

# **Coastal Fire Centre**

hot topics in Wildfire on the Coast



**2016 ISSUE 11** 

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# **Fuel Management**

**Fuel Management** is defined as 'the planned manipulation and/or reduction for the flammability and resistance to control of living or dead fuels for forest management and other land-use objectives.' The BC Wildfire Service is proactive in fuels management projects as it is a way of reducing the hazard in areas where dangerous levels of fuels on the forest floors have built up. Priority is given in an interface area.

Once an area has been identified as being a hazard and which would benefit from a fuels management project then a plan is developed that contains one or more **fuel treatments**. A fuel treatment is 'any manipulation or removal of fuels to reduce the likelihood of ignition and/or to lessen potential damage and resistance to control'. A fuel treatment, or **prescription** may mean trimming, pruning, chipping, piling or burning, or a combination of any or all of these.

The BCWS works with the land owner/manager to determine the objectives, options to meet the objectives, timelines and costs (including staff time). Once the initial

meetings have been completed and the desired outcomes identified, it may be determined that a prescribed burn should be a part of the overall plan. It is at this point that a detailed **Prescribed Fire Burn Plan** will be developed.

A prescribed fire burn plan is an extremely detailed plan that contains: a project overview (who is involved and where), a general description of the fuels including: the slope, duff depth, soil texture, fuel loading, elevation, etc., next is the list of objectives and how they will be achieved (this section includes the weather conditions needed to achieve the desired outcome), values at risk, public communications, preburn preparations, costs and monitoring of the burn. This is a comprehensive guide that must be signed off by both the land manager/owner and the BCWS.

It should be noted that once the plan has been written, the date has been set, crews are on site—if the conditions are not favourable, or there is any risk in burning then the burn will not go ahead. The project lead will stop and the project will be postponed until more favourable conditions are available.





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Category 2 Open Fire Prohibition is still in place.

For more information or to learn when it is lifted go to: www.bcwildfire.ca

**Does Your Property Need a Fuel Treatment?** 

HOW FIRESMART TREATMENTS
INFLUENCE WILDFIRE SPREAD

DECREASE THE
DENSITY OF TREES
PRUNE LOWER BRANCHES
REMOVE COMBUSTRIBLE SURFACE MATERIALS

Assessment: The first step in developing a good plan is to gather data. Do you know how to spend your time wisely and get good results? The first thing to do is to assess your property. Go to the new FireSmart Manual for your free assessment guide.

**Plan**: Arrrgghh! There is so much to do! By determining what needs to be done and making a list the job may seem more manageable.

Do you need to clean the roof, the gutters, is there foliage that can act as a wick hanging over your home? Knowing what you are dealing with and making a plan helps make quick work of the mitigation process.

This is a good time to recruit the family in helping clear debris. If you include them in the assessment phase they may want to take part in helping with the plan.

Mitigating Your Risk: Remember always be aware what you are doing and be cautious. You don't want to be de-limbing a tree and have someone run under at an inopportune moment. Have you decided to do some chipping and are renting a machine—it may not be as simple as you think. Have the rental company go over the instructions with you and ask any questions. Our crews have safety briefings to cover off any instructions they require to do a job safely.

Influencing Others: It is in your best interest to influence your neighbours. Take the opportunity to discuss FireSmart with your neighbours when, and as, you are able. Having others FireSmart their properties will only serve to help protect you and others in your community. How close are you to your neighbours? Can you make a day of helping one another? Become a FireSmart Community.

**Details**: Look for more opportunities to be safe? Did you know that certain plants are more flammable than others? Junipers, for example, have a high resin content and are extremely flammable. The same holds true for Holly. The FireSmart site carries a good guide on vegetation in addition to the FireSmart Manual.

**Share**: If you are planning to FireSmart your home, business or place of work—please Share! Take photos of the Before and After and post them. By sharing you may inspire others to do the same.

Link to the FireSmart Manual:

http://www2.gov.bc.ca/assets/gov/farming-naturalresources-and-industry/forestry/wildfire-management/ prevention/prevention-home-community/ bcws homeowner firesmart manual.pdf

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ZONE 1	HOME / YARD - 10 metres	ZONE 2	10–30 metres	ZONE 3	30–100 metres
This should be a fire-resistant zone, free of all materials that could easily ignite from a wildfire.			Thin and prune coniferous trees to reduce hazards in this area. Regularly clean up accumulations of fallen branches, dry grass and needles from the ground to eliminate potential surface fuels.	Look for opportunities to create a fire break by creating space between trees and other potentially flammable vegetation. Thinning and pruning is effective here as well. These actions will help reduce the intensity of a wildfire.	

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For current venting go to:
 <a href="http://www.bcairquality.ca/readings/ventilation-index.html">http://www.bcairquality.ca/readings/ventilation-index.html</a>

To conduct a Category 3 Fire a Registration Number is Required.

Open Fire Registration

1-888-797-1717

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### **Venting and Smoke Mitigation**

Ventilation Index—A numerical value relating the potential of the atmosphere to disperse airborne pollutants from a stationary source, such as smoke from a prescribed fire. It is calculated by multiplying the mixing height by the average wind speed in the mixed layer. It is also called ventilation factor.

Dictionary of Natural Resource Management
Julian and Katherine Dunster

It cannot be avoided where there is fire there will be smoke. There are, however, ways of reducing the effects of smoke on those around you. Remember, hot fires that burn efficiently produce less smoke, while cooler fires or fires that are lit in wet conditions can produce copious amounts of smoke.

Make sure that what you are burning is good and dry, and by checking the venting index and burning on only those days that are listed as FAIR or GOOD. Do not burn on a windy day; and only burn when there is no prohibition in effect at your location. Always check with your local jurisdiction to make sure that burning is allowed.

The Ventilation Index is based on weather and weather can change so if you are burning and the venting is deteriorating—STOP! The number one complaint we receive in the Fall are complaints about smoke. Although we understand the importance of abating hazardous material we also understand that there are those (your neighbours) who may have health concerns.

If you plan ahead and pile the material you are planning to burn, and tarp it off in readiness for GOOD conditions, then light it when conditions are right, it will burn quickly and cleanly. If, however, the weather deteriorates, or conditions change, be prepared to extinguish the pile.

Please remember that air quality is legislated by the Ministry of Environment (MOE). If you are in an area where burning is being conducted in a manner that produces a inordinate amount of smoke should be reported to:

Report All Poachers and Polluters (RAPP) **1-888-336-7378.** 

#### **Pruning, Spacing and Thinning**

Pruning involves the removal of the lower dead and live branches on trees, often referred to as ladder fuels. This limits the ability for surface fuels to climb into the upper portion of trees and spread via the crown of the trees.

To effectively prune you must be careful not to harm the trees by stem scarring or removing too much at the crown. A good guideline is to leave at least 40% of the live crown so that the tree remains vigourous and healthy but the ability for fire to ladder is somewhat limited. The prescribed pruning height can vary depending on species and if the tree is on a slope but take a look at the FireSmart Manual for some direction.

Spacing may involve the removal of trees

from a stand. This will reduce the canopy bulk thereby reducing the opportunity for fire to move quickly and easily across the tree crowns.

Thinning is a common treatment for fire hazard reduction. This will reduce the opportunity for wildfire to spread by laddering and the separation between trees will reduce the spread from tree to tree forcing the fire to drop to the forest floor.

Spacing and thinning standards is dependent on species, diameter and height, slope, terrain and other factors. These standards can be determined with a little bit of research and in some cases (on large properties) with the assistance of a forest professional.



#### To Date in Coastal

Fires to Date

Person 135 Caused

Lighting 54 Caused

Total 189 Number of Fires

> Fire Danger Rating today



**Current Prohibitions** (within BCWS

Campfires and Category 3 are allowed in all areas of the Coastal Fire Centre's Jurisdiction.

Category 2 fires are **VOT** permitted anywhere in the Coastal Fire Centre's jurisdiction with the exceptions of the North Island-Central Coast, Haida Gwaii Forest Districts and the area known as the 'Fog Zone'.

#### **Subsurface Fires**

Fall is the time of year when homeowners often clean their yards and prepare to dispose of any woody material by burning it. It is important to understand the reason that open fire may be prohibited (even where we are receiving rain) is that there is a potential for fire to burn underground even when the surface is wet.

A subsurface fire (subterranean) is a fire that burns underground along the root system of a tree or in buried, and/or decaying material. It's a very dangerous form of fire because the fire can smoulder for months underground, long after the surface part of the fire has been extinguished.

As long as the three parts of the fire triangle are present a fire will continue to burn even if it is under the forest floor. Oxygen may still be available in pockets or in loose humus soil, radiant heat may be transferred from a fire on the top of the ground and fuel may be present in the form of a thick duff layer or decaying material.

Subsurface fires can travel underground and resurface some distance from their point of origin. These fires can be started by lightning strikes, debris burning or campfires, and forest fires.

The drought code is a useful indicator of seasonal drought effects on forest fuels, and of smoldering in deep duff layers and large logs. Drought Code can also be used to estimate the depth of burning in duff and

#### At Coastal

You may see smoke rising above the landscape across Coastal in the next few months as industry, and the BCWS works to abate hazard resulting both from harvesting and from overgrowth in many areas.

This is the time of year that the BCWS takes on projects that include: hazard reduction, habitat restoration and other forest health projects. It is important for the public to understand that abating hazard during shoulder seasons is extremely important. The alternative would be to leave forest fuels to lie on the forest floor to continue to dry becoming a hazard in the years to come.

Please have patience but if the smoke becomes detrimental to your health, if it is not venting properly, or if you do not believe that those undertaking the burn are doing so safely, you can report it. To report an unsafe burn or extreme smoke please call the RAPP line at:

buried debris such as roots or wood. For example, on one fire the Drought Code was reading 773 which means the crews can anticipate that their may be deep burning to a depth greater than 2.0 metres. This is why in the summer months, even when their has been rain, a prohibition may be put in place, or kept in place.



When you are conducting a debris burn in your yard it is

important to make sure that you are conducting the burn on mineral soil, and in an area clear of roots. You do not want the roots to act as a wick and carry the fire underground or the radiant heat to ignite the material beneath the ground.

As with any fire you must be aware of your entire surroundings. You may want to soak down the area where you will be starting your burn as an added precaution and closely monitor the fire. And most importantly—put them out!

#### Weather

Synopsis: (Friday-Sunday) Steady rain all day Friday from Haida Gwaii to southern Vancouver Island and the western sections of the mainland with a 60-70% chance of showers for interior valleys. Weak ridging along the coast Saturday Pushes the rainband back north and by Sunday rain is falling only over the Mid-coast zone.

Outlook: (Monday-Friday next week) A weak ridge is now forecast to bring a mix of sun and clouds and cool temperatures all next week with little or no chance of rainfall. Unfortunately, these longer range forecasts have been changing every 24 hours or so and at the moment little confidence in the forecast.

The Fire Centre will not be having daily weather briefings as of September 21, 2016, but will have access to forecasts as required.

1-888-336-7378.