1. Observed Changes

Community members from Bunibonibee Cree Nation (Oxford House) indicated that they have seen a number of changes in weather conditions, winter roads, and other frozen water bodies within and surrounding the community in recent years. Many of these changes observed are thought to have been gradual in nature.

Seasonal Changes in Weather

Winter seasons are generally warmer and shorter than they were in the past, with longer falls and earlier springs. Community members described these conditions as unstable since weather is warmer in some years, but seasonally cold in other years. Similarly, in some years, the amount of rainfall is greater than usual, but typical in others. As a result of these changes, the weather is now more difficult to predict. There are now more funnel clouds in the area. Community Elders indicated that there has been a change in the orientation of the moon in the sky, which is one of the signs that they use to predict the weather. One community member indicated that they no longer see the northern lights (which is usually an indicator of cold nights).

Water bodies

Water levels fluctuate considerably in Bunibonibee Cree Nation. High water levels are causing rivers and creeks to flow faster. Streams, rivers, creeks, muskeg, and lakes do not freeze to the same extent that they used to. Water freezes later in the season (and in some instances not at all) and the ice is thinner and weaker than it used to be. Permafrost is melting causing the ground to sink in areas around streams and beaver dams.

Winter Roads and other trails

There is some concern regarding winter road conditions in Bunibonibee Cree Nation. Individuals indicated that the road conditions are not as stable as they used to be. The blue ice (the ‘good ice’) is not as thick as it was in the past, and there is noticeably more slush. Hanging ice is also present where the road crosses water bodies. There is also more mud on the roads and trails. In the past, the trapping trail would freeze in December. Now, the water crossings are still open at the end of December, even if you pack the snow.

Plants and Animals

Changes in wildlife species are being observed in Bunibonibee Cree Nation, particularly in the mammals and birds. For example, migration and spawning times and patterns of animals are changing. Muskrat, whitefish, frogs, and some bird species are decreasing in number, while wolves and beavers are increasing. New animals including raccoons, skunks, and various bird species (e.g. pelicans) have arrived in the area. One year, a polar bear was shot on a trapline outside of the community. Community members have also noticed a change in the taste of the wild game (e.g. geese and other animals).

Quick Facts

On-Reserve Population: 2082
Total Population: 2432
Reserve Area: 4876.2 Hectares
Language: Cree and English
Winter Road Network:
Oxford House to Norway House
Length: 215 km
Other local Networks:
Various trapper trails (old and new)
Winter Activities: Hunting, trapping, fishing, snowshoeing, hockey, bingo, Winter Carnival
Summer Activities: Hunting, fishing, camping, canoeing, family outings, floor hockey, volleyball, baseball, summer carnival and trips, boating, summer festivals, bingo
Users of the Winter Road: Band, stores, school, care home, nursing station, Manitoba Hydro, Manitoba Telephone System, nursing station, fishing lodges, trappers, hunters
2. Perceived Causes

Community members attributed observed changes to various factors. There is a sense that water isn’t freezing consistently due to high water levels, fast-flowing currents, and warmer temperatures. Some of the community Elders suggested that this warming trend is part of a natural cycle that occurs over long periods of time.

With respect to migration patterns, one community Elder suggested that some animals have altered their movement in order to avoid hydro lines and the MTS towers in the area.

3. Roles and Impacts of Observed Changes

Bunibonibee community members described an important role for the frozen water bodies, winter roads, and other trails around their community. These roles are being impacted by the changes that they are experiencing.

Social / Cultural

The winter road is an important link, allowing community members from Oxford House to travel outside of the community in an affordable manner. There is a general sense of excitement in the community when the winter road is open. Community members help each other out by providing transportation to family and friends without vehicles.

The Elder’s Care Home in Bunibonibee is a regional centre. The opening of the winter road allows family members from other communities to visit residents of the home. The road also allows people to get out of Bunibonibee to visit family members that are in care facilities in cities/towns.

Financial role

The cost of goods within Bunibonibee Cree Nation is 200% higher than in communities connected to all-weather roads. This is a concern since 80% of the community is unemployed. Elders within the community can be particularly susceptible to these high prices since they tend to have more limited budgets than other community members.

Several community members indicated that the winter road is essential in order to help keep the high price of food, gasoline, and other supplies within their community down. When the winter road is open, the cost of goods within local community businesses is lower since goods are transported in by truck rather than by air cargo. Additionally, community members with access to vehicles offset high costs by travelling on the winter road to Thompson to purchase goods ‘at the same prices as communities with all-weather roads’. The winter roads have been more important in recent years since the community recently lost one of its air carriers. This resulted in a reduction of the number of flights and cargo shipments into the community, and subsequently has increased costs. Freight costs are 2-3X as expensive by air compared with ground transport on the winter road.

There are also other trails that navigate across frozen water bodies around Oxford House to allow individuals to access important resources. These routes allow hunters to access bush areas for wild game, trappers to access their traplines, fishermen to ice fish, and various individuals to access firewood. Access to these routes is reduced during warmer years when ice conditions are unstable and unpredictable. This is compounded by increased value of furs (e.g. otter).

Annual operation of the winter road also provides financial opportunities since some community members are hired to work in the construction and maintenance of the winter road, as well as to unload semi-trucks that carry freight into the community.

Despite the concerns expressed about the impact of warmer weather on winter roads and other ice around the community, one of the financial benefits is lower energy bills for home heating.

Community Operations and Local Businesses

The winter road is an important link for getting supplies into the community for local operations such as:

- Grocery stores – supplies (e.g. dry goods, furniture, lumber, and fuel)
- Band – housing materials and fuel
- Manitoba Conservation – building project material and fuel
- Manitoba Telephone System – fuel for their towers
- Schools – school supplies
- Manitoba Hydro – wire and supply poles
- Personal Care Home – food and project materials
Nursing Station – equipment and medical supplies  
Fishing Lodges – fuel supply and building supplies

When the winter road season is short, it affects the ability of these businesses and operations to acquire affordable goods and to generate profit. For some businesses, however, operation of the winter road can have adverse effects. For example, community stores do not sell large volumes of inventory during times when the winter roads since community members travel to cities to stock up on supplies themselves. Milder temperatures also decrease the sale of winter clothing and vehicle parts (e.g. truck belts).

The changing weather also impacts other community services. For example, ice sometimes builds up on power lines (due to warmer weather), causing power outages in the community.

Personal health and safety

The winter road and frozen water bodies play an important role in the personal health and safety of community members in Bunibonibee Cree Nation. For example, frozen water on non-winter road trails are essential for allowing safe access to (and monitoring of) traplines around the community. Warmer weather and unstable ice conditions decrease this much-needed access. Increased slush levels on the winter road and other routes have made travel more difficult (as skidoos, sleds, and vehicles often become stuck). There have been instances where individuals with their dogsleds have fallen through thin ice, resulting in injury and even death.

Stress levels also go up when the winter road season is short due to increased financial pressures and greater social isolation. Additionally, community members may travel at times when they would not normally take such risks. For example, some individuals travel in the darkness to maximize the amount of time they have available to shop in centres connected by all-weather roads. This also leads to increased fatigue of students and employees in schools and the workplace on Monday mornings since individuals and their friends/families sometimes drive through the night in order to maximize their time in the city. There are also concerns about access to immediate medical assistance in emergency situations when the winter road is closed.

Community members also indicated that environmental safety risks are decreased when the winter road is open as it reduces spillage of fuel. Bringing in fuel by air cargo requires an additional transfer step from the plane to a truck, prior to transfer into the storage fuel tank.

4. Strategies, Capacity, Drivers, and Barriers

Physical Infrastructure / Winter Road Construction
Various ideas were suggested for dealing with issues related to construction of the winter roads when water is not freezing in a stable and reliable manner. Parts of the winter road have been moved off of the ice and into the bush. A swamp buggy is also used to help create the winter roads since it is light in comparison to other equipment. To address concerns regarding unfrozen areas of muskeg, timber could be used to make a foundation to build the road across. However, the local conservation office will not allow the road builders to use timber. This has not been justified to the satisfaction of some community members. One individual suggested that there needs to be a comprehensive survey on the ban of logs to create winter road crossings. Culverts, used bridges, and other permanent structures could also be brought in to form bridges across the muskeg and other water bodies. However, it is difficult to transport these heavy structures into the community due to the poor road conditions. Communities need more funding to cover expenses associated with increased costs for maintenance of infrastructure (e.g. to repair frost boils on main roads associated with melting permafrost, to repair washed out roads and culverts, to widen bridges, and to construct causeways and float plane docks). One community member suggested building winter roads on higher ground where there are smaller trees and the wind can help freeze the ice.

Financial
Some community members hunt, trap, and fish to offset the high costs in the community. However, the high cost of gasoline poses a barrier to undertaking these activities. Additionally, traps are often submerged at the water’s edge due to high water levels. Chief and Council recently met with government to discuss their concerns and potential solutions (e.g. a more flexible hunting season). The community is also currently implementing a pilot project for agriculture.
To offset fuel shortages, the band is planning to implement a new strategy where they will fill the fuel tanks as soon as the winter road is open. This fuel will be sold off at a lower price, and then the tanks will be restocked again prior to the road closing. Community members should also implement similar strategies by stocking up on other goods. For example, firewood should be cut and stocked during non-winter months so that individuals have a sufficient supply of wood to carry them through the winter season when it is difficult to access.

Subsidy programs are also an important means for offsetting the high costs in the community. The government could create programs for offsetting the high cost associated with trapping and fishing in the community (e.g. by providing skidoos and traps as they did in the past). Freight and fuel subsidies provided by the government (similar to those that were provided to the commercial fishery before it shut down) would also be useful. MTS could also provide subsidies to the community since individuals pay a lot for their services. There needs to be increased competition for air transportation in order to decrease costs and improve service.

**Personal Safety**

Community members currently use skidoos to cross water bodies where the ice is not strong enough to support trucks. As well, individuals create different routes when the standard routes are impassable.

**All-weather road and other transportation alternatives**

One of the strategies that was suggested for offsetting many of the concerns (e.g. social, financial, economic and health) in the community is the creation of an all-weather road along a ridge between Oxford House and Norway House. One individual stated this should happen right away. This issue has been discussed for 20 years. However, there are also concerns about the impact that the all-weather road might have on the community. These concerns include the increased ease with which alcohol and drugs could enter the community (which is currently a ‘dry community’). As well, there are concerns about the environmental impact of an all-weather road in the region. For example, parcels of land have already been ‘staked out’ by timber companies for future use. The operation of an all-weather road will bring in these companies as well as other non-Native people (e.g. mining companies, poachers) to access their resources. There is also the sense that the government does not want to provide the financial support for an all-weather road.

Aside from construction of an all-weather road, there has also been the suggestion of constructing a railroad from Oxford House to access other centres that are connected by all-weather road.

**Communication, Programs, and Training**

Community members suggested that Bunibonibee Cree Nation needs a community member who can access and share information on climate change and issues related to winter roads and other ice. For example, community members wish to know what is being done and what can be done about road construction, maintenance, access, and environmental issues. It is important that this individual can speak the local language and openly answer the questions that are being asked. Similarly, this individual should be able to speak to the government on behalf of the community regarding their concerns. At the current time, the community does not have such an individual, so they are reliant on outside support to tackle their issues. More internal knowledge is needed. A north/east committee on winter roads should also be formed for bands that use the roads in the area. This would allow communities to share resources and ideas for dealing with a broad array of concerns related to access in remote communities.

The government should also support training of community youth in skills such as trapping and surviving in the wild, particularly with respect to changes in the ice conditions.

**5. Roles and Responsibilities**

**Community members**

- Record and report changes in the land, water, plants and animals
- Give ideas to Chief and Council to work on
- Enlist a community member to gather and share information between the community and the government
- Force leaders to push for a quicker resolution and a better situation

**Chief and Council**

- Consult the experts for advise
- Find out from the community what the needs are
- Speak to the government on behalf of the people and the community

**Regional (Tribal Councils)**

- Come to the communities to see what is happening
- Speak to the government on behalf of the communities

**Provincial Government**

- Use their funding to make the roads accessible earlier in the season
- Provide manpower and resources to put in bridges in problem areas
- Ease concerns by letting communities know what is happening
- Provide money for consultations

**Federal Government**

- Push for more funding
- Provide information
- Extend the time when the winter road is open to travel