



Get to know your Zones

The foundation of FireSmart mitigation is the “Priority Zone System” which means that focusing efforts starting from the home and working outwards (Zone 1-3) will yield the best fire mitigation improvements.

Forest ecosystems in coastal BC allow for a unique approach to treating the Zone 2 areas around our homes. Dense coastal forests, if untreated, are prone to vigorous fires and even crown fires can occur when high fuel accumulations or steep slopes are present. Fortunately our forests are less prone to catastrophic crown fires than in other parts of our province. More good news is that we can make simple improvements within the forest to further reduce its volatility. By reducing surface and ladder fuels we can eliminate the potential for fire to travel from the ground up into the tree canopies. Combining this with the shade created by our large coastal trees will help maintain forest moisture levels. Implementing these FireSmart practices results in reduced fire potential by decreasing intensity, spread rates, thrown embers, and increases our firefighting effectiveness. We can eliminate the risk of hard to control crown fires if we FireSmart our forests.

This same principle also explains why slash fires can be very challenging to control. Slash areas in the summer exposed to direct sunlight become very dry, and are typically loaded with small diameter branches and other fast burning fine fuels such as needles, twigs, etc.



FireSmart

COASTAL HOMES AND PROPERTIES

Learn to take action on your property and reduce the risk of wildfire damage.

Photo: BC Wildfire Service

Wildfire evacuations can happen, and our best option is to implement FireSmart principles to our homes and yards to increase the probability of returning to intact homes.

 **Do you have a plan in case of an evacuation?** Check out the FireSmart evacuation checklist and other information on the FireSmart website at [FiresmartCanada.com](https://firesmartcanada.com)
For local evacuation info visit qathet.ca or call the qRD at **604-485-2260**

 FireSmart BC and FireSmart Canada both have great Facebook pages to follow!

For more information contact the qathet Regional District’s FireSmart coordinator at: Firesmart@qathet.ca or call **604-485-2260**



Why a Coast specific brochure?

Our coastal forest environment has experienced wildfires for millennia and they are a natural part of wildland ecosystems. Without wildfire, the landscape loses its diversity – fire recycles nutrients, helps plants reproduce and create a mosaic of vegetation that provides habitat for a variety of wildlife. By choosing to extend communities into forested areas, we become more exposed to the danger of wildfire, however, it is possible to reduce potential wildfire impacts on our homes by following some basic principles.

FireSmart principles are based on research into wildfire behaviour to answer why wildfires cause the destruction of one house while the adjacent home is unscathed. This research has determined that 90% of homes and buildings damaged or destroyed during a wildfire is caused by embers and not the main fire front. The resulting FireSmart principles have time and time again shown it is possible to mitigate losses.

The recommendations in this brochure build on the FireSmart foundation and add strategies specifically relevant to our coastal ecosystem.

 **FIRESMART IS A SHARED RESPONSIBILITY.** As residents living in a fire-prone ecosystem it is essential to take steps to protect our families, properties, and communities from wildfire.

Working together as a neighbourhood and implementing FireSmart strategies could help transform homes and properties into a firebreak, protecting ourselves and others from spreading wildfire.

Starting from the home and working your way outwards will offer the best resiliency rewards for you efforts.



This brochure aims to help you understand the steps and principles of wildfire hazard mitigation in our coastal BC ecosystem.

This guide emphasizes FireSmart priorities specific to coastal forests in Zone 2. For more detailed information on Home and Zone 1 minimum standards visit the FireSmart homeowners manual from firesmartbc.ca.

Home (1a) Minimum Standards

- Ensure that exterior wall coverings are noncombustible and not susceptible to melting. Concrete, fibre-cement board, stucco and masonry are all recommended materials
- Noncombustible roof that is in good repair and free of combustible debris build up
- A minimum 1.5 metre noncombustible surface should extend around the entire home
- 15 centimetres of ground-to-siding noncombustible clearance
- Multi-panel or tempered glass windows with screening
- Garage and entrance doors that are properly fitted and well maintained
- Noncombustible vents with 3 millimetre screening or fire rated vents
- Gutters and downspouts constructed of noncombustible materials and kept clean. Ensure metal drip edge is in place as part of the roof assembly
- Fire rated composite decking material that is sheathed with noncombustible material, such as fibre cement board or metal screening
- Noncombustible fencing materials such as, metal, chain link, metal privacy slats, concrete stone or masonry

Zone 1a
0-1.5 metres

Zone 1
1.5-10 metres

Zone 2
10-30 metres

Zone 3
30-100 metres

Zone 1 Minimum Standards

- Plant a low density of fire-resistant plants and shrubs. Avoid having any woody debris, including mulch, as it provides potential places for fires to start
- Store items such as firewood piles, construction materials, patio furniture, tools and decorative pieces at least 10 metres from home and locate any outbuildings in Zone 2
- Maintain grass to a maximum of 10 centimetres in height
- Irrigate vegetation and grass in this zone



FIRE RESISTANT PLANT CHARACTERISTICS:

Deciduous plants. eg: alder, maple and dogwood trees with watery sap

Moist supple foliage. eg: ferns, green grass

Minimal deadfall. Does not produce much fine, dry, dead accumulations. eg: laurel, boxwood and oregon grape

FLAMMABLE PLANT CHARACTERISTICS:

High sap or resin content. eg: pine or fir trees with thick, aromatic, sticky sap

Needles or foliage containing oils and resins, often aromatic. eg: Cedar, juniper and scotch broom

Loose, papery, flaky, bark or stems. eg: pampas grass

Zone 2-3 Minimum Standards

Historically, before fire suppression, fires would go unchecked and burn off fine surface fuels and ladder fuels while leaving large healthy trees alive. This helped prevent accumulations that could cause more severe fire behaviour. We cannot let fires burn unchecked near populated areas due to the risk to homes, lives and infrastructure, therefore it falls to all of us to replicate this natural process by other means.

The following guidelines will help you create a stand of forest that also serves as a form of fuel break.

If you have **forested land**, you can further improve its resiliency by applying FireSmart principles to create a Shaded Fuel Break. The goal here is to promote canopy closure and increase the gap between surface and over story fuels.

- Leave all healthy deciduous trees and shrubs. Although not deciduous, live salal bushes and arbutus trees are considered fire resistant and can be retained
- Remove understory conifers under 6" in diameter. Where spacing allows, consider leaving the occasional conifer in the understory to promote future crown closure
- On conifer trees, remove all branches to a height of 3 metres above the ground (maximum of 1/3 the height of the tree)
- Remove surface fine fuels under 6". Any logs retained should be bucked so that they lay flat and in contact with the ground

Untreated forest

Treated forest

If you have recently **cleared land** such as slash, some mitigation is strongly recommended since this can be our region's most volatile fuel type.

- Remove fine fuels
- Choose to replant with deciduous trees or other fire resistant plants
- Converting this area from slash or brambles into grazed pasture, managed field or lawn will reduce a fire's intensity
- Limb remaining conifers to 3 meters above the ground (maximum 1/3 the height of the tree)



DEFINITIONS:

Fine Fuels - Twigs, branches, tall dry grass and logs and lumber that are 6" in diameter or smaller. These fuels ignite more readily and burn faster, thus are more likely to contribute to increased fire spread rates.

Ladder Fuels - Typically these are limbs on conifers or entire coniferous saplings if they are in the understory. In coastal BC, the reason fire climbs up into the tree canopy is because branches act as a ladder for the fire to climb up into the canopy.