## WEEKLY GREAT LAKES WATER LEVEL UPDATE

Feb 24, 2017

## WEATHER CONDITIONS

The past week has seen record breaking high temperatures across the Great Lakes Basin with dozens of the records being the highest recorded on that day for over 100 years. Temperatures ranged from to 20 30 degrees above their local and seasonal normals in much of the basin. A cold front moving into the basin will cause temperatures to moderate towards normal this weekend but warmer than average temperatures are expected to return through early next week. The western portion of the basin saw some above average precipitation in the last week while the eastern portion of the basin was abnormally dry. The coming weekend will bring significant precipitation to the southern and eastern portions of the basin with much of Lakes Michigan-Huron, Erie, and Ontario expected to receive over an inch of precipitation in the next 7 days. Lake Superior should receive about half an inch in the same time period. Precipitation type is uncertain and colder regions may receive several inches of snow instead of rain.

## LAKE LEVEL CONDITIONS

Lakes Superior and Michigan Huron are 3 and 4 inches, respectively, below their level a year ago and while Lake Superior is expected to decline and additional inch over the next month Lake Michigan-Huron is expected to rise 2 inches over the same time period. Lake St. Clair is about an inch below its level last year at this time and is projected to rise 3 inches in the coming month. Lake Erie is 6 inches above its level a year ago while Lake Ontario is at about the same level compared to last year at this time. Lake Erie is expected to continue rising while Ontario is expected to remain at its current level over the next month. See our <u>Daily Levels web page</u> for more water level information.

## FORECASTED MONTHLY OUTFLOWS/CHANNEL CONDITIONS

Lake Superior's outflow through the St. Mary's River is projected to be above average. Lake Michigan-Huron's outflow into the St. Clair River, and Lake St. Clair's outflow through the Detroit River are predicted to be above average. Lake Erie's outflow into the Niagara River is also forecasted to be above average. Nevertheless, outflow of Lake Ontario into the St. Lawrence River is projected to be near average for the month of February.

ALERTS

Official records are based on monthly average water levels and not daily water levels. Users of the Great Lakes, connecting channels and St. Lawrence River should keep informed of current conditions before undertaking any activities that could be affected by changing water levels. Mariners should utilize navigation charts and refer to current water level readings. Ice information can be found at the National Ice Center's website.

|   | SUPERIOR | MICH-HURON | ST. CLAIR | ERIE   | ONTARIO |
|---|----------|------------|-----------|--------|---------|
| Forecasted Water Level for Feb 24, 2017 (feet)                        | 601.74   | 578.90     | 574.93    | 572.28 | 245.60  |
| Chart Datum (feet)  | 601.10   | 577.50     | 572.30    | 569.20 | 243.30  |
| Difference from chart datum<br>(inches)                               | +8       | +17        | +32       | +37    | +28     |
| Difference from average water level<br>for Jan 24, 2017 (inches*)     | -2       | -1         | 0         | +2     | +7      |
| Difference from average water level<br>for Feb 24, 2016 (inches*)     | -3       | -4         | -1        | +6     | 0       |
| Difference from long-term monthly                                     |          | _          | 10        | 47     | 10      |
| average of Feb (inches)   | +6       | +/         | +18       | +1/    | +10     |
| Difference from highest monthly<br>average of record for Feb (inches) | -9       | -26        | -22       | -14    | -16     |
| Year of highest recorded monthly<br>mean                              | 1986     | 1986       | 1986      | 1987   | 1952    |
| Difference from lowest monthly<br>average of record for Feb (inches)  | 26       | 34         | 53        | 49     | 43      |
| Year of lowest recorded monthly<br>mean                               | 1926     | 1964       | 1926      | 1936   | 1936    |
| Drejected change in levels by Mar                                     |          |            |           |        |         |
| 24, 2017 (inches)   | -1       | +2         | +3        | +4     | 0       |
| ALL DATA SHOWN IN THIS SUMMARY ARE REFERENCED TO IGLD 1985            |          |            |           |        |         |

\*VALUES FOR SPECIFIC DAY ARE BASED ON 3-DAY DAILY AVERAGE AROUND SPECIFIED DATE LONG TERM AVERAGE PERIOD OF RECORD, 1918-2015 LAKE ONTARIO FORECAST ADAPTED FROM INTERNATIONAL LAKE ONTARIO –ST. LAWRENCE RIVER BOARD

FORECASTED INFORMATION PROVIDED Department of the Army Detroit District, Corps of Engineers <u>Detroit District Home</u> 1-888-694-8318 ext. 1 RECORDED DATA (1918 – present) provided by <u>NOAA, Great Lakes Online</u> (301) 713-9596 FOR MORE INFORMATION VISIT Detroit District Great Lakes Homepage International Joint Commission Great Lakes Information Network