



# WEATHER warning

## UNDERSTANDING CANADA'S NEW WEATHER ALERTING SYSTEM

The need to better understand and communicate the risks associated with certain types of weather was the impetus for a major overhaul of Canada's weather alerting system launched at end of 2025.

Previously, alerts were issued when forecast conditions were expected to meet a certain threshold — such as winds gusting to 90 kilometres per hour or more, or more than 50 millimetres of rainfall in an hour. But few people have little to no frame of reference for what these hazards mean in practice.

The new system, which aligns with best practices set out by the World Meteorological Organization, instead uses different colours to alert the public to the expected *impacts* of the incoming weather, with yellow being the least severe but still impactful in the short term, orange for significant widespread impacts, and red for dangerous and life-threatening weather with extreme and long-lasting impacts.

### Weather Alerts

Environment Canada issues alerts to let you know about noteworthy weather and how it can impact you.

A weather alert gives information that helps one to take appropriate action to keep oneself, others, and property safe. The alerts are impact-based, and tell you what the weather will do (e.g., Potential power outages), in addition to what it will be (e.g., a severe thunderstorm).

#### Three types of weather alerts

Each type of alert will appear on either a yellow, orange, or red banner to show the weather event's severity.

The three types of alerts issued by Environment Canada stay the same: **Warnings**, **Advisories**, and **Watches**. Each depends on severity of the weather, timing, and how quickly you should act.

#### Warnings

- ☒ **act now** to protect yourself from **severe** weather
- ☒ urgent messages that severe weather is either happening or will happen

- ☒ usually issued 6 to 24 hours in advance, but can be longer
- ☒ some severe weather (for example, tornadoes) can occur rapidly, with less than 30 minutes' notice

#### Advisories

- ☒ **act now** to protect yourself from **significant** weather
- ☒ issued for specific weather events that are less severe but still significant
- ☒ issued for blowing snow, fog, freezing drizzle, and frost

#### Watches

- ☒ **get ready** to protect yourself from **potential** severe weather
- ☒ issued when conditions are favorable for the development of severe weather
- ☒ may be upgraded to a Warning when certainty increases

**Always read the full weather alert text.**



## Colour-coded Weather Alerts

Weather alerts are colour-coded to tell what risk the weather is. Every type of weather alert — Warnings, Advisories, and Watches — now has a colour when issued. The weather alert colours move from yellow, to orange, to red, as the potential risk increases, and each identified by distinct symbol

(see Fig. 1).

The same weather can have different impacts, depending on timing, location, and population. That's why each weather alert has a colour, to tell the level of the impact possible in your area, so one can prepare appropriately.



⌘ **Hazardous weather may cause damage, disruptions or health impacts**

- ⌘ Impacts are moderate, localized and/or short term
- ⌘ Yellow alerts are the most common



⌘ **Severe weather is likely to cause significant damage, disruption or health impacts**

- ⌘ Impacts are major, widespread and/or may last a few days
- ⌘ Orange alerts are uncommon



⌘ **Very dangerous and possibly life-threatening weather will cause extreme damage and disruption**

- ⌘ Impacts are extensive, widespread and prolonged
- ⌘ Red alerts are rare

Figure 1

To illustrate the different impacts of yellow, orange, red warnings, here are examples with respect to wind. (Note that the examples do not show all the potential impacts of wind warnings.)

**Yellow Warning – Wind** : In this warning you may see:

- ⌘ some short term utility outages
- ⌘ larger tree branches broken
- ⌘ risk of injury from flying or falling debris

**Orange Warning – Wind** : In this warning you may see:

- ⌘ widespread utility outages
- ⌘ some roof damage
- ⌘ small to medium trees snapped
- ⌘ increased risk of injury from flying or falling debris

**Red Warning – Wind** : In this warning you may see:

- ⌘ long duration, widespread utility outages

- ⌘ structural damage to homes and buildings
- ⌘ significant damage to trees including orchards and parks
- ⌘ high likelihood of injury due to flying and falling debris

### Special Weather Statements

Special Weather Statements are issued for information only, they are not an alert. Weather statements are not colour-coded.

Special Weather Statements are used to:

- ⌘ let you know when weather conditions are unusual, inconvenient, or are cause for potential concern
- ⌘ give you extra information about weather events beyond our usual forecasts or alerts

### Marine Warnings and Watches

Marine weather warnings are part of a separate alerting program and do not use colour-coded weather alerts. The Canadian Marine Warning Program will continue to use a single-tier warning system.

# How Weather Alert Colours are Chosen

Environment Canada looks at two types of information to choose the colour of weather alert.

- ☒ how **confident** the forecasters are that the weather will happen
- ☒ the possible **impact** that weather may have on you

## Alert Colour Matrix

An Alert Colour Matrix (Fig. 2) is used to help choose the colour for the alerts. It has a vertical and horizontal axis, to show the different levels of forecast **confidence** and weather **impact**. Confidence that the weather will happen goes vertically up the side of the matrix from low to very high. The possible weather impacts are horizontal along the bottom from low to extreme. Where the level of **confidence** meets level of **impact** on the matrix determines the colour to describe that alert.

## Threshold to Choose an Alert Colour

For each alert, there can be different combinations of weather impact and forecast confidence.

### No alert:

- ☒ Impact is expected to be low
- ☒ Impact is expected to be moderate and confidence is low or moderate

### Yellow alert:

- ☒ Impact is moderate and confidence is high or very high
- ☒ Impact is high and confidence is low or moderate
- ☒ Impact is extreme and confidence is low

### Orange alert:

- ☒ Impact is high and confidence is high or very high
- ☒ Impact is extreme and confidence is high or very high
- ☒ Impact is extreme and confidence is moderate or high

### Red alert:

- ☒ Impact is extreme and confidence is very high

## How the Colours Show Weather Impact

Let's say a thunderstorm is on its way. Assume the first part of the information "forecast confidence" is **very high** that it will happen (certain it's coming). The alert colour will change depending on the possible impact of the storm. If we expect the possible impacts will be:

- ☒ **moderate** — issue a **yellow** alert
- ☒ **high** — issue an **orange** alert
- ☒ **extreme** — issue a **red** alert

Weather impact levels describe how the weather will affect:

- ☒ travel delays
- ☒ utilities disruption
- ☒ damage to property
- ☒ danger to people's health
- ☒ time for society to recover

## Levels of Forecast Confidence

A variety of information sources are used to assess level of forecast confidence.

- ☒ Current observations
- ☒ Weather prediction models
- ☒ Forecaster expertise

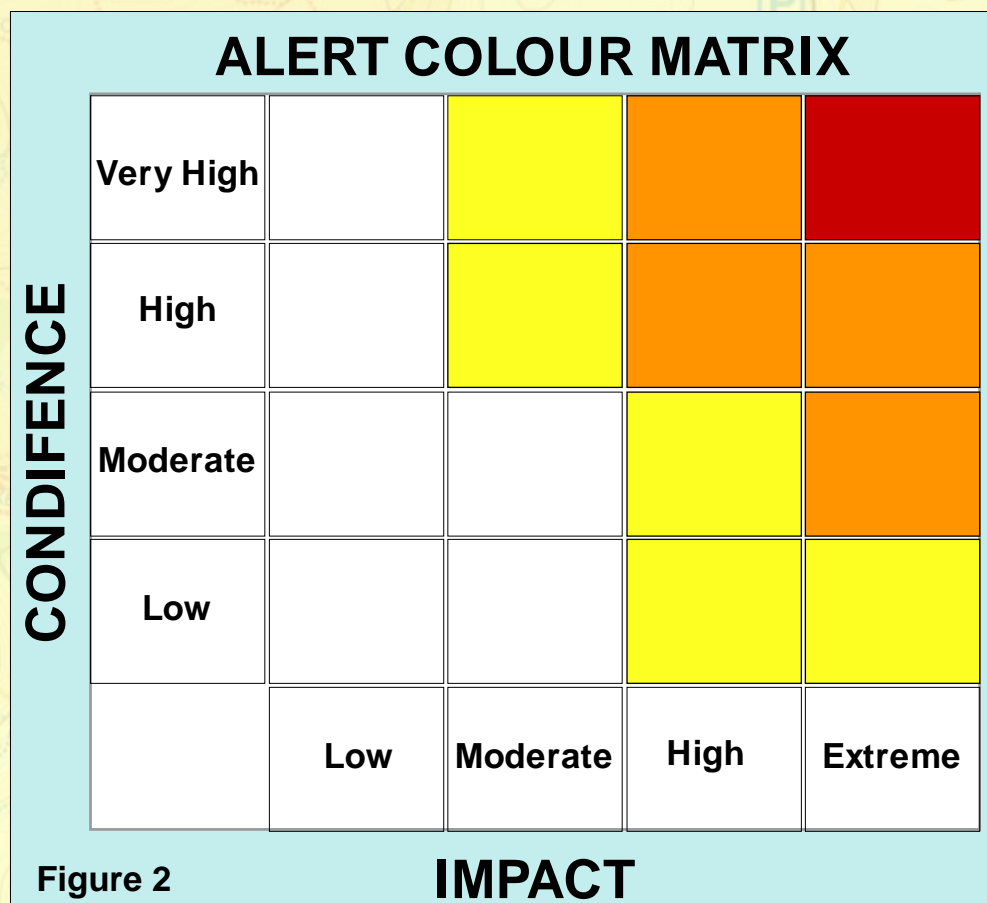


Figure 2

IMPACT



# ORANGE WARNING - RAINFALL



2026-04-03

## In effect for:

**Barry's Bay - Killaloe - Deep River - Madawaska - Whitney -  
Eastern Algonquin Park - Bancroft - Hastings Highlands - Denbigh  
- Petawawa - Pembroke - Cobden - Eganville**

**Issued** 4:38 PM EDT Friday 3 April 2026

**Impact Level:** High

**Forecast Confidence:** High

## Statements

**Another round of rainfall is expected Saturday. The ground, already near saturation, has little ability to absorb further rainfall.**

## What:

> Rainfall amounts of 30 to 50 mm.

## When:

Saturday into Saturday night.

## Additional information:

A Colorado low will move into the area on Saturday, bringing another round of significant rainfall. Heightened impacts are possible due to recent rainfall combined with ongoing snowmelt. Locally higher rainfall amounts are possible in areas that receive a thunderstorm.

For information concerning flooding, please consult your local Conservation Authority or Ontario Ministry of Natural Resources office. Visit [Ontario.ca/floods](https://Ontario.ca/floods) for the latest details.

Localized flooding is likely. Some roads may become impassable. Visibility will likely be suddenly reduced at times.

Don't drive through flooded roadways. Avoid low-lying areas. Stay away from rivers, creeks and culverts.

Please continue to monitor alerts and forecasts issued by Environment Canada. To report severe weather, send an email to [ONstorm@ec.gc.ca](mailto:ONstorm@ec.gc.ca) or post reports on X using #ONStorm.

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