



Climate change adaptations for northern First Nation communities & individuals

DROUGHT & DRY PERIODS

CLIMATE CHANGE

warmer temperatures



changing rain & snow



IMPACTS ON THE LAND

more evaporation from plants, land & water



dry land



poor drinking water quality



berries & plants under stress



dusty conditions



increased risk of wildfire



shifting habitat for plants & animals



limited fish spawning areas, migration routes & cold water refuges



low water for travel



Assess drought vulnerability & make a plan



Find out how your community could be impacted by dry weather

Prepare for travel with low water

Monitor for drought conditions in your area



Use 'Canadian Drought Monitor' or create a community-based monitoring program

Monitor/protect important habitat

Share about water conservation

Control dust on community roads

Monitor/protect important plants & animals

Monitor water levels

Visit Ontario's Surface Water Monitoring Centre online or create a community-based monitoring program

Assess drinking water systems

Ensure they will work in future drought & low water conditions

I thought climate change was predicted to make northern Ontario wetter?

It is, but summer months will only see a small increase in rain, which may not be enough to replace the water lost to evaporation.

DROUGHT & DRY PERIODS - ADAPTATION OPTIONS



Travel & low water



- Low water levels can make travel by boat more difficult. Consider changes like:
 - finding new water routes
 - creating a portage around low water areas
 - using motors made for shallow water
 - carrying lighter loads in boats
 - traveling over land instead
- Be mindful of hazards like: newly exposed rocks (sometimes called 'reefs') or logs, soft/muddy shorelines, etc.

Share about water conservation



- Inform the community of drought or low water conditions and encourage water conservation when needed.
- Raise awareness about water conservation and how it can be done in the community (fix leaky taps/toilets, collect rainwater for gardens, etc.).

Monitor water levels



- Set up a program to monitor water levels or use existing programs like the Low Water Conditions Map from Ontario's Surface Water Monitoring Centre.
- In some cases, low water could impact hydro-electric power generation. If this applies in your area, you may want to plan for power outages.

Drought impact assessment



- Find out what areas of the community might be impacted by drought conditions and how community members might be affected.
- Changing drinking water quality, dusty roads leading to breathing problems, lack of water for gardens or harvested foods, are all examples of drought impacts.
- Have a community plan to lessen the impact of drought on people and the community.

Monitor for drought conditions



- Monitor for drought conditions in your area and have a plan in place for dealing with drought conditions (called a drought response plan).
- Drought monitoring can be done with programs like Canadian Drought Monitor.
- Communities may want to create their own drought monitoring program.

Monitor/protect important habitat



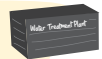
- Monitor and/or put measures in place to protect important habitats that can be impacted by dry conditions and low water.
- This could include wetlands, wild rice beds, fish spawning grounds, fish migration routes, shoreline areas, etc.

Control dust on roads



- Hot, dry weather can cause excessive dust on gravel roads, leading to breathing issues for some in the community.
- To limit dust on community roads: limit traffic, encourage lower speeds, change road building materials, water roads or apply eco-friendly dust suppression products.

Assess drinking water systems



- Low water levels can put drinking water quality at risk.
- Monitor drinking water sources for problems related to low water like algae growth, higher contaminate levels, issues with intake pipes, dry wells, etc.
- Determine if your drinking water system will work well in drought and low water conditions with a vulnerability assessment.
- Have a plan to supply emergency drinking water if needed.

Monitor/protect important plants & animals



- Monitor and/or put measures in place to protect important plant or animal species that could be impacted by drought and dry periods.



www.upnorthonclimate.ca

*Adaptations vary in scale (small to large), focus (individual to community) & cost (low to high). Find what works for you and your community.