

ARMY CORPS OF ENGINEERS WEEKLY GREAT LAKES WATER LEVEL UPDATE

Jan 15, 2021

WEATHER CONDITIONS

Temperatures ranged from near normal to moderately above normal in the Great Lakes basin last weekend and on Monday. On Tuesday, temperatures rose throughout the basin, and on Wednesday, cities as far north as Marquette, MI, were experiencing daily high temperatures in the 40's. The basin generally lacked precipitation in the 10-day period ending Wednesday, January 13th. This weekend, temperatures will start out moderately above average, with much of the southern and eastern sections of the basin seeing daily highs in the 40s on Friday. However, temperatures will fall to near average on Sunday and will continue to be near average on Monday. The western section of the basin could see storm activity early Friday, while most of the region is expected to see precipitation all throughout the weekend.

LAKE LEVEL CONDITIONS

The predicted January 15th water levels of Lakes Superior, Michigan-Huron, and St. Clair are 3 to 4 inches below what they were a month ago, while Lake Erie is an inch higher. Lake Ontario is near the same level it was a month ago. All the lakes are below what they were at this time last year. Lakes St. Clair and Ontario are the farthest below what they were a year ago, by 13 and 16 inches, respectively. Looking forward a month, the levels of Lakes Superior and Michigan-Huron are expected to be 3 and 1 inches, respectively, below their projected January 15th level, while Lakes Erie and St. Clair are forecasted to be 1 to 2 inches higher. Lake Ontario's projected February 15th level is expected to match its January 15th level. 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 predicted to be above average this January. Lake Michigan-Huron's outflow through the St. Clair River and Lake St. Clair's outflow into the Detroit River are forecasted to be above average for January. Lake Erie's outflow into the Niagara River is predicted to be above average for January and Lake Ontario's outflow through the St. Lawrence River is projected to be above average in January.

ALERTS

Water levels shown are still-water surface elevations over the entire lake surface. Water levels at specific locations may differ substantially due to meteorological influences. 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. High water levels and potentially record high water levels are expected to persist for at least the next six months, so flood prone areas are expected to remain vulnerable. Ice information can be found at the National Ice Center's [website](#).

	SUPERIOR	MICH-HURON	ST. CLAIR	ERIE	ONTARIO
Forecasted Water Level for Jan 15, 2021 (feet)	602.20	580.97	576.08	573.10	244.85
Chart Datum (feet)	601.10	577.50	572.30	569.20	243.30
Difference from chart datum (inches)	+13	+42	+45	+47	+19
Difference from average water level for Dec 15, 2020 (inches*)	-3	-3	-4	+1	0
Difference from average water level for Jan 15, 2020 (inches*)	-7	-7	-13	-5	-16
Difference from long-term monthly average of Jan (inches)	+9	+31	+29	+26	+2
Difference from highest monthly average of record for Jan (inches)	-6	-4	-8	-7	-21
Year of highest recorded monthly mean**	1986	1987	1986	1987	1946
Difference from lowest monthly average of record for Jan (inches)	+28	+59	+67	+58	+32
Year of lowest recorded monthly mean	1926	2013	1936	1935	1935
Projected net change in levels by Feb 15, 2021 (inches)	-3	-1	+2	+1	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

**WATER LEVEL RECORDS FROM 2020 WILL BE REFLECTED LATER IN 2021 WHEN DATA HAS BEEN FINALIZED

LONG TERM AVERAGE PERIOD OF RECORD, 1918-2019

FORECASTED INFORMATION PROVIDED BY 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 Center for Operational Oceanic Products and Services	FOR MORE INFORMATION VISIT Detroit District Great Lakes Homepage International Joint Commission Great Lakes Information Network
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