

healthy supply and quality of certain country foods could share surplus with the other communities for their surplus in other country foods. In the long term a store and warehouse could be built in JMR as a central point for distributing food amongst the communities, which may eventually lead to a commercial enterprise if there is enough food grown and/or harvested locally to have a surplus for other communities and temporary work camps in the area to purchase. Such an enterprise also has the potential to create job sharing opportunities with the communities involved.

Another adaptation strategy to address food security is to change harvesting locations where species are less abundant and/or unhealthy, including areas where scientists have identified increased levels of contaminants, such as at Ekali Lake and McGill Lake. People are already reducing their consumption of fish from these lakes, based on the recommendations of scientists. There is also the potential to harvest new species that are being seen in the area, but most of the animals and birds seen so far are not considered food by community members, with the possible exception of whitetail deer.

6.2. Access to Safe Drinking Water

In regard to adaptation strategies to address the challenges of accessing safe drinking water, there are a number of factors that are contributing to the deterioration of the water quality in the area. Pollutants and contaminants are prime contributors to this; however, the warming of lakes and rivers can also affect the quality of the water and cause contaminants trapped in the ground to leach into the water table. Without more information it is difficult to elucidate the connections between a warming climate and its effects on the water quality in the Dehcho region.

At this stage our community needs a contaminants study conducted for the area, and we also need improved methods for monitoring the quality of drinking water and for treating it. People have already started adapting to the lack of quality drinking water in the community by buying bottled water for the grocery store. This is an expensive adaptation strategy, but a necessary one, as many people consider drinking water in the community and out on the land not to be safe.

6.3. Cultural Continuity & Community Sustainability

The climate change impacts affecting the health of our culture and community are intertwined and developing adaptation strategies that promote cultural continuity includes promoting a sustainable community and vice versa. The adaptation strategies initially explored regarding the climate change impacts that are affecting these aspects of our health are principally initiatives that can be planned, developed, and implemented by the community with little or no outside assistance. However, there are other potential adaptation strategies specific to addressing climate change impacts at the community and regional levels that would require collaborative approaches with other communities and researchers; as well as regional, territorial, and federal governments.

At the community level a number of adaptation strategies can be developed in the form of education and communication initiatives to inform community members about the health risks associated with climate change, and what actions people can take to prevent or minimize these risks. For example, education strategies about how to prevent heatstroke and sunburn (e.g. drink plenty of fluids, sunscreen, limit time in direct sunlight, etc.), or a community fire education strategy in case of a forest fire could be developed by the community and implemented in the form of community workshops or information sessions, as well as in the school. Community initiatives that address climate change related issues when out on the land could be developed as part of youth learning survival skills and learning about their spiritual connection with the land, such as at culture camps and ecology camps, and through the passing on of TK from older family members and Elders.

In regard to the impacts to our TK, our community needs to revisit the objective in the community plan (see Appendix 7) about maintaining our TK, in particular, how we can adapt our TK to the changes being caused to seasonal weather patterns, and the subsequent changes to the environment, so we are able to recognize the signs that indicate weather changes like our Elders did in the past. We have already been re-focusing our TK, putting emphasis on learning how to judge ice conditions on lakes and rivers as a reactive and necessary response to climate change. Community members also emphasized teaching youth outdoor survival skills, as well as teaching youth about important places that may disappear due to changes to the landscape with a changing climate and environment (e.g. permafrost heaves).

In terms of maintaining and promoting community sustainability in the face of a changing climate, the adaptation strategies mentioned for food security apply to community sustainability. Additionally, having an inventory of non-traditional medicines and medical supplies on hand at the nursing station that do not require a nurse or a doctor to administer them, would allow our community to be better prepared to deal with increases in accidents, injuries, and other health issues; whether they are related to climate change or not. With hotter and drier summers steps are already being taken to build a fire break around the community to protect it from forest fires. Our community is also concerned if any of the houses and other buildings in our community are located in permafrost zones. The community is also interested in knowing if there are zones of permafrost within the vicinity of JMR so that we can be aware of these areas if the community decides to build more houses or facilities, such as a root cellar. To identify where areas of permafrost are located in the vicinity of JMR, a permafrost specialist would be needed to map out these areas.

Other community members suggested adaptation strategies related to improving the standards for constructing and maintaining buildings and roads that take into account climate change related impacts on infrastructure. Upgrading roads and creating more drainage systems to reduce the chance of roads being washed out in a flood is one adaptation strategy mentioned that could be shared between communities and may lead to potential job sharing between these communities. However, most of the climate change adaptation strategies aimed at maintaining and enhancing community sustainability would need government support, which would require negotiating policy changes regarding how funding for taking action on climate change impacts and related environmental issues is allocated by the Federal and Territorial governments that also includes resources for communities to conduct projects to address these issues at local and regional levels.

6.4. Travel Safety

Our community has been experiencing the negative impacts of climate change on traveling, either out on the land or by vehicle, for a number of years now, and we have already started adapting strategies to minimize hazards while traveling. Now, when out on the land we always travel in pairs for safety and we bring extra supplies and first aid kits in the event we are caught suddenly by inclement weather. Our harvesters are becoming quite adept at assessing ice conditions and identifying potential hazards, and they are passing this knowledge on to younger generations. However, our community needs to review its policy on emergency funding with the potential likelihood of increases in travel accidents.

Inherent in the passing of TK to younger generations is the teaching of outdoor survival skills, but general first aid training could also help prevent and minimize accidents and injuries that happen in the community or out on the land. Another potential adaptation strategy to improve travel safety is for hunters and trappers to GPS trails and mark where travel hazards are, and keep an updated map and database in the community to inform other members of these hazards before they go out on these trails. If