



Climate Change Impacts

Parts of the Northwest Territories are warming up to four times faster than global averages and experiencing considerable changes to the natural environment. This intense warming means climate change impacts are being felt more strongly and more rapidly in the NWT.

Our ecosystems, species, water quality and quantity, infrastructure, health and well-being, cultures and heritage are experiencing pressures and changes due to the climate warming. These impacts need to be addressed through climate change adaptation and mitigation actions to build stronger and more resilient communities.

Warmer temperatures affect the safety and reliability of our transportation systems by contributing to permafrost degradation on NWT highways and airport runways; reduced operating seasons for winter roads and increased operation and maintenance costs. Ice roads are no longer as reliable and travelling on the land is becoming more difficult and sometimes dangerous due to changing snow and ice conditions. Thawing permafrost requires more maintenance to our infrastructure foundations and changes to our construction practices are required

to ensure new infrastructure is more resilient to the effects of climate change. NWT ecosystems dependent on permafrost for their stability or unique nature will be irreversibly transformed.

Increasingly intense wildfires and a longer than normal fire season are directly attributed to climate change. Communities and other values are at an increased risk, which can only be mitigated by more thorough FireSmart practices and by implementing community protection plans.

There are some benefits and opportunities to a warmer NWT climate. Reduced energy bills resulting from warmer winters may free up income for residents. This could be put towards other adaptation or mitigation initiatives. Shrinking sea ice will allow for shipping and tourism opportunities along the Arctic coast. Adaptation initiatives allow innovative solutions to lessen the negative impacts of climate change, while capitalizing on the opportunities that present themselves.

Appropriate monitoring and adaptation initiatives, such as identifying the impacts taking place in the NWT, those expected to take place, and developing a plan on how to adapt to these changes is one of the key objectives of the NWT Climate Change Strategic Framework (CCSF).