

# A Homeowner's Guide to Permafrost

Providing Nunavut homeowners with the necessary resources to keep their houses on solid ground

## CONTEXT

Changes to permafrost is one of the more significant climate change impacts communities are experiencing in Nunavut. Infrastructure is being (and will continue to be) severely compromised because of rapid changes in the terrain that can have serious effects on Nunavummiut (people of Nunavut).

In the past, Nunavut homeowners have not always had access to some of the necessary resources on permafrost and how it is a critical component of their home structures. Homeowners need relevant information on permafrost if they are to adapt to changes and protect their homes.



Photo: Government of Nunavut

## OBJECTIVE

The Government of Nunavut's Department of Environment has created *A Homeowner's Guide to Permafrost in Nunavut*. The objective is to provide homeowners in Nunavut with the knowledge and resources to make simple changes around their home to help the permafrost stay frozen beneath it. The guide also helps local decision-makers

take on adaptation actions that are relevant to the communities they serve. The guide was developed as part of a series with the Government of Northwest Territories' *A Homeowner's Guide to Permafrost in the Northwest Territories*.

The Nunavut guide explains what permafrost is, how climate change is affecting it, the impacts to houses from thawing permafrost, and the importance of preventing thaw. It also explains how wind, snow, water, and the seasons affect permafrost, and how skirting, snow build-up, water build-up and other practices can all lead to permafrost degradation.

## APPROACH

The guide was written in a non-technical, plain language format for the average homeowner. The text is broken up with informative illustrations, check-lists, and useful photos displaying good and bad practices of home foundation management. A picture says a thousand words, and this philosophy is used to keep the guide user-friendly.

## EXPECTED RESULTS

Building degradation from permafrost thaw can be costly to not only homeowners, but also to government and private construction companies. By promoting good building maintenance practices and providing education and outreach around the importance of permafrost to buildings, it is expected that some of these costs might be reduced or delayed. This will lead to significant future cost savings. In using this guide, homeowners will be better equipped to make decisions about the construction and upkeep of their homes.

## Significance

*The Homeowner's Guide to Permafrost in Nunavut is the first of its kind to provide education about the effects of permafrost thaw on homes and adaptation strategies for Nunavummiut to keep a strong foundation.*

## Partners

- Nunavut Housing Corporation
- Government of Northwest Territories
- Centre d'études nordiques, Université Laval
- Natural Resources Canada
- Aboriginal Affairs and Northern Development Canada

## FOR MORE INFO

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