FLOOD WARNING – Lake Nipissing Shoreline in North Bay and Callander and Parks Creek Subwatershed

Flood Outlook – La Vase River downstream of Lakeshore Drive

Message Number: 2024-11
Issued: May 1, 2024, at 1:00 PM EDT
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FLOOD WARNING notifies that flooding is imminent or already occurring in specific watercourses or municipalities. Municipalities and individuals should take action to deal with flood conditions. This may include road closures and evacuations.

Watershed Conditions Statement – Flood Outlook gives early notice of the potential for flooding based on weather forecasts calling for heavy rain, snow melt, high wind or other conditions that could lead to high runoff, cause ice jams, lakeshore flooding or erosion.

If you have a flood emergency, please contact your municipality. If you live in an unincorporated township, please contact the Ministry of Natural Resources and Forestry (MNRF) – North Bay District.

A **FLOOD WARNING** continues for the Lake Nipissing Shoreline in the City of North Bay and Municipality of Callander and Parks Creek subwatershed.
A **FLOOD WATCH** has **ended** for the La Vase River downstream of Lakeshore Drive and the Wasi River subwatershed.
A **Watershed Conditions Statement – Flood Outlook** has been issued for the La Vase River downstream of Lakeshore Drive

This is an update to the previous Message Number 2024-10 dated April 24, 2024.

Current Conditions:

The North Bay area has recorded 162 mm of precipitation through the month of April which is approximately 225 % of normal.

Water levels on Lake Nipissing remain above the maximum “non-damage” water level for Lake Nipissing. The water level on Lake Nipissing is regulated by dams operated by the federal government.

High water levels on Lake Nipissing influence water level and flow in the lower reaches of tributaries. The Parks Creek Backflood Control Structure is in operation to maintain water level in Parks Creek lower than that of Lake Nipissing, protecting many local homes and businesses from flooding. Water level in the La Vase River downstream of Lakeshore Drive is also high.

The water level on the Ottawa River at Mattawa has decreased in response to reduced flow from upstream reservoirs. Water levels on the Ottawa River are managed by upstream dams and reservoirs operated by provincial and federal governments through the Ottawa River Regulation Committee.

Water levels in the remainder of the watershed are near normal for this time of year. Water levels on Trout Lake, Turtle Lake, and Lake Talon are regulated by dams that are operated by the Ministry of Natural Resources and Forestry.

Current water levels can be viewed by searching Station Names “Ottawa River”, “Mattawa River”, “Chippewa Creek”, “La Vase River”, “Wasi River”, and “Lake Nipissing” at https://wateroffice.ec.gc.ca/search/real_time_e.html

Forecasted Conditions:

Unsettled weather from the past few days is expected to return on Friday (May 3). Cumulative precipitation of 10-30 mm is possible over the next five days.

The water level of Lake Nipissing is above maximum non-damage water levels and has stabilized. Wind can have a significant effect on the lake, causing large local variations (in the range of 10-20 cm water level locally) depending on wind direction, per Public Services and Procurement Canada. For water level and flow information, see https://www.tpsgc-pwgsc.gc.ca/ontario/eaux-water/renseignement-information-eng.html. The changes to water levels on Lake Nipissing depend on the amount of water flowing in from rivers, precipitation, and the amount of water flowing out through the control dams to the downstream French River.

Landscape conditions with dormant vegetation and saturated soils have limited capacity to store additional moisture. Water level and flow on local lakes and rivers may increase in response to the forecasted rain.

The water level of the Ottawa River at Mattawa is forecast to decrease over the next few days and remain normal for this time of year, per the Ottawa River Regulating Committee. The Ottawa River water levels are managed by dams and reservoirs operated by provincial and federal governments. The Ottawa River Regulation Planning Board posts current data and forecasts on their website https://ottawariver.ca/

Historic Flood Conditions:

When lake-based flooding occurred on Lake Nipissing in May 2019, the water level on Lake Nipissing at North Bay reached a maximum daily average water level that is about 35 cm higher than yesterday’s (April 30) daily average water level of 196.233 m. The water level was higher than current levels for the period between May 2 and June 22, 2019.

In response to 34.5 mm of steady rain over 12 hours with frozen or saturated soil conditions and minimal remaining snowpack in March 2024, the water level on Chippewa Creek increased by 83 cm over 15 hours, peaking about 3 hours after rain ended.

Risk:

A Flood Warning continues for the Lake Nipissing shoreline in North Bay and Callander and the Parks Creek subwatershed. Water levels in the downstream reaches of Lake Nipissing tributaries (including Parks Creek, Jessup's Creek, and La Vase River) are impacted by high water levels on Lake Nipissing. The changes to water levels on Lake Nipissing depend on the amount of water flowing in from rivers, precipitation, wind, and the amount of water flowing out through the control dams to the downstream French River. Average water level on Lake Nipissing has stabilised. Local water levels can fluctuate rapidly, especially in response to strong winds. The North Bay and Callander shoreline is vulnerable to increased wave action, heightening the risk for shoreline erosion during high water levels on Lake Nipissing. NBMCA has initiated operations of the Parks Creek Backflood Control structure located at Eva Wardlaw Conservation Area in North Bay. For more information visit: https://nbmca.ca/watershed-management/flood-forecasting/parks-creek-backflood-control-structure/

A Flood Watch has been downgraded to a Watershed Conditions Statement – Flood Outlook has been issued for the La Vase River downstream of Lakeshore Drive. Water level in the La Vase River downstream of Lakeshore Drive is already high with Lake Nipissing's influence. Increased flow on the La Vase River in response to rainfall could cause flooding for residents along Riverbend Road.

Water levels in the remainder of the watershed are near normal for this time of year. Landscape conditions with dormant vegetation and saturated soils have limited capacity to store additional moisture. Water level and flow on other local lakes and rivers may increase in response to the forecasted rain.

All residents, especially those in low lying areas, are encouraged to monitor the conditions that are developing. Banks adjacent to rivers and creeks are very slippery at this time and when combined with fast moving and cold open water, pose a serious hazard. The public is encouraged to keep children and pets away from watercourses and waterbodies.

Municipalities are encouraged to monitor water crossings for debris that may affect the movement of water through culverts and bridges. A close watch on local conditions and updated forecasts and warnings from Environment Canada is also recommended.

Staff at the North Bay-Mattawa Conservation Authority will continue to monitor weather and watershed conditions and update this message based on the changing weather and streamflow conditions.

This message will be in effect until (or updated before) Friday, May 10, at 4:00 PM EDT.

The general public is advised of these messages through the www.nbmca.ca website with the flood status icon and a link to information about current conditions. NBMCA also circulates these messages to local media and social media, posting on Twitter (@theNBMCA), Instagram (nbmcainfo), and Facebook (NBMCA).

The public is invited to share photos of watershed conditions on social media using #NBMCAFlood.

Local flood messages for outside the NBMCA jurisdiction (map below) are issued by the local District Office of the Ministry of Natural Resources and Forestry. All flood messages are posted on the Ontario Flood Forecasting and Warning Program website

https://www.lioapplications.lrc.gov.on.ca/webapps/swmc/flood-forecasting-and-warning-program/

Terminology: Notification Levels

WATERSHED CONDITIONS STATEMENT: general notices of potential flooding or other conditions that pose a safety risk. There are two kinds of statements:

Water Safety: indicates that high flows, unsafe banks, melting ice or other factors could be dangerous for users such as anglers, boaters, swimmers, children, or pets. Flooding is not expected.

Flood Outlook: gives early notice of the potential for flooding based on weather forecasts calling for heavy rain, snow melt, high wind or other conditions that could lead to high runoff, cause ice jams, lakeshore flooding or erosion.

FLOOD WATCH

FLOOD WATCH: notifies that the potential for flooding exists within specific watercourses and municipalities. Municipalities, emergency services and individual landowners in flood-prone areas should prepare.

FLOOD WARNING

FLOOD WARNING: notifies that flooding is imminent or already occurring in specific watercourses or municipalities. Municipalities and individuals should take action to deal with flood conditions. This may include road closures and evacuations.

MAP: North Bay – Mattawa Watershed