



## **Coastal Fire Centre**

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#### **CURRENT STATISTICS**

Fires to-date: 26

Hectares burned: 35

Human-caused: 26

Lightning-caused: 0

#### **BANS AND PROHIBITIONS**

Campfire: No Ban

Category 2: No Ban

Category 3: No Ban

Forest Use Restrictions: No Ban

Prohibitions section of bcwildfire.ca for full

details.

## **CoFC Prescribed Fire Report**

Holding three quarters of the population of BC, Coastal Fire Centre Prescribed Fire projects typically have complex land base interests involving a variety of proponents and interested parties. Jurisdiction is often complex, producing public land bases with differing land management objectives for habitats with pressures from user groups, sometimes with competing objectives.

Close proximity to large urban centres often creates smoke management issues and public safety concerns. A large portion of eastern Vancouver Island is privately owned. BC Wildfire Service crews working on private land for research projects challenge legal obligations.

All of these complexities provide excellent training, certification and educational opportunities for staff as well as providing an engaging framework to strengthen partnerships.

#### COASTAL PRESCRIBED FIRE GOALS AND IMPACTS

**Grassland:** Grasslands that have excluded natural and cultural burning are easily altered by invasive weeds, including fire prone weeds like broom and gorse. These weeds can be controlled by low intensity ground fires which will leave grasses free to grow. This approach requires careful attention to the burn prescription, as too high a temperature will destroy deep coastal duff layers.

**Garry Oak restoration:** Garry Oak habitat is reliant on natural or cultural burning to maintain the ecosystem, and exclusion of fire results in invasive weed intrusion and habitat destruction. Similar to Grassland burning, the fire must be carefully managed to prevent damage to the Garry Oak understory.

Fire Management Research: Projects undertaken to evaluate fire impacts in forestry practices on public or private forestry land adjacent to coastal communities can result in legal complexities.



#### COASTAL PRESCRIBED FIRE GOALS AND IMPACTS CONT'D

Training, Certification, Educational opportunities: Undertaking prescribed fire benefits staff's career goals and broadens the understanding of the importance of fire on coastal landscapes. The challenging parameters of burning in coastal grasslands and Gary Oak forests provides a complex learning environment for coastal staff, with the opportunity of deeper understanding of prescribed fire principals.

Partnerships: Coastal Prescribed fire planning often involves First Nations, local government, fire departments, and various land managers, owners, other land use proponents as well as special interest groups. Careful engagement leads to a deeper understanding of all parties of the importance of burning to maintain healthy and diverse coastal ecosystems.

Community Safety/Smoke Concerns: Prescribed fire near highly populated coastal urban communities can cause safety and smoke concerns, which involve careful adherence to air quality regulations and prescription parameters. Three quarters of the population of BC reside within the CoFC area, and the Georgia Basin has the least tolerance for smoke.

Land Management issues: Public lands often contain complex land manager interests which can be influenced by special interest user groups. Public land use is varied, and can range from commercial forestry, to community forests, watersheds, protected species habitats and heavily used day and overnight parks.

Wildfire Risk Reduction: Due to population densities within the Coastal Fire Centre, many of these projects will reduce risk to communities from wildfire.

The following page (page 3) contains a list of prescribed fires scheduled, or completed this Spring.



## FireSmart BC

To effectively reduce wildfire risk, it is important that the public gain a better understanding of what it means to be FireSmart. Check out FireSmart BC's amazing resources online.

Facebook: https://www.facebook.com/firesmartbc/

Twitter: https://twitter.com/BCFireSmart

Website: FireSmartBC.ca



### Livelt

The BC Wildfire Service has partnered with <u>Livelt</u> for <u>#FireSmart</u> Week! Re-live this amazing event and check out their website to learn about forest ecology and how to increase the resiliency of your home in the event of a wildfire.

https://www.liveit.earth/firesmart-week

**Cowichan Garry Oak Preserve:** (South Island) This multi-year 1.3 ha project will help restore this last deepsoil Garry oak woodland and meadow left in Canada. (link) Lower intensity Prescribed fire will mimic natural and Indigenous cultural burning, encourage biodiversity and help re-establish the Western blue-bird.

Proponents	Goals & Impacts
Nature Conservancy Canada;	Grassland; Garry Oak Preserve; Community Safety/Smoke Concerns; Training,
local fire department on site	Certification, Educational; Partnerships; Land Management issues

**Department of National Defence: Rocky Point:** Adjacent to Victoria, this multi-year 12.5 ha project undertakes ecosystem restoration and maintenance, and Broom and Gorse encroachment in this Garry oak habitat. First Nations have been engaged and involved in returning this rare habitat to its former state.

Proponents	Goals & Impacts
Department of National	Grassland; Garry Oak Preserve; Smoke Management; Training, Certification,
Defense	Educational; Partnerships

**Jump Lake (Research and Development):** This one-time, high intensity burn project will assess oriented pile resilience to fire compared to "haystack" piles. Partnered with FP Innovations and Mosaic Forestry, this will take place on private forest land, and could help shape forestry practices on the coast.

9	Proponents	Goals & Impacts
	FPI, Mosaic	Research & Development; Smoke Management; Community Smoke/Safety
		Concerns; Complex Land Management (private Forest Land)
	AND VANDOM MANAGEMENT	WWW Control of the co

Dashwood 5 ha/ Doumont Rd 3 ha (Nanaimo): These multi year eco-system restorations in two locations are near private land in a rural community. The project will focus on flammable invasive species removal (Gorse and Broom) and provide training / cross training with a local fire department.

Proponents	Goals & Impacts
Ministry of Transportation &	Wildfire Risk Reduction; Community Safety/Smoke concerns; Partnerships;
Infrastructure	Training, Certification, Educational (BCWS & Fire Dept)
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Pemberton Valley (Pemberton): This multi year Wildfire Risk Reduction project will help protect a First Nations community from wildfire. In 2021, 90 ha were burnt.

-	Proponents	Goals & Impacts
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Owl Creek (Pemberton): This 13 ha, high elevation First Nations cultural burn will reduce the community risk from wildfire, undertake ecosystem restoration for varieties of wild berry and aid silviculture practices.

Lil'watt First Nations used this fire to promote traditional fire use, and it is expected to become multi-year.

Proponents	Goals & Impacts
Lilwat Forest Ventures	Wildfire Risk Reduction (landscape level fuel break); Ecosystem restoration;
(Lil'watt First Nations)	Partnerships (First Nations); Training, Certification, Educational (First Nations
	traditional burning); Fire Management esearch (Lil'watt FN initiated)

Chittenden Meadows / Skagit Provincial Park (Fraser): This 5.7 ha multi-year Ecosystem Restoration will restore a grassland meadow heavily encroached by invasive species. This area is a First Nations traditional fire use area and consultation is building relationships with local First Nations and across the US border.

Proponents	Goals & Impacts
BCParks; BCIT research team	Grassland; Training, Certification, Educational; Research; Partnerships (First
Marin Carl	Nations, Washington State Parks); Fire Management Research

## Wildfire Risk

**Coastal Fire Centre** 

#### What is it and how to reduce it?

Wildfire risk is the likelihood of a fire occurring from either human or natural causes, the predicted fire behaviour and the associated social and economic impacts. There are several ecological factors which are beyond our control that play a role in assessing wildfire risk including weather, topographic influence, drought levels, fuel dryness, and fuel availability. However, wildfire risk can be reduced in our communities with responsible fire use and wildfire prevention.



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BC Wildfire Service has dedicated staff who analyze forecast data from 260 weather stations across the province. The weather stations send reports on an hourly basis and are supplemented by information from other agencies. The hourly observations support fire weather forecasting and the Canadian Forest Fire Danger Rating System (CFFDRS). The CFFDRS is one of the primary fire management decision aids in Canada. With it, fire managers can assess wildfire risk including the potential for ignition, spread, and burning intensity. The information is then used for making fire prevention, preparedness, and suppression decisions.

Although fire is a natural and essential ecological process which allows ecosystems to diversify, recycle nutrients and regenerate growth, it can be threatening to our developments and infrastructure when it encroaches on the wildland-urban interface (WUI). The WUI is the area where homes and other human developments meet or are intermixed with wildland fire fuels. By choosing to extend our communities, resource developments and recreational pursuits into forested areas, we become more exposed to the danger of wildfire.

Living where wildfires can occur puts your home at risk, but it's possible to reduce the potential impacts from these natural events. Begin your preparedness journey by reviewing the Wildfire Preparedness Guide. The guide will help you prepare your household, protect your property, and understand what to do if a wildfire is close to your community. FireSmart is another great resource that can provide tips and information on the specific actions that can help reduce wildfire risk around your home.

Don't wait until it's too late. Take part in decreasing wildfire risk in your neighbourhood.

## Behind the Scenes with a Fire Weather Forecaster

In 2003 B.C. experienced one of the worst wildfire seasons in recorded history, and Jesse Ellis was in the centre of it all working at a warehouse in Barriere, B.C. That season, and a subsequent stint on an initial attack crew, changed the direction of Ellis' life as he switched from studying geology to atmospheric science to pursue a career with wildfire.

As one of four staff weather forecasters working for BC Wildfire Service, Ellis plays a key role behind the scenes. Much of his job comes down to making detailed and scientific information relevant to crews on the ground.



Jesse Ellis - BC Wildfire Service Fire Weather Forecaster

He compiles information from maps, computer software, data from airports and weather stations to guide work on the fire line or when planning prescribed burns.

"We pull a huge volume of information and sift through it, qualify it and then present it in a way that is hopefully adds value for our field staff trying to make difficult decisions on a tight timeline."

He said his time in the field in the past helps him be a better forecaster.

"After I get out in the field, reacquaint myself with the crews on the ground, kick the dirt and use a drip torch then I feel that my work is even better when I return to the office. It reminds me and refreshes me on what the key goals are or the

Three key factors drive that fire weather forecasting are wind, relative humidity and atmospheric stability. All three can be difficult to predict but can have huge affects on fire behaviour, making them an ongoing focus throughout the fire season.

In the spring and fall, when most prescribed burns take place, a key factor in planning is smoke minimization in smoke sensitive areas such as nearby highway corridors or communities. Closer to the date of the burn Ellis will forecast the weather to run calculations on fuel moisture.

"That way we can determine whether the fuel moisture is likely to come into prescription, which means that it's within a range that it burns hot enough, but not too hot, so it achieves the objectives of the burn."

On that day Ellis will provide a spot forecast, which provides field staff with information such as wind speed and direction, relative humidity throughout the day, temperature, and cloud cover.

"It gives field staff the confidence that there is not likely to be a weather event come up over the hill and surprise them."

Ellis can provide similar information to crews on wildfires as needed throughout the fire season. His work can be used to make predictions on how much a fire may grow, which can inform evacuation considerations, and provides information for implementing advisories and warnings. At the end of the day, Ellis said his satisfaction comes from being able to provide accurate and timely information to crews.

"My favourite part of my job is knowing that I'm doing the best I can to keep our staff safe and to do our work in a cost-effective way."

# Wildfire NEWS

## **Coastal Fire Centre**

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# Don't Worry, be App-y!

Want to get the latest information on wildfires in British Columbia? There's an app for that!

The official BC Wildfire Service mobile app is the most convenient way to stay connected with BC Wildfire Service. With the touch of a finger, users can access:

- an interactive wildfire map,
- latest news from the BC Wildfire Service Twitter feed.
- advisories on bans and prohibitions, area restrictions, and evacuation orders and alerts,
- statistical wildfire data,
- weather data, and more.

Users can select multiple map layers and enable push notifications to get the know on wildfire info. Notifications can be toggled on or off for the latest news.

Another feature allows users to set up to three areas for which they would like to receive notifications on. The "Near Me" function of the app requires permission to use a mobile device's location services. Once permission is granted, users can find wildfire details for up to 50 kilometres near their current location.

The information available on the app is pulled from multiple data sources and updates at different intervals. The active fires on the wildfire map



every two hours on the half hour. For example, 08:30, 10:30, 12:30 and so on. The evacuation order and alert data is updated by the custodian when information from the local authority, such as Regional Districts, is received. All other nonwildfire data provided on the map is updated by the custodians of that data. Once that data is updated by the custodians it is reflected on the map.

The mobile app is one of the many proactive initiatives that BC Wildfire Service has undertaken to give member of the public, media and stakeholders access to timely, consistent, accurate wildfire information.

The app is available for Apple (IOS) and Android devices and is free to download in the App Store and Google Play.

Apple (IOS): <a href="https://apps.apple.com/us/app/bc-">https://apps.apple.com/us/app/bc-</a> wildfire-service/id1477675008?ls=1

Android: https://play.google.com/store/apps/ details?id=ca.bc.gov.WildfireInformation&hl=en

## **Fire Weather Forecast**

Issued: 1300pm PDT Thursday May 6th, 2021.

SYNOPSIS: A deep elongated trough is approaching the Coast today spreading cloud and rain to the Central and North Coasts. The trough pushes into the Interior overnight leaving a cool and unsettled air mass in its wake for Friday. Intermittent and scattered showers will prevail across most of the Coastal Fire with temperatures down by 2 to 3 degrees from Thursday. Isolated lightning strikes with rain will again be possible on Friday afternoon over the Coast Mountains and North Cascades. A ridge of high pressure begins builds temporarily offshore Friday afternoon leading to partial clearing and a brief dry spell Friday evening into Saturday morning. The weather pattern remains active with another frontal system slated for midday Saturday delivering more showers and below seasonal temperatures to Coastal BC.

**OUTLOOK:** Drier, warmer conditions return Sunday through Tuesday morning thanks to a ridge building offshore. Temperatures will steadily rise to high teens by Tuesday afternoon for most zones. Rain returns to northern portions of the Fire Centre by Tuesday afternoon and southern zones by Tuesday night.

**CONFIDENCE/DISCUSSION:** Good to fair confidence, overall the trend looks good and there has been consistency but we are likely to see adjustments around amounts as the patchy instability settles in and showers decide exactly where they want to develop.

**6 TO 10 DAY:** The loner range pattern looks rather unsettled with a regular passage of frontal systems and associated rainfall. Fire weather indices are expected to remain relatively low for the foreseeable future.

#### At Coastal

Coastal crews are now back to their full complements and have completed much of their recurrency training.

Due to Covid-19 restrictions, training has been confined to smaller on-site exercises and virtual learning instead of the larger bootcamps held in the past.

Crews have responded to 26 fires to date, continue with any specialized training, including chainsaw training, and are working on fuels management projects throughout the Coastal Fire Centre. Despite the cooler temps, crews have been busy!

The Matchlee Bay Fire (V80323) in a remote area 8 kilometres southeast of Gold River (~70 kilometres west of Courtenay) is 12 hectares in size and is 'Under Control'. The fire is being patrolled but there are areas of the fire that are unsafe for crews to fully mop up. Fire behaviour is now relatively quiet.



Photo taken April 19, 2021.

**Coastal Fire Centre Information Section** 

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**Generic Email:** 

BCWS.CoFCInformationOfficer@gov.bc.ca



# **Interactive Map Updated Symbology**

On April 15, 2020, the BC Wildfire Service made changes to how wildfire information is displayed on the Public Interactive BC Wildfire Dashboard. Fires will now be displayed on the map by their stage of control.

Interactive Map Reference Guide.

Interactive Map.