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High Risk Activities

Regardless of whether you're an industry professional who works regularly in the forest or a member of the public who enjoys exploring the great outdoors, you are responsible for ensuring that your activities do not contribute to the ignition or spread of a wildfire.

The Wildfire Regulation defines high-risk activities and sets out requirements and restrictions related to those activities. Please ensure that you fully understand your legal obligations under the *Wildfire Act* and the Wildfire Regulation when you are engaged in any high-risk activity in (or within 300 metres of) forested or grassland areas.

If industry personnel or members of the public are planning to do any land clearing within one kilometre of grasslands or a forest, they must take measures to prevent a wildfire starting or spreading. This requirement also applies to the use of spark-producing machinery such as welders, mowers, chainsaws, grinders,

power tools or any other equipment that could strike a rock and create a spark.

To help mitigate wildfire risks, people doing this sort of work may be required to: have fire suppression systems and equipment available onsite; maintain a fire watch after operations are completed; and comply with "shutdown" regulations.

Shutdown times apply to areas where the fire danger rating has been "extreme" for more than three consecutive days. People engaged in high-risk activities should use representative weather station data for their worksite location and pay particular attention to the Fire Danger Class rating. It is also important for them to practise due diligence by regularly [taking onsite weather](#) readings and adjusting their activities accordingly.

On Page 3 of this newsletter, we have provided a list of links where you can access this information. We hope you find it useful.

Campfire Prohibitions

When the weather warms up every spring and summer holiday plans start to unfold, the same question gets asked throughout B.C.: "When will campfires be banned?"

We are approaching the time of year when a determination could be made to enact a campfire prohibition within the Coastal Fire Centre's jurisdiction. This determination is based on when fire weather indices (i.e. the numbers that represent the level of dryness on the landscape and therefore the availability of wildland fuels that could burn in a wildfire)

reach predetermined thresholds. If these numbers do not support the implementation of a campfire prohibition, it could be delayed until conditions change.

There have been years in the Coastal Fire Centre when either an entire fire season has gone by without a prohibition being enacted (e.g. 2011 and 2012) or a campfire prohibition was delayed until much later in the season (until Aug. 17 in 2016). It all depends on the conditions.

While some people find it hard to imagine camping without a campfire, others take a different view. Someone recently proposed that the government prohibit all open burning (including campfires) from June to September. The BC Wildfire Service, however, is obligated to enact prohibitions according to [Section 10](#) of the *Wildfire Act*. Decisions on whether to implement open burning prohibitions are guided by legislation, but tempered by local knowledge.



To obtain copies of the FireSmart Homeowner's Manual to share with your community go to: <https://firesmartbc.ca/resource-ordering-form/>.

Using Representative Weather Stations

Under [Section 6](#) of the Wildfire Regulation, anyone conducting high-risk activities is required to use representative weather data to determine the fire danger rating for their location. Choosing a representative weather station is not always straightforward. The easiest method is to just use the nearest weather station, but there are different scenarios for which the nearest station is not necessarily the most representative.

Aspect: Aspect refers to the direction that a slope faces. In B.C., a south aspect will generally be hotter and drier than a north aspect, due to increased exposure to direct sunlight. Choosing a station with a similar aspect is generally a good idea.

Elevation: During most weather patterns, daytime temperatures are usually cooler at higher elevations than at lower elevations, so calculated fire weather indices (including danger ratings) for a location in a valley bottom will often be higher than for a nearby mid-slope or high-elevation site. However, during certain weather patterns (like when a high-pressure ridge stalls over the area for an extended period), a “subsidence inversion” can develop. Warm and dry air from higher elevations can trap cooler and moister air at lower elevations, sometimes leading to a period lasting several days when the warmest temperatures and lowest humidity levels in the area are actually found at elevations higher than the valley bottom.

Character of recent rainfall activity: No two rainfall events are the same, especially when convective showers occur (i.e. the kind of showers that can grow to become

thunderstorms under the right conditions). Convective showers may be somewhat predictable in some areas. Much of the time, however, the amount of rainfall and the size of the area affected can vary considerably due to the complexities of wind, temperature, and humidity patterns. Highly variable rainfall amounts over short distances can reduce confidence in how representative a given weather station’s readings are. Using a manual rain gauge is a cheap and easy way to compare local rainfall amounts to those recorded at nearby automated weather stations.

It’s important to remember that any given weather station only reports conditions at that specific location. Even a small distance away, temperature, relative humidity, wind and rainfall measurements can be different. Choosing the most representative weather station to determine a danger rating can be a challenge (especially in this part of the world), so: pay attention to aspect and elevation; take and document on-site weather readings; and compare your readings to those of nearby automated weather stations. These steps can help confirm your decision about which weather station to follow, even if it’s not the closest one to your work site.

Example of a Rain Gauge



L.A.C.E.S

LACES is an acronym for a safety system used by wildland firefighters to protect themselves from being trapped by a wildfire. It was developed by American Paul Gleason in 1991, after the devastating Dude Fire killed six firefighters in Arizona in 1990.

L—Lookout(s) **A**—Anchor Point(s) **C**—Communication(s) **E**—Escape Route(s) **S**—Safety Zone(s)

The acronym reminds fire crew members of their responsibility to look out for each other (and themselves) by planning to get out of an unsafe situation prior to it occurring. While nearly all of the items listed are self-explanatory, “A” stands for “anchor point” and refers to locating “an advantageous point, usually a barrier to fire spread, from which to start or finish construction of a control line” (Merrill and Alexander 1987).

Before starting a task, firefighters will receive a briefing from their supervisor. This briefing covers firefighting objectives, strategies and tactics, but also safety. The safety topics focus on reducing exposure to hazards and increasing situational awareness. Topics that are always covered in these briefings include LACES, safe work procedures, current and expected weather and fire behaviour, known fireline hazards and (of course) a map of the area where they’re working.

The LACES system can be used by anyone working in forested areas. It reminds them to take a few minutes to think about potential hazards in the area (situational awareness) and to develop a plan to leave in a hurry if that becomes necessary.

Checklist for Forest Safety—Wildfires

Here are some of the wildfire risks that Coast Fire Centre crews consider that you also may want to consider when you're working in the forest:

- Be aware of the wildfire risk in your area and plan your work activities accordingly. For an interactive map showing current fires go to:
<https://governmentofbc.maps.arcgis.com/apps/opsdashboard/index.html#/f0ac328d88c74d07aa2ee385abe2a41b>
- Have a fire evacuation plan as part of your overall Emergency Response Plan. A wildfire evacuation planning document produced by WorkSafeBC can be found at: <https://www.worksafebc.com/en/resources/health-safety/information-sheets/wildfire-evacuation-planning?lang=en>
- Get to know and follow the requirements of the Wildfire Regulations regarding fire watch and fire equipment requirements.
<https://www2.gov.bc.ca/gov/content/safety/wildfire-status/about-bcws/governance/legislation-regulations?keyword=wildfire&keyword=act&keyword=and&keyword=wildfire&keyword=regulations>
- Stay on top of current situations, wildfire conditions can change quickly.
<https://www2.gov.bc.ca/gov/content/safety/wildfire-status/wildfire-situation/fire-danger>
- Use weather forecasts to help plan work activities especially for staff in remote locations. Strong winds and high temperatures will increase the intensity and speed of wildfires. For a drop-down list of weather stations by Fire Centre scroll down to the bottom of this page:
<https://www2.gov.bc.ca/gov/content/safety/wildfire-status/wildfire-situation/fire-danger>
- Smokey conditions can create poor air quality, watch out for air quality advisories. For information on air quality including a BC Air Quality Interactive map: <https://www2.gov.bc.ca/gov/content/safety/wildfire-status/wildfire-situation/air-quality>
- Avoid working on steep slopes or in hard-to-access areas when there is a wildfire in the area. These sites are difficult to evacuate, and the steep slopes can contribute to faster wildfire spread.
- Beware of areas with a high buildup of fuels (e.g. dead stands of trees killed by insect infestations or disease, blowdown trees and accumulations of Coastal slash). To view a Fuel Hazard Assessment and Abatement Fire Risk map, go to: <https://www2.gov.bc.ca/gov/content/safety/wildfire-status/prevention/for-industry-commercial-operators/hazard-assessment-abatement/haz-assess-abate-fire-risk?keyword=hazard>
- Look out for each other. Know which other crews are working in the area and establish a strong communication system with them. One way that wildland fire crews look out for each other by using the LACES system described on Page 2 By using these techniques, you can help promote safety among your coworkers.
- LACES is an acronym that stands for: lookout (in areas where fire may be present, assign someone to be a lookout); anchor point (locate an advantageous point, usually a barrier to fire spread, from which to start or finish construction of a control line); communication (make sure your communication system works and test it regularly); escape route (make sure you have an alternative route out of the area); and safety zone (agree on a muster point if you need to leave the area).

Know Your Zone

Please note that this contact information is for business needs and not for Fire Information.
 For information about a fire please go to the website www.bcwildfire.ca,
 Facebook page BC Forest Fire Info, or for Coastal Fire Centre Information phone 250-951-4209.

Zone	Location	Contact
Fraser	<p>The Fraser Zone has two very distinct geographic and demographic units (Fraser-Lower Mainland and Fraser-Haida Gwaii) and contains the widest range of cultural and climatic variances within the Fire Centre.</p> <p>Lower Mainland—The lower mainland portion of the Fraser Fire Zone stretches northeast from Bowen Island to Boston Bar and south to Manning Park and the international border.</p> <p>Haida Gwaii (Queen Charlotte Islands) is a 300 km long area that consists of more than 150 islands approximately 90 kilometres west of Prince Rupert. There are two main islands, Graham Island to the north and Moresby Island to the south.</p>	<p>FRASER ZONE OFFICE BCWS.ZWCOFRA@gov.bc.ca DESK: (604) 858-4742 FAX: (604) 858-4943</p>
Sunshine Coast	<p>The Sunshine Coast Fire Zone has the same administrative boundaries as the Sunshine Coast Natural Resource District, except it excludes Lasqueti Island. It is located on the mainland including numerous Gulf Islands. The zone lies within the Coast Mountains, extending from Howe Sound in the south to Bute Inlet to the north.</p>	<p>SUNSHINE COAST ZONE OFFICE / POWELL R BCWS.ZWCOSSC@gov.bc.ca DESK: (604) 485-2794 FAX: (604) 485-2798</p>
Pemberton	<p>The Pemberton Fire Zone is located on the mainland north of Vancouver, and has the same borders as the Sea to Sky Natural Resource District. The Sea to Sky highway (99) goes through the center of the zone from Lions Bay and north through the Duffy Lake.</p>	<p>PEMBERTON ZONE OFFICE (PEMBERTON) BCWS.ZWCOPEM@gov.bc.ca DESK: (604) 894-5401 FAX: (604) 894-5092</p>
North Island/ Mid Coast	<p>The North Island Mid Coast Zone is the largest geographic fire zone within the Coastal Fire Centre. The area includes all of Vancouver Island north of Fanny Bay to Cape Scott, and all islands and inlets north from Maurelle Island to Dean Channel and Princess Royal Island (north of the Bella Coola valley).</p>	<p>NORTH ISLAND/MID COAST ZONE (QUINSAM) BCWS.ZWCONIMC@gov.bc.ca DESK: (250) 286-7560 FAX: (250) 287-5103</p>
South Island	<p>The South Island Zone consists of the southern part of Vancouver Island, south of Union Bay and Tofino, which covers a diverse area and includes the following gulf islands: Denman, Hornby, Lasqueti, Gabriola, Saltspring, Galiano, Mayne, Saturna, North Pender, South Pender, Thetis, Penelakut and numerous smaller islands to the east.</p>	<p>SOUTH ISLAND ZONE (ERRINGTON) BCWS.ZWCOMISI@gov.bc.ca DESK: (250) 951-4223 FAX: (250) 248-0477</p>

To Report a Wildfire Call: 1-800-663-5555 or *5555 on your cell phone.

High Risk Activities—Determine Your Risk

Under the Wildfire Regulation ([Section 6](#)), “a person who carries out a high risk activity on or within 300 m of forest land or grass land on or after March 1 and before November 1, unless the area is snow covered, must determine the Fire Danger Class for the location of the activity”.

There are three steps to determine your obligations regarding high-risk activities:

1. Is your proposed activity considered a high-risk activity?

High-risk activities are defined in the “[Definitions](#)” section of the [Wildfire Regulation](#). Determine whether the activity you are about to undertake is one of those listed in this section. If it is, then your next step is to determine the fire danger rating in the area where you will be operating.

2. What is the fire danger rating at your proposed operating location?

Under [Section 6](#) of the Wildfire Regulation, people conducting high-risk activities are required to use representative weather data to determine the fire danger rating for their location. The source of this data could be [internal](#) (your organizations) weather stations, third parties, or the detailed fire danger ratings provided at the bottom of the [Fire Danger](#) page of the BC Wildfire Service website (<https://www2.gov.bc.ca/gov/content/safety/wildfire-status/wildfire-situation/fire-danger>). Data is available for every Ministry of Forests, Lands, Natural Resource Operations and Rural Development weather station. You can also access daily fire weather data and forecasts from the BC Wildfire Service using a BCeID. To register for a BCeID, go to www.bceid.ca

3. Based on the fire danger rating, are there currently any restrictions on high-risk activities?

Once you’ve determined that your activity is considered to be a high-risk activity and you know the fire danger rating in the area where you’ll be conducting that activity, go to Schedule 3 of the Wildfire Regulation to read about [Restrictions on High Risk Activities](#).

For more information about high-risk activities, go to: <https://www2.gov.bc.ca/gov/content/safety/wildfire-status/prevention/for-industry-commercial-operators/high-risk-activities?keyword=high&keyword=risk&keyword=activities>



Prevention Blog—Alan Berry—Senior Wildfire Officer, Prevention

Hello everyone. Let me share some statistics with you.

Between 2013 and 2018 (inclusive), 1,269 wildfires occurred within Coastal Fire Centre. Of these, 440 were lightning-caused and the remaining 65% resulted from a variety of human-related ignitions. What this tells me is that 829 fires in the centre during that period (or an average of 138 per year) were preventable.

We continue to develop and implement strategies to reduce the number of preventable wildfires, but I thought that I would discuss one cause that has been trending upward in recent years.

Firearm use is known or has been suspected to be the cause of an increasing number of wildfires, many of which occurred during the peak fire season and resulted in significant damage. Wildfires sparked by firearms use typically involve the shooter aiming at a target in logging slash or other dry forest vegetation. The Coastal Fire Centre is asking members of the public to make sure they take extra precautions wherever possible when shooting recreationally during the fire season, to avoid causing a spark in the forest.

They are also reminded that when a Category 2 open fire prohibition came into effect in the Coastal Fire Centre on May 30, 2019, the use of binary exploding targets was also restricted. Use of these materials when they are prohibited is punishable under the Wildfire Act.

As we prepare for what’s shaping up to be another dry summer, please avoid any activities that may start a wildfire. If a campfire is allowed in the area where you are, make sure that it is fully extinguished and the ashes are cold to the touch before you leave the site for any length of time.

Fires to Date Since April 1, 2019

Total 42

Lightning 1

Person 41

Number of fires since May 31, 2019

Total 9

Lightning 1

Person 8

Fire Danger Rating today



Current Prohibitions (within BCWS jurisdictional area)

Category 2 Open Fire Prohibition throughout the Coastal Fire Centre's jurisdictional area.

Campfire and Category 3 prohibitions are being considered, but not implemented yet.

Go to BCWildfire.ca for the latest information.

At Coastal

The Coastal Fire Centre has had a relatively quiet two weeks, with the most notable fire on Read Island. This fire was a lightning caused fire on a large knoll (or small mountain) in very thick forest. The fire burned as a ground fire, underneath the forest canopy, and made establishing the fire size difficult. As the smoke travelled along the ground and then appeared through the trees, the firefighters thought the fire might be 34, then 27 hectares. They were able to walk the perimeter with a GPS device, and the final mapped size is 20 hectares. The fire is being held (and therefore unlikely to grow) and 70% contained, but it will take the firefighters time to put it out. Some sections of the fire are on steep slopes with loose rock. Firefighters are transported to this fire via helicopter, as there is not ferry service available.

People on islands can often feel very vulnerable to wildfire, as they are aware of the distances and dryness of their lands. It is a good reminder that the single most important thing property owners anywhere can do is to FireSmart their homes and properties. Prior to a wildfire, please undertake an [assessment](#), and start the process of making your home more fire resilient.

The downturn in temperatures, away from the hot conditions a few days ago, is welcome, and there is a potential of precipitation in the forecast over the weekend. The weather indices (weather data that indicates the dryness of the various layers of the forest) are approaching the threshold for a campfire ban, and are being watched closely. Please stay tuned to our website (BCWildfire.ca, [Bans & Restrictions](#)) for the latest information.

Weather

ISSUED: 12:00 PDT Friday June 14 2019

SYNOPSIS: Patchy moisture, both near the surface as well as aloft, results in variable cloud throughout each zone today while an upper ridge maintains generally warm, dry, and stable conditions across the majority of the region. Elevated inflow or northwesterly winds redevelop today, although generally lower than what was seen yesterday. Inflow conditions support good recoveries in most areas & elevations again tonight as patchy low cloud likely becomes more extensive by Saturday morning. The leading edge of the next Pacific frontal system brings thickening cloud to western sections of the Mid Coast, North Island, and Haida Gwaii with rain favouring Haida Gwaii in the afternoon and overnight. For the remainder/majority of the region, Saturday should be a near

repeat of today with above seasonal temperatures and variable cloud. Good recoveries again Saturday night.
OUTLOOK: Disorganized bands of moisture associated with the remnants of a weakening frontal system should drift eastward over the region on Sunday. Expect slightly higher humidities and slightly lower temperatures than Saturday in most areas with inflow or westerly winds dominating and isolated showers favouring higher terrain and upslope areas in a westerly flow. A cooler, strengthening westerly flow aloft should gain control Monday and Tuesday bringing a mixed bag each day with variable cloud, isolated showers, and elevated inflow or westerly winds. Full recoveries each night in all zones.