Provincial Watershed Conditions Statement Issued for Southern Ontario by the Surface Water Monitoring Centre of the Ministry of Natural Resources and Forestry on March 21, 2023, at 2:00 p.m.

MNRF Districts:

Aylmer, Guelph, Aurora, Midhurst, Peterborough, Kemptville, Parry Sound, Pembroke, Algonquin, North Bay, Sudbury

Conservation Authorities:

All Southern Ontario Conservation Authorities, North Bay-Mattawa, Sudbury Conservation

Local Messages Issued By MNRF Districts and Conservation Authorities:

Please visit www.ontario.ca/floodforecast for a current listing.

Weather Situation:

On Wednesday, a strong low-pressure system is expected to move into the province over the Lake Superior and travel across Northeastern Ontario through the day and into lower Hudson Bay on Thursday. This warm moist air mass will be pushed into the province by moderate south-southwesterly winds bringing showers and periods of rain for most of southern Ontario and showers or mixed rain-snow for a large portion of Northeastern Ontario. Northwestern Ontario should see snow from this system.

Total rain accumulation across southern Ontario and stretching up to Sudbury and North Bay is forecast to reach 15 - 20 mm with lesser amounts across the rest of Northeastern Ontario.

Above-freezing daytime air temperatures, as high as + 10°C, are forecast for southern Ontario over the next three days. Overnight lows are expected to remain above freezing for much of northeastern Ontario and all of southern Ontario Wednesday night. Freezing overnight temperatures are forecast for Thursday night as a colder drier air mass moves in from the northwest.

Strong south-south-westerly winds, up 35 km/hr, are expected across southern Ontario on Wednesday, especially over Lakes Erie and Ontario.

On Saturday, long term forecasts indicate much of southern Ontario will see another 15 - 25 mm of mixed rain and snow from a low-pressure system expected to move across Lake Erie and Lake Ontario.

Risks:

A moderate snowpack, ranging from 10-15 cm in the southwest to 60 cm at the east, is reported throughout the southern Ontario. Under the forecast above-freezing temperatures above freezing with the added rain; the snowpack will become saturated with water, and a

moderate melt and release of water is expected, producing substantial runoff.

Under these conditions, water levels and flows in local watercourses will increase. No major flooding is expected at this time, but some watercourses may reach or exceed their banks, leading to localized flooding in floodplains, low-lying areas, and areas with poor drainage.

In addition, milder temperatures and rain could weaken and cause the breakup of remaining ice cover where it exists, causing localized water level increases and flooding should ice jamming occur.

Forecast winds across the lower Great Lakes will result in wave heights that may exceed local thresholds and create hazardous shoreline conditions due to increased erosion.

A close watch on local weather and watershed conditions is recommended. The public should be advised of the danger around the fast-flowing and cold rivers and streams, unstable ice cover, and the hazard posed by the high waves and strong wind.

This message will be in effect until (or updated before) noon on Friday, March 24th, 2023.

FOR USE BY WATER MANAGERS ONLY

This is a high-level Provincial message that is intended for internal use by conservation authorities, MNRF districts and other water managers responsible for responding to high water emergencies.

The SWMC message is based on information such as watershed conditions, weather forecasts and model outputs. Supporting information is available on the SWMC Extranet and should be used in conjunction with this analysis. Register for an Extranet account via the link below.

First-hand reports of changing water conditions from local agencies are greatly appreciated and benefit the overall flood program. Please also consider tweeting reports of flooding with the hashtag #ONFlood and promote the public's use of #ONFlood within local flood messaging.

Weather panels and precipitation forecasts are now produced Monday to Friday, and updated twice daily on the SWMC's Extranet. Weekend panels and forecasts are produced when required.

Links:

- https://www.ontario.ca/form/register-surface-water-monitoring-data SWMC Extranet registration page
- http://www.ontario.ca/floodforecast MNRF's Internet Flood Information page, including portions of this flood message and subsequent updates, as warranted.
- https://weather.gc.ca/marine/region_e.html?mapID=11 Environment Canada Marine Weather Forecasts

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