



Flood Outlook – Mattawa River subwatershed downstream of Hurdman Dam, and the Town of Mattawa

Water Safety Statement – urban creeks in the City of North Bay

Message Number: 2023-19
Issued: October 24, 2023, at 3:15 PM EDT
From: NBMCA Duty Officer, Angela Mills

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.

Watershed Conditions Statement – 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.

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 **Watershed Conditions Statement – Flood Outlook** has been issued for the Mattawa River subwatershed downstream of the Hurdman Dam, and the Town of Mattawa.

A **Watershed Conditions Statement – Water Safety** has been issued for the urban creeks in the City of North Bay.

Current Conditions:

Water levels and flows in the Ottawa River have been above normal as the runoff of the heavy rains (approximately 100 mm) over the Thanksgiving weekend moves through the watershed, per the Ottawa River Regulation Planning Board (<https://ottawariver.ca/>). This water level is more typical of spring freshet. Discharge from the dam on Lake Temiscaming (upstream of Mattawa) has been increasing this week. Water levels on the Ottawa River are managed by upstream dams and reservoirs operated by provincial and federal governments.

Water levels and flows in other watercourses and lakes in the NBMCA watershed are near normal for this time of year. The water level on Lake Nipissing is regulated by dams operated by

the federal government. 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:

Environment Canada has issued a Special Weather Statement for the North Bay – Powassan – Mattawa area. Forecasts indicate 35 to 70 mm of rain is expected between today (October 24) and Sunday (October 29).

Water levels are expected to rise on the Ottawa River. The Ottawa River Regulation Planning Board issues forecasts for the Ottawa River water levels and flows (<https://ottawariver.ca/>). Public Services and Procurement Canada issues forecasts for water levels on Lake Nipissing (<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.

Historic Flood Conditions:

The Ottawa River responded to considerable rain in October 2020, with 60 mm (North Bay Airport) over a three-day period. Daily water level rose from 152.94 m (Oct 22; Otto Holden Dam daily discharge 942 m³/s) to 153.58 m (Oct 25; Otto Holden Dam daily discharge 1478 m³/s), with sustained high flow through Nov 2, 2020. Water level at Hurdman Dam increased by 30 cm during this rain event.

Chippewa Creek water level increased by 120 cm in just 90 minutes in response to intense rainfall of 25 mm in 45 minutes, and a total of 37 mm on the day of June 26, 2023. Additionally, in response to very intense rain on September 17, 2023, Chippewa Creek increased by 113 cm in just 55 minutes, rising with a rate of up to 20 cm every 5 minutes.

Risk:

Reduced evapotranspiration on the landscape with plants becoming dormant and cooler temperatures lead to greater response to rain events. The forecasted rain over the next several days will increase water levels across the watershed.

Flooding may be possible in Mattawa in response to the forecasted rain. Water levels are expected to remain above normal for this time of year in the Ottawa River and lower reaches of the Mattawa River over the next few days. 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/>

Rapid changes in water levels on urban creeks in the City of North Bay are possible with the forecasted rainfall, especially during and after periods of intense precipitation. Water levels in the rest of the watershed are anticipated to increase in response to the rain event; however, flooding is not expected at this time.

All residents, especially those in low lying areas, are encouraged to monitor the conditions that are developing. Slippery banks and fast-moving colder water present hazardous conditions. The public is encouraged to keep children and pets away from watercourses.

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) Monday, October 30, 2023 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.


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

