# LEVEL news



Great Lakes - St. Lawrence River Water Levels

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# November Precipitation Helps Slow Seasonal Decline CHS Web Site Is Back On-Line

Unseasonably mild weather was experienced throughout much of the Great Lakes region during November. The region's first major snowstorm of the season occurred during the last week of the month. The storm brought snow to the northern portion of the basin and was accompanied by rain and freezing rain over parts of eastern Ontario and western Ouebec.

As was the case during October, rainfall received during November helped slow the seasonal decline in the water levels of the Great Lakes. While all the lakes remain below average, the current water levels on Lakes Superior and Michigan-Huron are noticeably higher than levels recorded one year ago. The regional rainfall

and in particular high flows from the Ottawa River eased the low water level problems for navigation and other users in the Montréal region of the St. Lawrence River.

The monthly mean level of Lake Superior declined by just 1 cm from October to November. The lake began December 17 cm below its long-term average, but about 18 cm above its level of one year ago.

The monthly mean level of Lakes Michigan-Huron increased by 2 cm from October to November instead of declining as it usually does. At the beginning of December, the level of Lakes Michigan-Huron was 35 cm below average, but 21 cm higher than one year ago. Notable is the fact that water

levels on Lakes Michigan-Huron were 55 cm below average as recently as the beginning of September.

Water levels on Lakes St. Clair, Erie and Ontario all declined by less than average from October to November falling just 3, 1, and 5 cm, respectively. At the beginning of December, Lakes St. Clair, Erie and Ontario were 10, 16, and 3 cm below average, respectively.

Montréal Harbour's monthly mean water level was 5.78 m in November, 74 cm below the 1967-2000 period-of-record average for the month. Except for two days, levels at Montréal in November were higher than the chart datum elevation of 5.55 m.

#### **Water Level Advisory**

Water levels on Lakes Superior, Michigan-Huron, St. Clair and Erie are well below their all-time averages for this time of year. Lakes Superior and Michigan-Huron are at levels slightly above the level of Chart Datum. Lake Ontario is slightly below its all-time average for this time of year. The water level at Montréal Harbour on the St. Lawrence River is well below its all-time average for this time of year but is above the level of Chart Datum. Mariners should exercise extreme caution throughout the entire system, especially during periods of strong winds when water levels can rise or fall significantly in a short period of time.





# Lake Superior Outflow Regulation

Reflecting an increase in water supplies to the upper lakes during November, Regulation Plan 1977-A has specified a small increase in the Lake Superior outflow for December.

The IJC's Upper Great Lakes Plan of Study Team has completed its public meetings on the proposed study to improve Lake Superior outflow regulation. The meetings were well attended by citizens and representatives of interest groups. The team is currently incorporating public comments and inputs, and is expected to submit its draft plan of study to the IJC in January 2002.

#### FOR MORE INFORMATION:

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## **November Precipitation Over the Great Lakes**As a percentage of the long-term November average:

Great Lakes Basin 109% Lake Erie 119% Lake Superior 124% (including Lake St. Clair) Lakes Michigan-Huron 104% Lake Ontario 91%

NOTE: These figures are preliminary

# Lake Ontario Outflow Regulation

With improved water level conditions in the Montréal region during November, Lake Ontario outflows greater than specified by the regulation plan were no longer necessary. Since early November, the daily outflows have been either at, or slightly less than those specified by the regulation plan. At the end of November all previous underdischarges have amounted to 2.6 cm of water being conserved on Lake Ontario.

As in recent years, Seaway navigation this year on the Great Lakes and the St. Lawrence River is expected to end sometime around Christmas. Water temperatures in the upper St. Lawrence River in late November were slightly higher than the average recorded over the past 10 years. If needed, short-term adjustments in the Lake Ontario outflow will be made

to help facilitate the proper formation of ice cover in the St. Lawrence River.

### CHS Web Site Back On-line

The Canadian Hydrographic Service Tides and Water Levels Web Site is now back on-line at address **chswww.bur.dfo.ca/danp/**. The web site can also be accessed through the *OUR GREAT LAKES* page at **www.on.ec.gc.ca/glimr/**.

# **November Outflows From the Great Lakes**As a percentage of the long-term November average:

Lake Superior 77% Lake Erie 89% Lake Huron 91% Lake Ontario 87%

**NOTE:** These figures are preliminary