

WIND & STORMS

We have a plan to adapt.

Together, we can weather the storm of climate change. Read this brochure to learn about wind and storms in our region, how they could affect you, and information to help you be prepared. Stay up to date:

CVRDNEWNORMALCOWICHAN.CA



More intense storms are forecast for the Cowichan Region.

The Cowichan region's mild climate with warm, dry summers and relatively mild winters are attractive to many. However, with our global climate changing, and we are seeing frequent and extreme storms that have higher wind speeds and more intense rainfall. Extreme storms can destroy critical infrastructure; damage homes, buildings, businesses, and industry; compromise the environment; and harm residents.

How can we prepare for the new normal?

Be prepared and understand your risks.

Cowichan Region Climate Adaptation Partners have been working together to study and prepare for the impacts of climate change. Together, we are taking steps to implement risk management at the community level through a Board-approved Climate Adaptation Strategy.

Residents, businesses, and property owners also have responsibility to prepare. Knowing the risks wind and storms helps people mitigate potential impacts on private lands, increases personal safety, and prepares us to respond quickly in the event of an emergency.



COWICHAN
ADAPTS



ABOUT WIND & STORMS

While rain is common in the Cowichan region, storms that bring high winds can cause particular damage.

Extreme storms with strong winds can impact our communities in many ways:

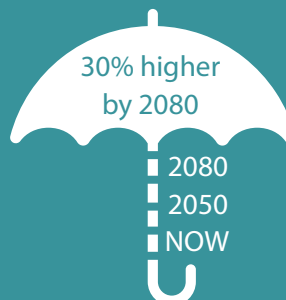
-  Property damage to buildings and infrastructure
-  Power outages impacting basic needs such as heat, light, clean water, refrigeration, etc.
-  Blocked roads by downed trees and power lines, limiting access including for emergency services
-  Broken communication channels including phone, cable, and internet services
-  Storm surge impacts to coastal areas and water-based transportation like ferries
-  Stormwater systems challenged to manage rapid run-off and stormwater flows
-  Costs to clean-up storm damages
-  Impacts to delivery community services such as garbage pick-up, recreation programs, etc.
-  Water turbidity from overwhelmed water systems
-  Public safety hazards from fallen branches or blowing debris
-  Environmental impacts including damages to trees, vegetation, and habitat
-  Economic impacts including agricultural damage, loss of business and industry opportunity, and recreation and tourism losses
-  Social and health impacts including stress and mental health concerns
-  Accumulations of ice from ice storms can topple trees, utility poles, and be dangerous for the public

CLIMATE CHANGE PROJECTIONS

Meteorologists can predict severe weather using radar, satellite images, weather balloons, weather stations, and computer forecasting models. Fortunately, short-term weather forecasts are available to the public on a regular basis to help communities prepare for storms. Climate change modelling simulates how our climate will respond to long trends, which indicate increased frequency and intensity of wind and storm events.



By the 2050s, it is currently projected that our 1-in-20 (or 5% chance) wettest day extreme storm events will be about 30% more intense



Maximum One-Day Rainfall

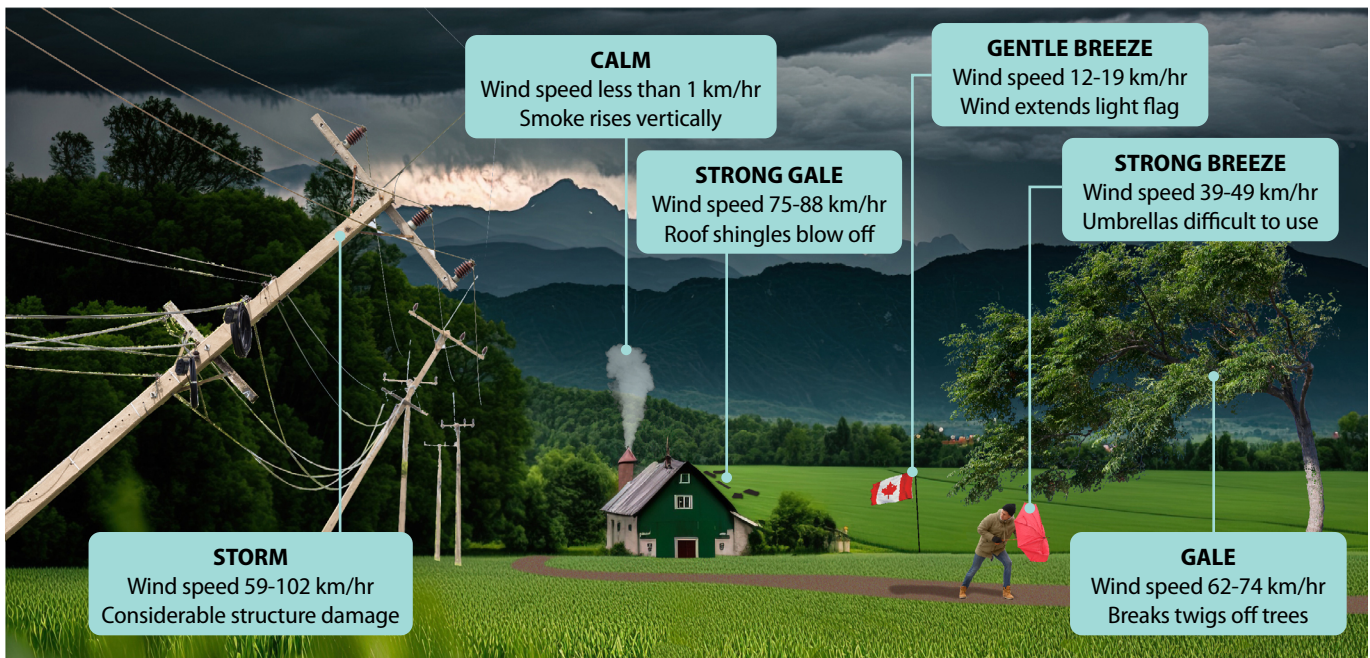
2080	98 mm
2050	85 mm
NOW	75 mm



MANAGING RISK: WIND & STORM FORECASTING



The Beaufort Wind Scale is a tool that provides a visual estimation of the wind's effects on land and sea. The graphic below illustrates some wind impacts. View the complete table at the [Government of Canada website](#).



ADAPTATION TO MANAGE RISK

We can adapt to the risk of wind and storms in our region by taking a proactive approach to prepare our social, economic, and environmental systems for the impacts of a changing climate. Here's how.



Build resilient grey and green infrastructure that can withstand extreme storm events



Locate and design community facilities to be safe and available to shelter those impacted. Plan ahead so that services are quickly operational following an event



Work together to **enhance emergency management systems**, especially to support vulnerable populations



Continue to update emergency preparedness and warning systems to help communities respond quickly to major events



Explore opportunities and feasibility for decentralized energy generation and distribution in the region



Educate and support community members to manage risk at home and in business



TOOLKIT

Use these tools to help understand wind and storm risks in your community, how you can prepare, and what to do if an extreme storm occurs.

Be Ready for Wind and Storms.

BEFORE A STORM

- ▶ Review potential hazards like loose materials, large trees, or electrical lines around your property or business that could be damaged in a storm
- ▶ Secure outdoor furniture, patio umbrellas, and other items so they don't blow away
- ▶ Inspect trees on your property and trim branches that could be a hazard or remove trees in poor health. A certified arborist can provide expert advice.
- ▶ Prepare an emergency kit with at least three days of supplies
- ▶ Locate emergency centres and warming stations in your community
- ▶ Consider obtaining storm insurance
- ▶ Consider purchasing a generator for your home or business in case of a power outage

AFTER A STORM

- ▶ Stay away from damaged areas and watch out for debris such as sheet metal, glass, electrically-charged wires, and loose tree branches
- ▶ Follow boil water advisories to avoid contaminated water
- ▶ Discard refrigerated food that may be contaminated after power outages
- ▶ Examine your walls, doors, staircases, and windows for damage
- ▶ Take photos of damage, both of the building and its contents, for insurance claims
- ▶ Check for debris collection drop-off locations

DURING A STORM

- ▶ Stay informed by listening to local media for the latest advisories and weather information
- ▶ Check on friends and neighbours
- ▶ Avoid all non-essential travel on roads and water
- ▶ Use caution around flooded roads, downed trees and power lines, and stay inside during an ice storm
- ▶ If you live in coastal areas that could be impacted by storm surge, consider moving to higher ground

RESOURCES

- ▶ Visit BC's [Storm Preparation webpage](#)
- ▶ Use [Windy.com](#) or [Windy app](#) to monitor wind speeds and forecasts
- ▶ Check BC Hydro's [power outage map](#)
- ▶ Review information on [how to prepare for a power outage](#)
- ▶ Stay tuned to [public weather alerts for British Columbia](#)



Stay connected, monitor progress, and find tools about how you can adapt
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