



LEVELnews

Great Lakes – St. Lawrence River Water Levels

No Consistent Pattern for December Water Level Changes

Although the outflow from Lake Superior was below average during December, the below-average water supply it received caused the lake's level to fall by 9 cm during December. That drop is 2 cm more than its average December decline of 7 cm. The level of Lakes Michigan–Huron also fell during December. However, due to a combination of below-average outflow and above-average water supply, the level of Lakes Michigan–Huron fell by 3 cm during

December, less than its average decline for the month of 5 cm.

The levels of both lakes Erie and Ontario increased during December. However, water supplies that were well above average resulted in these levels rising several centimetres more than they typically do during December, despite above-average outflows for both lakes during the month. The levels of lakes Erie and Ontario increased by 8 and 12 cm,

respectively, during December. On average, the levels of these two lakes have risen by 2 and 1 cm, respectively, during December over the 1918–2010 period of record currently used for water level statistics and comparison purposes.

Six-Month Forecast

For a graphical representation of recent and forecasted water levels on each of the Great Lakes and on Lake St. Clair, compared to their 1918–2010 **(continued on next page)**

Great Lakes Water Level Information				
Lake	December 2011 Monthly Mean Level		Beginning-of-January 2012 Level	
	Compared to Monthly Average (1918–2010)	Compared to One Year Ago	Compared to Beginning-of-Month Average (1918–2010)	Compared to One Year Ago
Superior	31 cm below	2 cm above	32 cm below	3 cm above
Michigan–Huron	30 cm below	18 cm above	30 cm below	17 cm above
St. Clair	18 cm above	38 cm above	13 cm above	40 cm above
Erie	42 cm above	54 cm above	41 cm above	56 cm above
Ontario	9 cm above	10 cm above	16 cm above	22 cm above

period-of-record monthly averages and extreme levels, please refer to the December 2011 edition of the Canadian Hydrographic Service's monthly water levels bulletin at:
www.waterlevels.gc.ca/C&A/ital_e.html

Bulletin's Naming Convention

Each month, LEVELnews directs its readers to the Canadian Hydrographic Service's monthly water levels bulletin for the latest six-month water level forecast. For example, this month's issue points to the December 2011 edition of that bulletin. Contrary to what might be expected, the December 2011 date is not an

error. The December 2011 edition of that bulletin is produced and posted on the Internet by the Canadian Hydrographic Service early in January 2012. The December 2011 date on the bulletin indicates that it includes recorded water level data up to, and including, December 2011.

It should also be noted that even though it is now 2012, the period of record used for comparison purposes in the bulletin and LEVELnews is still 1918–2010, and will likely remain so for a couple more months. The 2011 water level data needs to be verified and accepted as correct before the period-of-record statistics can be updated to 1918–2011.

Lake Erie–Niagara River Ice Boom

Each year since 1964, the New York Power Authority and Ontario Power Generation have installed the Lake Erie–Niagara River Ice Boom at the head of the Niagara River. The use of the ice boom is authorized by the International Joint Commission and is overseen by the Commission's International Niagara Board of Control.

Installation of the boom spans can begin on whichever comes first: December 16 or when the Lake Erie water temperature, as measured at the Buffalo Water Intake, falls to 4°C. With the Lake Erie water temperature at 6°C on December 14, installation of the ice boom's spans was planned to begin as permitted on December 16. However, strong winds and high wave conditions delayed the start of installation until December 17. Installation of the boom was completed on December 18. The water temperature at Buffalo remained above 4°C throughout the boom installation period.

FOR MORE INFORMATION:

Chuck Southam (Editor)
 Boundary Water Issues Unit
 MSC – Operations Ontario
 Environment Canada
 P.O. Box 5050
 Burlington ON L7R 4A6
 Tel.: 905-336-4955
 Fax: 905-336-8901
 Email: water.levels@ec.gc.ca

David Fay
 Great Lakes–St. Lawrence
 Regulation Office
 MSC – Operations Ontario
 Environment Canada
 111 Water Street East
 Cornwall ON K6H 6S2
 Tel.: 613-938-5725

For information regarding reproduction rights, please contact Public Works and Government Services Canada at 613-996-6886 or at

droidauteur.copyright@tpsgc-pwgsc.ca

Photos: © Environment Canada - 2012
 © Her Majesty the Queen in Right of Canada, represented by the Minister of the Environment, 2012

ISSN 1925-5713

Aussi disponible en français

December Precipitation over the Great Lakes*

Great Lakes Basin	90%	Lake Erie	145%
Lake Superior	62%	(including Lake St. Clair)	
Lakes Michigan–Huron	86%	Lake Ontario	91%

December Outflows from the Great Lakes*

Lake Superior	76%	Lake Erie	117%
Lakes Michigan–Huron	90%	Lake Ontario	114%

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