

# Manitoba Métis Traditional Knowledge, Land Use, and Occupancy Study for the Lynn Lake Gold Mine Project

# **Final Report**

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#### **Definition of Terms**

**Country Foods:** Foods from wild animals or plants, also called wild foods, on which the citizens of the Manitoba Métis Community rely for subsistence.

**Land Use:** Defined generally as hunting, fishing, and gathering, and the use of sites and resources for cultural and ceremonial purposes by the Manitoba Métis Community.

**Map Biography:** The methodology for this TKLUS is based on the best practice map biography technique pioneered by Terry Tobias in his manual *Living Proof: The Essential Data-Collection Guide for Indigenous Use and Occupancy Map Surveys* (2009). The map biography is the standard data collection method for land use and occupancy studies. A map biography is an interview process in which a person provides an account of their life on the land and water, including places they have travelled, stayed, and gathered resources. In some cases, as with some of the TEK data provided in this TKLUS, participants indicate places that they have not used personally, but about which they have knowledge from family or other members of the community (Tobias, 2009).

**Métis Knowledge or Métis Traditional Knowledge (MK or MTK):** The body of knowledge and information shared by the Manitoba Métis Community, as a part of the Métis Nation, and held by and transmitted between Métis people, which supports traditional land use for the benefit and well-being of Métis peoples. Métis Traditional Knowledge can be considered a distinct type of Traditional Knowledge.

**Occupancy**: Defined generally as the settlements, movements, and sites associated with a distinct group of peoples, in this context with the Manitoba Métis Community.

**Oral History:** For the purposes of this Study, Oral History refers to the participant's qualitative land use and occupancy knowledge about a particular area or activity. It could include details about the social, economic, cultural, or environmental importance of a location, species, or land-based activity, as well as legends and stories that have been passed down. Oral History is used to bring depth to land use and occupancy research and increase shared understanding about the values of the participants. It is commonly collected as complementary material to a map biography as it doesn't lend itself as well to being recorded on a map.

**Métis Ecological Knowledge (MEK):** The knowledge and information by which people come to understand the ecology of their surrounding environment through years of firsthand experience and inherent cultural understanding of the relationships between humans, animals, lands, and waters. People also come to understand the ecology of their environment through teachings that have been passed down through relations or within a community.

Study Area: The Study Area refers to the 100 km area around the two Project Sites.

Project Sites: The Project Sites are the two project footprint areas of the proposed mine sites.



# 1.0 Introduction of the Traditional Knowledge, Land Use, and Occupancy Study for the Lynn Lake Gold Mine Project

## 1.1 Background and Context

The Manitoba Metis Federation (MMF) hired Shared Value Solutions (SVS) to support us in providing evidence of land use and occupancy by the Métis Nation's Manitoba Métis Community (MMC) within proximity to the two mine sites being proposed by Alamos Gold near Lynn Lake, Manitoba. Alamos Gold Inc. provided the funding to complete this study.

The information provided in this report includes sensitive information shared with the MMF by members of the Métis Nation's Manitoba Métis Community (also known as Métis Citizens) with the understanding that it would be kept confidential, individuals would not be specifically identified, and the information would not be disclosed other than by the MMF. Métis Citizens have entrusted the MMF, as their democratically elected Métis Government, to safeguard and appropriately use this information on their behalf. The information provided in this report is the property of the MMF and cannot be duplicated or distributed without the MMF's prior written consent.

The Lynn Lake Gold Project is an open-pit gold mine and new metal mill located near Lynn Lake, Manitoba. Alamos Gold Inc. owns the mine. There are two locations that hold gold and silver deposits that Alamos is proposing to re-construct: the Gordon site and the MacLellan site. The proposed work would include the construction (re-development of the old mines), operation, and closure of the mines at both old Gordon and MacLellan mine sites.

## 1.2 Study Objectives

The Manitoba Métis Traditional Knowledge and Land Use Study (the Study) documents where and how harvesters of the MMC use the lands and waters within a 100 km Study Area around the proposed Lynn Lake Gold mines. For the purposes of the Study, participating harvesters were asked to focus on the 100-km Study Area around the Lynn Lake Gold Project sites (herein called the Project). The mapped data in this report is only reflective of a small number of Métis harvesters. Documented land use and occupancy has only been provided for the Study Area.

There were five main objectives of the Study:

1. Document evidentiary information that shows where and how Métis harvesters use the lands and waters around the Project sites and provide this data to the MMF in a format that is useful in their negotiations and discussions with Alamos Gold Inc., including information identifying the following:



- Locations for hunting, trapping, fishing, and gathering plants or natural materials;
- locations that are culturally significant to the MMC;
- locations of overnight stays on the land;
- access routes and trails;
- areas of ecological importance, and/or
- areas of demographic importance (e.g., locations of current or past residences, birthplaces, and burial sites).
- 2. Collect information from harvesters on the frequency of wild food consumption including food that is harvested within the Study Area.
- 3. Collect information in a format that is consistent with the current Manitoba Métis Land Use and Occupancy catalogue data.
- 4. Understand participants' thoughts and perceptions of the Project.
- 5. Document evidentiary information that shows where and how Métis harvesters have used the lands and waters outside of the Manitoba Métis Resource Harvesting Zone to exercise their Métis rights.

# 1.3 Geographic and Temporal Scope of the Study

#### Geographic Scope

There were two geographic scopes used for this Study. The first Study Area included the areas within 100 km of the Project sites. The second Study Area included the Churchill River watershed from South Indian Lake downstream to Hudson Bay. Figure 1 displays the Study Areas. These two geographic scopes were chosen based on assumptions about the areas mostly likely impacted by the Project (e.g., in the immediate vicinity and downstream).







#### **Temporal Scope**

Researchers followed land use and occupancy study best practices. This includes the use of two temporal scopes. The first is current use, which includes anything that happened within the participant's lifetime. The second is historic use of sites that the participants know about through teaching or knowledge transfer from past generations, including Oral History or Traditional Knowledge about Métis harvesting and gathering practices and sites of cultural or other significance. For current use, researchers asked participants whether a certain activity happened within the last 10 years, prior to the last 10 years, or if it was an ongoing activity both within and prior to the last 10 years.

# 1.4 Interpreting the Maps and Tables

The MMF has conducted multiple map biography and Oral History interviews for various projects or studies. The data presented in this report includes all data collected by the MMF, including the data collected specifically for this Project, as well as information from other projects or reports relevant to this Study. Our researchers combined this data and provided analysis of the land use and occupancy sites within 100 km of the Project sites.

SVS worked with three datasets to develop the maps for this report. The first was collected between 2003 and 2009. This data has been included on the maps, but attribute data was not available in a form that allowed for categorization. This data has been included to add to the information of where citizens of the Manitoba Métis Community have identified land use and occupancy sites. The second dataset is from 2009 onward and includes the land use and occupancy data that has been collected for other Manitoba Métis Community knowledge studies and is referred to as the MMF Data Catalogue. The third dataset is from interviews conducted specifically for this Project. The second and third datasets have been combined and are displayed on the maps and in the tables as specific land use and occupancy categories. These datasets contain in-depth attribute data, including species, season, activity, and the time period in which the activity happened. The MMF Data Catalogue includes data collected from an additional 114 Manitoba Métis harvesters.

# 2.0 The Manitoba Métis Community

## 2.1 History and Identity

The Métis Nation—as a distinct Indigenous people—evolved out of relations between European men and First Nations women who were brought together as a result of the early fur trade in the Northwest. In the eighteenth century, both the Hudson Bay Company and the Northwest Company created a series of trading posts that stretched across the upper Great Lakes, through the western plains, and into the northern boreal forest. These posts and fur trade activities brought European and Indigenous peoples into contact. Inevitably, unions between European men—explorers, fur traders, and pioneers—and Indigenous women were consummated. The children of these families developed their own collective



identity and political community so that "[w]thin a few generations, the descendants of these unions developed a culture distinct from their European and Indian forebears" and the Métis Nation was born—a new people, indigenous to the western territories (*Alberta (Aboriginal Affairs and Northern Development*) v. Cunningham, [2011] 2 SCR 670 at para. 5; 2008 MBPC *R. v. Goodon*, 59 at para. 25; *Manitoba Metis Federation Inc. v. Canada (Attorney General*), [2013] 1 SCR 623 at para. 2).

The Métis led a mixed way of life. "In early times, the Métis were mostly nomadic. Later, they established permanent settlements centered on hunting, trading and agriculture" (*Alberta v. Cunningham*, at para. 5). The Métis were employed by both of the fur trades' major players, the Hudson's Bay and Northwest companies. By the early 19<sup>th</sup> century, they had become a major component of both firms' workforces. At the same time, however, the Métis became extensively involved in the buffalo hunt. As a people, their economy was diverse; combining as it did, living off the land in the Aboriginal fashion with wage labour (*MMF Inc. v. Canada*, at para. 29).

It was on the Red River, in reaction to a new wave of European immigration, that the Métis Nation first came into its own. Since the early 1800s, the Manitoba Métis Community—as a part of the larger Métis Nation—has asserted itself as a distinct Indigenous collective with rights and interests in its Homeland. The Manitoba Métis Community shares a language (Michif), national symbols (infinity flags), culture (i.e., music, dance, dress, crafts), as well as a special relationship with its territory that is centered in Manitoba and extends beyond the present-day provincial boundaries.

The Manitoba Métis Community has been recognized by the courts as being a distinctive Indigenous community, with rights that are protected in section 35 of the *Constitution Act, 1982*. In *Goodon*, the Manitoba courts held that:

The Métis community of Western Canada has its own distinctive identity [...] the Métis created a large inter-related community that included numerous settlements located in present-day southwestern Manitoba, into Saskatchewan and including the northern Midwest United States. This area was one community [...] The Métis community today in Manitoba is a well-organized and vibrant community (paras. 46-47; 52).

This proud independent Métis population constituted a historic rights-bearing community in present day Manitoba and beyond, which encompassed "all of the area within the present boundaries of southern Manitoba from the present-day City of Winnipeg and extending south to the United States" (*R. v. Goodon*, at para. 48).

The heart of the historic rights-bearing Métis community in southern Manitoba was the Red River Settlement; however, the Manitoba Métis Community also developed other settlements and relied on various locations along strategic fur trade routes. During the early part of the 19<sup>th</sup> century, these included various posts of varying size and scale spanning the Northwest Company and the Hudson Bay Company collection and distribution networks.



More specifically, in relation to the emergence of the Métis—as a distinct Aboriginal group in Manitoba—the Supreme Court of Canada wrote the following in the *MMF Inc. v. Canada* case:

[21] The story begins with the Aboriginal peoples who inhabited what is now the province of Manitoba—the Cree and other less populous nations. In the late 17<sup>th</sup> century, European adventurers and explorers passed through. The lands were claimed nominally by England which granted the Hudson's Bay Company, a company of fur traders' operation of out London, control over a vast territory called Rupert's Land, which included modern Manitoba. Aboriginal peoples continued to occupy the territory. In addition to the original First Nations, a new Aboriginal group, the Métis, arose—people descended from early unions between European adventurers and traders, and Aboriginal women. In the early days, the descendants of English-speaking parents were referred to as half-breeds, while those with French roots were called Métis.

[22] A large—by the standards of the time—settlement developed at the forks of the Red and Assiniboine Rivers on land granted to Lord Selkirk by the Hudson's Bay Company in 1811. By 1869, the settlement consisted of 12,000 people, under the governance of Hudson's Bay Company.

[23] In 1869, the Red River Settlement was a vibrant community, with a free enterprise system and established judicial and civic institutions, centred on the retail stores, hotels, trading undertakings and saloons of what is now downtown Winnipeg. The Métis were the dominant demographic group in the Settlement, comprising around 85 percent of the population [approximately 10,000 Métis], and held leadership positions in business, church and government.

The fur trade was vital to the ethnogenesis of the Métis and was active in Manitoba from at least the late 1770s, and numerous posts and outposts were established along cart trails and waterways throughout the province. These trails and waterways were crucial transportation networks for the fur trade (Jones 2014; Figure 2) and were the foundation of the Manitoba Métis Community's extensive use of the lands and waters throughout the province. In the early 20<sup>th</sup> century, the Manitoba Métis Community continued to significantly participate in the commercial fisheries and in trapping activities, which is well documented in Provincial government record.





#### Figure 2. The Fur Trade Network: Routes and Posts Prior to 1870



# 2.2 Manitoba Metis Federation

The MMF is the democratically elected government of the Métis Nation's Manitoba Métis Community (Manitoba Métis Community). The MMF is duly authorized by the Citizens of the Manitoba Métis Community for the purposes of dealing with their collective Métis rights, claims, and interests, including conducting consultations and negotiating accommodations (as per MMF Resolution No. 8). While the MMF was initially formed in 1967, its origins lie in the 18<sup>th</sup> century with the birth of the Manitoba Métis Community and in the legal and political structures that developed with it. Since the birth of the Métis people in the Red River Valley, the Manitoba Métis Community—as a part of the larger Métis Nation— has asserted and exercised its inherent right of self-government. The expression of this self-government right has changed over time to continue to meet the needs of the Manitoba Métis Community. For the last 50 years, the MMF has represented the Manitoba Métis Community at the provincial and national levels.

During this same period, the MMF has built a sophisticated, democratic, and effective Métis governance structure that represents the Manitoba Métis Community at the local, regional, and provincial levels throughout Manitoba. The MMF was created to be the self-government representative of the Manitoba Métis Community—as reflected in the Preamble of the MMF's Bylaws (also known as the MMF Constitution), which are agreed to by its members as a part of registering with the MMF:

WHEREAS, the Manitoba Metis Federation Inc. has been created to be the democratic and selfgoverning representative body of the Manitoba Métis Community.

In addition, the purpose "to provide responsible and accountable governance on behalf of the Manitoba Métis Community using the constitutional authorities delegated by its citizens" is embedded within the MMF's objectives, as set out in the MMF Constitution as follows:

- I. To promote and instill pride in the history and culture of the Métis people.
- II. To educate members with respect to their legal, political, social and other rights.
- III. To promote the participation and representation of the Métis people in key political and economic bodies and organizations.
- IV. To promote the political, legal, social and economic interests and rights of its citizens.
- V. To provide responsible and accountable governance on behalf of the Manitoba Métis community using the constitutional authorities delegated by its members.

The MMF is organized and operated based on centralized democratic principles, some key aspects of which are described below.

**President:** The President is the Chief Executive Officer, leader, and spokesperson of the MMF. The President is elected in a province-wide ballot-box election every four years and is responsible for overseeing the day-to-day operations of the MMF.



**Board of Directors:** The MMF Board of Directors, or MMF Cabinet leads, manages, and guides the policies, objectives, and strategic direction of the MMF and its subsidiaries. All 23 individuals are democratically elected by the citizens.

**Regions:** The MMF is organized into seven regional associations or "Regions" throughout the province (Figure 3): The Southeast Region, the Winnipeg Region, the Southwest Region, the Interlake Region, the Northwest Region, the Pas Region, and the Thompson Region. Each Region is administered by a Vice-President and two executive officers, all of whom sit on the MMF's Cabinet. Each Region has an office which delivers programs and services to their specific geographic area.

**Locals:** Within each Region are various area-specific "Locals" which are administered by a chairperson, a vice-chairperson and a secretary-treasurer. Locals must have at least nine members and meet at least four times a year to remain active. There are approximately 140 MMF Locals across Manitoba.

While the MMF has created an effective governance structure to represent the Manitoba Métis Community at the local, regional, and provincial levels, it is important to bear in mind that there is only one large, geographically dispersed, Manitoba Métis Community. Citizens of Manitoba Métis Community live, work and exercise their s. 35 rights throughout and beyond the province of Manitoba.







## 2.3 MMF Resolution No. 8

Among its many responsibilities, the MMF is authorized to protect the Aboriginal rights, claims, and interests of the Métis Nation's Manitoba Métis Community, including as related to harvesting, traditional culture, and economic development, among others.

In 2007, the MMF Annual General Assembly unanimously adopted Resolution No. 8 that sets out the framework for engagement, consultation, and accommodation to be followed by Federal and Provincial governments, industry, and others when making decisions and developing plans and projects that may impact the Manitoba Métis Community. Under MMF Resolution No. 8, direction has been provided by the Manitoba Métis Community for the MMF Home Office to take the lead and be the main contact on all consultation undertaken with Manitoba Métis Community. Resolution No. 8 reads, in part that:

...this assembly continue[s] to give the direction to the Provincial Home Office to take the lead and be the main contact on all consultations affecting the Métis community and to work closely with the Regions and Locals to ensure governments and industry abide by environmental and constitutional obligations to the Métis...

The MMF Home Office works closely with the Regions and Locals to ensure the rights, interests, and perspective of the Manitoba Métis Community are effectively represented in matters related to consultation and accommodation.

Resolution No. 8 has five phases:

Phase 1: Notice and ResponsePhase 2: Funding and CapacityPhase 3: Engagement or ConsultationPhase 4: Partnership and AccommodationPhase 5: Implementation

Each phase is an integral part of the Resolution No. 8 framework and proceeds logically through the stages of consultation.

# 2.4 Manitoba Métis Community Rights, Claims, and Interests

The Manitoba Métis Community possesses Aboriginal rights, including pre-existing Aboriginal collective rights and interests in lands protected by section 35 of the *Constitution Act, 1982,* throughout Manitoba. Indeed, Manitoba courts recognized these pre-existing, collectively held Métis rights in *R. v. Goodon* (at paras. 58; 72):



*I conclude that there remains a contemporary community in southwest Manitoba that continues many of the traditional practices and customs of the Métis people.* 

*I have determined that the rights-bearing community is an area of southwestern Manitoba that includes the City of Winnipeg south to the U.S. border and west to the Saskatchewan border.* 

As affirmed by the Supreme Court of Canada, such rights are "recognize[d] as part of the special aboriginal relationship to the land" (*R. v. Powley,* 2003 SCC 43, at para. 50) and are grounded on a "communal Aboriginal interest in the land that is integral to the nature of the Métis distinctive community and their relationship to the land" (*MMF Inc. v. Canada*, at para. 5). Importantly, courts have also recognized that Métis harvesting rights may not be limited to Unoccupied Crown Lands (*R. v. Kelley,* 2007 ABQB 41, para. 65).

The Crown, as represented by the Manitoba government, has recognized some aspects of the Manitoba Métis Community's rights through a negotiated agreement: The *MMF-Manitoba Points of Agreement on Métis Harvesting* (2012) (the *MMF-Manitoba Harvesting Agreement*). This Agreement was signed at the MMF's 44th Annual General Assembly and "recognizes that collectively-held Métis Harvesting Rights, within the meaning of s. 35 of the *Constitution Act, 1982*, exist within the [Recognized Métis Harvesting Zone], and that these rights may be exercised by Métis Rights Holders consistent with Métis customs, practices and traditions..." (*MMF-Manitoba Harvesting Agreement*, section 1). In particular, the *MMF-Manitoba Harvesting Agreement* recognizes that Métis rights include "hunting, trapping, fishing and gathering for food and domestic use, including for social and ceremonial purposes and for greater certainty, Métis harvesting includes the harvest of timber for domestic purposes" throughout an area spanning approximately 169,584 km<sup>2</sup> (the "Métis Recognized Harvesting Area") (*MMF-Manitoba Harvesting Agreement*, section 2; Figure 4 below). The MMF further asserts rights and interests beyond this area, which require consultation and accommodation as well.

Beyond those rights already established through litigation and recognized by agreements, the Manitoba Métis Community claims commercial and trade-related rights. Courts have noted that Métis claims to commercial rights remain outstanding (*R. v. Kelley* at para. 65). These claims are strong and well-founded in the historical record and the customs, practices, and traditions of the Manitoba Métis Community, and it is incumbent on the Crown and Proponents to take them seriously.

As noted above, the Manitoba Métis Community has its roots in the western fur trade (*R. v. Blais*, 2003 SCC 44 at para. 9 [*Blais*]; *R. v. Goodon* at para. 25). The Métis in Manitoba are descendants of early unions between Aboriginal women and European traders (*MMF Inc. v. Canada* at para. 21). As a distinct Métis culture developed, the Métis took up trade as a key aspect of their way of life (*R. v. Powley* at para. 10). Many Métis became independent traders, acting as middlemen between First Nations and Europeans (*R. v. Goodon* at para. 30). Others ensured their subsistence and prosperity by trading resources they themselves hunted and gathered (*R. v. Goodon* at para. 31, 33, & 71). By the mid-19<sup>th</sup> century, the Métis in Manitoba had developed the collective feeling that "the soil, the trade and the Government of the country [were] their birth rights." (*R. v. Goodon* at para. 69(f)). Commerce and trade are, and always have been, integral to the distinctive culture of the Manitoba Métis Community. Today,



the Manitoba Métis have an Aboriginal, constitutionally protected right to continue this trading tradition in modern ways to ensure that their distinct community will not only survive, but also flourish.

Figure 4. MMF-Manitoba Harvesting Agreement Recognized Manitoba Métis Harvesting Zones

#### (Green and Pink)



Expansion of the Recognized Metis Harvesting Area



Unlike First Nations in Manitoba, whose commercial rights were converted and modified by treaties and the *Natural Resources Transfer Agreement (NRTA)* (*R. v. Horseman*, [1990] 1 SCR 901), the Métis' preexisting customs, practices, and traditions—including as they relate to commerce and trade—were not affected by the *NRTA* (*R. v. Blais*) and continue to exist and be protected as Aboriginal rights. First Nations' treaty rights in Manitoba are, for example, inherently limited by the Crown's power to take up lands (*Mikisew Cree First Nation v Canada (Minister of Canadian Heritage*), [2005] 3 SCR 388 at para 56). Métis rights, in contrast, are not tempered by the "taking up" clauses found in historic treaties with First Nations. Métis rights must be respected as they are, distinct from First Nations' rights and unmodified by legislation or agreements.

In addition to the abovementioned rights to land use that preserve the Métis culture and way of life, the MMF has other outstanding land related claims and interests with respect to lands. Specifically, these claims relate to the federal Crown's constitutional promise to all Aboriginal peoples, including Manitoba Métis, as set out in the Order of Her Majesty in Council Admitting Rupert's Land and the North-Western Territory into the Union (the "1870 Order") which provides

that, upon the transference of the territories in question to the Canadian Government, the claims of the Indian tribes to compensation for lands required for purposes of settlement will be considered and settled in conformity with the equitable principles which have uniformly governed the British Crown in its dealings with the aborigines.

The manner in which the federal Crown implemented this constitutional promise owing to the Manitoba Métis—through the *Dominion Lands Act* and the resulting Métis scrip system—effectively defeated the purpose of the commitment. Accordingly, the MMF claims these federal Crown actions constituted a breach of the honour of the Crown, which demand negotiations and just settlement outside of the 'old postage stamp province' within Manitoba as well.

The MMF also claims that the *Dominion Lands Act* and the resulting Métis scrip system were incapable of extinguishing collectively held Métis title in specific locations where the Manitoba Métis Community is able to meet the legal test for Aboriginal title as set out by the Supreme Court of Canada. These areas in the province, which the Manitoba Métis exclusively occupied—as an Indigenous people—prior to the assertion of sovereignty, establish a pre-existing Métis ownership interest in these lands.

The MMF also has an outstanding legal claim within what was the 'old postage stamp province' of Manitoba relating to the 1.4 million acres of land promised to the children of the Métis living in the Red River Valley, as enshrined in s. 31 of the *Manitoba Act, 1870 (MMF Inc. v. Canada* at para 154).

This land promised was a nation-building, constitutional compact that was meant to secure a "lasting place in the new province [of Manitoba]" for future generations of the Métis people (*MMF Inc. v. Canada* at para 5). This "lasting place" was to have been achieved by providing the Manitoba Métis Community a "head start" in securing lands in the heart of the new province (*MMF Inc. v. Canada* at paras 5-6).



Instead, the federal Crown was not diligent in its implementation of s. 31, which effectively defeated the purpose of the constitutional compact.

In March 2013, the Supreme Court of Canada found that the federal Crown failed to diligently and purposefully implement the Métis land grand provision set out in s. 31 of the *Manitoba Act, 1870 (MMF Inc. v. Canada* at para 154). This constituted a breach of the honour of the Crown. In arriving at this legal conclusion, the Court wrote:

What is at issue is a constitutional grievance going back almost a century and a half. So long as the issue remains outstanding, the goal of reconciliation and constitutional harmony, recognized in s. 35 of the Constitution Act, 1982 and underlying s. 31 of the Manitoba Act, remains unachieved. The ongoing rift in the national fabric that s. 31 was adopted to cure remains unremedied. The unfinished business of reconciliation of the Métis people with Canadian sovereignty is a matter of national and constitutional import. (MMF Inc. v. Canada at para 140)

This constitutional breach is an outstanding Métis claim flowing from a judicially recognized common law obligation which burdens the federal Crown (*MMF Inc. v. Canada* at paras 156; 212). It can only be resolved through good faith negotiations and a just settlement with the MMF (see for example: *R v Sparrow*, [1990] 1 SCR 1075 at paras 51–53; *R v Van der Peet*, [1996] 2 SCR 507 at paras 229, 253; *Haida* at para 20; *Carrier Sekani* at para 32). Lands both within the 'old postage stamp province' as well as in other parts of Manitoba—since little Crown lands remain within the 'old postage stamp province'—may need to be considered as part of any future negotiations and settlement in fulfillment of the promise of 1.4 million acres.

On November 15, 2016, the MMF and Canada concluded a *Framework Agreement for Advancing Reconciliation* (the "Framework Agreement"). The Framework Agreement established a negotiation process aimed, among other things, finding a shared solution regarding the Supreme Court of Canada's decision in *MMF Inc. v. Canada* and advancing the process of reconciliation between the Crown and the Manitoba Métis Community. It provides for negotiations on various topics including, but not limited to, the "quantum, selection and management of potential settlement lands." Negotiations under the Framework Agreement are active and ongoing.

# 3.0 Map Biography and Oral History

The focus of the map biography and Oral History interviews was on the collection of the following information:

- Current and childhood residences, and Métis ancestry;
- Traditional Ecological Knowledge, including locations of fish spawning areas, seasonal mammal habitat and migration routes, bird habitat, reptile and amphibian habitat, salt or mineral licks, plant habitat, species at risk, spring water locations, and other important ecological features or habitat;



- Hunting and trapping sites, including species and temporal scope of hunting and trapping activity;
- Fishing locations, including species and temporal scope of fishing activity;
- Gathering of plants and other natural materials for food, medicine, crafts or other purposes, including type of plant collected and temporal scope of gathering activity;
- Commercial fishing, trapping, and other land uses for income;
- Cultural and heritage areas including burial sites, sacred or ceremonial sites, historical village sites, trails, and significant locations, contemporary gathering places, recreation areas, and other culturally significant locations;
- Locations of overnight sites including cabins, other types of structures, and campsites;
- Land and water access routes;
- Any observed changes to the environment or any of the above items; and
- Perspectives on being Métis in Manitoba, thoughts and perceptions of the Lynn Lake Gold Mine, and cumulative effects from industry and development.

## 3.1 Participants

Participants were identified through phone calls by the MMF to harvesters who live in or harvest near the Study Area.

Participants were also required to:

- Be Métis Citizens based on the current definition of Métis Citizens in the MMF Constitution;
- Have historic and/or current connection to the Study Area;
- Be hunters, fishers, trappers, plant harvesters, and other land users (e.g., for education, personal employment, sustenance, etc.); and
- Be from a variety of age groups and genders.

The MMF scheduled all interviews, which took place in the Regional offices in Thompson and the Pas. A total of 13 individuals took part in map biography and Oral History interviews between November 12, 2019 and January 26, 2020. In total, there were 10 males and three females who participated in the Study. Three participants had completed map biography interviews for past studies. In these instances, they were given the same PIN that was used for their data in previous studies, and all their collected



land use and occupancy data has been included in this Study. To supplement the data collected from these interviews, information from the MMF Data Catalogue was also drawn on. The MMF Data Catalogue includes data collected from an additional 114 Manitoba Métis harvesters.

## 3.2 Procedure

The methodology for the map biography and Oral History interviews was adapted by SVS from the work of Terry Tobias (2009) and was informed by discussions with MMF staff about the specific needs for this Study.

Map biography interviews were completed with one individual at a time, but in some instances the participant brought a family member or friend with them to observe. At the beginning of each interview, the Study team briefed the participant on the Lynn Lake Gold Mine, the Study's objectives, and how the data would be used. The Study team then reviewed the permission form with the participants and, if the participant agreed, invited them to provide their written consent to being recorded on audio and video and to allow their information to be used for the purposes of this Study.

Interview teams consisted of SVS staff members. The interviewers followed an interview guide to maintain consistency in the map biography process with each participant.

During the map biography, one interviewer would mark locations of features (points, lines, and polygons) identified by participants on the map directly into a computer using Esri Arc GIS Pro Online (Geographical Information System software). Enlarged wall maps were also hung on the walls of the interview room for reference. The second interviewer entered descriptive data for each feature (point, line, or polygon) into a customized Microsoft Access database that was developed for this Study. The GIS computer screen was video recorded to allow for post-interview verification and a back-up copy of the interview. If the participant consented, the interview was audio recorded so that it could be transcribed.

The Study team also asked Oral History questions related to Métis identity, family stories of land use, relationship to the land and waters, perceptions of current harvesting areas, and perspectives on cumulative effects of development and changes to the environment and land use activities. This portion of the interview also allowed participants time to provide their thoughts on the Lynn Lake gold mine and hopes for the future of the Métis in Manitoba in relation to the proposed gold mine.

All participants received a \$150 honorarium and travel reimbursement if they were travelling outside of their home area to participate in the interview.

SVS team members took measures during data gathering, back-up, and analysis to assure proper quality. Team members followed best practices in social science research methodology and SVS' methodological approach for gathering data during the map biography and Oral History. SVS staff conducted quality assurance on collected data from each interview section to ensure there were no missing data or errors in recording descriptions. Senior SVS staff reviewed all research tools and deliverables.



Geographic data was processed to create maps that depict the land use and knowledge of the participants. These maps have been used throughout the report. Raw data and information used remains the property of the MMF and will be returned to the MMF.

## 3.2.1 Tools for Map Biography and Oral History Interviews

The data collection toolkit included the following components:

- A project overview description
- A permission form
- An interview record form
- A map biography interview guide

Other tools included: two laptops that were used for digital mapping on ArcGIS software and recording descriptive data on a Microsoft Access database; video cameras and audio recorders for data backup; a large-scale map of the Study Areas that was placed on the wall to help participants orient themselves; and notepads, paper, and pens.

## 3.3 Country Foods Study: Food Frequency Questionnaire

At the beginning of their interview, each of the nine participants completed a food frequency questionnaire that asked them about the frequency, quantity, and type of country or wild foods they consumed within the last year, and whether or not any of that came from the 100 km area around each of the gold mine sites near Lynn Lake. The different types of foods included mammals, birds, fish, and plants.

## 3.4 Confidentiality and Informed Consent

To ensure confidentiality and informed consent of the participants, SVS researchers took all reasonable measures to safeguard personal and confidential information. Some of these measures included not communicating to other MMF Citizens the identity of participants who were being interviewed for the Study, using PIN numbers to represent participants instead of names, and storing data in a safe and secure location. Confidentiality and informed consent were communicated to the Study participants in writing through the permission forms and verbally by researchers prior to each interview. No names, identifiers, or other forms of personal information are used in this report.



# 3.5 Data Management

The research team used multiple means to protect the data. These included GIS files, Microsoft Access database entries, video recordings of the GIS screen and the participant, and audio recordings of each session.

To achieve the safe storage of data throughout the research process, the team developed and followed a data management and storage protocol while in the field and back in the office. At the end of each day, audio recordings, GIS files, and Access files were collected and backed up to an external hard drive. A copy of all files was backed up to a second external hard drive. Audio files were also uploaded to a cloud storage host as an additional backup measure. Information collected on the interview record form (name, PIN, SD card number, first and last data entry number, deviations from standard procedure, interview date and location) were recorded on a master data management Excel sheet and updated daily. Paper copies of interview record forms, permission forms, and food frequency questionnaires were digitized and kept on a cloud storage host.

# 3.6 Study Limitations

## 3.6.1 Sample Size

There were 13 Métis citizens who took part in interviews for this Study with a focus on citizens who have used the lands and waters around the Study Area. This is a relatively small sample size and cannot be taken to reflect the total Métis population that has used and occupied the land in this area.

Due to the limited scope and short duration of the Study, participants were strategically identified by the MMF to provide a cross-section of the Métis population that has specifically used and/or lived in the Study's geographic area. Despite these limitations, the MMF and SVS believe that the Study provides a snapshot of the MMC's patterns of land use and occupancy within the Study Area.

The Study is not, however, a statistically representative sample of the population of Métis land users across the Province of Manitoba or within the Study Areas and cannot be relied upon as such.

## 3.6.2 Mapping and Data Collection Consistency Issues

SVS researchers displayed maps on laptop computers using GIS software called ArcMap (v. 10.5). Participants looked at the computer with the interviewer and identified the location(s) of land use and occupancy sites related to each interview question. Most of the participants were able to recall specific locations, direct the interviewer to those locations on the map, and verify that the interviewer recorded the location correctly.

One participant had difficulty reading the maps and verifying locations using the computer-based maps due to difficulty understanding and/or relating to the maps spatially. In this case, the interviewer



assisted the participant in finding landmarks on the map as points of reference. This created some measure of difficulty in identifying specific locations at times, but the participant was still able to pinpoint specific sites and locations once they were found.

## 3.6.3 Interviewer, Participant, and Study Biases

Both interviewers and participants have inherent biases that can affect a research study. This is true for all studies and interviews conducted, no matter the context or circumstance. Interview bias can stem from the social setting of the interview, perceived power imbalances between the interviewer and participant, comfort levels of the interviewer or participant, or the physical location of the interview. SVS and MMF took the following steps to decrease interviewer and participant bias and mitigate the effects that it may have had on the Study:

- MMF staff conducted interview scheduling and explained Study objectives to MMF Citizens in advance;
- Informed participants of the interview process again at the beginning of the interview;
- Provided opportunity for questions to be asked and answered;
- Made conscious choices to use plain language in the wording questions and used a standard interview methodology and questionnaire;
- Limited the use of leading questions or statements;
- Where possible, interviews were conducted in MMF community spaces to offer a familiar setting; and
- Took breaks when needed to ensure interviewer and interviewee stayed alert and focused.

In addition to the strategies above, SVS also applied the methodologies of Terry Tobias (2009). An important aspect of the Tobias approach relevant to study bias is the Data Diamond. The Data Diamond is a mapping approach that ensures the map biography survey focuses on facts. To ensure that mapping data is as accurate as possible, a total of four use-and-occupancy facts need to be collected for the areas mapped (Tobias, 2009, p. 47). These facts are:

- 1. By a participant and/or others (Who);
- 2. Engaged in an activity (What);
- 3. At some point in time (When); and
- 4. At a specific location (Where).



The Data Diamond can be used to improve map accuracy by helping participants recall as many details as possible. SVS used detailed maps to help participants orient themselves, be more accurate with their mapping data, and to support participant recall.

## 3.6.4 Limitations of the Food Frequency Questionnaire

Participant recall is also a limitation of the food frequency questionnaire. To mitigate this limitation, we asked participants to only report on foods they consumed in the last year. Other limitations may be that a participant may have consumed wild foods two years ago but didn't this year for reasons associated with access or health. It may be that participants didn't consume foods from the Study Area this year but intend to in the coming years. The data reported on the frequency of food consumed from the Study Area should be indicative of frequency. To gather precise information on the frequency of consumption of wild food from the Study Area, a fulsome country foods study needs to take place in real time over a one-year period.

It is important to note that a limited number of Métis harvesters were available to take part in interviews due to the Study starting during a key harvesting season. The results of the Study therefore can be indicative of the Manitoba Métis Community's land use and reliance but should not be considered to fully capture or represent all Métis use or information.

## 3.6.5 Data Validation

The Study team sat down with six participants and provided each of them with a copy of their personal transcript and map of the features they provided during their interview. Beyond a few place name spelling corrections, there were no changes made to the documents. There were three participants who were not available for data validation. Four participants who were interviewed in January 2020 have not had a chance to review their transcript or map.

## 3.6.6 Thompson Regional Community Meeting

Researchers were invited by the MMF to a Regional Meeting in Thompson on January 25<sup>th</sup>, 2020. There were 53 Métis citizens in attendance. Researchers provided a brief overview of the Project followed by the results of the interim report. Those who attended were asked to participate in a discussion and were asked the following questions:

- 1. Did you ever interact with the Gordon or MacLellan mines while they were in operation? Please describe.
  - a. If so, have you noticed any effects from these old mines?
- 2. Based on the information we provided today and your past knowledge, what are your thoughts about the new developments of the Lynn Lake gold mine?



- a. Is there anything positive you could see coming from it or that you would like to see?
- b. Is there anything negative you think could come from it?
- c. Are there ways to enhance or mitigate positive or negative effects?
- 3. Do you think the proposed mine could impact some Métis people differently than others? For example, could it impact Elders, youth, or women differently?
- 4. Have you been impacted by other resource development activities?
- 5. other mining developments or hydro developments)?
- 6. What role would you like to see the Métis in Manitoba playing in the mine? What would you like to see the MMF do to make this happen?
- 7. If the mine is approved, are there any benefits you would like to see the Proponent giving to the local Métis community?
- 8. Do you have any unanswered questions that you would like to raise?

The results of the community meeting are discussed further in the next section.

# 4.0 Results of Métis Land Use Within the Project Study Area

Study results indicate that Manitoba Métis harvesters have used, and continue to use, the lands and waters in the Study Area for various purposes including subsistence harvesting and cultural and traditional uses. This section of the report provides an overview of these results.

## 4.1 Land Use and Occupancy Data Located in the 100 km Study Area

The MMF Catalogue Data<sup>1</sup> identifies 440 locations of land use and occupancy within the 100 km Study Area around both the Gordon and McLellan mine sites, referred to throughout this report together as the Project sites.

Non-commercial fishing sites were the most mapped land use sites within the Study Area, followed by locations of ecological significance and hunting kill sites. The sites of ecological significance identified are reflective of the deep relationship that the Manitoba Métis have with the lands, waters, and other

<sup>&</sup>lt;sup>1</sup> Note that the MMF Catalogue Data includes all Métis Land Use and Occupancy data collected since 2013. This catalogue includes all data from interviews conducted for this Study.



aspects of the environment throughout the area. Participants acquired this knowledge through their relationship with and use of the land throughout the year for a variety of purposes, including harvesting, recreation, and ceremony.

The data presented in Table 1 provide evidence that clearly indicates the presence of Manitoba Métis harvesters using the lands and waters around the Project sites to exercise their s. 35 Aboriginal and Treaty Rights<sup>2</sup>. Additionally, this data shows other areas of significance and connection to Métis culture and traditions.

Land Use and Occupancy Category	Total Features Mapped Within the Study Area
Personal fishing (non-commercial)	141
Ecological Knowledge	87
Hunting (kill site)	56
Access route or trails	39
Gathering	38
Overnight locations	27
Hunting areas	19
Occupancy	18
Cultural sites	9
Non-commercial trapping and snaring	2
Changes	2
Commercial harvesting (trapping and guiding)	2
Total in the Study Area	440

#### Table 1 Features Mapped Within 100 km of the Project Sites

Interview participants emphasized the importance of the lands and waters they use for harvesting, gathering natural materials, recreation, ceremony, and other purposes. Figure 5 displays all mapped data within the Study Area. Any impact to the Manitoba Métis Community's ability to harvest or otherwise use the land as a result of the proposed Project must be acknowledged and addressed with appropriate mitigation and accommodation measures.

<sup>&</sup>lt;sup>2</sup> S.35 of the Constitution Act, 1982 recognizes and protects the Aboriginal and Treaty Rights of the Aboriginal peoples of Canada. The "aboriginal peoples of Canada" are defined in section 35(2) as including the "Indian, Inuit, and Metis peoples." The courts have found that Aboriginal and Treaty Rights are collectively held rights and therefore consultation and accommodation regarding those rights need to be with the rights-holding collective.





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#### 4.1.1.1 Harvesting Within the Study Area

Figure 6 displays all harvesting locations mapped by Métis harvesters and land users within the Study Area. Harvesting activities include fishing, hunting, trapping and snaring, and gathering plants and other natural materials. As detailed in section 2.4, the Manitoba Métis Community possesses Aboriginal Rights, including pre-existing Aboriginal collective Rights and interests in lands protected by section 35 of the *Constitution Act*, *1982*, throughout Manitoba.

Additional harvesting maps and attribute tables can be found Appendix A. These maps include numbered leaders on each mapped feature; the corresponding information to each of these features (including species and season) can be found in the attribute tables.

More details on the harvesting activities mapped in Figure 6 are provided below.



#### Figure 6. All Harvesting Activities Mapped Within the Study Area





#### Fishing

Fishing was the most frequently mapped harvesting activity in the Project Area. The MMF data catalogue identified 141 personal fishing sites within the Study Area. Interview participants identified and mapped fishing spots (non-commercial) from which they kept fish to eat, mostly targeting pickerel/walleye, yellow perch, and various species of trout. Participants also reported harvesting pike/jackfish and lake whitefish.

Participants identified fishing sites on Simpson Lake and Swede Lake just south of the Gordon Site. They also identified fishing sites on Hughes Lake, Hughes River, and Chepil Lake. Closer to the MacLellan Site, participants mapped fishing sites at West Lynn Lake, Cockeram Lake, and Burge Lake.

Though interview participants discussed their recent experiences fishing in the Study Area, several interviewees described growing up in Lynn Lake and harvesting from these lakes year-round. For example, one participant described fishing around Lynn Lake in their childhood, which included acquiring knowledge about spawning areas and times.

"We fished these lakes [around Lynn Lake] continuously and extensively [growing up]. Primarily summer, but some in the winter as well. Every river where the fish ran during the spawn, you knew where it was, you knew where to go. To fish the actual lakes themselves, the spawning grounds, you never really ever had to, because of the plentifulness of the fish—the rivers they're running and that. But you still knew certain areas."

When describing use of the lakes close to or within the Study Area, one participant simply explained that the number and availability of fish in the area due to its more remote nature made for excellent fishing locations.

**Interviewer:** "And so, what makes this area like a good spot to fish? Can you tell us a little bit more about why you like to go there?"

**Interviewee:** "Numbers! [...] They're abundant fish, so I mean in an hour you can limit out. So, you go other places you can fish for a day and come up empty. So, yeah, they're good size fish, good fighting, very colourful beautiful fish. They're a little off the beaten path, so usually you've got the place to yourself. And, there's action, they're biting."

Though almost all participants who fished described having their favourite locations, interviewees also expressed that they rarely stick to one location throughout the year and instead move through the lakes and rivers based on the season and what the fish are doing during that time, whether it be running, spawning, or using general year-round habitat.

"Well, I mean in the spring, we'll go up the river and fish several spots, then we'll go down the river and fish several spots, and then even in the summer. Like in the spring when the fish are running, we'll fish [...] at the falls, and then we'll go down and fish [...] a little bit below the second set of falls, just in the rapids where the fish are running. During the summer, this stretch



right in here, [we go] trolling in there...it's a deep channel, and all summer you'll keep getting fish in there, and then again in the fall [...], when the whitefish are running, you'll still get pickerel here, and you'll get them back in here again."

Interviewees also noted several changes to the fish populations they have observed in the area. For example, at a spot which several people have nicknamed 'The Burn,' participants reported seeing new species such as blue pickerel or sturgeon moving into the area.

*"Last year was the first time I ever noticed blue pickerel up at The Burn. I was like okay I've been fishing here for thirty years and I've never seen blue pickerel."* 

"[The MMF] had done a sturgeon study and I said you know, [...] twenty- five [years] of fishing up at the Oar Creek slash up at The Burn, I'd never caught a sturgeon. And all of a sudden, I caught three in one year. What's changed? And then all of a sudden, my buddies are telling me, yeah, we caught a sturgeon, all catch and release, but it was just like, we've been here for how many years?"

This data demonstrates the importance of fishing to the Manitoba Métis Community for several purposes including harvesting species like walleye, trout, or whitefish as a food source as well as using the area for recreation, to connect with their families and community members, and to connect with their own culture. The data collected from participants demonstrates that fishing activities in and around the Study Area are extensive and ongoing, and that Métis harvesters have acquired in-depth knowledge of the fish, their environments, and patterns throughout their life-cycle as well as changes that have occurred over time. Changes to the waters in this area from current or future development would have an impact on Manitoba Métis rights and interests and could harm the generational teaching and knowledge transfer that happens when families harvest together. Additionally, any changes to fish quality or population would impact subsistence harvesting by Métis harvesters, and could impact personal economy and social networks.

#### Hunting

Interviewees also emphasized the importance of being able to exercise their harvesting rights by hunting on the land. The extent of this land-use is demonstrated by the total of 56 animal kill sites identified and mapped in the Study Area. In addition to these sites where participants reported making a kill and harvesting an animal, participants also identified 19 hunting areas, which are areas where participants reported going to hunt but either did not make or could not pinpoint a specific kill site.

The closest hunting location to the Gordon Mine site that was mapped is just west of the access road along the Hughes River. Closer to the MacLellan Mine site, just south of Glad Lake, participants identified locations where they hunted ptarmigan.

Interviewees explained that they primarily hunt large mammals such as caribou, moose, and deer, as well as bird species including ducks, geese, ptarmigan, and grouse. Many of these species provide a source of country or wild foods for the participants, but interviewees also described hunting as an



important community activity and part of Métis culture. For example, one participant spoke about how people follow the migratory patterns of caribou based on freeze-up cycles in the winter months.

"They [the caribou] come down in the winter, they start moving in the winter. So, by the time freeze-up happens—of course, it freezes for the north faster, so as the freeze occurs, before we start getting too much snow, they've started to move down. I haven't done it myself, but I know people have gone hunting as soon as they can get in a snow machine. And they'll leave Lynn Lake. They'll go up to Goldsand, Wells, and into Lac Brochet by snow machine. There's a wellgroomed trail. And then they'll go caribou-hunting into this area. And I know they'll go usually just after Christmas, and the caribou are already there."

In some cases, participants said that they use the meat from their hunts to share with their families, communities, or others who may not be able to hunt for themselves. This tradition of sharing the harvest is a common cultural practice by the Manitoba Métis Community and is one of the ways in which harvesting rights are interwoven with cultural and social practices to maintain connections between community members and families. It is a critical part of Métis culture that must be considered when there are potential impacts on Métis harvesting in this area.

"[...] There's a group of people from Lynn Lake that have, had a little cabin there and they've been hunting caribou for years and never been, this is the first time I went out. I was lucky enough to get a caribou. And I brought it back to camp just to, kind of boast about it! And we caught moose also and that. That first year, we, we were quite lucky. I got a caribou and a moose, but we share, we share, I brought it here and it was too much meat and shared it with some of the people here in the night."

"They had a small, an access road to Vandekerckhove which went to Fox Mine and up through that area to get to it and we went on a boat. We had a boat, an access to a boat and I'd already purchased the license for moose and caribou, but the caribou, the intent of that was, was to bring caribou meat back from to Tadoule Lake which.... There's lots of caribou out there, but we were hunting moose and we saw the caribou out on the lake, about six of them swimming on the lake and we followed them and they come up on land and waited and I shot one."

Though the caribou hunt in northern Manitoba continues to be an important activity, harvesters also noted changes they have witnessed over the years in the caribou migration patterns and how far north or south they seem to be travelling.

"So as far as caribou goes there's a small sliver of land in here that you can hunt for caribou, and they haven't come that far south in several years."

One interview participant speculated that this could be a result of repeated harvesting in the same area, a natural phenomenon, or development.



"So, I hunt caribou and I mean I've been hunting them for quite a few years. They seem to be not coming as far South as they once did. And I know that they re-routed the, the winter road up into Brochet, Lac Brochet and Tadoule. Whether or not it's just years of harvesting off there that made them avoid it or whether it's just a natural occasion I don't know. But that would be some development that changed some, some patterns."

Similarly, other interview participants described a decline in the moose population over the last 10 to 15 years. Interviewees described areas where moose used to be plentiful but have since been in decline, speculating that this is possibly as a result of increased numbers of non-Indigenous hunters coming to northern Manitoba to hunt moose as there are currently moose hunting bans in southern Manitoba..

"When I start noticing is, oh gosh, for Lynn Lake I'd say 19, I'd say about 1992 we started noticing around that area. Cause I was still, I was living in Leaf [Rapids] till 2002, but I was, like I said, I was back and forth 'cause my mom and dad lived near Lynn Lake. And I noticed, maybe even longer then that, maybe 1989, cause my dad, even he wasn't getting anything then. I'd say about, like a decline of hunting. "

**Interviewee:** "There used to be lots of moose just on that stretch of road. Like south, driving up towards the Lynn Lake, and Leaf Rapids area."

**Interviewer:** "You'd see them on the side of the highway, kind of? [...] And you said used to? Have you noticed a change?"

**Interviewee:** "Yeah, I find that the populations aren't as high as they used to be, like ten, fifteen years ago. I just think the lack of, or the closures that are happening in southern Manitoba drawing a lot more people up to the north here for moose hunting."

The identification of these hunting areas is significant because use of the area for harvesting engages the s. 35 constitutional Aboriginal Rights of the Manitoba Métis Community. It is important to note that a person does not have to be successful to be exercising their Aboriginal Rights to hunt. In fact, lack of success especially in areas where harvesters have been returning for a number of years could indicate that the area is already under pressure or facing resource challenge that would make it more difficult for the Métis to exercise their rights, indicating a higher degree of consultation and accommodation may be required.

The evidence here demonstrates the importance of hunting to the Manitoba Métis Community for several reasons. For example, interview participants harvested large mammals and birds as a source of food for both themselves and to share with their families and communities. Hunting can be an important land-based activity that provides a connection between harvesters and their Métis culture. The data and quotations presented above also indicate that Manitoba Métis harvesters have acquired, through hunting on the land, in-depth knowledge of species including, but not limited to, caribou and moose. It will be essential for this Métis Ecological Knowledge to be adequately and accurately incorporated into the Environmental Assessment of the Project.



#### **Trapping for Non-Commercial Purposes**

Participants mapped two non-commercial trapping and snaring locations in the Study Area. Noncommercial trapping and snaring include locations for personal use as opposed to commercial traplines. For example, one participant discussed how trapping provided a connection to the land for themselves and their families as they pass these practices through generations.

"Yeah, I've been connected to the land since I was a child. Obviously trapping with my father. It means a lot to me, and I've said it a few times today I really want to make sure that it's protected, and not overharvested. And that it's there for my kids, and their kids to enjoy as well, right. That's what it means to me. Making sure it's maintained, and like not abused. There it is."

Trapping and snaring are important land-based activities that have historically been, and continue to be, undertaken by the Manitoba Métis community. Impacts on trapping activities, including the cultural component of these activities, must be considered as part of the potential impacts to Métis harvesting in this area.

#### Gathering

There are 38 locations of gathering in the Study Area where Métis land users harvested plants and natural materials for food, medicine, and other purposes. Primarily, interview participants described gathering berries to eat seasonally and store or preserve for consumption throughout the year. Most commonly, participants described harvesting blueberries, raspberries, and strawberries. One participant who had lived most of their life in Lynn Lake spoke about harvesting berries all over the Study Area. These locations can be seen on the maps provided in this report.

One interview participant explained that different species of berries only occur under specific environmental conditions, like along eskers or in muskeg, which is why they are sometimes concentrated into identified gathering areas. This interview participant explained that while they gather berries sometimes for themselves, they also remembered gathering with their mother when they were a child.

"Cranberries, the esker areas with the pine are natural production for cranberries as well. But cranberries tend to ripen very late. I can remember going with my mom late in September picking cranberries. Your cloudberries, they're in your muskeg-y places."

Similarly, a participant described areas for pin cherries and raspberries along roadsides, as well as finding that blueberry growth is promoted in areas that have experienced a burn.

"Once a burn goes through, you'll probably still have at least pin cherries and raspberries immediately alongside the road being produced, because it's open, it's still gravelly, and they'll recover faster. Back off the road you're going to get the blueberries happening, whereas in the other areas where you don't have burn, the blueberries—you'll have the odd one, but they


haven't really taken off. Your burns promote blueberry growth. It thins out the area. Whatever it does to the soil, blueberries will naturally occur, and blossom."

Participants also described several medicinal plants they use, such as muskrat root or Labrador tea. Depending on the plant or species, gathering may take place year-round or seasonally.

The gathered plants, berries, and foods are often shared with other Métis community members and are relied on by Métis Citizens for subsistence and medicinal purposes. Gathering plants and other natural materials is another way in which harvesters exercise their Aboriginal Rights throughout the area and provide a cultural connection to the land, as well as a channel through which knowledge can be transferred through generations or families.

## 4.1.1.2 Routes, Occupancy, Cultural Sites, Commercial Harvesting and Observed Changes Within the Study Area

### Routes, Occupancy and Cultural Sites

In addition to land- and water-based harvesting activities such as fishing, hunting, trapping, and gathering, as described in section 4.1.1.1, interview participants explained the importance of several access routes, occupancy, and cultural sites that they use in the Study Area. There were 39 access routes or trails mapped by Métis land users. These trails identified as snow machine or Ski-doo routes, boat launches or routes, canoe routes and portages, as well as walking trails and trails used by other vehicles. Some of these routes include the Hughes River and Cockeram Lake.

Routes and trails are crucial for allowing harvesters to travel to important harvesting areas by land, water, ice, or snow but can also have historic or cultural significance. Some interview participants spoke of how they currently use trails, either over land or water, that were used historically by their Métis ancestors, providing an important cultural connection and piece of history, as well as a contemporary access route. Specifically, one interview participant described the historic Grass River Canoe Route and the value this holds for them and their family and friends they travel alongside as they explore the places that people used hundreds of years ago.

**Interviewee:** "[Referencing the Grass River Canoe Route] I mean there are so many different routes, you can go all the way up to Elbow Lake. Whichever way you go. Just keep following that little part of the river. Actually, we did this trip two years ago [...] Depending on the group, usually it's a seven-day backcountry trip that we do. [...] It goes all the way to Wekusko Falls. Actually, Grass River, I don't know the historical road how far it really goes, but the Grass River goes all the way through Thompson. [...] You're going to basically follow wherever the river flows out of the big lake here".

**Interviewer:** "So, seven days in, then somebody picks you up at the other end?" **Interviewee:** "Yup. [...] We had our base camp on, I think it was the Iskwasum. [...] I don't know how much further without reading or going through the history, but that's the basic Grass River canoe route. I know that's got a certain value. and I'm sure there's places in there that were old



campsites, like hundreds of years ago that people would use. I know there are pictograms on Trapping Lake."

The continued use of these trails by Métis Citizens today provides an important link to their past and the traditions of their Métis ancestors. In some instances, they are literally following in their footsteps. Where so much of the Manitoba Métis Community's Traditional Territory and cultural sites have already been taken up by development and urbanization, especially in southern Manitoba, these remaining cultural sites and connections become even more important.

Interviewees also mapped a total of 27 overnight locations on the land. Identifying overnight locations is important for several reasons. First, many interview participants expressed that they use these locations when they are out harvesting. Several interview participants described using either temporary structures like tents or more permanent structures like cabins while they are out on the land hunting or participating in other land-based activities.

"No, I don't have any structures, but pop up tents obviously. The entire trapline basically. Like sometimes when we're moose hunting, we'll stay at the north end, in a spot right here, and camp here."

"Because when you go there you just, somebody had must have built just a, you know, just plywood. It was really, every time we went there it was always something wrong with it, we'd fix it up again. Just a piece of wood where we could find whatever. But no, it wasn't a cabin, it was just like a, maybe it was to somebody it might've been a cabin. They built it obviously, so it had to be for some reason, when they're hunting, you'd have some place to stop."

Additionally, participants identified spending time out on the land as a way to share knowledge or spend time with their families and other community members. For example, one interview participant described the importance of their family canoe and camping trip to passing knowledge on to their children.

**Interviewee:** "[...] A few times we used to do a family canoe trip. Every summer we would go out with a group or as a family. So, we'd go do back country canoe trips. we do a lot of camping and stuff like that. and then the last couple of years, my boys are just getting old enough to be hunting. So, taking him on hunting trips and stuff like that."

**Interviewer:** "So, you are kind of self-taught but are passing your knowledge onto your children?"

Interviewee: "Trying to, yes." Interviewer: "Is that important to you?" Interviewee: "I think so, yeah definitely."

Participants mapped nine cultural sites in the Study Area. These sites were identified as being used for cultural, ceremonial, spiritual, traditional, or other purposes. These sites could also include areas that have been identified as holding other historical or cultural significance. For example, one participant



spoke about the Métis local of Leaf Rapids that used to host Métis cultural events on Turnbull Lake, including canoe races in the summer and dog-races in the winter.

**Interviewee:** "Turnbull Lake, I used to work at the MMF, and I used to, not work, we used to run the local. Actually, we were probably one of the richest locals there for a while. Did a lot of swimming there, fishing there, little bit of blueberry picking, not as much as further, like a little further down."

Interviewer: "[...] so the Métis local would take everybody down there." Interviewee: "Yeah, we used to have our Métis canoe races there. [...] I used to go on those canoe races with my mom and my dad. If I went with my dad, I would be touching the water, it was, my mom we'd be just. Oh, it was fun in those days. So, they had a lot of Métis events there. [...] So Turnbull, for the Métis though, is a big thing, like. Like, when I lived there, 22 years we used to have, as I say, the canoe races, dog races. I forget the trails of the dog races because I wasn't into that. I would use to just go watch. But for canoe racing and that, like, I was just totally involved with that."

Participants also explained that there are sites on the land that are historically or culturally significant to the Manitoba Métis, one such example being cemeteries or burial sites. One interview participant described a cemetery with a large Métis presence near Lynn Lake.

"Lynn Lake there's a cemetery there, there's a lot of Métis people there. Which I didn't know they were Métis until later in life. Cause they wouldn't admit that they were Métis, you know, like, or any kind of native in them at all. I started working at the MMF, I'm going through and hmmm...I didn't know [...] that, you know, they were."

These results demonstrate that the Manitoba Métis Community actively uses the lands and waters throughout the Study Area. This evidence is important as routes and occupancy sites are crucial to providing passage to harvesting areas and connection to Métis culture and history. Additionally, the identification of nine culturally significant sites within the Study Area from this small sample size alone indicates a high need for the MMF and Alamos Gold to assess the potential for impacts to the Manitoba Métis.

### **Commercial Harvesting**

There were two locations of commercial harvesting mapped by Métis land users. The first was a commercial trapping location and the second was a place where one participant did some guiding for a fishing outfitter. It should be noted that the number of people interviewed for this Study may not be the total number of Métis people who use this area for commercial purposes. It can be assumed that there are other commercial harvesting areas in the Study Area.

As described in section 2.1, the Manitoba Métis Community played a significant role in the fur trade. Trapping and snaring is, therefore, part of Métis tradition and culture. One interviewee described the various species they trap, explaining that they've been doing so throughout their lifetime.



Interviewer: "What species are you trapping in there? Interviewee: "Marten [...], lynx, fox, wolf, beaver, muskrat, wolverine. I think that might be all I've ever caught. [...] It's a big area, eh?" [...] Interviewer: "Have you ever caught mink, muskrat, wolf, or otter?" Interviewee: "Yes. I will go off trail after otters, because they eat a lot of fish. [...]" Interviewer: "And how long have you been going there?" Interviewee: "I've been a helper on the line since I was twelve." Interviewer: "And that's just in the wintertime you go?"

Moving forward, Alamos needs to consider the potential for the loss of formal wages that the project may have on those who depend on the lands and waters for their livelihood. Where necessary, the MMF and individual harvesters need to be compensated for a loss of access to the lands and waters, for both personal and commercial harvesting.

All routes, occupancy sites, cultural sites, commercial harvesting, and changes are displayed on Figure 7.





Figure 7 Routes, Occupancy Sites, Cultural Sites, Commercial Harvesting, and Changes mapped within the Study Area

## Métis Ecological Knowledge

Métis Ecological Knowledge refers to areas or sites where Manitoba Métis Citizens hold unique and specialized knowledge of the land, waters, wildlife, and other aspects of the environment as a result of their distinct Métis culture and relationship to and presence on the land throughout the seasons. This knowledge can also be gathered and shared between Métis Citizens over generations through their families or the Manitoba Métis Community more broadly. Interview participants identified and mapped a significant number of Métis Traditional Knowledge locations.

Sites of Métis Ecological Knowledge mapped within the Study Area include fish spawning areas, important wildlife habitat, migration routes, and species at risk among other sites identified by participants. In total, interviewees identified and mapped 87 ecological knowledge sites within the Study Area. This is significant, as it demonstrates that Métis harvesters are uniquely connected to the landscape and understand it in a way that is not possible for those who are not living on and using the land so intimately. It will be crucial to adequately and accurately consider Métis Ecological Knowledge as equal to the baseline data that the Proponent is collecting as part of their Environmental Assessment.

Most commonly, participants mapped fish spawning areas. Concentrations of fish spawning sites were mapped by participants at the mouth of Hughes Lake leading into the Hughes River just west of the Gordon Site access road. Another fish spawning area was mapped by participants along the Keewatin River just south-east of the MacLellan site. In addition to fish spawning, participants also identified the areas around both Projects sites as important habitat for valued species to the Métis such as moose, bear, lynx, fox, marten, otter, fisher, rabbit, weasel, squirrels, beaver, muskrat, mink, and blueberries.

All features of Métis Ecological Knowledge mapped by participants within the Study Area are displayed on Figure 8.



#### Figure 8. Ecological Knowledge Mapped Within the Study Area





Interviewees also detailed specific species of which they hold knowledge. Of interest in northern Manitoba are barren-ground and woodland caribou, which are known to migrate through the Study Area and have also been identified as species at risk. While both barren-ground and woodland caribou were mapped within the Study Area, barren-ground caribou travelling in large herds were the most often discussed in terms of their migratory patterns and presence on the land.

As several interview participants described, the caribou come across the ice as it freezes up and travel in different herds across the province.

**Interviewee:** "Yeah, [the caribou] come across the ice, but they come down through that side then the map on that one. The ones they come down through somehow through Red Sucker Lake and Oxford House and that. Right down in through Foot Lake. That's the St James herd. And then they got the, the coastal herd that comes in from Hudson Bay that's a cross breed between the woodland and the barren land."

"As far as the caribou's territory I would say you know they might get a big burn through there. And then they'll eat, paw through on the swamps and eat kind of the, I guess it would be kind of like a moss or a lichen or [...] We got floating bogs, so there's, there's no grass up there so they'll paw through and eat that. And if a fire goes through, they might kind of follow the out tracks or avoid it, but in a few years they're back into there. So, most of Northern Manitoba is caribou. The herd, it it's fairly widespread I've seen them across the whole board."

In addition to having knowledge of their migratory patterns, one interview participant also described being able to differentiate between the different ecotypes based on their colouring.

"The woodland [caribou] has got one colour. The mixed breeds got another colour. The barren land, some of the barren land you can see them, when you see them coming you can see that white on them from a long way because they're, it's so shiny actually."

Several participants also detailed their firsthand experiences seeing caribou migrate during their time on the land, often in large herds of hundreds or even thousands of animals.

"And on Shannon Lake [...] we could see the caribou way in the distance, and we stopped, waiting for everybody to catch up. [...] And we just pulled over to the side, we shut off our machines, and we were just waiting, sitting still. And the caribou are milling around, you could smell them [...]. And grunting—they make that kind of a sound. One came, and then a couple more came, and then a few more would follow. And they'd walk, and they'd look at you, and they'd stop. Finally, they got moving, and we sat there while that whole herd went through. And at one point in time--I don't know how many there would be wide, but lots—they're walking, and their antlers are clicking, because they're touching each other. And they'd stop, and they'd look at you, and they'd go. It was an experience that you can't even describe. We're talking hundreds of animals here, not ten or 20 or 30—hundreds of animals. Maybe 1000, I don't know."



"I've seen them all over. That big herd that I talked about, about 10,000, would have been probably just off from there. But routinely that area, I'll, I'll see something. I have seen the, the North around the Seal River, the very far North of the province, kind of even just North of Churchill, I've seen a big group of caribou one year, too. And then it's very common to see pockets of six, eight, you know, maybe even 30 or 40, but couple of times I've seen where, like ants, like you, you, you couldn't even get a head count, there's no way you could count that high."

Participants also expressed concern around changes to the caribou's migration patterns and behaviour in recent years. Specifically, participants expressed that the caribou are not travelling as far south as they used to or are staying further south for longer periods of time. One interview participant speculated that perhaps these changes were a result of increased human presence in the area or warmer temperatures.

"The last few years [caribou] still come down to this area, but every other year, they'll be further west, or they'll be further east. It could be weather-driven, snow amounts, but I think the activity on the road is probably also contributing to it to some degree. [...] And I know the pilots that fly the area would say they've seen little bits and pieces of caribou everywhere, where they didn't make it back. Did they not make it back because they were late and the break-up caught them, or are they just choosing to stay south? [...] Like all these areas are outposts for a lot of the lodges, different out camps, commercial fishing lakes et cetera, fly-in lakes. And they're seeing these caribou in the summertime. So, my personal opinion is I don't think they all got ambushed by the warm weather and got stuck. I think by choice they're there. Maybe I'm wrong, but the frequency of seeing them is too much, too often. And they're not woodland."

It is evident from the results provided here that species at risk, specifically caribou, are present within the Study Area and that the Manitoba Métis Community holds knowledge of their presence, migration routes, behaviour, and recent changes to these animals.

In addition to caribou, interview participants also had specific knowledge of other species in the Study Area including moose, bears, wolves, lynx, foxes, and various species of plants and fish. One interview participant described their knowledge of walleye in the area and how their patterns indicate when the time to go fishing is right.

"So, walleye will all, across the whole North, will spawn kind of spring after the ice is off. Our spring's a lot later than Southern [Manitoba] so it would almost end up being early summer before the ice is off and the temperatures are right."

Another interview participant described knowing the environmental conditions needed for various species of plants including pine, pin cherries, raspberries, and blueberries.

"So, this is all esker, nice sand, the sand, gravel ridges, the roads built right on the top of them, beautiful pine. The pine grows kind of hand in hand with your eskers, so alongside the road,



that's where you get your pin cherries naturally occurring, your raspberries naturally occurring. In the areas where they've been burnt off due to the fires, you will get your blueberries happening."

In summary, the data collected in the Study Area demonstrates that the Manitoba Métis possess and are using Métis Traditional Knowledge of the land and waters in the Study Area and have for many generations. The Métis Traditional Knowledge presented here demonstrates that the Manitoba Métis should be both consulted on any potential impacts of the project and involved in ongoing monitoring efforts connected to the project. As such, it is crucial that the Manitoba Métis Community, through the duly elected authority of the MMF, is consulted about any potential impacts of the Project and that mitigation and accommodation measures are developed for any impacts on Métis harvesting, cultural, and other rights.

#### 4.2 **Results of the Food Frequency Questionnaire**

As part of the Study, interview participants were asked to complete a food frequency questionnaire. The goal of this questionnaire was to find out how often participants consume country foods and whether any of it is harvested from within the Study Area. Although the land use data summarized in section 4.0. explores the lifetime of a participant's land use, the food frequency questionnaire focused on country foods that had been consumed by a participant and their family within the last year to provide an indication of what foods the Manitoba Métis Community may be harvesting and eating from the Study Area.

A total of twelve participants completed the food frequency questionnaire; 83% of participants reported providing food for their families from the Study Area. On average, participants had four other family members who consume the foods they harvest.

The food frequency questionnaire identified 64 country or wild foods that participants consumed from their harvesting areas in the last year, including various species of mammals, fish, birds, and plants as well as other natural materials such as spring water, birch water, or syrups. More specifically, participants identified 35 wild foods they have consumed from within the Study Area.

These foods include

Birch water

- Grouse (general)
- Black bear fat
- Grouse (Spruce)

- Blueberries
- Brown trout
- Burbot

- Labrador tea
- Lake trout
- Lake whitefish

- **Pin cherries**
- Ptarmigan
- Rabbit
- Rainbow trout
- **Raspberries**



- Caribou meat
- Caribou tongue
- Chaga
- Cranberries
- Duck (Mallard)
- Goose (Canada)

- Moose heart
- Moose liver
- Moose meat
- woose meat
  - Moose tongue
- Muskrat root
- Northern pike

- Saskatoon berries
- Sauger
- Spring water
- Strawberries
- Suckers
- Wild mint

- Goose (General)
- Pickerel/walleye

The results of the survey indicated that the highest percentage of participants harvested and consumed pickerel or walleye (58% of participants), blueberries (50% of participants), northern pike or jackfish (42% of participants), and moose meat (33% of participants) from the Study Area. The data presented here are only reflective of those foods that were harvested in the Study Area. A list of all the foods that participants reported harvesting, not limited to the Study Area, can be found in Appendix B.

Participants were also asked to estimate how frequently they eat the foods they harvest per season. In other words, if a participant identified that they harvest and consume pickerel from the Study Area, they were asked how many times per season they eat pickerel in the spring, summer, fall, and winter. Table 2 shows how often participants reported eating the country foods harvested from the Study Area by season. These values were summed to show the frequency of consumption year-round.

#### Table 2. Consumption frequency of country foods from the Study Area

Food Harvested	Sum of Frequency (Spring)	Sum of Frequency (Summer)	Sum of Frequency (Fall)	Sum of Frequency (Winter)	Total Frequency of Consumption (Year-round)
Birch Water		48			48
Black Bear Fat		12			12
Blueberries	6	34	33	6	79
Brown Trout	1				1
Burbot	3			4	7
Caribou Meat	39	39	39	39	156
Caribou Tongue				1	1
Chaga	6	7	6	7	26
Cranberries	3	3	5	3	14



Food Harvested	Sum of Frequency (Spring)	Sum of Frequency (Summer)	Sum of Frequency (Fall)	Sum of Frequency (Winter)	Total Frequency of Consumption (Year-round)
Duck (Mallard)	27		6		33
Goose (Canada)	3		3		6
Goose (General)	24				24
Grouse (General)			24		24
Grouse (Spruce)			15	18	33
Labrador Tea		1			1
Lake Trout	5	3	5	3	16
Lake Whitefish	3	3	2	2	10
Moose Heart	1		3		4
Moose Liver			1	1	2
Moose Meat	108	108	120	108	444
Moose Tongue			1		1
Muskrat Root		1		1	2
Northern Pike	9	3	4	5	21
Pickerel/Walleye	78	76	76	76	306
Pin Cherries		1			1
Ptarmigan				24	24
Rabbit				5	5
Rainbow Trout	13	24	12	12	61
Raspberries		90	12		102
Saskatoon Berries		1			1
Sauger	4	4	4	4	16
Spring Water	360	360	360		1080
Strawberries		90			90
Suckers			1		1
Wild Mint		3	3		6
Frequency of Country Food Consumption per Season:	693	911	735	319	

Of the foods harvested within the Study Area, spring water is most frequently consumed, followed by moose meat, pickerel, caribou meat, and raspberries. Strawberries, blueberries and rainbow trout are also consumed frequently by participants.

In combination with the harvesting and land-use data collected for this study and detailed in Section 4.1.1.1, this data provides evidence of Métis harvesting and consumption of wild and country foods within the Study Area and indicates that Métis harvesters use country and wild foods harvesting from



the Study Area for subsistence purposes year-round. Further, study participants expressed that these foods are not only for personal consumption but are shared with their families and sometimes community members.

Given the frequency and extent of the consumption of wild or country foods, it is evident that further discussions between the MMF and Alamos Gold regarding potential contamination from the Project and is necessary. These discussions will be essential to ensure appropriate mitigation, accommodation, or compensation measures are put into place to protect the rights and interests of the Manitoba Métis Community.

# 4.3 Perspectives on the Lynn Lake Gold Mine Project

During each interview, participants were asked questions about their perspectives on the Lynn Lake Gold Mine Project, including past experiences with development and any concerns related to this project specifically. This section will explore the effects that participants have felt from past developments throughout the Lynn Lake area, which is important when considering the cumulative effects related to the project or how potential impacts from the project could augment or otherwise be combined with the effects already being felt from other developments.

While several of the effects described by participants were a result of development projects in general, it is important to emphasize that a significant number of interview participants described how they were impacted as a result of the mines that previously operated around Lynn Lake in the 1980s through to the late 1990s and are proposed to become the Gordon and McLellan sites. Many of these impacts are still relevant and ongoing. Participants voiced many concerns with the proposed Project. With this direct connection, the information presented in this section provides a unique opportunity to Alamos Gold Inc. to consider these potential effects and ongoing impacts in their planning and operation of the Gordon and McLellan mine sites.

## 4.3.1 Past Development and Cumulative Effects

Interview participants were asked questions about their perspectives on past developments and cumulative effects they have experienced or observed on the land. For the purpose of this Study, cumulative effects were environmental, socio-cultural, or economic changes that are caused by a combination of natural or human activities. The term 'cumulative effects' most often refers to those effects accumulated through industrial development such as logging, mining, or other activities that cause changes impacting the land and people who rely upon it.

Several interview participants expressed concerns about development projects disrupting the environment and creating changes including weather patterns, wind, and the species present on the land, among others. One participant explained that changes come as a result of any type of



development. Importantly, this participant also explained how the effects of changes are experienced through various parts of the environment.

"Wherever there is any type of a development, there is always a changing. Your vegetation, your plants, even your trees. It also affects the wildlife. And not only wildlife but the birds, the fur bearing animals and everything. They all have to move because of a disturbance to the environment. For the land. And I've noticed that lots."

Several participants described changes to their harvesting areas as a result of the Bipole 3 transmission line project and from forestry, most notably with logging or cutting causing an increase in wind. This has forced some interviewees to spend less time in spots where they had been harvesting for years.

"I know since that Bipole project came through on Paint Lake, my God, you can never get a calm day on the lake. I remember be-being a kid and we'd go out there, it'd always be calm water. Now, you get out there and you've got one-foot rollers and things like that, and I don't know if it's directly to do with the Bipole project but man, we get a lot more wind up here. They've got to cut down on the logging."

**Interviewee:** "[...] When I was a kid, you'd go on Paint Lake, eight for ten times we'll say the water was calm. It was like, maybe not like glass but, I mean, you could go out there, anchor down and sit flat in your boat. Now you go out there and there's rock and you're thrashing around. It, it always seems to be so windy out there. [...]"

**Interviewer:** "And what impact does that have on you, in terms of how you are able to use the land or the water?"

**Interviewee:** "Well, you, you can't stand fishing there nearly as long when, when you're getting thrashed around. I mean, the body isn't meant to sit there like this all day, you know, so it cuts down on the time you can go out fishing."

Participants noted that the effects stemming from past mining developments near Lynn Lake are still being felt today. Just as effects from development may accumulate from different projects on the land, social and economic effects can also accumulate over time as old projects close and new ones move in.

One prevalent theme that interview participants raised in discussing previous mining activities around Lynn Lake was the quality of the water in the surrounding lakes and the town's water system. One participant described the boil water advisory the community has been subject to for a number of years.

### Interviewee: "[...] we've had a boil water advisory for so long in Lynn Lake. So long." Interviewer: "How long?"

**Interviewee:**" Long as I've been back. Ten, 12, 15 years, something like that. Our intake is not deep enough, so all that crap is coming in. The water's yellow, you can't drink it, you gotta boil it. You won't soap your clothes in it, they come out yellow right? Like we're, and our water just went up. We're, we're just, whole Lynn Lake is in an uproar right now because they just put our water up and you can't drink it, you can't do nothing with it. [...] Oh just boil it for five minutes,



sure. Soak your clothes in it for an hour, half an hour. Whatever it is you soak your clothes for. They're gonna be falling apart and they're gonna come out yellow."

Several interview participants described growing up with 'tea-coloured' water that they didn't realize was of poor quality until much later in life. Some of them felt that there was a connection between the poor water quality and the mine tailings being stored in the area.

Interviewer: "[...] Is there any locations where you collect spring water?" Interviewee: "No. I don't trust the water up [near Lynn Lake]." Interviewer: "Why's that?"

**Interviewee:**" I just, I don't know. Like all of our town waters, both in Lynn [Lake] and in Leaf [Rapids] are just so colored that I've never, never trusted to grab it off the lakes. I don't, you know, it's not clear in most places. Even though they say you can drink it out of our Churchill river, I still wouldn't trust it."

Interviewer: "Do you have any idea what would cause that colour?"

**Interviewee:** "I know up in Lynn [Lake] it was the tailings doing that. And I know that from just living there as long as I did. Our water was more of a tea color."

Interviewer: "Like out of the tap?"

**Interviewee:** "Yup. It always looked like a tea light tea color. You know, as a young kid we didn't know any better, but as you got older it was kind of, okay, this isn't normal. You know? Especially after I moved out of there. It was, this isn't normal to see it this color."

Interviewer: "What was it like growing up [in Lynn Lake]?"

*Interviewee:* "It was alright. Like I said, once you got older you realized your sand wasn't the same color as everybody else's. And the water when, as far as back as I remember always looked kind of yellowish like a tea. But then back then it was normal to us."

Interviewer: "Do you know why it was like that?"

**Interviewee:** "I didn't find out until I was much older that a lot of our sand is due to the tailings that were around blowing in and stuff. So. But growing up it was just normal to us."

Interview participants described this same issue with water quality happening in Lynn Lake today but instead of tea, they described the water as 'coffee' and 'apple juice' even after running the taps for a while.

"I stay in Lynn Lake. Their water comes running through the taps, it looks like coffee. Like it's...disgusting. For, my understanding is they put a water treatment plant in.... whatever costs a few million bucks, but as soon as they hit the trigger all the lines started to pop underground cause it was pressurized, where it's normally gravity flow. [...] But yeah, you go there to take a shower, and you think maybe there's rust in the lines, so you kind of bleed the lines for an hour, it's still coming out the same colour. You know a glass [of water] looks like tea."

"[I]brought my daughter here, and you know, she's asking you know, who's apple juice are those on the counter, you know, could she have a sip of who's ever apple juice and I said...apple juice? And I looked and I said sweetheart that's...that's my water."



In addition to the issue with both water in the environment and access to drinking water, participants described other pathways through which they noticed tailings making their way into the environment. Another common thread during interviews was the presence of 'yellow snow' around Lynn Lake. One participant even described noticing a decline in the number of ptarmigans in the area as this snow impacted their habitat.

"I remember that when I used to live up in Lynn Lake. There would be some years, there would be lots of ptarmigan. And then all of the sudden when the snow would look kind of yellow from the tailings off the old mine site in Lynn Lake. Where they had the mine site there was the big tailings up and back and when the wind was blowing, it would blow that tailings. The dust of them tailings around, and the snow would be yellow. And the habitat that used to be around there just sort of disappeared."

"That yellow snow was, was from the tailings. The old tailings pond behind where the mine used to be in Lynn Lake. [...] And what was happening is when the wind would come and start blowing, anything that was loose, it would blow it. And it would settle on top of snow and the snow would look yellow or it would be yellow. [...] I can't remember what it was, but you could smell it."

Another interviewee expressed concern about yellow dust, or mine tailings and other chemicals more generally, making their way into the environment and bioaccumulating through the food chain to impact other species.

"Where that dust [from the mine] is and with the [grouse] as one, they'll eat that. That's, I don't know, for them to digest their food better or whatever. And then you take your foxes or your wolves and they're killing [grouse] and eating them. So, what have they got? Same thing. They're eating them and the [grouse] they eat that. So that's one very heavy concern on that."

Several participants pointed to a lack of proper closure with the mines in Lynn Lake as a source of some of these issues and hoped that the proposed project would do a better job of ensuring the sites weren't left to contaminate the surrounding environment.

"So, but, as to what is gonna happen with the new mine, I think [Alamos] could do a bit better job than [the other mining company] did before, because basically they, they opened up the area and never cleaned up behind themselves."

Even more specifically, one participant described the still ongoing reclamation and tailings management work contributing to negative environmental conditions around Lynn Lake, re-emphasizing the negative impacts that were felt as a result of an inadequate closure plan and procedures that left remnants of the operation and mine tailings to sit in the area for many years.

"My concern is going to be for this [Lynn Lake] area, and what impact the open pit mine and further underground development are going to impact this immediate area. We still have—since



1950 right through to 1989—all the remnants of the tailings here, and even thereafter with the gold production. You've got all the tailings and the reclamation work is still ongoing. You've got reclamation work at the Fox Mine, which is still ongoing. So, you would hope, environmentally speaking, it's not going to get any worse than what it is, and hopefully we can bring the area back. But it's always going to be some level of a disaster. Tailings are tailings are tailings, and it just is what it is with the leaching and the various acidic issues related to it. Gold, by far, is the worst."

In addition to the environmental concerns associated with an abrupt closure and lack of proper management and reclamation work, participants also described devastating economic and socio-cultural impacts the town of Lynn Lake experienced seemingly overnight. Participants described Lynn Lake as a town in which the main industry was mining, at both the Farley and McLellan sites. When these mines closed, much of the town's population and economic opportunity went with them.

Participants explained that people had to sell their homes, hand over their keys, and leave town. These effects and the resulting impacts to the community, though they began years ago, are still being felt today. This, in addition to the ongoing environmental issues associated with the mines, is especially important to consider in the realm of cumulative effects related to the proposed project as interview participants described economic devastation that Lynn Lake has still not recovered from.

"When the mines in town finished, and all we had was the MacLellan Mine...when that shut down in '89, the following year we dropped down to probably around 850 people. When you're already downsized that much, [...] 200 residents is significant. And with no real mining or other economic base—even the tourism base being minimal—the town had just continued to deteriorate. Those downsizings, and the adjustments you had to make as a community as those projects came to an end, in my opinion is what has really impacted the town the most."

"At that time, my wife worked in the [name removed] bank at the time. And it was unbelievable. People walking in and just handing their keys in and basically, you know, it was sad. There were some nice houses in town and because the RCMP detachment at that time [started] to buy houses [...] the government paid a fair dollar, but most homes were going for just pennies. [...] An average house, for a really good house was \$20 -25,000 when the mine closed."

**Interviewer**: "So you were there, you were living there and working there with the RCMP when the mine closed down. What did that do in the community?"

**Interviewee:** "They, they had to bring in mental health workers and all this. Families were devastated, like they were making big money and overnight that, they were closing and stores [...] started reducing their inventory, closing half their store down because they didn't have the business anymore. The break and enters and the vandalism increased because, you know, a lot of people, people moved into town that thought they could get into houses for nothing. [...] As matter of fact we generated and started up, what you call citizens on patrol. A system just to have people driving all night long to protect properties and making people feel safe."



"People basically dropped their keys off at the bank and, and financing, a lot of people, a typical mining town, when you make big dollars, you spend big dollars. So, overnight a lot of people, a lot of reprocessing, you know. The boats and the toys and that, people basically sold a lot of their stuff [...] for next to nothing. People lost a lot of money, out of pocket. It was very unstable, but, you know, it's like any other community that was a one industry town. If that industry goes by the wayside, you know, it's, you know, it's just what happens. That's what happened at Lynn Lake, at that time. And it never recovered."

**Interviewer:** "Yeah, what was it like when the mines closed down? How old were you? You would have been young, eh?"

Interviewee: "Yeah ten or eleven years old."

Interviewer: "What do you remember about that time?"

**Interviewee:** "That it was like a light switch. Everybody was gone. Everything from the school, to the hospital. Everything completely scaled down. There was less teachers, less doctors, less nurses. It was a pretty big shock to the system. "

As interview participants explained, the closure of the mines around Lynn Lake caused a sudden displacement of the population in the town. Several interviewees who grew up or lived in Lynn Lake for a time described leaving and coming back to find the town in a state of deterioration. Participants explained that the sudden change resulting from the closure had deteriorated the economy, population, and infrastructure, creating a stark contrast to the Lynn Lake in which they used to live.

**Interviewer:** "What kinds of things did you notice when you went back [to Lynn Lake]?" **Interviewee:** "Deterioration of the town. When you first went into town, there was older, already older buildings and structure. [...] Then those are the houses that were left, and they basically fell apart and [...] the squatters came in and took over some of the houses and they basically deteriorated [...]."

*"It's sad and depressing, and that's one of the reasons I don't go back as well...just sad, for what that town used to be in its heyday when I was a kid growing up in high school for example.* 

"The infrastructure [in Lynn Lake] has deteriorated to such a point that unless they're going to rebuild the town, they can't band-aid it anymore. The economic base, the tax base, isn't there to rebuild the town. [...] You could take everybody and put them in one quarter of the corner of the township. That's how spread out the town used to be, and that's how many people you actually have living in town right now."

"[...] We were lucky we got to sell [our house in Lynn Lake], but not for much, \$10,000. You know, you buy it at \$30,000 at that time. Yeah. And it was just sad to see all that going, everything slowly going downhill. People were leaving. And the one thing about it though, I still keep in touch with the Facebook, you know. You always hear people are either dying or they're getting married, you know, or they're sick or something. But yeah, it's, same with Lynn Lake, it was a nice community, you hear about people, now there's not too many left up in Lynn Lake, old-



timers, I can only think of two now. And same with Lynn, Leaf Rapids is very little, few people left that I know now, the old-timers I call them."

Given the experiences interview participants described with the previously operating mine sites in Lynn Lake, it is evident that the Manitoba Métis were impacted by these developments in several different ways. First, interview participants described the impact of these mines on the environment from which they harvest and use for cultural purposes, including yellow snow, tea-coloured water, and discoloured sand as a result of tailings or other chemicals from the mines. Alongside these environmental effects was the economic devastation of the town following the mine closures. Participants detailed their community members losing their homes, money, and other belongings in a short period of time following the closure, which also resulted in a significant population decline. Today, as a result of these impacts, the town of Lynn Lake was described by participants as still struggling with the deterioration and social issues that emerged with the mine closures.

Aside from the impacts that participants have experienced, and in some cases continue to experience, in Lynn Lake, they also described the effects that other development projects throughout northern Manitoba have had on their harvesting or other practices. Most prevalently, interview participants explained that clearing the bush to make way for development projects has resulted in changes to the wind, which has impacted their ability to harvest throughout the lands and waters they have visited throughout their lifetime, in some cases dating back to their childhoods.

The environmental, economic, and social impacts that were described by participants as a result of developments throughout northern Manitoba are crucial to considering how the proposed project may impact the Manitoba Métis. These stories and accounts demonstrate the importance of ongoing communication and engagement with the Manitoba Metis Federation to ensure that the impacts are mitigated or appropriate compensation and accommodation measures are put in place to avoid further compounding effects to Métis rights and interests.

## 4.3.2 Concerns Related to the Lynn Lake Gold Mine

In addition to being asked about their previous experiences with development projects in the region, interview participants were also asked about any specific concerns they had pertaining to the proposed project. Interviewees expressed concerns related to the environment and the social impacts that could be felt as a result of the project. Many of the concerns that participants expressed are rooted in their past experiences with development and provide an important opportunity for Alamos Gold Inc. to look ahead and see where impacts to the Manitoba Métis may arise.

Several interview participants expressed concerns about the environment around the proposed mines and the changes to that environment that could come as a result of the project. One interview participant expressed concern that the chemicals used, and tailings areas, will impact wildlife and waterways in the region.



"Those new developments of those new mines are going to have an effect on any wildlife, birds, fur bearing animals. There's gonna be, because of their, when they're refining that ore, there is going to be a lot of chemicals being used which is going to be dumped into a tailing pond or whatever. Water will seep into the ground and end up in the rivers, the streams, which is going to affect everything."

One participant emphasized that even with reclamation efforts, development projects bring about changes that are impossible to reverse. Another expressed concern specifically around the "natural" activities that are associated with mining, including high nitrogen runoffs that are associated with openpit mining, as well as the ongoing trucking activity that will be necessary.

"I mean, from what I've learned with my experience from contracting through my own business, through working for contractors, through working for mining companies, you know, once you disturb something it's never the same again. I mean, try all you want, you can backfill with all the topsoil and grass seed but it's never going to be the same. It's not what it was, you've moved it, and it's changed."

"Anyway, the mining here is going to have some level of impact on the area, just for the fact that you're going to have again the high nitrogen runoffs from the open-pit mining, and you're going to have all the trucking activity. So those natural activities associated with a mine will have an impact on the animal life in the area."

The risk of negative impacts to wildlife, plants, water, and air are especially significant to the Manitoba Métis Community as they use the lands and waters to exercise their s. 35 Aboriginal Rights. As demonstrated by the results of the food frequency questionnaire in Section 4.2 of this report, interview participants reported frequently harvesting plants and animals for consumption in the Lynn Lake area. Because of this, several interview participants expressed concerns that wildlife could interact with mine tailings. One interviewee described watching fish die as they come into contact with mine tailings, alongside birds and other small fur bearers.

"[...] I know for the company I work for, we have tailings ponds and they are tied to a contract for life to keep, you know, hauling lime out there to reduce the acidity, so it's, it's gnarly, nasty stuff. I see what it does to, to animals, like tailings itself. It's brutal. You'll see fish come swimming up in clear water and into the tailings ponds and they'll hit where the line is and all of a sudden, they're belly up. And then a seagull flies by and eats it and I don't know how those damn things can survive but they can seem to eat anything, but there's birds that end up in there. Muskrats, you know, and they die from these tailings."

Another interviewee expressed similar concerns, describing how humans can become sick from eating wild or country foods off the land that have come in contact with mine tailings. This participant explained that, despite best efforts, they have seen wildlife make it past the barriers, interact with these chemicals, and die.



"Well, you don't want to be eating anything that interacts with tailings, tell you that. [...] Say it's one of those one-off chances it does, and you go and eat it, you get sick. Absolutely you get sick. I have seen when I worked in the refinery at this mine [...] I've seen muskrats, you know, like get into the buildings and [the company] can't stop them all but they do try. All doors are closed and things like that, but they, but they sneak in and you'd see them come swimming out from our sump area. They make it about ten feet out and their bodies start shutting down, so you know, you feel sorry for it, you kill it with a shovel instead of watching it slowly die."

This interviewee also went on to describe the potential impact to hunters and trappers eating food off the land that may have interacted with dangerous chemicals related to mining activities. They understood that measures are put into place to avoid these interactions but explained that the risk for harvesters and land users getting sick exists, nonetheless.

"So, I mean, if one of those things were to get out and go and heal up but it's sick, and you're trapping – and some people do eat muskrat – and they end up eating that, I couldn't imagine the health effects. It'd be terrible. And I know birds, geese, they go and they land in the tailings ponds and the companies [...] have [...] a propane canon, and it'll let out a loud bang to, to deter wildlife from coming again and it works 99 percent of the time. But that one percent is all it takes to get one person sick and one person is one too many."

In looking at the big picture around the project, one participant suggested that there could be a fair trade-off between the potential effects of the project and the economic gain for the area. This is significant, especially given the economic deterioration of Lynn Lake described by participants in section 4.4.1. This trade-off, however, is also a source of concern for interviewees. As several participants described, the possibility of having a mining camp environment and bringing in non-local people to work in the mines in effort to make the project more economically feasible would severely interfere with any economic benefit to Lynn Lake or the Manitoba Métis Community in the area.

"Can we argue there'll be a fair trade-off in terms of economic gain for the area, and our people and the other Indigenous peoples, and the other residents of the area? I'd like to be able to argue that. But [...] they may have a camp and a come-and-go crew, where it then lessens the economic input, in this case to Lynn Lake. And I know damn well that that's going to be their goal, because that's the most economical way to approach it. And the other aspect of it is reliability—you can't rely on people all the time to come and go, but you bring people in for two weeks at a time, or whatever shift schedule you're going to run. They're there for two weeks, they work their asses off, they go home. Level of productivity is higher with a camp environment where you're controlling everything, versus in this case people from Lynn Lake driving out to the mine and everything else."

"[the mine workers] should come into Lynn Lake. I think they should be in town. There's lots of houses, they might need work, or whatever you know, like they should be putting into the community. Don't just have them in the camp and fly them home and mine there, the, the town's gotta benefit somehow, right? I don't think they should be putting a camp."



One participant also noted crime rate rises in northern communities, like Thompson, when transient workers are present in the area because they are not invested in the communities they visit. This interviewee was a woman and described feeling nervous about what the presence of transient workers would mean for her.

"We get a lot of transient [workers]. So, our population will go up, they're not invested in this community, crime rate goes up as well. They come out of these dams, they come out of these mines, they go to the Thompson, which is the local hub in the north, party it up, break a few laws. I hate to say it, use and abuse locals, and go home. And does the money stay here? No. Are the jobs long term? Not really. [...] It will affect us. And as a single, and I hate to say this, but it is a reality, as a single woman in this community, crime rate goes up towards women, and it makes me nervous, personally."

On top of not feeling safe in a community with transient workers travelling in and out, the woman quoted above also mentioned that having a transient workforce results in no positive economic benefit to the communities or the Manitoba Métis that live there. Another participant echoed this sentiment and described the "double whammy" this could have on the community of Lynn Lake due to its vulnerable economic state and ongoing social issues.

"[The mine will] probably [have] a camp environment. So, they'll draw from Lynn Lake what they can. [...] You have all the social problems that you do. [...] So, the same is going to apply here, but you've got the double whammy with just the economic state of [Lynn Lake] and everything else...no, it'll be a camp environment. It'll be an 80-man operation biweekly. They'll fly in, fly out, or drive in, drive out probably."

Similar to other participants who expressed issues related to the workforce not being invested in the places they travel through; this interviewee described the impact this could have on their harvesting areas and other popular places to visit on the land.

"The environmental side of it, I can tell you right now. When you have an influx of people that have no ownership to the area, and it's their job, you're gonna have a lot of litter in the bush, you are gonna have a lot of people that go out and wanna go fishing at the weekends and stuff, and we used to have, find piles of litter, because it was basically, people that had no ownership to the land. No pride for the land so there's a lot of debris in the water. There's a lot of, you know, a lot of garbage and that. That's something that is, that's gonna come with an influx of population. There's no doubt about it."

In general, participants expressed concern about being able to trust the mining companies in ensuring concerns, effects, and impacts are addressed, mitigated, or appropriate compensation and accommodation measures are provided. One interview participant succinctly expressed the sentiment connecting all of these concerns:

"What mining companies say and what mining companies do are usually two different things."



Given the rights and interests of the Manitoba Métis in the project Study Area, alongside their previous experiences with similar mine development projects around Lynn Lake in the past, it is evident that ongoing communication and engagement with the Manitoba Metis Federation is crucial in ensuring that these concerns do not come to fruition and the negative impacts of the past mining operations do not repeat themselves with the proposed project.

# 5.0 Thompson Regional Community Meeting

As discussed in section 3.6.6, the Thompson Community Regional Meeting provided Métis citizens with an overview of the proposed Project and the results of the interim report. The 53 Métis citizens were asked to provide their comments on the discussion questions listed in section 3.6.6.

There were six main themes that continually came up during the discussion and from written feedback from attendees.

- Conduct a Métis-specific impact assessment Métis citizens have been and continue to be impacted in several ways by current or closed mining practices and other resource developments throughout the province. Previous mine closures in the Lynn Lake area have had devastating impacts on those who lived and worked in the area. There is a need to plan for both impacts to the environment as well as the social, economic, and physical health of Métis in the area.
- 2. **Ensure best practice is followed** All aspects of construction, operation, and closure need to use best practices for environmental management and restoration.
- 3. Employ Métis monitors Métis citizens need to be involved in monitoring programs.
- Métis employee retention program Retention of Métis employees at the proposed Lynn Lake Gold Mine is essential and opportunities for training and education need to go alongside employment opportunities.
- 5. **Set-asides for Métis businesses** -Contract work that goes out for tender needs to prioritize Métis-owned businesses.
- 6. **Strong closure plan** A clear closure plan needs to be put in place to ensure detrimental social, economic, and environmental impacts from the mine closure are avoided.

# 6.0 Recommendations for the Project

Those who participated in the Study as well as those who attended the Regional meeting in Thompson had recommendations that they felt needed to be included in any negotiations or plans that are made going forward.



A detailed and explicit closure plan that identifies how Alamos Gold Inc. is going to mitigate social and economic issues after the mines close was very important to Métis citizens who've experienced mining closures in the past. For example, one participant said they felt that people shouldn't have to lose their homes when the mine closes. Another expressed fear for what would happen to Lynn Lake or other communities after the mine closed.

"I would just like to see it, something happens, but people don't have to lose their homes. A lot of them are just boarded up going in to, molding, and stuff like that. And I don't know, there's lots of possibilities, if we just think of them."

"But the negative part of it, just, the negative part of it for me would be the, after the closure. What's going to happen to the town again. One of the biggest things that I always think of, it's the negative part of it, what's going to become of people again, again they're all going to move, probably die. Cause, it's a good career, like a mining, you get, being up in the north, because everything's more expensive to ship up, it's, at least you make good money."

The opportunity for employment as a potential economic benefit was discussed by many participants and was also raised at the Regional community meeting in Thompson. Not only was hiring Métis people for job opportunities important, but also retaining Métis people and providing capacity support for them to be successful on the job. For example, one participant said that it was important for people to have a stable work environment, another said that there needed to be training opportunities for those who wanted to work in the mine but who don't currently have the required skills. Overall, people felt that there was a desire for local Métis people to have meaningful and secure jobs in the area. This will be especially important for maintaining community and family connections amongst Métis citizens in the area.

"I think a good way to affect Métis people if you're hiring them, which I hope they, I really hope they do, give them a stable environment to work, don't talk to them like they're, you know, less than or 'you're only here because we, we need the statistic to say that we hired, you know, 80 of you, you know. Don't treat them like that."

"As long as they have a fair hiring process and they're hiring, you know, local people, and even if they're not qualified for say what you're hired for, well, qualify them. Train them. If your employees shouldn't be a liability, they should be an asset. The more you train somebody, the better you treat them. They are the face of your business, right? Like, if they're out there, they're happy because you've invested time and showing you have confidence in them because you helped them get, you know, get them to a position where if they leave, they leave with more than they showed up with. And I'm not just talking money, I'm talking education because education's huge, right? So, for positive impact on Métis people, be it men or women, both, children, kids, I don't know, train them. Hire them."

"Training. I mean, we're just as good as anybody else. Let, let's train our people. Let's have those smart people. Let's see how, so when they see a job posting, you know, for a class one engineer,



you know, hey look at that, we've got three people up to Class 1-A engineer levels now. Let's talk to them to see if they're interested in this, you know. Training, training, education. I mean, I've been trained by the MMF. I went to school for heavy equipment operator and from there I opened a business and now from there, I'm becoming a journeyman heavy duty mechanic, you know. [...] And they were really good to, to us because they let us know that they had stiff expectations. Like, they said there was no reason you should fail this. You need help studying? No problem. You need better books? No problem. You need to eat? No problem. You know, they, they set us up so the only factor at failing was literally you not paying attention."

"We've got smart, smart people. We have a lot of people with unlocked talent, you know, that they don't even know what they'd be good at yet but you get them into these job fairs and you know, things like that, put them in simulators, put them in a job placement for a week, you know, and maybe it's like, 'I kind of like this way of wood work. Maybe I'll be a carpenter' [...] Training, education – huge. Support. Follow through."

"Give them a fair shot [...] People have been up here for a long time who have invested their lives up here, you know. Like, we should be not necessarily taking advantage in a bad way but we should be taking advantage of that knowledge and, you know, getting them into the sectors in say this mining project that, where, you know, they've been there for 40 years already, they know what it looked like 40 years before, how it got to this state. [...] Use them. Nobody works for you harder than Métis people, you know. We do, we shoot for that higher target."

"If you want to make a good investment, invest in Métis people. Not only will you get your dollar back in work, but you'll get more. They will do the best job that you possibly could imagine. Believe in us. Try us out. We will impress you."

As discussed, there is a growing concern of the transient work population that often comes with mining camps. Métis citizens who already had experience with transient mining communities were concerned about these issues continuing. At the Regional meeting, people discussed issues with drugs, alcohol, and violence against women. One participant suggested that Alamos Gold Inc. should hire and retain local people, who are already engaged and embedded in the local community. There was one participant who felt that crime rates would not increase if most mine workers lived in and were connected to the local community.

"Start training people here so we don't have as many of the transients. People that are invested, that are going to be here long term [...] is one of the ways I could see that being helped to keep the crime rate down. Invest in the community long term. Less transients. [...] One of the things I see is hire local. Make sure they're at the table when you're looking at training, whenever the jobs come. And don't do it the day you're going to start the job, do it now!"

Many interview participants, and those in attendance at the Regional community meeting in Thompson, expressed a concern for how the environment was going to be impacted by the development. There was a strong feeling of needing to protect and care for the environment for future generations. For example,



one participant expressed their desire for clean water, and that water is life. They also expressed the need to ensure that what they are harvesting in the area is safe to eat, noting that they had already had arsenic poisoning once.

**Interviewee:** "As long as they are actually putting in a legitimate effort into, you know, cleaning it up when they're done and are at least making it usable, you know, for the next generation to be able to use – maybe not for mining – but hell, just for living, you know. That's a big factor, cleaning up after yourselves."

**Interviewer: "**When you talk about making sure it's usable for the next generation, what are those qualities that you want?"

**Interviewee:** "You want clean water. I mean, water is life. Pretty sure everybody knows that if you don't got water, you got nothing. So, there's waterways and, you know, ground water feeds everything. It feeds your trees, it feeds your plants, it feeds your berries. Guys like me picking, you know, I don't want to get any pickings if they're full of arsenic. I've had arsenic poisoning and it is not fun."

A country foods monitoring program of the foods identified in this report will need to be established to ensure that Métis citizens are not being exposed to harmful contaminants from the activities of the Project.

In both the interviews and at the Regional community meeting in Thompson, Métis citizens expressed the desire to have Métis environmental monitors who would be able to identify changes and raise the flag if they saw issues happening in the environment. The reason for having local Métis citizens take on this role, they said, was because they already had experience in this geographic area and would be familiar enough to identify changes.

"I think it's very important, while they're operating as that, they have what you call traditional trappers that live in that area and hunters. Especially the elders, one's going out there now before they start and check, and take pictures and record game, signs of game and caribou and moose and that, what the signs are and the site that they are at before they start disturbing the earth. And then, do a study once in a while, maybe once every month or two months to see just how there's any tracks, there are any lynx tracks or any marten tracks, is there anything, you know, to see whether or not, it's effected the population of wildlife there. I think they should do that, because they never did that before."

"[Get] the hunters, the harvesters to take a look at it and say, 'this is what it is today'. And then, take a look at it, a month later, two months later and say 'there's no moose in the area anymore. There's no, they'll be the fur, we no longer can trap in that area', or 'they're dumping their, dumping their, their tailings or [...] their overburden is going into the river'. [...] You know, I think things like that might be advantageous going forward and how that impacts on the land and hunting and everything harvesting. But I think they gotta rely on local sources to do that. Local people."



Some participants felt that the MMF has not been adequately consulted on past resource development projects but that Métis citizens are still heavily impacted by these developments. Participants felt that the MMF will need to be at the table to ensure appropriate mitigation and accommodation measures are in place to ensure that negative impact are mitigated, and any potential positive impacts are enhanced.

"I also know from past experience, people that come up here and open up mines, even the dam, and other agreements with the First Nations, and MMF hardly ever gets invited to that table so the Métis really don't get included."

"I'd like to see MMF at the table and the jobs being discussed. What's the future going to hold? What are the jobs needed? How are we going to be affected long term? [...] What's going to be released into the air? Will the land be put back to the way it was before? Those are the questions I think MMF should be asking."

# 7.0 Conclusions and Expectations of the MMF

The results of the Métis Traditional Knowledge and Land Use Study has given the MMF the information required to make meaningful recommendations to Alamos Gold Inc. The evidence that we have presented above shows that there is indeed significant land use by Métis citizens in the area, and any impacts to the environment have reasonable potential to impact Métis citizens. Furthermore, based on past experiences it is likely that Métis citizens' social, economic, and physical health may be impacted through direct or indirect effects of the project. All of the issues raised above need to be accurately and adequately included in the Environmental Assessment process or resolved through additional mitigation or accommodation measures jointly agreed upon with the MMF. In this report we have provided Alamos Gold Inc. with some indicative baseline data of where and how Métis citizens use the lands and waters and in which they hold Aboriginal rights under s.35 of the Constitution. This baseline data should not be considered a comprehensive or exhaustive record of current use of lands and resources for traditional purposes by the Manitoba Métis Community, as the scope of data collection was constrained by funding and timelines dictated by Alamos Gold Inc.

The following are how we expect to be engaged in this Project moving forward:

- Alamos Gold Inc. must meaningfully engage the MMF at any level where key strategic project decisions are being made. We expect adequate time to review these decisions and capacity support to engage with and respond to these decisions to ensure all Métis Traditional Knowledge and Land Use information has been considered in these decisions. Such decisions may include but are not limited to material changes to the site layout, project description, closure plans, mine plans, and permitting plans.
- Alamos Gold Inc. must formally and functionally acknowledge MMF jurisdiction, sovereignty, governance, and rights, claims, and interests and the related requirements for consultation and



engagement moving forward. This must be done within Alamos' environmental assessment documentation and any related environmental permitting applications to the Crown, in particular.

- In the spirit of respect, we expect and require Alamos Gold Inc. to include the information presented in the report above in the upcoming release of the Environmental Assessment. This includes:
  - Demonstration that the information in this report was incorporated into all relevant aspects of the Environmental Assessment. That is, we expect to see this information applied in an integrated fashion to all relevant chapters and technical supporting documents of the Environmental Assessment, not just summarized in an MMF specific chapter. In particular, this is relevant to EA content (baseline environment, effects assessment, mitigation, determination of significance of adverse effects, follow-up programs) associated with relevant components of the environment such as terrestrial and aquatic ecology, fish, wildlife, species-at-risk, cultural and archaeological heritage, human health, socioeconomic conditions, water resources, air quality and the like, where adverse effects on these components may have secondary effects on Métis traditional use, socioeconomic conditions, health, or archaeological and cultural heritage.
  - That the Métis Ecological Knowledge and land use data provided in this report is treated and conveyed as being equally valid and legitimate in comparison to other baseline data for the Environmental Assessment.
  - That there is transparency and traceability in how the information in this report was used to determine mitigation, and the significance of adverse effects on Métis rights, current uses of lands and resources for traditional purposes, socioeconomic conditions, health, or archaeological and cultural heritage.
- We request that Alamos Gold Inc. include in an Environmental Assessment section on Sustainability or similar, how and where they will ensure socioeconomic benefits for the Manitoba Métis Community, including planning for capacity development and the retention of Métis employees, and for Métis economic and business participation.
- We expect that, where appropriate mitigation measures cannot be put into place, that Alamos Gold Inc. will provide accommodation and long-term relationship measures that ensure the lowest feasible impact to the Manitoba Métis Community's rights and interests. For example, these accommodations could include equity ownership of the Project, revenue sharing, direct involvement in progressive and full close-out rehabilitation and environmental monitoring, financial compensation for impacts that cannot be avoided or where residual impacts remain following mitigation measures, and ensuring long-term economic and social benefits to the Manitoba Métis Community.



• Given the evidence provided in the report, we expect that ongoing engagement and consultation will be required. A fulsome socio-economic study and management plan as well as an environmental and cultural management and protection plan that is designed to protect the sensitive Métis values described in the report are expected as part of this ongoing engagement.



# Appendix A: Additional Maps and Corresponding Attribute Tables



Figure 9 Métis Harvesting within the Study Area (Map 1 of 7)







Figure 10 Métis Harvesting within the Study Area (Map 2 of 7)



Figure 11 Métis Harvesting within the Study Area (Map 3 of 7)





Figure 12 Métis Harvesting within the Study Area (Map 4 of 7)



Figure 13 Métis Harvesting within the Study Area (Map 5 of 7)





Figure 14 Métis Harvesting within the Study Area (Map 6 of 7)




Figure 15 Métis Harvesting within the Study Area (Map 7 of 7)



PIN- GISID	Category	Туре	Subtype	Spring	Summer	Fall	Winter
1303-110	Fishing (personal)		Jackfish/Northern Pike, Lake Sturgeon, Pickerel/Walleye, Yellow Perch				Х
1303-111	Fishing (personal)		Jackfish/Northern Pike, Lake Sturgeon, Pickerel/Walleye, Yellow Perch				Х
1303-112	Fishing (personal)		Jackfish/Northern Pike, Lake Sturgeon, Pickerel/Walleye, Yellow Perch				X
1303-113	Fishing (personal)		Jackfish/Northern Pike, Lake Sturgeon, Pickerel/Walleye, Yellow Perch				Х
1303-114	Fishing (personal)		Jackfish/Northern Pike, Lake Sturgeon, Pickerel/Walleye, Yellow Perch				Х
1303-115	Fishing (personal)		Jackfish/Northern Pike, Lake Sturgeon, Pickerel/Walleye, Yellow Perch				X
1303-118	Fishing (personal)		Jackfish/Northern Pike, Pickerel/Walleye, Yellow Perch				Х
1303-119	Fishing (personal)		Jackfish/Northern Pike, Pickerel/Walleye, Yellow Perch				Х
1303-120	Fishing (personal)		Jackfish/Northern Pike, Pickerel/Walleye, Yellow Perch				Х
1303-135	Fishing (personal)		Jackfish/Northern Pike, Pickerel/Walleye				Х
1303-136	Fishing (personal)		Jackfish/Northern Pike, Pickerel/Walleye				Х
1303-137	Fishing (personal)		Jackfish/Northern Pike, Pickerel/Walleye				Х
1975011	Hunting	Mammals	Moose				
3689011	Fishing (personal)	Fish	Whitefish, Jackfish, Sturgeon	Х	Х	Х	
3689013	Hunting	Birds	Ducks, Geese	Х			

Table 3 Métis Harvesting Within the Study Area - Attribute Tables Corresponding to Harvesting maps 1-7



PIN- GISID	Category	Туре	Subtype	Spring	Summer	Fall	Winter
3689017	Fishing (personal)	Fish	Whitefish, Arctic Char, Cisco	Х	Х	Х	
4253015	Fishing (personal)	Fish	Pickerel				
5103-16	Fishing (personal)		Pickerel	Х			
5103-17	Hunting		Duck			Х	
5103-18	Hunting		Duck			Х	
5103-19	Hunting		Duck			Х	
5103-20	Fishing (personal)		Pickerel			Х	
5106-4	Trapping						Х
5106-5	Hunting		Woodland Caribou			Х	Х
5106-6	Hunting		Woodland Caribou			Х	Х
5106-7	Hunting		Moose		Х	Х	
5106-8	Hunting		Moose		Х	Х	
5106-9	Hunting		Moose		Х	Х	
5106-10	Fishing (personal)		Jackfish/Northern Pike, Lake Whitefish, Pickerel/Walleye	Х	Х	Х	Х
5106-11	Fishing (personal)		Jackfish/Northern Pike, Lake Whitefish, Pickerel/Walleye, Sucker			Х	
5106-12	Hunting				Х		
5106-13	Fishing (personal)		Goldeye, Jackfish/Pike, Lake Whitefish, Pickerel/Walleye		Х		Х
5106-15	Fishing (personal)		Jackfish/Pike, Lake Whitefish, Pickerel/Walleye				Х
5106-16	Hunting						Х
5106-17	Hunting						Х
6102-1-L	Hunting	Mammals, Vegetation, Fish	Moose, Deer, Bear, Berries, Blueberries, Fish			Х	X



PIN- GISID	Category	Туре	Subtype	Spring	Summer	Fall	Winter
6103-27	Fishing (personal)		Trout		Х		
6103-33	Fishing (personal)		Pickerel/Walleye		Х		
6103-34	Fishing (personal)		Pickerel/Walleye		Х		
6103-35	Fishing (personal)		Pickerel/Walleye		Х		
6103-36	Fishing (personal)		Pickerel/Walleye		Х		
6103-37	Fishing (personal)		Pickerel/Walleye		Х		
6103-38	Fishing (personal)		Pickerel/Walleye		Х		
6103-39	Trapping						Х
6103-59	Fishing (personal)		Lake Whitefish			Х	
6103-60	Fishing (personal)		Pickerel/Walleye	X		Х	
6103-61	Fishing (personal)		Pickerel/Walleye	X		Х	
6103-62	Fishing (personal)		Pickerel/Walleye		Х		
6103-63	Fishing (personal)		Pickerel/Walleye	X			Х
6103-64	Fishing (personal)		Pickerel/Walleye	Х			Х
6103-65	Gathering	Vegetation	Blueberries, Pin Cherries		Х		
6103-66	Fishing (personal)		Pickerel/Walleye				X
6103-66	Hunting	Mammals	Moose			Х	
6103-67	Fishing (personal)		Pickerel/Walleye				Х
6103-67	Hunting	Mammals	Moose			Х	



PIN- GISID	Category	Туре	Subtype	Spring	Summer	Fall	Winter
6103-68	Fishing (personal)		Pickerel/Walleye			Х	
6103-68	Hunting	Birds	Grouse, Chickens			Х	Х
6103-69	Fishing (personal)		Lake Whitefish			Х	
6103-70	Fishing (personal)		Lake Whitefish				Х
6103-70	Fishing	Fish	Pickerel		Х		
6103-71	Fishing	Fish	Pickerel		Х		
6103-72	Fishing	Fish	Pickerel		Х		
6103-73	Hunting	Mammals	Moose			Х	
6103-74	Fishing (personal)		Pickerel/Walleye	Х	Х		
6103-74	Hunting	Mammals	Moose			Х	
6103-75	Fishing (personal)		Lake Trout		Х		
6103-76	Fishing (personal)		Pickerel/Walleye	Х	Х		
6103-77	Fishing (personal)		Pickerel/Walleye	Х	Х		
6103-78	Fishing (personal)		Pickerel/Walleye	Х	Х		
6103-79	Fishing (personal)		Pickerel/Walleye	Х	Х		
6103-80	Fishing (personal)		Pickerel/Walleye	Х	Х		
6103-81	Hunting (kill site)	Large Mammals	Moose			Х	
6103-82	Hunting (kill site)	Large Mammals	Moose			Х	
6103-83	Hunting (kill site)	Large Mammals	Moose			Х	
6103-84	Hunting (kill site)	Large Mammals	Moose				Х



PIN- GISID	Category	Туре	Subtype	Spring	Summer	Fall	Winter
6103-85	Hunting (kill site)	Large Mammals	Moose			Х	
6103-86	Hunting (kill site)	Large Mammals	Moose			Х	
6103-87	Hunting (kill site)	Large Mammals	Bear			Х	
6103-100	Gathering	Food	Blueberries		Х		
6201-18	Hunting	Mammals	Moose			Х	
7102-40	Hunting (kill site)	Large Mammals	Moose			Х	
7102-41	Hunting (kill site)	Large Mammals	Moose			Х	
7102-42	Hunting (kill site)	Large Mammals	Moose			Х	
7102-43	Fishing (personal)		Jackfish/Northern Pike	Х			
7102-44	Fishing (personal)		Pickerel/Walleye	Х			
7102-45	Fishing (personal)		Sucker (Longnose & White)	Х			
7102-46	Hunting		Moose				Х
7102-47	Fishing (personal)		Jackfish/Northern Pike, Pickerel/Walleye				Х
7102-48	Fishing (personal)		Jackfish/Northern Pike, Pickerel/Walleye				Х
7102-49	Fishing (personal)		Jackfish/Northern Pike, Pickerel/Walleye				Х
7601-4	Fishing (personal)		Pickerel/Walleye		Х		
7601-9	Fishing (personal)		Pickerel/Walleye		Х		
7601-11	Fishing (personal)		Pickerel/Walleye		Х		



PIN- GISID	Category	Туре	Subtype	Spring	Summer	Fall	Winter
7601-13	Fishing (personal)		Pickerel/Walleye		Х		
7601-17	Fishing (personal)		Lake Whitefish		Х		
7601-18	Fishing (personal)		Pickerel/Walleye		Х		
7601-19	Fishing (personal)		Jackfish/Northern Pike		Х		
7601-31	Fishing (personal)		Pickerel/Walleye			Х	
7601-33	Fishing (personal)		Pickerel/Walleye		Х		
7601-34	Fishing (personal)		Pickerel/Walleye		Х		
7601-51	Gathering	Food	Blueberries		Х		
7601-63	Fishing (personal)		Yellow Perch	Х			
7602-12	Fishing (personal)		Pickerel/Walleye		Х		
7602-18	Fishing (personal)		Pickerel/Walleye		Х		Х
7602-19	Fishing (personal)		Pickerel/Walleye		Х		Х
7602-21	Gathering	Food	Strawberries		Х		
7602-22	Gathering	Food	Blueberries			Х	
7602-23	Gathering	Food	Cranberries			Х	
7602-24	Gathering	Medicinal or Ceremonial Plants	Mint			Х	
7602-25	Gathering	Medicinal or Ceremonial Plants	Mint			Х	
7602-26	Gathering	Medicinal or Ceremonial Plants	Mint			Х	



PIN- GISID	Category	Туре	Subtype	Spring	Summer	Fall	Winter
7602-27	Fishing (personal)		Pickerel/Walleye		Х		
7602-29	Hunting Area	Large Mammals	Moose			Х	
7602-30	Hunting Area	Large Mammals	Moose			Х	
7602-31	Hunting Area	Birds	Duck	Х			
7602-32	Hunting Area	Birds	Goose	Х			
7602-33	Hunting Area	Birds	Duck	Х			
7602-34	Hunting Area	Birds	Goose	Х			
7602-35	Fishing (personal)		Pickerel/Walleye				Х
7602-36	Fishing (personal)		Pickerel/Walleye	Х			Х
7603-8	Hunting Area	Large Mammals	Barren Ground Caribou				Х
7603-10	Hunting (kill site)	Large Mammals	Barren Ground Caribou				Х
7603-11	Hunting (kill site)	Large Mammals	Barren Ground Caribou				Х
7603-21	Fishing (personal)		Pickerel/Walleye			Х	
7603-22	Fishing (personal)		Jackfish/Northern Pike			Х	
7603-23	Fishing (personal)		Pickerel/Walleye			Х	
7603-24	Fishing (personal)		Jackfish/Northern Pike			Х	
7603-26	Fishing (personal)		Pickerel/Walleye		Х		



PIN- GISID	Category	Туре	Subtype	Spring	Summer	Fall	Winter
7603-27	Fishing (personal)		Jackfish/Northern Pike		Х		
7603-28	Fishing (personal)		Pickerel/Walleye		Х		
7603-30	Fishing (personal)		Pickerel/Walleye		Х		
7603-31	Fishing (personal)					Х	
7603-32	Fishing (personal)		Pickerel/Walleye		Х	Х	
7603-33	Fishing (personal)		Jackfish/Northern Pike		Х	Х	
7603-34	Fishing (personal)		Pickerel/Walleye	Х	Х		
7604-4	Fishing (personal)		Pickerel/Walleye	Х			
7604-5	Fishing (personal)		Pickerel/Walleye	Х			
7605-2	Hunting Area	Large Mammals	Caribou (Woodland)			Х	
7605-3	Hunting Area	Large Mammals	Moose			Х	
7605-4	Fishing (personal)		Jackfish/Northern Pike	Х		Х	
7605-5	Fishing (personal)		Pickerel/Walleye	Х		Х	
7605-7	Fishing (personal)		Pickerel/Walleye		Х	Х	
7605-8	Fishing (personal)		Jackfish/Northern Pike		Х	Х	
7605-9	Fishing (personal)		Pickerel/Walleye		Х	Х	
7605-10	Fishing (personal)		Jackfish/Northern Pike		X	Х	



PIN- GISID	Category	Туре	Subtype	Spring	Summer	Fall	Winter
7605-12	Hunting Area	Large Mammals	Moose			Х	
7605-13	Fishing (personal)		Lake Trout				Х
7605-15	Fishing (personal)		Rainbow Trout		Х	Х	
7606-19	Hunting (kill site)	Large Mammals	Barren Ground Caribou				Х
7606-20	Hunting (kill site)	Large Mammals	Barren Ground Caribou				Х
7606-30	Hunting (kill site)	Large Mammals	Moose				Х
7606-31	Hunting (kill site)	Large Mammals	Moose				Х
7606-32	Hunting (kill site)	Large Mammals	Moose				Х
7606-33	Hunting (kill site)	Small Furbearers	Rabbit				Х
7606-34	Hunting (kill site)	Birds	Ptarmigan				Х
7606-35	Hunting Area	Birds	Ptarmigan				Х
7606-36	Hunting (kill site)	Birds	Ptarmigan				Х
7606-37	Hunting (kill site)	Birds	Ptarmigan				Х
7606-38	Hunting (kill site)	Birds	Ptarmigan				Х
7606-40	Fishing (personal)		Pickerel/Walleye				Х
7606-41	Fishing (personal)		Jackfish/Northern Pike				Х
7606-42	Fishing (personal)		Jackfish/Northern Pike				X



PIN- GISID	Category	Туре	Subtype	Spring	Summer	Fall	Winter
7606-43	Fishing (personal)		Lake Trout				Х
7606-44	Fishing (personal)		Jackfish/Northern Pike				Х
7607-3	Hunting (kill site)	Large Mammals	Moose			Х	
7607-4	Hunting (kill site)	Large Mammals	Moose			Х	
7607-5	Fishing (personal)		Pickerel/Walleye		Х		
7607-6	Fishing (personal)		Pickerel/Walleye		Х		
7607-7	Fishing (personal)		Lake Trout		Х		
7607-8	Fishing (personal)		Lake Trout		Х		
7607-9	Fishing (personal)		Jackfish/Northern Pike				Х
7607-11	Fishing (personal)		Burbot (Ling Cod)				Х
7607-12	Fishing (personal)		Lake Whitefish		Х		
7607-13	Fishing (personal)		Pickerel/Walleye		Х		
7607-14	Fishing (personal)		Pickerel/Walleye		Х		
7607-15	Hunting (kill site)	Large Mammals	Moose			Х	
7607-16	Fishing (personal)		Pickerel/Walleye				Х
7607-17	Hunting Area	Large Mammals	Moose			Х	
7607-18	Fishing (personal)		Pickerel/Walleye		Х		
7607-20	Gathering	Food	Blueberries		Х		



PIN- GISID	Category	Туре	Subtype	Spring	Summer	Fall	Winter
7607-21	Gathering	Food	Cranberries			Х	
7607-22	Gathering	Food	Birch water		Х		
7607-23	Gathering	Food	Birch water		Х		Х
7607-24	Hunting (kill site)	Large Mammals	Caribou (other)				Х
7607-25	Hunting (kill site)	Large Mammals	Caribou (other)				Х
7608-11	Hunting Area	Large Mammals	Moose			Х	
7608-12	Hunting Area	Large Mammals	Moose			Х	
7608-15	Hunting (kill site)	Birds	Goose			Х	
7608-16	Hunting (kill site)	Birds	Duck			Х	
7608-18	Gathering	Food	Blueberries		Х	Х	
7608-20	Gathering	Medicinal or Ceremonial Plants	Chaga			Х	
7608-22	Gathering	Drinking Water	NA	Х		Х	Х
7608-23	Gathering	Drinking Water	NA	Х		Х	Х
7608-28	Hunting (kill site)	Large Mammals	Moose			Х	
7608-36	Fishing (personal)		Pickerel/Walleye				Х
7608-37	Fishing (personal)		Jackfish/Northern Pike				Х
7608-38	Fishing (personal)		Pickerel/Walleye				Х
7608-39	Fishing (personal)		Jackfish/Northern Pike				Х
7608-40	Fishing (personal)		Pickerel/Walleye	х	Х	Х	Х



PIN- GISID	Category	Туре	Subtype	Spring	Summer	Fall	Winter
7608-41	Fishing (personal)		Lake Trout	Х	Х	Х	Х
7608-42	Fishing (personal)		Lake Trout	Х	Х	Х	Х
7608-43	Fishing (personal)		Pickerel/Walleye		Х		
7608-44	Fishing (personal)		Pickerel/Walleye		Х		
7608-45	Fishing (personal)		Lake Trout		Х		Х
7608-46	Fishing (personal)		Pickerel/Walleye	Х			
7608-47	Fishing (personal)		Pickerel/Walleye	Х	Х		
7608-48	Fishing (personal)		Pickerel/Walleye	Х	Х		
7608-51	Gathering	Food	Cranberries			Х	
7609-6	Fishing (personal)		Pickerel/Walleye	Х			
7609-10	Hunting (kill site)	Large Mammals	Moose			Х	
7609-11	Hunting Area	Large Mammals	Moose			Х	
7609-12	Fishing (personal)		Pickerel/Walleye	Х	Х		
7609-14	Fishing (personal)		Pickerel/Walleye			Х	
7609-15	Fishing (personal)		Pickerel/Walleye		Х		
7609-17	Hunting Area	Large Mammals	Moose			Х	
7609-18	Fishing (personal)		Pickerel/Walleye			Х	
7609-19	Fishing (personal)		Pickerel/Walleye	х			



PIN- GISID	Category	Туре	Subtype	Spring	Summer	Fall	Winter
7609-22	Gathering	Food	Blueberries		Х		
7609-23	Hunting Area	Birds	Duck			Х	
7609-24	Hunting Area	Large Mammals	Moose			Х	
7609-26	Hunting Area	Large Mammals	Moose			Х	
7609-28	Fishing (personal)		Pickerel/Walleye	Х			
7609-29	Fishing (personal)		Pickerel/Walleye		Х		
7610-3	Fishing (personal)		Pickerel/Walleye	Х	Х	Х	
7610-4	Fishing (personal)		Pickerel/Walleye		Х		
7610-6	Gathering	Food	Blueberries		Х		
7610-7	Gathering	Food	Cranberries		Х		
7610-8	Gathering	Food	Raspberries		Х		
7610-9	Gathering	Food	Blueberries		Х		
7610-10	Gathering	Food	Cranberries		Х		
7610-11	Gathering	Food	Blueberries		Х		
7610-12	Gathering	Food	Raspberries		Х		
7610-13	Gathering	Food	Raspberries		Х		
7610-14	Fishing (personal)		Jackfish/Northern Pike		Х		
7610-15	Fishing (personal)		Pickerel/Walleye		Х		
7610-16	Fishing (personal)		Pickerel/Walleye		Х		
7610-18	Fishing (personal)		Jackfish/Northern Pike			X	
7610-19	Fishing (personal)		Pickerel/Walleye		Х		



PIN- GISID	Category	Туре	Subtype	Spring	Summer	Fall	Winter
7610-20	Fishing (personal)		Pickerel/Walleye		Х		
7610-21	Fishing (personal)		Pickerel/Walleye		Х		
7610-23	Gathering	Food	Blueberries		Х		
7610-24	Gathering	Food	Cranberries		Х		
7610-25	Gathering	Food	Blueberries		Х		
7610-26	Gathering	Food	Blueberries		Х		
7610-27	Gathering	Food	Cranberries		Х		
7610-28	Gathering	Food	NA		Х		
7610-29	Gathering	Food	Blueberries		Х		
7610-32	Gathering	Food	Blueberries		Х		
7610-34	Gathering	Food	Blueberries		Х		
9009001	Hunting	Mammals	Moose				
9018-15	Hunting		Goose	Х			
9021007	Hunting	Mammals	Moose			Х	
9022002	Fishing (personal)	Fish	Whitefish, Jackfish, Pickerel		Х	Х	
9022003	Gathering	Berries, Medicines	Labrador Tea, Wild Mint	Х		Х	
9022007	Hunting	Mammals, Birds	Moose, Barren Land Caribou, Woodland Caribou, Black Bear, Rabbit, Geese, Duck, Beaver, Upland Birds	X	Х	Х	X





Figure 16 Métis Access, Occupancy, Cultural Sites, Commercial Harvesting, and Observed Changes in the Study Area (Map 1 of 2)





Figure 17 Métis Access, Occupancy, Cultural Sites, Commercial Harvesting, and Observed Changes in the Study Area (Map 2 of 2)

Table 4 Métis Access, Occupancy, Cultural Sites, Commercial Harvesting, and Observed Changes in the Study Area - Corresponding Attribute Tables to Map 1 - 2

PIN- GISID	Category	Туре	Spring	Summer	Fall	Winter
1303-116	Occupancy	Active Cabin or Bush Camp	Х	Х	Х	
1303-117	Access Routes	Boat Launch/Landing	Х	Х	Х	
1303-139	Occupancy	Temporary Structure (Tent, Lean-To, Etc.)	Х	Х	Х	
1303-140	Occupancy	Temporary Structure (Tent, Lean-To, Etc.)	Х	Х	Х	
5103-45	Occupancy	Temporary Structure (Tent, Lean-To, Etc.)			Х	
6102-8-G	Cultural Sites	Cultural Site				
6103-26	Access Routes	Land and Water Route				Х
6103-28	Occupancy	Active Cabin or Bush Camp		Х		
6103-29	Access Routes	Land Route/Trail	Х			Х
6103-30	Occupancy	Active Cabin or Bush Camp	Х			Х
6103-31	Access Routes	Land Route/Trail				Х
6103-32	Occupancy	Active Cabin or Bush Camp				Х
6103-41	Occupancy	Active Cabin or Bush Camp				
6103-42	Cultural Site	Burial Site				
6103-65	Access Route or Trails	Water & Snowmobile Route	Х	Х	Х	Х
6103-75	Access Routes	Land Route or Trail	Х		Х	Х
6201-16	Access Routes	Boat Landing			Х	
6201-17	Access Routes	Water Route or Trail			Х	
6201-19	Access Routes	Overnight Site			Х	
7102-29	Changes to Environment	The snow around Lynn Lake turned yellow from tailings blowing in the wind. Concerned about animals eating this.				
7601-5	Access Route or Trails	Boat Launch/Landing		Х		
7601-6	Access Route or Trails	Water Route	X			
7601-8	Access Route or Trails	Boat Launch/Landing		Х		



PIN- GISID	Category	Туре	Spring	Summer	Fall	Winter
7601-10	Access Route or Trails	Water Route		Х		
7601-12	Access Route or Trails	Boat Launch/Landing		Х		
7601-14	Access Route or Trails	Water Route		Х		
7601-16	Access Route or Trails	Boat Launch/Landing		Х		
7602-17	Access Route or Trails	Boat Launch/Landing		Х		
7602-37	Cultural Sites	Spiritual/Ceremonial/Sacred Site			Х	
7602-38	Cultural Sites	Recreation Site (Swimming)		Х		
7602-39	Occupancy	Cabin	Х	Х	Х	Х
7602-40	Occupancy	Temporary Structure (Tent, Lean-To, Etc.)		Х		
7602-41	Occupancy	Temporary Structure (Tent, Lean-To, Etc.)		Х		
7603-9	Occupancy	Temporary Structure (Tent, Lean-To, Etc.)				Х
7603-18	Occupancy	Temporary Structure (Tent, Lean-To, Etc.)			Х	
7603-19	Access Route or Trails	Boat Launch/Landing			х	
7603-25	Access Route or Trails	Boat Launch/Landing		Х		
7603-29	Access Route or Trails	Water Route		Х		
7605-6	Access Route or Trails	Boat Launch/Landing	Х	Х	Х	
7605-11	Access Route or Trails	Water Route		Х	х	
7605-14	Access Route or Trails	Land Trail (Snowmobile)				Х
7605-16	Occupancy	Cabin		Х	Х	
7606-7	Occupancy	Trailer				Х
7606-8	Occupancy	Temporary Structure (Tent, Lean-To, Etc.)				Х
7606-47	Occupancy	Temporary Structure (Tent, Lean-To, Etc.)				Х



PIN- GISID	Category	Туре	Spring	Summer	Fall	Winter
7607-10	Occupancy	Cabin	Х	Х	Х	Х
7607-19	Access Route or Trails	Boat Launch/Landing		Х		
7608-19	Occupancy	Cabin	Х	Х	Х	Х
7608-25	Access Route or Trails	Land Trail	Х		Х	Х
7608-26	Commercial Harvesting	Trapping & Snaring - Beaver, Fox, Lynx, Marten, Mink, Muskrat, Otter, Wolf, Wolverine				Х
7608-27	Occupancy	Cabin			Х	Х
7608-29	Access Route or Trails	Portage Route		Х		
7608-30	Access Route or Trails	Water Route		Х		
7608-31	Access Route or Trails	Portage Route		Х		
7608-32	Access Route or Trails	Water Route		Х		
7608-33	Access Route or Trails	Portage Route		Х		
7608-34	Access Route or Trails	Water Route		Х		
7608-35	Access Route or Trails	Water Route		Х		
7608-49	Access Route or Trails	Boat Launch/Landing	Х	Х		
7608-50	Commercial Harvesting	Guiding - Fishing		Х		
7608-52	Occupancy	Temporary Structure (Tent, Lean-To, Etc.)	Х		Х	
7609-7	Occupancy	Temporary Structure (Tent, Lean-To, Etc.)			Х	
7609-8	Access Route or Trails	Portage Route			Х	
7609-9	Access Route or Trails	Portage Route			Х	



PIN- GISID	Category	Туре	Spring	Summer	Fall	Winter
7609-13	Access Route or Trails	Boat Launch/Landing			Х	
7609-16	Occupancy	Trailer		Х		
7609-20	Cultural Sites	Recreation Site (Swimming)		Х		
7609-21	Changes to Environment	Noticed orange water in the lakes of this area.		Х		
7609-25	Occupancy	Temporary Structure (Tent, Lean-To, Etc.)			Х	
7609-27	Access Route or Trails	Boat Launch/Landing	Х	Х		
7610-5	Occupancy	Cabin		Х		
7610-17	Occupancy	Cabin			Х	
7610-22	Cultural Sites	Recreation Site (Swimming)		Х		
7610-30	Cultural Sites	Recreation Site (Swimming)		Х		
7610-33	Cultural Sites	Recreation Site (Swimming)		Х		
7610-35	Cultural Sites	Recreation Site (Swimming)		Х		Х
9018-16	Occupancy	Temporary Structure (Tent, Lean-To, Etc.)	Х			
9018-17	Access Routes	Boat Landing	Х			
9018-18	Access Routes	Water Route	Х			
9022004	Occupancy	Bush Camp	Х	Х	Х	





## Figure 18 Métis Ecological Knowledge Identified Within the Study Area (Map 1 of 2)





Figure 19 Métis Ecological Knowledge Identified Within the Study Area (Map 2 of 2)



Table 5 Métis Ecological Knowledge Identified Within the Study Area - Corresponding Attribute Tables for Map 1 - 2

PIN- GISID	Туре	Subtype	Spring	Summer	Fall	Winter
5103-32	Mammal Migration Route	Woodland Caribou				Х
6103-51	Fish Spawning Areas	Pickerel/Walleye				
6103-52	Fish Spawning Areas	Jackfish/Northern Pike	Х			
6103-53	Fish Spawning Areas	Yellow Perch	Х			
6103-54	Fish Spawning Areas	Pickerel/Walleye	Х			
6103-55	Fish Spawning Areas	Jackfish/Northern Pike	Х			
6103-56	Fish Spawning Areas	Yellow Perch	Х			
6103-57	Fish Spawning Areas	Pickerel/Walleye	Х			
6103-58	Fish Spawning Areas	Jackfish/Northern Pike	Х			
6103-69	Mammal Habitat	Moose, Bear			Х	
6103-71	Species at Risk	Barren Ground Caribou				Х
6103-72	Mammal Habitat	Moose	Х	Х	Х	Х
6103-73	Mammal Habitat	Bear	Х	Х	Х	Х
6103-88	Plant Habitat	Raspberries		Х		
6103-89	Plant Habitat	Cedar, Pin Cherries		Х		
6103-90	Plant Habitat	Mushrooms (Red Tops)		Х		
6103-91	Plant Habitat	Raspberries		Х		
6103-92	Plant Habitat	Pin Cherries		Х		
6103-93	Plant Habitat	Mushrooms (Red Tops)		Х		



PIN- GISID	Туре	Subtype	Spring	Summer	Fall	Winter
6103-94	Plant Habitat	Raspberries		Х		
6103-95	Plant Habitat	Pin Cherries		Х		
6103-96	Plant Habitat	Mushrooms (Red Tops)		Х		
6103-97	Plant Habitat	Cranberries		Х	Х	
6103-98	Plant Habitat	Cranberries		Х	Х	
6103-99	Plant Habitat	Cranberries		Х	Х	
6103-101	Plant Habitat	Blueberries				
6103-102	Plant Habitat	Blueberries				
6103-103	Plant Habitat	Blueberries				
7102-6	Fish Spawning Areas	Jackfish/Northern Pike	Х	Х		
7102-7	Fish Spawning Areas	Lake Whitefish	X X			
7102-8	Fish Spawning Areas	Pickerel/Walleye	X X			
7102-9	Fish Spawning Areas	Sucker (Longnose & White)	Х	Х		
7102-10	Fish Spawning Areas	Pickerel/Walleye	Х	Х		
7102-11	Fish Spawning Areas	Jackfish/Northern Pike	Х			
7102-15	Fish Spawning Areas	Jackfish/Northern Pike	Х	Х		
7102-16	Fish Spawning Areas	Pickerel/Walleye	Х	Х		
7102-17	Fish Spawning Areas	Lake Whitefish			Х	
7102-28	Mammal Habitat	Moose	Х	Х	Х	Х
7102-30	Mammal Habitat	Wolf, Lynx, Fox (Red, Silver and White), Marten, Otter, Fisher, Rabbit, Weasel, Squirrel, Beaver, Muskrat, Mink	X X		Х	Х
7102-31	Bird Habitat	Grouse, Ptarmigan	Х	Х	Х	Х



PIN- GISID	Туре	Subtype	Spring	Summer	Fall	Winter
7102-32	Species at Risk	Barren Ground Caribou	Х		Х	Х
7601-7	Fish Spawning Areas	Pickerel/Walleye				
7601-15	Fish Spawning Areas	Pickerel/Walleye				
7601-20	Species at Risk	Barren Ground Caribou				Х
7601-30	Mammal Habitat	Moose			Х	
7601-32	Other Important Habitat	Pike	Х	Х	Х	
7601-38	Other Important Habitat	Land-locked Lakes; Bird Habitat				
7601-44	Mammal Habitat	Timber Wolf				Х
7601-46	Mammal Habitat	Moose	Х	Х		
7601-48	Species at Risk	Barren Ground Caribou				Х
7602-4	Fish Spawning Areas	Pickerel/Walleye	Х			
7602-5	Fish Spawning Areas	Pickerel/Walleye	Х			
7602-6	Fish Spawning Areas	Jackfish/Northern Pike	Х			
7602-7	Fish Spawning Areas	Pickerel/Walleye	Х			
7602-8	Fish Spawning Areas	Jackfish/Northern Pike	Х			
7602-9	Mammal Habitat	Moose	Х	Х	Х	Х
7602-10	Mammal Habitat	Moose	X	Х	Х	Х
7602-11	Mammal Habitat	Moose			Х	
7602-13	Bird Habitat	Duck Migration Stopover	Х		Х	

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PIN- GISID	Туре	Subtype	Spring	Summer	Fall	Winter
7602-14	Bird Habitat	Goose Migration Stopover	Х		Х	
7602-15	Bird Habitat	Duck	Х			
7602-16	Bird Habitat	Goose				
7602-20	Plant Habitat	Strawberries				
7602-28	Species at Risk	Wolverine				Х
7603-20	Species at Risk	Barren Ground Caribou			Х	
7603-35	Fish Spawning Areas	Pickerel/Walleye	Х			
7606-4	Mammal Habitat	Moose				Х
7606-5	Spring Water	Spring Water				Х
7606-6	Spring Water	Spring Water				Х
7606-39	Bird Habitat	Ptarmigan				Х
7607-26	Fish Spawning Areas	Pickerel/Walleye X				
7607-27	Fish Spawning Areas	Pickerel/Walleye	Х			
7607-28	Fish Spawning Areas	Pickerel/Walleye	Х			
7608-4	Fish Spawning Areas	Pickerel/Walleye	Х			
7608-5	Fish Spawning Areas	Pickerel/Walleye	Х			
7608-6	Fish Spawning Areas	Lake Whitefish			Х	
7608-7	Fish Spawning Areas	Pickerel/Walleye	Х			
7608-8	Fish Spawning Areas	Lake Whitefish			Х	
7608-9	Fish Spawning Areas	Pickerel/Walleye	Х			
7608-10	Mammal Habitat	Moose Breeding Ground			Х	

PIN- GISID	Туре	Subtype	Spring	Summer	Fall	Winter
7608-13	Mammal Habitat	Moose			Х	
7608-14	Species at Risk	Boreal Woodland Caribou			Х	
7608-17	Plant Habitat	Blueberries		Х	Х	
7608-21	Spring Water	Spring Water	Х		Х	Х
7608-24	Spring Water	Spring Water	Х		Х	Х
7608-53	Species at Risk	Barren Ground Caribou				Х
7610-31	Plant Habitat	Wild Rice				

## Appendix B: Results of the Food Frequency Questionnaire

Table 6 Results of the Food Frequency Questionnaire

Food Harvested	Sum of Frequency (Spring)	Sum of Frequency (Summer)	Sum of Frequency (Fall)	Sum of Frequency (Winter)	Total Frequency (Year- round)
Apples		90	12		102
Beaver	1				1
Birch Water		48			48
Black Bear Fat		12			12
Black Bear Meat	12	0	24	12	48
Blueberries	18	56	48	18	140
Brook Trout	2	3	2	4	11
Brown Trout	2				2
Burbot	3			11	14
Caribou Kidney				1	1
Caribou Liver				1	1
Caribou Meat	81	81	81	93	336
Caribou Stomach				2	2



Food Harvested	Sum of Frequency (Spring)	Sum of Frequency (Summer)	Sum of Frequency (Fall)	Sum of Frequency (Winter)	Total Frequency (Year- round)
Caribou Tongue				4	4
Cedar			12		12
Chaga	6	7	6	7	26
Choke Cherries		1	3		4
Cisco			1		1
Cranberries	15	27	20	15	77
Crayfish		1			1
Deer Fat		3	36		39
Deer Heart			2	2	4
Deer Meat	48	51	51	48	198
Duck (Blue Wing)	1		1		2
Duck (Mallard)	34		14		48
Elk	6	6	6	6	24
Fiddleheads	4	2	3	3	12
Goose (Blue)	3	3	3	3	12
Goose (Canada)	35		4		39
Goose (General)	24		3	3	30
Goose (Rose)	1	1	1	1	4
Goose (Snow)	13	12	13	12	50
Grouse (General)			26		26
Grouse (Rough)			8		8
Grouse (Sharpe)			1		1
Grouse (Spruce)			18	18	36
Labrador Tea	3	4	3	3	13
Lake Trout	7	7	11	9	34
Lake Whitefish	4	11	4	9	28
Maple/Birch Syrup		12			12
Moose Heart	1		3		4
Moose Liver			1	1	2



Food Harvested	Sum of Frequency (Spring)	Sum of Frequency (Summer)	Sum of Frequency (Fall)	Sum of Frequency (Winter)	Total Frequency (Year- round)
Moose Meat	187	163	211	199	760
Moose Tongue			1		1
Muskrat	2		1		3
Muskrat Root		1	1	1	3
Northern Pike	18	12	13	14	57
Pickerel/Walleye	138	136	148	136	558
Pin Cherries	12	13	12	12	49
Ptarmigan	2			25	27
Rabbit				5	5
Rainbow Trout	16	30	14	16	76
Raspberries	12	105	24	12	153
Sage	12	12	12	12	48
Saskatoon Berries		4	3		7
Sauger	18	18	18	18	72
Spring Water	384	384	389		1157
Squirrel			1		1
Strawberries		180	2		182
Suckers	4		1		5
Wild Mint		3	3		6
Wild Rice	15	15	15	15	60
Willow	24	24	12		60
Yellow Perch	24	24	24	24	96
Frequency of Country Food Consumption per Season:	1192	1562	1326	775	



## References

Tobias, T. (2009). *Living Proof: The Essential Data-Collection Guide for Indigenous Use-and-Occupancy Map Surveys.* Ecotrust Canada

