

Environnement et Changement climatique Canada

Volume 25, Number 10 October 2017



LEVELnews

Great Lakes — St. Lawrence River Water Levels September levels at highs not seen since late 90's

Despite above average declines in lake levels in three of the four Great Lakes over the month of September, all the lakes had levels that have not been this high at this time of year for at least the last 20 years. Water levels in the St. Lawrence River also remained well above average due to high outflow from Lake Ontario and the Ottawa River.

September monthly lake levels

All of the lakes had monthly mean levels above average in September. The September Monthly mean water level of Lake Superior was 27 cm above its period-of-record (1918-2016) average and 10 cm higher than September 2016, making it the highest September mean level seen since 1986. Lake Michigan-Huron's mean level in September was 43 cm above average, 15 cm higher than last September's level and the highest since 1997. Lake Erie's mean monthly level was 42 cm above average, 20 cm above its level the previous September and the highest it has been since 1997. Lake Ontario's

mean monthly September level was 34 cm above average, 38 cm higher than the level last year and the highest it has been since 1986.

Lake level changes

All Great Lakes levels decline with average September conditions, however Lake Superior rose 2 cm through September due to wet conditions for this time of year, when its average (1918–2016) decline is 2 cm. Lake Michigan– Huron experienced drier conditions in September resulting in its level falling 8 cm

Great Lakes Water Level Information				
	September 2017 Monthly Mean Level		Beginning-of-October 2017 Level	
Lake	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	27 cm above	10 cm above	29 cm above	10 cm above
Michigan–Huron	43 cm above	15 cm above	42 cm above	16 cm above
St. Clair	50 cm above	17 cm above	51 cm above	8 cm above
Erie	42 cm above	20 cm above	46 cm above	18 cm above
Ontario	34 cm above	38 cm above	26 cm above	34 cm above



when on average it declines 6 cm. Lake Erie fell 11 cm over September which was more than the average fall of 9 cm. Lake Ontario levels fell by a record 29 cm over September due to the high outlfows and despite continued relatively high water supplies to the lake. This September's decline was 1 cm more than the record set in 2009 and well above the average September decline of 14 cm.

Beginning-of-October lake levels

All the lakes had beginningof-October levels well above those seen in the last 20 years. Lake Superior's

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ISSN 1925-5713 Aussi disponible en français beginning-of-October level was 29 cm above average (1918–2016), 10 cm above the level at this time last year, and the highest they have been since 1985. Lake Michigan-Huron's beginning-of-October level was 42 cm above average, 16 cm higher than last year and the highest it has been since 1997. Lake Erie was 46 cm above average at the beginning of October, 18 cm above this time last year and the highest it has been since 1997. Lake Ontario's level at the start of October was 26 cm above average. 34 cm above this time last vear and the highest it has been since 1986. At the beginning of October, all of the lakes were at least 61 cm above their chart datum level.

Water levels forecast

Relative to their beginningof-October levels and assuming average water supply conditions all the Great Lake levels are expected to decline through October. 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 at: http://tidesmarees.gc.ca/C&A/ bulletin-eng.html.

September Precipitation over the Great Lakes*

Great Lakes Basin Lake Superior Lake Michigan–Huron

71% Lake Erie 44% 127% (including Lake St. Clair) 50% Lake Ontario 57%

September Outflows from the Great Lakes*

Lake Superior Lake Michigan–Huron 113%

113% Lake Erie Lake Ontario 126%

*As a percentage of the long-term September average. NOTE: These figures are preliminary.

125%