

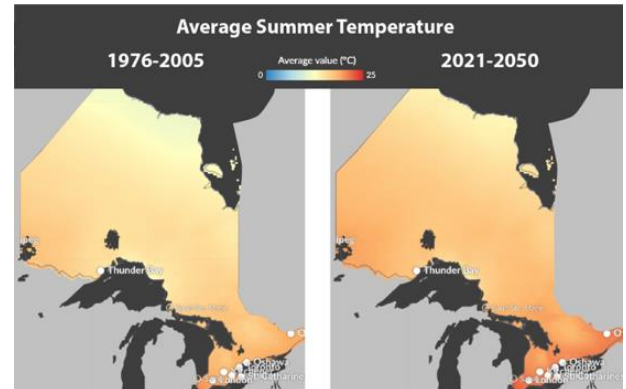


Protecting Infrastructure from Wildfire

Climate change is impacting the timing, frequency, and intensity of wildfires on the land and putting infrastructure at risk, but fire prevention and policies can be put in place to keep communities, homes and people safe.

How is climate change impacting wildfires?

Climate change is bringing warmer temperatures to summers in Ontario which can lead to drier conditions that cause wildfires to ignite and spread more easily. In many places, the wildfire season now starts earlier in the year and lasts longer into the fall than it has before.



How can we prepare?

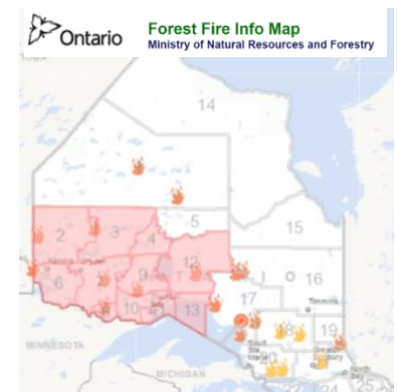
Community emergency plan

Having a community emergency plan is critical in order to be prepared for a wildfire, but community members must be aware of and have access to this information in order for it to be useful. A community emergency plan should outline:

- An emergency meeting place.
- List of contacts within the community.
- List of who is responsible for a given task, such as ensuring hazardous materials like fuel tanks are protected and who can act as a back-up if those individuals are unavailable.
- Inventory of the fire suppression equipment and a continually updated supply inspection log.
- Information on the location of sprinklers, power pumps, hose lines, fire alarms, and 2-way valves for splitting a single water supply within each community to protect valuables.
- An outline of hazard zones that exist around the community.

Monitor fire risk and smoke

Hot, dry conditions can make fires more likely to start and spread. Communities can monitor the fire hazard risk for their area with tools like Ontario's Forest Fire Info Map (<https://www.ontario.ca/page/forest-fires>). When fire risk is high, communities may want to restrict or ban outdoor burning, like campfires and encourage to butt out cigarettes before throwing them into the trash. Information on safe fire practices could also be shared with the community to lower the risk of human-caused fires. Communities may also wish to monitor for smoke and air quality. (<https://firesmoke.ca/forecasts/current/>)



Vegetation management

Managing the trees and plants near a community and your home can help reduce risk. Vegetation management will differ the closer you are to a building (priority zone). No vegetation should be within 1.5m (5ft) of a building. As you move away from the building, more and more vegetation can be left intact. Forest stands near the community can be thinned to reduce the spread of fire into a community. This preventative work can employ local people and provide firewood for community members.



Buffer zones & fireguards

Fireguards act as barriers to potential fires, they can be made by digging a trench down to the mineral soil around the perimeter of the community and clearing fuel sources, like trees, on either side of the trench. Encouraging less flammable deciduous trees like birch, poplar, or maples can reduce the risk of fire spreading toward the community.



Fireguards act as barriers to potential fires. Photo from www.livefiresmart.ca/community

Building with fire in mind

Changing how homes and buildings are constructed can make them more resistant to damage from wildfires. For example, roofing materials like asphalt, metal, or slate, are good choices for fire resistance. Fire resistant materials for siding include stucco, metal siding, brick, or concrete.

FireSmart Canada has many helpful resources and programs on how to reduce fire risk including vegetation and building management.

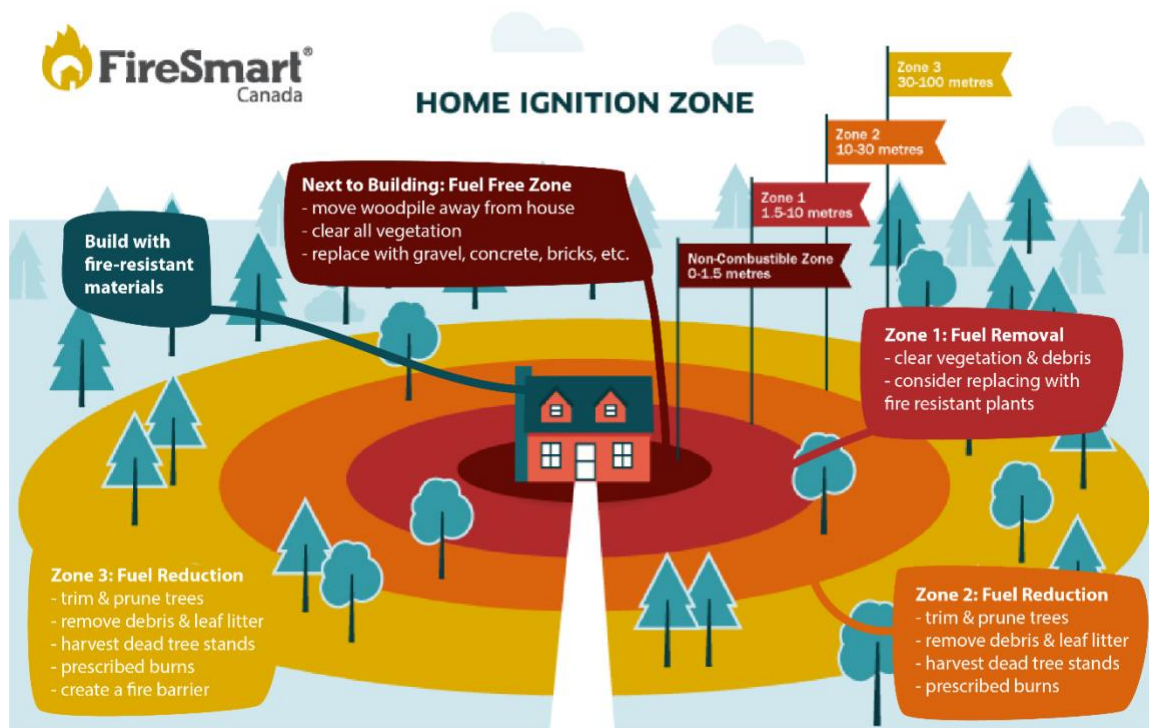


Image modified from FireSmart Canada's original image: <https://firesmartcanada.ca/wp-content/uploads/2018/10/FireSmart->

Fighting fire with fire

The Boreal forest is naturally shaped by fire. Lightning starts small regular fires that clear away dead material reducing fuel available for large damaging wildfires that can be especially risky for communities. This is the reason that fires that are not at risk of reaching a community, are left to burn themselves out. In many regions, controlled burns are set by government agencies to mimic the natural fire cycle. Clearing sections of the forest through controlled and prescribed burns were performed at nine First Nation communities across Ontario in 2017 to help reduce risk to those communities.

Fire risk is increasing because of climate change. Communities can prepare by having an emergency plan, monitoring the risk, and managing the land to reduce the risk.

For more information <https://firesmartcanada.ca/programs-and-education/>

