



BRITISH COLUMBIA SEASONAL OUTLOOK

As of June 19, 2020

Season summary to date

The 2020 wildfire season began with drier-than-normal conditions. In April, fires spread quickly through valley bottoms where light fuels, such as grasses, dried out quickly due to dry winds and low humidity. These fires were successfully contained to a small size due to actions of response crews and a high level of underlying moisture content from snow melt, periodic rain and freshet. Periodic rain also helped to keep the number of ignitions low in April, May and the first half of June.

How do rainfall patterns influence the wildfire season in B.C.?

Rainfall patterns during the spring and summer months have a significant influence on the severity of the wildfire season in B.C. In the spring, as snow melts, light surface fuels tend to dry quickly. So, despite cooler conditions and some influence from spring freshet, fires in pine needles and grasses can travel quickly under strong, dry winds. If rainfall is received periodically throughout the spring and into June, larger fuels, requiring longer drying periods, are much less likely to ignite limiting fires to mostly fine fuels.

How does rainfall influence lightning-caused starts?

If lightning is accompanied by rain, ignitions are significantly less likely. This is evident when comparing the 2018 and 2019 wildfire seasons. In July 2019, B.C. experienced 160,000 more lightning strikes than in July 2018. However, the 2019 wildfire season had well below the long-term average number of ignitions while the 2018 wildfire season was a record-setting year with many dry lightning ignitions. There have been 19,171 lightning strikes across the province between June 1 and 19, 2020, resulting in only five lightning starts.

What does this mean for the remainder of the wildfire season?

B.C. remains in a weather pattern that is producing periodic rainfall and, therefore, limited fire starts can be expected. However, the remainder of the wildfire season in B.C. will be highly dependent on local weather patterns, length of drying periods and wind events. Current suppression tactics are expected to remain successful to holding most wildfires to a small size, as a result of rainfall, which has influenced fuels, as discussed above. The frequency of rain, rather than the amount, will be more important later in summer to help keep wildfires to a small size.

As discussed in the [June 5, 2020 Season Outlook](#), the wet weather patterns that we have been experiencing are difficult to predict, as they are unstable in nature. Weather models currently show variability as to whether B.C. will continue to have patchy rainfall across the province or if B.C. will move into a drying phase. If B.C. enters a sustained drying period, deep fuel layers will begin to dry out. If B.C. experiences successive drying periods without widespread periodic rainfall, there will be a rise in wildfire behaviour potential.

What can British Columbians do to help prevent wildfires?

With periods of warm and dry conditions forecast in some areas of the province, there is still potential for forest fuels and grasslands to intermittently dry out. Everyone who plans to spend time outdoors in the coming weeks is encouraged to use caution with any activity that could potentially spark a wildfire. Poorly managed and abandoned campfires result in numerous wildfires each year. If you plan to have a campfire, be sure to check current campfire restrictions for the area you are in and review BC Wildfire Service's [campfire regulations poster](#) before heading out.

2020 wildfire season statistics – as of June 19, 2020				
168 wildfires		662 hectares burnt		
Average number of wildfires to date – as of June 19, 2020				
5 year	10 year	15 year	20 year	25 year
328	287	347	357	365
Average area burnt to date (hectares) – as of June 19, 2020				
5 year	10 year	15 year	20 year	25 year
40,459	22,762	21,012	16,726	14,500





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How does the BC Wildfire Service estimate fuel dryness across the province?

The BC Wildfire Service uses the [Canadian Forest Fire Danger Rating System](#) (CFFDRS) to predict how weather will influence forest fuels and fire behaviour. The [Fire Weather Index System](#), a component of the CFFDRS, is used to assess how dry vegetation is within the landscape and so infers potential fire intensity. The Fire Weather Index dataset is based on daily observations of temperature, relative humidity, wind speed and 24-hour precipitation. This index, along with Fire Behaviour Prediction models, helps to predict fire behaviour parameters such as rate of spread, fire intensity and fire size. The Fire Weather Index has six standard components that provide numeric ratings of relative potential for wildland fire. The BC Wildfire Service uses all six components to assess ignition and fire behaviour potential.

How does fuel dryness affect fire behaviour?

The [Buildup Index \(BUI\)](#), one of the six standard components, is a numeric rating of the total amount of fuel available for combustion on the landscape. The BUI takes into account the moisture content of medium to large-sized woody materials, as well as seasonal drought effects on forest fuels. It helps to determine how volatile forest fuels are, how intensely and deeply they will burn and how difficult it might be to suppress a fire in a given fuel type. As the amount of fuel available for combustion on the landscape increases, fire behaviour becomes increasingly more volatile and, as a result, makes it increasingly more difficult for crews to successfully contain a wildfire.

Figures 1 and 2 illustrate the BUI rating across the province as of June 18, 2020 and June 18, 2019. When comparing these two maps, it is evident that the spring of 2019 was dryer than in 2020 and that recent rainfall has significantly moderated fuel dryness across the province. A BUI value greater than 140 in southern B.C. and greater than 80 in northern B.C. indicates that fuels are at or near a dry enough condition to sustain a persistent, deep-burning wildfire.

Figure 1. BUI map of B.C. as of July 18, 2020.

Figure 2. BUI map of B.C. as of July 18, 2019.

