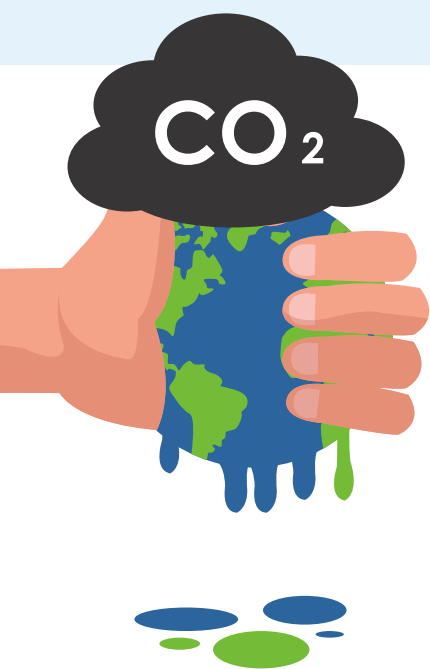


PERMAFROST IN THE CANADIAN ARCTIC

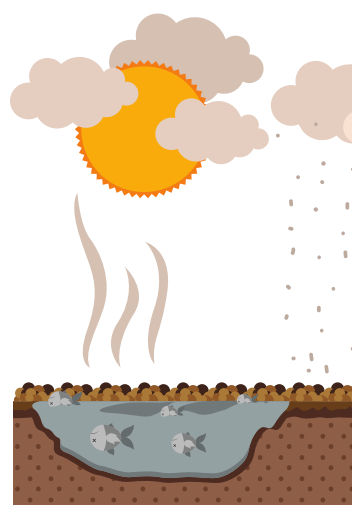
PERMAFROST

refers to “ground (soil or rock and included ice and organic material) that remains at or below 0 degrees C for at least two consecutive years”

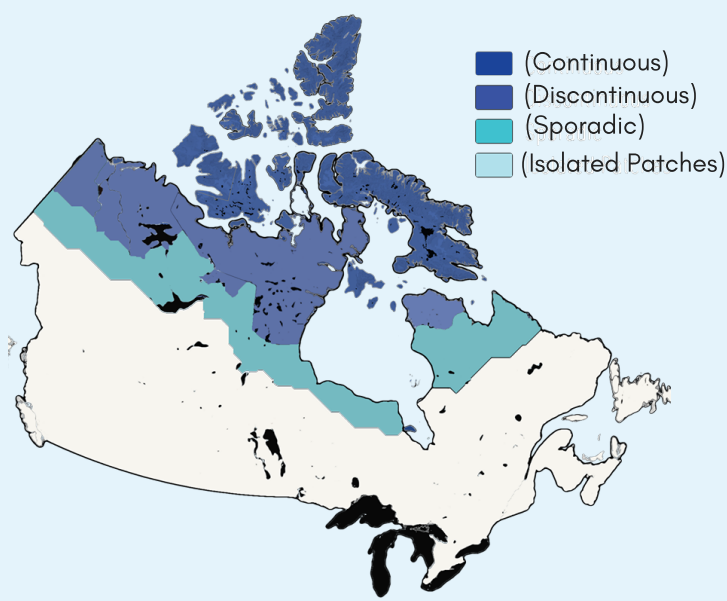
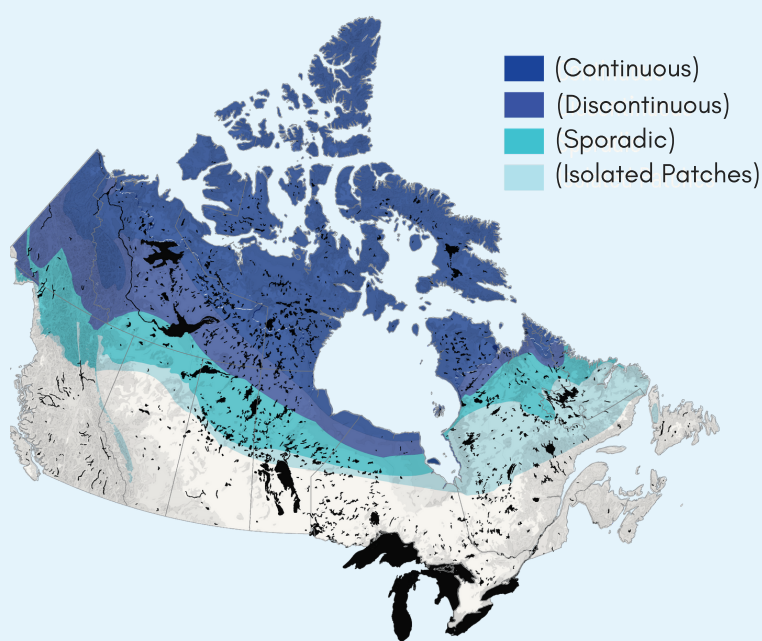


Global climate change is largely the result of anthropogenic greenhouse gases

Climate change increases Earth's surface temperatures. This causes permafrost to thaw and changes its distribution and properties

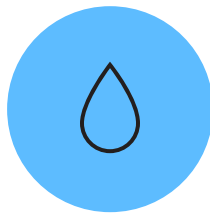


Today permafrost underlies half of Canada's landscape...



...However, as the Arctic warms, permafrost may be reduced to half its distribution!

PERMAFROST THAW AFFECTS CANADIAN ARCTIC COMMUNITIES IN MANY WAYS



Makes surface water flows unpredictable affecting water quality and quantity



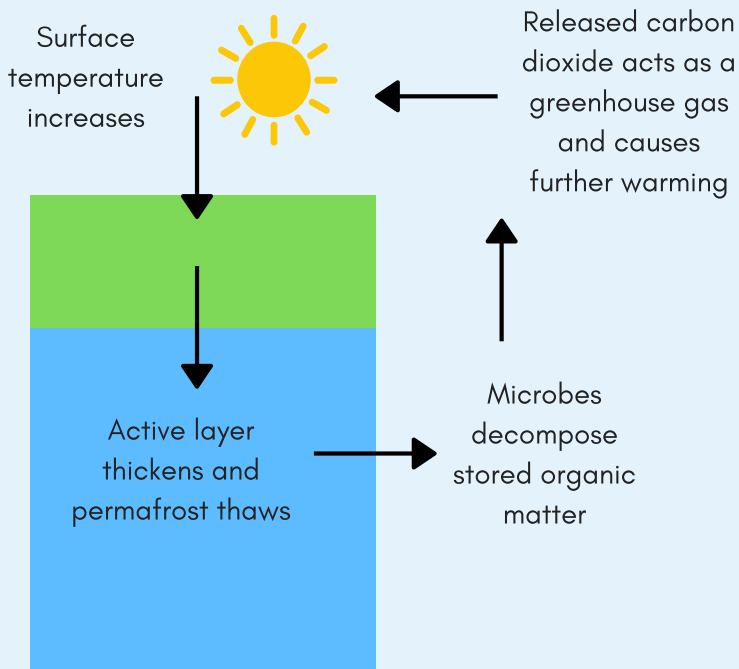
Infrastructure built atop thawing permafrost may fail



Creates costly need for regular maintenance of transportation routes



Disturbs biota, affecting traditional subsistence strategies



Worse yet, as surface temperatures increase with climate change, the thawing permafrost allows for microbes to decompose stored organic matter, releasing carbon to the atmosphere and causing further climate change!



So what will you do to protect the Canadian Arctic from climate change?