

Climate Adaptation

BC Tourism
Sustainability
Network



The BC Tourism Sustainability Network gratefully acknowledges that we live, work and play on the traditional, ancestral and unceded territories of the 204 First Nations in British Columbia.

Image: Totem Pole at Friendly Cove on Nootka Island in Nootka Sound



Ministry of
Tourism, Arts,
Culture and Sport



DESTINATION
BRITISH COLUMBIA®



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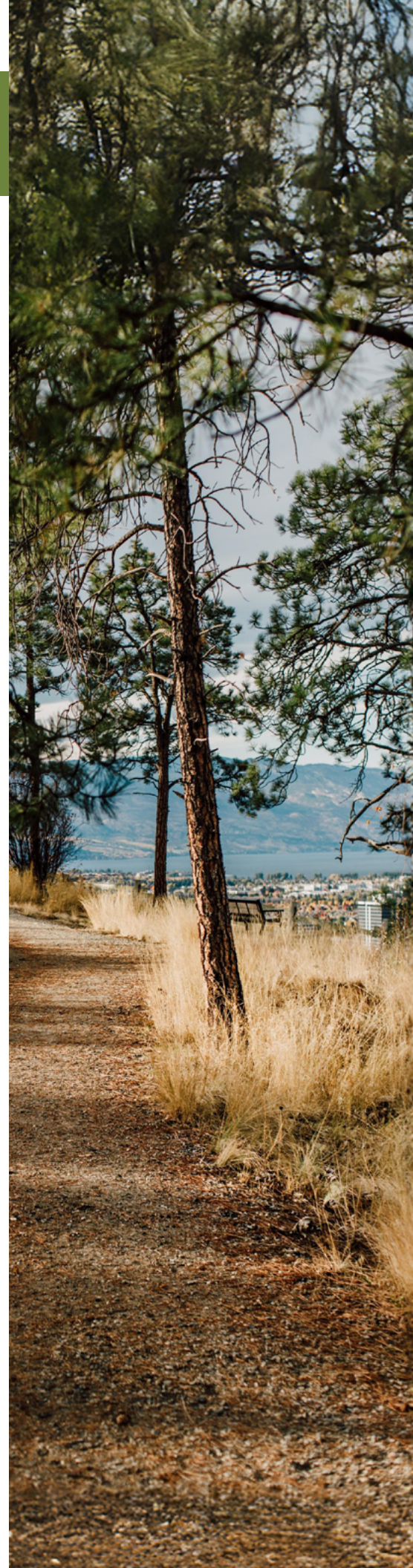
Understanding Climate Adaptation

Understanding the terms “climate adaptation”, “climate mitigation”, and “climate resilience” is an important first step to understanding how these actions fit into responding to climate change impacts.

According to the [United Nations Framework Convention on Climate Change](#), climate adaptation can be defined as adapting to change that is already occurring through adjustments in ecological, social or economic systems through changes in processes, practices or structures. The intention of adaptation is to moderate damages and risks, and benefit from opportunities related to climate change. Climate adaptation measures vary widely across countries and industries, and there is no one solution. It is not only the role of governments to decide what climate adaptation measures to enact, but also all stakeholders within a region.

[Climate mitigation](#) is defined as responding to climate change by reducing and stabilizing the levels of greenhouse gases in the atmosphere, and making efforts to enhance carbon “sinks”. Mitigation actions are proactive in that they avoid and reduce emissions to avoid the costs of adaptation. These actions can include switching to renewable energy sources, implementing new technologies such as electric vehicles, or protecting areas from deforestation.

Finally, climate resilience refers to the capacity of a business to anticipate and cope with climate change related events, and recover and adapt while incurring minimal damage. Climate adaptation and resilience are complementary concepts. Implementing climate adaptation measures will increase resiliency to future impacts. Adaptation measures can be short or long term, and look forward or backward, while [resilience is more holistic](#) and affects an entire system.





The Importance of Climate Adaptation in Tourism

Climate adaptation is strongly integrated into provincial tourism climate goals. [British Columbia's Climate Preparedness and Adaptation Strategy 2022-2025](#) highlights four pathways to prepare for climate change, and builds on the [2019 Preliminary Strategic Climate Risk Assessment](#). This strategy is intended to build the capacity and resilience to climate change impacts, and presents actions to support key industries such as tourism.

The Province of BC published its [Strategic Framework for Tourism 2022-2024: A Plan for Recovery and Resiliency](#) that acts as a 3 year roadmap to rebuild and revitalize the tourism industry and focus on climate change adaptation and resilience. This framework includes actions under the three main pillars of people, planet, and prosperity. The planet pillar has key priorities to “build a cleaner tourism industry that is prepared to adapt to climate change & support responsible travel and preservation of BC’s natural spaces” ([Government of BC, 2024](#)).

Tourism businesses are part of the unique fabric of a destination, and play a role in protecting their communities so that they are ready to welcome visitors to their region. Tourism operators, businesses, and stakeholders need to understand the potential climate impacts, and prepare and adapt accordingly to minimize environmental, social, and economic issues.

According to the [Tourism Emergency Management Framework](#), the comprehensive framework for tourism in BC, tourism businesses are “responsible for preparing their tourism operation so that they can respond effectively, recover quickly and keep visitors safe”.

Exploring the Risks

The natural environment, built infrastructure, residents and visitors are all at risk from a changing climate and the extreme weather events and natural disasters resulting.

Potential impacts of climate change on tourism businesses include:

- Changing travel patterns: travelers may change their patterns based on changing temperatures and frequencies of natural disasters affecting some regions more than others
- Tourism activities will be affected by rising temperatures and weather events - e.g. ski resorts throughout British Columbia have experienced less snow affecting their operations
- Infrastructure needed for tourism such as roads or bridges can be damaged by extreme weather events
- Biodiversity changes can affect destinations that rely on biodiversity to attract visitors, as some species may move or be put at risks by climate impacts
- Costs for food, water, and energy are rising, which can affect business operations decisions



Opportunities for tourism businesses

While the tourism industry feels many of the immediate effects of climate change, there are also opportunities for tourism businesses to adapt, thrive, and increase the resilience of their destination and community. The tourism industry has many opportunities to engage and involve stakeholders within their area and tourism businesses and DMOs can advocate for policies that target climate adaptation and resilience.

Climate adaptation measures can help preserve the biodiversity of a destination, which in turn attracts visitors to experience the unique value that a destination offers. For many tourism businesses across BC, their business would not be able to operate without the natural beauty of BC that guests come to experience. By working to protect the environment the environment allows businesses to welcome guests to experience it in a responsible and safe way.

Tourism businesses also have the opportunity to connect with visitors from around the world and the country, and engage them in learning about how they are adapting to climate change and taking action. As tourism businesses lean into promoting and marketing regenerative tourism, climate adaptation and resilience can be an important piece to highlight. Visitors that are conscious of their impact on a destination and aware of the climate impacts that may be affecting communities will be drawn to businesses that are doing their part in adaptation.

While more frequent and intense climate events have been occurring in BC, this does not mean that tourism businesses cannot safely welcome visitors to their regions. Being prepared and aware of the resources that are available and communicating to guests goes a long way in allowing businesses to operate safely and responsibly. While these events are becoming more likely, they are not inevitable in every region, and communications should be informative but not alarmist.



Overview of Climate Disasters in BC

History of Climate Disasters

British Columbia, renowned for its natural beauty, attracts millions of tourists annually to its coastal towns, rocky mountains, and old-growth forests. As businesses gear up for the tourism season, they also prepare for potential climate disasters. Heat waves, wildfires, and floods wreak havoc on communities across the province and are increasingly common occurrences, [costing B.C. up to CAD 17 billion per year](#). British Columbia has become the [centre of Canada's climate change caused disasters](#).

BC regularly experiences extreme weather events and impacts in the form of extreme heat, wildfires, floods, landslides, erosion, droughts, and water scarcity. These climate disasters have lasting impacts on BC's health and wellbeing of communities, economy, and infrastructure.

In the summer of 2021, British Columbia experienced one of the deadliest climate-related disasters in Canada on record, a heat dome which resulted in the death of 619 people across the province. The extreme heat event reached a [record temperature of 49.6°C and was followed by one of the worst wildfire seasons on record](#), putting the province in a state of emergency for two months. Shortly after, the province was hit with extreme flooding and landslides in the fall of 2021, resulting in severe damage to communities and infrastructure across the province.

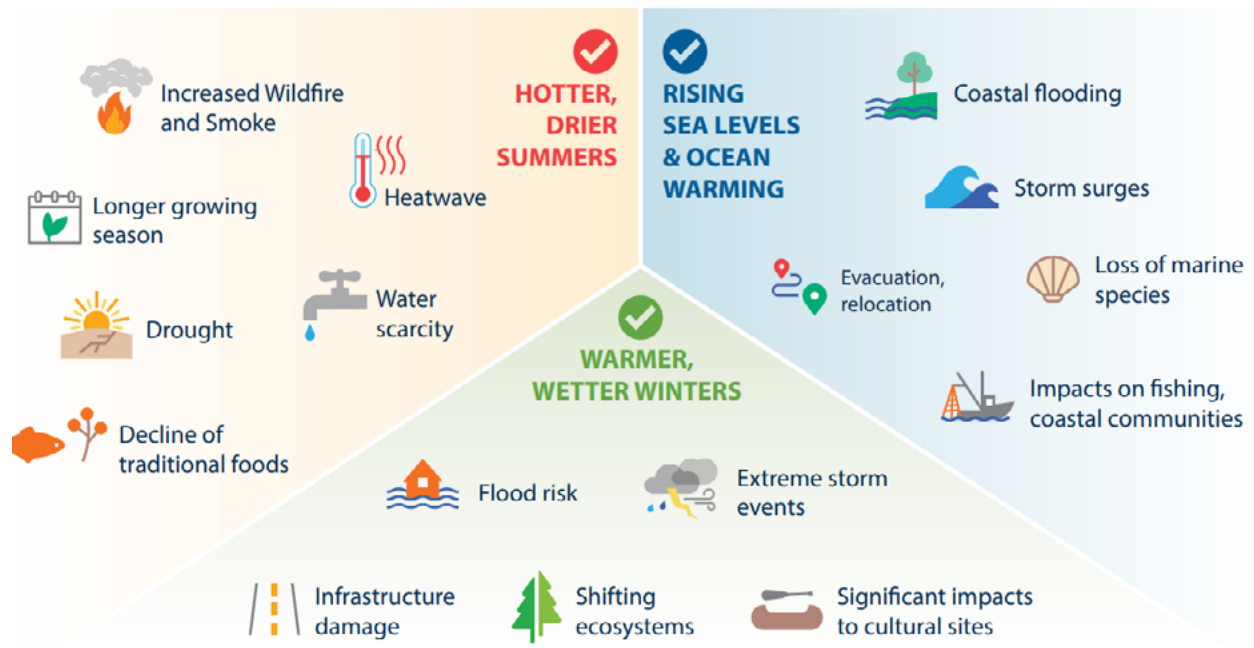
In 2017, 2018, 2020, and 2021 BC experienced forest fires which significantly affected the air quality and imposed health risks across the province ([British Columbia Regional Perspectives Report Ch.5](#)). 2023 was the most expensive and destructive wildfire season in BC's recorded history, with [2,217 fires detected, 25,000 square kilometers of trees, bush and grassland burned, and approximately \\$770 million](#) spent fighting fires.

BC has an unstable future ahead, with the annual average temperature increasing by over 5°C by 2100, as predicted by the [high emission scenarios](#). Climate impact trends include an increase in annual precipitation, which will threaten water accumulation (i.e. decreased snowpack), resulting in longer drought periods in the summer, increased atmospheric river events, and greater risk from flooding and landslides. Ocean conditions will change, resulting in storm surges, rising sea levels, and increased acidification. Wildfire risk will increase from [changing precipitation and temperature](#).

Governments, businesses, and communities will have to work together to prepare for and adapt to the changing climate conditions ahead.



Impacts on our Communities, Economy, Health and Wellbeing



This figure contains the impacts to communities, the economy, and health and wellbeing as identified in the [BC Climate Preparedness & Adaptation Strategy Actions for 2022-2025](#). This assessment was informed by the [2019 Preliminary Risk Assessment](#).

Source: [Government of BC Climate Preparedness & Adaptation Strategy Actions for 2022-2025](#).

Climate disasters are not isolated events, they disrupt the delicate earth systems, often resulting in further disasters. As climate change worsens, the frequency and intensity of extreme climate events will increase. The impacts from climate disasters are not only seen in the natural environment, but there are a range of social and economic impacts that communities and regions are faced with in light of extreme events. Governments, businesses, and communities will have to work together to prepare for and adapt to the changing climate conditions ahead.



DID YOU KNOW?



BC completed a comprehensive [Climate Risk Assessment in 2019](#)



Fire

Wildfires have always occurred naturally due to events like lightning strikes, and are an important part of the lifecycle of a forest ecosystem. However, due to climate change BC is seeing larger, hotter fires that endanger entire communities and blanket large regions in smoke that significantly reduces air quality. Longer, dryer and hotter summers due to global warming are leading to unprecedented wildfire seasons year after year. These fires not only have devastating environmental effects, but also displace people from their homes and destroy important infrastructure that is vital for residents and regional tourism.



DID YOU KNOW?



BC faces an average of 1,600 wildfires per year ([ClimateReadyBC](#))

BC is currently tackling wildfires through [ClimateReadyBC](#):

- Funding partnerships and community programs like FireSmart
- Supporting risk reduction & cultural/prescribed burning
- Forest landscape planning to increase forest resiliency
- Expanding cultural and prescribed burning

Risks to tourism businesses from wildfires include:

- Costly damage to business property
- Evacuation alerts for employees and guests
- Community infrastructure damages affecting tourism in the region
- Poor air quality or fire risk dissuading visitors from an area



Photo: Landon Parenteau

Recommendations for Adaptation, Preparedness and Response:

[ClimateReadyBC](#) suggests that to manage risks of wildfires in a community, individuals should understand the possible effects of wildfires, the likelihood of a fire occurring in their area, and the community's vulnerability and resilience to fire events.

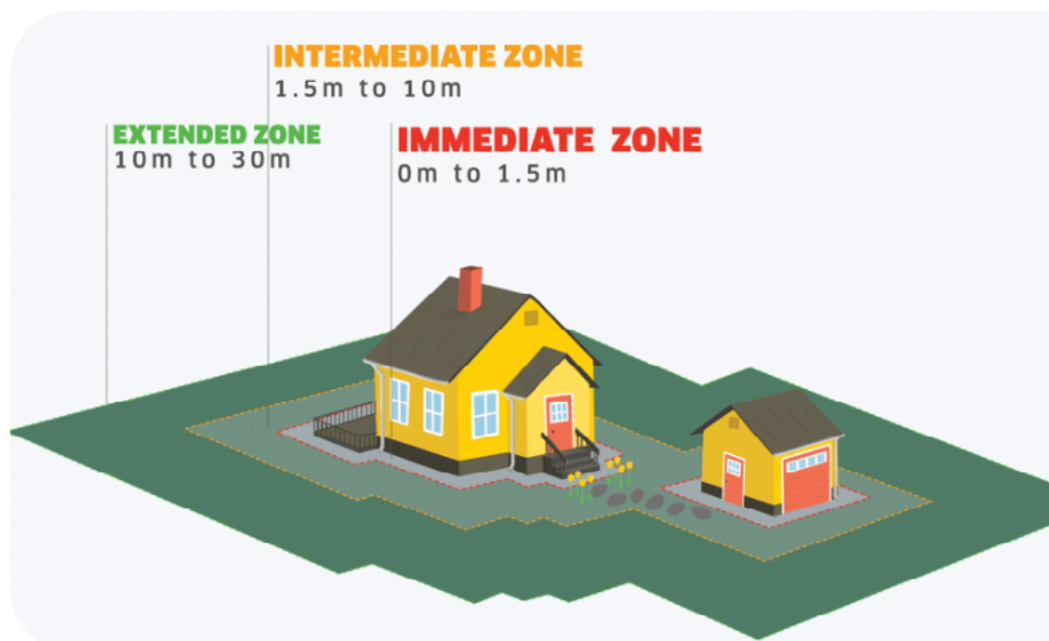
Keep up to date with the status of fires in your region using the [BC Wildfire Service map](#). The BC Wildfire Service also offers an app that provides real time updates, alerts, and information that can be shared with employees and guests.

While naturally occurring wildfires can happen at any time, in 2023 of the 2,245 wildfires, 72 percent were natural-caused and 25 percent were human-caused. For the remaining three percent of wildfires, the causes are undetermined ([Government of BC](#)). Tourism businesses should proactively communicate to their guests information such as the importance of disposing of lit cigarettes properly, not littering glass bottles that can heat up and start fires, and generally being aware of areas that are at extreme fire risk due to drought conditions.



FireSmart BC is a program that tourism businesses can use to reduce the risks to their property, access an emergency preparedness checklist, and other useful tips and tools.

The “[FireSmart BC Begins at Home Guide](#)” outlines how to prepare a building and the immediate zones around it to reduce risks from fire damage, and a scorecard to assess risk. The “[Emergency Wildfire Preparedness Checklist](#)” can be integrated into a businesses general emergency management plan, and disseminated to employees so they are aware of quick actions to take.



Source: [FireSmart BC Begins at Home Guide](#)

Business Case: Panorama Mountain Resort & Wildfire Resilience

Panorama Mountain Resort is a mountain resort and alpine village offering skiing, hiking, mountain biking, and other outdoor activities to immerse guests in the picturesque Purcell Mountains in the Kootenay Rockies region year-round. Panorama manages 13 condos, hotels, and townhomes with capacity for over 2000 people, and welcomes guests and staff from all over the world. Panorama Mountain has a robust Emergency Response plan that guides their communications and processes for responding to emergencies in the area, specifically wildfires.

The following is a conversation with Ryan Stimming, Senior Manager of Mountain Operations, and Julia Price, Health & Safety Coordinator, on the fundamental components of their Emergency Response Plan and how they work to make the resort more resilient to wildfires and climate change.

Can you explain the basics of your Emergency response plan and its fundamental components? How do you communicate this to staff?

Our Emergency Response Plan (ERP) consists of procedures for common emergencies, in order of most prevalent to least likely. This internal document is loosely based on Incident Command System frameworks, but designed to be more approachable and simple. At the staff orientation staff are taught key information and resources about wildfires and other common emergencies. All resort directors have a hard copy of the Emergency Response Plan, and it is also available on a public drive and internal website for staff.

Panorama Mountain Resort is located in the regional district of East Kootenay, which has political jurisdiction. The resort is not responsible for evacuating homes in case of an emergency, but play a role as an important partner to the regional district, as they are intimately knowledgeable about the lay of the land, number of condos, and who the property managers are. The resort is able to act as an information pipeline for incident commanders. BC Wildfire is the other important agent who is responsible for protecting the entire community from fires but managing fires and cutting firebreaks,



Can you describe a recent period where you experienced wildfire events and how you prepared and adapted to this challenge?

In 2023 we experienced the Bruce Creek Wildfire (part of the Horse Beef Creek complex of fires). Earlier, the area had an evacuation alert for the entire community. The resort responded by limiting the sprawl of guests using the crown land around the resort of recreation. Normally, hikers and cyclists can access the summit using the ski area for their recreational activities, but the resort closed the upper mountain so that if the alert became an order, it would be much easier to find and corral guests. Closing the upper mountain also limited the exposure of the area to human-caused fires by keeping people close to the base area.

The resort learned a lot from the evacuation alert. The resort employs lots of international staff who are aware that BC is prone to fires, but to them an alert sounds very serious and many staff were quite frightened, and chose to miss work or even leave the area. Going into summer 2024, the resort adjusted their onboarding process for new staff orientation to proactively provide information about what an alert order means, infographics with important information, and other resources to give staff the knowledge they need ahead of the summer season. This was intended to limit a general sense of panic should an alert or evacuation occur.

The resort also learned a lot from COVID-19 response processes. There are people across the province whose job it is to regulate disasters, and tourism operators follow the rules set out by the province. This makes it easy to defend decision-making. The resort is adopting this same mindset for dealing with wildfires, and directs people to the regional district or BC Wildfire service if decisions are questioned.

What practices do you implement to prepare & increase the resiliency of the resort for fires or other conditions (e.g. extreme cold)?

In the ERP there is information about how wildfire is managed at a political level. The resort also has a wildfire suppression plan that details how to manage threats to the property. This plan relies on snowmaking infrastructure including a pump house, hoses, a go-box with the equipment, sprinklers, a fire suppression trailer, and snow guns. Senior staff can enact the plan, and their staff are trained in how to use this equipment.



Another climate event that the resort has been making operational adjustments for is periods of extreme cold. In the past two years, the resort has been closed on average 3 days per year due to extreme cold events, which is unprecedented. The general rule of thumb is that at -29C with windchill the resort remains open, and at -30C with windchill the resort will close. This is not only to protect staff and guests, but also the machinery such as ski lifts take longer to warm up and are less likely to run reliably in these conditions. In the past, these extreme cold temperatures would come at night, but once the sun was up in the morning temperatures would climb. Now, these temperatures are lasting later into the morning and the resort has to make business and safety decisions about closing for the day. During cold periods the resort will also limit terrain that people have access to. This is a new operational challenge the resort is tackling moving forward.



Do you have any advice for other ski resorts or other businesses planning for climate risks? Any specific technologies that have been important?

Proactivity is key. Forest fire fuel on the forest floor in the region impacts the probability of wildfires occurring, so the resort encourages the government to provide funding to clean up fire fuel in the Panorama area to “firesmart” the forest around the resort. The homeowners associations of the surrounding subdivisions have also found champions to firesmart the communities. The province is in charge of the Crown Land that surrounds Panorama. Between the resort and homeowners associations, there are efforts made to encourage the province to protect the entire area.

Get to know the people in your region that will be the ones to help you in case of an emergency. Make connections with your fire chief, WildfireBC, and the regional district office and their emergency planners well before emergencies. Ask proactive questions. If your Emergency Response plan aligns with theirs, this will make emergency planning and response a more clean and efficient process.





Are there any resources or information sources you have found that you would recommend to other businesses that are implementing climate adaptation measures at their business?

The government of BC website has great information about fire bans and restriction stages to help staff and guests understand safe fire practices. Staff and guests are encouraged to sign up for the provincial emergency notification system, and a QR code to sign up is provided for all staff. This ensures that people get information in real time.

How do you collaborate effectively with local authorities and other businesses? Any key partnerships?

We recently partnered with GreenStep to put together short, medium and long range sustainability plans. These plans are focussed on energy consumption and efficiency, and waste management for a rural area. The resort hired an energy conservationist that helps take information provided by GreenStep and implement it into the resort's daily operations. The resort also has a Green Team of 8 individuals from various departments.

Panorama resort land has also been certified as a Whitebark Pine friendly ski area. White bark pines are a species that is "Vulnerable", so the resort helps local researchers access the area to determine why Whitebark pines are being threatened by blister rust. People are able to come and collect samples for studies. There are also areas that are protected where people do not ski to further preserve the species.

Flood



Flooding is common across all of BC, and can occur any time, but most often in the spring and early summer, due to heavy rainfall and melting snow. As climate change worsens, BC will likely experience an increase in frequency and severity of flooding. Vancouver Island, Vancouver coast and mountains, Thompson Okanagan, Kootenay Rockies, and parts of Northern BC are regions which have been impacted by severe flooding in recent history.

The Lower Mainland has the highest risk of catastrophic flooding, due to a large population and infrastructure built in the floodplain area of the [Lower Fraser River](#). Floodplains are regions that are flat land near rivers, streams, lakes, or the sea, which are particularly susceptible to flooding. Understanding where floodplains are is an important first step in assessing the vulnerability of a region to flooding. The BC Government has [floodplain maps and coastal floodplain maps](#) to identify flood hazards.

Risks of Flooding in BC

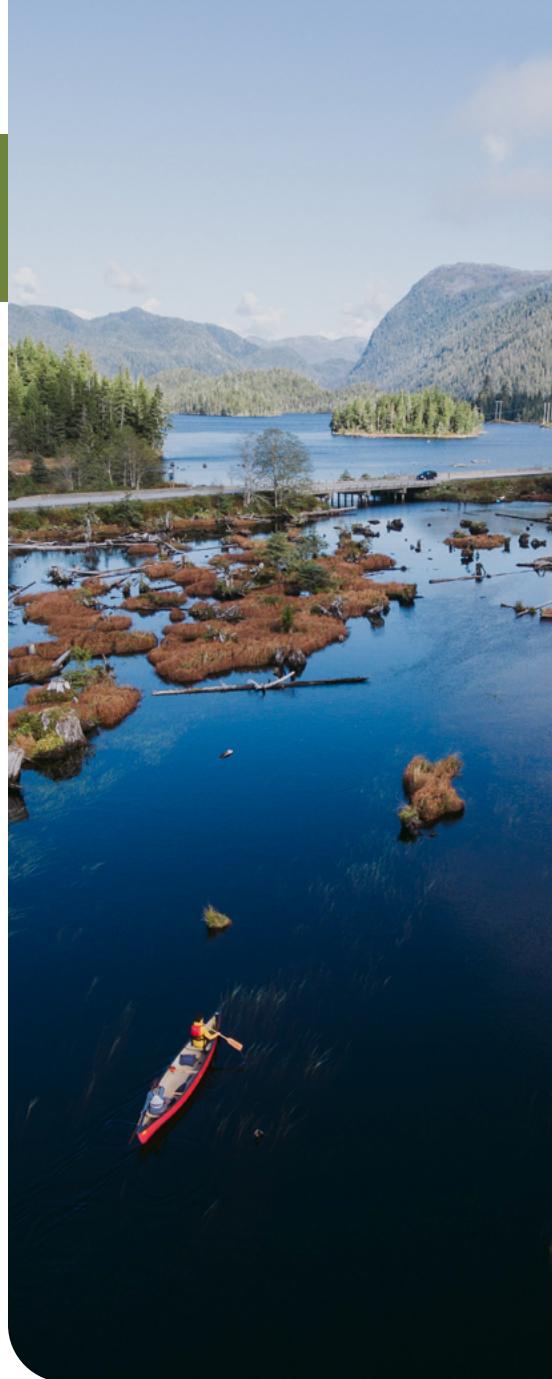
- Building and infrastructure damage
- Water contamination
- Cause power outages
- Disrupt transportation
- Create landslides
- Put people in danger

BC is currently tackling flooding through [ClimateReadyBC](#)

- Preparing highways for extreme weather and flooding
- Collaborating with local and Indigenous governments for a BC Flood Strategy and Resilience Plan
- Community Emergency Preparedness Fund

Specific risks for tourism businesses

- Decline in visitor numbers during widespread events
- Business impacts - damage to facilities or inability to operate
- Significant damage to building infrastructure
- Damage to important transportation infrastructure (e.g. major bridges and highways washed out)
- May affect tourism operator activities (e.g. water-based tours on rivers may need to be postponed)

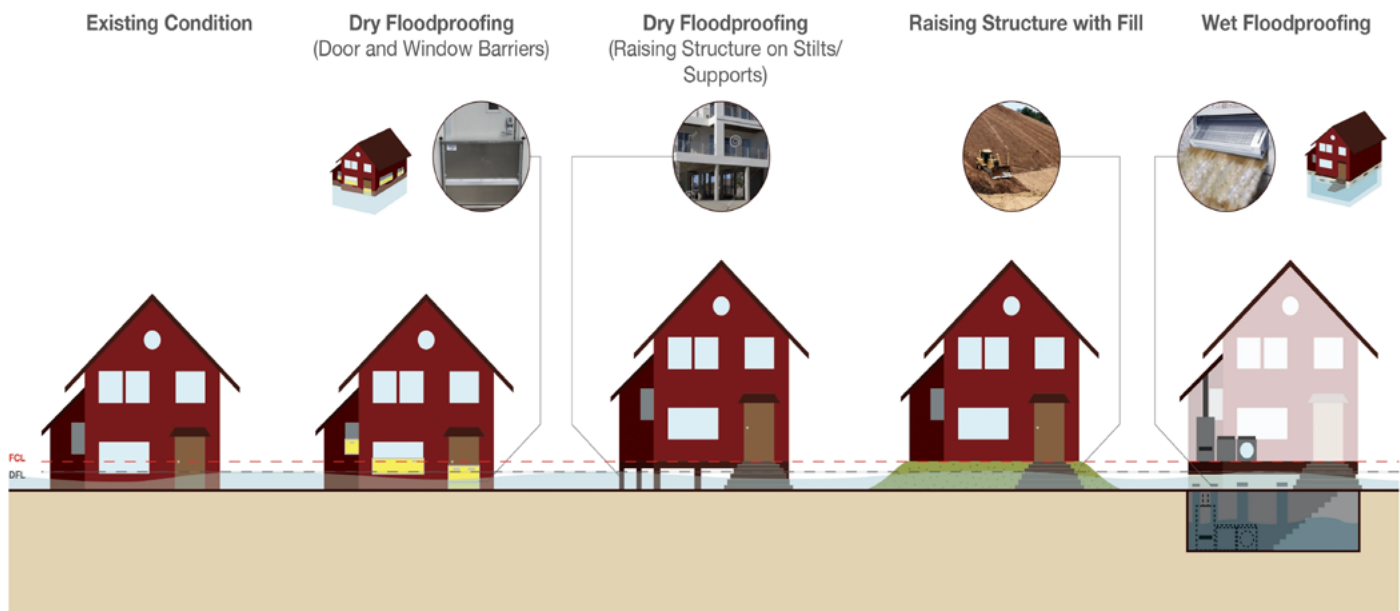


Recommendations for Adaptation, Preparedness and Response:

Floodwise BC provides a plethora of resources and guides related to flooding in BC, specifically in the Fraser Valley and Lower Mainland areas, which are at higher risk. “Flood Proofing” your property and operation is an important step in adapting and preparing for flood events. This can reduce losses from a building, reduce clean up time, and prevent injuries and unsafe conditions.

FLOODPROOFING

*Architectural Design Flood Mitigation Measures
Retrofitting Existing Structures*



This figure from FloodWise shows different flood mitigation measures for structures.

Source: [FloodWise](#)

[Flood protection infrastructure](#) are structural measures often put in place by communities to reduce damage from floodwaters, and include: dikes, sea barriers, water diversion, storage, breakwaters, natural shorelines, and others. Businesses can advocate for these measures to be proactively put in place in their community if you live in a flood prone area.

If you are located near the Lower Mainland, you can view flood hazard, vulnerability, and risk [maps](#).

The [PreparedBC Guide](#) for Tourism operators suggests keeping important documents safely off the ground to protect them from water damage.

Visit the [BC River Forecast Centre](#) to view an interactive Flood Warning and Advisory map to keep up to date with flooding events in your area. This map has been created by the forecast centre analyzing snow pack, assessing seasonal water supply and flood hazards, and is an important tool to allow communities to proactively respond.

A StormSurgeBC portal is currently under development, and other information about storm surge frequencies in coastal areas can be found through the [Government of Canada](#) portal.



Drought

Climate change has increased the severity and frequency of droughts across BC in recent years. Rising temperatures and shifting rainfall patterns result in dry soil conditions and water scarcity, ultimately resulting in a vulnerable ecosystem ([Climate Institute](#)). Climate change is causing droughts to develop faster and over larger areas of land, with over 40% of global land area expected to experience year-round drying by the end of the century ([Climate Institute](#)).

Droughts are dangerous on their own, but also increase the risk of floods and wildfires. Trees and plants weakened from drought are more vulnerable to insects and diseases, making them more likely to die and become fuel for fires. Dry conditions impact soils ability to absorb water, resulting in water run off and increased risk of flooding.

BC has experienced prolonged periods of drought persisting over multiple years.

BC is currently tackling drought through [ClimateReadyBC](#)

- Water scarcity response planning
- Protecting water and watersheds through the [Watershed Security Strategy](#)
- Developing tools such as the [Water Conservation Calculator](#) and [BC Agriculture Water Calculator](#)
- Developing a BC water sustainability act to regulate water diversion, use, and storage
- Funding for emergency preparedness

Risks to tourism businesses from drought include:

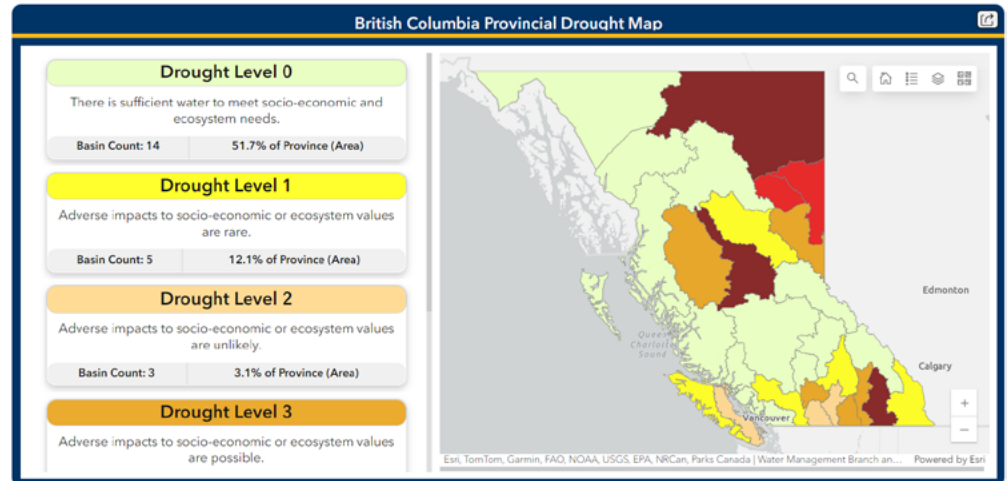
- Reduced water availability for businesses. If you welcome large numbers of guests, there may be issues with consumption being too high in times of water scarcity.
- Reduced crop quality and harvests for agricultural-based tourism businesses (e.g. wineries), and a potential increase in agricultural pests.
- Increased wildfire risk.
- Remote or off-grid businesses that rely on wells or groundwater can be affected by reduced water levels.



Recommendations for Adaptation, Preparedness and Response:

Access the [BC Drought Information Portal](#) to view maps on current and historical drought levels and watershed conditions that can help you stay informed.

Preparing for drought conditions generally involves making changes regarding your water consumption and use efficiency, and this occurs inside buildings and landscaping outside. For example, the [Government of BC](#) and the [Destination BC Water Conservation Industry Toolkit](#) suggests:



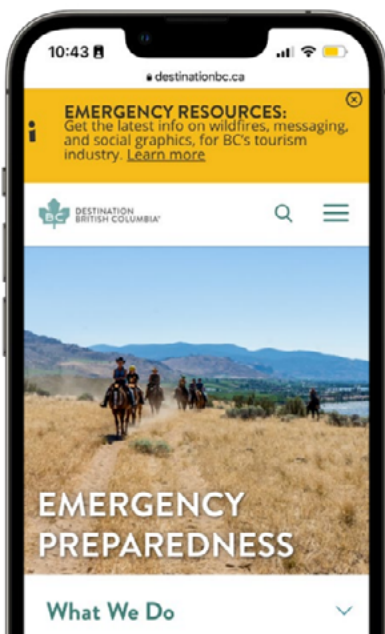
Source: [BC Drought Information Portal, 2024](#)

- Conduct an annual [water audit](#) to find inefficiencies and set water consumption targets.
- Fix leaky toilets or faucets around the property.
- Install low flow devices.
- Reduce non-essential water use.
- Plant drought resistant and native plants around your property that require less water. Follow any local watering restrictions.
- Collect rainwater for watering plants around your property, or use greywater.
- Encourage guests to take shorter showers and be responsible with their water use.

[The Destination BC Water Conservation Industry Toolkit](#) suggests specific messaging to communicate to guests, such as “The tourism industry in BC continues to undertake responsible business practices to help conserve water, and we’re asking our guests to do the same by following these simple tips that can make a big difference.”

If there are water shortages, follow local water restrictions closely, and ensure that these are also communicated to guests that are visiting the area and may be unaware that this is a time to conserve water. Local water restrictions can be found on [CivicInfoBC](#), or your municipality website.

If your tourism operation is a farm or winery based business, the [Government of BC](#) provides resources about support programs that you may be able to access.



Business Case: Noble Ridge Winery & Drought Resilience

Noble Ridge Winery is a picturesque property located in Okanagan Falls in the Thompson Okanagan region. Their name comes from the noble variety of grapes that they grow. Noble Ridge has a strong belief in sustainable practices, specifically around responsible stewardship of the planet. They are Biosphere Certified and Sustainable Winegrowing in BC certified.

The following is a conversation with Winemaker Benoit Gauthier, who is leading the sustainable operations at Noble Ridge, and has made significant efforts in making his vineyards more resilient to drought conditions.



Can you explain a recent period where you experienced drought conditions and how you prepared and adapted to this challenge?

In June 2023 we hit a rough patch with drought conditions when our vineyard's well pump broke down. It took six weeks to get the replacement pump, which was definitely a challenge. Luckily, I have been preparing for water shortages for about a decade. Back in 2014, I started improving the soil's water retention by adding compost under the vine rows. Then in 2021, I planted a special cover crop to boost the organic content and provide some shade. This really helped lower soil temperatures and cut down on evaporation, making it easier to cope with the drought while waiting for the new pump.

What practices do you implement to prepare the winery for dry and hot periods each year to increase your resiliency?

To prepare for hot and dry spells, I make sure our irrigation system is in tip-top shape. I also take good care of our cover crop to keep it working efficiently. Plus, I have tweaked my canopy management to protect the grapes from sunburn, which helps keep the fruit safe during the heat.

What have been some successes and barriers you have experienced?

I have had some great wins with my soil amendments and viticulture practices, especially during the hot summer months. Over the years, I have cut down on irrigation needs by 15%, which helps avoid stressing out the vines. On the flip side, working with our rocky soil has been a challenge. Getting organic matter in was tougher than I thought, requiring a lot more time and effort than I originally expected. But honestly, I see the benefits of hard work paying off every year.

You have a comprehensive section for sustainability on your webpage, and highlight your sustainability initiatives and program. How are you implementing climate adaptation and emergency preparedness into this program?

Our sustainability efforts focus on climate adaptation and emergency preparedness. We have put several practices in place to tackle climate change, starting with our staff. I offer a flexible work schedule so we can manage extreme summer heat. We are also working hard to minimize our carbon footprint. In the vineyard, I stick to a minimal input approach, cutting back on tractor and fertilizer use, which helps lower CO₂ emissions from diesel.

On the building side, we have installed a geothermal heating system and solar panels to boost energy efficiency. Safety is a big deal for us too—we have a robust program with monthly training sessions that cover emergency preparedness topics like evacuation plans, heat stress management, fire safety, and wildlife safety. This helps keep our team ready for anything.

Do you have any advice for other wineries or other agricultural businesses planning for climate risks? Any specific technologies that have been important?

If you are in the winery of the agricultural business and looking to tackle climate risks, I would say to invest time and resources into sustainable practices. It really pays off. For anyone developing new vineyards, I highly recommend getting the latest irrigation technology. Things like soil humidity sensors, remote pressure sensors, and smart valves can help you save water and fine-tune your irrigation. Embracing these tools makes a big difference in efficiency and sustainability.



Are there any resources or information sources you have found that you would recommend to other businesses that are implementing climate adaptation measures at their business?

Check out the certifications from Sustainable Winegrowing BC and Biosphere. They have been super helpful on our path to sustainability, offering solid guidance and practical tips for implementing eco-friendly practices. These resources can really help anyone looking to boost their climate adaptation efforts.



Ask the Expert: A Conversation with Wanda Blogdane, Tourism & Crisis Communications Professional

Wanda Blogdane is an experienced communications professional that previously held a position with Banff Lake Louise Hospitality Association as their Executive Director, and worked with Backcountry Lodges of BC for 5 years. Her work at BLLHA involved reviving education on climate adaptation and emergency preparedness for senior managers in the tourism industry and providing functional support to tourism businesses. Wanda also worked with the City of Calgary in Emergency Preparedness and Crisis Communications, and assisted at the media level with crisis communications during the flooding events of 2013. Wanda has a strong appreciation for the ICS - the globally recognized structure for incidence command, and integrated this into her work at BLLHA is the lead destination in Alberta on industry specific support systems and emergency response leadership. In her role at BLLHA she experienced wildfires, flooding, COVID-19 pandemic and a significant staff accommodation fire event where strong incidence response was required in the community.



Can you speak to the role of businesses in climate adaptation?

It is important for as many organizations and businesses as possible to have a basic understanding of the Incident Command System. Understanding the command system and the common language will help them understand their role in emergency preparedness and disaster response. Climate disasters are often complex and intricate at the ground level and involve an ecosystem of businesses, DMOs, communities, governments, and first responders, and operators want to know how they can help. The tourism sector is more interconnected than any other industry I have seen. Tourism businesses understand what is their role and what is not their role is important. It is also important for businesses to know where to obtain important information from reputable sources, and how to distribute this effectively to their internal teams and externally to visitors.

The communications piece is one where tourism businesses are often involved, and they should aim to use a fact-based approach and have knowledge of where to get key messages from. In British Columbia, this is often from DMOs, municipalities, or resource hubs such as DestinationBC. Relying on social media or unofficial sources can risk relaying incorrect information.

It is also important for tourism businesses to understand how they can help one another. In the first 48 hours after an event takes place, everyone wants to help, but this can be the wrong time as first responders trying to do their work. Businesses can listen to first responders and if needed help receive or feed evacuees, but outside of this it is best to take pause and wait to see what the needs are from the individual community and it rebuilds after the event.

Additionally, many tourism businesses in BC, especially large accommodations, employ workers from other countries. Many of these individuals are at risk of losing important documentation during events like wildfires where evacuations happen quickly. Businesses can work with settlement services in their communities to ensure that all their employees are prepared and have systems in place should an event like a wildfire or flood occur.



In your work, what resources (provincially, nationally) did you find most useful or direct businesses towards when it comes to climate adaptation and disaster response?

- Destination BC has many valuable industry resources and templates in their online portal
- Regional tourism hubs and entities
- Alert systems that are set up provincially through text messaging tools and apps are key

Businesses can ensure all their employees are signed up for alerts at their staff orientations, and these resources should be included in the emergency management plan of an organization. If translation services are needed, settlement services in communities can make emergency plans and resources accessible to those that need access in a different language.

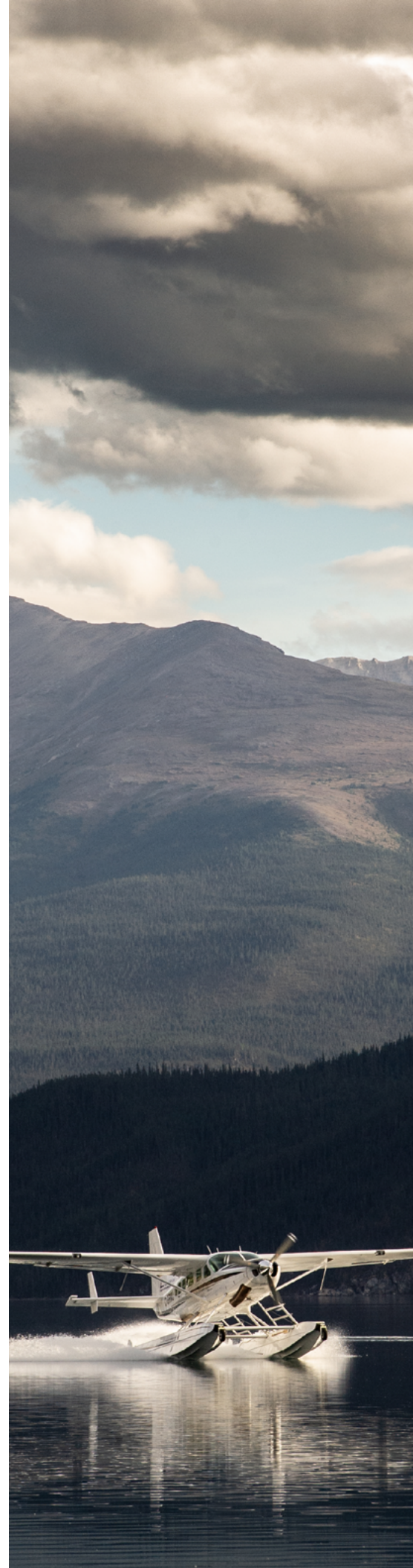
What communications methods did you find most effective when working with tourism businesses and visitors?

Text alert systems are key to effective and timely communications. Businesses can add this information to employee training, encourage them to sign up, and describe why. Accommodation providers can inform guests by having signs in the room welcoming them to the region and highlighting key resources should an event occur. This can be done through posters, signs, or even in room TVs. All communication should be informative, and not alarmist, with simple calls to action such as “Sign up here” or “All in safety together”.

Human resource teams of an organization, no matter the size, are key in disseminating information internally. They have access to email lists and contacts for the entire company, and can send automated messaging directing employees to important safety information. Training guides, such as DestinationBC’s templates, are also helpful for developing internal emergency preparedness systems.

Any funding sources for businesses that you think they should be aware of?

Businesses can work with industry associations to advocate proactively in advance of incidents. Local organizations may have emergency fund components available for tourism businesses. Tourism businesses can identify local partners in their regions, for example through Chambers of Commerce and discuss their role and how they can advocate for provincial funding. Now is the time to have proactive conversations, especially as climate events become more frequent.



Resources for Further Reading

The following resources aim to help tourism businesses monitor, prepare, and act in the case of climate disasters and extreme weather events.

[Tourism Emergency Management Framework \(TEMF\)](#) provides a comprehensive framework for tourism in British Columbia to help protect the health and safety of travelers and support a resilient tourism industry. The framework offers a coordinated approach to emergency management for the tourism sector by governments, communities, businesses, and citizens, and follows a four stage approach of mitigation, preparedness, response, and recovery.

[Destination BC Emergency Preparedness](#) is a resource hub for emergency preparedness for tourism businesses, including emergency communication and messaging guidelines, responsible travel graphics, and regional emergency contacts.

This [PreparedBC](#) guide aims to help tourism businesses in BC to plan and prepare for emergencies. It offers tools and templates for businesses to assess risk, identify core business functions and critical contacts, and outlines a clear planning process for evacuation, sheltering in place, and communications.

[FireSmart BC](#) offers educational resources and practical assessment tools to better understand the impact of wildfires in BC.

[Water Conservation Tourism Industry Toolkit](#) is a tool kit for water conservation within BC's tourism industry.

[ClimateReadyBC](#) has hazards and mapping tools for all common disasters affecting BC.

[BC Government Tsunamis](#) prepares individuals for tsunamis by understanding how to prepare and respond during a tsunami in BC's five tsunami notification zones.





[EmergencyInfoBC](#) provides current and official information on emergencies as they occur in BC. The [EmergencyMapBC](#) is an interactive map of all emergencies in BC, including wildfires, evacuation alerts, flood watches and warnings, hot weather resources, recent earthquakes, and tsunami notifications.

[BC Air Quality Health Index](#) monitors air quality indexes and forecasts for the province.

[FireSmoke Canada](#) is a Canadian portal for wildfire weather and smoke.

[BC Economic Development Association Top 10 Steps to Prepare Your Business for Evacuation](#) provides important steps to follow to prepare your business in case of an evacuation alert.

[The Great British Columbia Shakeout](#) provides news and guidance on what to do during an earthquake.

[B.C. Drought Information Portal](#) helps individuals understand, prepare, and respond to current drought conditions.

[Climate Adaptation and Preparedness for the Kootenay Rockies Tourism Sector](#) is a simple infographic created by the Kootenay Rockies region with key facts about climate adaptation and preparedness.

[PreparedBC: Guide for Tourism Operators](#) is a guide with actionable steps to keep tourism businesses and guests safe during a disaster.

[Incident Command System Overview](#) (ICS) is an emergency response and incident planning management system used by government agencies and businesses in BC. It is important for businesses to understand this management framework so that they can effectively respond during an emergency.