



Climate change adaptations for northern First Nation communities & individuals

FOOD SECURITY

CLIMATE CHANGE

warmer temperatures



changing rain & snow



IMPACTS ON THE LAND



changes in water levels



permafrost thaw



warmer lakes/ rivers



earlier spring



warmer winters



changes in vegetation

IMPACTS ON FOOD



changing migration patterns

↑ plants & animals moving north



shifting ranges for plants & animals



changes in fish spawning

cold-water fish under stress

Monitor commonly harvested plants, animals & fish

Assist plant migration

Adjust where, when & how you harvest

Protect/restore important habitat

Share harvested food

Grow food in the community

Start a community food storage program

Use community coolers/freezers or traditional food storage



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Community-based monitoring



- Monitoring activities can help us understand what's happening with plants and animals in our area.
- What a community chooses to monitor will depend on its needs and goals.
- The information gathered from monitoring can help guide future actions and decisions.
- Things to monitor could include:
 - population counts (how many?)
 - fish spawning times & locations
 - migration times & patterns
 - animal health & diseases
 - locations where important plants grow
 - when plants are ready for harvest
 - water levels & temperature

Protect/restore habitat



- Protect the habitat that is important to harvested plants and animals and/or restore habitat areas that have been damaged.
- Important habitat areas might include:
 - migration routes
 - spawning grounds
 - staging & nesting areas
 - cold water refuges
 - calving grounds
 - wild rice stands

Adjust how you harvest



- Change when and where you harvest to match when/where animals and plants are now available.
- Change how/when you travel and wait until weather conditions are safe.
- Harvest species that are new to the area and shift away from harvesting vulnerable populations.

Community food storage



- Warmer fall weather can make it harder to keep harvested meat cool.
- Community coolers can provide a cool space for community members to hang and butcher their game. Community freezers can be used for long-term storage of food by members.
- Encourage traditional food storage methods, like smoking/salting meat, fish houses or storing food underground (if climate conditions still allow).

Food sharing



- Sharing harvested foods within the community can help ensure that everyone has access to healthy traditional foods.

Community food production



- Growing food in the community can help more people have access to healthy foods. Examples of local or community food production include:
 - household gardens
 - raising animals
 - community gardens
 - indoor growing methods
 - forest gardens
 - other methods of culturally appropriate food production
 - greenhouses

Assisted migration



- Programs where humans help species move to new areas in response to climate change is called 'assisted migration'.
- For food security this may mean planting berries or other plants that will grow well in future climate, or helping important plants in the area continue to grow.
- Moving plants and animals can lead to invasive species and disruptions of ecosystems. Weigh all risks carefully before using assisted migration.



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