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Help Clients to Protect their Homes from the Growing Threat of Wildfire

Canadians treasure living next to our sun-dappled forests and swaying grasslands. In fact, 1/3 of all residents have chosen to live within a few km of wilderness areas. The zone where wilderness meets communities is known as the wildland urban interface or WUI. Although these locations are considered highly desirable for many reasons, special precautions must be taken to co-exist safely with the “wild neighbours.”

Actions such as safely storing garbage to reduce the likelihood of nuisance bear behaviour, for example, are heavily promoted by local governments and carefully practiced by residents. Unfortunately practical actions that address a far greater danger to public safety, the growing threat of wildfires, are not as widely promoted or practiced.

The Growing Threat of Wildfires

Roughly half of all wildfires are caused by human activity in the WUI. As we expand our communities into these areas, the number of human-caused wildfires and their associated financial, social and environmental impacts continue to rise. Coupled with longer wildfire seasons brought about by climate change-induced hotter, drier weather,

it is estimated the current average of 2.5 million hectares burned per year could double by the end of the century.

In May, 2016, Canada experienced its costliest natural disaster when a large WUI wildfire burned almost 600,000 hectares in northern Alberta, resulting in the evacuation of 80,000 residents from Fort McMurray and halting production of the Oil Sands. Insured losses totaled \$3.5 Billion, while uninsured losses, covered by residents, businesses and governments, were estimated to have totaled an additional \$6 Billion.

Climate scientists and wildfire experts alike warn that the catastrophic negative impacts associated with WUI wildfires are certain to continue to rise if immediate action is not taken to help communities safely co-exist with wildfire.

The Bad News and the Good News

The bad news is that burning embers from wildfires can float through the air for an estimated 2km and that 90% of all homes destroyed by wildfires are ignited when these embers land on the home or on flammable materials within 100m of the home (known as the home ignition zone). The good news is that installing fire-rated roofing and removing combustible materials from within 10m of the home enables 90% to survive a major wildfire.

FireSmart Resources to Help Clients Protect Homes

Since 2012 FireSmart Canada, a national not-for-profit organization, has maintained a mandate to help communities co-exist with wildfire, recognizing the need to balance its natural ecosystem benefits with the need to minimize damage and disruption to populated areas. A variety of free home protection resources, hazard self-assessment tools, best practice manuals and self-help videos, may be shared with clients to help them apply FireSmart best practices when they are re-building after wildfire damage, building a home in a new location, renovating or doing seasonal maintenance chores.

Educational resources focus on helping people reduce the likelihood that embers will ignite the home and materials within the 100m “home ignition zone.” Since many homes are built closely together, neighbours are encouraged to work together to reduce their shared risks.

Sharing Three Steps to Cost-Effective Home Wildfire Protection with clients is a great way to help them begin their home wildfire protection journey. This document highlights low cost maintenance tips that clients can apply today and medium to high cost tips they can integrate into their renovation plans.

FireSmart best practices include:

- Regularly removing debris from eaves troughs, roof surfaces, decks and vents
- Keeping grass mowed to 10cm or less
- Removing all combustible ground cover (mulch and plants) within 1.5 m of the home
- Removing flammable vegetation (e.g. evergreen trees and shrubs) from within 10m of the home
- Storing combustible items such as firewood at least 10m away from the home
- Using fire-rated roofing (e.g. composite shingles, metal roofs) and non-combustible siding (e.g. cement fireboard, stucco) when building and renovating homes

Helping Clients to Become FireSmart


Sharing FireSmart educational resources and highlighting available municipal incentives and insurance discounts for making homes FireSmart, will encourage clients to take action to protect their homes and families from the growing threat of wildfires. Encouraging clients to share educational resources with neighbours and to take preventative action at the neighbourhood scale will empower communities to co-exist safely with their “wild neighbours.”

THREE STEPS TO COST-EFFECTIVE WILDFIRE HOME PROTECTION

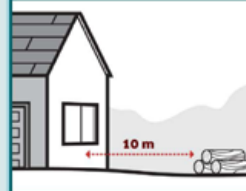
Complete these 3 steps to reduce the risk of a wildfire spreading to your home. For items listed under step 3 check with your municipality about any permit requirements and the availability of subsidies. Give decks, sheds and outbuildings within 10 m of your home the same FireSmart consideration as you do your home.

STEP 1: MAINTAIN WHAT YOU'VE GOT AT LEAST TWICE PER YEAR

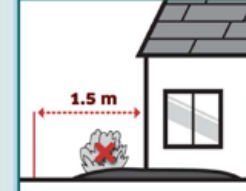
\$0 - \$300




Remove needles, leaves and other debris from gutters, roof surfaces, decks and balconies. Regularly clean vents.



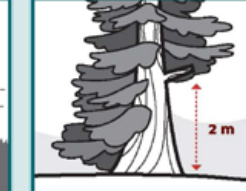
Remove combustible materials (firewood and lumber) stored within 10 m of the house perimeter and under decks.



Remove all combustible ground cover (mulch and plants) within 1.5 m of the house perimeter.



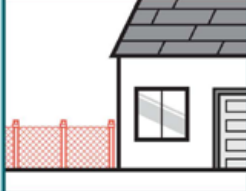
Mow the lawn to <10 cm and plant low-growing, well-spaced shrubs and other vegetation.




Prune evergreen trees to create a 2 m clearance from the ground to the lowest tree branches.

STEP 2: COMPLETE SIMPLE UPGRADES

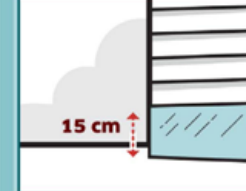
\$300 - \$3,000



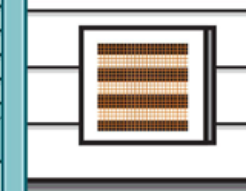
Install non-combustible fencing within 1.5m of the house (cement fibre, metal, chain link or stone).




Install non-combustible ground surfaces within 1.5 m of the house (mineral soil, rock, concrete or stone).



Create a 15 cm ground-to-siding non-combustible clearance (e.g., install cement board or metal skirting).




Add a non-combustible 3 mm screen to all external vents, except dryer vents.




Replace worn or missing weather stripping on all doors, including garage doors.

STEP 3: COMPLETE MORE COMPLEX UPGRADES


\$3,000 - \$30,000



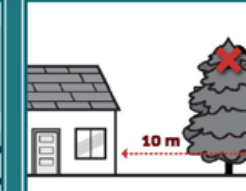
Install Class A fire-resistant roof covering (e.g., cement fibre, metal or asphalt shingles).



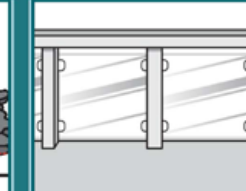
Install non-combustible siding (stucco, metal, stone, cement fibre board).



Install multi-pane or tempered glass windows and exterior fire-rated doors.



Remove evergreen trees that are within 10 m of the house.



Retrofit all deck components to be fire-rated, with a continuous surface.

NOTE: Not all actions will be applicable to each home. Completing these steps does not guarantee the prevention of fire.
 • Cost estimates are based on a 2,500 sq ft home.