

A misty forest scene with tall trees and a mossy ground. The text is overlaid on the left side of the image.

FIRESMART & Forest Management

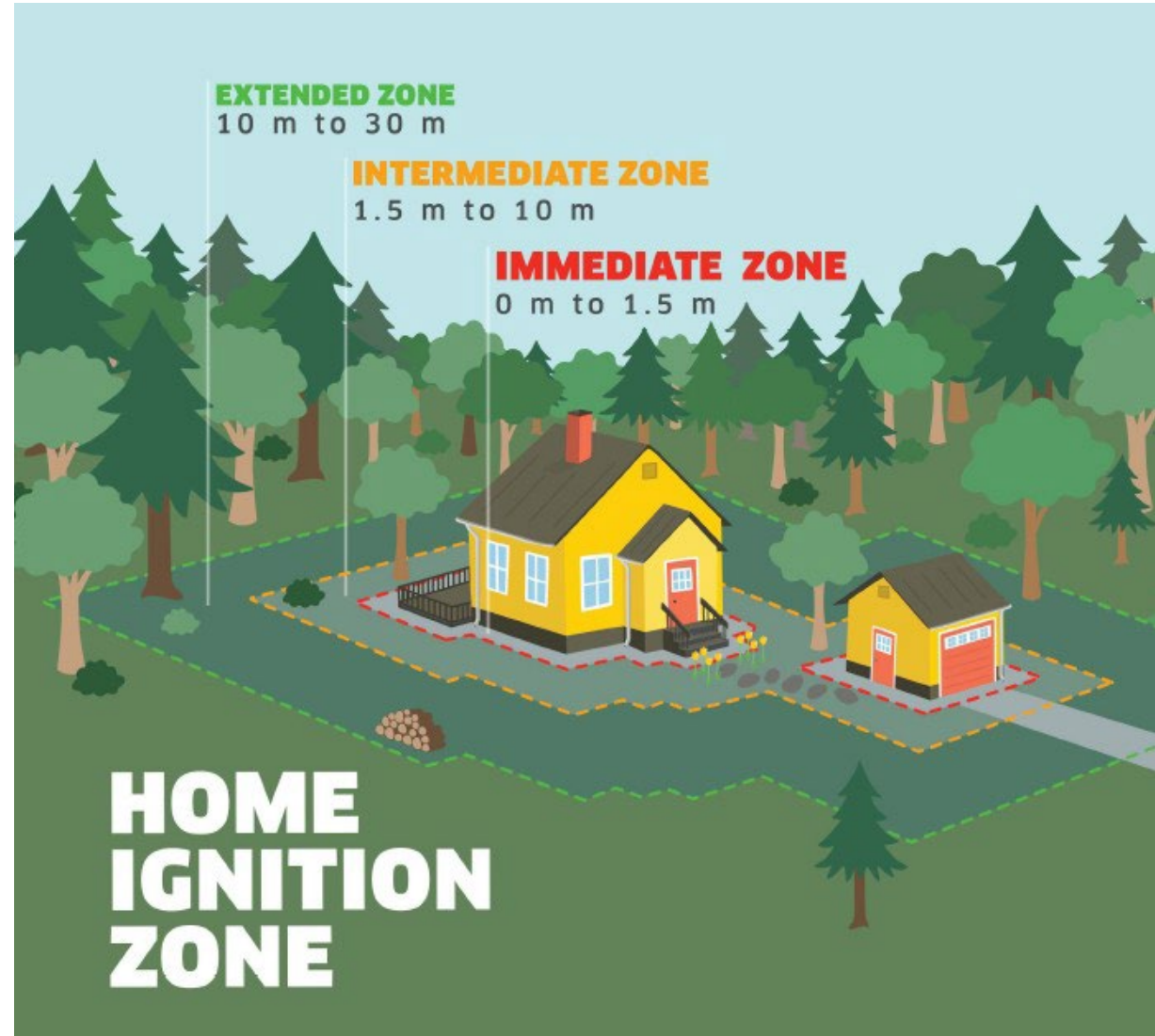
NOVA SCOTIA 2026

FireSmart Canada

FireSmart™ Canada is a national program that helps Canadians increase neighbourhood resilience to wildfire and minimize its negative impacts. It was founded in 1993 to address common concerns about wildfire in the wildland urban interface.

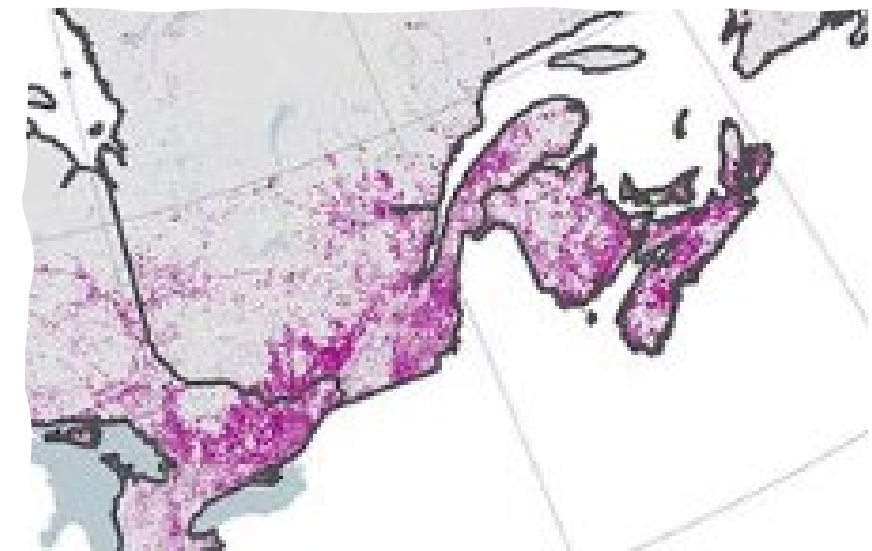
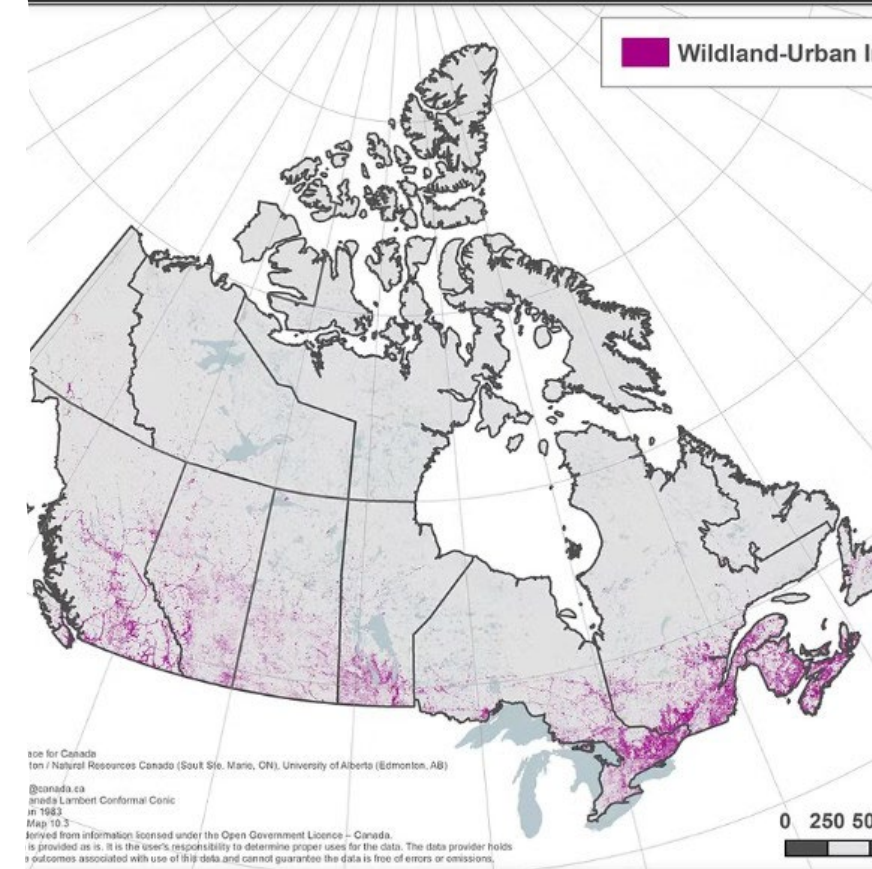
Each Province and Territory in Canada have adopted the National FireSmart program and works collaboratively with FireSmart Canada to promote and administer the programs offered through FireSmart Canada

The FireSmart program is mainly focused on mitigation work around the home or any structure, but looking at the steps to take in the extended zone, Forest Management can be included to help with Wildfire protection



WILDLAND URBAN INTERFACE

- Nova Scotia is a rural province
- ~ 70% of the province is privately owned
- Small communities and stand-alone acreages
- Scale or size compared to population
- Wildland timber type and composition



Considerations for community resilience to Wildfire

- Human intervention has altered the natural Fire Regime by suppression efforts
- Instead of having more less intense wildfire we are seeing less more intense wildfires
- Communities have expanded into the surrounding natural area exposing structures to wildland fuels
- Natural occurrences like Hurricanes, winter storms and floods have contributed to wildland fuel loads

What is the Wildland Urban Interface (WUI)?

The wildland urban interface is typically described as the area where human development meets or intermingles with the natural environment. Over time, our communities and lifestyles increasingly extend further into forested areas and as such, we find interface communities all over Canada, in both remote rural locations and in urban centers. When we live, work and play in WUI zones, we become more exposed to the danger of wildfire, but it is possible to live safely with this natural event.

Fuels in the WUI



WILDLAND FUELS

All vegetation (natural and cultivated)



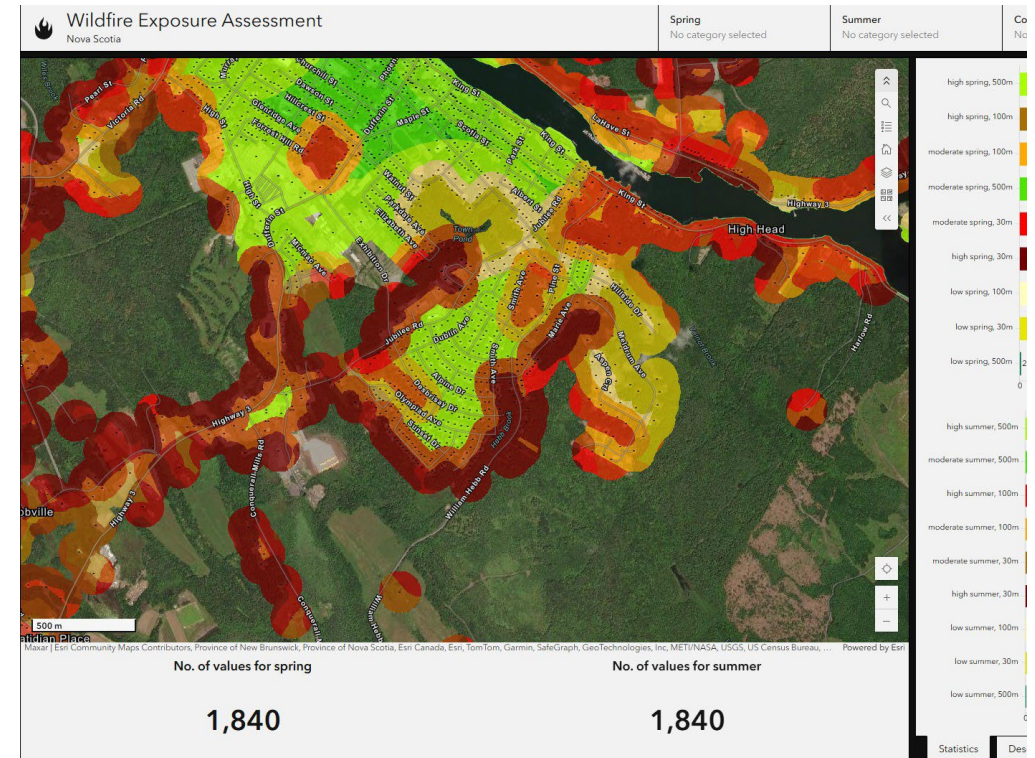
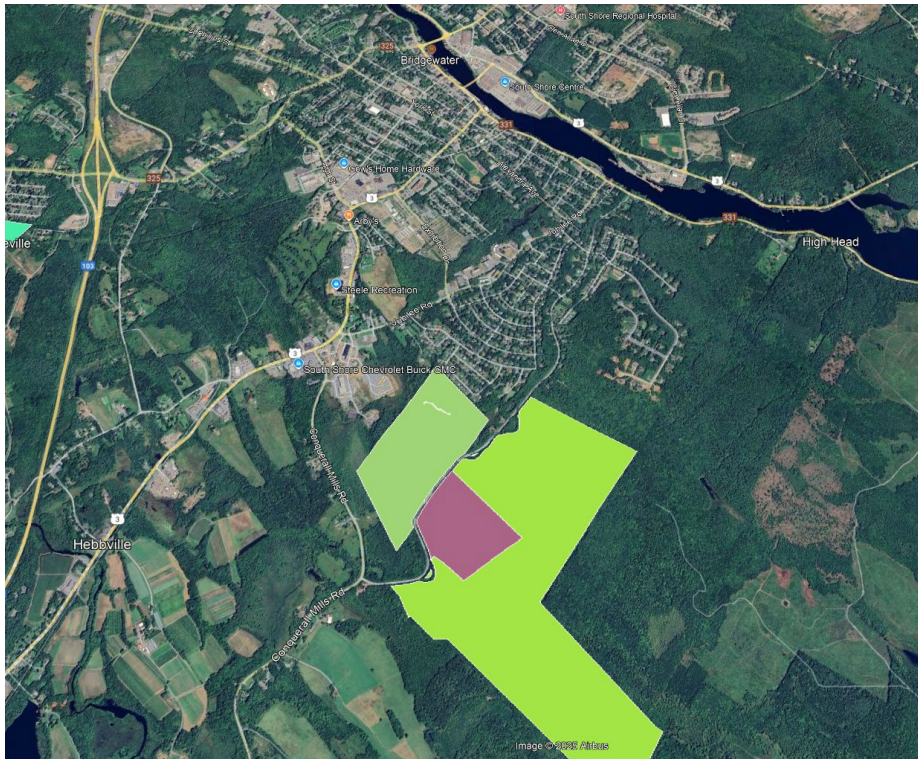
BUILT FUELS

Man-made structures (buildings and infrastructure)



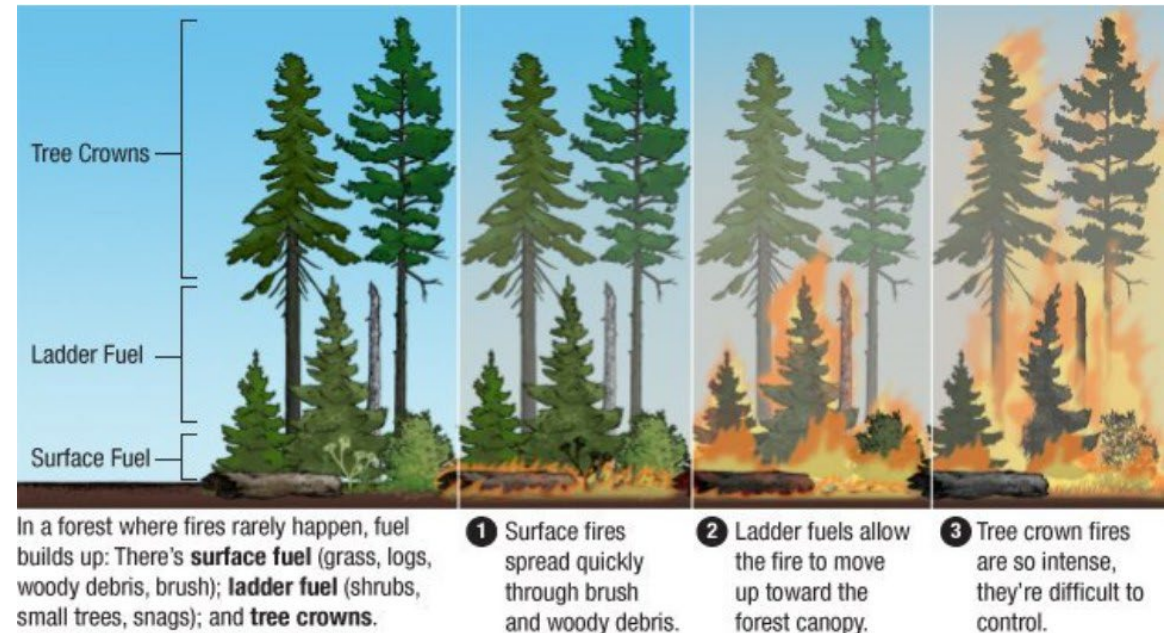
Wildland fuels and built fuels all have different burning characteristics. When combined, they create uniquely complex conditions that affect the ignition and spread of fire that are very different than the conditions created by an isolated structural or wildland fire. This is called the WUI fuel complex. By understanding the complexities of these combined fuels, along with considering the topographic and weather conditions that affect the combustibility of these fuels, we can better appreciate the unique and often overwhelming challenges that a WUI fire presents, especially when it comes to suppression attempts.

WUI and Forest Management
Management and fuel reduction prescriptions can help mitigate Wildfire damage around
communities.
Its 2-fold where fuel mitigation can protect structures and protect the assets on woodlots



FireSmart vegetation management principal

- Remove surface and ladder fuels to reduce the possibility of fire getting into the crowns
- Fire on the surface is more manageable for ground crews.
- Fire in the crowns of trees are more intense, fast moving and out of the capabilities of ground crews
- Crown fires have the most potential to transport embers long distances



Managed vs Unmanaged

- Managed forests by thinning, pruning and surface debris removal suffer minimal damage from wildfire due to lack of available surface and ladder fuels
- Unmanaged forests can suffer excessive damage and loss of not just standing timber but habitat and surface organic layer



Fuel load in unmanaged forests

- Extreme heat due to heavy fuel loads can burn all surface organics down to mineral soil
- Leaving post fire areas susceptible to flooding
- Lack of soil and seed stock needed to germinate new growth means the recovery of the forest could take many years



General FireSmart Treatment

- Remove dead and down
- Limb trees up to 2m and remove limbs
- 3m crown spacing
- On a small scale this can be done by hand
- Mechanical removal can be done with mulchers and/or harvesting equipment; quicker but more expensive



Woodlot owners/managers are already doing similar prescriptions to the land base as what FireSmart principals recommend with Silviculture practices.. Crown spacing can be accomplished but removing surface and ladder fuels would satisfy the basic FireSmart prescription

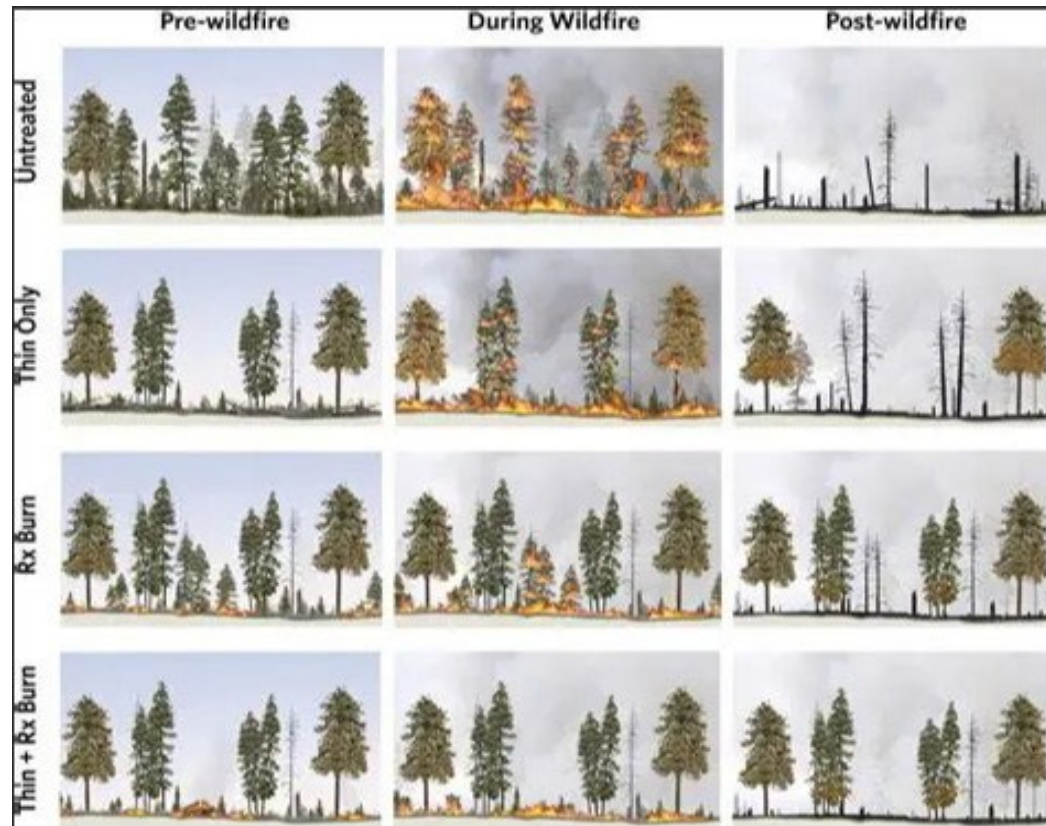
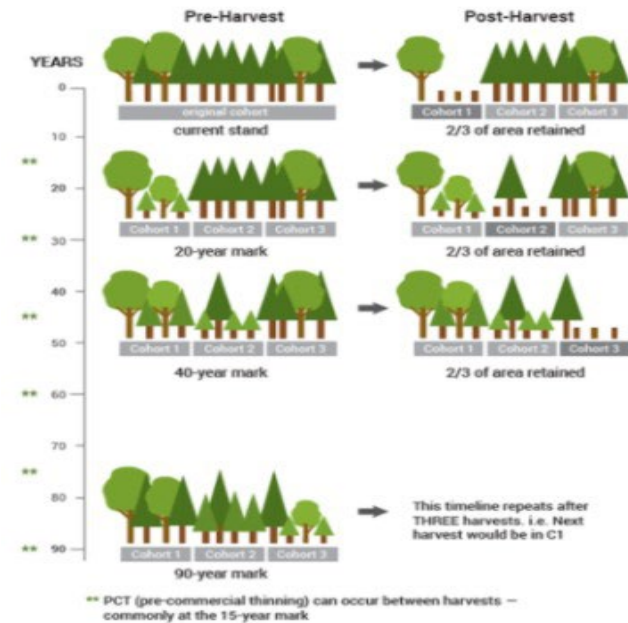
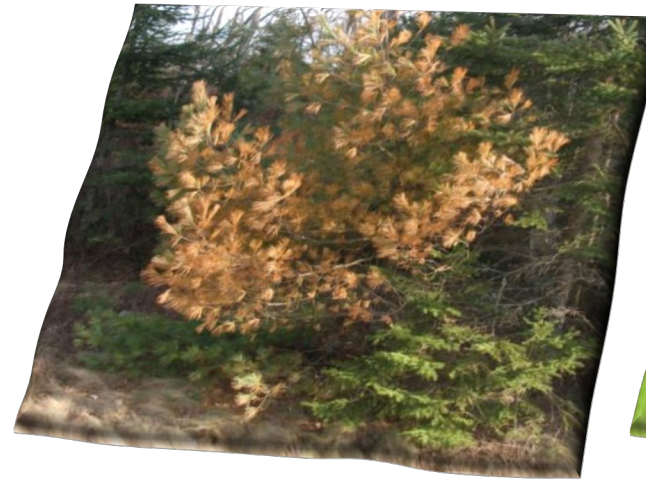


FIGURE 6
High-Retention Gap Irregular Shelterwood System

Sample of a TIMELINE for a mature even-age stand in ZONAL Acadian ecosystems
This timeline results in three cohorts after three harvests



AROUND YOUR HOME AND WOODLOT



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- Remove dead vegetation
 - Remove diseased & insect damaged vegetation
 - Remove Ladder fuels
 - Remove lower limbs
 - Thin vegetation
 - Plant fire resistive species both in landscaping and woodlot



Acadian Forest/Hardwood dominant stands
Deciduous or mixed wood stands have a better fire resiliency then conifer stands

