865.81 | 856.08 | |
| 5/1 | 938.05 | 927.95 | 921.64 | 893.63 | 893.92 | 884.25 | 875.41 | 889.15 | 902.31 | | 887.20 | 864.97 | 858.30 | |
| 6/1 | 937.90 | 927.93 | 921.58 | 893.45 | 893.63 | 884.24 | 874.73 | 888.68 | 902.11 | | 887.06 | 864.97 | 855.02 | |
| 7/1 | 937.07 | 927.43 | 921.14 | 892.91 | <893 | 883.80 | 873.80 | 887.94 | 901.39 | | 886.38 | 864.72 | 852.00 | |
| 8/1 | 936.27 | 926.79 | 920.65 | 892.31 | <893 | 883.51 | 873.04 | 887.10 | 901.67 | | 885.67 | | | |
| 9/1 | 936.91 | 926.79 | 920.72 | 892.35 | <893 | 883.64 | 873.09 | 886.77 | 902.31 | | 885.75 | | | |
| 10/1 | 937.86 | 926.90 | 920.92 | 892.45 | | 883.76 | 873.19 | 886.80 | 902.75 | | 885.92 | | | |
| 10/27 | 938.60 | 927.45 | 921.06 | 892.60 | 894.28 | 883.90 | 874.06 | 886.85 | 903.29 | | 886.28 | | | |
| 12/1 | 937.63 | 927.07 | 920.88 | 892.29 | 893.64 | 883.60 | 873.50 | 886.73 | 902.69 | | 885.94 | | | |
| 2008 | | | | | | | | | | | | | | |
| 1/1 | 937.49 | 927.47 | 920.97 | 893.58 | 883.75 | 873.74 | 886.63 | 902.67 | | | | | | |
| 2/1 | 937.24 | 927.30 | 920.86 | <893 | 883.70 | 873.54 | 886.09 | | | | | | | |
| 3/1 | 936.89 | 927.16 | 920.87 | <893 | 883.67 | 873.22 | 886.35 | | | | | | | |
| 4/1 | 937.35 | 927.26 | 920.96 | 893.39 | 883.92 | 873.42 | 886.41 | | | | | | | |
| 5/1 | 939.05 | 928.24 | 921.40 | 891.84 | 894.47 | 884.17 | 875.52 | 886.84 | | | | | | |
| 6/1 | 939.09 | 928.90 | 921.39 | 891.74 | 894.18 | 884.20 | 875.41 | 886.67 | | | | | | |
| 7/1 | 938.07 | 928.75 | 921.34 | 891.60 | 894.15 | 884.14 | 875.41 | 886.43 | | | | | | |
| 8/1 | 937.33 | 928.31 | 921.02 | 891.15 | 893.20 | 883.83 | 874.36 | 886.24 | | | | | | |
| 9/1 | 936.77 | 927.87 | 920.76 | 890.90 | <893 | 883.71 | 873.80 | 885.41 | | | | | | |
| 10/1 | 936.61 | 927.58 | 920.68 | 890.47 | | 883.56 | 873.26 | 885.17 | | | | | | |
| 11/1 | 936.43 | 927.32 | 920.52 | 889.37 | | 883.54 | 872.95 | 884.79 | | | | | | |
| 12/1 | 936.41 | 927.08 | 920.52 | | | 883.58 | 872.78 | 884.75 | | | | | | |
| 2009 | | | | | | | | | | | | | | |
| 1/1 | 936.18 | 927.23 | 920.58 | | 883.43 | 872.65 | 884.94 | | | | | | | |
| 2/1 | 935.92 | 926.96 | 920.55 | | 883.44 | 872.45 | 884.74 | | | | | | | |
| 3/1 | 935.81 | 927.02 | 920.62 | | 883.48 | 872.43 | 884.64 | | | | | | | |
| 4/1 | 936.82 | 927.13 | 920.73 | | 883.56 | 872.58 | 887.91 | | | | | | | |
| 5/1 | 936.60 | 927.09 | 920.53 | | 883.49 | 872.24 | 887.39 | | | | | | | |
| 6/1 | 936.03 | 926.58 | 920.11 | | 882.94 | 871.61 | 886.89 | | | | | | | |
| 7/1 | 935.84 | 926.30 | 919.91 | | 882.82 | 871.22 | 886.69 | | | | | | | |
| 8/1 | 935.48 | 925.91 | 919.61 | | 882.58 | 870.71 | 886.06 | | | | | | | |
| 9/1 | 936.56 | 925.97 | 919.74 | | 882.70 | 870.66 | 886.28 | | | | | | | |
| 10/1 | 935.90 | 925.53 | 919.36 | | 882.34 | 870.14 | 885.74 | | | | | | | |
| 11/1 | 937.34 | 925.89 | 919.81 | | 882.65 | 871.53 | 885.86 | | | | | | | |
| 12/1 | 937.12 | 925.45 | 919.76 | | 882.69 | 871.04 | 886.04 | | | | | | | |
| 2010 | | | | | | | | | | | | | | |
| 1/1 | 937.08 | 925.67 | 919.96 | | 882.72 | 871.14 | 886.14 | | | | | | | |
| 2/1 | 936.67 | 925.58 | 919.91 | | | | | | | | | | | |
| 3/1 | 936.45 | 925.49 | 919.86 | | | | | | | | | | | |
| 4/1 | 937.35 | 925.50 | 919.90 | | 882.66 | 871.05 | 885.85 | | | | | | | |
| 5/1 | 937.31 | 925.35 | 919.87 | 888.86 | 882.64 | 868.70 | 884.82 | | | | | | | |
| 6/1 | 937.49 | 925.38 | 919.87 | 888.75 | 882.60 | 868.50 | 884.60 | | | | | | | |
| 7/1 | 938.46 | 925.70 | 920.00 | 888.75 | 882.66 | 868.48 | 884.50 | | | | | | | |
| 8/1 | 937.62 | 926.05 | 919.91 | 888.54 | 882.62 | 868.46 | 884.37 | | | | | | | |
| 9/1 | 937.35 | 926.08 | 919.85 | 888.49 | 882.56 | 868.56 | 884.59 | | | | | | | |
| 10/1 | 938.52 | 926.46 | 920.02 | 888.74 | 882.70 | 868.86 | 884.57 | | | | | | | |
| 11/1 | 937.76 | 926.56 | 919.79 | 888.54 | 882.60 | 868.84 | 884.37 | | | | | | | |
| 12/1 | 937.74 | 926.52 | 919.79 | | | | | | | | | | | |
| 2011 | | | | | | | | | | | | | | |
| 4/1 | 939.14 | 927.79 | 920.26 | 894.45 | 883.68 | 871.78 | 886.16 | | | | | | | |
| 5/1 | 940.07 | 929.14 | 920.67 | 889.62 | 894.58 | 883.53 | 872.68 | 885.42 | | | | | | |
| 6/1 | 938.99 | 929.22 | 920.77 | 889.78 | 894.55 | 883.76 | 874.79 | 885.32 | | | | | | |
| 7/1 | 938.77 | 929.30 | 920.99 | 890.00 | 894.76 | 884.04 | 875.63 | 885.22 | | | | | | |
| 8/1 | 940.86 | 929.34 | 922.11 | | 896.76 | 884.81 | 875.78 | | | | 866.68 | | | |
| 9/1 | 939.68 | 929.09 | 922.20 | 890.90 | 896.08 | 885.06 | 875.73 | 887.61 | | | 866.77 | 862.16 | | |
| 10/1 | 937.60 | 928.70 | 921.85 | 890.78 | 894.23 | 884.26 | 875.53 | 887.04 | | | 865.14 | 860.68 | | |
| Month diff. | | -2.08 | -0.39 | -0.35 | -0.12 | -1.85 | -0.80 | -0.20 | -0.57 | | | -1.63 | -1.48 | |
| Year Diff. | | -0.92 | 2.24 | 1.83 | 2.04 | | 1.56 | 6.67 | 2.47 | | | | | |
| Overflow | | 937.50 | 928.35 | 922.35 | 927.80 | 894.00 | 884.10 | 875.20 | 891.50 | 908.50 | 908.50 | 929.50 | 865.70 | 861.00 |



Minnesota Association of Watershed
Districts, Inc.

MINNESOTA CLIMATOLOGICAL NETWORK

| | | | | | | | | | |
|------|-------|---|--------|----------|-------|---------|--|--|---|
| 11 | 09 | <input checked="" type="checkbox"/> am <input type="checkbox"/> pm | | | | | | | 8 |
| Year | Month | Ob Time | County | Township | Range | Section | | | |

| | | |
|--|---------------------------|---------------------------------|
| Name Charles W. Taylor | County Name Washington | Township Name |
| Address 4677 Birchbark Tr. No. Lake Elmo, Minn. 55042 | | Telephone No. (612) 777-2979 |

24-HOUR AMOUNTS

At the end of each month, forward forms to
Office of State Climatology
Department of Natural Resources
University of Minnesota, 279 North Hall
St. Paul, Minnesota 55108

REMARKS:
Give times and comments
about events.
(Temperature and Phenology
Items are very useful).

Type of Gauge (Check One)

| | |
|-------|-----------|
| Cyl. | Test Tube |
| Wedge | Other |

| RAIN MELTED SNOW ETC. (IN HOURS) | SNOW ON GAGE | SNOW ON GROUND (INCHES) | Hour | Remarks |
|--|--------------------|----------------------------------|--------|---------|
| 0.02 | | | 01 | |
| | | | 02 | |
| 0.04 | | | 03 | |
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| 0.05 | | | 05 | |
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| 0.15 | | | 21 | |
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| 0.13 | | | 27 | |
| | | | 28 | |
| | | | 29 | |
| | | | 30 | |
| | | | 31 | |
| 0.71 | | | TOTALS | |

| Date | Silver Lake East 62-0001 (1912 datum) |
|-------------|--|
| 2011 | |
| 1/20 | 988.83 |
| 2/23 | 988.93 |
| 3/10 | 988.88 |
| 4/15 | 989.24 |
| 5/4 | 988.92 |
| 5/18 | 988.90 |
| 5/23 | 989.16 |
| 6/1 | 989.03 |
| 6/30 | 989.10 |
| 7/14 | 988.97 |
| 7/27 | 989.48 |
| 8/10 | 989.25 |
| 8/24 | 989.25 |
| 9/8 | 988.90 |
| 9/21 | 988.66 |
| 10/4 | 988.51 |
| Month Diff. | -0.15 |
| Year Diff. | -0.21 |
| Overflow | 988.51 |