



LEVELnews

Great Lakes – St. Lawrence River Water Levels

All lake levels above average in July

All of the Great Lakes, with the exception of Lake Superior, saw wet conditions for July, but not as wet as seen in previous months. Lake levels remained well above average for this time of year. Levels in most of the St. Lawrence River also remained high due to continued high flow from the Ottawa River and record high outflow from Lake Ontario.

July monthly levels

All of the lakes had monthly mean levels above average in July. The July monthly mean water level of Lake Superior

was 24 cm above its period-of-record (1918–2016) average and 6 cm higher than July 2016 making it the highest July mean level seen since 1986. Lake Michigan–Huron’s mean level in July was 42 cm above average, 15 cm higher than last July’s level and the highest it has been since 1997. Lake Erie’s mean monthly level was 49 cm above average, 27 cm above its level the previous July and the last time it was higher was in 1997. Despite a very rapid decline in its level over July, Lake Ontario’s mean monthly July level of 75.69 m was

3 cm higher than the previous record high set in July 1947, 69 cm above its average and 74 cm higher than the level last year.

Lake level changes

Different combinations of water supply and outflow resulted in variable lake level changes across the Great Lakes basin in July. Lake Superior rose only 1 cm compared to its average (1918–2016) July rise of 5 cm, due mainly to near-normal water supply and well above-average outflow from the lake. Lake Michigan–Huron

Great Lakes Water Level Information				
Lake	July 2017 Monthly Mean Level		Beginning-of-August 2017 Level	
	Compared to Monthly Average (1918–2016)	Compared to One Year Ago	Compared to Beginning-of-Month Average (1918–2016)	Compared to One Year Ago
Superior	24 cm above	6 cm above	22 cm above	5 cm above
Michigan–Huron	42 cm above	15 cm above	44 cm above	17 cm above
St. Clair	51 cm above	21 cm above	54 cm above	20 cm above
Erie	49 cm above	27 cm above	47 cm above	24 cm above
Ontario	69 cm above	74 cm above	62 cm above	70 cm above

experienced wet conditions for July and despite above average outflow, its level rose 3 cm when on average it remains stable throughout July. A combination of relatively wet conditions for the month and above-average outflow resulted in Lake Erie falling 4 cm over July, slightly less than the average fall of 5 cm. Lake Ontario levels continued their rapid fall that began at the end of May, due mainly to the record high outflow from the lake lowering the water levels despite the well above-average water supplies for July. Lake Ontario levels fell 20 cm over the month of July, its 5th

highest July decline and much more than the average fall of 8 cm.

Beginning-of-August lake levels

All the lakes had beginning-of-August levels above those that we have seen in at least 20 years. Lake Superior's beginning-of-August level was 22 cm above average (1918–2016), 5 cm above the level at this time last year, and the highest they have been since 1986. Lake Michigan–Huron's beginning-of-August level was 44 cm above average, 17 cm higher than last year and the highest it has been since 1997. Lake Erie was 47 cm above average at the beginning of August, 24 cm above this time last year and the highest it has been since 1997. Lake Ontario's level at the start of August was 62 cm above average and 70 cm above this time last year. This beginning-of-August level was the 2nd highest on record, but 11 cm below the period of record high value set in 1947. At the beginning of August, all

of the lakes were at least 55 cm above their chart datum level.

Water levels forecast

Relative to their beginning-of-August levels and assuming average water supply conditions all the Great Lake levels are expected to begin their decline as the fall season approaches. For a graphical representation of recent and forecasted water levels on the Great Lakes, refer to the [Canadian Hydrographic Service's monthly water levels bulletin](http://www.cdn.ec.gc.ca/tides-marees.gc.ca/C&A/bulletin-eng.html) at: tides-marees.gc.ca/C&A/bulletin-eng.html.

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July Precipitation over the Great Lakes*

Great Lakes Basin	89%	Lake Erie	93%
Lake Superior	74% (including Lake St. Clair)	Lake Michigan–Huron	115%
Lake Michigan–Huron	91%	Lake Ontario	115%

July Outflows from the Great Lakes*

Lake Superior	142%	Lake Erie	118%
Lake Michigan–Huron	110%	Lake Ontario	140%

*As a percentage of the long-term July average.

NOTE: These figures are preliminary.