
This background brief is a support document for the 2024 public engagement on the City of Maple Ridge's Climate Action Plan.

Impacts of Extreme Weather

Extreme weather occurrences are becoming more common and the impacts on Maple Ridge are becoming greater.

- **Heat and Drought:** Increasing heat and temperatures have been experienced through extreme heat days and periods of drought - leading to water conservation, water restrictions, and risks of heat exposure and heat stress.
- **Fire and Smoke:** Increases in heat and periods of drought put forested areas at higher risk of fires and wildfire smoke - leading to increased poor air quality and health related risks of poor breathing, respiratory and cardiac ailments.
- **Flooding and Landslides:** Increased sudden and heavy extreme rainfalls have led to flooding of neighbourhoods along the Alouette River and the closing of flooded streets. Heavy rainfalls and rising river water levels combined with warm temperatures and melting snowpack can develop into landslides and debris flows on mountain sides and steep gullies.
 - With the Fraser River bordering Maple Ridge to the south there is a significant chance that an increase in sea level will push salty ocean water further upstream, increasing the water levels of the river. Heavy rains and increased alpine snowmelt can also cause increased volume in the Fraser River.

Some members of our community have been particularly impacted by recent flooding, extreme heat, and wildfire smoke events. This is why Maple Ridge is adopting a resilience approach that increases our ability to respond and reduce the impacts of climate change on the community - contributing to a safer and healthier community.

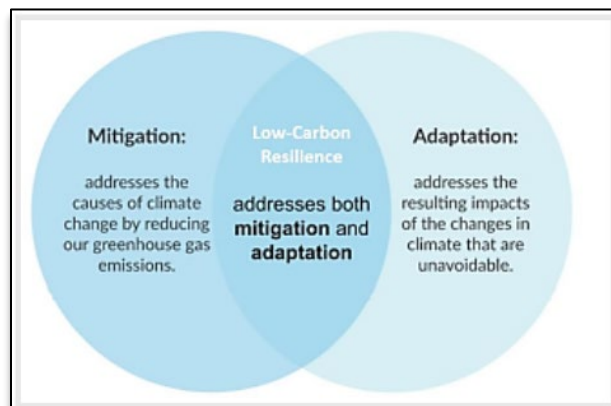
What is the Maple Ridge Climate Action Plan?

A City Climate Action Plan will help focus efforts and resources on shared priorities - contributing to a cleaner, healthier, and more sustainable community.

Successful climate action requires:

- collaboration between multiple levels of government and organizations
- residents and businesses taking important steps to reduce emissions and build resilience

The Maple Ridge Climate Action Plan will develop actions that reduce our vulnerability and risks to climate change (known as “**adaptation**”) and reducing our contributions of greenhouse gases (**GHGs**) that result in climate change (known as “**mitigation**”) while advancing benefits including strengthening community health, local economic development, a liveable community that meets the needs of our diverse residents, and better infrastructure that benefit and strengthen our City today and in the future.



Project Funding

The Maple Ridge Climate Action Plan is being funded by Province of BC grants and will identify strategic actions that can be taken at the municipal level. The plan will guide how the City uses federal and provincial funds available for climate action in the future.

Climate Action Plan Goals:

- Show greenhouse gas emissions in the community from buildings (residential, commercial, institutional, and industrial), transportation and waste.

- Review the potential for natural assets (trees, parks, greenspace, watercourses) in the community to capture greenhouse gas emissions and reduce urban heat, and the opportunities to protect, enhance and expand these assets to support climate action.
- Identify risks and determine vulnerabilities in the community from climate hazards including wildfire, heat, flooding, extreme rain.
- Map extreme temperature (heat) to find community vulnerability and identify responses.
- Examine multi-hazards and map the risks of climate change and impacts to the local economy, social and cultural practices, and the environment to inform community response.
- Determine “BIG Move” priorities and actions that can address climate action and build more resiliency in the community to climate impacts.
- Develop an action-orientated climate action plan for Maple Ridge to inspire action and advance community benefits while reducing emissions and addressing the climate challenges that Maple Ridge faces.

Related City Projects

Developing the Climate Action Plan builds on the City’s work to date on advancing sustainability through corporate and community initiatives in:

- **green infrastructure:** Urban Forestry Management Strategy, Green Infrastructure Management Strategy, Tree Protection & Management Bylaw
- **transportation:** Strategic Transportation Plan, Maple Ridge Moves
- **sustainable development:** Watercourse Protection Bylaw, Integrated Stormwater Management Plans, Natural Features Development Permit

The Climate Change Plan and resulting actions will help align the City's strategic goals and relevant policies, including the [Official Community Plan](#).

Glossary

Mitigation - Reducing or preventing emissions of greenhouse gases that cause climate change.

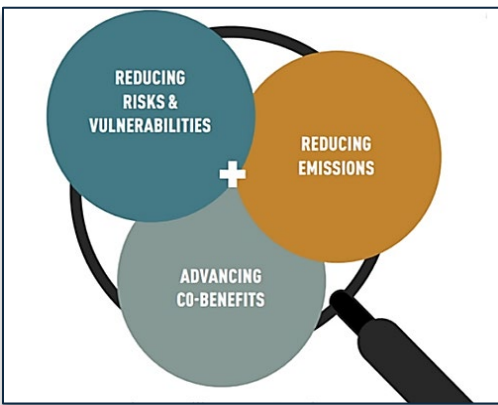
Adaptation - Identifying and preparing for the impacts of climate change to reduce risk and vulnerability from climate change impacts.

Resiliency – Social, natural, and economic systems being able to respond to and recover from climate change impacts and events (flooding, heat waves,

Low carbon resilience: An approach to climate action that coordinates and establishes adaptation and mitigation within municipal and community planning, and decisions to enhance a community’s collective ability to withstand the impacts of climate change.

It considers how climate actions intersect with community priorities - such as health, equity, biodiversity, and natural systems - and economic development so that actions provide multiple benefits beyond just climate resilience.

Low Carbon Resilience Approach



Project Phases and Timeline

