

Water Use, Structure Protection and FireSmart:

Structure protection sprinkler systems play an important role in the emergency response during Wildland Urban Interface (WUI) fires. These sprinkler systems are deployed by highly trained Structure Protection Specialists and first responders to protect homes and properties from ember ignition WUI fires. Structure protection sprinkler systems are most effective and work best when used on homes and properties that are already FireSmart. FireSmarting your property allows first responders to more safely and effectively protect your home and property during a WUI fire.

For more information about how to FireSmart your home and property visit:

[FireSmart Begins at Home Guide](#)

Completing all FireSmart recommendations will greatly increase a structure’s survivability without the need of any response intervention or sprinkler deployment.

How fires move across the landscape:

Factors Influencing the Spread of Wildland Fire

Dense Continuous Forests

Wildland fire can spread quickly in forests where trees are near each other. Fire spreads directly from tree to tree, and can produce sparks and embers that may travel distances of two kilometres. These embers may land on trees or homes well ahead of the fire and create multiple fire situations. It is important to be aware of the dangers of sparks and embers when creating a FireSmart property.

🔥 **Coniferous trees are highly flammable.** 🌲

🔥 **Deciduous trees are less flammable.** 🌳

Slope

Fire moves fastest uphill. The steeper the slope, the faster a wildland fire will spread. Homes on hills, or at the top of hills, face the greatest risk from wildland fire. If your home is located on a hill, consider taking extra measures, like removing trees adjacent to the slope and planting fire resistant plants. If you are planning to build a new home, consider having it set back at least 10 metres from the crest of any hill or slope, as well as the landscaping around it. Maintain a 1.5 metre non-combustible surface in the Immediate Zone, including any attachments, such as decks.

Water use for fire suppression:

If a fire is actively threatening or has reached your property, provincial legislation allows homeowners to use water to fight the fire without any permission from local or provincial governments as long as the water use ends when the fire is extinguished.

Using water to reduce the risk of a fire, or to prepare for a potential fire, in most cases requires permission from the provincial government.

For information on water use authorization requirements contact:

Front Counter BC at 1-877-855-3222 or FrontCounterBC@gov.bc.ca

Structure Protection Sprinkler System Best Practices

FireSmart BC does not recommend that individuals (residents and property owners) install their own structure protection sprinkler systems.

- Installing and effectively using structure protection sprinkler systems requires experience and technical expertise.
- Structure protection sprinkler systems are most effective when used in addition to FireSmart principles and guidelines.
- Installing your own structure protection sprinkler system can lead to uninsurable water damage to your property.

For more information on the BC Wildfire Service Structure Protection Program Visit:

[BC Wildfire Service Structure Protection Program](#)

Sprinkler Activation and Evacuations

- If you have installed a structure protection sprinkler system on your property **DO NOT** activate your system as you are evacuating. Structure Protection Specialists will activate sprinkler systems when the time is right.
- Pre-emptively activating structure protection sprinkler systems can drain reservoirs and deplete valuable water resources that first responders depend on to protect homes, neighbourhoods and communities
- Plan and prepare to evacuate during wildfire season if there are fires in your area.
- Follow official evacuation alerts and orders. Always follow the advice and direction of your local authority.

For more information on wildfire preparedness visit:

[PreparedBC Wildfire Preparedness Guide](#)

[Emergency Wildfire Preparedness Checklist](#)

Structure Protection Sprinkler Equipment

- If you have installed a structure protection sprinkler system on your property it is important to make sure all your equipment is in good working order.
- Ensure your system is compatible with standard structure protection sprinkler systems. Structure Protection Specialists utilize 5/8" econoflo™ hose with standard garden hose thread connections to supply water to sprinklers.

For more information on the standard structure protection sprinkler equipment used refer to the [Structure Protection Unit Inventory Inspection sheet](#):

- Regularly check to ensure all hoses, sprinklers and pumps are serviceable and in good working order.
- Consider that there will likely be a loss of electrical service during a WUI fire so it is important to ensure your system does not depend on electric pumps to function.