Keeyask Generation Project

Resource Use Monitoring Plan

Keeyask Hydropower Limited Partnership

Manitoba Conservation and Water Stewardship Client File 5550.00
Manitoba Environment Act Licence No. 3107

June 2015

KEEYASK GENERATION PROJECT RESOURCE USE MONITORING PLAN

Prepared by

Keeyask Hydropower Limited Partnership

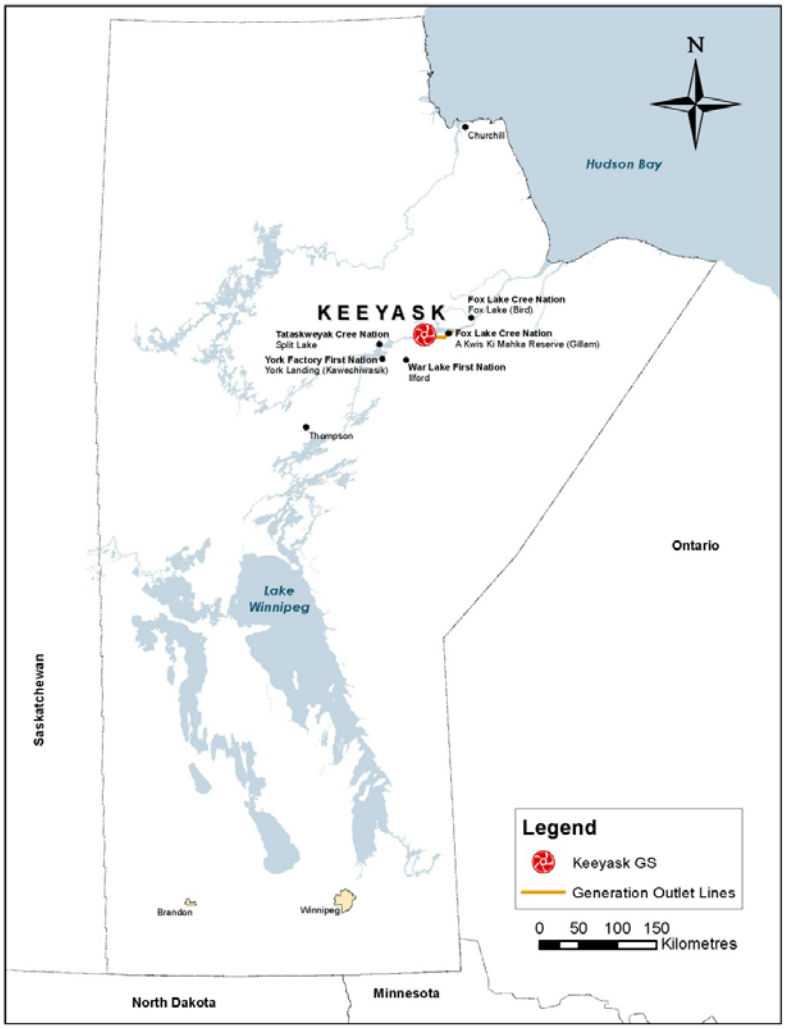
Winnipeg, Manitoba

June 2015

PREFACE

KEEYASK ENVIRONMENTAL PROTECTION PROGRAM

An Environmental Protection Program (the Program) has been developed to mitigate, manage and monitor potential environmental effects described in the *Keeyask Generation Project: Response to EIS Guidelines* during the construction and operation phases of the Keeyask Generation Project (the Project) shown on Map 1. The Program includes a collection of plans grouped in the following categories: Environmental Protection Plans, Environmental Management Plans, and Environmental Monitoring Plans.



Map 1: Location of Keeyask Generation Project

Figure 1 lists all of the plans included in the Program. It also demonstrates how the Program will be managed. The Keeyask Hydropower Limited Partnership (the Partnership) has delegated authority to Manitoba Hydro to manage construction and operation of the Project including

implementation of the Program. The organizational structure of the Partnership for this aspect of the Project includes a Monitoring Advisory Committee (MAC), which includes participants from each of the Keeyask Cree Nations (KCNs) and Manitoba Hydro. Manitoba Hydro will be guided on the implementation of the Program by the MAC, the Partnership Board of Directors and ongoing discussion with Regulators.

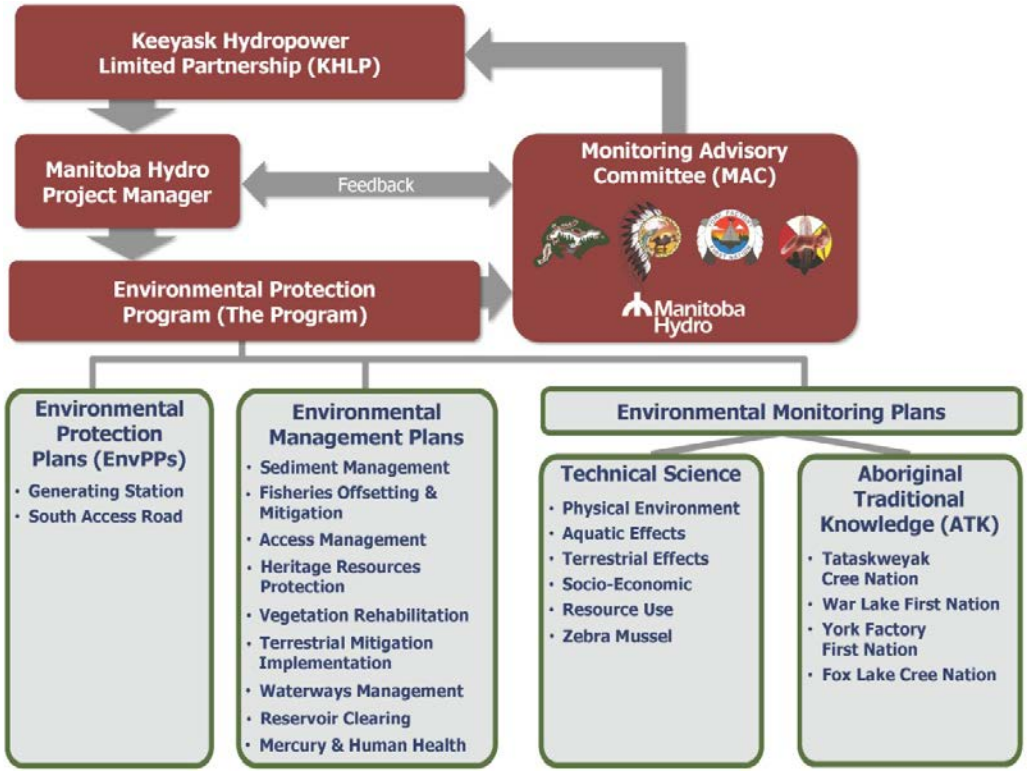


Figure 1: Environmental Protection Program

The Environmental Protection Plans (EnvPPs) provide detailed, site-specific environmental protection measures to be implemented by the contractors and construction staff to minimize environmental effects from construction of the generating station and south access road. They are designed for use as reference documents providing the best management practices to meet or exceed regulatory requirements. EnvPPs are organized by construction activity, highlighting measures to reduce the impact of a specific work activity (e.g., tree clearing or material placement in water). Contractors' compliance with the EnvPPs is a contractual obligation. Under Manitoba Hydro's construction site management, a Site Environmental Lead will be responsible for monitoring compliance and determining when corrective actions are required.

The Environmental Management Plans focus on minimizing effects on specific environmental parameters. They outline specific actions that must be taken during construction and in some cases into the operational phase to mitigate Project effects. The management plans include monitoring to determine success of the actions taken and to determine other actions that need to be undertaken (adaptive management). Implementation of these plans will involve Manitoba

Hydro's staff, the KCNs, specialized consultants and contractors under the direction of the Project Manager.

The Environmental Monitoring Plans are designed to measure the actual effects of the Project, test predictions or identify unanticipated effects. During the course of the environmental assessment, numerous requirements for monitoring were identified. There will be both technical science monitoring and Aboriginal Traditional Knowledge (ATK) monitoring undertaken. The technical science monitoring will be conducted by Manitoba Hydro and specialized consultants contracted by Manitoba Hydro, who will in turn hire members of the KCNs to work with them to fulfil the monitoring activities. Manitoba Hydro will also have contracts with each of the KCNs to undertake ATK monitoring of the project.

The activities that occur and the results generated from the Environmental Protection Program will be discussed at MAC meetings. The MAC is an advisory committee to the Partnership Board of Directors and will review outcomes of the programs and, if appropriate provide advice and recommendations to the Partnership on additional monitoring or alternative mitigation measures that may be required. The MAC will provide a forum for collaboration among all partners. On behalf of the Partnership, the MAC will also ensure that the outcomes of the Environmental Protection Program are communicated more broadly on an annual basis to Members of the KCNs, regulators and the general public.

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1.0 INTRODUCTION

This document describes the Resource Use Monitoring Plan (RUMP) for the Keeyask Generation Project (the Project), a 695-megawatt (MW) hydroelectric generating station at Gull (Keeyask) Rapids on the lower Nelson River, immediately upstream of Stephens Lake. The Project will be located entirely within the Split Lake Resource Management Area. The Project is approximately 725 kilometres (km) northeast of Winnipeg, 35 km upstream of the existing Kettle Generating Station, where Gull Lake flows into Stephens Lake, 60 km east of the community of Split Lake, 180 km east-northeast of Thompson and 30 km west of Gillam (Map 1-1).

Technical information for the resource use environment, including a description of the environmental setting, effects and mitigation, and a description of proposed monitoring and follow-up programs is provided in the Resource Use section of the *Keeyask Generation Project: Response to EIS Guidelines and the Socio-Economic Environment, Resource Use and Heritage Supporting Volume* (SE SV).

Monitoring that will inform the resource use monitoring requirements is conducted through other monitoring plans. For example, resource harvest depends on biophysical resources (fish, birds, plants and mammals from the aquatic and terrestrial environments) and access to resource use locations (Waterways Management Program outcomes will be reported through the Socio-Economic Monitoring Plan). Aboriginal Traditional Knowledge (ATK) monitoring plans undertaken by the Keeyask Cree Nations (KCNs) will provide community-specific monitoring results.

With respect to monitoring the domestic harvest and consumption of resources, Manitoba Hydro has entered into separate Adverse Effects Agreements (AEAs) with each of Tataskweyak Cree Nation, War Lake First Nation, Fox Lake Cree Nation and York Factory First Nation. These agreements, signed in 2009, describe a range of Offsetting Programs which were negotiated based on each community's perspectives about the types of programming required to address anticipated Project effects. As per the provisions of these agreements, each of the First Nations will take responsibility for the management, implementation and operation of their own community's Offsetting Programs. Ongoing evaluation of the success of offsetting programs, based on their intended purpose, will take place at the community level throughout Project implementation. Each community will develop their own approach to evaluate the effectiveness of their offsetting programs and, based on their own values and priorities, will measure whether the program(s) continue to address their concerns about Project-related effects. If required, provisions in the AEAs allow communities the opportunity to modify offsetting programs or to reallocate annual program funding to more appropriately address Project effects as they are experienced.

The Socio-Economic Monitoring Plan describes mitigation and monitoring related to the safe consumption of wild foods with respect to mercury, including periodic consumption surveys and

provisions for evaluating the effectiveness of communication products intended to assist consumers with making informed and healthy consumption decisions.

Given the overlap with other monitoring being conducted through other plans, Section 1.1 describes the scope and rationale for activities included and excluded from the Resource Use Monitoring Plan.

1.1 OBJECTIVES AND RATIONALE

There are five monitoring objectives outlined in this section as follows:

- To determine if the workforce is hunting, fishing or gathering within or outside the Project site and to an extent that would adversely affect domestic resource use;
- To document any changes to moose and caribou license demand, harvest patterns, and, if feasible, quantify harvests;
- To document any changes to licensed fish harvest patterns and fishing intensity;
- To summarize resource use access requests and collect voluntary harvest information from authorized resource harvesters; and
- To consolidate information generated from other monitoring programs (e.g., physical, aquatic, terrestrial, socio-economic and ATK) including the RUMP, to understand effects of Project construction on resource use and resource users.

Rationale for each objective is described below. Detailed methods to achieve each objective are provided in Section 2. Reporting is described in Section 3.

While there are provisions in the Construction Access Management Plan (AMP) to prevent unauthorized road access to the Project area and to restrict the potential for construction workforce harvests, KCNs have raised concerns with respect to the potential for the workforce to harvest resources (both on the Project site[1] and off-site) which could affect their domestic use of resources.

Therefore, monitoring **objective 1 is**: **to determine if the construction workforce is hunting, fishing or gathering resources within or outside the Project site and to an extent that would adversely affect domestic resource use.**

Domestic fishing and domestic hunting and gathering however, will not specifically be monitored within this RUMP. Domestic use will be considered under community-specific ATK monitoring activities and sustainability plans. For example, the Cree Nation Partners' (CNP) Moose Harvest Sustainability Plan contains monitoring to ensure resource sustainability is achieved. Manitoba

[1] For the purposes of this RUMP, the Project site is defined as areas within the gates where principle and supporting infrastructure will be built. Off-site areas are defined as local areas outside the gated access areas of the Project.

Conservation and Water Stewardship (MCWS) will continue to manage the wildlife and fish resources through provincial harvest restrictions and through resource management board ('Board') planning processes with the KCNs.

Given these provisions, no resource use monitoring is proposed in relation to domestic harvesting. Nonetheless, results of the KCN-led ATK monitoring programs and ATK provided by Aboriginal workforce personnel, as available, will be used as a source of information to inform monitoring activities within this RUMP (*e.g.,* reports of additional licenced harvests and/or information on non-local harvests).

The KCNs have expressed concern about how the Project will affect mammal populations and have suggested that effects may be greater than predicted in the EIS, particularly, due to caribou and moose harvest. They have noted that increased access may increase harvest, including that by non-KCN individuals, and that all harvesting needs to be sustainable. Given the importance of these species to KCNs culture and country foods supply, and some level of uncertainty regarding the level of effects, long-term monitoring will be carried out for these species. While the KCNs will be conducting their own ATK monitoring, portions of the harvest in the region are attributed to licensed (non-Aboriginal) harvest.

In light of the potential for increased licensed harvest (see Resource Use Section 1.7 of the SE SV), monitoring **objective 2 is: to document any changes to moose and caribou licence demand, harvest patterns and, if feasible, quantify harvest data.**

KCNs also have expressed similar concerns with respect to licensed fish harvest having the potential to affect domestic harvest. In response to these concerns and in light of the potential for increased licensed harvest, monitoring **objective 3 is**: t**o document any changes to licensed fish harvest patterns and fishing intensity.**

In order to provide more complete understanding of Project site access and use, monitoring **objective 4 is**: t**o summarize resource harvest access requests and collect voluntary harvest information from authorized[2] resource harvesters.**

Monitoring pertaining to resource use will be conducted as part of several monitoring plans and published in numerous sources. This highlights the need for consolidating results in a synthesis report. In response to this need, monitoring **objective 5 is**: **to consolidate information generated from other monitoring plans (e.g., aquatic, terrestrial, socio-economic and ATK) including the RUMP, to understand effects of Project construction on resource use and resource users.**

[2] See the Construction AMP for the process of authorizing access to the Project site for resource harvesting.

2.0 MONITORING ACTIVITIES AND TIMELINES

2.1 METHODS

Objective 1: To determine if the workforce is hunting, fishing or gathering resources within or outside the Project site and to an extent that would adversely affect domestic resource use.

Regular construction phase monitoring will document resource harvest conducted by the Project workforce. No hunting within the Project site is expected to occur due to Construction AMP restrictions; however, a survey will be developed to document fishing, hunting, and plant gathering activities that may be conducted by the workforce. By including hunting and gathering activities in the survey, the nature of harvest or the absence of harvest within the Project site can be explicitly recorded and harvest off-site can be documented.

Sampling Procedures

Chapter 8 of the *Response to EIS Guidelines* (section 8.2.5) indicated that the survey would be conducted at the access road gates. This approach has been reconsidered because there is potential for redundant administration of the survey (i.e., the same workers may leave and return to the site frequently). As an alternative, a survey will be conducted with workers regularly during the construction phase to determine if the workforce is harvesting local resources.

The survey is expected to be conducted in camp common areas by random polling (i.e., during mealtimes). Support from the General Contractors will be requested to assure workers that the survey is voluntary, anonymous, and the results will be aggregated to protect personal privacy. To gain an understanding of harvests, the survey is expected to achieve, at minimum, a random 10% workforce sample during years one and two. This would involve surveying at least 40 - 45 workforce members in each of years one and two (see Project Description Supporting Volume [PD SV], Figure 3-3 for quarterly peak estimated workforce requirements). In construction year one, the survey will be administered in mid- to late-November to understand whether the workforce had participated in moose hunting and/or autumn fishing (typically conducted earlier in the fall). In year two, the same survey (Appendix A) will be conducted using the same methods and sample sizes but will be conducted in late June. The timing of the June survey administration is designed to capture any participation in spring fishing and/or any caribou hunting over the previous winter. After each survey is completed and analyzed, workforce harvest levels will be categorized into one of two scenarios: *Scenario 1: negligible workforce harvests*; or *Scenario 2: actively harvesting workforce*.

Under *Scenario 1: negligible resource harvests*, the next scheduled survey would occur in November of year three when peak workforce rates of approximately 1,600 have been realized and thereafter the survey would be conducted every two years, once per year.

The threshold at which *Scenario 2: actively harvesting workforce,* would be triggered, while difficult to define scientifically, would involve affirming at least one of the following conditions during years one or two:

- A proportion (i.e., >=5%) of the surveyed workforce is harvesting on and/or off-site, at minimum, on a semi-regular basis (i.e., every two months) would indicate that, at minimum, 20 additional harvesters are harvesting in the region on a monthly basis;
- A proportion (i.e., >=5%) of the surveyed non-KCN Aboriginal workforce is harvesting big game species such as moose or caribou under Treaty and Aboriginal rights. This harvest would be considered additive pressure for the region (non-Aboriginal people require licences which would be captured under Objectives 2 or 3);
- A proportion (i.e., >=5%) of the surveyed non-KCN Aboriginal workforce is harvesting furbearers or lake sturgeon under Treaty and Aboriginal rights. This harvest would be considered additive pressure for the region (non-Aboriginal people are not permitted to harvest either type of wildlife).

It should be noted that an actively harvesting workforce would not automatically suggest that domestic harvest would be affected. However, the conditions above were set to establish a threshold by which harvests should be examined with increased frequency and scrutiny.

Under Scenario 2, sampling intervals would be more regular, occurring in June and November, every construction year. Sampling would be expanded as required to ensure statistically valid (i.e., representative) sampling was undertaken to extrapolate estimates of total workforce harvest by species. Depending on the heterogeneity of survey responses, a sample size of up to 160 during peak workforce years 3 and 4, or 10% of the workforce may be selected.

Also under Scenario 2, survey data will be analysed and supplied to the appropriate biophysical monitoring team to determine whether effects on species abundance could be expected and whether these conditions had the potential to affect KCN domestic harvest success. A sampling schedule is provided in Table 1 under the two harvest scenarios.

Table 1: Workforce harvest sampling under two different harvest scenarios.

Survey /Schedule	Year 1	Year 2	Year 3		Year 4		Year 5		Year 6		Year 7		Year 8
Baseline Survey	Nov.	Jun.	-	-	-	-	-	-	-	-			
Scenario 1: Negligible Resource Harvests	-	-	Nov.				Nov.				Nov.		
Scenario 2: Actively Harvesting Workforce	-	-	Jun.	Nov.	Jun.	Nov.	Jun.	Nov.	Jun.	Nov.	Jun.	Nov.	Jun.

Objective 2: To document any changes to moose and caribou licence demand, harvest patterns, and, if feasible, quantify harvest data.

To document any changes to demand for moose and caribou licences, changes in hunting patterns and harvest, data collection will occur during three periods:

- Once in the first year of construction;

- Biennially during construction; and
- Biennially during operation repeating four times, thereafter, it will be re-evaluated.

During all three periods, an interview will be conducted with the MCWS Northeast Region Wildlife Manager. The first interview will update information on existing demand for resident[3], non-resident[4] and foreign resident[5] moose licenses and demand for resident caribou licences in the region[6]. Also during the construction phase, MCWS officials' observations with respect to existing licensed moose and caribou harvest locations will be updated. Interviews conducted during the construction and operation phases will seek information on changing licence demand and changes to hunting locations and harvests. If feasible, changes in moose harvest in the eastern portions of Game Hunting Area (GHA) 9 (Map 1-2) and the south and north central portions of GHAs 2 and 3 respectively will be quantified using data provided by MCWS. Available observations on changes to caribou licence demand, hunting locations and harvest[7] will be documented for GHAs 2 and 3. As available, ATK including resource users' observations of harvest levels and knowledge will be incorporated.

Objective 3: To document any changes to licensed fish harvest patterns and fishing intensity.

The same approach will be used as the moose and caribou monitoring described above. Data collection will occur during the same three periods:

- Once in the first year of construction;
- Biennially during construction; and
- Biennially during operation repeating four times, thereafter, it will be re-evaluated.

During all three periods, an interview will be conducted with the MCWS Northeast Region Fisheries Manager. The first interview will update information on existing licensed fishing locations and harvest (if available). Interviews conducted during the construction and operation phases will seek information on changing locations of licensed fishing and harvest (if available).

With respect to objectives 2 and 3, it should be noted that documenting changes in licence demand cannot be directly linked to specific geographic areas, due to the nature of moose and fish licences. For example, for the six Game Hunting Areas (GHAs) that intersect within the

[3] A "resident" means a person who is present in the province for a period of six months immediately preceding the licence purchase.

[4] A "non-resident" means a person who is a Canadian citizen but is not a Manitoba resident.

[5] Foreign residents (those that are neither a Canadian citizen nor a resident of Manitoba) are required to hire a licensed guide operating within a specific allocation area. Therefore, harvest levels and geographic locations of foreign resident harvest are well documented.

[6] Non-resident and foreign resident licenses are not available for caribou in the region.

[7] Increasing caribou harvest is not expected due to limited license availability though license demand may increase and the location of hunting may change over time.

Project region (Map 1-2) and several other GHAs, moose licensing is open or general and harvest is not tracked specifically[8] by GHA. Fishing licences also are valid for any location within Manitoba (*i.e.,* they can be purchased in one location and used in another within Manitoba). In addition, changes in licence demand cannot be directly linked to the Project due to other external factors. Despite these limitations, consulting the local expertise of MCWS officials, in addition to workforce survey results and ATK if available, will provide the best available understanding of any Project-related changes to the nature, distribution, and intensity of licensed harvest.

Objective 4: To summarize resource use access requests and collect voluntary harvest information from authorized resource harvesters.

Resource use requests will be documented on a monthly basis by the Keeyask Generation Station site liaison officer and provided annually for use in this RUMP. Voluntary harvest information will be requested at the gate from the authorized resource harvesters as they exit the Project site and included in the monthly reports.

Objective 5: To consolidate information generated from other monitoring plans (e.g., aquatic, terrestrial, socio-economic and ATK) to understand effects of Project construction on resource use and resource users.

During the preparation of annual resource monitoring reports, key personnel involved in the aquatic, terrestrial, socio-economic and ATK monitoring programs will be consulted to elicit their current understanding of effects relevant to the resource use monitoring (e.g., moose populations from terrestrial program, observations of non-resident harvesters from ATK programs). This information will be incorporated into annual resource use monitoring plan reports (see Section 3 for reporting schedule).

A synthesis report of technical science and ATK monitoring results as they pertain to resource use and resource users will be produced at the end of the construction phase using available reports and materials. The synthesis report will make recommendations regarding the need for further monitoring. Potential inputs identified from planned construction monitoring activities are listed in Table 2.

[8] A voluntary Big Game Hunter Questionnaire is available to licensed hunters to report their harvest and the GHA hunted (Manitoba Conservation and Water Stewardship 2014).

Table 2: Summary of potential inputs into a resource use construction phase synthesis report

Environmental Component	Topic	Monitoring Activity
Resource Use	Workforce Harvest	Survey of workforce harvest; Interviews with Manitoba Hydro Site Environmental Lead.
Resource Use	Resource User Access and Harvest	Summarized resource use requests and issues relating to requests for authorized access. Voluntary harvest information from authorized resource harvesters.
Socio-Economic Environment	Waterways Management	Outcomes of the Waterways Management Program including waterways management, debris monitoring and navigation.
Terrestrial Environment	Birds-ruffed grouse	Monitoring ruffed grouse abundance and distribution. Further monitoring details are published in TEMP Section 5.1.
Terrestrial Environment	Caribou	Monitoring distribution, abundance and mortality. Further monitoring details are published in TEMP Section 6.1.
Terrestrial Environment	Moose	Monitoring distribution, abundance and mortality. Further monitoring details are published in TEMP Section 6.1.
Terrestrial Environment	Other Mammals	Monitoring relocation and mortality of black bear, gray wolf, red fox, arctic fox and beaver using site records. Further monitoring details are published in TEMP Section 6.1.
Aquatic Environment	Fish Community	Monitoring specific environmental changes to fish in relation to specific construction activities. Further monitoring details are published in Aquatic Environment Monitoring Plan Section 5.1.
Community-specific ATK Monitoring	All relevant to resource use	Provision of the Cree perspectives and understandings about the effects of the Project including resource user observations if provided.

3.0 TIMING AND NATURE OF REPORTING

Data reports will be produced following each year of monitoring that summarize the activities and general findings of resource use monitoring and monitoring conducted through other plans pertaining to resource use or resource users. After the last scheduled construction monitoring year, a comprehensive report to consider, consolidate, and analyze the monitoring information to date will be produced. Based on the results of the comprehensive synthesis report, recommendations for any further monitoring or mitigation will be produced.

Licensed harvest monitoring (objectives 2 and 3) will continue for eight years into the operation phase occurring every two years. Reports will be prepared in the year following the two-year monitoring period (years 11, 13, 15 and 17). The Year 17 report is expected to be a synthesis report of all operation phase licensed harvest monitoring. Should the need arise to extend licensed harvest monitoring further into the operation phase, the Year 17 synthesis report would be replaced by a biennial report and the monitoring period extended.

Table 3. Summary of resource use monitoring activities and reporting intervals planned for the Keeyask Resource Use Monitoring Plan.

Monitoring Objective	Construction[1]								Operation									
	Year(s)																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18-25
Workforce harvest and gate record monitoring (Objectives 1 & 4)	●	●	●	●	●	●	●	●										
Licensed harvest monitoring (Objectives 2 & 3)	●		●		●		●		●		●		●		●		● R[2]	
Monitoring Synthesis (Objective 5)									● R									

● = Monitoring period of workforce harvest and annual gate record collection.

● = Biennial monitoring period of licensed moose and caribou hunting and fishing (construction phase years 1-2, 3-4, 5-6, and 7-8; operation phase years 9-10, 11-12, 13-14, and 15-16). "●" denotes the end of a monitoring interval.

= Synthesis report of construction phase monitoring results available that pertain to resource use. "R" denotes report.

[1] The construction phase is treated as the period that the access gates will be in-service up to the conversion of the access roads to the provincial highway system.
[2] A synthesis report on licensed harvesting may be drafted upon completion of this monitoring. If need exists to continue licensed harvest monitoring beyond year 16, drafting of a synthesis report may also be extended and replaced by biennial reports.

4.0 STUDY AREA MAPS

N

Limestone G.S.

Fox Lake Cree Nation
Fox Lake (Bird)

Henday C.S.

Long Spruce G.S.

Kettle G.S.

Gillam

Radisson C.S.

Fox Lake Cree Nation
A Kwis Ki Mahka Reserve

280

290

North Access Road

STEPHENS LAKE

NELSON RIVER

GULL LAKE

Birthday Rapids

CLARK LAKE

Tataskweyak Cree Nation
Tataskweyak (Split Lake)

BURNTWOOD RIVER

SPLIT LAKE

HUDSON BAY RAILWAY

Split Lake RMA

Fox Lake RMA

Kelsey G.S.

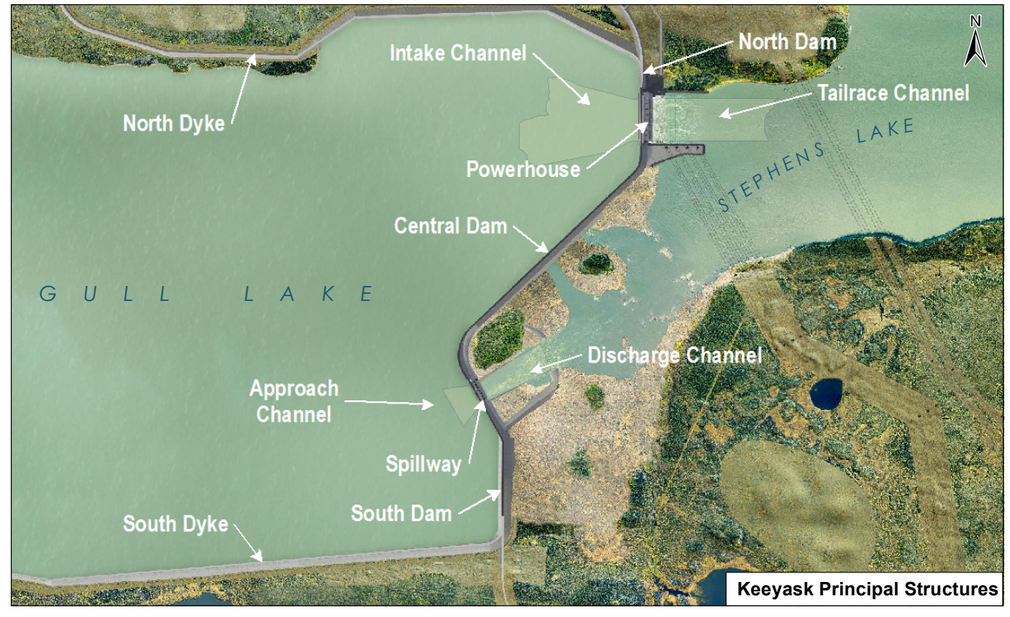
York Factory First Nation
York Landing (Kawechiwasik)

York Factory RMA

War Lake First Nation
Ilford (Mooseocoot)

NELSON RIVER

Split Lake RMA



Keeyask Principal Structures

KEEYASK
Hydropower Limited Partnership

DATA SOURCE:
Manitoba Hydro; Government of Manitoba; Government of Canada

CREATED BY:
Manitoba Hydro - GIS Studies

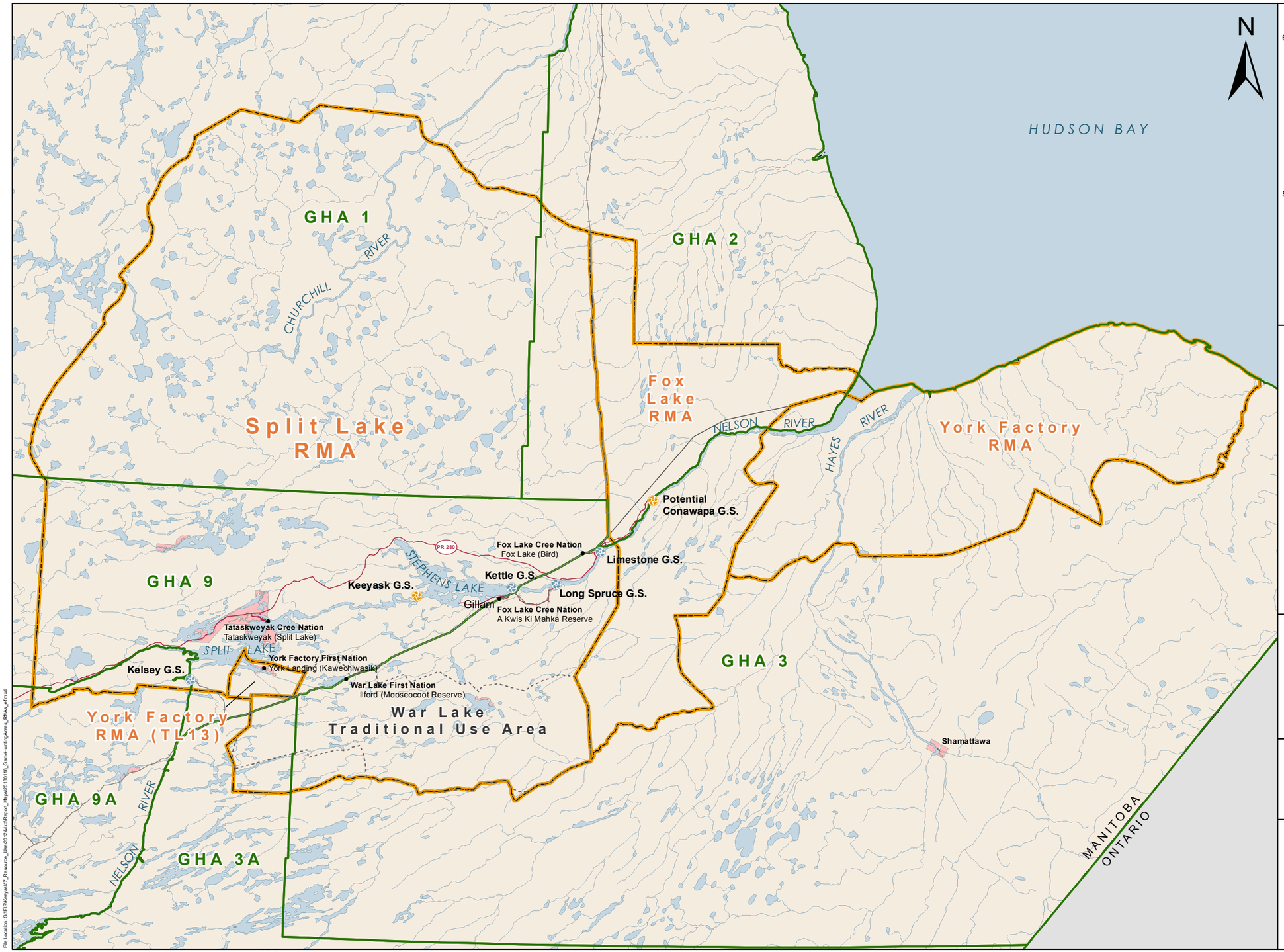
COORDINATE SYSTEM:	DATE CREATED:	REVISION DATE:
UTM NAD 1983 Z15N	03-AUG-11	29-DEC-14
0 5 10 Kilometres 0 4 8 Miles	VERSION NO: 2.0	QA/QC:

Legend

- Generating Station (Existing)
- Keeyask Generating Station
- Converter Station
- Keeyask GP Construction Footprint
- Transmission Line
- Resource Management Area
- War Lake Traditional Use Area
- Keeyask Principal Structures
- Highway
- Railway
- Access Road
- Proposed Access Road
- First Nation Reserve

General Project Location

File Location: Z:\GIS\Keeyask\Analysis_EnvironSoc\Resource_Use\MXD\Keeyask_GeneralLocationMap_withInset_HSPF_20DEC2014.mxd



Legend

- Game Hunting Areas
- Resource Management Areas
- First Nation Reserve
- Highway
- Rail
- Abandoned Rail

Projection: UTM zone 15, NAD 83
Data Source: Manitoba Conservation, 1:1 000 000

0 10 20 40 60 80 Kilometres
0 5 10 20 30 40 Miles

Game Hunting Areas

KEEYASK
Hydropower Limited Partnership

File Location: G:\ES\Keeyask\7_Resource_Use\20'0\Mxd\Report_Maps\20130116_GameHuntingAreas_RMAs_a1.mxd

5.0 REFERENCES

5.1 LITERATURE CITED

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APPENDIX A: SURVEY

CONSTRUCTION WORKFORCE RESOURCE HARVEST SURVEY- PURPOSE AND HOW INFORMATION WILL BE USED

The purpose of this survey is to find out if and how much wildlife, fish and plants are harvested by construction workers. This information will be used to understand the level of fishing, hunting and gathering conducted by the workforce. You will not be personally identified in any way and information collected will be used to monitor fish and wildlife.

SECTION 1

Question 1. Which group best describes you (check one box):

❒ Construction workforce member (non-Aboriginal)

❒ Construction workforce member (Aboriginal)

❒ TCN ❒ WLFN ❒ YFFN ❒FLCN ❒ Métis

❒ Non-Status ❒ Inuit ❒ Other First Nation _____

Question 2. Do you normally live in Thompson, Split Lake, Gillam or Bird? ❒ Yes ❒No

Question 3. Do you have friends or family connections in Thomson, Split Lake, Gillam or Bird that would bring you to this area to visit? If yes, how many times/year would you visit this area?

_____

Question 4. When did your employment begin at the Keeyask Generation Site? _____ (Date)

Question 5. Have you worked regularly since that date?

❒ Yes ❒ No _____(specify any interruptions in employment)

Question 6. What is your work rotation? _____days on, _____days off.

Question 7. Since you began working here, have you fished, hunted or gathered plants and/or other natural products on **days that you worked**?

❒ No ❒ Yes – Fished ❒ Yes – Hunted ❒ Yes – Gathered plants/other natural products.

Question 8. During your **days off**, did you fish, hunt or gather plants and/or other natural products east of Thompson?

❒ No ❒ Yes – Fished ❒ Yes – Hunted ❒ Yes – Gathered plants/other natural products.

If **no to questions 7 and 8**, this survey is completed. If **yes**, please answer questions 9 (fishing), 10 (hunting) and/or 11 (gathering); all that are applicable.

SECTION 2

Question 9 – FISHING

Fishing method: ❒ Angling (rod and reel) ❒ Ice fishing ❒ Net fishing

Fishing effort: average number of hours per trip _____ , number of trips/month _____ and months active _____

Fishing location(s):_____(waterbody)

Harvest: ❒ No, catch and release ❒ Yes. If yes, indicate how much:

Species: _____ # of fish: _____ Species: _____ # of fish: _____
Species: _____ # of fish: _____ Species: _____ # of fish: _____

Fishing occurred during ❒ Stay at site ❒ Days off ❒ Both.

If local resident or one with connections to local residents: Would you have fished these times even if you were not working here? ❒ Yes ❒ No

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Question 10 – HUNTING *(includes small and large game such as rabbits, grouse, moose, caribou and furbearers etc.)*

Hunting method: ❒ Rifle ❒ Bow ❒ Other, please specify: _____

Hunting effort: average number of hours per trip _____ , number of trips /month_____ and months active _____

Hunting location(s) (please be as specific as possible and list multiple locations if necessary): _____

____

Species: _____ # harvested: _____ Species: _____ # of harvested_____
Species: _____ # harvested: _____ Species: _____ # of harvested_____ Hunting occurred during ❒ Stay at site ❒ Days off ❒ Both.

If local resident or one with connections to local residents: Would you have hunted these times even if you were not working here? ❒ Yes ❒ No

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Question 11 – GATHERING *(includes plants for medicinal purpose, berries, items for crafts or ceremonial purposes [e.g., feathers, firewood or other natural items.)*

Gathering effort: average number of hours per trip _____ , number of trips /month _____ and months active _____

Gathering location(s) (please be as specific as possible and list multiple locations if necessary): _____

Species or type: _____Amount: _____ Species or type: _____Amount: _____
Species or type: _____Amount: _____ Species or type: _____Amount: _____Species

Gathering occurred during ❒ Stay at site ❒ Days off ❒ Both.

If local resident or one with connections to local residents: Would you have gathered these times even if you were not working here? ❒ Yes ❒ No