



LAKE ONTARIO FLOOD WATCH

Message #3

Credit Valley Conservation

1255 Old Derry Road, Mississauga, ON., L5N 6R4
Telephone: (905) 670-1615 Fax: (905) 670-2210

Issued to: Municipalities, Police, Emergency Services, School Boards, Media, Local Conservation Authorities, CVC Staff and Board Members

Date: July 14, 2017 (Update of May 28, 2017 Message)

Time: 4:00 P.M.

Lake Ontario water levels reached an elevation of 75.88 metres International Great Lakes Datum (m IGLD) on May-25-2017 and May-29-2017. It was reported that “months of high precipitation produced the highest recorded waters level on Lake Ontario since reliable records began in 1918.” Locally, the 1 in 100 year Lake Ontario flood elevation is 75.80 m IGLD. The provisional lake level for Jul-13-2017 was at 75.72 m IGLD.

The high lake levels has continued through the month of June, with basin precipitation for the month at monitored locations to be, in almost all cases, more than 50% than the expected normal monthly accumulation, and at many locations, approaching or surpassing twice the monthly accumulated precipitation. The 3 month accumulated precipitation in the Lake Ontario basin has set a new record for the period of April-May-June.

Water levels for the beginning of July on Lake Ontario, as reported by the National Hydrological Services (Environment and Climate Change Canada, June 2017 Great Lakes Water Levels Information Memorandum), the monthly mean water level of 75.81 m in June represents the highest monthly mean ever recorded for any month, 5 cm higher than the previous record high of 75.76 m which was recorded in June 1952. Further, the mean June level was also 74 cm above average and 79 cm higher than a year ago.

In a typical year, a seasonal drop of about a centimetre per day can be expected at this time of the year, but due to the continued high basin-wide precipitation, this normal decrease in water level has not been achieved, even with record controlled outflows from the lake.

Long term weather outlooks by Environment Canada indicate little change or variation in the current weather patterns for the first 2 weeks in July, with continued unsettled patterns with scattered and isolated but frequent showers and thunderstorms that can contribute significant precipitation over the basin. Longer term, Environment Canada reports little confidence in any forecast.

Precipitation within the Lake Ontario basin and storm surge could result in temporary increases in lake levels. Winds originating from the south and east could generate waves to intensify the impacts of the high lake levels. The elevated lake levels combined with wave action can exacerbate flooding and the erosion of natural beaches, bluffs and structures along the shoreline. Water levels in the Credit River and other Lake Ontario tributaries have experienced local increases due to backwater from Lake Ontario.

The public is urged exercise caution along the shoreline and lakefront areas. Elevated lake levels combined with wave activity will make these areas dangerous. Conditions can change drastically over a short period of time with shifting winds and wave activities; sections of trails could be isolated due to higher lake levels and waves. Please respect all trail closures.

Lake levels will continue to drop slowly over next few months. Given the enormous size of the lake and the uncertainties related future precipitation, water levels in Lake Ontario are expected to remain higher than normal. Credit Valley Conservation staff will continue to monitor weather and lake conditions. This Lake Ontario Flood Watch will be in effect until Aug-31-2017 or until further notice.

Additional information regarding current and forecasted Great Lakes water levels are available from the following websites:

- Media release from the International Lake Ontario – St. Lawrence River Board: http://ijc.org/en/_islrbc/News_Releases
- Great Lakes water levels and related data from Environment Canada: <https://www.ec.gc.ca/eau-water/default.asp?lang=En&n=F6F3D96B-1>
- Tides, currents and water levels from the Department of Fisheries and Oceans: <http://tides-marees.gc.ca/eng/find/zone/45>
- USACE Hydraulic Engineering Center Great Lakes Data: <http://w3.lre.usace.army.mil/hh/ForecastData/DailyLevelsMetric.pdf>
- NOAA Lake Ontario Operational Forecast System: <https://tidesandcurrents.noaa.gov/ofs/loofs/loofs.html> (imperial units)

For more information on this Lake Ontario Flood Watch message, contact CVC during office hours at 905- 670-1615. To report a flood afterhours, please call 1-800-215-8505.

Jeff Wong
Flood Duty Officer

NOTE: A Flood Watch is issued when flooding is possible in specific watercourses or municipalities. Municipalities, emergency services and individual landowners in flood prone areas should prepare.