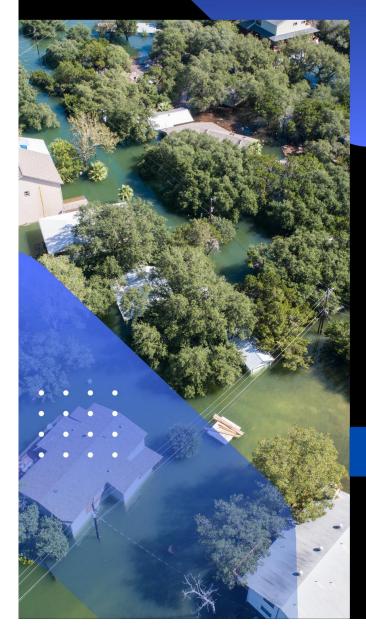
Anishinabek Nation



Climate Change and Food Security Study:

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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Southeast Region September 2022

Alderville | Algonquins of Pikwakanagan | Beausoleil | Chippewas of Georgina Island | Chippewas of Rama | Curve Lake | Mississaugas of Scugog Island | Moose Deer Point Climate Change and Food Security: A Multi-Region Vulnerability Assessment for Adaptation and Resilience-Building Using Traditional Knowledge

Regional Summary Report (September 2022)

S O U T H E A S T R E G I O N

Alderville First Nation Algonquins of Pikwàkanagàn Beausoleil First Nation Chippewas of Georgina Island First Nation Chippewas of Rama First Nation Curve Lake First Nation Mississaugas of Scugog Island First Nation Moose Deer Point First Nation

Region-Specific Vulnerabilities

- The Southeast region experiences significant development pressures from various industries and a high human population density
- The impacts of climate change may exacerbate the impacts of development in the region
- Higher average temperatures and changes in ice cover pose challenges for access to traditional foods, owing to reliance on ice-roads and waterways

Climate Change Impacts Reported Using Traditional Knowledge from Preexisting Projects

Anishinaabe in the Southeast Region are already reporting impacts of climate change on traditional food systems.

- **Curve Lake First Nation** recognizes the loss of ice fishing and ice roads, and how that may impact the community's ability to access sufficient food
- **Beausoleil First Nation**'s reserve land is located on islands in Georgian Bay, and its members have relied on ice roads for winter transportation of food and other goods; the community has noticed changes to the ice, which may impact access to food
- Members of the *Chippewas of Georgina Island First Nation* have reported several changes they believe are related to climate change, including:
 - $\circ \quad$ the colour and temperature of lake Simcoe had changed
 - creeks had dried up
 - o there were fewer cold water fish
 - \circ specific species of birds (whippoorwills and mourning doves) were no longer around
 - o spring came earlier and summers were longer and hotter, and winter was warmer
 - \circ $\;$ the ice quality had changed, and there was less snow

- rough winds had damaged roofs
- community members were getting rashes from the water

Adaptation and Resilience-Building

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

- **Curve Lake First Nation** plans to learn about the impacts of climate change on traditional food systems by interviewing Elders and has committed to a *Community and Corporate Climate Action Plan*
 - They plan to achieve this by practicing *miinidiwag*, the custom of giving what one does not need to those in need, with a food cooperative; Curve Lake First Nation will also develop a strategy to protect and enhance traditionally important species, such as *manoomin*, or wild rice
- **Beausoleil First Nation** started the Agaaming Across the Bay: Beausoleil First Nation Wind and Water Monitoring Project in response to changes to their traditional territories reported by Elders
 - o Agaaming was developed for the First Nation to monitor the impacts of climate change
- Chippewas of Georgina Island First Nation has developed a climate change adaptation strategy
 - Part of the strategy was conducting a Traditional Ecological Knowledge survey of members about the impacts of climate change
 - The survey was made specific to the experience of living on Georgina Island; it asked 19 members about changes they had noticed
 - The Chippewas of Georgina Island First Nation also identified vulnerabilities they face due to climate change, such as flooding washing out roads or causing mold in flooded homes, the loss of 5 feet of shoreline from erosion, eutrophication of the lake causing poor water quality and excessive algae, and a risk of damage or loss of the ice road

Traditional Knowledge About Climate Change Impacts Collected by Anishinabek Nation

Anishinabek Nation interviewed an Elder from Alderville First Nation about changes they observed to traditional food systems, and that appear to be caused by climate change.

- Changes in the species are impacting the Region:
 - The Emerald Ash Borer has killed off most white ash trees
 - The Gypsy Moth has caused trees to lose their leaves (most often oaks)
 - Canada Geese are pulling or clipping wild rice plants, destroying the beds
 - Starry stonewort and frag mites are altering waterways
- Temperatures are more extreme, which impacts timing for fishing and trapping; for the past few years, the change from winter to summer was so quick that there was no trapping season
- The summers are drier, and cause drought conditions
- There are not enough berries to pick, and community members have to go to farms for berries

Anishinabek Nation surveyed individuals from member First Nations about their experience with the impacts of climate change on food systems. One individual from the Southeast Region, a member of Curve Lake First Nation, responded to the survey.

The survey respondent reported **seasonal changes** related to a warmer climate including:

• Warmer and mild winters

"It's been 35 years since I last trapped; due to the weather and strong winds, not many have gone out." - Alderville First Nation Elder

- Earlier springs
- Longer and hotter summers
- Less rain

They also reported experiencing the following **extreme weather** events during the past three years:

- Heat waves
- Windstorms
- Drought

The respondent observed that **fishing and hunting have become more challenging** with climate change because animal migration, water levels, and weather have changed. Native species that have roles in the local food systems may also be threatened by the presence of **invasive species**, which the survey respondent has observed in their community.

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 Southeast Region specifically, adaptation and resilience-building could focus on:

- Interactions between the impacts of climate change and industrial/urban development
- Opportunities to improve on the land/water skills and ice safety, and participate in water quality and fish population monitoring
- Opportunities to support traditional gardening and wild rice cultivation

Recommendations from Anishinaabe in the Southeast Region

The survey respondent from Curve Lake First Nation highlighted a need to **build capacity to support and expand food cultivation** in the community to improve food security. Curve Lake First Nation has a community garden, and community members harvest wild rice, but it is a challenge for the community to obtain enough resources and help to keep these initiatives running.

The respondent highlighted the need for more resources to support **education on climate change**, and to encourage community members to participate in climate change adaptation strategies.

Curve Lake First Nation has experienced food shortage in the past three years, and the respondent suggested that the community could benefit from building a cache of non-perishable food and seeking more funding and promoting the community's food bank. More funding for cold **food storage** was also recommended.

The Elder from Alderville First Nation noted the importance of continuing to **monitor the waters and pollution levels** to manage impacts on fish and the people that eat them.