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CURRENT STATISTICS

Fires to-date: 18

Hectares burned: 47

Human-caused: 12

Lightning-caused: 0

BANS AND PROHIBITIONS

Campfire: No Ban

Category 2: No prohibition

Category 3: No prohibition

Forest Use Restrictions: No Ban

[Prohibitions section of bcwildfire.ca for full details.](#)

Fire Centre Update

Prohibitions on open burning lifted

It is unusual to look at the [B.C. Wildfire Dashboard](#) or the new [B.C. Wildfire Service Mobile App](#) and see so few fires burning.

Plenty of precipitation throughout the fire centre in the past couple of weeks has resulted in low fire activity. Crews in the Northwest Fire Centre (NWFC) have not had to respond to a fire since June 4. With 18 fires and a total of 47 hectares burned, fire activity to date is significantly below average.

Prohibitions on open burning have been rescinded in the NWFC for the time being. Fire prevention specialists continue to assess conditions to determine if fire prohibitions may again be appropriate.

It is important to note that many municipal governments have their own open fire bylaws and it is important to check with local authorities before proceeding with any open fire. The [BCWS Fire Bans and Restrictions](#) webpage is a good starting point for information. Several documents on the site provide guidance for those interested in using open fire:

[Open fire regulations infographic](#) gives a quick comparison of campfires, Category 2 fires and Category 3 fires

[Backyard & Industrial Burning](#) – Category 2 open fires pamphlet

[Industrial & Resource Management Burning](#) – Category 3 and Resource Management Open Fires pamphlet

[Open Burning Practices for Farmers and Ranchers](#)

Remember to obtain the current Ventilation Index for your area by calling 1-888-281-2992 (toll-free) or visiting <http://www.env.gov.bc.ca/epd/epdpa/venting/>.

The Northwest Fire Centre encourages everyone to use fire safely and responsibly, and appreciates the public's cooperation in minimizing the risks posed by wildfire.



How Fires Burn and How Crews Respond

Three elements must be present to ignite and maintain a fire: fuel, oxygen, and heat.

1. Fuel is any organic matter in or on the ground, living or dead, that can ignite and burn. The quantity and type of fuel in the path of a fire influences how quickly a fire might spread. Forest fuels can range from dry grasses to downed trees.
2. Oxygen exists in the air we breathe and makes up 21% of the Earth's atmosphere. By depriving a fire of oxygen, it can be extinguished. Similarly, if oxygen is added to an existing fire by way of heightened wind activity, fire intensity can increase.
3. In a forest environment, heat is introduced to the equation either naturally by way of extremely hot conditions and/or lightning strikes, or via human activity.

Fire suppression is performed according to this fire triangle principle, which is that if these elements made up the sides of a triangle and you removed one side, then the triangle would collapse. Therefore, the implementation of firefighting tactics aims to remove or rather limit one of these elements so a wildfire will eventually exhaust itself.

As noted, a fire can effectively be suppressed by eliminating one or more of the three factors required to start and maintain a fire: fuel, heat and oxygen. Operational tactics are carried out according to this basic principle, thus effectively stopping a wildfire in its tracks.

The quantity and type of fuel in the path of a fire influences how quickly a fire might spread. Fuels range from cured grass, fallen leaves and small twigs to duff, roots, shrubs, stumps, tree seedlings and dead-downed rounds, just to name a few. A key tactic that is used in wildfire suppression is the removal of fuel sources. Firefighters do this by creating a fuel free which is a buffer zone between the fire and adjacent unburned fuels. The fire's size and topography, as well as the observed and predicted fire behaviour, determine the extent of fuel free necessary to be successful in restricting the spread of the fire. You may have also heard a fuel free be referred to as:

- a fireguard (any human-made control line),
- a hand guard (small trench dug by firefighters that is roughly half a metre in width and dug down to mineral soil),
- a machine guard (created using heavy equipment, such as cats, dozers or excavators, and is typically 15-30 feet in width), or
- a control line (a combination of human-made fireguard and/or natural fire barriers, such as pre-existing roads or bodies of water).



How Fires Burn and How Crews Respond Cont.

Once a control line is established, a burn operation may be conducted to remove additional unburned fuel from a fire's path. Ultimately, the goal of conducting a burn operation is to remove all available fuel between the fire perimeter and the pre-determined control line. Thus, removing fuel from a fire's path to ensure that the fire has less chance of reaching or breaching the pre-determined control lines. Before commencing a burn operation, hazards are identified, assessed and mitigated. The greatest priority is always the safety of personnel, the public, equipment, and all adjacent values.

When it comes to cooling and removing heat from a fire, water is an invaluable tool. Ground crews draw water from natural or artificial water sources to suppress wildfires, using a network of water pumps and hoses. Generally, a hoselay starts at a body of water and works its way along a pre-determined control line to deliver water to a fire's edge. In the absence of a natural water source, trucks, known as water tenders, transport water to a fire's edge where it is stored in a water bladder. A water bladder can hold 1,500-5,000 gallons of water and can be set up on any reasonably flat surface.

When road access is limited, helicopters are used to transport water. Helicopters transport water using bambi-buckets (collapsible buckets suspended below the helicopter) to fill water bladders that have been pre-established by ground crews. As can be seen in [this video](#) from August 2019, a bambi-bucket fills a water bladder at the base of a wildfire.

A wildfire can also effectively be suppressed by removing or limiting the oxygen supply to the fire. On the ground, firefighters may engage directly with a fire and use a combination of hand tools and water to snuff it out. If fire behaviour is aggressive, airtankers will support ground crews by dropping fire retardant, foam or water on or near a fire to slow down the spread of the fire. Water-soluble fire retardant is commonly used in fire suppression because of its long-lasting effects. These types of retardants contain ammonium salts, which affects the burning process of forest fuels. The release of these gaseous fuels within logs and debris cause a reaction that cools and suffocates the fire.

Implementing operational tactics that aim to remove one of the three factors required to start and maintain a fire (fuel, heat and oxygen) are the most effective way to suppress a wildfire.

How Houses Burn: FireSmart Home Ignition Points

Wildfires can quickly spread from the forest to a community, becoming what is known as an “interface fire”. In the interface, where the wilderness and urban development meet, it is crucial that home owners take the time to FireSmart their properties.

If a wildfire presents an imminent threat to structures, such as homes, BC Wildfire Service’s Structure Protection Specialists will assess the structures to determine if they are “defendable” or not. Structural Protection Units (SPUs), consisting of sprinkler systems specifically designed to defend structures, may then be deployed to the incident. These sprinklers, essentially, create a “humidity bubble” (streams of water) around the structure. The water streams moisten roofs and other surfaces on and around a structure. This application of water is also effective in extinguishing airborne sparks and embers from a wildfire.

It’s more likely that an SPU will be set up on a structure if the structure is on a property that has been “FireSmarted”. If a structure and the surrounding property looks FireSmart, it will take less time to set up the necessary sprinklers needed to cover the structure. With less time needed to deploy structural protection units on such properties, more homes can be protected in the limited time available.



Structural Protection Unit Trailer and sprinkler system deployed on a structure.

A major reason why a particular structure may not receive sprinkler protection is because FireSmart principles have not been used on the property, which increases the time to set up enough sprinklers to sufficiently protect it. These types of decisions are difficult to make and are often made quickly when a wildfire is approaching. If homeowners have prepared their property by using FireSmart principles, they have a much higher chance of receiving structural protection than a property that isn’t FireSmart.

How Houses Burn: FireSmart Home Ignition Points Cont.

Simple measures, such as focusing on the three priority zones of FireSmart, can make a significant difference to the survivability of a home and property. This includes:

Non-combustible Zone (0 to 1.5 metres from a structure or home)

- Removing combustible material down to the mineral soil in this zone.

Priority Zone 1 (1.5 metres to 10 metres from a structure or home)

- Avoid planting flammable plants in this zone, such as cedar, juniper, pine, tall grasses and spruce trees.
- Keeping lawns well-watered and mowed and clearing needles from gutters.
- Moving firewood piles, construction materials, storage sheds, and other combustible structures into Priority Zone 2.



Priority Zone 2 (10-30 metres from a structure of home)

- Measuring the distance between the outermost branches of trees to ensure a minimum of 3 metres between trees in this zone. Small coniferous trees that act as a “ladder” to allow fire to move into the treetops should also be removed from this zone.
- A surface fire can climb up into trees quickly. Remove branches within 2 metres from the ground in Priority Zone 2 will help stop surface fires from moving into treetops.
- Clean up fallen branches, dry grasses and needles from the ground to eliminate the potential surface fuels in this zone as well.

Priority Zone 3 (30-100 metres from a structure or home)

- Thin and prune coniferous trees to reduce excess vegetation and branches. This will help decrease the intensity and spread of a wildfire.
- Look for opportunities to create a fire break in this zone by creating space between trees.

More information about FireSmart is available at [FireSmartBC.ca](https://www.firesmartbc.ca) or [FireSmartCanada.ca](https://www.firesmartcanada.ca)

Getting ready for wildfire season

Training and preparation is an ongoing process

Firefighters undergo a high level of training, both in the classroom and out in the field, and are constantly refreshing and upgrading to be fully prepared for wildfire season.

In previous years, new recruits have attended a week-long boot camp, where they learn all about firefighting: techniques, pumps and water delivery systems, heavy equipment, wilderness survival, weather, and safety, among many other topics. Those who successfully complete boot camp may then be offered a position on a fire crew. This year, in keeping with the guidelines issued by the Provincial Health Officer, the B.C. Wildfire Service (BCWS) cancelled the New Recruit Boot Camp in Merritt and instead new recruits were trained locally by video, online session or in small groups.

We are fortunate in the Northwest Fire Centre (NWFC) to have a robust Junior Forest Worker Program in many communities. Over half of our new recruits this year had completed the grade 12 program, which offers a variety of fire suppression and safety courses taught by local BCWS employees. Students receive high school credits for the program, and a few will be invited to work on local BCWS crews for the summer. Graduates of the program have certifications and training necessary for many outdoor-related industries, including fire suppression. For more information about the Junior Forest Worker Program, contact your local high school.

Firefighters start throughout the spring, depending on needs and their schedules. Once on location with their crews, training and preparation begins. Crews are assembled to ensure new recruits work with more experienced firefighters for ongoing, on-the-job training. Additionally, crews are supervised, trained and supported by still more experienced staff working out of fire zone offices and specialists from regional fire centres.



Crews in the Nadina Fire Zone practice building helipads during the summer of 2019.

When not responding to fires, crews do other activities to train, maintain skills and contribute to their communities. Along with drills and practice scenarios, crews conduct prescribed burns, for example, to lessen wildfire risk while providing valuable on-the-ground experience, and clear community trails for outdoor recreationists while getting chainsaw practice. All of this ensures crews are trained and ready to respond when needed.

Contact Information

Report a Wildfire: *5555 on a cell or 1-800-663-5555

Wildfire Information Line: 1-888-3FOREST

Northwest Fire Centre Reception: 250-847-6600

NWFC Information Officer:

Phone: 250-847-6639

Email: BCWS.NWFCInformationOfficer@gov.bc.ca