

LEVEL *news*



Great Lakes - St. Lawrence River Water Levels

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Above-average Precipitation Slows Seasonal Decline on Middle Lakes **Fall Storm Season Begins**

Precipitation during the past several weeks has slowed the usual seasonal decline in water levels on Lakes Michigan-Huron, St. Clair and Erie. Rains along the St. Lawrence River valley and Ottawa River basin have also temporarily eased the low water level problems for navigation and other users in the Montréal region of the St. Lawrence River.

The level of Lake Superior declined by a near-average amount from September to October, falling about 7 cm. The lake began November 24 cm below its long-term average, about 11 cm above its level of one year ago.

The monthly mean level of Lakes Michigan-Huron increased by 2 cm from September to October instead

of declining as it usually does. At the beginning of October, Lakes Michigan-Huron were still 39 cm below their long-term average level, but about 13 cm higher than they were a year ago.

Water levels on both Lakes St. Clair and Erie declined by just 2 cm from August to September—about one-fifth their long-term average amounts. Lake Ontario's level fell slightly less than average, declining 11 cm. At the beginning of November, Lakes St. Clair, Erie and Ontario were 23, 20, and 7 cm below average, respectively.

Montréal Harbour's monthly mean water level was 5.53 m in October, 87 cm below the 1967-2000 period-of-record average value for the month,

and slightly below chart datum. Although October's monthly mean level was a new period-of-record low for the month, significantly increased flows from the Ottawa River helped raise the Harbour's October mean level 19 cm above that of September. Harbour levels are expected to average above chart datum during November.

Fall Storm Disrupts Shipping

The first major storm of the 2001 fall season over the Great Lakes, combined with low water levels, virtually halted commercial navigation on October 25-26. Sustained southwesterly winds of 40 to 50 knots depressed already low water levels on the
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Public Consultation on IJC Upper Great Lakes Plan of Study

The International Joint Commission's (IJC) Upper Great Lakes Plan of Study Team will be conducting public consultation sessions at eight locations throughout the upper Great Lakes basin, during the period October 31 through November 15, 2001. Meeting locations and times can be found on the IJC's web site (www.ijc.org). Although mailing-list subscribers to LEVEL*news* will receive this month's edition after the public consultation meetings have taken place, the Study Team welcomes and encourages input. Comments on the draft plan of study are welcome until November 30, 2001. For further information, including the draft plan of study, you can access the Study web site at: <http://huron.lre.usace.army.mil/ijc/uglpos/>



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St. Clair and Detroit Rivers and the western end of Lake Erie, causing over 50 ships to drop anchor or remain tied up at docks. The water level at the western end of Lake Erie dropped 1.7 m below pre-storm levels to more than one metre below chart datum, making it unsafe for loaded ships to sail and draining local marinas. Upbound traffic on the Welland Canal was also halted due to high winds.

Lake Ontario Outflow Strategy

During the summer of 2001, the International St. Lawrence River Board of Control (Board) used some of the water that it had stored on Lake Ontario last fall and winter, to assist several interests. On October 21,

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October Precipitation Over the Great Lakes As a percentage of the long-term October average:

Great Lakes Basin	172%	Lake Erie	219%
Lake Superior	145%	(including Lake St. Clair)	
Lakes Michigan-Huron	190%	Lake Ontario	114%

NOTE: These figures are preliminary

1.3 cm of stored water remained on Lake Ontario.

The Board met on October 22 to consider existing and potential future water level and water supply conditions. In light of their assessment, the Board announced the following regulation strategy.

A maximum weekly over-discharge of 600 m³/s will be utilized as required for the following purposes:

- Ensure the water level at Montréal Harbour is at least chart datum when required by deep draft ship arrivals and departures.
- Maintain a level of at least 20.6 m on Lac St. Louis.
- Ensure outflow increases to meet hydropower generation requirements when necessary.

Over-discharge is the amount of Lake Ontario outflow more than that specified by the lake's regulation plan.

In addition to using the 1.3 cm stored water that remains on Lake Ontario, the outflow increases for the purposes mentioned above may use the equivalent of an additional 6 cm of water. The strategy also allows for outflows less than amounts specified by the regulation plan if downstream conditions are favourable to do so. The strategy will be reviewed should accumulated over-discharges reach 6 cm below Plan level, but in any event no later than early December. If the situation changes significantly in the interim, the Board will modify the strategy as necessary.

October Outflows From the Great Lakes

As a percentage of the long-term October average:

Lake Superior	85%	Lake Erie	92%
Lake Huron	89%	Lake Ontario	89%

NOTE: These figures are preliminary