



## WHAT THE CREES FROM WASKAGANISH, WHAPMAGOOSTUI AND MISTISSINI HAVE TO SAY ABOUT CLIMATE CHANGE

### THE CLIMATE CHANGE PROJECT

#### WHAT IS THE PURPOSE OF THE CLIMATE CHANGE PROJECT?

- To improve our understanding of the consequences of climate change on the land and people of Eeyou Istchee - hunters and trappers and other community members.
- To find the impacts for which it is necessary to be especially careful and to find solutions to problems that are created by climate change.
- To increase awareness of climate change and encourage Cree to participate in finding solutions.

#### WHAT WAS DONE

- The project was conducted in three communities: Waskaganish, Whapmagoostui and Mistissini.
- A first round of workshops was held in the fall of 2009 in each of the communities, and individual interviews with Tallymen and Elders were conducted. A summary of the findings was provided to each of the three communities in the spring of 2010. This report builds upon these community reports.
- A second round of workshops was held in the fall of 2010. These workshops were used to validate the findings and identify and discuss solutions.
- In addition, the team met with each community's senior administrators and the Band council in Whapmagoostui and Waskaganish.



# Observations from the Cree of Waskaganish, Whapmagoostui and Mistissini

OBSERVED CHANGE	EXAMPLES
Change in Weather Patterns	<ul style="list-style-type: none"> <li>• Change in dominant wind direction</li> <li>• Weather harder to predict</li> <li>• Later freeze-up and earlier break-up</li> <li>• Change in freeze-up and break-up patterns</li> <li>• Change in rain patterns</li> </ul>
<p><i>In November, we are supposed to have a northern cold wind. But now we have a south wind and in the spring. When you are supposed to get south wind direction, you get north winds. Something is not normal. (Mistissini, 2009)</i></p> <p><i>People used to be able to predict the weather by looking in the sky. It's not working anymore. You can have three temperatures in one day: cold in the morning and warm and then it can drop. You can look and think the weather will be this way tomorrow, but it's not like that anymore. (Whapmagoostui, 2010)</i></p> <p><i>Now we cannot store meat under the moss area; we don't see that anymore. In March we used to have two feet of solid frozen ground; now it is only a few inches not frozen solidly. We used to make an ice hut in the fall, and it would stay until May or June. It doesn't work anymore. Because of the weather change, we need to bring freezers and generators to the camps. (Mistissini, 2010)</i></p>	

OBSERVED CHANGE	EXAMPLES
Change in ice quality on the Bay and in the lakes and rivers	<ul style="list-style-type: none"> <li>• Thinner ice</li> <li>• Less black ice</li> <li>• Shorter ice season</li> </ul>
<p><i>Navigation out on the Bay is becoming dangerous and can leave travelers stranded on ice sheets that have split from the main ice sheets; it is becoming dangerous for the Tallyman of the island to make the first trip onto the ice in order to find a good path of frozen ice for others to utilize. (Waskaganish, 2009)</i></p>	

OBSERVED CHANGE	EXAMPLES
Change in snow quality and quantity	<ul style="list-style-type: none"> <li>• There is less snow</li> <li>• The snow is softer and makes travelling difficult</li> </ul>
<p><i>Snow used to be very predictable, but now in mid-winter the snow seems to be crystallized. Skidoos just sink in the snow because it's powder snow, only the top part is hard. That makes it difficult to travel—changes the way you hunt—changes the way you travel. Even by snowshoe, this is a problem. (Whapmagoostui, 2010)</i></p>	

OBSERVED CHANGE	EXAMPLES
New Species	<ul style="list-style-type: none"> <li>• Turkey Vulture on the Bay</li> <li>• Coyote, cougar, pelican and crane in Waskaganish</li> <li>• Deer and snow geese in Mistissini</li> <li>• Moose in Whapmagoostui</li> </ul>
<p><i>Snow geese are new around here. They are abundant. (Mistissini, 2009)</i></p> <p><i>The moose population has been increasing over the past 10 years and more moose have been sighted along the James and Rupert Bay coasts. Moose were usually not very abundant along the coast, but even the woodland caribou have been sighted closer to the bay. This is a new development first observed for the past 20 years. (Waskaganish, 2009)</i></p>	

OBSERVED CHANGE	EXAMPLES
Changes in Animals behaviour	<ul style="list-style-type: none"> <li>• More polar bears on the Bay</li> <li>• Black bears are not afraid of humans anymore</li> </ul>
<p><i>I had to shoot a few polar bears, the last time (9 feet from head to tail). I could see the children and they were in the snow about 500 feet from the camp and I saw the bear walking in the woods— could attack and snatch a child. (Waskaganish, 2010)</i></p> <p><i>The black bear are behaving differently; usually in past don't come close to human activity. But today bear come very close to the camps. (Whapmagoostui, 2009)</i></p>	

OBSERVED CHANGE	EXAMPLES
Change in Plants	<ul style="list-style-type: none"> <li>• Less berries</li> <li>• More trees in Whapmagoostui</li> <li>• Maple trees in Mistissini</li> </ul>



During the 2009 and 2010 workshops, the participants demonstrated that climate change has had significant direct and indirect impacts on the Eeyou Istchee Cree. Warmer winters, for example, make for late freeze-up/early break-up and create unsafe ice conditions on the Bay and on lakes and rivers. This in turn has had an impact on hunting and trapping activities, making it harder, more dangerous and more expensive to go on the land. These impacts mean that the Cree have had to rely more on food imported from the South and that they are less present on the land, thus creating an impact on food security and land control.

The consequences of climate change go beyond restrictions on land-based activities however. There are also social and health impacts on the Eeyou Istchee communities as the following quotes from the community members illustrate.

### IMPACT ON LAND BASED ACTIVITIES (HUNTING, TRAPPING AND GATHERING)

- *People used to leave in late August to their trapline and come back in March. Now they leave sometimes up to mid-October, depending on the distance of their trapline from the community, and depending on the transportation they have to use. (Waskaganish, 2009)*
- *25 years ago, around 1985, the first week of May, we used to travel along the shore by ski-doo. Since 1990, we stopped using the ski-doo, and started using the helicopter to go to camp. When flying over, year after year, we notice more open water during the same time of the year. (Waskaganish, 2009)*
- *More and more, people are building airstrips on their trapline close to their camps, especially when they are coming back to the community in the spring. They are no longer travelling on the land. And this has an impact on them because it's more expensive. And the government is not helping by putting more restrictions on flying regulations. It raises the difficulties for hunters who want to go on the land. (Whapmagoostui, 2009)*

### SOCIAL IMPACTS

- *4 or 5 years ago, we had to call helicopters sooner than usual because we didn't want people to go on the ice, we had seen early break-ups and sometimes in the first weeks of May there were break-ups. That had an impact on our activities especially the safety aspect of families going on the land. We had to heavily subsidize the helicopter so that was another impact. Sometimes it takes 2 trips to bring a family back. That increases the cost of our local CTA program a great deal. (Waskaganish, 2010)*
- *I think there is a social impact to the lack of easy access to the land. There was an incidence in the community when the kids were setting fires because they were bored. There used to be time when the whole community was empty. For a Cree child or a young person, being able to go on the land is fair play, being able to relax and be out there, away from all the distractions is special, cell phones, etc. it brings families together. (Waskaganish, 2010)*

### HEALTH IMPACTS

- *What I see is not just impacts on culture and social but health matters; I was talking to older people who said when there is less hunting the food is less healthy, and the more sick people are, diabetes and blood-related sickness, strokes, heart attacks. All the stuff in the store-bought food is not compatible for our body to eat and causes stuff like cancer and arthritis and diseases. There is more of that lately. (Waskaganish, 2010)*

## Creation of Local Climate Change Committees

The creation of local climate change committees was an action identified by the communities and the study team.

The committees could be created first in Mistissini, Waskaganish and Whapmagoostui and the potential members could include the Cree Trappers Association, the Public Safety Officer, the Local Environment Administrator, the Fire and Police Chief, the Cree Health Board and the Cree School Board.

These committees could:

- Identify local priorities to address climate change impacts.
- Prepare and review existing emergency response plans for winter travel and/or provide additional safety equipment, for example, GPS tracking systems.
- Identify funding sources and secure funding.
- Establish partnerships with research institutes and other levels of government for monitoring.
- Follow up on the adaptive actions identified by the communities and their implementation.

⋮ *We have to put our ideas together and then put it into action. I think first there could be a committee to start it off. They have to have the elders in it because they know the land and they know the ice. Safety has to be there. The Working group will create safety rules. The following institutions should be included: Public Safety, Elders, CTA. (Mistissini, 2010)*

## Monitor Climate Change in Eeyou Istchee

Develop community based monitoring programs in order to better understand the changes that are/will be happening in Eeyou Istchee. For example:

- Collect data on ice and weather conditions using, for example, weather stations, still cameras, ice probes and water level gauges.
- Monitor the main ice routes and implement a warning system through the radio, internet, Cree GeoPortal and other means.
- Monitor polar bear activity around the communities.
- Involve youth in the monitoring (learning how to collect data and analyze it).
- Provide annual reporting back to the communities of the monitoring results.

⋮ *You see all the James Bay highway maps, we look at the maps for the best route. We could do the same with the GeoPortal. The map could show signs that say "caution" or "thin ice" like skidoo signs. These could be shown on a map. They would be closed in the evening when it is very cold or at times when it is dangerous and Public Safety could be involved. (Waskaganish, 2010)*

## Security and Awareness Programs

Safety issues were the most important concerns raised during the workshops and many participants suggested the creation of security and awareness programs. These programs should mainly target youth and could be a part of the Cree school curriculum and Ashumi program. It should also involve Tallymen & Elders because they know the land.



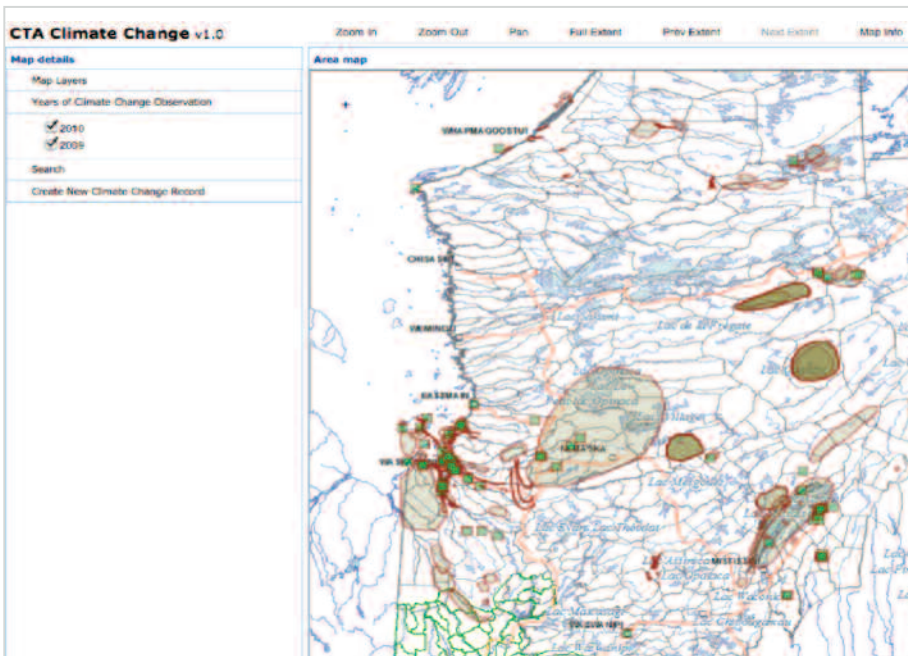
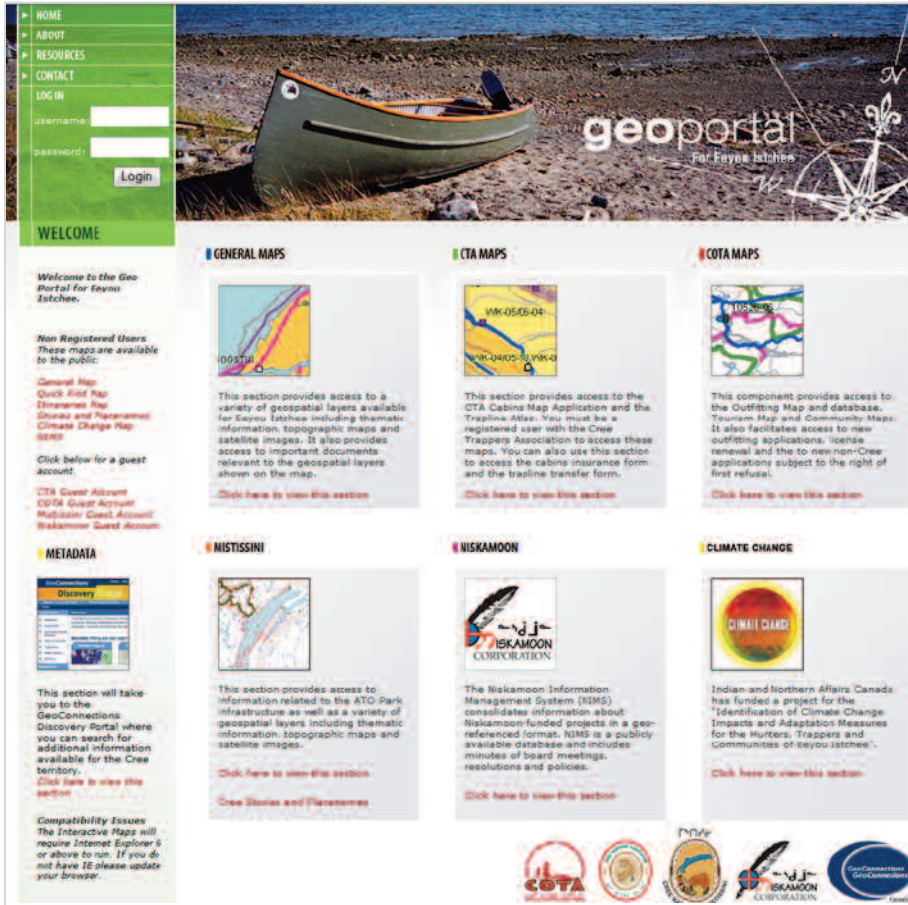
⋮ *The Tallymen who have been travelling all these years must exchange their knowledge with the youth, it's important for the youth to know the travelling conditions from the elders who have been so many years on the land. (Mistissini, 2010)*

⋮ *Young people don't know their environment, don't have the traditional knowledge that their Elders had. We need school programs that will teach kids about environment and safety – to help them learn what they need to know about the environment in order to be safe. (Whapmagoostui, 2010)*

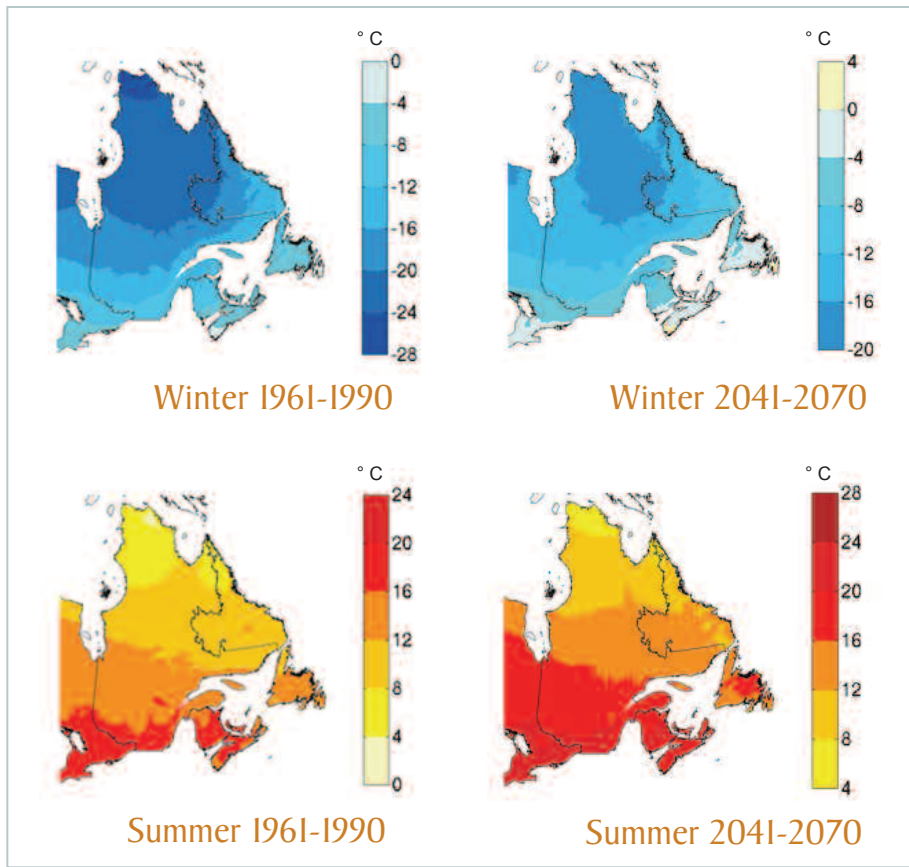
The Cree GeoPortal has a section on climate change. You can find it at: [www.creegeoportal.ca/geoportal](http://www.creegeoportal.ca/geoportal)

Using the Cree GeoPortal you can:

- Browse the climate change observations recorded during the workshops and interviews.
- Add new observations to the map (the local CTA can help you do this).



## Temperature Change Maps



### Temperature Change Maps

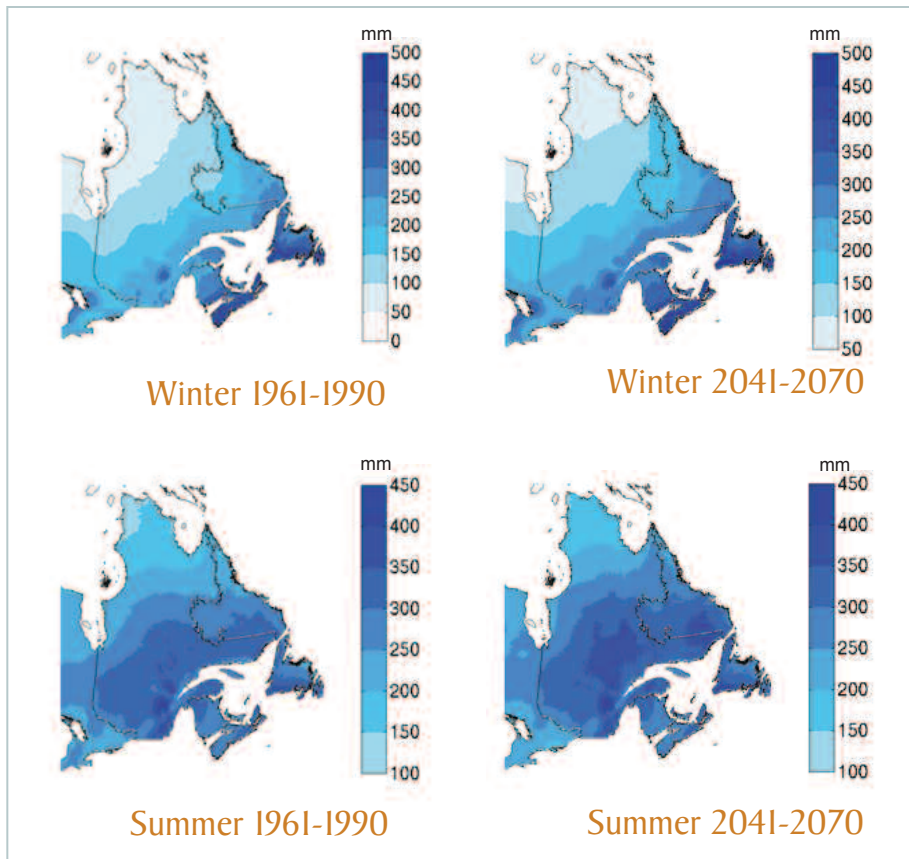
These maps show that temperatures will increase both in winter and summer especially in the southern part of Eeyou Istchee

- Darker blues indicate colder winter temperatures
- Darker red and orange indicate warmer summer temperatures

Ouranos, Learning to Adapt to Climate Change

Editors: C. DesJarlais et al., Montreal, 2010, 128p.

## Precipitation Change Maps



### Precipitation Change Maps

These maps show that in Eeyou Istchee, precipitation will increase in the summer and in the winter

- Darker blues indicate an increase in precipitation

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