Environment Canada Environnement Canada

Volume 23, Number 3 17 March 2015

www.ec.gc.ca

LEVELnews

Great Lakes — St. Lawrence River Water Levels

Lake Levels Decline With Dry, Cold Conditions

Dry and cold conditions resulted in greater than average level declines and heavy ice conditions in all of the Great Lakes for February.

- The monthly mean water level of Lake Superior was 21 cm above its period-of-record (1918–2013) February average, 23 cm higher than February 2014, and the highest February level since 1997.
- Lake Michigan–Huron's mean level in February was also 22 cm above average, up 55 cm from last year and the highest mean level recorded in February since 1998.
- Lake Erie's mean monthly level was 4 cm above average and 9 cm above last February's.
- Lake Ontario was 10 cm below its average February level and 11 cm lower than a year ago, and the lowest February level recorded since 2012.
- Montreal Harbour's level generally remained below average for February, but daily values varied considerably over the month with a difference of 59 cm between its high and low value due to ice effects.

Above-average outflows combined with below-normal water supplies, resulted in Lake Superior's level falling 7 cm in February, 2 cm more than the lake's average (1918–2013) decline of 5 cm. Lake Michigan–Huron levels on average remained stable in February, but fell 3 cm last month due to below-average

(continued on next page)

Great Lakes Water Level Information

Lake	February 2015 Monthly Mean Level		Beginning-of-March 2015 Level	
	Compared to Monthly Average (1918–2013)	Compared to One Year Ago	Compared to Beginning-of-Month Average (1918–2013)	Compared to One Year Ago
Superior	21 cm above	23 cm above	19 cm above	19 cm above
Michigan–Huron	22 cm above	55 cm above	22 cm above	54 cm above
St. Clair	4 cm below	13 cm above	7 cm below	5 cm below
Erie	4 cm above	9 cm above	5 cm below	Same
Ontario	10 cm below	11 cm below	20 cm below	16 cm below

Canada

water supplies. Ice conditions in the Detroit River contributed to the slightly lower-than-average 2 cm rise in Lake St. Clair. Lake Erie experienced its second largest recorded decline, falling 14 cm during a month that, on average, sees it rise by 3 cm. Lake Ontario's level fell by 13 cm when, on average, it rises by 3 cm, resulting in the fifth largest February decline on record.

Beginning-of-March Lake Levels

The upper lakes remained above average and above last year's levels while the lower lakes were below average and at or below last year's levels for the beginning of March. Lake Superior's beginning-of-March level was 19 cm above average (1918–2013), 19 cm above last year's level and the highest it has been this time of year since 1997. Lake Michigan–Huron's beginning-of-March level was 22 cm above average, 54 cm higher than last year and the highest beginning-of-March level since 1998. Lake Erie was 5 cm below average at the beginning of March, and at the same level as last year. Lake Ontario's level began March at 20 cm below average, and 16 cm lower than last year.

Water Level Forecast

For a graphical representation of recent and forecasted water levels on each of the Great Lakes, Lake St. Clair and Montreal Harbour, compared to their respective period-of-record monthly averages and extreme levels, please refer to the Canadian Hydrographic Service's monthly water levels bulletin found at: **tides-marees.gc.ca/C&A/bulletin-eng.html**

Ice Conditions on Lakes

The end of February saw the weekly ice coverage of the Great Lakes at 86%, significantly higher than the maximum ice season average ice cover of 41%. The cold weather has formed thick ice on the lakes so it is expected to take some time before it melts. However with spring and the warmer weather approaching, ice coverage has started to diminish with Great Lakes ice cover at 73% in the second week of March. More information on Great Lakes ice conditions can be found on the Canadian Ice Service web site at: **ice-glaces.ec.gc.ca**.

FOR MORE INFORMATION:

Derrick Beach (Editor)
Boundary Water Issues
National Hydrological Services
Meteorological Service Canada
Environment Canada
Burlington ON L7S 1A1
Tel.: 905-336-4714
Fax: 905-319-6939
Email: LEVELnews-infoNIVEAU@ec.gc.ca

Rob Caldwell
Great Lakes–St. Lawrence Regulation Office
Meteorological Service Canada
Environment Canada
111 Water Street East
Cornwall ON K6H 6S2
Tel.: 613-938-5864

ISSN 1925-5713

Aussi disponible en français

February Precipitation over the Great Lakes*

Great Lakes Basin	**52%**	**Lake Erie (including Lake St. Clair)**	**55%**
Lake Superior	**75%**		
Lake Michigan–Huron	**38%**	**Lake Ontario**	**58%**

February Outflows from the Great Lakes*

Lake Superior	**127%**	**Lake Erie**	**104%**
Lake Michigan–Huron	**99%**	**Lake Ontario**	**105%**

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