



# 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

Co-authors, Brett Campeau and Alison Porter

Northern Superior Region September 2022

Biigtigong Nishnaabeg | Biinjitiwaabik Zaaging Anishinaabek | Fort William | Long Lake #58 | Michipicoten | Namaygoosisagagun | Netmizaaggamig Nishnaabeg | Pays Plat | Red Rock Indian Band (Lake Helen)

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

Regional Summary Report (September 2022)

### NORTHERN. SUPERIOR REGION

Biinjitiwaabik Zaaging Anishinaabek Biigtigong Nishnaabeg Fort William First Nation Long Lake #58 First Nation Michipicoten First Nation Namaygoosisagagun First Nation Netmizaaggamig Nishnaabeg Pays Plat First Nation Red Rock Indian Band

#### **Region-Specific Vulnerabilities**

- Northern regions are expected to experience the most significant climate change impacts
  - Increases in average temperature is expected to impact ice as a travel platform for hunting/fishing
- Climate change impacts are exacerbated by forestry and mining activity in the region
- Climate change is expected to have major impacts on the boreal forest
  - For example, climate change will likely contribute to an increase in the frequency and severity of forest fires and pest infestations
  - These impacts can harm the health of the ecosystem and thus decrease the availability of wild foods, impacting food security/sovereignty in the Northern Superior region

#### **Climate Change Impacts Reported Using Traditional Knowledge from Preexisting Projects**

Anishinaabe in the Northern Superior Region are already reporting impacts of climate change.

- Knowledge keepers from Fort William First Nation reported changes to water and waterways;
   plants, trees and forests; air and winds; the distribution and wellbeing of wildlife; and seasonality
- Most Elders interviewed in a recent study at Fort William First Nation had experienced the loss of blueberry patches, partly due to resource development
  - The knowledge keepers described climate change as a significant concern for the community because of its contribution to the loss of livelihoods, medicines, foods, and connectedness to the land
  - The knowledge keepers explained that because of the Anishinaabe understanding that humans are part of the natural world and kin to other creatures, the loss of interconnectedness to the lands would be a major loss to Anishinaabe identity and culture

"It [climate change] makes the land ill and us ill."

Fort William First Nation Elder

- Elders from Biigtigong Nishnaabeg have noticed reduced access to traditional foods
  - The Elders explained that this reduces their ability to participate in and share knowledge of land-based practices

 The Elders noted that community gardens used to be more common, and that revitalizing their use would increase access to traditional foods

#### **Adaptation and Resilience-Building**

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

- **Biinjitiwaabik Zaaging Anishinaabek** is starting a community butcher shop. The butcher shop will increase access to wild game and host gatherings to share food and knowledge
- Several First Nations in the Northern Superior Region have begun community garden projects (e.g., Biinjitiwaabik Zaaging Anishinaabek, Fort William First Nation, Namaygoosisagagun First Nation, Netmizaaggamig Nishnaabeg, and Biigtigong Nishnaabeg)

#### Traditional Knowledge About Climate Change Impacts Collected by Anishinabek Nation

Anishinabek Nation interviewed two Elders from member First Nations in the Northern Superior Region about changes they have observed to traditional food systems, and that appear to be caused by climate change.

"[We] cannot follow our

#### • Elder of Biinjitiwaabik Zaaging Anishinaabek:

- Animals are a source for our knowledge about nutrition: for example, the Anishinaabe saw wolves eating the heads of suckers, and so they knew this was a nutritious food
- There are changes in the animals:
  - Yellow spots have been found on moose meat, which could not be eaten
  - There are contaminated fish
- Winters have been mild, and there are new species in the area like pelicans and racoons
- Last summer there was little rain and blueberries were small; bears rely on blueberries, and last year they were very skinny
- Traditional food has been contaminated by aerial spraying of herbicides, salt runoff from highways, and the usage of cyanide to extract gold; contaminated food has had to be destroyed
- Heat and risk of fires has prevented people in the community from having sweat lodge, burning the sacred fire at powwows, and prevents people with asthma from being able to go outside

#### • Elder of *Biigtigong Nishnaabeg*:

- There are seasonal changes: there is less snow; the beavers are confused by the melting lakes and ponds, and they are harder to find
- With warmer temperatures, the Elder has not been able to ice fish for 5 years now and has had to rely on the grocery store
- o An area along a road has been clear cut, and there is increased erosion in areas without trees
- People are not eating the livers, kidneys or hearts of animals harvested from the land as they traditionally would because the organs appear contaminated
  - This goes against our cultural teachings that we are utilize all parts of an animal
- Fishing in the region has changed:
  - There are hardly any fish at the location where we would set up out nets
  - Sturgeon used to be very large: 4-5 feet long

teachings and use the whole

seem to be contaminated."

- Biigtigong Nishnaabeg Elder

animal because organs

- We have experienced summers with very little rain, and blueberries grew very small and were not abundant
  - This fall, we noticed bears were very underweight, and likely fewer bear cubs will be born the following spring

#### • Elder of *Red Rock Indian Band*:

- o The Elder has trapped their whole life and has seen changes linked to climate change
- The wind has become very strong and damages trees, and the weather is very hot
- The weather is no longer predictable
- Marshes, the Jack Pine River, and the region in general has dried up; moose are no longer calving here now, which might be because new shoots are not able to grow in the dry conditions
- The forest is very dry possibly more susceptible to bad fires
- There has been a change in the fur bearers that the Elder traps: meat is not as thick and their hair has changed (this has been noticed by other trappers as well)
- There are changes in the species living in the region:
  - The star-nosed shrew, a preferred source of food by the marten, has diminished
  - There are now black-necked swans and turkey vultures, and more bald eagles
  - There are no longer lake trout, possibly due to shallow water becoming too hot
  - Porcupines seem to have disappeared, and so have the blue jays
- o Highbush cranberries no longer bear fruits; it was too hot this year for blueberries to grow
- Herbicide spraying is impacting traditional foods: we can no longer eat the organs of many animals (e.g., moose, partridge, rabbits) because they have become like "goo"
- The ice along a route frequently used by the Elder was no longer safe to use for travel

"Past 15 years I have seen the change; it was there before but I thought it was a normal thing and then it got progressively worse. At times it takes me two days to get through before I can attend to my traps."

- Red Rock Indian Band Elder

#### **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 Northern Superior Region specifically, adaptation and resilience-building could focus on:

• Interactions between the impacts of climate change and the impacts of mining and forestry

- On-the-land harvesting programs, Elder-youth camps, or other means to support hunting/fishing/gathering and the sharing of knowledge/skills, especially for ice safety
- Traditional food systems are particularly important for ensuring food security for Anishinaabe in the Northern Superior Region because other sources of food such as grocery stores are often a long drive away and not easily accessible

#### **Recommendations of Anishinaabe Elders of the Northern Superior Region**

- Elder of *Biigtigong Nishnaabeg*:
  - We need to do more land-based learning to teach people about climate change
- Elder of *Biinjitiwaabik Zaaging Anishinaabek*:
  - Consultation with First Nations should involve more consideration about our traditional food systems, and the health impacts that may result from changes to our food systems should be prioritized
  - Anishinaabe need to monitor and have more dialogue and engagement with federal and provincial governments about proposed industrial initiatives. The Elder explained that Anishinaabe need to be included in these discussions right from the start
  - o Anishinaabe may be able to learn how to adapt to climate change from the animals

"This food has been in our DNA for thousands of years."

- Biinjitiwaabik Zaaging Anishinaabek Elder

- Elder of *Red Rock Indian Band*:
  - Leadership needs to talk to Elders and people who go out on the land to understand what is happening, and how to address these climate change issues
  - Knowledge sharing should be carried out among communities