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LEVELnews

Great Lakes — St. Lawrence River Water Levels

Lake Levels Move Toward Average In October

All of the Great Lakes levels remained above average in October, but also saw greater than average declines, moving their levels closer to average compared to values seen through the summer months.

- The monthly mean water level of Lake Superior was 9 cm above its period-of-record (1918–2014) average in October and 11 cm lower than October 2014.
- Lake Michigan–Huron's mean level in October was 15 cm above average, 4 cm above last year's level and the highest mean level recorded in October since 1997.
- Lake Erie's mean monthly level was 28 cm above average, 9 cm above the October level of the previous year, and the highest monthly mean level recorded in October since 1997.
- Lake Ontario was 6 cm above its October average level, 8 cm higher than last year, and the highest October level since 2006.
- Montreal Harbour generally remained below average all month due to very low outflow from the Ottawa River.

Above-average level declines were seen in all the lakes in October due to a combination of below-average water supplies and above-average outflows. Dry conditions and above-average outflows in Lake Superior resulted in its level falling 9 cm in October, compared to the average (1918–2014) fall of 3 cm. Lake

(continued on next page)

Great Lakes Water Level Information

Lake	October 2015 Monthly Mean Level		Beginning-of-November 2015 Level	
	Compared to Monthly Average (1918–2014)	Compared to One Year Ago	Compared to Beginning-of-Month Average (1918–2014)	Compared to One Year Ago
Superior	9 cm above	11 cm below	9 cm above	13 cm below
Michigan–Huron	15 cm above	4 cm above	16 cm above	1 cm above
St. Clair	27 cm above	8 cm above	23 cm above	5 cm below
Erie	28 cm above	9 cm above	25 cm above	3 cm above
Ontario	6 cm above	8 cm above	6 cm above	9 cm above

Canada

Michigan–Huron fell 11 cm due to dry conditions, when the average October fall is 7 cm. Lake Erie fell 19 cm, also due to dry conditions, when its average monthly fall is 9 cm. Lake Ontario's near-average water supplies were offset by above-average outflows, resulting in its levels declining 18 cm, compared to its average fall of 12 cm.

Beginning-of-November Lake Levels

At the beginning of November, levels of all the Great Lakes were above average (1918–2014) and above last year's levels, with the exception of Lake Superior. Lake Superior's beginning-of-November level was 9 cm above average, but 13 cm below last year's level. Lake Michigan–Huron's beginning-of-November level was 16 cm above average, 1 cm higher than last year, and the highest it has been since 1997. Lake Erie was 25 cm above average at the beginning of November and 3 cm higher than this time last year. Lake Ontario's level at the beginning of November was 6 cm above average, 9 cm higher than this time last year and levels have been higher as recent as 2013.

Surge Conditions

Sustained strong north easterly winds of 10 to 40 km/h for several days pushed water from the east side of Lake Ontario, Erie and Michigan–Huron to the west side causing a short-period water level rise, or surge, on the west side of the lakes, and a decrease in water level on the east side of the lakes. The surge peaked on October 3, with a short-period water level rise of 0.97 m on the west end of Lake Erie when compared to pre-storm levels, and a 1.86 m difference in level between the east and west end of the lake. The greatest surge effect was seen on Lake Erie, but other areas experienced surges of 20 to 30 cm. For further information on water level fluctuations on the Great Lakes visit the Canadian Hydrographic Service website at: **tides-marees.gc.ca/C&A/fluctuations-eng.html**

Water Level Forecast

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: **tides-marees.gc.ca/C&A/bulletin-eng.html**.

FOR MORE INFORMATION:

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October Precipitation over the Great Lakes*

Great Lakes Basin	**95%**	**Lake Erie (including Lake St. Clair)**	**93%**
Lake Superior	**98%**		
Lake Michigan–Huron	**90%**	**Lake Ontario**	**108%**

October Outflows from the Great Lakes*

Lake Superior	**122%**	**Lake Erie**	**108%**
Lake Michigan–Huron	**103%**	**Lake Ontario**	**115%**

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