

# Nalcor Energy – Lower Churchill Project



## LCP SOCIOECONOMIC ENVIRONMENTAL EFFECTS MONITORING PLAN

Nalcor Doc. No. LCP-PT-MD-0000-EV-PL-0022-01

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**Inter-Departmental / Discipline Approval (where required)**

Department	Department Manager Approval	Date

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## **1 PURPOSE**

The purpose of this Socioeconomic Environmental Effects Monitoring Plan (SEEMP) is to demonstrate how adverse socioeconomic effects of the Lower Churchill Hydroelectric Generation Project (the Project) will be mitigated by the Lower Churchill Project (LCP), and to set out a program for monitoring the effectiveness of the proposed mitigation measures. The main objectives of socioeconomic monitoring for the Project are to:

- Mitigate adverse effects and enhance the benefits (creating value) of the Project for stakeholders;
- Create opportunities for people in the region to participate in the Project and thereby enhance wellbeing;
- Establish a role for LCP as an active participant in the sustainability of communities in the region; and
- Maintain goodwill and good relations with people and their governments.

To comply with regulatory requirements and commitments made in the Environmental Impact Statement (EIS) (Nalcor 2009) and during the Joint Review Panel process (JRP 2011), LCP's SEEMP approach includes consideration of:

- Mitigation objectives – performance objectives in respect of each adverse environmental or socioeconomic effect;
- Mitigation – measures planned to achieve the mitigation objectives;
- Metrics and targets – specific, quantifiable, relevant and time constrained; and
- Follow-up or Monitoring Programs – how the project will include follow-up or monitoring surveys and activities to verify that mitigation strategies are meeting the mitigation objectives.

LCP's SEEMP builds on existing information and commitments made in the EIS (Nalcor 2009) and through the Joint Review Panel (JRP) process, and any socioeconomic related conditions of permits and licenses for the Project.

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## 2 SCOPE

This SEEMP addresses the socioeconomic effects of the Project on the Aboriginal communities and the populations of Labrador and the Province of Newfoundland and Labrador during the construction and operations phases.

## 3 DEFINITIONS

**Environmental Assessment:** An evaluation of a project's potential environmental and socioeconomic risks and effects before it is carried out and identification of ways to improve project design and implementation to prevent, minimize, mitigate, or compensate for adverse environmental and socioeconomic effects and to enhance positive effects.

**Environmental Protection Plan:** Document outlining the specific mitigation measures, contingency plans and emergency response procedures to be implemented during the construction or operation of a facility.

**Environmental and Social Effects Follow-up:** Evaluating the actual project effects to confirm the predictions made in the environmental assessment (EA).

**Environmental and Social Effects Monitoring:** Monitoring the Project to ensure fulfillment of EA commitments.

**Environmental Compliance Monitoring:** Monitoring of Project activities to confirm compliance with regulatory requirements and commitments made through the EA process.

**Resident:** a person ordinarily resident in the Province or who meets the requirements of the Elections Act, 1991, SNL1992 c. E-3.1, as amended from time to time.

## 4 ABBREVIATIONS & ACRONYMS

<b>EA</b>	Environmental Assessment
<b>EEMP</b>	Environmental Effects Monitoring Plan
<b>EMP</b>	Environmental Management Plan
<b>EPP</b>	Environmental Protection Plan
<b>GDP</b>	Gross Domestic Product
<b>IBA</b>	Impacts and Benefits Agreement
<b>ITK</b>	Innu Traditional Knowledge
<b>JRP</b>	Joint Review Panel

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<b>km</b>	Kilometers
<b>LTA</b>	Labrador Transmission Asset
<b>LCP</b>	Lower Churchill Project
<b>NL</b>	Newfoundland and Labrador
<b>NLDEC</b>	Newfoundland and Labrador Department of Environment and Conservation
<b>RCMP</b>	Royal Canadian Mounted Police
<b>RNC</b>	Royal Newfoundland Constabulary
<b>SEEMP</b>	Socioeconomic Environmental Effects Monitoring Plan
<b>TLH</b>	Trans Labrador Highway

## 5 INTERNAL REFERENCES

LCP-PT-MD-0000-PM-PL-0001-01	LCP Project Execution Plan
LCP-PT-MD-0000-PM-CH-0001-01	LCP Project Charter
LCP-PT-MD-0000-EA-PL-0001-01	LCP Generation Environmental Assessment Commitment Management Plan
LCP-PT-ED-0000-EA-SY-0001-01	Environmental Impact Statement and Supporting Documentation for the Lower Churchill Hydroelectric Generation Project
LCP-PT-ED-0000-EV-RG-0001-01	Lower Churchill Project Permit Registry
LCP-PT-MD-0000-SM-ST-0001-01	Post Environmental Assessment Release
LCP-PT-MD-0000-RT-PL-0001-01	Regulatory Compliance Plan
LCP-PT-MD-0000-HS-PL-0001-01	Health and Safety Plan
LCP-PT-MD-0000-HS-PL-0004-01	LCP Emergency Response Plan
LCP-PT-MD-0000-IM-PL-0003-01	Information Management Plan
LCP-PT-MD-0000-CO-PL-0001-01	Communications and Stakeholder Relations Plan
LCP-PT-MD-0000-EV-PL-0002-01	LCP Integrated Environmental Management Plan

## 6 PROJECT DESCRIPTION

### 6.1 MUSKRAT FALLS GENERATION

The Muskrat Falls Generation Project (Figure 6-1) will include the following sub-components which are broken down under the five principal areas of the development:

- 22 km of access roads, including upgrading and new construction, and temporary bridges;

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- A 1,500 person accommodations complex (for the construction period);
- A north roller compacted concrete overflow dam;
- A south rock fill dam;
- River diversion during construction via the spillway;
- 5 vertical gate spillway;
- Reservoir preparation and reservoir clearing;
- Replacement of fish and terrestrial habitat;
- North spur stabilization works;
- A close coupled intake and powerhouse, including:
  - 4 intakes with gates and trash racks;
  - 4 turbine/generator units at approximately 206 MW each with associated ancillary electrical/mechanical and protection/control equipment;
  - 5 power transformers (includes 1 spare), located on the draft tube deck of the powerhouse; and
  - 2 overhead cranes each rated at 450 Tonnes



**Figure 6-1** Muskrat Falls Generating Facility



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## 6.2 LABRADOR TRANSMISSION ASSET (LTA)

LTA consists of the ac transmission line system from Churchill Falls to Muskrat Falls (see Figure 6-2), specifically:

- Churchill Falls switchyard extension;
- Muskrat Falls switchyard;
- Transmission lines from Muskrat Falls to Churchill Falls: double-circuit 315 kV ac, 3 phase lines, double bundle conductor, single circuit galvanized lattice steel guyed suspension and rigid angle towers; 247 km long; and
- 735 kV Transmission Line at Churchill Falls interconnecting the existing and the new Churchill Falls switchyards.

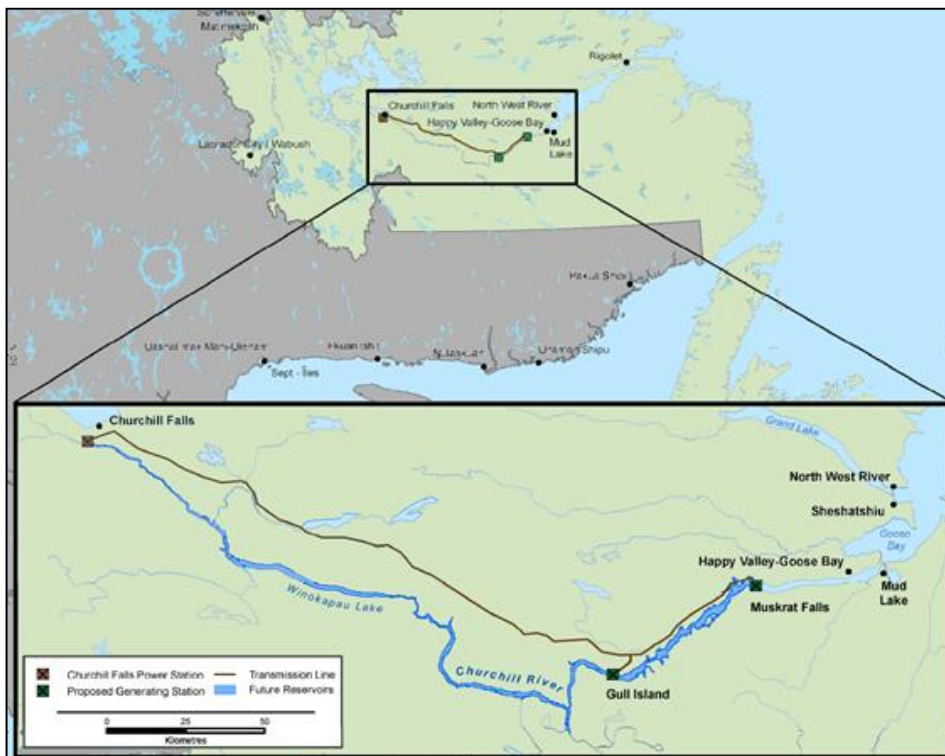


Figure 6-2 Labrador Transmission Asset

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## **7 EXISTING INFORMATION**

As outlined in the EIS (Nalcor 2009), the EA includes consideration of the human environment. The potential environmental effects are considered in the context of central Labrador (Upper Lake Melville area), Labrador, and the Province of Newfoundland and Labrador (NL). Communities; Economy, Employment and Business; Land and Resource Use; and, Cultural Heritage Resources are components valued by society and can serve as indicators of change.

Existing information regarding these components was gathered for the EIS for the Project (Nalcor 2009) through a series of surveys, environmental baseline reports, component studies, Innu Traditional Knowledge (ITK), local knowledge and other reports prepared on behalf of Nalcor.

Baseline data on demographics related to Communities and Economy, Employment and Business, were drawn from secondary sources (Minaskuat 2008a), including:

- Statistics Canada and other agencies and departments of the Government of Canada;
- The Newfoundland and Labrador Statistics Agency and other agencies and departments of the Government of Newfoundland and Labrador; and
- Municipal governments and local and regional authorities and boards.

Information was also collected through personal and telephone interviews with the above types of groups and agencies at the community, regional and provincial levels.

Baseline data for Land and Resource Use (Minaskuat 2009) for the EIS were gathered from:

- Reports and data held by various government departments and agencies;
- A comprehensive review of published and unpublished literature; and
- A series of interviews on land and resource use in Labrador.

Baseline data for Cultural Heritage Resources (Minaskuat 2008b) for the EIS were gathered from a review of previous studies where heritage resources had already been assessed and mapped (e.g., Trans Labrador Highway [TLH] Phase 1) and field assessment and mapping conducted over several years in areas associated with the Project that were not yet investigated.

### **7.1 COMMUNITY CONTEXT**

The Project is located in Central Labrador (Upper Lake Melville area) where the main communities are Happy Valley-Goose Bay, North West River, Sheshatshiu and Mud Lake.

Happy Valley-Goose Bay is located at the south-west end of Lake Melville near the mouth of the Churchill River. Built on a sandy plateau in 1941, the town was incorporated in 1973 when the

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former town of Happy Valley and the Local Improvement District of Goose Bay were amalgamated. Happy Valley-Goose Bay is the largest population centre in Central Labrador, with a population of 7,552 in 2011 (Statistics Canada 2012). The town is home to the largest military air base in north-east North America, Canadian Forces Base Goose Bay.

North West River is a community with a population of 553 (2011), located on the shore of Lake Melville approximately 33 kilometres (km) north-east of Happy Valley-Goose Bay (City-data 2013; Town of Northwest River 2013).

Sheshatshiu is an Innu community located approximately 30 km north of Happy Valley-Goose Bay. Although all members do not live in the community, the Sheshatshiu Innu has a registered population of 1,447 as of March 2013 (AANDC 2013).

Mud Lake is a small community in central Labrador, located across the Churchill River from Happy Valley-Goose Bay. Mud Lake residents rely on the Churchill River for their transportation link to Happy Valley-Goose Bay, using boats to cross the river in summer and snowmobiles in winter. Approximately 50 permanent residents live in Mud Lake (Explore Labrador 2014).

## 7.2 ECONOMY, EMPLOYMENT AND BUSINESS COMPONENT

Information regarding the Economy, Employment and Business Component is presented for Central Labrador (Upper Melville Lake area), Labrador, and the Province of Newfoundland and Labrador.

### 7.2.1 Economy

#### ***Central Labrador (Upper Lake Melville Area)***

Happy Valley-Goose Bay, North West River, Sheshatshiu and Mud Lake are communities of the Upper Lake Melville area. The economy of the area is based on a mix of forestry, mining, outdoor recreation and outfitting, and providing services to the long established Canadian Forces Base training site.

A sluggish economy improved with the ongoing development of the TLH, which has resulted in new commercial trading patterns, business expansions and tourism opportunities (Nalcor 2009; Town of Happy Valley-Goose Bay 2001 in Nalcor 2009).

Approximately one-third (33.3%) of the businesses in the Upper Lake Melville area are in the retail trade sector (Nalcor 2009; CLEDB 2007 in Nalcor 2009), with limited manufacturing or secondary processing activity.

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Happy Valley-Goose Bay is the largest community in Labrador and is the administrative hub for the delivery of health, education, utility and other government services to central and coastal Labrador. Offices of many provincial and federal government departments, which employ large numbers of professionals and trades people, are located in Happy Valley-Goose Bay (Nalcor 2009; CLEDB 2007 in Nalcor 2009).

***Labrador***

Labrador’s economy is traditionally based on raw material extraction and the service industry; major industries include mining, aerospace and defence, fish harvesting and processing, forest resources and tourism (Nalcor 2009; NLDTW 2006 in Nalcor 2009).

***Province of Newfoundland and Labrador***

Since the late 1980s and early 1990s, the Newfoundland and Labrador economy has improved dramatically, largely as a result of the growth of the offshore oil sector and, more recently, mineral production at Voisey’s Bay in northern Labrador. A period of large capital investments for offshore projects such as Hibernia, Terra Nova, White Rose, and the Voisey’s Bay nickel-cobalt-copper mine provided a considerable source of employment. These projects have supported the provincial economy that, as reflected in Gross Domestic Product (GDP) growth, was one of the fastest growing in Canada in the first years of the 21st century (Nalcor 2009; NLDF 2007a in Nalcor 2009). However, GDP was expected to decline in 2009 and 2010 under the assumption that oil produced from Terra Nova, Hibernia and White Rose will decrease as reserves are drawn down (Nalcor 2009; NLDF 2007b in Nalcor 2009).

Real GDP in Canada is expected to grow 0.5% annually in 2014, according to an average estimate of forecasters, while the unemployment rate is expected to be 6.9%. Alberta is expected to lead the provinces in real GDP growth at 3.5% followed by Saskatchewan (+2.4%) and British Columbia (+2.4%) (Government of Newfoundland and Labrador 2014).

As noted in the EIS (Nalcor 2009), offshore oil developments and mining projects are very capital intensive, and the corresponding growth in employment is substantial, but has not kept pace with the level of growth in GDP. The unemployment rate in the Province is the highest in Canada; however, unemployment in Newfoundland and Labrador varies substantially from region to region. For example, the August 2014 unemployment rate for the Avalon Peninsula was 8.2 % which is comparable to the rest of Canada (7.2%), whereas it was much higher in rural Newfoundland and Labrador and as high as 16.3 % in Notre Dame – Central Bonavista Bay (). This reflects the change in the structure of the provincial economy over the past 20 years away from rural, labour-intensive, resource-based activities to highly capital-intensive, concentrated resource-based activities.

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## 7.2.2 Employment and Business

### ***Central Labrador (Upper Lake Melville Area)***

The labour force in the Upper Lake Melville area increased from 5,019 in 2001 to 5,325 in 2011 (Statistics Canada 2013a-d), with most employed workers (85.4%) living in Happy Valley-Goose Bay. North West River comprised 5.7% of the labour force (305) and Sheshatshiu and Mud Lake combined comprised 8.9% (478) (Statistics Canada 2013a-d). In 2010, the median earnings or income from employment in the Upper Lake Melville area was \$33,446<sup>1</sup>, an increase of 26.5% from 2005 (\$26,442) and 42.9% from 2000 (\$23,403) (Statistics Canada 2001, 2006 in Nalcor 2009; Statistics Canada 2013a-d).

Between 2001 and 2011, the participation (i.e., the percentage of the work-age population working or actively looking for employment) rate for the Upper Lake Melville area increased from 57.8% in 2001, to 71.3% in 2011 (Statistics Canada 2001, 2013). Happy Valley-Goose Bay maintained the highest participation rate in the Upper Lake Melville area in 2006 (75.4%) (Statistics Canada 2006 in Nalcor 2009) and in 2011 (74.9%) (Statistics Canada 2013a).

Within the Upper Lake Melville area, the unemployment rate was consistently lower in Happy Valley-Goose Bay than in the other communities in the area. For example, in 2006, the unemployment rate was 12.7% in Happy Valley-Goose Bay and 28.6% in Sheshatshiu and Mud Lake (Statistics Canada 2001, 2006 in Nalcor 2009). In 2011, the unemployment rate decreased to 9.4% in Happy Valley-Goose Bay; the unemployment rates in Sheshatshiu and Mud Lake in 2011 were 27.0% and 33.3%<sup>2</sup>, respectively (Statistics Canada 2013a, 2013c-d).

As of December 2006, there were 329 businesses in the Upper Lake Melville area, representing 40.5% of businesses in Labrador. The majority of businesses in the Upper Lake Melville area (145) were small, with one to four employees. There were 42 businesses with 20 to 99 employees (Newfoundland and Labrador Statistics Agency/Community Accounts 2007 in Nalcor 2009).

### ***Labrador***

In 2011, the labour force in Labrador was 13,715 (Statistics Canada 2013e), a decrease from the 14,340 in 2006. In 2001, Labrador's participation rate was 66.7%. The participation rate decreased to 63.2% in 2006 and increased to 71.4% in 2011. From 2001 to 2006, the unemployment rate increased from 19.1% to 24.5%, then decreased to 12.8% in 2011 (Newfoundland and Labrador Statistics Agency/Community Accounts 2008 in Nalcor 2009; Statistics Canada 2001, 2006 in

<sup>1</sup> Median earning income in 2010 is a weighted median that excludes Division No.10, subdivision C, due to data suppression by Statistics Canada for confidentiality.

<sup>2</sup> 2011 data from Statistics Canada disaggregated Sheshatshiu and Mud Lake data.

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Nalcor 2009; Statistics Canada 2013e). Note, Labrador data presented here is for Census District 10 only as prior to 2006 Census District 11 data was combined with Census District 10.

Population and labour force statistics for Labrador are presented in Table 7-1. The decline in population in Labrador has had an effect on labour supply; and, this decline is expected to continue. The difference between overall population trends and those of the 15 to 64 age-group can be attributed to out-migration (Nalcor 2009).

**Table 7-1:** Population and Labour Force Statistics for Labrador in 2001, 2006 and 2011.

Labour Statistics	2001	2006	2011
Population Of Working Age (# Of Individuals Aged 15 To 64 Years)	Approximately 20,800 (i.e., 5.1%> in 06)	19,813	19,145
Labour Force (# Individuals)	—	14,340	13,715
Labour Participation Rate (%)	66.7	63.2	71.4
Unemployment Rate (%)	19.1	24.5	12.8

Source: Nalcor 2009; Statistics Canada 2013e.

In 2006, there were 848 businesses in Labrador, representing 5.1% of the total for the Province. Of these, 411 (48.5%) employed one to four persons, 310 (36.6%) had five to 19 employees and 107 (12.6%) had between 20 and 99 employees (Newfoundland and Labrador Statistics Agency / Community Accounts 2007, in Nalcor 2009).

***Province of Newfoundland and Labrador***

Population and labour force statistics for the NL are presented in Table 7-2. The labour force and the labour participation rate in NL both increased from 2001 to 2006 to 2011, while the unemployment rate decreased steadily over the same period (Statistics Canada 2001, 2006 in Nalcor 2009; 2013d). In 2006, the main sources of employment by industry were business services, which employed 35,390 people, retail trade (30,580 people), health care and social services (30,360 people) and other services (50,040 people). Industries that employed the fewest people were finance and real estate (7,895 people) and wholesale trade (6,630 people) (Statistics Canada 2006). In 2011, the main sources of employment by industry were health care and social assistance, which employed 35,300 people, retail trade (32,000 people), public administration (25,200 people) and construction (22,055 people). Industries that employed the fewest people were arts, entertainment and recreation (3,245 people) and management of companies and enterprise (205 people) (Statistics Canada 2013f).

**Table 7-2:** Population and Labour Force Statistics for the Province of Newfoundland and Labrador in 2001, 2006 and 2011.

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Labour Statistics	2001	2006	2011
Population Of Working Age (# Of Individuals Aged 15 To 64 Years)	232,260	248,685 (Aged 15+)	255,890 (Aged 15+)
Labour Force (# Individuals)	232,260	248,865	255,890
Labour Participation Rate (%)	57.6	58.9	59.4
Unemployment Rate (%)	21.8	18.6	14.6

Source: Nalcor 2009 (Newfoundland and Labrador Statistics Agency/Community Accounts 2008, internet site); Statistics Canada 2001, 2006, 2013d

The median income for residents of NL aged 15 and over was \$24,165 in 2000, and in 2005 it had decreased by 25.2% to \$18,086 (Statistics Canada 2001, 2006 in Nalcor 2009). In 2011, median earnings had increased to \$25,279 (Statistics Canada 2013d).

The number of people employed averaged 215,700 in 2006, an increase of 0.7% from 2005. Employment was forecast to increase in 2007 based on job growth in the service sector and to be mostly full-time employment (NLDF 2007d in Nalcor 2009). In 2012, employment growth was the second highest in the country among the Canadian provinces, growing by 2.3% to reach a record high of 230,000. Job gains were concentrated in full-time employment and were mainly driven by major project development activity in the resource sector and related spin-offs (NLDF 2013).

As of December 2006, there were 16,583 businesses in the Province, most (60.2%) of which employed one to four people. There were 266 businesses with 100 to 499 employees (Newfoundland and Labrador Statistics Agency/Community Accounts 2007 in Nalcor 2009).

### **7.3 LAND AND RESOURCE USE**

Current land and resource use for traditional, recreational and commercial purposes was studied in an area extending from the southern limits of the proposed reservoir to the interconnecting transmission line that will run approximately parallel to Phase I of the TLH between Happy Valley-Goose Bay and Churchill Falls to the west (Minaskuat 2009). The focus was on land and resource use by Innu and other Aboriginal and non-Aboriginal persons.

The presence of the TLH has facilitated access to previously remote areas for hunting and trapping (DND 1994 in Nalcor 2009). Current land and resource use by Innu for subsistence and traditional purposes is focused on, but not limited to, areas adjacent to the TLH Phase I between Happy Valley-Goose Bay and Churchill Falls. Activities continue to be focused in areas used before permanent settlement in the 1960s. Other areas of importance for harvesting include the headwaters of the Red Wine River and other rivers and lakes; however, sources indicate that the use of Churchill River has declined considerably since the original Churchill Falls Development in the 1960s (Minaskuat 2009).

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Land and resource use activities by other Aboriginal and non-Aboriginal persons for recreational and subsistence purposes take place throughout the entire year. Activities such as hunting, trapping, and snowmobiling occur mainly from October to June, activities such as boating and berry picking occur from June to September, and other activities such as fishing, cabin use, and wood cutting, occur throughout the year (Minaskuat 2009). In addition to the corridor along the TLH Phase I between Happy Valley-Goose Bay and Churchill Falls, other areas that experience use are the Churchill River downstream of Muskrat Falls and the Churchill River west of Winokapau Lake (Minaskuat 2009).

Most land and resource use activities, such as hunting, fishing, and trapping, are managed by the Government of Newfoundland and Labrador or the Government of Canada.

Hunting is identified as a key element of land and resource use. Based on the number of animals harvested, caribou from the George River Caribou Herd is the most important game species (Nalcor 2009). The migratory George River Caribou Herd is the largest herd in the province and one of the largest in Canada. This barren ground caribou herd's population was estimated at 50,000 caribou in 2011 (NLDEC 2011, internet site); however, recent biological information gathered, census results and ongoing population modeling, indicate that the herd has fewer than 20,000 individuals (NLDEC 2013). The Innu hunt migratory birds around the community of Sheshatshiu and near Gull Island and Muskrat Falls on the Churchill River (DND 1994 in Nalcor 2009) as well as in areas to the north and east (MacLaren Plansearch 1994 in Nalcor 2009).

Trapping is considered a recreational rather than a subsistence activity (Plaice 2002 in Nalcor 2009) and, while some trapping is for ceremonial value and for meat, the pelts are typically sold on a cost recovery basis (Nalcor 2009). The number of licensed trappers in Labrador fluctuates based on market prices at auction sales, and NL Department of Environment and Conservation (NLDEC) estimates that there are about 400 active trappers (Nalcor 2009).

Fishing has traditionally been an important recreational and subsistence activity for land and resource users in Labrador although it is limited on the lower Churchill River. Minaskuat (2009) reported that a maximum of approximately 14% of the total Central Labrador population angled on the lower Churchill River between Churchill Falls and Muskrat Falls in a typical year and that brook trout, lake trout and *ouananiche* (landlocked salmon) were the most common species angled upstream of Muskrat Falls. Anglers fishing downstream, including in Lake Melville, more commonly pursue brook trout, Atlantic salmon and smelt.



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#### 7.4 CULTURAL HERITAGE RESOURCES

Information regarding cultural heritage resources was based on background research of published and unpublished sources related to geomorphology, cultural history, resource profiling of the region, archaeological potential mapping, and field assessment (Nalcor 2009).

The potential for occurrence of palaeontological resources is limited to the presence of sedimentary rocks, which occur as sandstone and conglomerate strata of the Neoproterozoic Double Mer Formation (Williams et al. 1985 in Nalcor 2009).

No buildings, structures or sites classified as cultural heritage resources are registered (Nalcor 2009). However, a number of non-registered structures of historic and local importance, associated with trapping activities along the lower Churchill River during the first half of the 20th century, were recorded during previous archaeological field studies conducted from the early 1970s to 2007 (Thurlow and Associates 1974, Tuck 1981, IEDE/Jacques Whitford 2000, Jacques Whitford/IELP 2001a, 2001b, 2001c, 2001d in Nalcor 2009; Minaskuat 2008b).

Based on interviews with residents of Labrador to establish the nature and extent of contemporary (i.e., post-1960) land use patterns and activities in the lower Churchill River valley between Churchill Falls and Muskrat Falls, Minaskuat (2009) presented records of the 19<sup>th</sup> century Hudson’s Bay Company trading post at the west end of Winokapau Lake, and a number of tilts of possible early 20<sup>th</sup> century age at various locations along the river.

During the baseline historic resources assessment associated with the EA, Nalcor assessed the entire Project area to determine the historic resource potential. The results of this assessment will be used to delineate areas where additional Stage 2 and Stage 3 historic resources impact assessments are required.

Nalcor will conduct significant recovery programs at the following locations:

- Muskrat Falls North Spur, Rock Knoll, and north side portage trail
- Muskrat Falls south side portage trail
- Sandy Banks Hudson’s Bay Company trading post
- Other pre-contact sites in the Muskrat Falls reservoir area

Historic Resources programs will be conducted in close consultation with the Provincial Archaeology Office and in compliance with the Historic Resources Act. All Historic Resources Impact Assessment Permit Applications are subject to Gov. NL Aboriginal Consultation Guidelines.

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LCP archaeological work will also be conducted in close consultation with the Innu Nation via the Environmental Management Committee. Included in this consultation process will be presentations and discussions with Innu Nation Elders to augment the assessments.

Comprehensive Historic Resource Impact Assessment Reports will be prepared for each component of the Project and made available to the public via the Project website. At any time during the program comments will be considered by the Project and incorporated, where appropriate.

## **8 REGULATORY COMPLIANCE**

Throughout the EA process for the Project, including the EIS (Nalcor 2009) and responses to Information Requests from the JRP, Nalcor has committed to monitor the effects of the Project on the socioeconomic components identified in Section 6.0 of this SEEMP. LCP has committed to continuing its stakeholder relations efforts during the construction and operations phases of the Project and publicly communicating Project benefits through monthly reports. The stakeholder relations commitments made in relation to the Project are listed in Section 9.0, Social Effects Management.

The intent of the SEEMP is to allow LCP to evaluate and respond appropriately to the findings of the follow-up or monitoring programs as they relate to the Project effects on the socioeconomic components identified in the EIS (Nalcor 2009) during construction and operation of the Project.

In addition, the NL Reg. 18/12, also referred to as the Lower Churchill Hydroelectric Generation Project Undertaking Order (the Order) releases the Project from environmental assessment and sets conditions for this release that LCP must meet. The release of the Project from environmental assessment under section 3 is subject to the following conditions:

- (a) Nalcor Energy shall abide by all commitments made by it in the Environmental Impact Statement dated February 2009, and all the Environmental Impact Statement Additional Information Requests made by the Lower Churchill Hydroelectric Generation Project Environmental Assessment Panel and consequently submitted by Nalcor Energy, and the submissions made by Nalcor Energy during the panel hearings and, subsequent to the hearings, to the panel, unless one or more of the commitments, or a part of a commitment is specifically waived by the minister;
- (e) Nalcor Energy shall prepare and abide by the requirements of environmental effects monitoring plans for all phases of the project, and those plans shall be submitted to and approved by the Minister of Environment and Conservation or the appropriate minister of

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the Crown before the commencement of an activity which is associated with or may affect one or more of the following matters:

- (xx) Aboriginal land and resource use and culture;
- (xxi) social effects;
- (xxii) human health;
- (xxiii) employment and business;
- (xxiv) local, regional and provincial economies;
- (xxv) community services and infrastructure; and
- (xxvi) family and community.

Submission of this EEMP satisfies the condition/requirement in the Order that Nalcor Energy prepare and submit to the Minister of Environment and Conservation or the appropriate minister of the Crown, an environmental effects monitoring plan for all phases of the project, before the commencement of an activity which is associated with or may affect the above-noted matters from the Order.

**9 SOCIOECONOMIC EFFECTS MANAGEMENT**

The effects management plans (i.e., mitigation measures outlined in the EIS [Nalcor 2009], the Generation and Labrador Transmission Assets Environmental Protection Plan (EPP) (Nalcor 2013), and the commitments made by LCP in the JRP Information Request responses and the JRP review process as they relate to socioeconomic components include both mitigation and benefit enhancement measures. Commitments made by LCP to manage the socioeconomic effects for the Project are listed below by socioeconomic component.

**9.1 GENERAL**

- LCP will publish results of climate change research.
- LCP will make Project effects data on the downstream environment available to the parties / public and any interested academics / research organizations.
- When seeking to acquire required property rights, LCP will follow Part II of the Muskrat Falls Project Land Use and Expropriation Act.
- LCP will explain the results of the EIS in a clear and direct manner (i.e., plain language summary) to make the issues comprehensible to the widest possible audience.

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- LCP will adopt a zero tolerance policy towards alcohol and other drug abuse at the worksites.
- LCP will control the availability of alcohol in accommodations complexes.
- LCP will provide on-site paramedic and emergency response facilities and services at accommodations complexes.

## 9.2 COMMUNITIES

- LCP will maintain a community information centre in Happy Valley-Goose Bay to provide ongoing Project information to all stakeholders.
- LCP will undertake a comprehensive monitoring and follow-up program upon Project start-up, employing an adaptive management strategy that provides an opportunity for stakeholder participation.
- LCP to establish a Monitoring and Community Liaison Committee. LCP to develop a complaints resolution process in consultation with the Monitoring and Community Liaison Committee.
- LCP will cooperate with the Royal Canadian Mounted Police (RCMP) and Royal Newfoundland Constabulary (RNC) to promote public safety on highways at all times.
- LCP to support the Government of Newfoundland and Labrador in capacity agreement negotiations with Happy Valley-Goose Bay to provide financial resources which will increase the Town's capacity to address additional administrative demands related to the Project.
- LCP will provide residents of Mud Lake alternative means of traveling to Happy Valley-Goose Bay if Project impedes transportation during reservoir impoundment periods. Additionally, if the Project adversely affects travel during ice break-up and freeze-up LCP to minimize any inconvenience to residents.
- LCP will monitor ice conditions at the Mud Lake Crossing and issue public advisories on the condition of ice.
- LCP will measure ice thickness and communicate information regarding ice conditions during freeze-up and break-up at select locations on the lower Churchill River.
- LCP will evaluate the effects of the Project on local communities by participating in and seeking input from government agencies, committees / groups and other groups that are identified during consultation on the Project.

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- LCP to ensure comprehensive emergency preparedness planning is undertaken in consultation with communities identified as potentially at risk from a catastrophic dam failure.
- LCP will provide government and community agencies with information on Project activities and plans (employment) on a quarterly basis to facilitate their planning regarding the provision of social infrastructure and services.
- LCP will provide Project-related information to government and training institutions which provide training programs to those interested.
- Prior to sanction, LCP will engage in consultation with relevant stakeholder organizations and provincial departments and agencies to develop and implement a Gender Equity Program and a Diversity Program for the Project.
- LCP will continue to consult regularly with various authorities such as the Department of Transportation and Works and the Towns to reduce any adverse socioeconomic effects of additional road traffic within communities.
- LCP will consult with all relevant communities in or near the Project area as part of such planning, as well as during Project construction, to provide information and updates on ongoing and planned construction activities, identify questions or concerns, and to seek to address any issues through design and scheduling.
- LCP will continually engage Aboriginal groups and offer opportunities for input throughout the construction and operation of the Project.
- LCP will liaise with the applicable government agencies regarding Project-related housing demands.
- LCP will liaise with the Goose Bay Airport Corporation to provide information about the demands that the Project will place on the terminal.
- LCP will liaise with relevant federal, provincial and local government agencies, and relevant transportation, health, education and other community and regional agencies, in the planning process and during Project construction and operations.

### **9.3 ECONOMY, EMPLOYMENT AND BUSINESS**

- LCP will develop a Project Gender Equity and Diversity Plan through consultation with interested parties and identifications of Project-specific barriers to employment which will include the following provisions:
  - LCP will put in place the necessary organization resources to develop and implement the Gender Equity and Diversity Plan;

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- LCP will support training and recruitment programs for under-advantaged groups in consultation with training and educational institutions in the Province and stakeholder organizations;
  - LCP will require that each primary contractor to the Project provide LCP with a plan for compliance with the Diversity Plan, and will require that contracts related to the execution of the Project include an acknowledgment from successful bidder that they are aware of the existence and importance of the Diversity Plan.
  - LCP will develop an implementation schedule and will report on progress to the Government;
  - LCP will consult on development and progress on the Gender Equity and Diversity Plan in an annual consultation with the Government and other stakeholders, including community groups; and
  - LCP will meet its IBA commitments with respect to training, employment and contracting opportunities for Labrador Innu.
- LCP will work with the Government of Newfoundland and Labrador and the private sector interests to optimize supplier development opportunities and partnerships for Labrador and the province as a whole.
  - LCP will provide information and updates on Project employment requirements and opportunities to local, regional and provincial groups and organizations.
  - LCP will communicate with school staff, academic institutions and students about career options, participating in career fairs and supporting training efforts.
  - LCP will continue to provide information and updates on Project activities and effects related to Economy, Employment and Business on a regular basis as part of its ongoing governmental, Aboriginal, stakeholder and public consultation activities throughout the Project.
  - LCP will collect and compile data on Project expenditures by type, amount, location and type of contractor (i.e., Aboriginal/Non-Aboriginal) and report to relevant government agencies on a monthly basis (through the NL Benefits Report).
  - LCP will participate in activities to raise the profile of the skilled trades. Contribute to and participate in activities and initiatives designed to help students become aware of and interested in the skilled trades in general, upcoming Project employment opportunities, and associated training opportunities and requirements.
  - LCP will provide government and community agencies with information on Project activities and plans (employment, traffic volumes, heavy loads, solid waste) on a quarterly

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basis to facilitate their planning regarding the provision of physical infrastructure and services.

- LCP has worked, and will continue to work, with governments, Aboriginal groups, women’s organizations, training institutions and labour organizations to discuss Project labour requirements, to identify existing or anticipated gaps in the labour supply pool, and will explore and discuss potential approaches to address gaps.
- LCP will conduct appropriately-timed supplier development workshops to ensure local suppliers and contractors can prepare for bidding and establish business relationships. Workshops will be held on both the Island and Labrador.
- LCP will apply measures required as part of the IBA between Nalcor Energy and Innu Nation.
- LCP will publically post all training, employment and procurement/contracting opportunities.
- LCP will continue to support the Labrador Aboriginal Training Partnership, subject to conclusion of a funding agreement with the Government of Canada.
- LCP will support the Innu Nation to develop an Innu Training Plan, hire an Innu Employment Training Coordinator.
- LCP will establish an on-site Innu liaison position.
- LCP will provide cultural sensitivity training to all employees.
- LCP will adopt an industrial benefits planning strategy.
- LCP will develop an engagement and benefits strategy.
- LCP will include Newfoundland and Labrador benefits as selection factors in awarding Project contracts.
- LCP will require construction contractors to adhere to hiring protocols as per the NL Benefits Strategy.
- LCP will establish collective agreements with relevant labour organizations.
- LCP will develop a human resources plan for women’s employment.
- LCP will advance gender equity and diversity on the Project.
- LCP will provide competitive wages and benefits and a progressive and respectful work environment.
- LCP will encourage preconstruction training initiatives.
- LCP will work with contractors to implement apprenticeship programs.

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- LCP will offer technical expertise and assist in coordination of training.
- LCP will establish a Labrador Business Opportunities Committee.
- LCP will maintain a work environment that facilitates the achievement of career goals.
- LCP will provide on-the-job training opportunities for Innu during the construction phase.
- LCP will contribute to student achievement awards and provide work term placement opportunities on the Project.
- LCP will provide specific business opportunities to qualified Innu businesses.
- LCP will develop a contracting policy that provides companies within the Province with full and fair opportunities.
- LCP will develop a Project-wide safety culture to achieve world class safety performance.
- LCP will promote healthy lifestyles through workplace programs.
- LCP will subject to reasonable Project requirements, provide flexibility in work schedules and rotations, job-sharing and leave provisions to enable Innu employees to engage in traditional activities.
- LCP will collect and compile data on Project employment by number employed, location of primary residence, occupational category, gender, and Aboriginal affiliation. For skilled trades, the number of apprentices and journeypersons will be collected and compiled.

#### 9.4 RESOURCE AND LAND USE

- LCP will work with guides so that boat traffic and guided tours can continue with minimal interruption.
- LCP will provide detailed site-specific rehabilitation plans, including associated procedures, during the detailed design phase, prior to the start of construction. The development of these plans will be done in consultation with stakeholders and in compliance with regulatory requirements.
- LCP will implement environmental awareness training and regular briefings for all personnel.
- LCP will require an authorization under Section 32 of the *Fisheries Act* that will include proposals for: further baseline sampling, development of a mitigation and adaptive management strategy, compensation measures and multi-year monitoring.



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- LCP will require an authorization under Section 35(2) of the *Fisheries Act* that will include a detailed fish habitat compensation plan and a multi-year habitat monitoring strategy with thresholds identified for further action and if, required, reporting processes and adaptive management measures. Also required will be a multi-year post-Project monitoring and reporting downstream into Lake Melville on a variety of parameters including nutrients, primary production, fish and fish habitat utilization and sediment transport in order to assess changes to downstream habitat.
- LCP has made the Fish Habitat Compensation Plan and monitoring program available for public and Aboriginal consultation prior to Fisheries and Oceans Canada authorization.
- LCP will provide information regarding timber volumes and storage locations to the Department of Natural Resources, who will then provide the information to the public.
- LCP will implement a compensation program for flooded trap lines to trappers with demonstrated continuous and successional use.
- If consumption advisories are required as a result of downstream mercury monitoring, LCP to consult with downstream resource users on further mitigation measures, including the potential for compensation.
- Monitoring programs will include a communications plan to describe the results of monitoring to interested parties.
- LCP will provide government and community agencies with information on Project activities and plans on a quarterly basis to facilitate their planning regarding land and resource use.
- Stakeholders will continue to be involved in monitoring programs, including participation in the design and implementation of environmental management and monitoring and follow-up programs, as appropriate.
- LCP has provided and will continue to provide Project information regarding social parameters to relevant authorities (including community and government organizations and agencies) as input to their monitoring and decision-making processes, and to consult with relevant groups throughout the life of the Project.
- LCP to monitor and manage construction traffic and borrow pit activities to minimize dust and noise problems.
- LCP will establish baseline levels for methyl-mercury exposure by local residents and liaise with government authorities to develop and post fish consumption advisories.
- LCP to address issues related to mercury monitoring in people and the environment, including appropriate follow-up action that may be required to protect people from harm.

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- LCP to support Government of Newfoundland and Labrador and Aboriginal groups to obtain relevant dietary data to determine the effectiveness of consumption advisories and the overall effect on fish and country food consumption.
- LCP to incorporate research on mercury in country food and its consumption as part of activities implemented regarding mercury effects.
- LCP will provide self-contained accommodations complexes with respect to water supply, sewage systems and communications.
- LCP will prepare reservoirs through clearing of timber and removal of vegetation to reduce adverse aesthetic effects.
- LCP will clear riparian zone around the perimeter of the reservoir to enable access to the shoreline and/or reservoir and enable safe navigation of the reservoir.
- LCP will clear riparian zones to provide habitat for furbearers and other hunted/trapped game.
- LCP will establish new boat launches to replace access points lost due to the Project.
- LCP will maintain access to portage routes at Muskrat Falls.
- To manage the potential adverse effects of herbicide application for the LTA, mitigation and management measures will be implemented such as providing notice to communities and Aboriginal groups of locations of the ROW where vegetation management has occurred. The notice would include the date of application via signage in the ROW, so that plant and berry harvesting.
- would not occur in that location until the plants are again safe for consumption.
- LCP will develop snowmobile trails equal to the amount inundated.
- LCP will enforce a no harvesting policy for Project employees, and firearms will be prohibited on-site.
- LCP will provide country foods at the accommodation complexes, where reasonable and commercially available.
- LCP will notify commercial and other land and resource users about planned Project activities.
- LCP will establish an Environmental Management Committee with Innu Nation to make recommendations regarding environmental protection, management, permitting and reporting.

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## **9.5 CULTURAL AND HERITAGE RESOURCES**

- LCP will consult with local stakeholders to determine the level of mitigation for historic tilts.
- LCP will Aboriginal groups in the management and protection of historic and archaeological resources, as appropriate.
- LCP will support the PAO in undertaking commemorative and educational efforts to preserve historical, archaeological, spiritual and cultural sites and artifacts.
- LCP will develop a Historic Resources and Archaeological Resources Contingency and Response Plan for Project construction, operation and maintenance. The plan will include follow-up to assess the condition of any new sites or materials discovered.
- Through the Environmental Management Committee, LCP will consider recommendations to protect and minimize adverse effects of the Project on historic resources and sites of spiritual significance to Innu.

## **9.6 EFFECTS MANAGEMENT DEVELOPMENT**

Other LCP EEM plans have been prepared to address the effects specific to some socioeconomic components. The monitoring of ice conditions on the Lower Churchill River during freeze-up and spring break-up in the vicinity of Mud Lake to address safe travel between Mud Lake and Happy Valley-Goose Bay is being addressed through the Ice Formation EEMP (Nalcor 2013c) prepared for the Project. This program includes support of the Lake Melville Ice Monitoring Service; a previously federally-funded service provided to facilitate safe transportation in the Lake Melville Area. Similarly, the Methyl-Mercury EEMP: Osprey and River Otter (Nalcor 2013b), has been developed to address methyl-mercury levels in the local ecosystem.

LCP has also initiated a number of management measures to address the socioeconomic commitments, either specifically for the Project or in relation to other undertakings. For example, a Fish Habitat Compensation Plan was considered over the past several decades (LCP 2009) and the Fish Habitat Compensation Plan for Muskrat Falls was completed in 2013 (LCP 2013).

Specifically to address effects on socioeconomics resulting from the Project, a Community Liaison Committee has been established and a Complaints Resolution Process is under development.

Socioeconomic issues respecting Labrador Innu are addressed in the IBA.

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## 9.7 LCP INNU IMPACTS AND BENEFITS AGREEMENT

The planning and implementation of activities in support of economic and social development is largely, but not exclusively, affected through impact benefit strategies and agreements with any Aboriginal group with an executed IBA. Such strategies and agreements address socioeconomic benefits that can be enhanced with some assistance directed at people, such that they are better positioned to access Project and other associated economic opportunities. Sustainability criteria are typically incorporated in decisions on effects mitigation and benefit enhancement measures and IBA by considering:

- Demonstrated demand for the measure;
- The willingness of people to participate in the development and implementation of the measures that imply their participation;
- People’s culture, expectations, basic needs and vulnerabilities;
- Consistency with government planning and programming; and
- Compliance with Lower Churchill Innu Impacts and Benefits Agreement.

A benefits strategy has been negotiated between Nalcor and the Government of Newfoundland and Labrador and an IBA has been established between Nalcor and the Innu Nation. The IBA includes commitments related to: employment and training, workplace policies and conditions, business opportunities, environmental protection, and financial benefits. The Lower Churchill Construction Projects Benefits Strategy (LCP No date), negotiated between LCP and the Government of Newfoundland and Labrador addresses the following socioeconomic areas of mutual interest that are relevant to managing socioeconomic effects of the Project:

- Project management;
- Engineering and project management;
- Procurement and contracting;
- Construction and assembly;
- Gender equity and diversity;
- Reporting;
- Confidentiality;
- Other projects (in relation to benefits commitments); and
- Public updates.

Following negotiation, representatives of the Innu Nation, Innu Band Councils, and Nalcor signed the IBA on November 18, 2011 (Government of Newfoundland and Labrador 2011).

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In addition to contractual and royalty arrangements, and the provision that the IBA appropriately includes any matter that parties consider to be relevant to the needs of the Project and the Innu, the following matters described in the IBA are relevant to managing effects on socioeconomics that result from the Project (Government of Newfoundland and Labrador 2010):

- Employment and training participation objectives for construction and operations including preferential hiring and scholarships;
- A target for contracts for Innu businesses, including preferential contracting practices, a supplier development plan, and obligations of sub-contractors;
- Workplace policies and conditions which consider Innu interests; and
- Establishment of a joint Nalcor-Innu environmental management committee (to address environmental policies, environmental management systems, and consideration of Innu knowledge).

## **10 SOCIOECONOMIC EFFECTS MONITORING**

This SEEMP contains monitoring programs or processes to track and report on socioeconomic parameters to demonstrate that the Project is complying with LCP’s socioeconomic commitments, and that mitigation and enhancement measures proposed by LCP to minimize the Project’s adverse socioeconomic effects and increase Project benefits are implemented and effective.

Monitoring for socioeconomic components involves the identification of indicators and the collection of data on these indicators, followed by the analysis of data collected in relation to the objectives of social management, the realities of Project implementation, and the socioeconomic dynamic in affected communities. Further, monitoring is only valuable insofar as it is comprehensively reported and results are used to adjust socioeconomic management measures. That is, results need to be incorporated into adaptive management strategies.

Monitoring contributes to demonstrating Project benefits and provides evidence of compliance with the EIS commitments. In addition, monitoring furthers the understanding of the effectiveness of mitigation and benefits enhancement measures and provides a mechanism to capture any unpredictable or evolving effects, such that socioeconomic management can be adjusted (i.e., adaptive management). Socioeconomic monitoring includes participation in monitoring activity by communities and Aboriginal groups. The integration of engagement into socioeconomic effects management and monitoring is crucial.

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LCP’s community relations and other management staff will informally monitor the day to day implementation of socioeconomic mitigation and enhancement measures in the course of management and administration of their relationships with Project workers, and with people in communities and their representatives. Meetings in communities with representatives of elders, youth, businesses, local governments and others are methods that will be used by LCP for discussion of Project related issues.

LCP’s IBA Commitments Lead, as well as other relevant management staff, will monitor implementation of the Innu IBA, including its socioeconomic enhancement measures. As per the Order, there is a requirement for monitoring of the implementation of socioeconomic mitigation and enhancement measures and for reporting of monitoring results. A priority for monitoring activity will be in the measurement of economic benefits to local communities that result from the Project during construction (e.g., on-the-job training opportunities for Muskrat Falls). In addition, monitoring is necessary to establish trends in community wellbeing, such that problems that may be related to the Project, or that the Project can effectively address, can be identified.

**10.1 MONITORING ISSUES**

Issues that will need to be monitored have been identified through engagement results (Nalcor 2009); and so are based on stakeholder and community priorities and interests. Relevant issues include the following:

- Uptake of Project employment and retention;
- Contracting and training opportunities;
- Effectiveness of education and training initiatives; both workforce training and broader education and training initiatives;
- Labour markets in communities;
- In- and out-migration levels and consequent effects;
- Changes in traditional land and resource use;
- Occupational health and safety; and
- Community wellness.

Specifically, the socioeconomic parameters that will be monitored to address the identified issues, include:

- Gender equity and diversity program;
- Labour acquisition;

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- Training programs;
- Supplier information;
- Property owner consultation;
- Transmission line construction activity;
- Publish baseline data reports and analysis of downstream effects;
- Fish habitat compensation;
- Human health risk assessment;
- Mud Lake observation program;
- Wetland and riparian compensation consultation;
- Dam break consultation;
- Community liaison committee;
- Quarterly meetings with the town of Happy Valley-Goose Bay;
- Churchill River navigation;
- Snowmobile trails;
- Trapper compensation consultation;
- Innu Nation IBA initiatives:
  - Innu employment;
  - workplace policies and conditions;
  - Innu business opportunities;
  - environmental protection;
  - IBA implementation; and
  - general Innu engagement. (Note, IBA monitoring and reporting will be conducted as per the IBA requirements. Public release of information is subject to agreement between Nalcor and Innu Nation.)
- Aboriginal – other initiatives:
  - permit application consultation with ten Aboriginal groups in Labrador and Québec;
  - Community Liaison Committee; and
  - community level land and resource use monitoring.

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## 10.2 MONITORING PROTOCOLS

LCP has committed to conduct monitoring programs to evaluate the effectiveness of the socioeconomic effects management plans, and to determine if expansion or reduction or deletion of the indicated programs is appropriate (with justification). This would apply to the following, as appropriate:

- Data collection during construction;
- Data collection during operations; and
- Monitoring reporting.

Protocols for data collection are discussed in the following subsections. Data collection includes metrics that are specific, quantifiable, relevant and time constrained. The goal is to collect meaningful data in a focused, defensible, repeatable approach, with an appropriate timeline to determine that the mitigation is appropriate. Where it is determined that the mitigation is not meeting stakeholder (and Project) needs or can be improved, the socioeconomic information collected and analyzed would be used in an adaptive management strategy to develop a measure better suited to address stakeholder (and Project) needs.

### 10.2.1 Data Collection during Construction and Operations (Community Level Data Availability and Analysis)

#### ***Canada Census Update***

The socioeconomic baseline study (Minaskuat 2008a) and EIS (Nalcor 2009) have presented data against which to measure community trends in such areas as population, educational achievement, participation and employment rates and income.

These data are from the Canada census and while useful because of completeness, the data are only collected every five years and there is a two year lag in data release after collection. LCP will update the socioeconomic baseline data with the most recently released Statistics Canada census data (2011) to present current conditions.

#### ***Local and Regional Data Collection***

Local education, police services and health services keep data on their activities. Most of these data are not made public on confidentiality grounds but may be used to derive data of interest (e.g., participation in educational programs, rates of teen pregnancy, attempted and actual suicides, domestic violence, mental health issues and various types of crime). Such data are pertinent to monitoring wellbeing and has been collected qualitatively through interviews. LCP's



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approach to stakeholder relations will involve discussion with relevant agencies as the approach to monitoring community well-being, respecting confidentiality.

***Ongoing Stakeholder Engagement***

LCP acknowledges that the Project will affect Newfoundlanders and Labradorians economically, environmentally and socially. As such, since November 2005, Nalcor has engaged stakeholders in consultation, using a wide range of methods and materials, to support a two-way flow of information throughout the Project planning and EA process. This engagement has provided stakeholders with the information needed to identify, discuss and provide feedback on aspects of the Project that are likely to affect them. Stakeholder relationships built during consultation in the Project planning phase is expected to provide LCP with the foundation for ongoing communication during Project execution.

To meet the Project’s commitments for socioeconomic effects management and monitoring, a Benefits Strategy has been developed, as well as a number of stakeholder committees (i.e., Community Liaison Committee, and Innu Business Development Advisory Committee.

Monitoring perceptions, through ongoing stakeholder engagement with affected people is important. For example, the extent of sharing and cooperation, levels of disturbance from increased traffic, and the legal but potentially disruptive behaviour of out-of-area workforces are subjectively experienced.

LCP’s stakeholder engagement and workforce management can provide some information, and additional purposeful or issue-specific engagement could be organized through the Community Liaison Committee, which has already been established.

**10.2.2 Analysis of Data**

Data collected using the methods described will be analyzed. Analysis will involve comparison of data collected during Project construction to baseline and/or data collected in years prior to construction, and consideration of new information provided by stakeholders as Project construction progresses. The analysis will be used to:

- Identify changes and trends over the reporting period based on compiled summaries;
- Determine the effectiveness of specific effects management measures;
- Evaluate whether specific targets are being met; and
- Identify any new or unexpected issues affecting stakeholders as a result of the Project.

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Where information collected demonstrates that measures are effective and targets are being met, compliance with commitments can be reported. Further, LCP may use the information to make decisions related to ongoing Project management. For example, for procurement and supplier development, subcontractor performance will be monitored for compliance with commitments and the results used in decisions on contract renewals and management.

Where information indicates that measures are not effective or new issues are identified, LCP will consider steps to modify measures or identify new measures to improve or address the situation as part of its adaptive management strategy.

### 10.2.3 Monitoring Reporting

Reporting on socioeconomic data and subsequent analysis, and tracking all stakeholder activities and engagement results is crucial to addressing socioeconomic issues and demonstrating that LCP is meeting its commitments. Socioeconomic monitoring involves the collection, analysis and reporting of internal LCP information, related to, for example, success of recruitment and hiring locally, contracting and training opportunities, health and safety performance, grievances, engagement activity and contributions to communities. LCP’s records can provide considerable monitoring data on commitments described in this SEEMP.

In this regard, LCP will undertake the following data collection and tracking activities:

- Maintain full human resources records in a form that permits an annual roll-up of employment by residence, gender, Aboriginal affiliation, and occupations by 4 digit National Occupation Classification Code, and the number of journeypersons and apprentices for skilled trade occupations.
- Maintain procurement records in a form that permits annual roll up of the number, value and general content of contracts for goods and services by supplier location and Innu content, as a percentage of total procurement.
- Require of all contractors monthly reporting on employment and procurement that provides the same information.
- Maintain health and safety, accident and incident, breach of worker codes of conduct and any other relevant records pertaining to events that occur in direct relation to Project activity.
- Highlight any anomalous results of traffic, air quality, noise, water flow and quality, and biological monitoring programs to allow an assessment of any potential for social effects.

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- Maintain records of all public education awareness and training events (e.g., environmental awareness training), including the content of and participation rates in events.
- Maintain records on other social effects mitigation and benefit enhancement measures and on LCP’s contributions to communities, identifying as relevant the objectives, organizations in receipt of support, implementation details and number of beneficiaries.
- Maintain records on all engagement events with the public, governments, relevant stakeholder groups and the Project workforce, noting attendance, issues raised and follow up.
- Release of information related to IBA commitments is subject to confidentiality commitments between Nalcor and Innu Nation.
- Maintain records on Project commitments to stakeholders and on grievances (complaints) and their resolution. Note: A Complaints Resolution Process is being developed and will be communicated to communities.
- Maintain records of all information disclosure materials distributed by the Project; and
- On an annual basis, undertake a formal review of the results of the above to determine the degree of compliance with EIS related undertakings and the Order, and to identify (and address) any specific obstacles or problem areas and any systemic successes or failures.

The tracking of socioeconomic issues and parameters will be managed by LCP through reporting of internal management information and maintaining a database that can be accessed and analyzed for reporting purposes. LCP will report to its managers and workforce accordingly, such that information can be used to adjust policies and procedures where necessary and practical. The results will be annually reported and shared with communities in appropriate formats, with a view to maintaining transparency and accountability and to build confidence in LCP’s economic and social performance relative to commitments.

**10.2.3.1 Benefits Strategy**

The Benefits Strategy outlines the overall benefits strategy for the construction of the projects. The overriding objective of this Benefits Strategy is to provide opportunities and benefits to the people of Newfoundland and Labrador during the construction phase of the projects. Section 6.0 of the strategy describes the reporting requirements for the Project, and includes the following:

Monthly Reporting

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- 1) LCP shall provide to the Government reports on a monthly basis from the date of sanction of the Projects and continuing throughout the life of the Projects in a form satisfactory to the Government.
- 2) Monthly reports shall contain the following information, in all cases broken out by 4 digit National Occupational Classification Code, location, contractor, Aboriginal affiliation, and gender relating to the Projects for the period, and for skilled trades it will include the number of journeypersons and apprentices:
  - a) Total number of Person Hours of all work on the Projects in that month and to date;
  - b) Number of Person Hours of project management in the Province in that month and to date;
  - c) Number of Person Hours of engineering design work in the Province in that month and to date;
  - d) Number of Person Hours of Construction and Assembly in the Province in that month and to date;
  - e) Number of Residents hired for the project team and the percentage of project team members who are Residents;
  - f) Number of Residents hired for engineering design work and the percentage of engineering design workers who are Residents;
  - g) Number of Residents hired for Construction and the percentage of Construction workers who are Residents; and
  - h) Number of Person Hours of Specialized Engineering performed outside the Province (if any) by component.
- 3) Monthly reports shall also provide the following information:
  - a) Total value of goods and services purchased;
  - b) Total value of services purchased from businesses in the Province by geographic location;
  - c) Total value of purchases by industry category (e.g., transportation, fuel, equipment, etc.);
  - d) Cumulative total value of goods and services referred to in subparagraphs a, b and c for the year to date;
  - e) Details of contracts awarded in that month.

Quarterly Reporting

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- 1) LCP shall provide to the Government reports on a quarterly basis from the date of sanction of a Project or Projects and continuing throughout the life of the Projects in a form satisfactory to the Government.
- 2) The quarterly report shall contain the following relating to the Projects for the period:
  - a) A statement from the Coordinator-LCP regarding the level of compliance with the strategy over the reporting period;
  - b) Information regarding supplier development workshops performed during the reporting period;
  - c) Report of activities carried out pursuant to the Gender Equity Program;
  - d) Report of activities carried out pursuant to the Diversity Program; and
  - e) Procurement forecasts.

Specific ways in which the Project addresses reporting commitments and socioeconomic issues are through The Muskrat Falls Projects Monthly Report and Benefits Strategy.

#### **10.2.3.2      *The Muskrat Falls Projects Monthly Report***

The Muskrat Falls Projects Monthly Report is published by the LCP. It is made publicly available at <http://muskratfalls.nalcorenergy.com/newsroom/reports/> and provides updates on the Project. The report includes details on construction and procurement activities, construction costs, safety and environmental activities, and details on stakeholder and community consultation and engagement initiatives during the reporting period. The report also provides detailed statistical tables summarizing employment and expenditure benefits generated from the Muskrat Falls development. Specific categories of information provided are as follows:

- Construction Update
- Procurement
- Construction Cost Summary
  - Monthly Expenditure Overview
- Safety and Environment
- Employment, Benefits and Community Engagement
  - Employment Highlights
  - Recruitment Activities
  - Training and Development
    - Construction Safety Training
    - Skills Development
    - Innu Cultural Awareness Training
    - Innu Workplace Orientation

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- Labrador Aboriginal Training Partnership Support
- Gender Equity and Diversity
  - Women and Aboriginal Employment
  - Gender Equity and Diversity Program
  - Women and Unions
  - Promoting Women in Trades on the LCP
- Labrador Innu Initiatives
  - Innu employment levels
  - Contracts awarded to Innu businesses by Nalcor
- Community Engagement
  - Business Development
  - Community Presentations
  - Public Inquiries
- Community Investment

## 11 SUMMARY

This SEEMP demonstrates how any adverse socioeconomic effects of the Project will be mitigated by LCP, and sets out a program for monitoring the effectiveness of the proposed mitigation measures and the enhancement of benefits.

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