

ARMY CORPS OF ENGINEERS WEEKLY GREAT LAKES WATER LEVEL UPDATE

Jan 11, 2019

WEATHER CONDITIONS

Unseasonably warm temperatures came to an abrupt halt this week as temperatures across the Great Lakes Basin dropped from as much as 20 degrees above normal to below average as a cold front moved through the basin mid-week. Temperatures across the basin are expected to warm slightly over the next few days before steadying slightly above normal for most of the basin. The northern reaches of the Great Lakes region will see another blast of bitterly cold temperatures next week. Precipitation over the last week was above normal for the majority of the basin and especially so over Lake Superior and the western half of the Michigan-Huron watershed. Drier weather is ahead for the region with minimal precipitation expected with the exception of a few showers in Michigan's Upper Peninsula.

LAKE LEVEL CONDITIONS

In the last month, water levels on Lakes Superior and Michigan-Huron have steadied their seasonal decline and are about the same level as a month ago. Lake St. Clair is also about the same as it was a month ago while Lakes Erie and Ontario are 2 and 4 inches above their respective levels last month. Lake Superior is also at the same level as it was last year at this time while the remaining lakes continue to be higher than their level a year ago. Lakes Superior and Michigan-Huron are expected to resume their seasonal decline over the next month and decline 3 and 1 inches respectively. Lake St. Clair is expected to rise an inch while Lake Erie is expected to decline 2 inches over the next month. Lake Ontario is expected to rise by 4 inches in the next month as outflows continue to be regulated by Plan 2014.

FORECASTED MONTHLY OUTFLOWS/CHANNEL CONDITIONS

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

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.

	SUPERIOR	MICH-HURON	ST. CLAIR	ERIE	ONTARIO
Forecasted Water Level for Jan 11, 2019 (feet)	602.59	580.15	575.66	572.93	245.41
Chart Datum (feet)	601.10	577.50	572.30	569.20	243.30
Difference from chart datum (inches)	+18	+32	+40	+45	+25
Difference from average water level for Dec 11, 2018 (inches*)	0	0	0	+2	+4
Difference from average water level for Jan 11, 2018 (inches*)	0	+4	+14	+10	+1
Difference from long-term monthly average of Jan (inches)	+13	+21	+24	+25	+9
Difference from highest monthly average of record for Jan (inches)	-1	-14	-13	-9	-14
Year of highest recorded monthly mean	1986	1987	1986	1987	1946
Difference from lowest monthly average of record for Jan (inches)	33	50	62	56	39
Year of lowest recorded monthly mean	1926	2013	1936	1935	1935
Projected change in levels by Feb 11, 2019 (inches)	-3	-1	+1	-2	+4

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, 1918-2017

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 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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