

SUBJECT AREA:Routing, Land and Resource UseREFERENCE:MCWS MMTP IR No 1QUESTION:

Please provide details on routing through proposed Protected Areas and an explanation of the following discrepancy: Section 2.11.1 of the EIS states that proposed and existing protected areas will be avoided, however Section 2.6.3 states that the transmission line route travels through parcels of a proposed protected area.

RESPONSE:

1 As described in Chapter 5 of the EIS, the route development process used a conservative approach in addressing protected areas, as both established protected areas and proposed 2 3 protected areas were treated as an Area of Least Preference. Route alternatives were not 4 developed through these areas because they are either officially protected through legal means 5 prohibiting hydroelectric development (i.e. ecological reserves, some wildlife management 6 areas) or are undergoing formal review for designation (proposed protected areas). 7 Candidate protected areas include Areas of Special Interest (ASIs) – study areas selected for 8 discussion purposes that may be considered as protected areas in the future. Although 9 information on candidate protected areas is not publicly available, the process of selecting 10 proposed protected areas is part of Manitoba's Protected Area Initiative (http://www.gov.mb.ca/conservation/pai/establishing/index.html). The selection process 11 12 involves identifying and prioritizing ASIs, that are then refined into protected areas proposals 13 through a process of technical review and consultation. A candidate protected area may therefore not become a proposed protected area, and a proposed protected area may not 14 15 become formally established.

▲ Manitoba Hydro

- 16 For clarification, better wording in Section 2.6.3 would have been "It runs through candidate
- 17 protected areas at Richer South Station." Whereas section 2.11.1 should have referred to the
- 18 areas avoided as "designated or proposed protected areas."



SUBJECT AREA: First Nation and Metis Engagement, First Nation and Metis Engagement REFERENCE: MCWS MMTP IR No 1 QUESTION: Image: Comparison of the second secon

Section 4.7 states that as a result of funded ATK studies, the MMF was provided an opportunity to be actively involved in the project during pre-planning. Please explain given that the MMF has not yet entered into an agreement with Manitoba Hydro for an ATK study for this project.

RESPONSE:

Section 4.7 of the MMTP EIS describes efforts made to inform organizations about the 1 engagement process, including the use of tools such as ATK proposal templates and draft 2 3 protocols. It also states that "Manitoba Hydro funded ATK studies by the ATKS Management 4 Team, Dakota Plains Wahpeton First Nation, Dakota Tipi First Nation, Peguis First Nation, Roseau River Anishinabe First Nation and Sagkeeng First Nation. As a result, First Nations, the 5 MMF and Aboriginal organizations were provided opportunities to be actively involved in the 6 7 Project during pre-planning and will continue to be involved during the construction and operation phases." 8

9 Manitoba Hydro provided timely and numerous opportunities for the MMF to be actively
10 involved in the Project during pre-planning activities through the following interactions:

- Manitoba Hydro began its efforts to engage the MMF in the Pre-Engagement Round in
 August 2013 by sending a letter informing the MMF of the Project and requesting a
 meeting to share information, answer any questions and identify the best way to
 engage with the MMF for the Project.
- On August 19, the MMF sent a letter in response indicating that the MMF appreciates
 Manitoba Hydro's effort in seeking to engage the MMF in "becoming informed of the
 Project and how it may affect and/or benefit Metis rights-holders". The letter indicated

▲ Manitoba Hydro

| 18 | | that the Resolution 8 process would need to be followed. The letter also indicated that |
|----|---|---|
| 19 | | the MMF would be pleased to entertain discussions about the Project and to contact |
| 20 | | the MMF to arrange a meeting. |
| 21 | • | Manitoba Hydro responded by letter on August 29, 2013 indicating Manitoba Hydro |
| 22 | | representatives would appreciate an opportunity to discuss how the MMF would like to |
| 23 | | be engaged in the upcoming transmission projects. The letter recommended discussing |
| 24 | | further either at a meeting scheduled for September 12 or at another meeting to be |
| 25 | | scheduled. |
| 26 | • | MMTP was not discussed at the September 12 meeting. However, on September 25, |
| 27 | | 2013, the MMF sent an email indicating that they would like to hold a meeting specific |
| 28 | | to the Pointe Du Bois Transmission Project and St. Vital Transmission Complex on |
| 29 | | October 2, 2013 and that after that meeting they would be able to further schedule a |
| 30 | | meeting to discuss MMTP. |
| 31 | • | On September 26, Manitoba Hydro responded confirming that they were available to |
| 32 | | meet on October 2. Manitoba Hydro and the MMF met to discuss other projects on |
| 33 | | October 2. |
| 34 | • | On October 7, 2013, Manitoba Hydro representatives sent the October 2 meeting notes |
| 35 | | to the MMF for review and asked when the MMF would be available for a follow-up. |
| 36 | • | On October 10, 2013, the MMF sent an email indicating that November 6, 2013 was the |
| 37 | | first available date that the MMF would be available to discuss MMTP. |
| 38 | • | On October 11, 2013, Manitoba Hydro responded confirming that they can wait to |
| 39 | | determine when to meet next until after the MMF receives a more finalized CEC agenda. |
| 40 | • | On October 31, 2013, Manitoba Hydro sent a letter to the MMF indicating that they are |
| 41 | | starting the first round of the engagement process including presenting alternative |
| 42 | | routes and border crossings and looking forward to discussing the Project with the |
| 43 | | MMF. |
| | | |

▲ Manitoba Hydro

The MMF was provided the same opportunities for engagement as were provided to other
Aboriginal communities and organizations throughout the First Nation and Metis Engagement
Process for MMTP. This process resulted in successful sharing of knowledge from many
communities, including issues and concerns about the project, and the submission of traditional
knowledge reports.

The above highlights the numerous opportunities that Manitoba Hydro provided for the MMF to be engaged during the pre-engagement round even before the start of Round 1 engagement. Communications between Manitoba Hydro and the MMF continued throughout all three rounds of transmission line routing. In January of 2016 an agreement was reached through which Manitoba Hydro provided funding to the MMF to develop a TLUKS (Traditional Land Use Knowledge Study). Results of this report will inform the Project Environmental Protection and monitoring activities, as well as the identification of environmentally sensitive sites.

Manitoba Hydro also welcomed information provided by people who self-identified as Metis 56 57 during the public engagement process. Information received through this process was treated similarly to any other participant in the process; it was recorded, considered, and played a part 58 59 in transmission line routing and the environmental assessment. Manitoba Hydro understands that receiving information from these individuals is not the same as receiving information from 60 the MMF. Individual Metis responses may not represent the perspectives held by the MMF as a 61 62 whole; however, this information did provide some individual Metis an opportunity to share 63 their point of view.

In the absence of MMF engagement during early project planning phases, Manitoba Hydro took
steps to better understand Metis use of the land. These steps included consideration of issues
shared in past project hearings, reports available in the public domain, historic maps,
compilations of regional history, and through development of a report prepared by
North/South Consultants entitled "Manitoba Métis: A review of available Information on the
Use of Lands and Resources for Traditional purposes in the MMTP Study area with Gap
Analyses."



SUBJECT AREA: Traditional Land and Resource Use, First Nation and Metis Engagement REFERENCE: MCWS MMTP IR No 1 QUESTION:

Section 11.4.3 of the EIS states that Metis identified hunting and trapping among the current use of land and resources for both economic and cultural purposes, and Section 11.4.4 states that Metis continue to use long-established trails and travelways. Please clarify these statements given that the MMF has not provided specific information on hunting, trapping, trails and travelways to Manitoba Hydro regarding this project to date.

RESPONSE:

In the absence of MMF engagement during early project planning phases, Manitoba Hydro took steps to better understand Metis use of the land, which included seeking information on hunting, trapping and trails. These steps included consideration of issues shared in past project hearings, reports available in the public domain, historical maps, compilations of regional history, and through development of a report prepared by North/South Consultants entitled *"Manitoba Métis: A review of available Information on the Use of Lands and Resources for Traditional purposes in the MMTP Study area with Gap Analyses."*



SUBJECT AREA: First Nation and Metis Engagement, Traditional Land and Resource Use REFERENCE: MCWS MMTP IR No 1 QUESTION: Image: Comparison of Compariso

The literature review, 'Manitoba Metis: A Review of Available Information on the Use of Lands and Resources for Traditional Purposes in the MMTP Study Area with Gap Analysis' is missing from the appendix in Chapter 11. Please provide this document.

RESPONSE:

- 1 Please see attached document titled, "Manitoba-Minnesota Transmission Project, Manitoba
- 2 Metis: A Review of Available Information on the Use of Lands and Resources for Traditional
- 3 Purposes in the MMTP Study Area with GAP Analysis".

MANITOBA-MINNESOTA TRANSMISSION PROJECT

MANITOBA MÉTIS: A REVIEW OF AVAILABLE INFORMATION ON THE USE OF LANDS AND RESOURCES FOR TRADITIONAL PURPOSES IN THE MMTP STUDY AREA WITH GAP ANALYSES

Prepared by

North/South Consultants Inc. Winnipeg, Manitoba

1 0,

March 2014

TABLE OF CONTENTS

Page

| 1.0 | Introdu | uction | 1 |
|------|----------|------------------------------------|----|
| | 1.1 | Purpose | 1 |
| | 1.2 | Scope | 1 |
| 2.0 | Domes | stic Resource Use in General | 3 |
| | 2.1 | Metis Settlement in the Study Area | 5 |
| 3.0 | Domes | stic Fishing | 6 |
| 4.0 | Domes | stic Hunting | 6 |
| 5.0 | Domes | stic Trapping | 7 |
| 6.0 | Domes | stic Gathering | 7 |
| 7.0 | | ary of Known Information | |
| 8.0 | Gap A | nalysis | 9 |
| 9.0 | Referen | nces | 11 |
| 10.0 | Literati | ure Consulted | 14 |
| 11.0 | Figures | 5 | 16 |
| | | | |

LIST OF TABLES

LIST OF MAPS

Page

Map 1.1: The Manitoba-Minnesota Transmission Project Study Area......2

LIST OF FIGURES

Page

Page

| Figure 1. | Deer Harvesting Areas Identified by TLUKS Interviewees (1990-2010). | |
|-----------|---|----|
| | Source: Larcombe 2012, Figure 7, p. 18. | 17 |
| Figure 2. | Large animal (moose) harvesting areas (1940 – 2011). Source: MMF 2011a, | |
| | p.118 | 18 |
| Figure 3. | Small Animal Harvesting Areas Identified by TLUKS Interviewees (1990- | |
| | 2010). Source: Larcombe 2012, Figure 9, p. 21 | 19 |
| Figure 4. | Gathering Areas Identified by TLUKS Interviewees (1990-2010) - South. | |
| | Source: Larcombe 2012, Figure 11, p. 24. | 20 |
| | Source. Larcombe 2012, Figure 11, p. 24 | 20 |

LIST OF APPENDICES

1.0 **INTRODUCTION**

1.1 PURPOSE

On March 7, 2014, the Licensing & Environmental Assessment Department, Transmission Planning and Design Division of Manitoba Hydro, requested a report on historical and contemporary Métis traditional use of resources within the Manitoba-Minnesota Transmission Project Study Area (the "Study Area") (Map 1-1). This report responds to this request and makes use of publically available literature. A gap analysis is also provided to document the expected scope and effort required to advance existing knowledge of Métis traditional use of resources in the Study Area.

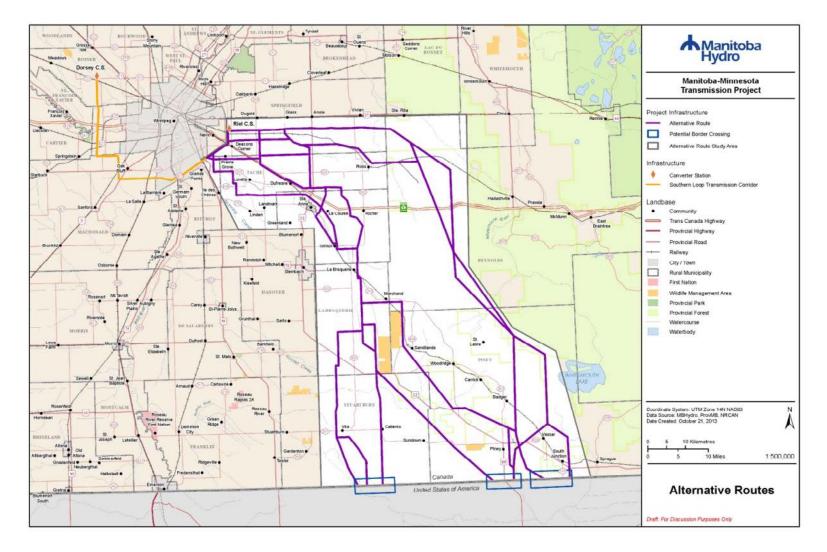
1.2 SCOPE

Resource use is comprised of the harvest and use of resources derived from the natural environment. Domestic resource use is conducted by Aboriginal peoples, including the Métis, for subsistence. It includes fishing, hunting, and trapping for food, as well as the gathering of products from the natural environment such as berries, medicines, ceremonial or craft objects, and firewood. The products from domestic resource use are not sold for cash income though they replace cash that would otherwise be spent on subsistence.

The following report is organized by specific topic areas including domestic resource use in general, domestic fishing, domestic hunting, domestic trapping, and domestic gathering. Information is presented chronologically in a narrative form. Following these sections, a summary of existing knowledge is provided (Section 7). A gap analysis (Section 8) also is provided to identify information needs and possible approaches to expand knowledge and understanding of Métis traditional use within the Study Area.

This document makes use of available literature to document domestic land and resource use. Literature cited (*i.e.*, referenced in this document) is listed in Section 9.0 and literature consulted (*i.e.*, reviewed though not referenced) is listed in Section 10.0.

Commercial resource use such as commercial trapping and commercial fishing are not within the scope of this report. It is acknowledged that commercial pursuits do, at times, concurrently produce resources for domestic consumption. For example, commercial fishing may produce by-catch that is brought home for household consumption. Similarly, a trapper may produce beaver and muskrat fur for commercial sale and consume the meat.



Map 1.1: The Manitoba-Minnesota Transmission Project Study Area.

The absence of commercial fishing waterbodies in the Study Area would suggest that no domestic fish resources were or are procured through commercial fishing. However, the potential to understand food production associated with trapping is less clear for the following reasons:

- The Study Area overlaps portions of Open Trapping Zones 1, 3, and 4 where trappers are required to obtain a license (Manitoba Conservation and Water Stewardship 2013a). However, the actual harvest locations within each of the Trapping Zones may not be precisely recorded to provide an understanding of the total harvest in the Study Area;
- Trapping licenses may not distinguish Métis trappers from other Aboriginal or non-Aboriginal trappers; and
- The decision to consume furbearer meat is an individual choice that would not be reflected in trapping production records.

It should be noted that, as part of this report, primary interviews of Provincial resource managers and consultation of commercial trapping records has not occurred. These potential sources of information are discussed in Section 8.0.

2.0 DOMESTIC RESOURCE USE IN GENERAL

The Manitoba Métis Federation (MMF) asserts that the Métis emerged – as a distinct Aboriginal people – in west central North America prior to Canada's westward expansion into the 'Old Northwest' (MMF 2012). Evidence presented by an expert¹ representing Mr. Goodon in the R. vs. *Goodon*² trial, indicated this mixed ancestry group started to be described in approximately 1816 as a group distinct from the Europeans and from the Aboriginal peoples (para 25). Accounts from other literature document the prairie Métis of mixed French and Aboriginal ancestry and English/Scottish-Aboriginal Métis people emerging as early as 1775 (Manitoba Education and Training 1993) or by the early 1800s (de Tremaudan 1982; Ens 1996).

Historically, Métis economic life depended on migration and mobility, and movement was a central feature of Métis culture (R. *vs. Gooden*; para 45³) as part of the fur trade (R. *vs. Gooden*; para 46⁴) and the buffalo hunt (R. *vs. Gooden*; para 69e⁴, 71⁵). The Métis were employed by both the Hudson's Bay Company and the Northwest Company and, by the early nineteenth century, the Métis became a

¹ Dr. Gwyneth Jones.

² Mr. Goodon was charged with unlawful possession of wildlife under s.19 of the Manitoba *Wildlife Act* after shooting a duck near Turtle Mountain, Manitoba in October 2004. Charges were dismissed in January, 2009. ³ Presented by Dr. A.J. Ray on behalf of Mr. Goodon, an expert in the economic history of Aboriginal and Metis people.

⁴ No source provided for this evidence.

⁵ Based on all expert testimony presented on behalf of Mr. Goodon.

MANITOBA-MINNESOTA TRANSMISSION PROJECT

major component of the work force of both companies as clerks, interpreters, canoemen, and packers (R. vs. Gooden; para 29⁶; Sealey and Lussier 1975; Tough 1998).

Following the merger of the two companies in 1821, the Métis were noted to be integral to the northern Manitoba fur trade transportation infrastructure. The Métis transported furs to Hudson Bay and provisioned outposts with supplies (Prefontaine et al. n.d.). The amalgamation of the companies, however, resulted in closure of redundant posts, stimulating migration and concentrated settlement of many Métis to the Red River Colony (now Winnipeg and environs) (Sealey 1975; Flanagan 1991) and around the present town of Pembina, North Dakota (later abandoned in 1823) (Ray 2007). Buffalo hunts were conducted in conjunction with seasonal farming based out of the Red River settlement and wage labour on fur brigades for the Hudson's Bay Company (Ray 2007). Records from Pembina's North West Company post from 1807/08 indicate that fresh buffalo meat represented the vast majority of calories consumed by the Métis followed by a minor contribution to diet of other game and birds such as deer, bear, beaver, swans, crane, ducks, and fish (Ray 2007).

The ongoing need for pemmican at remaining fur trade posts and to supply fur brigades stimulated the need for the buffalo hunt in southwestern Manitoba (Sawchuk 1973; Tough 1996). Buffalo harvest also provided robes and hides for commercial sale (Ens 1996; Ray 1997). Hunting buffalo was noted to be the Métis' primary industry from 1845 to 1864, the latter date being accepted as the climax year of the buffalo hunt, after which declining herds were observed and thus alternate livelihoods were sought by the Métis (Ross 1856; Sawchuk 1973; Pelletier 1974; Ens 1996). Additional changes came in 1870, when the Manitoba Act established the Province of Manitoba, referred to then as the "postage stamp province". That year, there were an estimated 9,830 Métis and "Half-Breeds" living in the area that was incorporated into the Province of Manitoba (Lagasse 1959) although a major wave of emigration to the west occurred around 1880 financed by the sale of scrip⁷ (Flanagan 2007).

Following the decline of the buffalo hunt in the post-1864 period, Métis sought other vocations which included buffalo bone collection for fertilizer on the southern and western prairies (Pelletier 1974) and agriculture (though marginal at times) taken up by those who remained on the surveyed lots of the Red and Assiniboine rivers (Flanagan 1991). Métis participated in commercial fishing on

⁶ Presented by Dr. A.J. Ray on behalf of Mr. Goodon.

⁷ Section 31 of the *Manitoba Act*, 1870, granted 1,400,000 acres for the benefit of the 'half-breed' residents in the Province in order to compensate for the loss of hunting grounds (Lehr and McGregor 2008). Tough (1996) describes scrip issued by the federal Department of Interior as "a coupon, redeemable for land [160 acres] or money [1\$/acre] ... issued to Metis grantees on an individual basis" (p.114). Scrip was issued in lieu of real property for Metis adults. Metis children were to get 240 acres in land (real property). Sprague (2007) elaborated that scrip offered in the 1870s could be redeemed from Dominion lands open for homestead that would be selected by a draw and be situated no further than two to four miles from the 'settlement belt' along the rivers. Flanagan's (2007) evaluation indicated that this was not regarded to be of much use by some Metis who preferred lots adjacent to family and particularly for those who were seeking larger tracts of land elsewhere. For some Metis, instead of taking a land option, scrip was liquidated for cash (Lehr and McGregor 2008) often "to finance departure from Manitoba" (Flanagan 2007, p.114). These circumstances and others were the subject of a recent Supreme Court decision in favour of the Metis which declared that the Federal Crown failed to implement the land grant provision set out in S.31 of the *Manitoba Act*, 1870 diligently in accordance with the honour of the Crown.

Lake Winnipeg that was first documented in 1872 and followed industry expansion later to Lake Winnipegosis and Lake Manitoba (Pelletier 1974). Tough (1998) noted that, of the 305 labourers employed by the two largest fishing operations on Lake Winnipeg in 1887, 40 were Métis. This suggests substantive Métis participation in commercial fishing in the central portions of the province.

Métis also participated in the production of goods including salt from the Lake Winnipegosis and Camperville areas (pre-1900) (Pelletier 1974; Barkwell 2012) and maple sugar and syrup from the Manitoba maple (*Acer negundo*) in areas where it grew south of the outlet of Lake Winnipeg (Pelletier 1974). Métis also produced lime and limestone from quarries in southern Manitoba circa the 1920s to 1940s, wild rice from southeastern Manitoba in the post-WWII era, and seneca root (*Polygala senega*) from the Interlake region centered around Hodgson, Ashern, and Gypsumville and possibly from other southeastern Manitoba locations (Pelletier 1974). Collection of Seneca root for commercial purposes was documented from the early 1920s to the 1970s when artificial pharmaceutical products reduced the roots' value (Pelletier 1974).

Ample accounts of commercial pursuits by the Métis in south and central areas of Manitoba are available. Concurrent with these activities, the Métis likely participated in a mixed subsistence-wage economy that made use of resources seasonally for subsistence to complement participation in the labour force of the industries noted above (see Usher and Weinstein 1991). The *R. vs. Gooden* trial evidence presented on behalf of Mr. Goodon documented hunting, fishing, trapping and harvesting of resources from the land as important practices for the Métis (para 73). Métis⁸ settlement patterns specific to the Study Area are noted below and Métis use of resources follow in the next sections.

2.1 MÉTIS SETTLEMENT IN THE STUDY AREA

Forty-two communities/settlements are present in or proximal to the Study Area (see Appendix A for a list). Literature documenting the settlement and land use patterns of Metis was found for two communities in the Study Area: Ste. Anne Des Chênes (referred to as Ste. Anne) and Lorette.

Historical settlement in the community of Ste. Anne began in the 1850s (Barkwell et al. 2012). Situated on a high point of land, called Pointe de Chênes (Oak Point), Métis settlement of the area accelerated following an 1852 flood of the surrounding area (Barkwell et al. 2012). Flanagan (1991) also documented a group of Métis from St. Boniface establishing a new parish at Ste. Anne in the early 1850s. Expansion of the settlement of Ste. Anne continued during the 1860s followed by settlement in the Lorette area in the 1860s (Flanagan 1991).

⁸ One additional note may be necessary to clarify Metis populations. Amendments to the Indian Act in 1985 intended to eliminate gender discrimination in the Act, commonly referred to as Bill C-31, have had a substantial effect on Aboriginal demographics over the past 25 years (Human Resource Development Canada [HRDC] 2000). According to HRDC, Metis populations were affected in only a minor way by Bill C-31 as the majority of those who had mixed ancestry, identified as non-status Aboriginal people as opposed to Metis.

Although the Hudson's Bay Company owned this land at the time, no action was taken to prevent settlement of the Ste. Anne and Lorette areas. Metis would take their livestock to winter on the Seine River (also the Oak, Rat, or Salle rivers outside of the Study Area) marking off land using stakes or furrows (Flanagan 1991). The land was used seasonally for hay cutting and timber, pasturing livestock, and making maple syrup. Following several years of this pattern of use, permanent dwellings were constructed and eventually title to the property was granted through Manitoba Act patents (Flanagan 1991).

Additional information on land use and settlement at specific communities within the Study Area was not located with the exception of some 1958 population estimates. Lagasse (1959) documented the following Métis populations by community (Ste. Anne and Lorette were not listed):

- Badger 10;
- Marchand 80;
- Sandilands 30;
- Vassar 100; and
- Woodridge -100.

3.0 **DOMESTIC FISHING**

According to part of the Traditional Land Use Knowledge Study (TLUKS) undertaken by the Manitoba Métis Federation as part of Bipole III Environmental Impact Statement studies, fish species most sought after (past and present) by Métis within the Bipole III Study Area as a whole between 1940 and 2011 were pickerel (Walleye) and jackfish (Northern Pike) (MMF 2011a). Fishing by rod and reel (as opposed to net fishing) during the open-water season was reported to be the most common fishing method among the Métis interviewed (MMF 2011a).

The only site-specific food fishing area was documented by the MMF (2011a) occurred outside (to the west) of the Study Area in the vicinity of St. Malo and on the Roseau River in the vicinity of Stuartburn. Species harvested were not identified. To the west of the Study Area, Barkwell et al. (2012) noted that Rivière Sale, now St. Norbert (where the La Salle River meets the Red River), was an important seasonal gathering place for Métis due to the wealth of fish in the area, including Burbot, jackfish, Carp, and catfish.

4.0 **DOMESTIC HUNTING**

Traditionally, buffalo were hunted by the Métis for both commercial and domestic purposes (see section 2.0), however, other large game animals were and are important. In a summary of results from the Traditional Land Use Knowledge Study (TLUKS, MMF 2011a) undertaken on behalf of the MMF for the BiPole III Environmental Impact Statement (EIS), Larcombe (2012) indicated that moose was the primary big game species sought by Métis TLUKS study participants, followed by deer and elk.

Within the Study Area, historically, a large swamp and forest, locally called "l'épinettière" by the Métis, located to the east of the St. Anne settlement was known for good game hunting (Barkwell et

al. 2012). Deer hunting still occurs in a large area southeast of Ste. Anne extending as far south as the Manitoba border (Figure 1; Larcombe 2012). On an annual basis, Métis persons holding a harvester card can receive two white-tailed deer tags from the MMF (Larcombe 2012) and, based on the Métis Laws of the Harvest (MMF 2011b, Third Edition), deer hunting is permitted between 16 July and 14 January annually. No estimates of harvest were provided by the TLUKS study (MMF 2011a) or its summary (Larcombe 2012).

Larcombe (2012) did not report any moose harvest locations for the 1990-2010 period in the Study Area. MMF (2011a) reported a moose harvest location south of Marchand that was used between 1940 and 2011 (Figure 2). As of 2013, there are no moose hunting seasons established for non-Aboriginal people in the Game Hunting Areas (34A, 35, and 35A) that overlap the Study Area (Manitoba Conservation and Water Stewardship 2013b).

No elk hunting areas were shown by the MMF (2011a) or Larcombe (2012) in the Study Area. Elk are unlikely to be harvested in the Study Area as their range occurs elsewhere in Manitoba, however, a small satellite herd has been observed recently in the Piney area in the south central portion of the Study Area (Manitoba Conservation and Water Stewardship 2014).

Small animal harvesting is often done in conjunction with large animal harvesting (Larcombe 2012). Based on the Bipole III TLUKS study-wide results (MMF 2011a), Larcombe (2012) indicated that study participants preferred to harvest upland birds (such as grouse, partridge, and ptarmigan) followed by ducks and geese, then rabbits. Small game harvesting areas in the Study Area were similar to the deer hunting areas located to the southeast of Ste. Anne (though the boundary of small game harvest areas did not extend as far south as the Manitoba border) (Figure 3; Larcombe 2012). The species harvested were not specified.

Information with respect to wild turkey hunting was not located.

5.0 **DOMESTIC TRAPPING**

The Bipole III TLUKS study (MMF 2011a) captured some information on trapping within its study area. Species trapped were reported to include beaver, coyote, fisher, fox, lynx, marten, mink, muskrat, otter, rabbit, racoon, squirrel, weasel, wolf and wolverine. The most common trapped species between 1940 and 2011 in the Bipole III study area was muskrat followed by weasel, beaver, coyote and fox (MMF 2011a). Information was not provided on harvest locations or on species consumption. Though many species are listed, most are likely trapped only for commercial purposes (e.g., sale of fur). Beaver, muskrat and lynx are the most commonly consumed furbearers (Usher and Weinstein 1991). Information on trapping in specific locations within the Study Area was not located.

6.0 **DOMESTIC GATHERING**

Little is known about domestic gathering practices of Métis in the Study Area. Barkwell et al. (2012) noted that the "l'épinettière" (an area to the east of the St. Anne settlement) was historically used by the Métis as a source of lumber. Lagasse (1959) also noted participation in lumber and pulp cutting in

southeastern Manitoba. While this was predominantly a commercial operation, the same forest resources would likely have been used for heating, cooking and other household needs.

Pelletier (1974) discussed wild rice as a resource that is harvested from southeastern Manitoba, primarily from areas within the Whiteshell Provincial Forest, however, Métis participation in this harvest and harvest within the Study Area was not provided. Pelletier (1974) indicated that, based on a 1959 survey by the Department of Agriculture, Seneca root grows in the Study Area and Métis participated in Seneca root harvest (more notably in the Interlake area). Seneca root was used by the Métis in place of pharmaceutical products and also sold for cash income from circa 1920 tapering off in the 1970s (Pelletier 1974). Production of maple syrup also occurred in southern areas of Manitoba including the Roseau River (Pelletier 1974) area within the southeastern portion of the Study Area. While syrup was primarily produced for cash income (Pelletier 1974), Métis households likely produced syrup for their own use. Métis access to Manitoba maple trees was noted by Pelletier (1974) to have declined as new settlers began homesteading in the area and the maple trees were cut for firewood. No further information was located on current use of wild rice, Seneca root, or maple syrup by the Métis.

In a study on Métis traditional plant use in southern Ontario, participants indicated that plant gathering was and is important to their way of life (Métis Nation of Ontario 2010). Numerous species were identified as used for medicines, food and crafts (Métis Nation of Ontario 2010). Many of these species, including birch, cedar, dandelion, and milkweed, may be found within the Study Area, however specific information on traditional plant use in this area was not located.

In a summary of results from Traditional Land Use Knowledge Study (TLUKS) undertaken on behalf of the MMF for the BiPole III Environmental Impact Statement (EIS), Larcombe (2012) indicated that close to one third of the Metis interviewed (49 in total across the Bipole III Study Area) stated that they conducted gathering, primarily in summer months. Of those who gathered, a majority harvested berries and wood products. A minority of those who gathered harvested roots, nuts and/or mushrooms and a small minority harvested medicines. Four gathering areas used between 1990 and 2010 were depicted in the Study Area, one northeast of Ste. Anne and three to the southwest of Ste. Anne (Figure 4; Larcombe 2012). The type(s) of gathered material was not specified.

7.0 SUMMARY OF KNOWN INFORMATION

Metis people have resided in the Study Area since prior to the establishment of the Province of Manitoba in 1870 with the earliest settlement occurring in Ste. Anne and Lorette areas. Metis settlement was documented later (1958) in Badger, Marchand, Sandilands, Vassar and Woodridge.

The majority of literature consulted documented historical commercial pursuits undertaken in the Study Area (road building, lumbering, maple syrup production, hay cutting, cattle tending, and possibly wild rice and Seneca root collection). There is also evidence that the Métis participated and likely continue to participate in a mixed subsistence-wage economy making use of natural resources to supplement/substitute wage earnings.

Confirmed and current harvesting areas identified in the Study Area include big game hunting, specifically, white-tail deer hunting (moose and elk hunting has not been confirmed). Harvest areas of small game have been documented but the species harvested has not been confirmed. Small game harvested may include upland birds (such as grouse), ducks, geese and rabbits. Based on the patterns of hunting area selection described by Larcombe (2012), large and small game hunting areas are generally coincident. Gathering areas have also been identified in the Study Area, though the species targeted is unknown. Trapping in the Study Area has not been confirmed and whether or not furbearers' meat is consumed for subsistence also is unknown. No information was available with respect to food fishing in the Study Area.

8.0 GAP ANALYSIS

Assuming that the objectives of a gap analysis would be to acquire information to assist with MMTP route selection and ultimately, to meet the requirements of *the Canadian Environmental Assessment Act*, 2012 S.5 (c) iii – describing effects on the current use of lands and resources for traditional purposes, we provide our professional assessment in the following gap analysis (Table 8-1).

| Component | Sub- component | Gap | Rationale |
|----------------------------|-----------------------|--|---|
| Resource Use in General | Travel and navigation | Seasonal travel patterns, modes of travel (e.g., boat, truck, ATV, etc.); Perspectives on changes to and effects of changes in access (access to water and/or overland travel) in all seasons; and Perspectives on changes in access by others that may be perceived to affect or compete with existing use. | Little is known about travel to harvest areas, travel modes and season of travel. |
| Domestic Hunting | Big game | Whether other potential big game hunting (elk or moose) is undertaken in the Study Area; Spatial patterns of hunting for deer (seasons, harvest quantities); and Perspectives on effects (if any). | The TLUKS (2011) study and its summary, Larcombe (2012), provided the only site-specific information on big game harvests. These studies had limited participation from Métis resident in the Study Area and/or those who use it. Supplemental effort to acquire information is recommended. |
| | Small game | Species harvested, quantity harvested and locations of harvest; and Perspectives on effects (if any). | - Same as above. |

| Table 8-1: Gap Analysis for Site Selection and Environmental Impact Assessment |
|--|
|--|

| Component | Sub- component | Gap | Rationale |
|-----------------------|-------------------|--|---|
| Domestic Fishing | n/a | Species harvested, quantity harvested and locations of harvest; and Perspectives on effects (if any). | - Same as above. |
| Domestic Trapping | n/a | Species trapped and consumed for food; Quantity and location of harvest; and Perspectives on effects (if any). | No information is currently available. Other information sources include interviews with Manitoba Conservation and Water Stewardship resource managers and trapping records (less applicable). |
| Domestic Gathering | n/a | Species harvested, quantity harvested and locations of harvest; and Perspectives on effects, and specifically, perspectives on vegetation management in linear corridors. | While limited site-specific information is currently available, the species and quantity harvested is not. Broader participation of Métis residing and/or using the Study Area would be recommended. |

Table 8-1. Continued.

9.0 **REFERENCES**

- Barkwell, L., L. Dorion and D. Prefontaine. 2012. The Métis homeland: its settlements and communities. Sixth Edition. 69 pp. Online access: <u>www.Métismuseum.ca/media/db/11956</u> [Accessed March 10, 2014].
- Canadian Environmental Assessment Act, 2012. (S.C. 2012, c. 19, s. 52)
- de Tremaudan, A.-H. 1982. Hold high your heads: History of the Métis Nation in western Canada. Pemmican Publications, Winnipeg, MB. 210 pp.
- Ens, G.J. 1996. Homeland to hinterland : the changing worlds of the Red River Métis in the nineteenth century. University of Toronto Press, Toronto, ON. 268 pp.
- Flanagan, T. 1991. Métis lands in Manitoba. University of Calgary Press, Calgary, AB. 245 pp.
- Flanagan, T. 2007. The market for Métis lands in Manitoba: an exploratory study. In The Western Métis: profile of a people. Edited by Douaud, P.C. Canadian Plains Research Center, Regina, SK. 145-154 pp
- Human Resource Development Canada [HRDC] 2000. Aboriginal people in Manitoba 2000. Online access: http://www.gov.mb.ca/ana/apm2000/apm2000.pdf [Accessed March 11, 2013].
- Lagasse, J. 1959. The Métis of Manitoba. Manitoba Historical Society Transactions, Series 3, 1959-59 Season. Online Access: <u>http://www.mhs.mb.ca/docs/transactions/3/Métis.shtml</u> [Accessed March 10, 2014].
- Larcombe, P.M. 2012. Manitoba Métis traditional use and the Bipole III Project: A report submitted to the Manitoba Clean Environment Commission with respect to Manitoba Hydro's Bipole III application. Winnipeg: Symbion Consultants. November 4, 2012. 43 pp.
- Manitoba Conservation and Water Stewardship. 2013a. 2013-2014 Trapping Guide. Online Access: http://www.gov.mb.ca/conservation/wildlife/trapping/pdf/2013_2014trappingguide_web.pdf. [Accessed March 9, 2013].
- Manitoba Conservation and Water Stewardship. 2013b. 2013 Hunting Guide. Online Access: <u>http://www.gov.mb.ca/conservation/wildlife/hunting/pdfs/sept17hunting_guide2013.pdf</u> [Accessed March 10, 2014].
- Manitoba Conservation and Water Stewardship. 2014. Elk Fact Sheet. Online Access: <u>http://www.gov.mb.ca/conservation/wildlife/mbsp/fs/elk.html</u> [Accessed March 10, 2014].
- Manitoba Education and Training. 1993. Reaching for the Sun: A guide to the early history and the cultural traditions of Native people in Manitoba. 115 pp.
- Manitoba Métis Federation Inc. [MMF]. 2011a. Manitoba Métis traditional use, values and knowledge of the Bipole III project study area. Winnipeg: Manitoba Métis Federation. August 2011. 44 pp. + appendices.

- Manitoba Métis Federation Inc. [MMF]. 2011b. Métis laws of the harvest: guide to Métis hunting, fishing, trapping and gathering. Third Edition, August 31, 2011. 25 pp.
- Manitoba Métis Federation Inc. [MMF]. 2012. Madden, J.T. Letter to the Canadian Environmental Assessment Agency. September 20, 2012.
- Métis Nation of Ontario. 2010. Métis Nation of Ontario-Southern Ontario Métis Traditional Plant Use Study. Written and prepared by the Métis Nation of Ontario with help from AECOM. Online Access:
 <u>http://www.Métisnation.org/media/81616/so on tek darlington report.pdf</u> [Accessed March 9, 2013].
- Pelletier, E. 1974. A social history of the Manitoba Métis: The development and loss of Aboriginal rights. Winnipeg: Manitoba Métis Federation Press. 150 pp.
- Prefontaine, D.R., P. Young, T. Paquin and L. Dorion. n.d. Métis fur trade employees, free traders, guides and scouts. The Virtual Museum of Métis History and Culture, Gabriel Dumont Institute of Native Studies and Applied Research. Online Access: <u>http://www.Métismuseum.ca/media/document.php/00713.pdf</u> [Accessed March 12, 2014]
- Ray, A.J. 2007. The northern Great Plains: pantry of the northwestern fur trade, 1774-1885. In The Western Metis: profile of a people. Edited by Douaud, P.C. Canadian Plains Research Center, Regina, SK. 55-71 pp.
- R. v. Goodon, 2008 MBPC 59 (CanLII), Online Access: <u>http://canlii.ca/t/224ch</u> [Accessed March 9 2012].
- Ross, A. 1856 The red river settlement: its rise, progress and present state; with some account or the native races and its general history to the present day. London: Smith, Elder, and Company.416 pp. Online access: http://www.ourroots.ca/e/page.aspx?id=256134 [Accessed March 12, 2014]
- Sawchuk, J. 1973. The Métis of Manitoba: a reformulation of an ethnic identity. Master's Thesis, University of Manitoba, Winnipeg, MB. 95 pp.
- Sealey, D.B. 1975. Statutory Land Rights of the Manitoba Métis. Winnipeg: The Manitoba Métis Federation Press. 148 pp.
- Sealey, D.B., and A.S. Lussier. 1975. The Métis, Canada's forgotten people. Pemmican Publications Inc. Winnipeg, MB. 200 pp.
- Sprague, D.N. 2007. Dispossession vs. accommodation in plaintiff vs. defendant accounts of Métis dispersal from Manitoba, 1870-1881. In The Western Métis: Profile of a people. Edited by Douaud, P.C. Canadian Plains Research Center, Regina, SK. 326 pp
- The Wildlife Act (Manitoba). C.C.S.M. c. W130
- Tough, F. 1996. As their natural resources fail: native people and the economic history of northern Manitoba, 1870-1930. Vancouver: UBC Press. 376 pp.

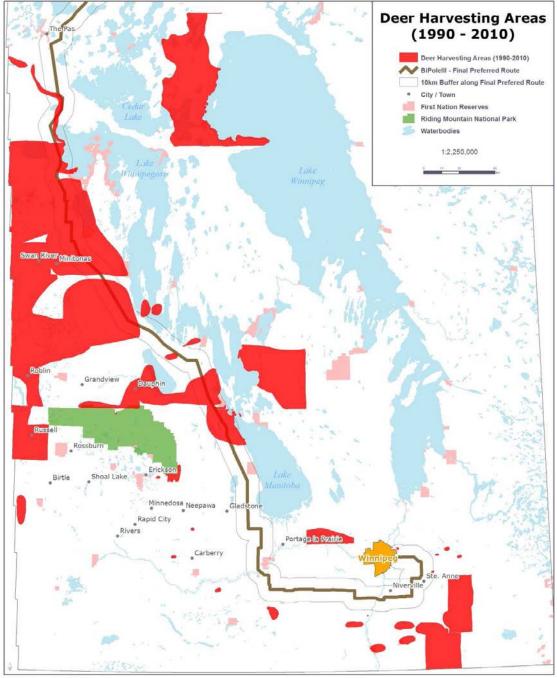
- Tough, F. 1998. Economic aspects of Aboriginal title in northern Manitoba: Treaty 5 adhesions and Métis scrip. Manitoba History, no. 15, Spring 1988.
- Usher, P.J. and M.S. Weinstein. 1991. Towards assessing the effects of Lake Winnipeg Regulation and Churchill River Diversion on resource harvesting in native communities in northern Manitoba. Winnipeg: Central and Arctic Region, Department of Fisheries and Oceans, Canadian Technical Report of Fisheries and Aquatic Sciences Report 1794. 69 pp.

10.0 LITERATURE CONSULTED

- Chartrand, L.D. 2005. Métis Aboriginal rights in the twenty-first century : looking beyond Powley. Master's Thesis, University of Manitoba, Winnipeg, MB. 173 pp.
- Corrigan, S.W., and L.J. Barkwell. 1991. The Struggle for recognition : Canadian justice and the Métis nation. Manitoba Métis Federation Inc. Public Inquiry into the Administration of Justice and Aboriginal People. Permican Publications Inc., Winnipeg, MB. 236 pp.
- Keddie, P.D. 1975. Changes in rural Manitoba's "ethnic mosaic" 1921 to 1961. Transactions of the Manitoba Historical Society 3(31). Online access: <u>http://www.mhs.mb.ca/docs/transactions/3/ethnicmosaic.shtml</u> [Accessed March 12, 2014]
- Lehr, J.C., and B. McGregor. 2008. Using schools to map the frontier of settlement on the Canadian Prairies. Great Plains Research 18: 53-66 pp.
- Manitoba Métis Federation. 1988. Survey of members. University of Manitoba Research Ltd., Social Sciences Division, Winnipeg, MB. 124 pp.
- Manitoba Métis Land Commission. 1977. Our land. Winnipeg : Métis Lands Commission 1977, Winnipeg, MB. 20 pp.
- MEDTP, Inc. 1986. Currents of change: Métis economic development. Pemmican Publications, Winnipeg, MB. 63 pp.
- Minister of Public Works and Government Services Canada. 2000. First Nations in Manitoba: Locations and Treaty Boundaries [Map]. Online Access: <u>http://amc.manitobachiefs.com/images/maps/first_nations_locations_treaty_boundaries.j</u> pg. [Accessed March 10, 2014]
- Mochoruk, J. 2007. Manitoba and the (long and winding) road to the natural resources transfer agreement. Review of Constitutional Studies 12(2): 255-300 pp.
- Morrison, S.J. 1995. Rotten to the core: the politics of the Manitoba Métis Federation. J. Gordon Shillingford Publishing, Victoria, BC. 126 pp.
- Patzer, J. 2008. Métis hunting rights in the juridical field : keeping up appearances. Master's Thesis, University of Manitoba, Winnipeg, MB. 129 pp.
- Rudolph, K.R, and S.M. Mclachlan. 2013. Seeking Indigenous food sovereignty: origins of and responses to the food crisis in northern Manitoba, Canada. Local Environment 18(9): 1079-1098 pp.
- Sealey, M. and B. Sealey. 1974. Six Métis Communities. Manitoba Métis Federation, Winnipeg, MB. 91 pp.Shore, F.J., and L.J. Barkwell. 1997. Past reflects the present : the Métis Elders' Conference Métis Elders' Conference (1991: Winnipeg, Man.). Manitoba Métis Federation Inc. 248 pp.

- Stanley, G.F.G. 1972. Manitoba 1870 A Métis achievement. University of Winnipeg Press, Winnipeg, MB. 32 pp.
- Talbot, R. J. 2009. Negotiating the numbered treaties: An intellectual and political biography of Alexander Morris. Saskatoon: Purich Publishing Ltd.
- Usher, P.J., Tough, F.J., and R.M. Galois. 1992. Reclaiming the land: aboriginal title, treaty rights and land claims in Canada. Applied Geography 12(2): 109-132 pp.
- Wilkins, K. 2007. Unseating horseman: commercial harvesting rights and the natural resources transfer agreements. Review of Constitutional Studies 12(2): 135-171 pp.
- Woodley, K. 1977. An ethnographic study of a typical Métis community in Manitoba. Master's Thesis, University of Manitoba, Winnipeg, MB. 218 pp.

11.0 **FIGURES**



Produced by Sofa Logic Inc.

Figure 1. Deer Harvesting Areas Identified by TLUKS Interviewees (1990-2010). Source: Larcombe 2012, Figure 7, p.18.

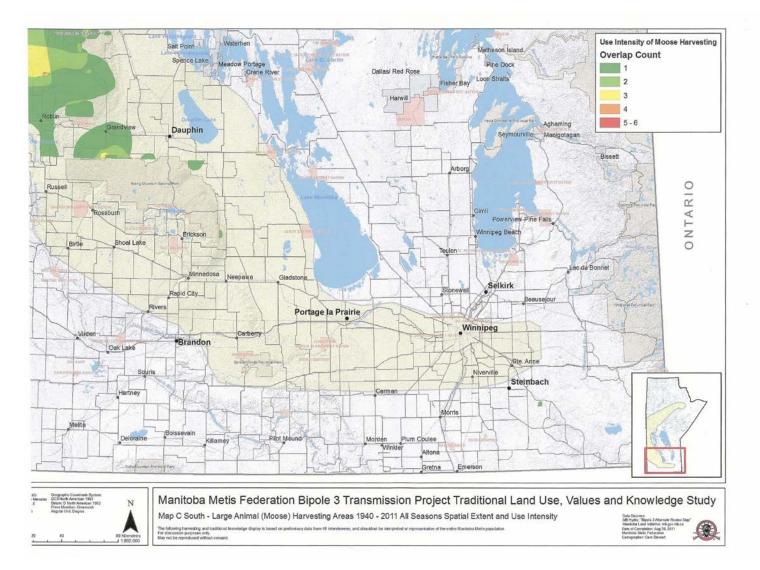


Figure 2. Large animal (moose) harvesting areas (1940 – 2011). Source: MMF 2011a, p.118.

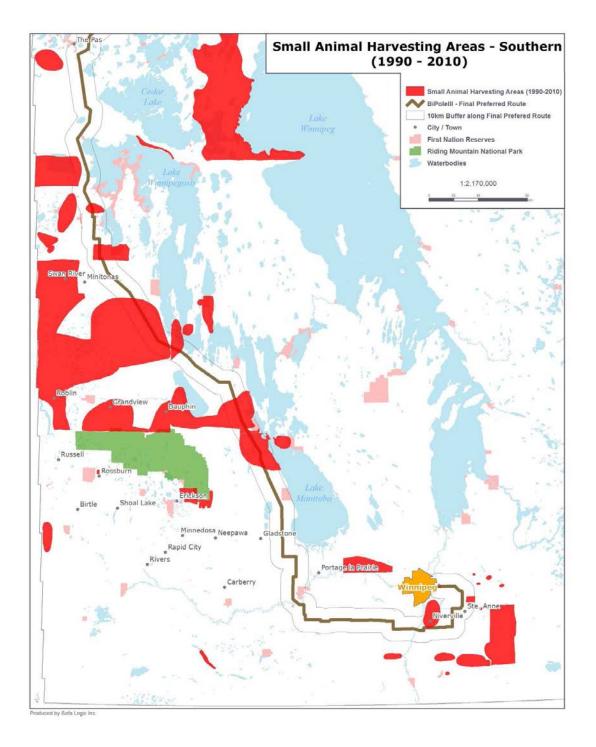
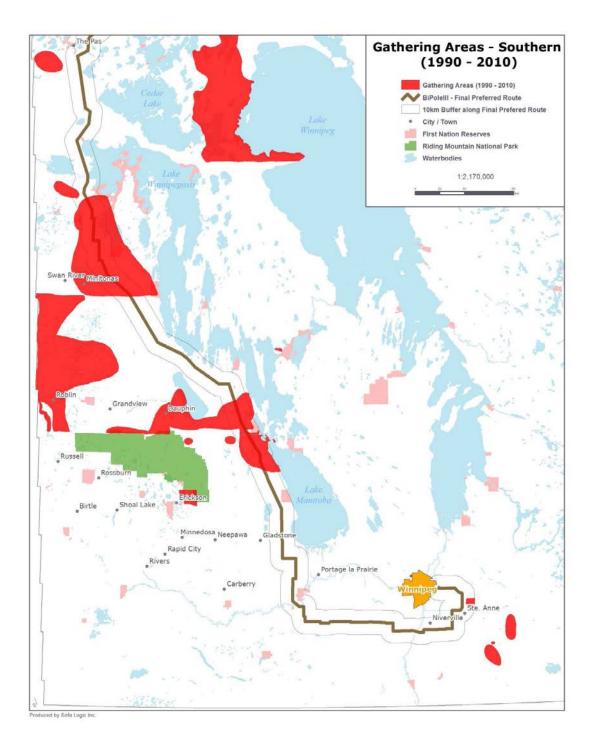


Figure 3. Small Animal Harvesting Areas Identified by TLUKS Interviewees (1990-2010). Source: Larcombe 2012, Figure 9, p.21.



- Figure 4. Gathering Areas Identified by TLUKS Interviewees (1990-2010) South. Source: Larcombe 2012,
 - Figure 11, p.24.

Appendix A1: Communities in or Proximal to the Study Area

Communities or settlements in the Study Area include:

- Anola
- Arbakka
- Badger
- Caliento
- Carrick
- Deacons Corner
- Dufrense
- Dugald
- Giroux
- Glass
- Grand Pointe
- Greenland
- Ile des Chenes
- La Broquerie
- La Coulee

- Linden
- Lorette
- Marchand
- Piney
- Prairie Grove
- Ross
- Sandilands
- South Junction
- St. Labre
- Ste. Anne
- Ste. Rita
- Sundown
- Vassar
- Vivian
- Woodridge

Communities or settlements proximal to the Study Area include:

- Barkfield
- Blumenort
- Gardenton
- Grande Pointe
- Keefield
- New Bothwell

- Randolf
- Roseau River
- Steinbach
- Sarto
- Stuartburn
- Tolstoi



SUBJECT AREA:Vegetation and Wetlands, Traditional Land and Resource UseREFERENCE:MCWS MMTP IR No 1QUESTION:

Provide information on whether traditional plant species were considered during the wetland survey and in the assessment of potential effects on wetlands.

RESPONSE:

- 1 The intent of wetland surveys was to better understand the location, size and class of the
- 2 wetland. Wetland surveys documented dominant plant species, soil and water characteristics.
- 3 Wetland surveys of this nature do not typically include a complete species inventory. As the
- 4 intent of the wetland survey was for classification and location purposes, a detailed species list
- 5 (including traditional species) was not compiled, or needed, to meet the intent of the wetland
- 6 surveys.



SUBJECT AREA:Wildlife and Wildlife Habitat, Land UseREFERENCE:MCWS MMTP IR No 1QUESTION:

Provide comments on whether Manitoba Hydro will consider the recommendations in the comments from Parkland Mews.

RESPONSE:

1 For over a decade Manitoba Hydro has been a supporter of Peregrine Falcon Recovery in

2 Manitoba, most recently in 2011-2015 Manitoba Hydro entered into a partnership with

3 Manitoba Conservation, Parkland Mews and others to fund a multi-year PHD study on the

4 dispersal and distribution of Peregrine Falcons in Manitoba. Preliminary results of that study

5 have shown that survival rates are low and numerous sources of mortality exist, as illustrated in

6 the Peregrine Falcon Monitoring Project, Final Progress Report 2015:

7 "Of the 30 juvenile peregrines equipped with PTTs, 17% (n=5) were confirmed alive by the end

8 of the study. Not all survivorship outcomes could be determined conclusively, and two PTTs

9 ceased functioning prematurely. Of the sixteen peregrine carcasses successfully retrieved, 31%

10 (n=5) were recovered in the immediate vicinity of transmission lines or utility poles in Manitoba

11 (n=3) or the United States (n=2). In Manitoba, both the Transmission (n=1) and Distribution

12 and Sub-Transmission (n=2) networks were implicated. Peregrine mortality in Mexico was

suspected in the immediate vicinity of comparable features but this could not be confirmed in thefield".

15 The study also indicated the young birds utilize a large home range even in their first summer

16 often extending hundreds of kilometers from their dispersal site. Even though only one

17 confirmed Peregrine Falcon mortality was associated with Manitoba Hydro transmission line

18 infrastructure, Manitoba Hydro is committed to discussing mitigation strategies to be applied to

19 the Manitoba-Minnesota Transmission Project infrastructure in the vicinity of Parkland Mews.

▲ Manitoba Hydro

- 20 Manitoba Hydro will evaluate GPS data of falcon movements acquired through the above PhD
- 21 study of birds released at Parklands Mews and discuss potential strategies with Parkland Mews
- to mitigate the close proximity of the breeding site with the project that could include bird
- 23 diverters and perch deterrents.
- 24 During construction, Manitoba Hydro does not foresee any additional risks to Peregrine
- 25 Falcons, however, as per the Construction Environmental Protection Plan, environmental staff
- 26 working on the project will monitor for bird interactions with construction activities and report
- 27 any mortalities to Manitoba Conservation and Water Stewardship (MCWS).
- 28 Manitoba Hydro has had recent discussions with MCWS with respect to Manitoba's Peregrine
- 29 Falcon Recovery Plan and will be evaluating the ongoing role of Manitoba Hydro in those efforts
- 30 in the coming months.



SUBJECT AREA:Socio-economic, PropertyREFERENCE:MCWS MMTP IR No 1QUESTION:

The comments from Mr. Bernard Fournier indicate that the location of his farm is marked incorrectly on the map in the EIS. Please provide a map with the correct location and indicate how the change in location of the farm impacts the environmental and socio-economic assessment of the project.

RESPONSE:

- 1 There are two farm designations in the province, Centennial Farms and Century Farms.
- 2 Centennial Farms are recorded by the Historic Resources Branch; Mr. Fournier's farm is not
- 3 listed in the database as a Centennial Farm. The red triangle plotted on the map in the EIS
- 4 therefore relates to a Centennial Farm of a different landowner.

5 Century Farms are under the mandate of Manitoba Agriculture, Food and Rural Development 6 (AFRD) and applicants send in a form to their nearest AFRD Go Office. Once approved, Century 7 farms are not tracked; and property owners receive signage to erect on their property. The 8 program specifics do not indicate what portion of the farm is recognized (i.e. the original 9 building site or the entire quarter section). The program is in place to recognize family 10 contributions to Manitoba's agricultural past. The program does not provide any type of legal 11 protection such as a municipal or provincial designation through Historic Resources Branch. The 12 site recognized through the program does not become a heritage sensitive area because it is not a recorded archaeological site or in the Historic Resources database. Because there is no 13 database of Century Farms, the Centennial Farm locations obtained from the Historic Resources 14 15 Branch were the only data mapped in the EIS. Consequently, the Fournier Century farm was not 16 marked.



SUBJECT AREA:Agriculture, Noise & EMFREFERENCE:MCWS MMTP IR No 1QUESTION:

Please provide comments on the concerns from Mr. and Mrs. Alain and Jacqueline Fournier regarding the potential long term impacts on cattle grazing under the transmission line, specifically relating to conception rates, birth defects, and health problems.

RESPONSE:

The proposed transmission line is to operate at a voltage of 500 kilovolts (kV). A number of 1 2 scientific studies have evaluated potential adverse effects in cattle near transmission lines with 3 similar voltages. As discussed in Section 7 of the Exponent report titled "Research on Extremely 4 Low Frequency Electric and Magnetic Fields from Alternating Current Transmission Lines— 5 Summary Evaluation of the Evidence," dated May 2015, the scientific evidence does not show that the reproductive functions or health of cattle are affected by grazing under high-voltage 6 7 power lines or that electric and magnetic fields (EMF) in experimental studies affect their 8 health. The potential effects of EMF on livestock have been studied extensively and reported in 9 the scientific literature, and cattle have been more extensively studied than other farm animals. 10 A number of farm surveys and observational field studies of grazing animals have been 11 conducted over the past several decades in Europe and North America to study potential 12 effects of high-voltage transmission power lines with voltages between 380kV and 765kV. 13 These surveys and observational studies have examined various outcomes, including milk 14 production, reproductive performance, grazing habits, and behavioral changes. Overall, no 15 consistent differences between cattle grazing under or close to transmission lines and cattle 16 farther away from transmission lines were confirmed.

In addition, a series of well-designed experimental studies of dairy cattle were conducted by a
group of Canadian researchers to examine the potential effects of electric fields and magnetic



- 19 fields, separately and in combination, on various behavioral, reproductive, productivity, and
- 20 health parameters (Burchard et al., 1996; Rodriguez et al., 2002; Burchard et al., 2003; Burchard
- et al., 2004; Burchard et al., 2007). Cattle were exposed to EMF at levels characteristic of 765kV
- 22 transmission lines. While some small variations between exposed and control groups were
- 23 observed in some of their studies, these differences were within normal ranges (and therefore
- 24 not harmful) and were not consistently related to EMF exposure.



SUBJECT AREA: Property, Clearing REFERENCE: MCWS MMTP IR No 1 QUESTION:

Please provide comments on the concerns from Mr. Edward Rak regarding fragmentation of his property by the existing and the proposed transmission lines and that there will be no bush left on the property as a result of the proposed line.

RESPONSE:

- 1 Based on the information provided, the property in question is NE 32-009-07E1 located in the
- 2 RM of Tache as outlined in the following map.
- 3 Paralleling or maintaining close proximity to other transmission lines minimizes the number of
- 4 independent rights of way on the landscape and was viewed favorably during public
- 5 engagement. At this location the transmission line parallels R49R, an existing 230kV
- 6 transmission line.

As the new ROW will be parallel to R49R, Manitoba Hydro will attempt to reduce the additional
new right-of-way width (currently 80m) that could lower the amount of new clearing required.
Due to this, Manitoba Hydro may be able increase the amount of vegetation between the
existing homes and potentially reducing the amount of timber removed. Maintaining all
applicable safety and reliability requirements will remain the most important consideration in
determining right-of-way width in the area. This is further explained in Chapter 3, Section
3.10.3.2, Table 3-17.





SUBJECT AREA:Property, AccessREFERENCE:MCWS MMTP IR No 1QUESTION:

Please provide comments on the concerns from Mr. and Mrs. Mikel Rondeau and Ashley Poiron regarding fragmentation of their property by the proposed transmission line; noise, disruption, hunting and poaching on private land from public access to the transmission line right-of-way by all-terrain vehicles and snowmobiles; and liability to owners of land to be expropriated for damage to the transmission towers.

RESPONSE:

Based on the knowledge we have regarding Mr. Rondeau and Ms. Poiron, they own the eastern
half of NE 02-009-07E1.

Manitoba Hydro representatives began working with Mr. Rondeau and Ms. Poiron when they 3 4 became involved in the public engagement process in Round 3/January 2015. Manitoba Hydro has had several discussions regarding their concerns, potential tower spotting on their 5 6 property, and their route preferences in relation to their property. The feedback they provided was considered and incorporated into the decision-making of the final preferred route. A 7 modification was developed and is documented in Chapter 3, Section 3.10.2.2.9 "Landowner 8 9 C". Manitoba Hydro will continue with ongoing communication with Mr. Rondeau and Ms. Poiron. 10 In regard to noise, concerns relating to this have been addressed in Chapter 18, Effects on 11 12 Human Health Risk, of the EIS. The maximum anticipated audible noise during operation at the edge of the right-of-way is 23dBA, as outlined in section 18.5.4.1.2. This level would remain 13 below Manitoba's provincial guidelines for residential and commercial areas (45dBA 14 (nighttime)-55dBA (daytime)) and is comparable to the volume of a conversation in a living 15

16 room.

▲ Manitoba Hydro

- Construction noise will be short term and will follow applicable noise by-laws. Construction
 noise and disturbance, and equipment noise, as outlined in 18.5.4.1.1, will be approximately 89
 decibels (at 15m from the source) with the exception of the brief use of implosives to splice the
 conductors together. These implodes will likely occur 2-3km apart and notification will be sent
 to those people that may be affected.
- 22 Regarding access to private property and concerns regarding the use of this access as
- 23 opportunities for illegal hunting or ATV access, Manitoba Hydro has indicated that landowners
- 24 can work with Manitoba Hydro to implement measures to limit access to or on the right-of-
- 25 way. Fencing (with gate) and signage supplied and installed by Manitoba Hydro are the most
- 26 common forms of restricting access.
- 27 Regarding liability, landowners should carry insurance that protects them for incidents
- 28 occurring on their property. Ultimately, the circumstances of each incident need to be weighed
- 29 to determine liability and with liability for the incident falling to the individual who caused the
- 30 damage. A landowner does not need to acquire additional insurance for having a transmission
- 31 line placed on their property.

