

ARMY CORPS OF ENGINEERS WEEKLY GREAT LAKES WATER LEVEL UPDATE

Jan 12, 2018

WEATHER CONDITIONS

In the past week, there has been quite a swing in temperatures throughout the Great Lakes basin. Last weekend, temperatures were much below average, with some places experiencing record low temperatures along with a bitterly cold wind chill. During the week, temperatures have rebounded and many areas will likely experience record high temperatures on Thursday with high temperatures in the mid to upper 50s. However, that will not last long as an arctic front continues to push through the basin Thursday night into Friday bringing another cold blast and high temperatures on Saturday will be back in the teens for most of the basin, while in the northern reaches of the basin near Lake Superior will see high temperatures in the single digits. The Lake Erie and Ontario basins will be impacted by another winter storm Friday into the day on Saturday, which will likely bring about a foot of snow to these areas.

LAKE LEVEL CONDITIONS

Water levels for all of the Great Lakes remain above average levels and above last year's levels. All of the lakes have declined in the last month. Lakes Superior, Michigan-Huron, and Erie dropped 3 inches, while Lake Ontario has dropped 1 inch and Lake St. Clair has dropped 11 inches. Note that ice developing in the channels and on the lake surface can cause large changes in daily levels during the winter, especially for Lake St. Clair. Over the next month, Lake Superior and Lake Michigan-Huron are expected to continue their seasonal decline and drop by 3 inches and 1 inch, respectively. Lakes St. Clair, Erie, and Ontario are expected to rise by 1, 1, and 2 inches, respectively. See our [Daily Levels](#) web page for more water level information.

FORECASTED MONTHLY OUTFLOWS/CHANNEL CONDITIONS

Lake Superior's outflow through the St. Marys River is projected to be above average in January. Lake Michigan-Huron's outflow into the St. Clair River, and Lake St. Clair's outflow through the Detroit River are also predicted to be above average. Lake Erie's outflow into the Niagara River is forecasted to be above average, and outflow of Lake Ontario into the St. Lawrence River is projected to be above average for January as well.

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 Jan 12, 2018 (feet)	602.56	579.82	574.41	571.95	245.31
Chart Datum (feet)	601.10	577.50	572.30	569.20	243.30
Difference from chart datum (inches)	+18	+28	+25	+33	+24
Difference from average water level for Dec 12, 2017 (inches*)	-3	-3	-11	-3	-1
Difference from average water level for Jan 12, 2017 (inches*)	+7	+11	-3	+3	+7
Difference from long-term monthly average of Jan (inches)	+13	+17	+9	+13	+8
Difference from highest monthly average of record for Jan (inches)	-2	-18	-28	-21	-15
Year of highest recorded monthly mean	1986	1987	1986	1987	1946
Difference from lowest monthly average of record for Jan (inches)	33	46	47	44	38
Year of lowest recorded monthly mean	1926	2013	1936	1935	1935
Projected change in levels by Feb 12, 2018 (inches)	-3	-1	+1	+1	+2

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, 1918-2016

FORECASTED INFORMATION PROVIDED Department of the Army Detroit District, Corps of Engineers Detroit District Home 1-888-694-8313 ext. 1	RECORDED DATA (1918 – present) provided by NOAA, Great Lakes Online (301) 713-9596	FOR MORE INFORMATION VISIT Detroit District Great Lakes Homepage International Joint Commission Great Lakes Information Network
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