Lake Winnipeg East System Improvement (LWESI) Transmission Project

Cultural Resources Technical Report

Northern Lights Heritage Services Inc.

December 2012 **12-1380-0026**

EXECUTIVE SUMMARY

The purpose of this report is to present the potential effects of the Lake Winnipeg East System Improvement (LWESI) Transmission Project (the Project) on the Cultural Resources of participating communities in the study area and to provide routing suggestions.

The assessment process identified Cultural Resources within the Project Study Area to determine potential Project effects on them. Community-based study addressed biophysical and socio-economic headings, including Cultural Resources, and the collected information was disseminated to other disciplinary study groups.

A review of Cultural Resources determined that from three proposed alternative routes, Alternative Route C was the preferred option as it intersected fewer identified Cultural Resource valued sites. Following this and other disciplinary recommendations, Manitoba Hydro chose a Final Preferred Route.

One sensitive cultural resource was identified at the terminus of the chosen Final Preferred Route and proposed Manigotagan Corner Station site. This Culturally Sensitive Site is a region that is still maintained and utilized for traditional dog sled races. The proposed Manigotagan Corner Station will run directly through the trail.

From this identified concern an environmental effect was identified and mitigation measures were recommended. The proposed mitigation measures are;

1) avoidance, or
2) to work with the communities that utilize the track to identify the exact portion of track that would be affected and assist in creating a diverted course around the proposed Manigotagan Corner Station.

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ATK	Aboriginal Traditional Knowledge
CEA Agency	Canadian Environmental Assessment Agency
CSS	Culturally Sensitive Site
EA	Environmental Assessment
GHA	Game Hunting Area
km	kilometre
kV	kiloVolt
Line PQ95	Pine Falls–Manigotagan 115 kV Transmission Line
LWESI	Lake Winnipeg East System Improvement
m	metre
MCWS	Manitoba Conservation and Water Stewardship
NTS	National Topographic Survey
PEP	Public Engagement Program
PR	Provincial Road
ROW	right-of-way
SSEA	Site Selection and Environmental Assessment
Switchyard	Pine Falls Generating Station Switchyard
the Project	Lake Winnipeg East System Improvement Transmission Project
UNESCO	United Nations Educational, Scientific and Cultural Organization
VEC	Valued Environmental Component

1 INTRODUCTION

For the The Lake Winnipeg East System Improvement (LWESI) Transmission Project (the Project) Environmental Assessment (EA), Cultural Resources are used in the discussion of study area, methods, and existing environment, evaluation of routes, and effects and mitigation.

Cultural resources, defined by the United Nations Educational, Scientific and Cultural Organization (UNESCO) as Intangible Cultural Heritage, is the wealth of knowledge and skills that is transmitted through cultural manifestation from one generation to the next (UNESCO 2012). A working definition for Cultural Resources is "...physical features, both natural and manmade, associated with human activity. These would include sites, structures, and objects possessing significance, either individually or as groupings in, history, architecture, archaeology, or human [cultural] development...Cultural properties are unique and nonrenewable resources." (Fowler 1982)

For the Project, Cultural Resources has been designated as a Valued Environmental Component (VEC) and is expressed through oral traditions as Aboriginal Traditional Knowledge (ATK). Aboriginal Traditional Knowledge was used as an overarching term for the knowledge shared by all participating communities. It is constantly being shaped and re-shaped through experience, information, knowledge and wisdom. The relationship between community members and their natural and cultural world is dynamic and interactive. ATK adds to the comprehensiveness of this EA process by informing the Project and by meeting UNESCO's international EA best practice guidelines (UNESCO 2003).

Aboriginal Traditional Knowledge is a living process rooted in the past and adjusted over time to meet the needs of a cultural group. The 1992 Convention on Biological Diversity through UNESCO defined it as "… the knowledge, innovations and practices of indigenous and local communities around the world. Developed from experience gained over the centuries and adapted to the local culture and environment, traditional knowledge is transmitted orally from generation to generation. It tends to be collectively owned and takes the form of stories, songs, folklore, proverbs, cultural values, beliefs, rituals, community laws, local language, and agricultural practices, including the development of plant species and animal breeds."

ATK was shared through community member participation in workshops and interviews conducted by the Manitoba Hydro ATK study team. This method provided a source of knowledge that was used to inform Manitoba Hydro of areas of community cultural and resource use, and it was incorporated into the selection process of the Final Preferred Route. All of the gathered observations were qualitatively scrutinized to determine community concerns for inclusion in the determination of Culturally Sensitive Sites (CSS) which quantified potential constraints for the Project.

The Site Selection and Environmental Assessment (SSEA) process has been implemented by Manitoba Hydro to avoid, reduce, or mitigate the potential effects in a feasible and practical

manner. This process identifies potential environmental effects and recommends mitigation measures for residual effects.

1.1 Project Overview

The Lake Winnipeg East System Improvement (LWESI) Transmission Project (the Project) is required to provide system upgrades in the region east of Lake Winnipeg. The Project will serve existing and new load growth, and provide firm transformation and adequate voltage support for the communities located in and around the region. It is expected that this new development will meet the electrical requirements for at least the next 20 years.

The Project includes the construction of a new 115 kiloVolt (kV) transmission line from Powerview-Pine Falls, Manitoba to Manigotagan [Pine Falls–Manigotagan 115 kV Transmission Line (Line PQ95)], approximately 75 kilometers (km) north of Powerview-Pine Falls. The project will require the development of a new 115-66 kV transmission station (Manigotagan Corner Station) west of the intersection of Provincial Road (PR) #304 and the Rice River Road, near the Community of Manigotagan. This station will serve as the terminal for the new Line PQ95 as well as the existing 66 kV sub-transmission lines in the Manigotagan area.

This technical report supports the EA Report to meet the licensing requirements of the *Manitoba Environment Act* for a Class II License for this project.

1.2 Report Purpose and Outline

The purpose of this report is to present, through the use of an ATK study, the potential effects on Cultural Resources of participating communities and to provide routing suggestions in the Project Study Area. This document utilizes the ATK that was shared within the Project Study Area (Map 1) to:

- identify and describe the effects on Cultural Resources; and
- explain how ATK was disseminated to other disciplines for integration into their technical reports.

Aboriginal Traditional Knowledge contributed to the selection of a Final Preferred Route (Map 2). Three alternative routes were proposed by Manitoba Hydro; the area of the routes became the focal point for community discussion of the cultural use of lands within the study area. Community discussions regarding certain areas on the natural landscape that intersected these alternative routes highlighted what appeared to be more vulnerable areas than others. The findings were disseminated and incorporated into the biophysical and socio-economic components (e.g., forestry, aquatics, mammals, birds, land and resource use) of the Project by the various disciplines.

Aboriginal Traditional Knowledge was obtained through workshops and interviews that were held at Black River First Nation, the Community of Seymourville, Hollow Water First Nation and the Community of Manigotagan who agreed to participate in the Project-specific Manitoba Hydro ATK process. In addition, ATK studies that had previously been published for Sagkeeng (Fort Alexander First Nation) were reviewed to determine if the area of the proposed transmission line were used by the First Nation for cultural and/or resource purposes (NLHS 2005). Sagkeeng First Nation chose not to participate in the ATK workshops.

The Cultural Resources Technical Report is organized into eight sections as follows:

- **Section 1** provides an overview of the project and the purpose and outline of the project;
- **Section 2** describes the Project Study Area;
- **Section 3** describes the methods for data collection and analysis;
- **Section 4** describes the existing environment in the Project Study Area;
- **Section 5** discusses the evaluation of Alternative Routes, the Final Preferred Route and the Manigotagan Corner Station Site;
- **Section 6** discusses the effects of the Project and mitigation measures;
- **Section 7** offers conclusions; and
- **Section 8** lists the references used in this technical report.
- **Section 9** provides a glossary of terms used in this technical report.

2 PROJECT STUDY AREA

2.1 General Regional Area Description

The Project Study Area includes an area of approximately 2,112 square kilometres and extends from south of the Community of Powerview-Pine Falls, north to the Community of Manigotagan, and from the eastern boundary of Lake Winnipeg, to approximately 10 km east of Provincial Road (PR) #304. The Project Study Area was chosen to be of sufficient size to assess any potential Project effects on biophysical and socio-economic components.

2.2 Project Study Area

The Project Study Area for the Project EA was provided by Manitoba Hydro (Map 1). However, CSS discussion was limited to a 100 m corridor on the centre line of each of the alternative routes and the final preferred route. The right-of-way (ROW) width established for the Project is 60 metres (m) from the centre line however; the rationale for the increased corridor size is because cultural resource areas can be expansive as well as site-specific. In order to fully understand the Cultural Resources of all the participating communities, it was necessary to determine the true extent of Cultural Resources near the alternative routes and the final preferred route in order to recommend mitigative measures.

The Study Area for the participating communities represents a small part of a larger ancient occupancy for First Nations in the region and historic land use for municipal communities on the east side of Lake Winnipeg and along major river systems including the Manigotagan River, Sandy River, Black River, O'Hanly River and the Winnipeg River. The historic past generally defined by European contact has been documented by written records such as fur trade journals, missionary journals and maps and described by ethnographic and oral history studies based on present-day land use activities. An unwritten history is present throughout this area and this is captured by the oral tradition. Treaty and the formation of reserves played a very important part in determining where people would be located. Sagkeeng First Nation is a signatory of Treaty 1 (The Stone Fort Treaty, 1871); Black River and Hollow Water are signatories of Treaty 5 (1875). Treaty 3 (1873) extends into eastern Manitoba and its western and southern borders abut those of Treaties 1 and 5 (Figure 1)

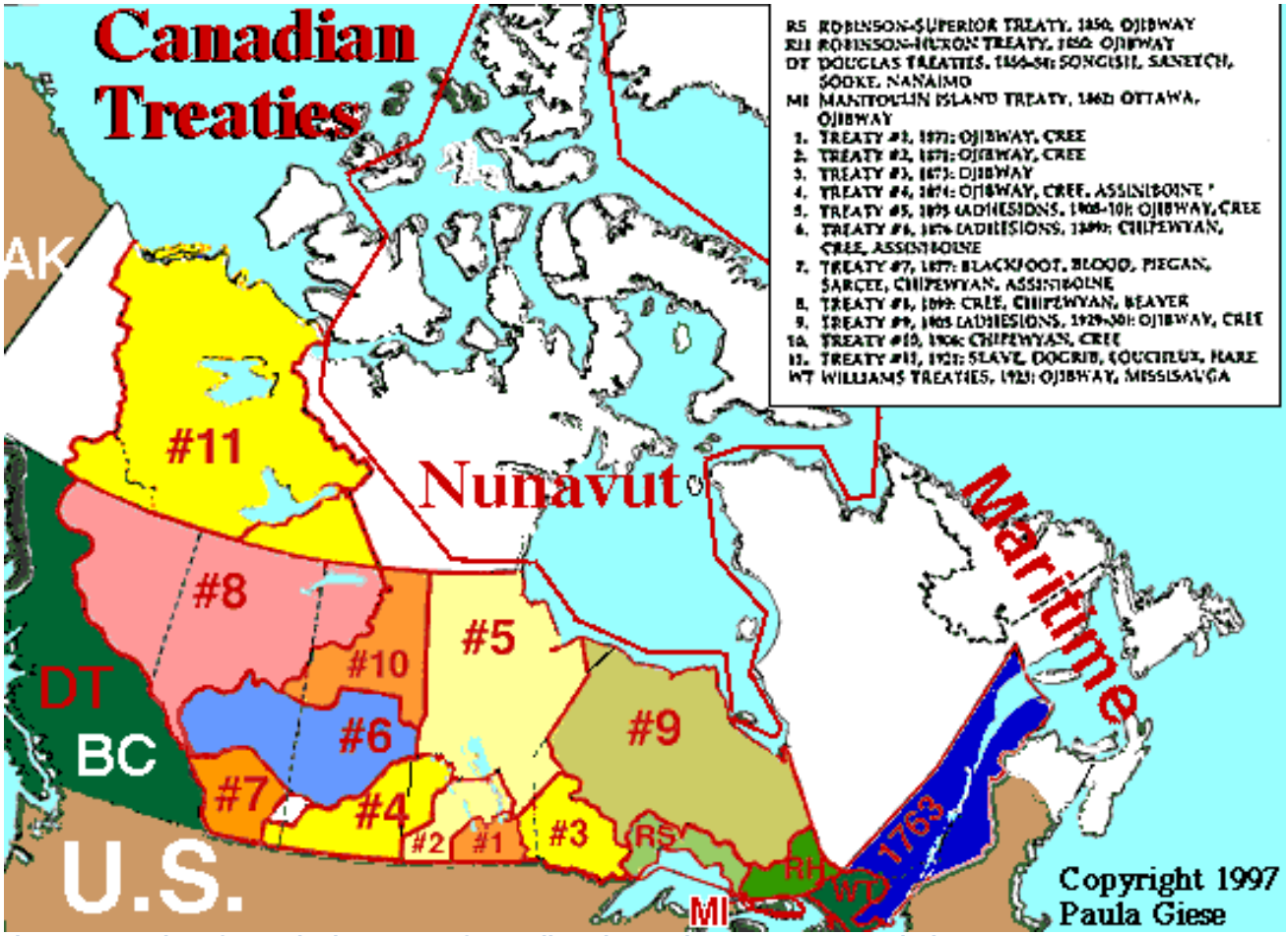

Figure 1. Treaties of Canada. (Courtesy of Canadian First Nations Treaty Map Index).

3 METHODS

3.1 Data Collection and Analysis

For the assessment process the goal was to identify sensitive Cultural Resources within the Project Study Area to determine potential Project effects on them. Community-based study in the form of workshop group interviews and a Key Person Interview along with memory mapping of land use areas provided ATK, which addressed the following specific biophysical and socio-economic headings:

- Fur Bearing and Non-Fur Bearing Animals;
- Vegetation;
- Birds;
- Forestry;
- Aquatics;
- Culture and Heritage Resources; and
- Rocks and Minerals.

In addition, a single Key Person Interview was conducted with a local plant specialist who provided further insight into the cultural use of lands that may be affected by the proposed Project. The results of this interview were incorporated into the ATK information compiled from the community workshops but are displayed independently from the community maps that were generated (Map 7).

Initially, all the biophysical and socio-economic disciplines provided a question list of discipline specific information to be collected. These questions were then reviewed and edited for clarity and if necessary reworded for easy translation into Ojibway based on community need. These were compiled into a standardized set of questions that was used in all the participating community workshops.

By employing interviewing techniques, ATK of people within the Project Study Area was shared that provided insight into Cultural Resources that might be considered culturally sensitive and designated as a CSS.

Interview Method

A semi-directed interview process was used for the Project process for group interviews. This approach is a flexible and relaxed method of interviewing and allows for new questions to be raised as the interview proceeds. In this format there are generally a series of discipline specific

topics that need to be explored. The interviews were digitally recorded to ensure accuracy and proper representation of workshop attendees.

Mapping

Part of the ATK gathering process was to outline knowledge of areas of land use and associated cultural practices that could be impacted by the construction of the Project. ATK about discipline specific topics which include fur bearing and non-fur bearing animals, vegetation, birds, forestry, aquatics, culture and heritage resources and rocks and minerals was recorded on a series of maps, creating a living history of group experience and collective knowledge. The workshop mapping was conducted using a well-established technique that documents a two dimensional (temporal-spatial) record of ATK on 1:50,000 scale National Topographic System (NTS) map sheets.

Digital Recording and Summarization

On completion of the digitally recorded interviews the corresponding files were downloaded to a personal computer utilizing Philips Speech Exec Dictate©. Each workshop interview was summarized as an overview from the digital recordings and hand written workshop notes using Microsoft Word© format.

Two types of summary reports were drafted: a general summary of the visit to each community and an interview overview summary. The former acted as a debriefing update for the ATK study team and Manitoba Hydro; the latter document provided details of ATK and Local Knowledge from each interview that was conducted.

Overview summaries were completed by the ATK study team that included details of the group discussion that linked the map data to the group discussion of disciplinary topics. Aboriginal Traditional Knowledge overviews were developed as a primary ATK source that was disseminated to the disciplines to use as supplementary to the map information and as descriptive information for technical report integration.

3.2 Valued Environmental Component Selection

The EA was focused on VECs, which are aspects of the natural and socio-economic environment that are particularly notable or valued because of their ecological, scientific, resource, socio-economic, cultural, health, aesthetic, or spiritual importance. To be considered as a VEC, a component must have the potential to be adversely affected by project development or have the potential to have an effect on the Project.

A workshop was held with discipline experts to select VECs for the Project which met one or more of the following criteria:

- identified regulatory requirements;
- consultation with regulatory authorities;
- information derived from published and unpublished date sources;
- information and comment received during the engagement of local communities;
- feedback through the Public Engagement Program (PEP); and
- biophysical and heritage assessment field surveys.

A preliminary list of VECs was proposed, and revised throughout the EA process which balanced biophysical and socio-economic components, and represented both potential positive and negative effects of the Project.

The VEC selected for Cultural Resources is summarized below.

The VEC in this technical report is *Cultural Resources,* which reflects the intimate relationship that exists in the region between the participating communities and the landscape that surrounds them. Table 1 summarizes the indicator, parameter and rationale for this VEC. The rationale for the use of Cultural Resources as a VEC is rooted in the Canadian Environmental Assessment Agency (CEA Agency) and UNESCO's recommended standards related to traditional land use studies. The ongoing process of ATK itself is the environmental indicator that defines current and historic land use practices and takes into account the recently shared ATK as a measurable parameter in the form of CSS.

Table 1 Summary of Valued Ecosystem Components for Cultural Resources

Environmental Component	Environmental Indicator	Parameter	Rationale
Cultural Resources	Aboriginal Traditional Knowledge	Culturally Sensitive Sites	CEAA and UNESCO recommended standards

Within the scope of this document, which seeks to outline potential Project effects to ATK, the CEA Agency and UNESCO have provided a baseline for cultural studies that suggests that within our global village are local communities whose history of interaction with the natural environment is timeless. The product of this deep and intimate relationship is a cumulative body of knowledge that has served as the blueprint for survival.

The 1992 Convention on Biological Diversity through UNESCO confirmed the value of traditional knowledge as an integral part of the global knowledge-base. Article 8(j) of the Convention states that:

> *Subject to national legislation, respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and promote their wider application with the approval and involvement of the holders of such knowledge, innovations and practices and encourage the equitable sharing of the benefits arising from the utilization of such knowledge, innovations and practices* (UNESCO 1992).

Since then UNESCO (2003) has issued ethical and methodological guidelines and principles for collecting ATK as the Convention for the Safeguarding of Intangible Cultural Heritage.

4 EXISTING ENVIRONMENT

4.1 Aboriginal Traditional Knowledge

The The First Nation communities of Sagkeeng (Treaty 1), Hollow Water and Black River (Treaty 5) are composed of indigenous people who refer to themselves as Anishinaabeg and who speak Anishinaabemowin. The Northern Affairs communities of Seymourville and Manigotagan are mainly composed of Metis who are closely associated with Anishinaabeg First Nations through kinship, language and history. Metis people are recognized through self-identity, acceptance by the Metis community and by family ties to the historic period.

From a cultural resources perspective, describing the existing environment is challenging because culture is dynamic.. ATK is part of an organic process that can be modified or adapted at any time by the holder depending on circumstances; “old ways” can be incorporated into the narrative of past experience or by purposely continuing with traditional methods. It is not so much the activity derived from ATK but rather it is the act of “doing” that is the essence of community knowledge.

The effects assessment for the ATK component of the Project employed a methodology based on the relationship between humans and the natural environment that they inhabit which is effective when working with Aboriginal and local peoples who historically and currently employ a mixed economy where subsistence and cash economies are intertwined to produce a distinct life way (Usher 1992). A growing body of archived and active ATK studies has contributed significantly to a greater appreciation of the value of the traditional knowledge and local knowledge, especially with regard to the natural environment.

Because ATK is both personal and collective certain individuals may be considered “specialists” while group knowledge may be more general in its application.

The value of the long-term natural environment observations by Aboriginal and other people with close ties to the natural environment is important because it adds depth of knowledge and understanding of the relationship and interaction between humans and their living environment. Furthermore, the Aboriginal and local understanding of the complex web of relationships reminds us that the world is viewed in a holistic manner; what affects one component of the system has the ability to cause change elsewhere.

In addition to an awareness of an alternative philosophical process there has also been political recognition of indigenous rights both nationally and internationally.

4.2 Aboriginal Traditional Knowledge Process

An ATK study was undertaken to provide relevant information on local knowledge and land use that were absent from the Project Study Area data record. Data on ATK was gathered during five workshops that were held in the Communities of Hollow Water, Manigotagan, Black River, and Seymourville. Sagkeeng First Nation chose not to participate at this time; however, recent published studies were available for review. Workshops were guided by a series of questions provided by discipline leads. Information was summarized in a series of map biographies on traditional and current land use practices, and interview summaries, and land use maps. Relevant information was integrated into the technical reports which support the EA Report.

5 EVALUATION OF ALTERNATIVE ROUTES AND INFRASTRUCTURE

5.1 Description and Evaluation of Alternative and Preferred Routes

The overall route selection process for the Line PQ95 component is described in Chapter 6.0 of the main EA report. Evaluation of the alternative routes focused on a predetermined set of evaluation criteria. The evaluation criteria reflected the importance of known factors that are identified from various perspectives including socio-economic, biophysical, cost and technical aspects. These criteria, as well as valuable feedback obtained from the Public Engagement Program (PEP), became the basis from which the Final Preferred Route was identified.

The Manigotagan Corner Station Site was selected on the basis of engineering and technical criteria. The Preferred Station Site was integrated into the PEP and received favorable feedback from local community representatives.

The section below describes the inputs for Line PQ95 Alternative Routes and the Manigotagan Corner Station Site from the Cultural Resources perspective.

5.1.1 Alternative Routes

Each proposed alternative route begins at the Pine Falls Generating Station Switchyard (Switchyard) and terminates at the proposed Manigotagan Corner Station near the Community of Manigotagan. These alternative routes would become the basis of discussion for the communities during the ATK workshops. Once the workshops were completed, the gathered information was qualitatively analyzed along with the map data provided by each of the participating communities and a Key Person Interview (Map 7) to illustrate potential CSS. This information in the form of ATK overview summaries was utilized to evaluate each of the Alternative routes.

In addition, the combined themes map created in 2005 (NLHS) for Public Interest Law Centre was carefully reviewed for indication of culturally sensitive sites. These sites are not represented on the map series located in the appendix of this report.

Culturally Sensitive Sites represent areas of concern within the 60 m ROW of the alternative routes and final preferred route that participating communities noted and defined on 1:50,000 scale NTS maps that might be affected by the proposed construction of a new transmission line. These sites were represented on map sheets as points, lines or polygons to highlight where potential interaction with Cultural Resources may occur.

Regarding the Cultural Resources VEC, it should be noted that Alternative Routes A, B and C are very similar as all three Alternative Routes are within close proximity to one another and Cultural Resources can cover large areas of the landscape. All three routes contain ATK identified areas within a 100 m corridor centered on each Alternative Route.

The following is a high level summary of ATK information which identified Cultural Resources along each of the proposed Alternative Routes and provides a rationale for selection of a Final Preferred Route from a Cultural Resource perspective.

Alternative Routes A, B and C

During the ATK study, similar Cultural Resources were identified that fell within a 100 m corridor centered on each Alternative Route including:

- berry picking areas;
- wood collection for personal use as fuel or craft making materials;
- trapping regions;
- heritage areas of concern;
- moose crossing and calving regions at the Black, Wanipigow, Manigotagan and Sandy rivers;

- medicinal plant harvesting;
- duck and eagle habitat;
- an eagle nesting region along the O'Hanly River from Lake Winnipeg up to the bridge crossing at PR #304; and
- fish spawning areas.

For the proposed Alternative Route A, a total of twenty-seven (27) Cultural Resources were determined to intersect the projected line from the Pine Falls Generating Station Switchyard to the proposed Manigotagan Corner Station Site.

For the proposed Alternative Route B, a total of twenty-nine (29) Cultural Resources were determined to intersect the projected line from the Pine Falls Generating Station Switchyard to the proposed Manigotagan Corner Station Site.

For the proposed Alternative Route C, a total of twenty-six (26) Cultural Resources were determined to intersect the projected line from the Pine Falls Generating Station Switchyard to the proposed Manigotagan Corner Station Site.

Interestingly, one saw mill was identified by the Sagkeeng First Nation ATK along the O'Hanley River. During the early and mid 20th century pulp-cutting camps or small settlements were established west of PR 304. Elders from Sagkeeng remembered living there while their fathers cut wood and their mothers cooked for the camp. This area is well west of the alternative routes. Berry-picking areas were identified along Pine Creek, but again are east of the alternative routes.

Cultural Resources Recommended Alternative Route Option

Based on the review of Cultural Resources, Alternative Route C was chosen as the preferred option, as it intersected fewer identified Cultural Resource valued sites.

Despite the ATK similarities that exist between the Alternative Routes, Route C contains fewer ATK identified areas within a 100 m corridor centered on the Alternative Routes.

ATK gathered during community workshops and that examined for Sagkeeng First Nation provided general knowledge regarding cultural land use patterns to all the study team disciplines.

Regarding the discipline of Heritage Resources, ATK also assisted in identifying areas of potential heritage resources along the proposed alternative routes, which is covered in a separate technical report (Heritage Resources Technical Report, Northern Lights Heritage Services 2012).

Regarding the discipline of Vegetation, ATK also assisted in identifying an area of sensitivity along the Alternative Routes and Final Preferred Route, which is covered in the Vegetation Technical Report (Calyx Consulting 2012).

ATK noted in Sagkeeng First Nation's combined theme mapping indicated general areas of recent and historic knowledge, but the areas were located east of the alternate routes, south-west towards Belair and Stead and south along the Winnipeg River; these sites will not be affected by the Project. .

5.1.2 Manigotagan Corner Station and Final Preferred Route

Regarding CSS that are Cultural Resource based, one site was identified as being situated on the proposed Manigotagan Corner Station Site at the terminus of the chosen Final Preferred Route. This includes:

- a region that is still maintained and utilized for traditional dog sled races. The proposed Manigotagan Corner Station Site will run directly through the trail.

Although not within a 100 m corridor centered on the Manigotagan Corner Station Site and Final Preferred Route, two other Cultural Resources should be noted:

- a training area that is utilized for the dog sleds that falls within approximately 550 m of the proposed Manigotagan Corner Station Site; and

a traditional tipi set up for outdoor youth counselling which falls within approximately 670 m of the proposed Manigotagan Corner Station Site.No ATK from the Sagkeeng First Nation is recorded for this area. The station is within Treaty 5 and the land is used and occupied by Hollow Water First Nation and the Metis of Seymourville and Manigotagan and other local people..

6 EFFECTS AND MITIGATION

6.1 Overview

The effects assessment followed the methods outlined in Chapter 3.0 of the EA Report. Table 3.3 provides a summary of the effects assessment.

Based on the site selection process outlined in Chapter 6.0 of the EA Report, a Final Preferred Route was selected based on route comparison using several criteria, including Cultural Resources. The Final Preferred Route is a combination of Routes A, B and C. The Manigotagan Corner Station Site was selected on the basis of engineering and technical criteria. The following effects assessment section was completed on the Preferred Route.

6.2 Effects Assessment

Evaluation of the Final Preferred Route

Once Manitoba Hydro compiled the results of disciplinary studies of the three Alternative Routes, a Final Preferred Route was proposed (Map 1). Review of the results from ATK study was applied to the Final Preferred Route to determine Cultural Resources. This process involved selecting all Culture Resource points, lines or polygons that fell within a 100 m corridor centered on the ROW of the Final Preferred Route for each community that participated which includes: Hollow Water First Nation, Black River First Nation, Manigotagan and Seymourville as well as the ATK Key Person Interview (Maps 3 through 7). Recent ATK from Sagkeeng First Nation was also reviewed but not mapped.

CSS that relate more specifically to the Heritage Resources VEC were identified from the ATK study and the information was disseminated and shared with the Heritage Resources discipline for specific VEC analysis, necessary fieldwork studies. This is covered in the Heritage Resources Technical Report (Northern Lights Heritage Services Inc. 2012).

Regarding CSS, only one fell within 100 m of the Final Preferred Route. The site is located at the proposed Manigotagan Corner Station Site. This region is a winter track that is still maintained and utilized for traditional dog sled races. A portion of this race track would run directly through the proposed Manigotagan Corner Station Site.

6.3 Proposed Mitigation Measures and Residual Effects

The first proposed mitigation measure is avoidance. This would require a repositioning of the Manigotagan Corner Station Site to accommodate the portion of track that would be affected by the proposed placement of the station.

The second more feasible mitigation measure would be to work with the communities that utilize the track to identify the exact portion of track that would be affected and assist in creating a diverted course around the proposed Manigotagan Corner Station Site.

During the construction phase of the Project, mitigative measures will be implemented to ensure that this site is not disturbed by construction activities as well as ensuring that full access to this site is not disrupted.

Relocation of the traditional dog sled track will allow the continued use of this area for this important cultural practice. Therefore the residual effects of the project on Cultural Resources should be negligible (Table 2).

Table 2 Potential Effects, Mitigation Measures, Significance of Residual Effect for Cultural Heritage

Potential Effect	Project Phase	Key Mitigation Measures	Residual Effect	Significance Criteria
Interference with the dog sled track	Construction and operation	Reroute this section of dog sled track	None	Magnitude: None Geographic Extent: None Duration: None Frequency: None Reversibility: None Likelihood of Occurrence: None

6.4 Interactions with Other Projects

Table 3 summarizes the ongoing, future and potential projects that have the potential to interact with the Project. The potential interactions of the Project with other projects in close proximity will not have any combined effect on Cultural Resources.

6.5 Monitoring and Follow-Up

With regards to monitoring and follow up of the one CSS, Manitoba Hydro should undertake to work with the communities to monitor relocation of the affected portion of the dog sled track and follow up once the project is in operation.

Table 3 Other Projects in the Region

Sector	Project	Description	Location	Status	Timelines
Mining	San Gold Mine Expansion	• Planned expansion of San Gold's Gold Mine and tailings pond in Bissett, northeast of Project Study Area • Production is expected to double	Northeast of Project Study Area	Ongoing	
	Mineral Exploration	• The north end of the Project Study area overlaps with many mining claims and exploration activities (e.g. drill holes) • Mining claims are held by Golden Pocket Resources, DLW Gold Ventures Inc., Canada Bay Resources Ltd., and San Gold Corp.	North of Project Study Area	Ongoing/ Planned	
	Quarry Development	• There are 83 quarry leases within the Project Study Area, several in close proximity to the Project • Lease holders include private companies, as well as Manitoba Infrastructure and Transportation (MIT), and the East Side Road Authority • Development and expansion of existing and new quarries is likely, particularly for projects such as the East Side Road	Within the Project Study Area	Ongoing/ Planned	
Forestry	Timber Resource Harvesting	• Request for Proposal (RFP) to for timber resource harvesting in FML01 by Manitoba Conservation and Water Stewardship (Manitoba Conservation and Water Stewardship [MCWS]) • A potential respondent to the RFP would be a community and forest industry joint venture being spearheaded by the Manitoba Model Forest (Winnipeg River Integrated Wood and Biomass Project) • This would result in an estimated 400 to 450 direct jobs, up to 400,000 m^3 softwood/year and 200,000 m^3 hardwood/year	Within the Project Study Area	Planned	Within 1 – 3 years
Wildlife	Closure of Licensed and Rights Based Moose Hunting	• As of January 26, 2012, all licensed hunting in Game Hunting Area (GHA) 26 is closed • In addition, moose protection zones in areas of heavy moose concentration areas along roads and rivers are closed to hunting for rights-based peoples • Proposed decommissioning of roads by MCWS	GHA 26 within the Project Study Area	Ongoing/ Planned	2012

Table 3 Other Projects in the Region (continued)

Sector	Project	Description	Location	Status	Timelines
Transportation & Communication Infrastructure	East Side Road Authority	• Construction of a 156 km all season gravel road along the east side of Lake Winnipeg from Provincial Road #304 east of Hollow Water to Berens River First Nation	North of Project Study Area	Ongoing	2010 - 2014
	Fibre Optic Cable	• The San Gold Mine in Bissett, and several community members have expressed an interest in fibre optic cable service in the area	Within and northeast of Project Study Area	Potential	Unknown
Cottage Development	Black River First Nation Cottage Development Initiative	• Expansion of cottage development within the Black River First Nations territory in conjunction with MCWS • Phase I of the project is underway with road development underway for servicing of 50 cottage lots • Future phases are planned for an additional 550 additional cottage lots	Black River First Nation Reserve at the west of the Project Study Area	Ongoing/ Planned	Phase I: underway (year 1 of 5) Phase II:– 5 – 10 years
	Hollow Water First Nation Cottage Development Plans	• Considering cottage development projects with MCWS	Hollow Water First Nation Reserve at the north end of the Project Study Area	Potential	Unknown
	Sagkeeng First Nation Cottage Development Plans	• Considering cottage development projects with MCWS	Sagkeeng First Nation Reserve at the southwest end of the Project Study Area	Potential	Unknown

7 CONCLUSIONS

The team-led ATK interviews, whether group or Key Person Interview, provided an understanding of how the lands within the Project Study Area are used locally. The qualitative review of shared ATK information identified areas of cultural concern and provided insight into the potential effects that could result from the development of the LWESI Project. Sagkeeng First Nation chose not to participate in the workshops; however, recent public documents concerning ATK for Sagkeeng were reviewed and included as text.

Elements of Cultural Resource use were incorporated into a multi-disciplinary Alternative Route Comparison chart which assisted Manitoba Hydro in the determination of a Final Preferred Route.

Only one area of Cultural Resource concern was identified along the Final Preferred Route and the Manigotagan Corner Station Site. From this identified concern an environmental effect was identified and mitigation measures were recommended.

The results of the ATK study indicate that the participating communities have long and intimate cultural ties with the land and seek to ensure that future generations will enjoy a better life. ATK plays a vital role in Aboriginal and non-Aboriginal local cultures as they view the land on which they live as all-encompassing, where relationships with the land reinforce and contribute to the experience of their culture.

8 REFERENCES

8.1 Literature Cited

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9 GLOSSARY

Aboriginal Traditional Knowledge (ATK)

Knowledge, innovations and practices of indigenous and local communities around the world which is developed from experience gained over centuries and adapted to the local culture and environment. ATK is transmitted orally from generation to generation, tends to be collectively owned and takes the form of stories, songs, folklore, proverbs, cultural values, beliefs, rituals, community laws, local language, and agricultural practices

Anishinaabeg

The plural form of *Anishinaabe* which is the autonym used by Ojibway peoples.

Anishinaabemowin

The indigenous language of the Ojibway

Cultural Resources

Cultural properties that are unique and nonrenewable resources and can include physical features, both natural and manmade, associated with human activity as sites, structures, and objects possessing significance, either individually or as groupings in history, architecture, archaeology or cultural development.

Culturally Sensitive Site (CSS)

Areas of concern related to Cultural Resources noted by participating communities that fall within 60 metres (30 metres on either side of the centre line) of the established Project right-of-way of the Alternative Routes and Final Preferred Route that might be affected by the proposed construction of a new transmission line.

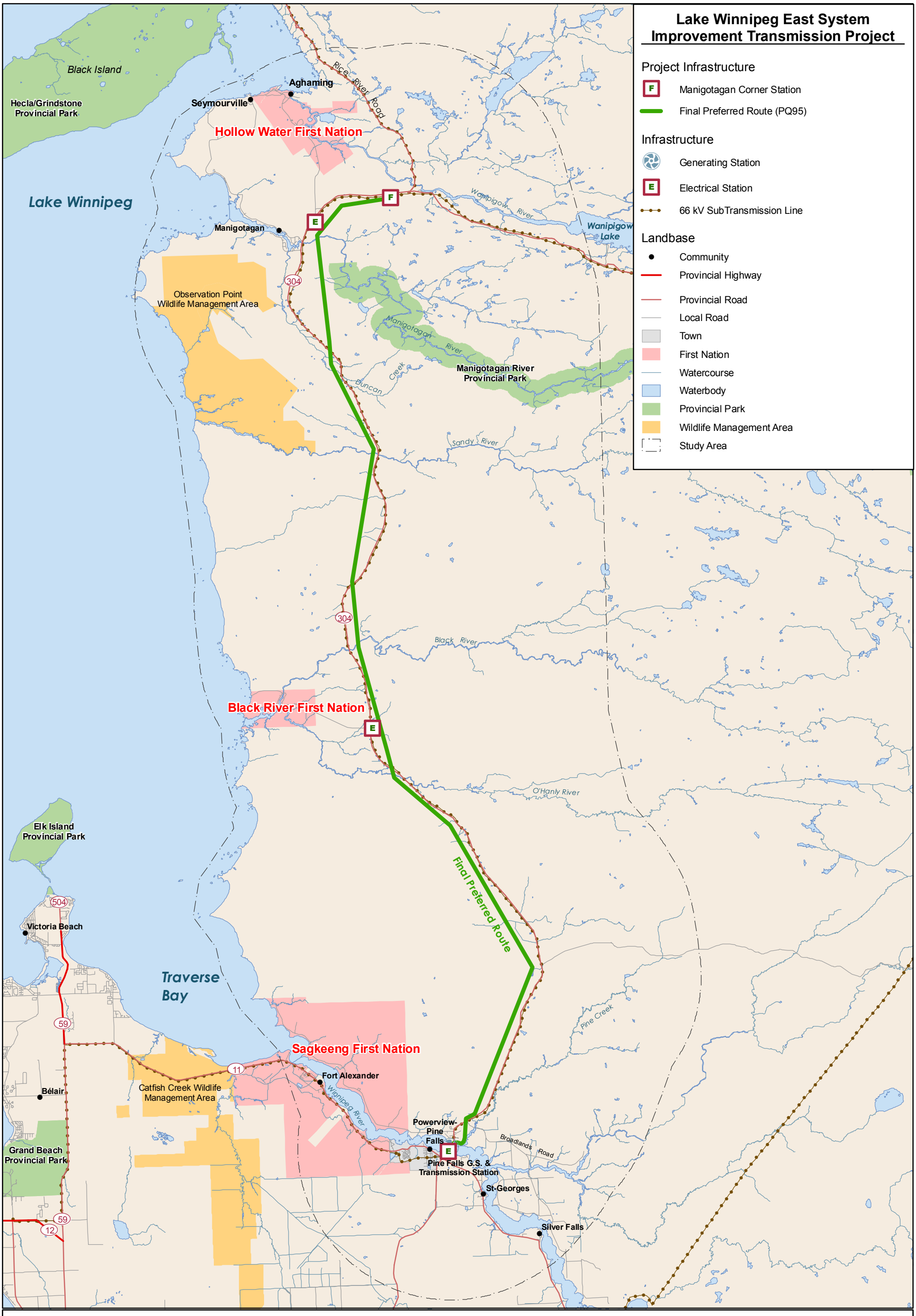
Key Person Interview

A Key Person Interview is a qualitative in-depth interview with an individual who has specialized knowledge within a community. A community expert, with their particular knowledge and understanding, can provide insight on the nature of potential problems and can offer recommendations for solutions.

Valued Environmental Component (VEC)

Aspects of the natural and socio-economic environment that are particularly notable or valued because of their ecological, scientific, resource, socio-economic, cultural, health, aesthetic, or spiritual importance that have the potential to be adversely affected by project development or have the potential to have an effect on the Project.

Lake Winnipeg East System Improvement Transmission Project



Coordinate System: UTM Zone 14N NAD83
Data Source: MB Hydro, ProvMB, NRCAN
Date Created: November 23, 2012

0 6 12 Kilometres
0 4 8 Miles
1:225,000

N

Project Study Area

Map 1

Lake Winnipeg East System Improvement Transmission Project

Project Infrastructure

- Manigotagan Corner Station
- Alternative Route A
- Alternative Route B
- Alternative Route C

Infrastructure

- Generating Station
- Electrical Station
- 66 kV SubTransmission Line

Landbase

- Community
- Provincial Highway
- Provincial Road
- Local Road
- Town
- First Nation
- Watercourse
- Waterbody
- Provincial Park
- Wildlife Management Area
- Study Area

Black Island
Hecla/Grindstone Provincial Park
Aghaming
Seymourville
Hollow Water First Nation
Rice River Road
Lake Winnipeg
Wanipigow River
Wanipigow Lake
Manigotagan
304
Observation Point Wildlife Management Area
Manigotagan River
Manigotagan River Provincial Park
Buncan Creek
Alternative Route C
Alternative Route B
Sandy River
Black River
Black River First Nation
Alternative Route A
O'Hanly River
Elk Island Provincial Park
504
Victoria Beach
Traverse Bay
59
Sagkeeng First Nation
11
Fort Alexander
Bélair
Catfish Creek Wildlife Management Area
Winnipeg River
Pine Creek
Powerview-Pine Falls
Broadlands Road
Pine Falls G.S. & Transmission Station
St-Georges
Silver Falls
Grand Beach Provincial Park
12

Coordinate System: UTM Zone 14N NAD83
Data Source: MB Hydro, ProvMB, NRCAN
Date Created: November 23, 2012

0 6 12 Kilometres
0 4 8 Miles
1:225,000

N

Alternative Routes

Map 2

Lake Winnipeg East System Improvement Transmission Project

Project Infrastructure
- Manigotagan Corner Station
- Final Preferred Route (PQ95)

Infrastructure
- Generating Station
- Electrical Station
- 66 kV SubTransmission Line

Aboriginal Traditional Knowledge
- Aquatics
- Birds and Mammal
- Culture and Heritage Resources
- Forestry (Timber) / Vegetation

Landbase
- Community
- Provincial Highway
- Provincial Road
- Local Road
- Town
- First Nation
- Watercourse
- Waterbody
- Provincial Park
- Wildlife Management Area
- Study Area

Black Island
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Observation Point Wildlife Management Area
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Black River First Nation
O'Hanly River
Elk Island Provincial Park
504
Victoria Beach
Traverse Bay
59
Sagkeeng First Nation
11
Fort Alexander
Bélair
Catfish Creek Wildlife Management Area
Winnipeg River
Powerview-Pine Falls
Pine Falls G.S. & Transmission Station
Broadlands Road
Pine Creek
St-Georges
Silver Falls
Grand Beach Provincial Park
12

Coordinate System: UTM Zone 14N NAD83
Data Source: MB Hydro, ProvMB, NRCAN, NLHS, Hollow Water FN
Date Created: November 23, 2012

0 6 12 Kilometres
0 4 8 Miles
1:225,000

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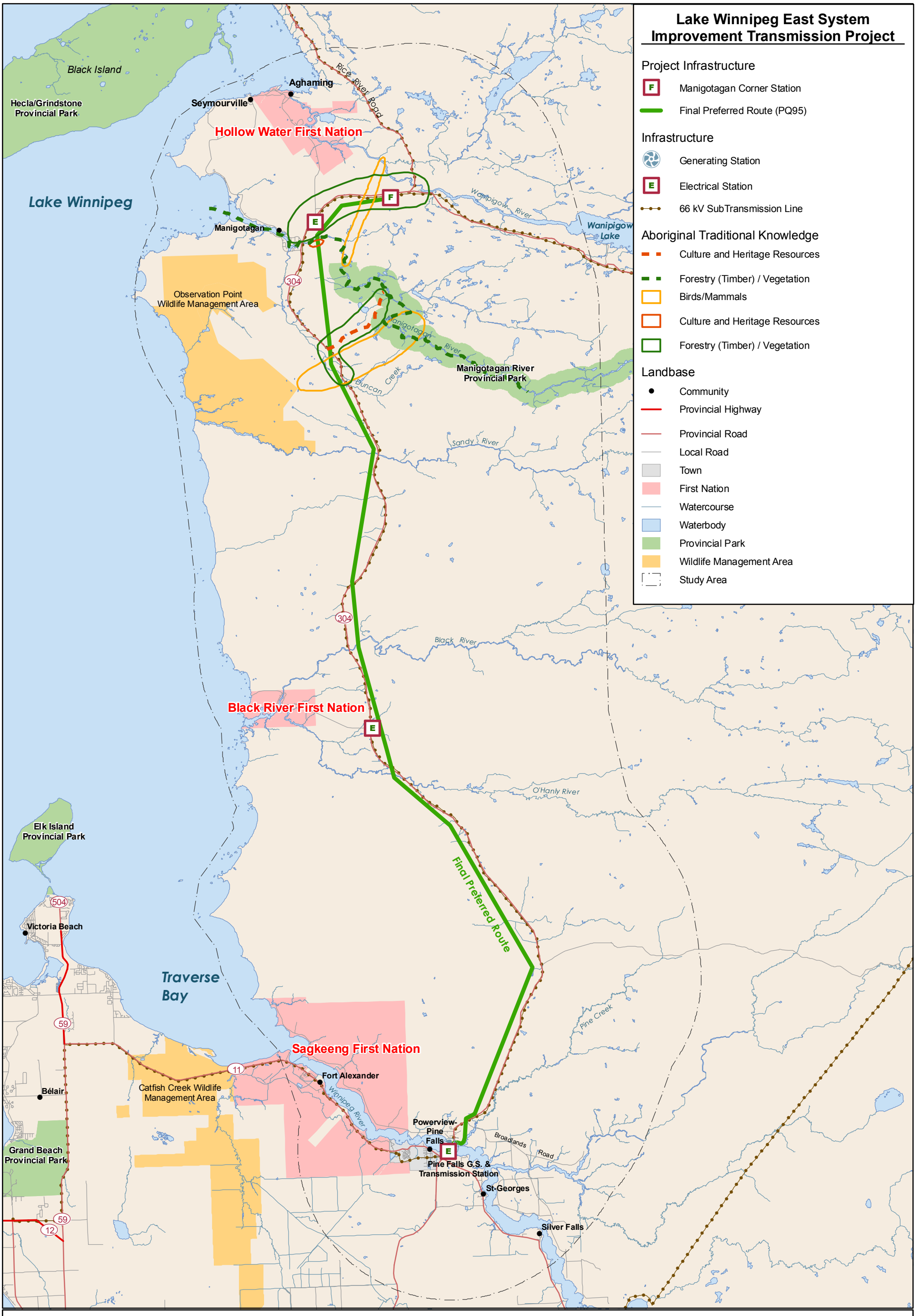
Aboriginal Traditional Knowledge
Hollow Water First Nation

Map 3


Lake Winnipeg East System Improvement Transmission Project
Project Infrastructure
Manigotagan Corner Station
Final Preferred Route (PQ95)
Infrastructure
Generating Station
Electrical Station
66 kV SubTransmission Line
Aboriginal Traditional Knowledge
Culture and Heritage Resources
Forestry (Timber) / Vegetation
Birds/Mammals
Culture and Heritage Resources
Forestry (Timber) / Vegetation
Landbase
Community
Provincial Highway
Provincial Road
Local Road
Town
First Nation
Watercourse
Waterbody
Provincial Park
Wildlife Management Area
Study Area
Black Island
Hecla/Grindstone Provincial Park
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Wanipigow Lake
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Manigotagan River
Manigotagan River Provincial Park
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Black River
Black River First Nation
O'Hanly River
Final Preferred Route
Elk Island Provincial Park
504
Victoria Beach
Traverse Bay
59
Pine Creek
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Bélair
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Powerview-Pine Falls
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Pine Falls G.S. & Transmission Station
St-Georges
Silver Falls
Grand Beach Provincial Park
12
Coordinate System: UTM Zone 14N NAD83
Data Source: MB Hydro, ProvMB, NRCAN, NLHS, Manigotagan Community Members
Date Created: November 23, 2012
0 6 12 Kilometres
0 4 1:225,000 8 Miles
N
Aboriginal Traditional Knowledge
Manigotagan
Map 4

Lake Winnipeg East System Improvement Transmission Project

Project Infrastructure
- Manigotagan Corner Station
- Final Preferred Route (PQ95)

Infrastructure
- Generating Station
- Electrical Station
- 66 kV SubTransmission Line

Aboriginal Traditional Knowledge
- Birds and Mammals
- Forestry (Timber) / Vegetation

Landbase
- Community
- Provincial Highway
- Provincial Road
- Local Road
- Town
- First Nation
- Watercourse
- Waterbody
- Provincial Park
- Wildlife Management Area
- Study Area

Black Island
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Manigotagan
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Manigotagan River Provincial Park
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Black River
Black River First Nation
O'Hanly River
Elk Island Provincial Park
504
Victoria Beach
Traverse Bay
59
Sagkeeng First Nation
11
Fort Alexander
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Catfish Creek Wildlife Management Area
Winnipeg River
Powerview-Pine Falls
Pine Falls G.S. & Transmission Station
Broadlands Road
Pine Creek
St-Georges
Silver Falls
Grand Beach Provincial Park
12

Coordinate System: UTM Zone 14N NAD83
Data Source: MB Hydro, ProvMB, NRCAN, NLHS, Black River FN
Date Created: November 23, 2012

0 6 12 Kilometres
0 4 1:225,000 8 Miles

N

Aboriginal Traditional Knowledge
Black River First Nation

Map 5

Lake Winnipeg East System Improvement Transmission Project

Project Infrastructure
- Manigotagan Corner Station
- Final Preferred Route (PQ95)

Infrastructure
- Generating Station
- Electrical Station
- 66 kV SubTransmission Line

Aboriginal Traditional Knowledge
- Forestry (Timber) / Vegetation
- Birds and Mammals
- Culture and Heritage Resources
- Forestry (Timber) / Vegetation

Landbase
- Community
- Provincial Highway
- Provincial Road
- Local Road
- Town
- First Nation
- Watercourse
- Waterbody
- Provincial Park
- Wildlife Management Area
- Study Area

Black Island
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Hollow Water First Nation
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Wanipigow River
Wanipigow Lake
Manigotagan River
Manigotagan River Provincial Park
Duncan Creek
Sandy River
304
Black River First Nation
BlackRiver
O'Hanly River
Final Preferred Route
Elk Island Provincial Park
504
Victoria Beach
Traverse Bay
59
Sagkeeng First Nation
11
Fort Alexander
Winnipeg River
Bélair
Catfish Creek Wildlife Management Area
Grand Beach Provincial Park
12
Powerview-Pine Falls
Pine Falls G.S. & Transmission Station
Broadlands Road
St-Georges
Silver Falls
Pine Creek
E
F

Coordinate System: UTM Zone 14N NAD83
Data Source: MB Hydro, ProvMB, NRCAN, NLHS, Manigotagan and Seymourville Community Members
Date Created: November 23, 2012
0 6 12 Kilometres
0 4 1:225,000 8 Miles
N

Aboriginal Traditional Knowledge Seymourville/Manigotagan

Map 6

Lake Winnipeg East System Improvement Transmission Project

Project Infrastructure
- Manigotagan Corner Station
- Final Preferred Route (PQ95)

Infrastructure
- Generating Station
- Electrical Station
- 66 kV SubTransmission Line

Sensitive Site
- Area of Concern

Landbase
- Community
- Provincial Highway
- Provincial Road
- Local Road
- Town
- First Nation
- Watercourse
- Waterbody
- Provincial Park
- Wildlife Management Area
- Study Area

Black Island
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Data Source: MB Hydro, ProvMB, NRCAN, NLHS
Date Created: November 23, 2012

0 6 12 Kilometres
0 4 8 Miles
1:225,000

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Aboriginal Traditional Knowledge Key Person Interview

Map 7