

Volume 9, Number 5

Big Jump in Lake Superior's Level Low Water Levels Expected on Middle Lakes

April was an unusual month, with average to dry conditions over most of the Great Lakes basin, but extremely wet conditions over Lake Superior's basin.

Heavy rainfall combined with snowmelt to cause a dramatic rise in Lake Superior's water level. Prior to April it appeared that levels this spring and summer on Lake Superior would almost certainly be down from last year. However, it now appears that the lake's levels this summer will be at or slightly above those of last summer. The heavy rainfall was confined to Lake Superior's basin. Lakes Michigan and Huron received near-average precipitation during April, and the level of the lakes rose only slightly more than average during the month. However, the level continues to be below that of last year, below Chart Datum, and at the lowest level for this time of year since 1965.

While heavy precipitation over the spring and summer will push the levels of Lakes Michigan and Huron above those of last summer, average precipitation will likely result in the water levels being 5 to 10 centimetres below last summer and very close to Chart Datum. However, if conditions are hot and dry, Lakes Michigan-Huron could be approaching record low levels by October.

The levels of Lakes St. Clair and Erie increased less than usual during April, and unless we have a wet spring and summer they are not likely to rise significantly from their present level. While at present they are both close to their level of last year at this time, by July they (continued on next page)

Record Rainfall Over Lake Superior Basin

It was a wet month around Lake Superior. Rainfall during April over the lake's basin was 135 millimetres, beating the old record of 106 millimetres by a wide margin (based on preliminary data). In fact, rainfall during April exceeded the total precipitation for the previous three months. It was particularly wet at Thunder Bay, which received over four times the average rainfall for the month.

Not surprisingly, all the rain caused a rapid jump in the lake's water level. For the past century, the largest increase in the lake's level from the beginning of April to the beginning of May was 18 centimetres. This year, the increase was 29 centimetres, which is virtually equivalent to the average rise in level from winter low to summer high! The rainfall got assistance in raising lake levels from melting of the large supply of snow that was around the basin.

As a result of the increase in Lake Superior's level, the outflow from the lake during May will be 30 percent higher that during April.





May 9, 2001

could be about 25 centimetres below last July's level if we get average precipitation and temperatures.

Lake Ontario's level increased by a typical amount during April, and it is now 5 centimetres below average. It is anticipated that the water level will remain within 15 centimetres of average through the spring and summer.

Rapid Changes in Water Levels at Montréal

For five of the preceding six months, the water levels at Montréal harbour have set new record lows. The level at Montréal remained low for the first week of April. Then, snowmelt on the southern portion of the Ottawa River basin around

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

Great Lakes Basin127%Lake Superior271%Lakes Michigan-Huron106%

Lake Erie 81% (including Lake St. Clair) Lake Ontario 40%

NOTE: These figures are preliminary

Easter weekend quickly increased the flows to the Montréal region of the St. Lawrence River. By mid-April, the level on Lake St. Louis had risen to near flood stage, and the level at Montréal harbour was 2.2 metres higher than at the beginning of April. This rapid rise was very shortlived, as the harbour level declined by 1.1 metres over the next two weeks.

To minimize the risk of flooding in the Montréal region of the St. Lawrence River, for one day (April 14) the International St. Lawrence River Board of Control held the Lake Ontario outflow at an amount slightly less than specified by the regulation plan. While the flow of the Ottawa River remained high for several days as a result of snowmelt on the northern part of its basin, no further reductions in the Lake Ontario's outflow were needed during the rest of April.

Public Meeting

The International Lake Superior Board of Control will hold its annual meeting with the public on June 27 from 7 p.m. to 9 p.m. at the Inn at Christie's Mill, Port Severn, Ontario. This Board oversees operation of the structure that controls the outflow from Lake Superior to Lake Huron.

April Outflows From the Great Lakes

As a percentage of the long-term April average:

Lake Superior	78%	Lake Erie	93%
Lake Huron	84%	Lake Ontario	92%

NOTE: These figures are preliminary