WILDFIRE Seasonal Outlook

BC Wildfire Service

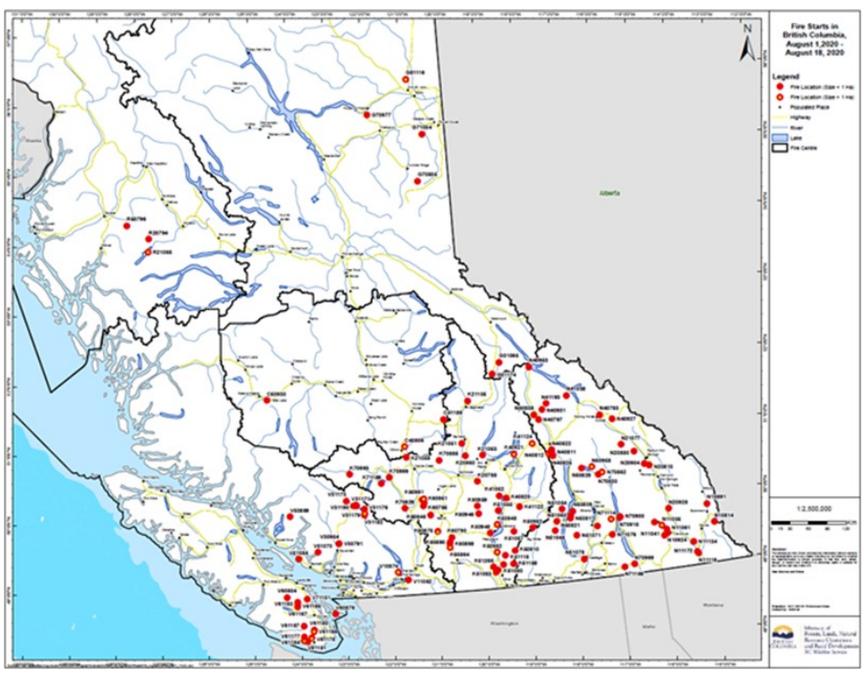
MID-MONTH UPDATE | Aug 21, 2020

FIRE SEASON SUMMARY

The first half of August saw hot and dry conditions across the southern half of British Columbia. These conditions dried out fuels, increased wildfire risk and supported the ignition and development of lightning-caused wildfires. A lightning event moved across the province on August 16th and 17th, bringing little to no rain with it. The result of this event sparked 91 wildfires throughout the Coastal, Kamloops and Southeast fire centres.

Since August 1st, there have been 269 new wildfires, bringing the yearly total to 541. Of the new fires, 171 of them were lightning-caused, 49 have grown over one hectare and three are Wildfires of Note. The growth of these wildfires is attributed to steep terrain, high winds and the wildfires burning in open fuel types, such as grasses, making them difficult to contain. However, most fires which started in the beginning of August burned with relatively low intensities, allowing for a greater initial attack success.

The northern half of the province is still experiencing a slower-than-normal fire season with very few starts in the last 20 days. The map below displays the number of fire starts in B.C. from August 1st to 18th.



REST OF THIS MONTH

The remainder of the fire season will be dependent on the amount of rain the southern half of the province receives in the coming weeks. The forecast for the northern half of the province is similar to current conditions. A high probability of initial attack success remains in the North as indices are still being moderated by recent rain and cooler conditions.

Weather models are predicting more lightning in the short term; however some precipitation may accompany these strikes. A break in the hot dry weather will help ground crews suppress current fires and will also help to lower current fire weather indices. The forecast for the southeastern part of the province remains relatively hot and dry and the region will not receive the next wave of rain.

STAY CONNECTED WITH BC WILDFIRE SERVICE

Get the latest wildfire news and information with the BC Wildfire Service Mobile App!

Available for free download on Apple (iOS) and Android devices, the app provides users with access to the latest posts to the @BCGovFireInfo twitter feed and to wildfire information such as active wildfires, evacuation orders, area restrictions and bans and prohibitions.

The latest update to the app allows users to enable push notifications on their mobile device for the information they want most.

STATISTICS TO DATE

2020 WILDFIRE SEASON *(April 1, 2020 to March 31, 2021)*

541 WILDFIRES

AVERAGE NUMBER OF WILDFIRES				
5-YEAR AVG.	10-YEAR AVG.	15-YEAR AVG.	20-YEAR AVG.	25-YEAR AVG.
1,254	1,209	1,359	1,418	1,379

3822 HECTARES BURNED

AVERAGE NUMBER OF HECTARES BURNED				
5-YEAR AVG.	10-YEAR AVG.	15-YEAR AVG.	20-YEAR AVG.	25-YEAR AVG.
449,469	285,896	212,773	178,878	148,642

To learn about other features of the app, review the BC Wildfire Service Mobile App Reference Guide.

For more information on how to establish wildfire resiliency in our forests and communities, visit:

bcwildfire.ca | firesmartbc.ca | BC Wildfire Service | BCGovFireInfo

WHAT IS A COLD FRONT AND HOW DOES IT IMPACT FIRE BEHAVIOUR?

A cold front is when a cold or cool air mass moves into an area previously occupied by a warm air mass. The colder air moving in is heavier than the warm air, forcing the warm air to rise. If the warm air has enough moisture in it, it may result in thunderstorms. The possibility of a lightning strike igniting a wildfire after a cold front passes is dependent on the amount of rain associated with the lightning and how dry the fuels are where the lightning strikes.

Cold fronts can also impact fires that are already burning. Cold fronts are known to cause wind shifts and produce gusting winds. This can change the direction a fire is growing in and increase aggressive fire behaviour by adding more air to the fire. However, once a cold front has passed, there may be scattered showers and a drop in temperature, making the fire easier to suppress.

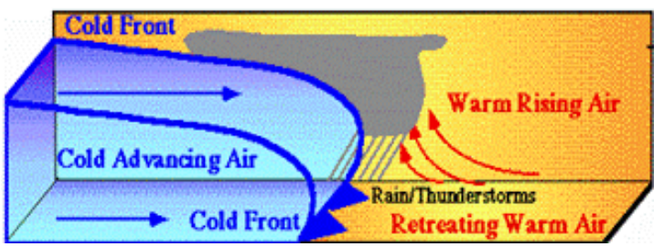


Figure 1: A cold front. Displaying a cold air mass colliding with a warm air mass to produce thunderstomrs a head of the front. Image credit: https://climate.ncsu.edu/edu/Fronts

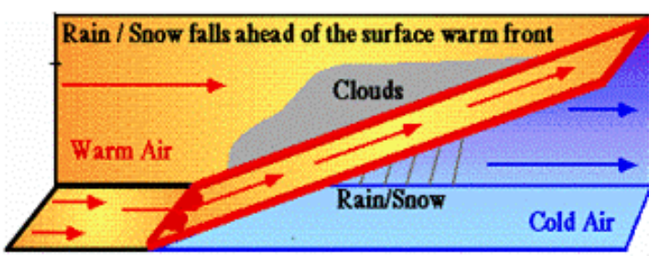


Figure 2: A warm front. Displaying a warm air mass ramping over cold air mass to produce some showers ahead of the front. Image credit: https://climate.ncsu.edu/edu/Fronts

WHAT IS A WARM FRONT AND HOW DOES IT IMPACT FIRE BEHAVIOUR?

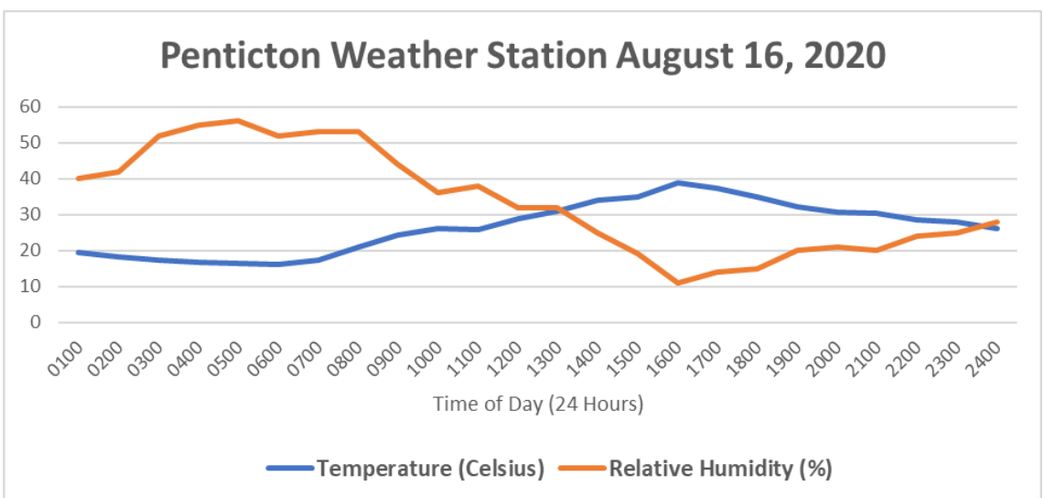
A warm front is the opposite of a cold front. A warm front occurs when a warm air mass replaces a cold air mass. Warm fronts bring warmer, drier weather and typically move more slowly than a cold front. Light to moderate rain may be experienced before a warm front passes over an area due to the warm moist air rising as it ramps over the cold front. As the warm air mass lingers over an area, it dries out forest and grassland fuels making them more susceptible to wildfire ignition.

When a warm front moves over an active wildfire, it can create control difficulties for wildfire staff. There will be a wind shift as the front moves over the fire which can impact the direction the fire spreads. More importantly, prolonged warmer, drying days will make the fire more active for longer periods in the day.

WHAT IS THE PEAK BURNING PERIOD AND WHEN IS IT?

The peak burning period describes a time in the day where temperatures are highest and the relative humidity is lowest. In the summer, peak burning may be between 4:00 p.m. and 6:00 p.m. but the timing varies depending on the time of year.

At the time of peak burning, fire behaviour is expected to increase. This is due to the amount of drying and direct sunlight an area has received all day. Fire behaviour changes as the sun sets because less direct sunlight is hitting the earth's surface and allows for cooling. By understanding peak burning, wildfire staff can develop plans to action and suppress wildfires prior to fire behaviour increasing.



The graph to the left demonstrates the relationship between temperature and relative humidity at the Penticton weather station on August 16th. The day's temperature is at it's peak and relative humidity percentage is at it's lowest point around 4 p.m.