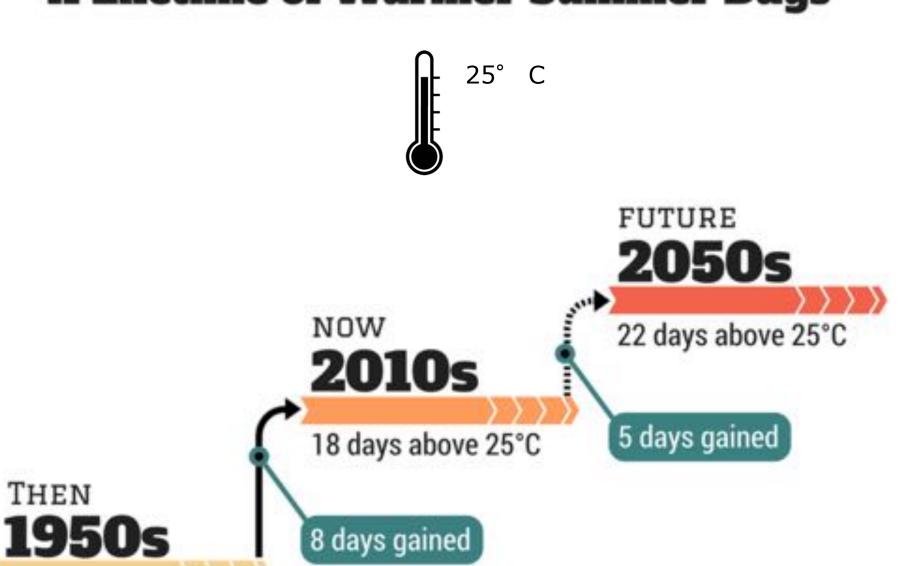
Up North on Climate Conference David Pearson, School of the Environment, Laurentian University. 24 April, 2018 dpearson@laurentian.ca

A Lifetime of Warmer Summer Days

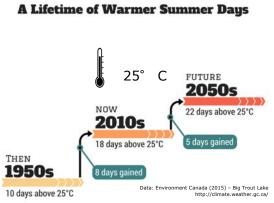


10 days above 25°C

Data: Environment Canada (2015) – Big Trout Lake http://climate.weather.gc.ca/

Very hot summer days



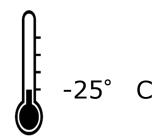


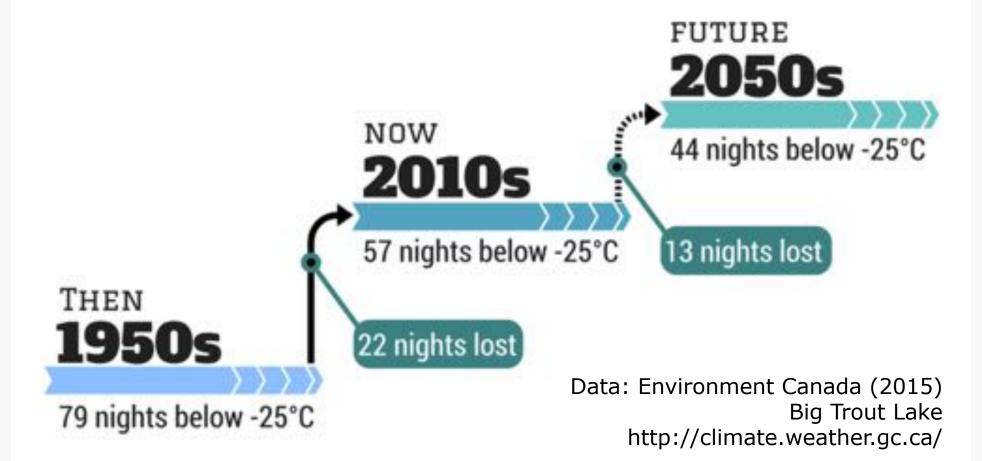
Have Elders or very young children in your community suffered heat stress during extreme hot weather? More frequently than in the past?

How have people dealt with heat stress?



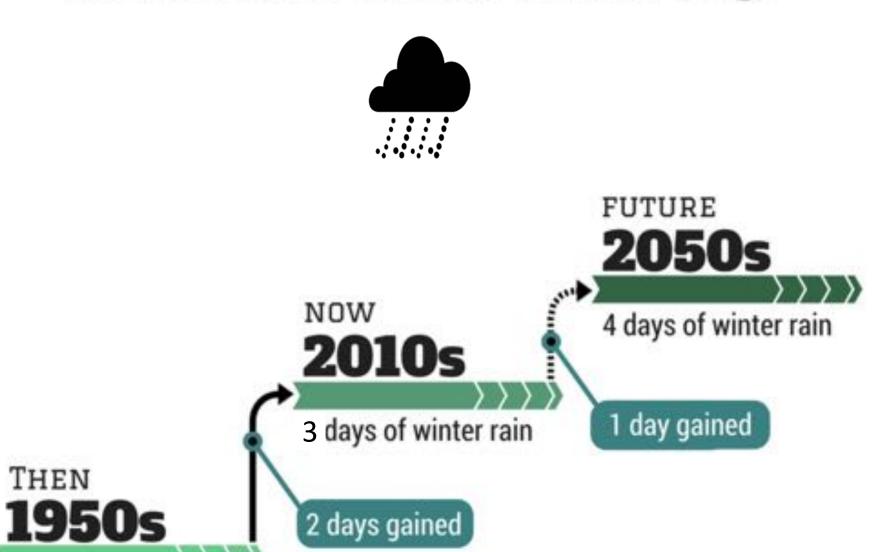
A Lifetime of Fewer Very Cold Nights







A Lifetime of Wetter Winter Days



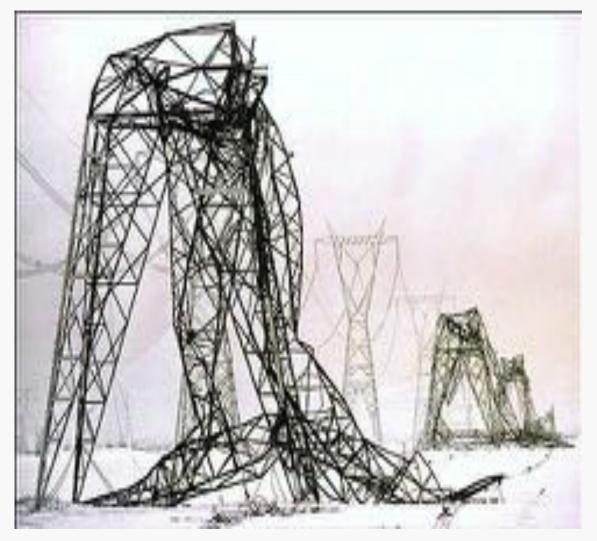
1 day of winter rain

THEN

Data: Environment Canada (2015) - Big Trout Lake http://climate.weather.gc.ca/



The destructive power of freezing rain

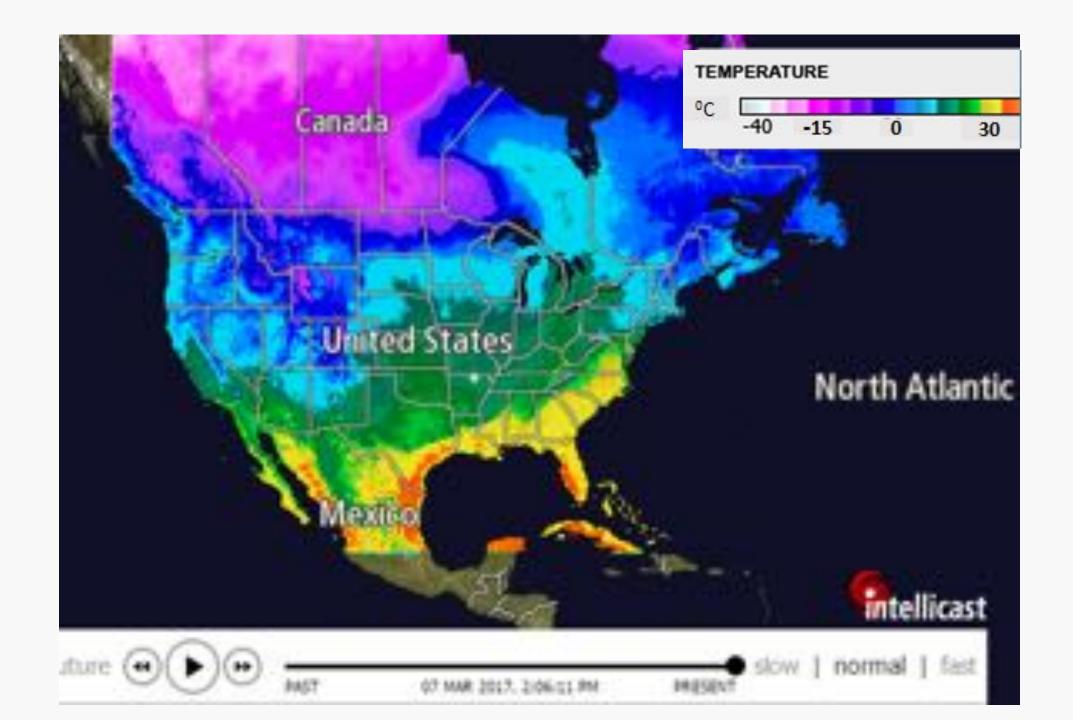


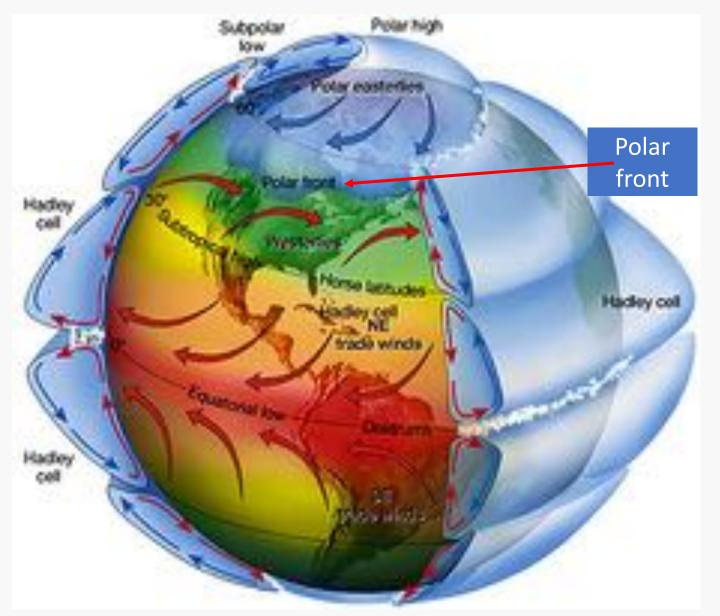


Freezing rain threatens vulnerable power grid =

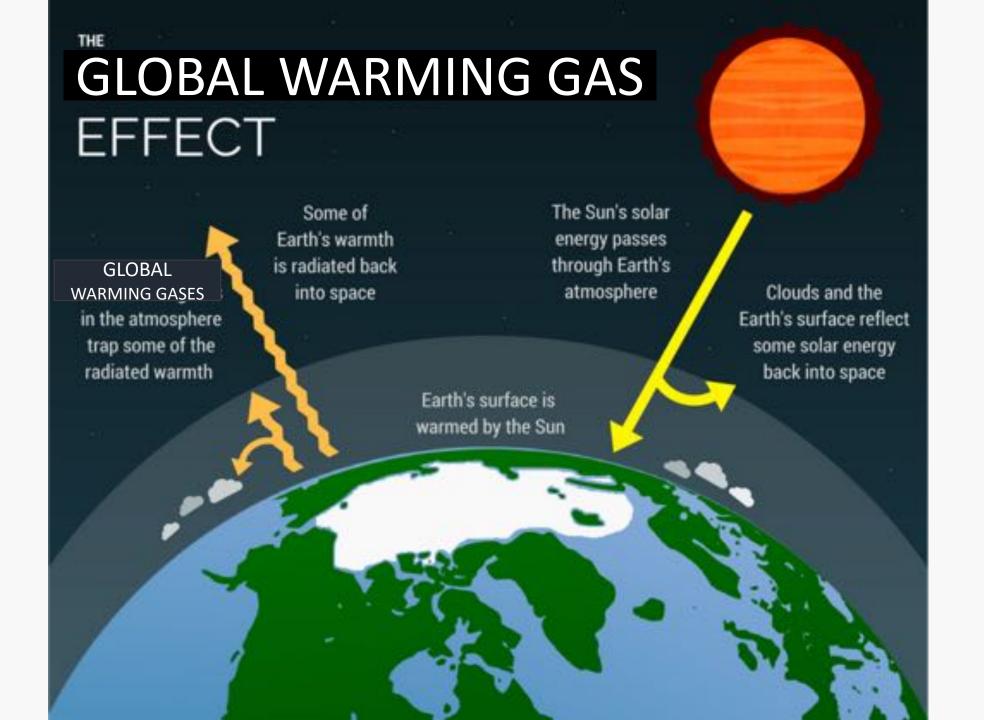
WAYNE THIBODEAU The Guardian







http://serc.carleton.edu/eslabs/hurricanes/index.html



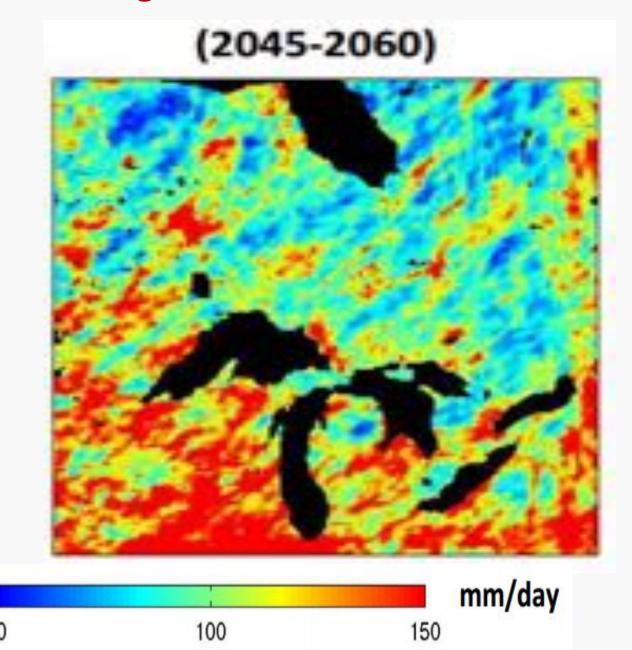




Future change in extreme rainfall

Rainfall during extreme events will increase by 14% - 29% by 2050

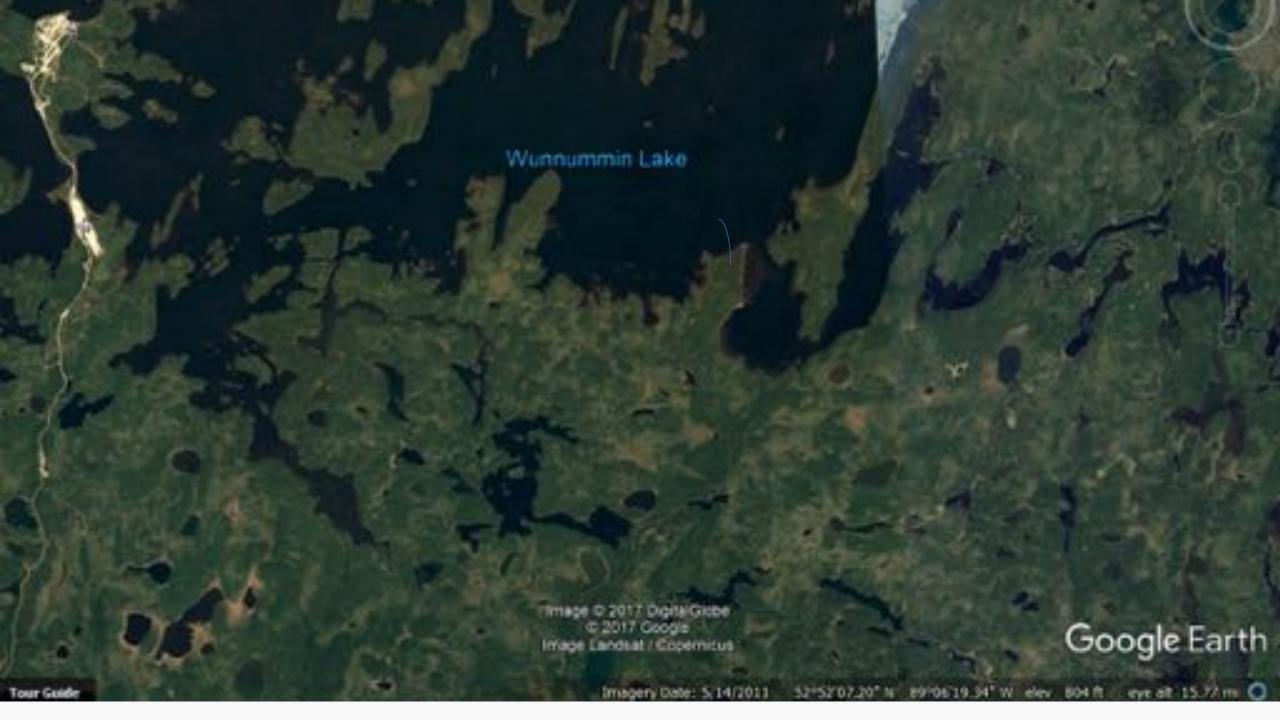
A once in 50 year rain event today will occur every 25 – 15 years



D'Orgeville and Peltier JGR – Atmos. 2014

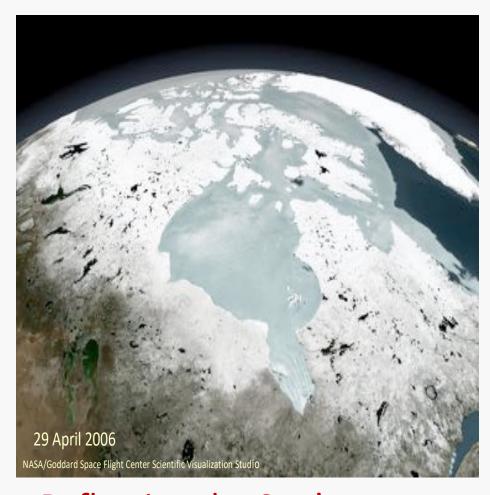








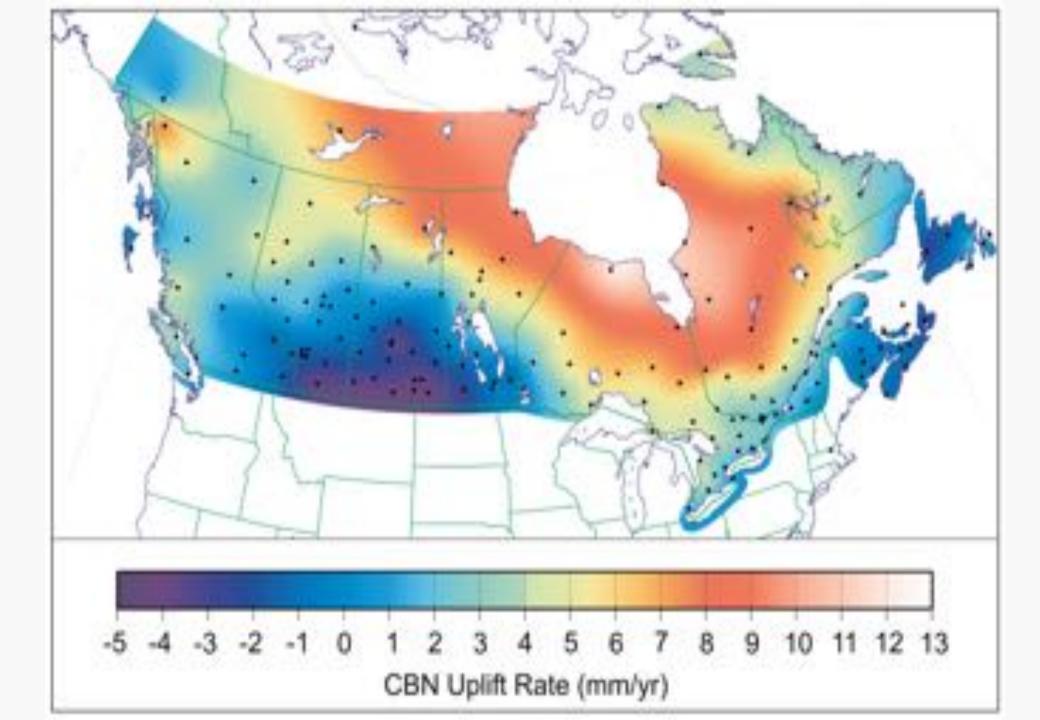
The two faces of Hudson Bay



Reflecting the Sun's energy and cooling the Spring breezes over the Lowlands

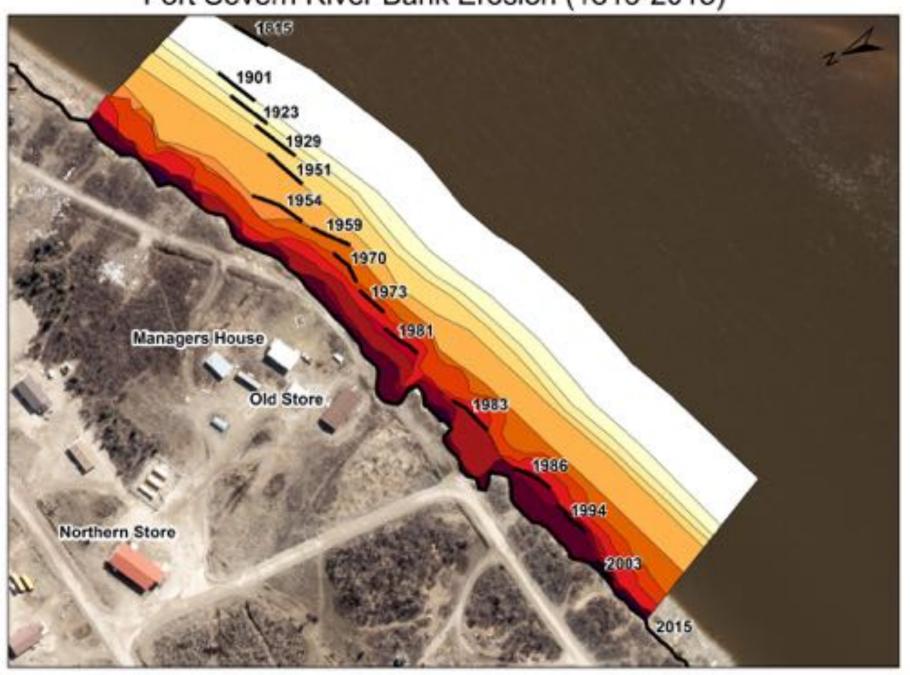
Absorbing the Sun's energy and warming the Fall breezes over the Lowlands



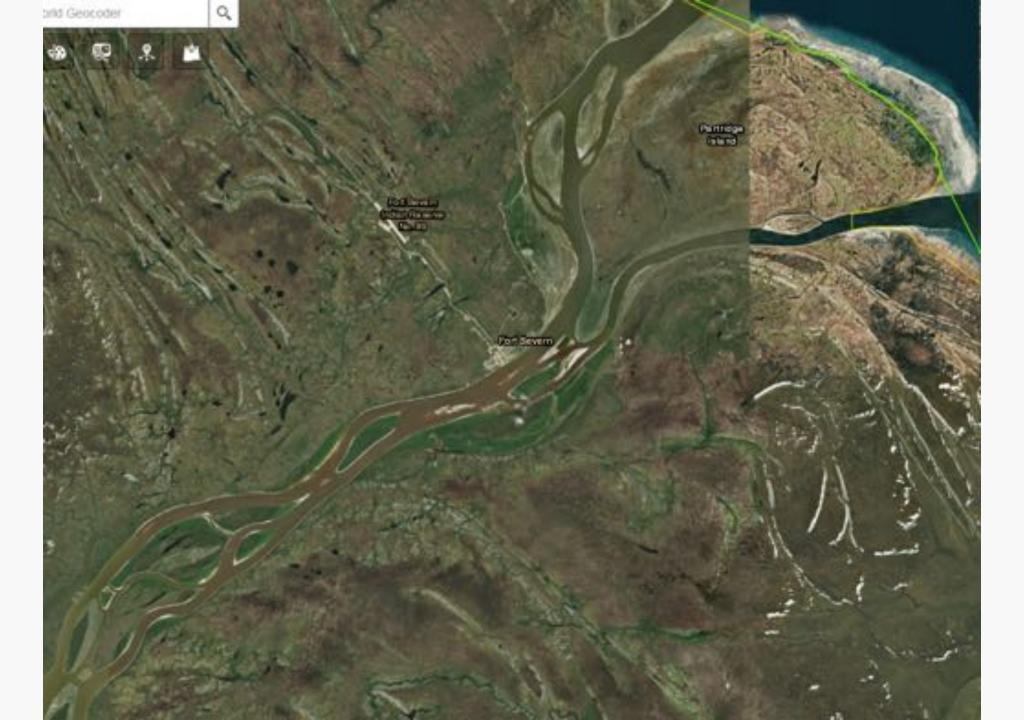




Fort Severn River Bank Erosion (1815-2015)









Geese





How much has the date of the arrival and departure of geese changed compared with the past ?

Are geese landing where they did in the past ?

What are people doing to find the geese they need?



How does weather affect northern First Nation communities in Ontario?

Weather has an impact on communities in many different ways. As climate changes some of those impacts are becoming worse. Some, like thinner winter ice, are becoming dangerous.

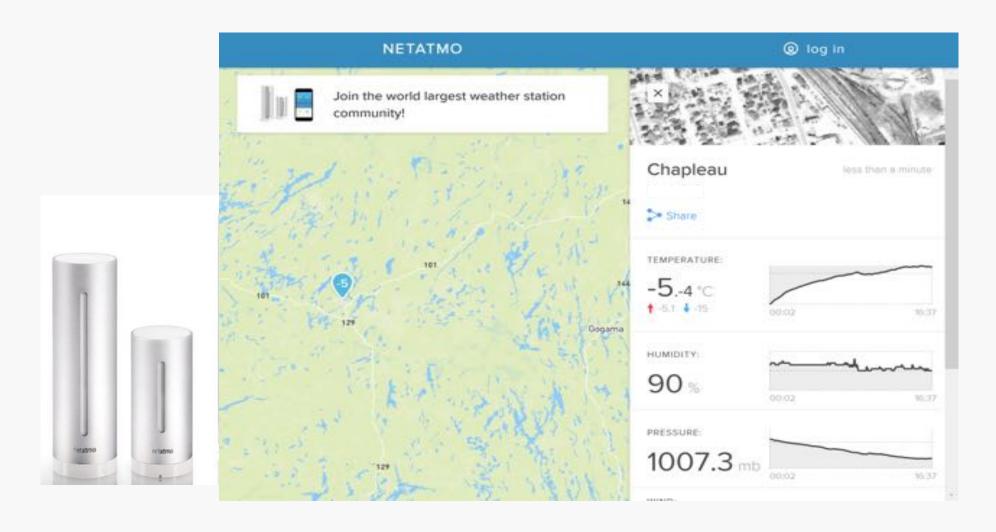
It is important to adapt to what is I	happening now and to prepare for what might happen during
the next two or three generations.	What are you seeing in your community?

ō	ommunity	April 2018
Tick of seen	flooding of ditches and buildings as late winter and early spring rain faits on frozen ground – rapid snow melt might happen too. Comments -	
	flooding over banks of rivers caused by ice jams during break-up. Comments -	
	flooding over the banks of rivers or takes during rapid snow melt. Comments -	
	sudden flooding in summer during heavy rain storms, especially in places with poor drainage in communities. Comments -	



Monitoring Tools

Weather – Netatmo Weather station



Information Tools

