

PROTECT YOUR HOME

WILDFIRE MITIGATION MEASURES

Preparing communities to limit the consequences of a wildfire.

In Quebec, wildfires can spread rapidly. They can jeopardize the safety of people, homes, and infrastructure. By taking steps to mitigate the risks, you can reduce the consequences and protect your property.



THIS LEAFLET WILL HELP YOU TO:

- Familiarize yourself with the dynamics of wildfires.
- Understand how a wildfire can spread to a home.
- Identify priority mitigation measures to protect your home.

UNDERSTANDING THE DYNAMICS OF WILDFIRES

Wildfires can be triggered or amplified by **weather** conditions favourable to their spread, such as high temperatures, low relative humidity, strong winds and prolonged drought.

Topography, including slope and orientation to the sun, can affect the speed and direction of fire spread.

Vegetation types, density, and moisture content influence fire spread and intensity. For example, dense forests, composed mainly of conifers or with a large quantity of combustibles, can burn more intensely than areas where vegetation is sparse and less abundant.



WILDLAND-URBAN INTERFACE ARE EXPOSED TO FIRES

Forest fires are an integral part of many forest ecosystems. However, they can be catastrophic and devastating when they break out in Wildland-Urban Interface areas. A Wildland-Urban Interface setting is an inhabited area whose development extends close to the forest. These areas can be considered as transitional spaces between urban, rural, and forested areas.

MAIN CAUSES OF FOREST FIRES



HUMAN ACTIVITY

Human activity is responsible for many wildfires. Common causes include campfires, smokers' materials, and waste burning.



LIGHTNING

A tree struck by lightning can catch fire. In addition, when lightning strikes the ground, it can cause sparks by coming into contact with flammable vegetation, such as dead leaves, twigs, or dry grass. Wildfires caused by lightning can spread rapidly and cause considerable damage over large areas.

HOW CAN A FIRE SPREAD TO A HOUSE?

NO COMBUSTIBLES, NO FIRE

Combustibles allow a fire to spread and increase in intensity. Among the main combustibles that could threaten your home are vegetation and dead organic matter (trees, branches, brush, grass, wood piles), as well as flammable materials and structures, such as a porch, patio, or shed.





Flames can **reach a home** by convection when they ignite other flammable objects in their path.





Thermal radiation from flames can be hot enough to ignite combustible materials in the home. The extreme heat generated by flames located **even 30 m from a home** can be intense enough to cause damage.





Sparks and embers can be carried by the wind for **up to two kilometres**. They can then be deposited on the roof or other flammable parts of the property causing fires.

IT IS IMPORTANT TO CREATE A COMBUSTIBLE BREAK NEAR HOMES AND STRUCTURES





PRIORITY ACTIONS TO PROTECT YOUR HOME INTERVENTION ZONES

PREVENT THE RISK OF A WILDFIRE SPREADING TO YOUR HOME:

- 1. LIMIT COMBUSTIBLES AROUND BUILDINGS;
- 2. PLAN VEGETATION MANAGEMENT AND MAINTENANCE;
- 3. USE FIRE-RESISTANT BUILDING MATERIALS.

IMMEDIATE ZONE

Distance from residence: 0 to 1.5 m

It is essential to eliminate all combustibles within this very close radius of a building and any structures attached to it, such as a porch or patio. Actions can also be taken to reduce the building's flammability, such as using fire-resistant materials, cleaning eavestroughs, or adding a spark arrestor to the chimney.

INTERMEDIATE ZONE

Distance from residence: 1.5 to 10 m

This zone is designed to create an environment where fire cannot spread. Choose fire-resistant plants and materials. We recommend avoiding conifers and mulch, keeping the grounds well-maintained and storing firewood more than 10 m from the residence.

EXTEN

EXTENDED ZONE

Distance from residence: 10 to 30 m

This zone around the residence is designed to reduce the potential intensity of a fire directed towards the residence. It is advisable to maintain a space between conifers, prune low branches, and regularly remove accumulations of fallen branches, grass, and dry needles to eliminate surface combustibles.

Following the recommendations for development and maintenance in these three areas helps prevent or slow the spread of fire to buildings



12 WAYS TO PROTECT YOUR HOME





Clean eavestroughs and roofs of debris such as leaves, conifer needles, and branches.





Avoid using bark mulch or other flammable materials in landscaping.



2

Close spaces under balconies with non-flammable materials to prevent embers from entering.



8

Keep grounds **free of woody debris**, branches,
and dead leaves and mow
grass to a maximum length
of 10 cm.



3

Install a spark arrestor with a maximum opening of 1 cm² on the chimney.



9

Choose deciduous trees and avoid conifers.



4

Choose exterior cladding with superior fire resistance.



(10

Maintain a 3 m distance between each conifer in the extended area.



5

Remove all combustible materials within 1.5 m of a building.



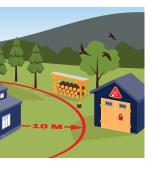
11

Prune conifers to a height of 2 m from the ground.



6

Make sure **eaves are enclosed** and vents are
screened to prevent the
infiltration of coals and



(12)

Store combustible materials more than 10 m from any building.



With the financial participation of



The recommendations contained in this leaflet are based on the guidelines set out in the *National Guide* for *Wildland-Urban Interface Fires* and *Standard 1140* of the *National Fire Protection Association*, as well as the FireSmart Canada and Firewise programs in the United States.

CAUTION

Before proceeding with certain landscaping projects, it is essential to check all applicable regulations, particularly at the municipal level. For example, tree-cutting is often regulated in municipalities and state-owned forests. The control of vegetation bordering bodies of water may also be subject to restrictions.

FOR MORE INFORMATION SOPFEU.QC.CA

