



Anishinabek
Nation



Climate Change and Food Security Study:

A Multi-Region
Vulnerability
Assessment for
Adaptation and
Resilience-Building
Using Traditional
Knowledge

**Prepared by First Peoples Law
for Anishinabek Nation**

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Lake Huron Region
September 2022

Atikameksheng Anishnawbek | Aundeck Omni
Kaning | Dokis | Henvey Inlet | Magnetawan |
M'Chigeeng | Mississauga #8 | Nipissing |
Ojibways of Garden River | Serpent River |
Sheguiandah | Sheshegwaning | Thessalon |
Wahnapiatae | Wasauksing | Whitefish River |
Wiikwemkoong Unceded Territory | Zhiibaahaasing

Climate Change and Food Security: A Multi-Region Vulnerability Assessment for Adaptation and Resilience-Building Using Traditional Knowledge

Regional Summary Report (September 2022)

LAKE HURON REGION

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Region-Specific Vulnerabilities

- The Lake Huron Region experiences significant forestry activity, which could worsen the impacts of climate change on the land and water
- Higher average temperatures pose a risk to communities in the region that rely on ice-roads and waterways for travel and to access hunting grounds

Climate Change Impacts Reported Using Traditional Knowledge from Preexisting Projects

Anishinaabe in the Lake Huron Region have already reported impacts of climate change on traditional food systems.

- Adults from **Garden River First Nation** have noticed that it was no longer safe to drink water directly from the river
 - Members also noted that water levels were changing
- Garden River First Nation members described changes in the distribution of animals, and that there were fewer muskrat, beaver, fish, and large wildlife; similar changes were noted in the abundance and distribution of plants used by the community
- Garden River First Nation has reported impacts of climate change on the transmission of culture to future generations:
 - Youth have expressed an eagerness to learn their Anishinaabe practices and language, and to go out on the land and fish, hunt, trap and harvest medicines
 - Adults were concerned about climate change preventing them from passing down this knowledge
- Anishinaabe Elders in **Batchewana First Nation**, which is located within the Lake Huron Region but is not a member of Anishinabek Nation, have observed changes in moose over the past 25 years: some Elders have reported that the moose now taste like pollution
- **United Chiefs and Council of Mnidoo Mnising** have witnessed a decline in many important food species including moose and whitefish; members are now faced with difficulties in feeding their families in accordance with their traditional customs

“With less plant, fish and wildlife species around to learn these traditions, there are less opportunities for Youth to learn and build meaningful relationships.”

- Garden River First Nation member

Adaptation and Resilience-Building

There are initiatives underway in the Lake Huron Region to support food security/sovereignty and improve the First Nations’ adaptation and resilience to climate change.

- **Magnetawan First Nation** has addressed the risk of flooding through floodplain mapping
 - This will help to improve planning for safety, emergency response, land use, as well as the communication of risks to people accessing the land in light of a changing climate
- Elders from **Batchewana First Nation** recommended that community gardens should be used more, as they were in the past

Traditional Knowledge About Climate Change Impacts Collected by Anishinabek Nation

Anishinabek Nation interviewed three Elders from member First Nations about changes they have observed to traditional food systems, and that appear to be caused by climate change.

- Elder of **Wahnapiatae First Nation**:
 - Blueberries have not been growing well; they have decreased in abundance and size; raspberries do not look or taste well
 - Algae blooms are now common in Lake Wahnapiatae
 - To grow gardens, community members need to have soil shipped in due to industrial and forestry activity
- “Fish seem to be arriving sooner and staying longer, and some don’t even seem to be leaving.”*

- Garden River First Nation Elder
- Elder of **Garden River First Nation**:
 - There are new species in the area, for example the emerald ash borer and giant hogweed
 - The rabbit’s behaviour has changed with the warmer weather: rabbits no longer move in a usual line pattern, which makes trapping more difficult
 - Other species have altered behaviour as well: the deer are swimming across rivers in the winter; the Great Blue Heron stays for the winter; and fish are arriving sooner and staying longer during the spawn harvest
 - Everything is moving further north, and that’s going to change what the community harvests
 - Warmer temperatures mean hunters have to skin animals faster to ensure meat is kept fresh
 - Elder of **Whitefish River First Nation**:
 - The water levels have changed; the Elder has had to find a new place for their boat, which they use to travel to collect traditional food.
 - Marshes are drying up, meaning a loss of habitat for ducks and deer to feed
 - Anishinaabemowin language skills are worsening because descriptive words used for seasons, or garden preparation, for example, are no longer used
 - The seasonal pattern leading up to ice formation has changed: in the past, during November the temperature would drop, and ice would form on the lake. Anishinaabe would use the ice for travel, but with this change there is less ice
 - Water quality has declined, and community members can no longer drink directly from streams. This is affecting fish health: fish now have worms, and pickerel are less abundant and smaller

- Several species are now missing or much less abundant: the whippoorwill, whiskey jack, rabbits, deer, foxes, fish, and mushrooms
- Sugar maples require more time to produce sap, or are otherwise drying out or dying

Anishinabek Nation also surveyed twelve people from Lake Huron Region member First Nations about the impacts of climate change that they have observed. Every respondent reported experiencing extensive impacts of climate change on many aspects of their way of life connected to traditional food systems. The impacts reported in the survey include:

- Later winters and earlier springs;
- Windier and warmer conditions;
- Invasive and new species;
- 3/4 of survey participants believe that climate change has impacted berry picking, and about 2/3 have noticed changes to fishing and hunting.

“The (maple) trees are really suffering. The sap took a long time to come down the tree...trees were drying up and dying out.”
 - Whitefish River First Nation Elder

The impacts of climate change on traditional food systems are of great concern for communities in the Lake Huron Region not only because of the disconnection from culture and tradition, but also because many communities do not have adequate access to other sources of food, like grocery stores or community gardens. Only one out of the twelve surveyed individuals reported an in-community grocery store, and many noted that there were none nearby. Two-thirds of the respondents reported the existence of a community food bank, however. A respondent from Sheshegwaning would like to see more local wild rice harvesting to support food security.

Preliminary Recommendations

For all Anishinabek Nation Regions, it will be important to support efforts to reconnect with or reinforce regionally-based traditional livelihoods and food systems by honouring Treaty relationships and applying Anishinaabe culture, language, and practice. This could include:

- Documenting local and traditional knowledge about climate change impacts and responses
- Distributing Reports to Member First Nations, and encouraging discussion on best practices and programs for adaptation or resilience-building
- Offering tailored support for each Region, or each First Nation
- Engaging with Ontario and Canada on shared responsibility for environmental stewardship and the need to support food systems as an element of the Treaty relationship

For the Lake Huron Region specifically, adaptation and resilience-building could focus on:

- Interactions between the impacts of climate change and the impacts of forestry
- Support for the use of community gardens to grow traditional foods and continue the usage of related Anishinaabemowin terms

Recommendations from Anishinaabe of the Lake Huron Region

Elders and survey participants recommended several initiatives for climate change resilience, including:

- Access to funding for climate change and food sovereignty coordinators

- Community sharing of knowledge on hunting, trapping, fishing, and wild food plants; equip youth with the skills and knowledge to participate in traditional food systems
- Community education on sustainable land management, and climate change in general
- Grow food in community gardens; one participant suggested using a permaculture approach