



Stantec

Sisson Project:

Baseline Socioeconomic Technical Report

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TABLE OF CONTENTS

1.0	INTRODUCTION.....	1
1.1	PURPOSE OF THIS TECHNICAL REPORT	1
1.2	ORGANIZATION OF THIS TECHNICAL REPORT	2
2.0	METHODOLOGY.....	5
2.1	DATA COLLECTION AND SOURCES	5
2.2	SPATIAL BOUNDARIES	6
2.2.1	Labour and Economy.....	9
2.2.2	Community Services and Infrastructure	9
2.2.3	Land and Resource Use	9
3.0	DEMOGRAPHIC OVERVIEW	10
3.1	TOTAL POPULATION.....	10
3.2	POPULATION DISTRIBUTION	11
3.3	ABORIGINAL POPULATION	13
3.4	VISIBLE MINORITIES.....	14
4.0	LABOUR AND ECONOMY	15
4.1	THE ECONOMY	15
4.1.1	New Brunswick	15
4.1.1.1	Mining, Energy, and Oil and Gas	16
4.1.1.2	Commercial Fisheries and Aquaculture.....	19
4.1.1.3	Forestry	19
4.1.1.4	Agriculture.....	19
4.1.1.5	Tourism.....	20
4.1.1.6	Military	20
4.1.2	York County.....	21
4.1.3	Carleton County.....	21
4.2	LABOUR	22
4.2.1	New Brunswick	22
4.2.2	York County.....	26
4.2.3	Carleton County.....	28
5.0	COMMUNITY SERVICES AND INFRASTRUCTURE	31
5.1	MUNICIPAL ADMINISTRATION AND PLANNING	31
5.1.1	New Brunswick	31
5.1.2	York County.....	32
5.1.2.1	Fredericton.....	32
5.1.2.2	Stanley.....	33
5.1.2.3	Burtts Corner and Napadogan	33
5.1.2.4	Millville	33
5.1.3	Carleton County.....	34
5.1.3.1	Woodstock.....	34
5.1.3.2	Hartland	35
5.1.3.3	Juniper.....	35
5.1.4	Policing.....	35
5.1.5	New Brunswick	35
5.1.6	York County.....	36

5.1.7	Carleton County.....	39
5.2	FIRE PROTECTION.....	39
5.2.1	York County.....	39
5.2.2	Carleton County.....	40
5.3	PERMANENT HOUSING	40
5.3.1	New Brunswick	40
5.3.2	York County.....	42
5.3.2.1	Fredericton.....	42
5.3.2.2	Stanley Parish.....	43
5.3.2.3	Douglas Parish	44
5.3.2.4	Millville	44
5.3.3	Carleton County.....	44
5.3.3.1	Woodstock.....	44
5.3.3.2	Hartland	45
5.3.3.3	Aberdeen Parish	45
5.4	TEMPORARY ACCOMMODATIONS.....	45
5.4.1	New Brunswick	45
5.4.2	York County.....	46
5.4.3	Carleton County.....	46
5.5	INCOME SUPPORT AND EMPLOYMENT SERVICES.....	47
5.5.1	New Brunswick	47
5.5.2	Study Area.....	48
5.6	COMMUNITY HEALTH	48
5.6.1	Health Administration.....	49
5.6.2	Health Facilities	50
5.6.2.1	York County.....	50
5.6.2.2	Carleton County.....	53
5.6.3	Human Resources.....	53
5.6.3.1	Study Area.....	54
5.6.4	Community Programs.....	55
5.6.4.1	Addictions and Mental Health Services	55
5.6.4.2	Public Health.....	55
5.6.4.3	Extra-Mural Program.....	55
5.6.5	Emergency Services.....	56
5.7	RECREATION AND ENTERTAINMENT	56
5.7.1	York County.....	56
5.7.1.1	Fredericton.....	56
5.7.1.2	Stanley.....	58
5.7.1.3	Burtts Corner and Napadogan	58
5.7.1.4	Millville	59
5.7.2	Carleton County.....	59
5.7.2.1	Woodstock.....	59
5.7.2.2	Hartland	59
5.7.2.3	Juniper.....	60
6.0	LAND AND RESOURCE USE.....	61
6.1	REGIONAL SETTING	61
6.2	REGULATION OF LAND USE AND DEVELOPMENT	61
6.2.1	<i>Community Planning Act.....</i>	<i>62</i>
6.2.2	<i>Crown Lands and Forests Act.....</i>	<i>62</i>

6.3	COMMERCIAL, INSTITUTIONAL, AND INDUSTRIAL LAND AND RESOURCE USE	63
6.3.1	Commercial	63
6.3.2	Industrial.....	63
6.3.3	Institutional	63
6.4	RESIDENTIAL LAND USE	63
6.5	OUTDOOR RECREATIONAL ACTIVITIES	63
6.6	CURRENT USE OF LAND AND RESOURCES FOR TRADITIONAL PURPOSES BY ABORIGINAL PERSONS	64
7.0	REFERENCES.....	67
7.1	LITERATURE CITED	67
7.2	PERSONAL COMMUNICATIONS.....	73

LIST OF TABLES

Table 2.1	Interviews Conducted	5
Table 3.1	Population by Sex, County, and Province, 2006	10
Table 3.2	Population Change by County and Province, 2001 – 2006	10
Table 3.3	Aboriginal and Visible Minority Population, by County and Province, 2006	13
Table 3.4	New Brunswick Aboriginal Community Population, 2009 (Maliseet).....	13
Table 4.1	Gross Domestic Product (GDP), Province of New Brunswick, 2001 to 2010.....	16
Table 4.2	Labour Force Characteristics, New Brunswick, York and Carleton Counties, 2006.....	22
Table 4.3	Labour Force Statistics by Economic Region, October 2011	23
Table 4.4	Experienced Labour Force by Industry, Province of New Brunswick, 2006.....	23
Table 4.5	Experienced Labour Force by Occupation, Province of New Brunswick, 2006.....	24
Table 4.6	Incomes in the Study Area.....	25
Table 4.7	Experienced Labour Force by Industry, York County, 2006	26
Table 4.8	Experienced Labour Force by Occupation, York County, 2006.....	27
Table 4.9	Largest Public and Institutional Sector Employers, York County, 2011	27
Table 4.10	Experienced Labour Force by Industry, Carleton County, 2006	29
Table 4.11	Experienced Labour Force by Occupation, Carleton County, 2006.....	29
Table 5.1	Social Assistance Recipients and Case Load, New Brunswick and Fredericton Region, 2008-10	48
Table 5.2	Number of Physicians at Healthcare Facilities in the Study Area	54
Table 5.3	Recreational Facilities, Fredericton.....	57

LIST OF FIGURES

Figure 1.1	Project Location	3
Figure 2.1	Communities Near the Project	7
Figure 3.1	Population by Gender and Age Group, Province of New Brunswick, 2006.....	11
Figure 3.2	Population by Gender and Age Group, York County, New Brunswick, 2006.....	12
Figure 3.3	Population by Gender and Age Group, Carleton County, New Brunswick, 2006.....	12
Figure 4.1	Economic Regions of New Brunswick.....	17
Figure 4.2	Education Level, Province of New Brunswick, 2006.....	25
Figure 4.3	Education Level, York County, 2006.....	28
Figure 4.4	Education Level, Carleton County, 2006.....	30
Figure 5.1	RCMP Jurisdictions, New Brunswick	37
Figure 5.2	Regional Health Authorities and Zones, New Brunswick.....	51
Figure 6.1	Recreational Campsite Leases	65

LIST OF APPENDICES

Appendix A:	List of Acronyms and Units
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1.0 INTRODUCTION

This document is the Baseline Socioeconomic Technical Report prepared by Stantec Consulting Ltd. (Stantec) as background information for the Environmental Impact Assessment (EIA) of the Sisson Project (the Project), proposed by Northcliff Resources Ltd. (Northcliff).

The Project consists of a conventional, open-pit tungsten and molybdenum mine, an ore processing plant and associated facilities located on provincial Crown land approximately 10 km southwest of the community of Napadogan, New Brunswick, and approximately 60 km directly northwest of the City of Fredericton (Figure 1.1).

1.1 PURPOSE OF THIS TECHNICAL REPORT

The purpose of this Technical Report is to describe the baseline conditions of the socioeconomic environment that may be affected by the Project. Three areas of the socioeconomic environment have been identified as particularly important to the well-being of local residents and their communities. In this report, they will be referred to as valued environmental components (VECs), and they are as follows.

- **Labour and Economy:** Labour refers to the supply of, and demand for, skilled and non-skilled labour in the Project area, while Economy refers to the levels of employment and income. This report describes the existing labour and economic conditions both locally and regionally that may be affected by the Project. It also provides a profile of the population and labour force, economic production, employment and income, and business and industry.
- **Community Services and Infrastructure:** Community Services and Infrastructure refers to the public and private sector services and infrastructure that support the well-being of individuals in a particular community. They include local emergency response (fire, medical, and police), ongoing support services (health and social services), housing and accommodations, recreation and entertainment facilities, and food services. This report describes existing availability and capacity of these services and infrastructure in the area of the Project.
- **Land and Resource Use:** Land and Resource Use refers to the use of the land and/or resources in the area of the Project by individuals for various purposes. It includes the regulation of land and resource use and development (zoning and land use planning), residential land use, commercial, institutional and industrial land and resource use, and use of land and resources for outdoor recreational activities. It does not include the use of land and resources by Aboriginal persons for traditional purposes since this topic will be addressed in a separate report.

This report characterizes existing baseline conditions for each of these socioeconomic VECs, to provide background information in support of the EIA process and the environmental effects assessment for the Project. As described in Sections 4.9, 4.10, and 4.11 of the Final Terms of Reference for the EIA Report of the Project (Stantec 2012), potential Project-related environmental effects on the socioeconomic environment will be assessed based on predicted economic inputs and outputs, changes in labour requirements, changes in demands for community services and

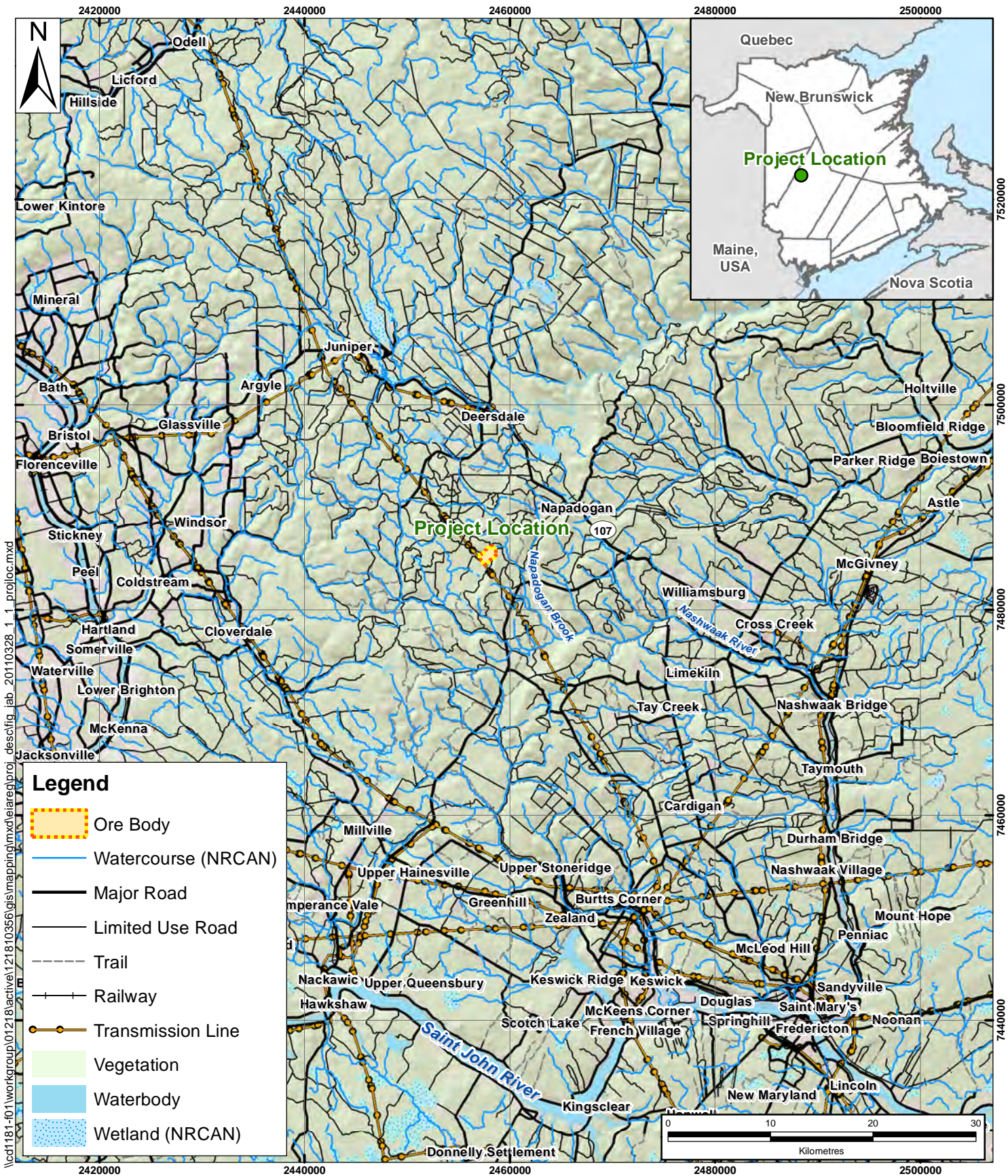
infrastructure, and changes to land and resource uses. Predictive studies will be conducted as part of the EIA to determine how the Project will interact with the socioeconomic environment.

1.2 ORGANIZATION OF THIS TECHNICAL REPORT

This remainder of this Technical Report is presented in six sections, as follows.

- Section 2.0 provides an overview of the methodology used in the technical report and describes the spatial boundaries for each VEC.
- Section 3.0 provides an overview of the demography of New Brunswick as a whole, and in York and Carleton counties specifically.
- Section 4.0 describes the labour force and economic drivers in New Brunswick generally and in York and Carleton counties specifically.
- Section 5.0 describes the community services and infrastructure in New Brunswick generally and in York and Carleton counties specifically.
- Section 6.0 describes the use of land and resources in the area of the Project.
- Section 7.0 provides a list of all references consulted as part of the work and personal communications.

Appendix A provides a list of acronyms and units of measure used throughout this Technical Report.



NOTE: THIS DRAWING ILLUSTRATES SUPPORTING INFORMATION SPECIFIC TO A STANTEC PROJECT AND SHOULD NOT BE USED FOR OTHER PURPOSES.

<h3>Project Location</h3> <p>Sisson Project</p> <p>Napadogan, N.B.</p>		Scale:	Project No.:	Data Sources:	Fig. No.:	
		1:500,000	121810356	SNB NRCAN, ESRI	1.1	
Client:	Northcliff Resources Ltd.	Date: (dd/mm/yyyy)	Dwn. By:	Appd. By:		
		26/01/2012	JAB	DLM		

2.0 METHODOLOGY

This section provides an overview of the methodology used in the technical report. It describes how and where data were collected and describes the spatial boundaries for each of the valued environmental components (VECs).

2.1 DATA COLLECTION AND SOURCES

This report presents a wide range of the most recently available data on baseline conditions and, where appropriate and available, trends with respect to the VECs. In the case of the labour force, business, and community infrastructure and services, information is also presented on current capacities and the ability of each to handle any additional demands.

This report primarily drew baseline data related to the VECs (Labour and Economy, Community Services and Infrastructure, and Land and Resource Use) from secondary sources, including:

- Statistics Canada and other agencies and departments of the Government of Canada;
- the various departments of the Government of New Brunswick (GNB); and
- municipal governments, and local and regional authorities and boards.

In addition, primary information was collected through interviews with the groups and agencies mentioned above at the community, regional and provincial levels (see Table 2.1 for details about these interviews). Site visits were conducted to observe how land and resources are used.

Table 2.1 Interviews Conducted

Interviewee	Affiliation	Date Contacted	Topics Discussed or Information Received
Department of Social Development – Public Housing	Department of Social Development – Public Housing	18-Nov-11	Public housing availability and statistics.
Shelley Douglass	Village of Stanley	27-Nov-11	Number of employees, water, sewer and waste infrastructure.
Travis Gauvin	Community of Juniper	30-Nov-11	Municipal administration, local infrastructure.
Kirk Steeves	Ambulance New Brunswick	29-Nov-11	Number of employees, equipment.
Mike Walton	Hartland Fire Department	29-Nov-11	Number of employees and volunteers, infrastructure and equipment.
Jerry Rousselle	Juniper Fire Department	13-Jan-12	Number of staff and volunteers, infrastructure and equipment.
Marcello Battilana	City of Fredericton	24-Nov-11	Building permits, new dwelling units, plans for new residential development in rural areas.
H. and P. Brooks	Residents of Juniper	1-Dec-11	Local restaurants and hotels.
Don Stenger	RCMP District 2	5-Dec-11	Number of staff, plans to hire.
Ann Marie Voutour	Town of Woodstock	6-Dec-11	Number of employees, recreation infrastructure.
Tim Noel	Douglas LSD	6-Dec-11	Number of employees, local infrastructure.

Table 2.1 Interviews Conducted

Interviewee	Affiliation	Date Contacted	Topics Discussed or Information Received
Toby Antworth	Valley Solid Waste Commission	6-Dec-11	Capacity of Woodstock transfer station, waste transfer system for rural areas.
Brett McCrae	Fredericton Region Solid Waste Commission	7-Dec-11	Fredericton landfill capacity.
Karen Mason	Horizon Health Network	29-Nov-11	Number of physicians, number of beds at hospitals/clinics.
Tianne Euteneier	Rural Planning District Commission	5-Dec-11	Building permits, plans for subdivisions in rural areas.
Natalie Hill	Village of Millville	9-Dec-11	Number of employees, local infrastructure, local fire protection, water, sewer, waste systems.

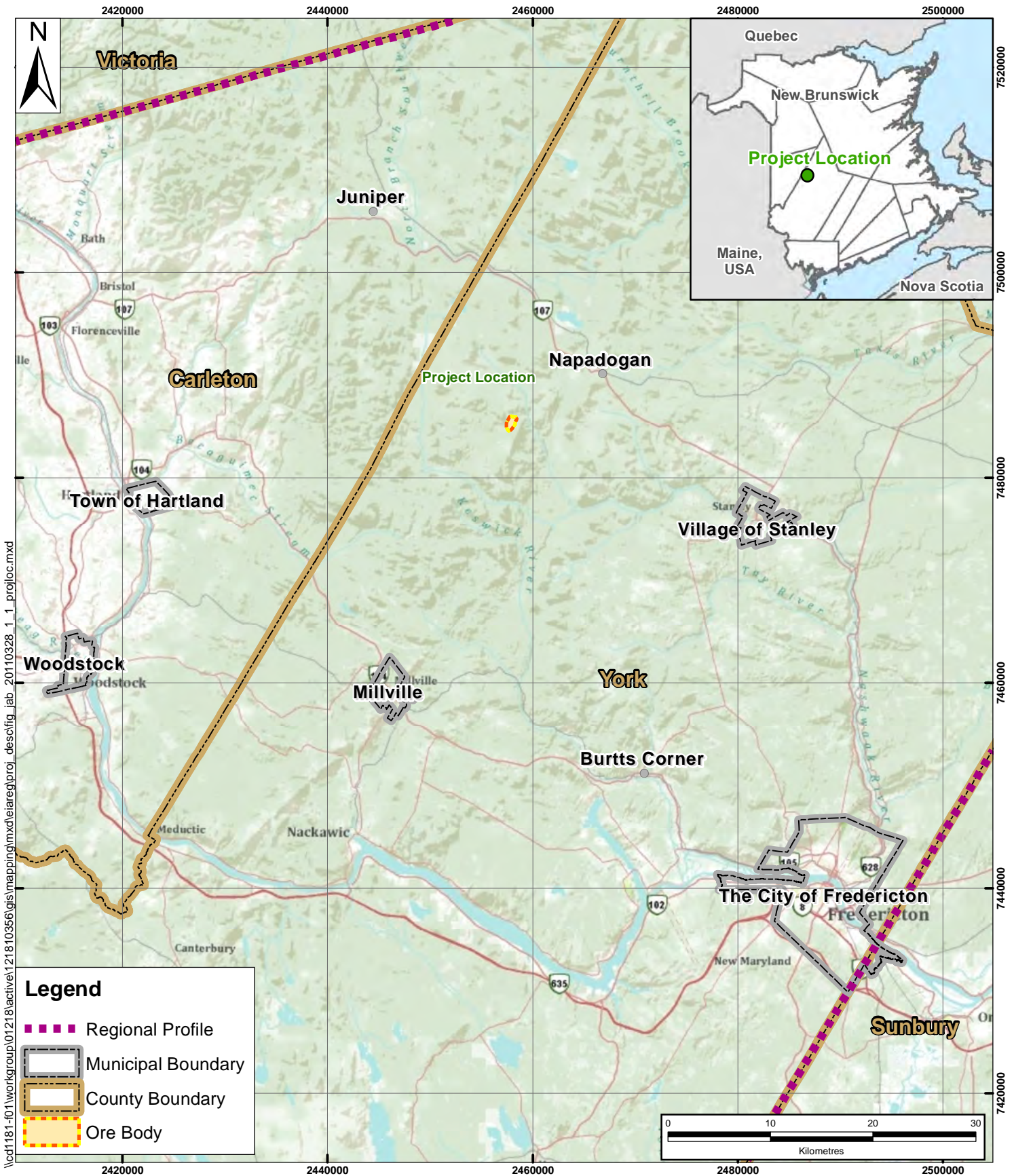
The information gathered from these secondary sources, interviews, and site visits is used to describe the existing socioeconomic environment in the area of the Project.

2.2 SPATIAL BOUNDARIES

The spatial boundaries for the characterization of the existing conditions for each of the VECs discussed in this Technical Report are based on the following terms.


- The **Project Development Area (PDA)** is the most basic area of the Project. The PDA is limited to the area of physical disturbance associated with the construction and operation of the Project. For this Project, the PDA consists of an area of approximately 1,200 hectares (ha) that includes the area of physical disturbance associated with the open pit, ore processing plant, storage areas, tailings storage facility (TSF), and related facilities. The PDA also includes access roads and a transmission line, the specific area of which will be determined in the EIA Report.
- The **Study Area** for this Technical Report includes the PDA and is further defined for each VEC as follows, based on geographic extent of the Project and its surroundings, the availability of appropriate data, and applicable administrative boundaries.
 - For Labour and Economy, the Study Area encompasses central New Brunswick (York County and the eastern portion of Carleton County), with a particular focus on the City of Fredericton and the communities of Stanley, Millville, Burtts Corner, Napadogan, and Juniper.
 - For Community Services and Infrastructure, the Study Area is the same as the Study Area for Labour and Economy, with the addition of the Towns of Woodstock and Hartland.
 - For Land and Resource Use, the Study Area includes the area of Crown land on which Project components will be located, and any areas immediately adjacent to it.

These terms define the spatial area(s) within which the existing socioeconomic conditions for each VEC were determined as part of this Technical Report. The locations of the main communities in proximity to the Project are shown in Figure 2.1.



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NOTE: THIS DRAWING ILLUSTRATES SUPPORTING INFORMATION SPECIFIC TO A STANTEC PROJECT AND SHOULD NOT BE USED FOR OTHER PURPOSES.

Communities Near the Project Sisson Project Napadogan, N.B.		Scale:	Project No.:	Data Sources:	Fig. No.:	
		1:500,000	121810356	SNB NRCAN, ESRI	2.1	
Client:	Northcliff Resources Ltd.	Date: (dd/mm/yyyy)	Dwn. By:	Appd. By:		
		29/11/2011	JAB	DLM		

2.2.1 Labour and Economy

The basic reference units for Labour and Economy are geographic data regions defined by Statistics Canada. The Study Area for Labour and Economy encompasses central New Brunswick (York County and the eastern portion of Carleton County), with a particular focus on the City of Fredericton and the communities of Stanley, Millville, Burtt's Corner, Napadogan, and Juniper.

These regions and communities have been included in the Study Area for this Technical Report because of their proximity to the Project and their potential to be affected by it. It is anticipated that both the local and provincial economies will be affected by the employment, income, economic output, labour supply effects, and goods and services demands of the Project. The provincial government has primary responsibility for the management of economic development throughout the Province of New Brunswick.

In most cases, data are described for the Province of New Brunswick, the counties, and the City of Fredericton. Where data are available for the smaller communities within the two counties, they are described.

2.2.2 Community Services and Infrastructure

The basic reference units for Community Services and Infrastructure are geographic data regions defined by Statistics Canada. This Technical Report focuses on the central and southwestern region of the Province of New Brunswick, including York County and Carleton County. Where information is available, communities within these counties that will likely provide services and infrastructure required by individuals directly and indirectly employed by the Project, and their families, are discussed. The Study Area for Community Services and Infrastructure is the same as the Study Area for Labour and Economy, with the addition of the Towns of Woodstock and Hartland. These have been included in the Study Area for this VEC because they provide services and infrastructure that may be required by individuals directly and indirectly employed by the Project, and their families.

Information is provided for each community within the Study Area, where it is available. Data were not always available for the smaller villages and communities of Juniper, Burtt's Corner, Napadogan, and Millville. In these cases, data are provided for a Local Service District (LSD), or for the County as a whole.

2.2.3 Land and Resource Use

The Study Area for Land and Resource Use includes the area of Crown land on which Project components will be located and any areas immediately adjacent to it. The Project location is shown in Figure 1.1. Information is provided for this area as a whole as uses of land and resources are fairly homogeneous throughout the general area. Specific exceptions are indicated as applicable, for instance the presence and use of recreational cabins to the southeast of the Project site.

3.0 DEMOGRAPHIC OVERVIEW

This section provides an overview of the demography of New Brunswick as a whole and the regions in the vicinity of the Project. This section includes the total population of the Province of New Brunswick, the population distribution in the Province, the Aboriginal population, and visible minorities in the area.

3.1 TOTAL POPULATION

The 2006 Census (Statistics Canada 2006) reported a population of 729,997 in New Brunswick. Though a Census was conducted in 2011, only some of the data collected are beginning to become available at the time of writing this Technical Report. The EIA report will include all relevant data available at the time of its preparation.

Table 3.1 shows the 2006 data for the population by sex, county and province. Table 3.2 shows the population change by county and province from 2001 to 2006.

Table 3.1 Population by Sex, County, and Province, 2006

Location	Total Population	Female*	Male*
Provincial Total	729,997	374,500	355,500
York County	90,872	46,870	44,005
Fredericton	50,535	26,695	23,835
Stanley	1,815	880	940
Douglas Parish**	5,775	2,850	2,925
Millville	305	145	160
Carleton County	26,632	13,625	13,010
Juniper***	960	465	490
Woodstock	5,115	2,790	2,320
Hartland	950	440	510
Notes:	* Numbers are rounded by Statistics Canada and are reported herein exactly as they are reported by Statistics Canada. Totals may not necessarily add up as a result of rounding. ** Data discussed includes the communities of Burtts Corner and Napadogan. *** Data supplied by Statistics Canada is described for the Parish of Aberdeen.		

Table 3.2 Population Change by County and Province, 2001 – 2006

Location	Population 2006	Population 2001	Percent Change
Provincial Total	729,997	729,498	0.07
York County	90,872	87,212	4.2
Fredericton	50,535	47,580	6.2
Stanley	1,815	1,915	-5.2
Douglas Parish**	5,775	5,719	0.98
Millville	305	319	-4.4
Carleton County	26,632	27,184	-2.0
Juniper***	960	1065	-9.9
Woodstock	5,115	5,198	-1.6
Hartland	950	902	5.3
Notes:	* Numbers are rounded by Statistics Canada and are reported herein exactly as they are reported by Statistics Canada. Totals may not necessarily add up as a result of rounding. ** Data discussed includes the communities of Burtts Corner and Napadogan. *** Data supplied by Statistics Canada is described for the Parish of Aberdeen.		

3.2 POPULATION DISTRIBUTION

The population of New Brunswick is aging. The median age in the province increased by three years from 2001 to 2006, from 38.6 to 41.5 years (Statistics Canada 2002a; 2007a). In New Brunswick, females outnumber males in all age groups above 20 years (Figure 3.1). The age distribution of the 2006 New Brunswick population is shown in Figure 3.1.

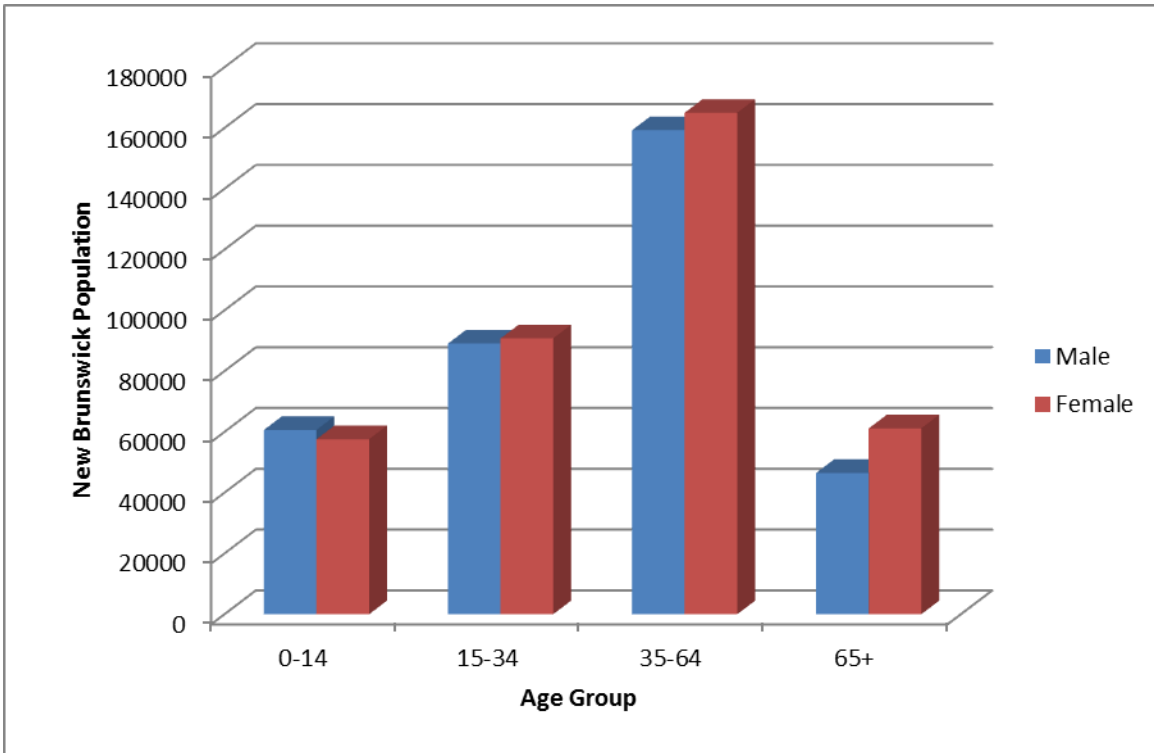


Figure 3.1 Population by Gender and Age Group, Province of New Brunswick, 2006

In 2006, approximately 16.1 percent of New Brunswick’s population lived in York and Carleton counties. From 2001 to 2006 the population in those counties rose from 114,396 to 117,504, an increase of 2.7 percent, while the provincial population rose only 0.07 percent during that same period (Table 3.2). *Population Projections for Canada, Provinces and Territories* predicts that these trends will continue over the next 27 years, showing a small increase in population, with an average of 1.2 percent between 2010 and 2036 with the median age increasing steadily (Statistics Canada 2007a).

The City of Fredericton, located in York County, is the largest community in the Study Area. Between 2001 and 2006, the population of Fredericton increased by 6.2 percent (Table 3.2) (Statistics Canada 2007b). This trend is consistent with national-level changes but is higher than the provincial average, which only saw growth of less than 0.1 percent (Table 3.2) (Statistics Canada 2007a). The 2006 population of York County is displayed graphically by gender and age group in Figure 3.2.

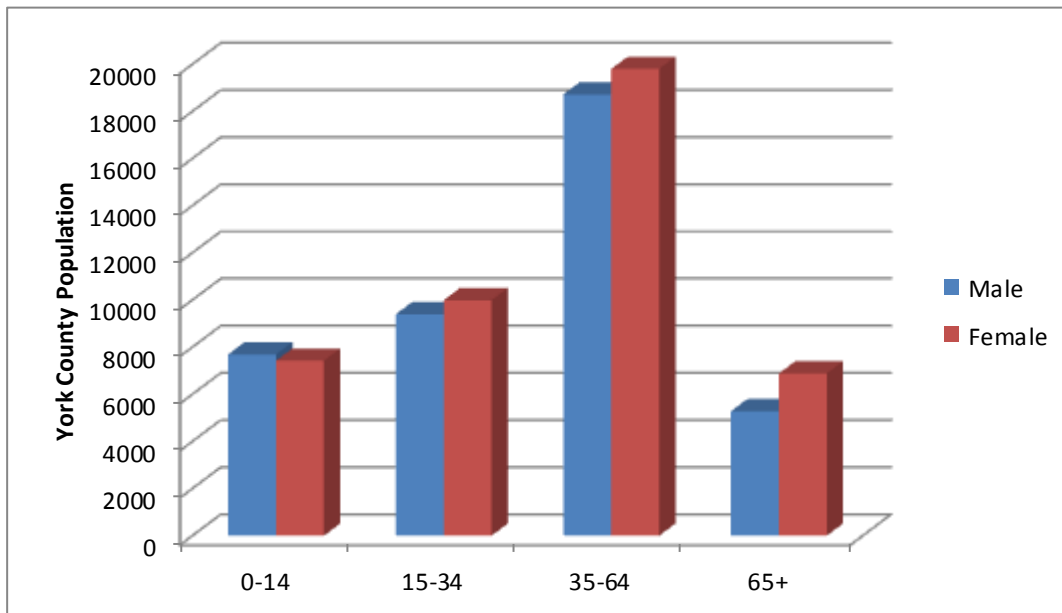


Figure 3.2 Population by Gender and Age Group, York County, New Brunswick, 2006

Carleton County includes the communities of Juniper, Woodstock and Hartland and saw a 2 percent decrease in population between 2001 and 2006 (Table 3.2) (Statistics Canada 2007c), with the greatest decline, 9.9 percent, occurring in the Aberdeen Parish (Community of Juniper). The 2006 population of Carleton County is displayed graphically by gender and age group in Figure 3.3.

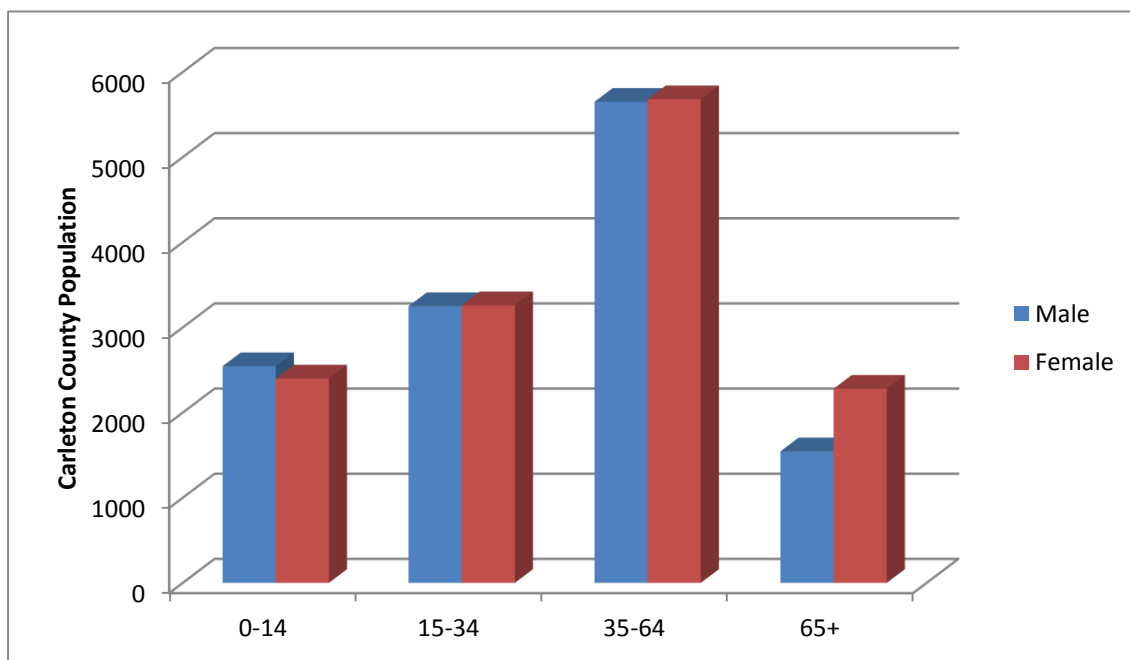


Figure 3.3 Population by Gender and Age Group, Carleton County, New Brunswick, 2006

3.3 ABORIGINAL POPULATION

Less than 0.1 percent of people (17,655 individuals) living in New Brunswick are of Aboriginal descent (Table 3.3) (Statistics Canada 2007a).

Table 3.3 Aboriginal and Visible Minority Population, by County and Province, 2006

Location	Aboriginal*	Visible Minority*
Provincial Total	17,655	13,345
York County	2,365	3,815
Carleton County	640	245

Notes:
* Numbers are rounded by Statistics Canada.

Source: Statistics Canada 2006.

The Aboriginal communities located near the Project are Maliseet. There are six Maliseet First Nations in New Brunswick:

- Madawaska Maliseet First Nation;
- Tobique First Nation;
- Woodstock First Nation;
- St. Mary's First Nation;
- Kingsclear First Nation; and
- Oromocto First Nation.

The largest on-reserve Maliseet community is the Tobique First Nation (Table 3.4) (Aboriginal Affairs and Northern Development Canada 2010).

There also exist nine Mi'kmaq Aboriginal communities primarily along the northern and eastern coasts of New Brunswick, but these are located at a considerable distance from the Study Area. Additional information with respect to First Nations will be included in the Traditional Use Study (TUS) and the EIA Report.

Table 3.4 New Brunswick Aboriginal Community Population, 2009 (Maliseet)

First Nation Community	Population On-Reserve	Population Off-Reserve
Madawaska Maliseet First Nation	129	109
Tobique First Nation	1,415	559
Woodstock First Nation	284	570
St. Mary's First Nation	796	712
Kingsclear First Nation	648	254
Oromocto First Nation	268	260

Source: Aboriginal Affairs and Northern Development Canada 2009.

3.4 VISIBLE MINORITIES

Census data from 2006 indicate that less than 0.1 percent of people living in New Brunswick are visible minorities (defined by Statistics Canada as persons, other than Aboriginal peoples, who are non-Caucasian in race or non-white in colour) (Table 3.3).

4.0 LABOUR AND ECONOMY

This section describes the labour force and economic drivers generally for the Province of New Brunswick and specifically for York and Carleton counties.

4.1 THE ECONOMY

This section describes economic conditions of the Study Area. It also discusses recent trends in key economic characteristics, including recent and projected performance of key sectors.

Data described in this section relate to the Study Area for Labour and Economy described in Section 2.2. In some cases, data also relate to Economic Regions, of which there are five for the province of New Brunswick (Figure 4.1):

- Northeast (Statistics Canada Labour Force Survey (LFS) Region 310), including Gloucester, Northumberland and Restigouche Counties;
- Southeast (LFS Region 320), including Westmorland, Kent and Albert Counties;
- Southwest (LFS Region 330), including Charlotte, Saint John and Kings Counties;
- Central (LFS Region 340), including York, Sunbury and Queens Counties; and
- Northwest (LFS Region 350), including Madawaska, Victoria and Carleton Counties (New Brunswick Department of Post-Secondary Education, Training and Labour 2012).

4.1.1 New Brunswick

The New Brunswick economy has traditionally been based on natural resource development, and it centres on its energy, natural resources and manufacturing industries. Tourism and communication technology industries also make substantial contributions to the provincial economy. Although forests occupy 85 percent of the province's land (equivalent to 6.1 million hectares) and have been an economic mainstay throughout its history, the forestry sector has become less of an economic driver within the province due to a decreasing contribution to employment from this sector. This decline has occurred over the past decade with the closure of several lumber and pulp and paper mills throughout the province, including, most recently, the closures of the Juniper Lumbermill and the Deersdale Sawmill, both located near the Project.

New Brunswick has seen a steady increase in its Gross Domestic Product (GDP) over the decade spanning 2001 to 2010. The increase from 2006 to 2010 was approximately 14 percent (Table 4.1). Strong exports and manufacturing led the province out of recession in 2010. Higher energy prices, production from the Canaport LNG terminal, and a resurgence in potash exports contributed to the improvement. Real economic growth was estimated to have increased 2 percent in 2010 due to stronger than anticipated growth in exports. Although the province led the country in export and manufacturing sales growth, it lagged in other areas. New Brunswick was one of only two provinces to show job losses in 2010, while growth in average weekly earnings and retail sales failed to keep pace

with the rest of the country (NBDF 2011). Based on third quarter information, real GDP growth in New Brunswick in 2011 was 1.2 percent. Retail sales have shown healthy growth, up 4.8 percent over 2010, compared to the national increase of 3.5 percent. New Brunswick’s job market was weak in 2011 with employment falling by 4,000 as gains in part-time employment were not enough to offset full-time losses (NBDF 2012).

Table 4.1 Gross Domestic Product (GDP), Province of New Brunswick, 2001 to 2010

Economic Indicator	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Gross Domestic Product (millions of Canadian dollars)	20,684	21,169	22,366	23,672	24,716	25,847	27,044	27,499	27,920	29,448

Source: Statistics Canada 2011.

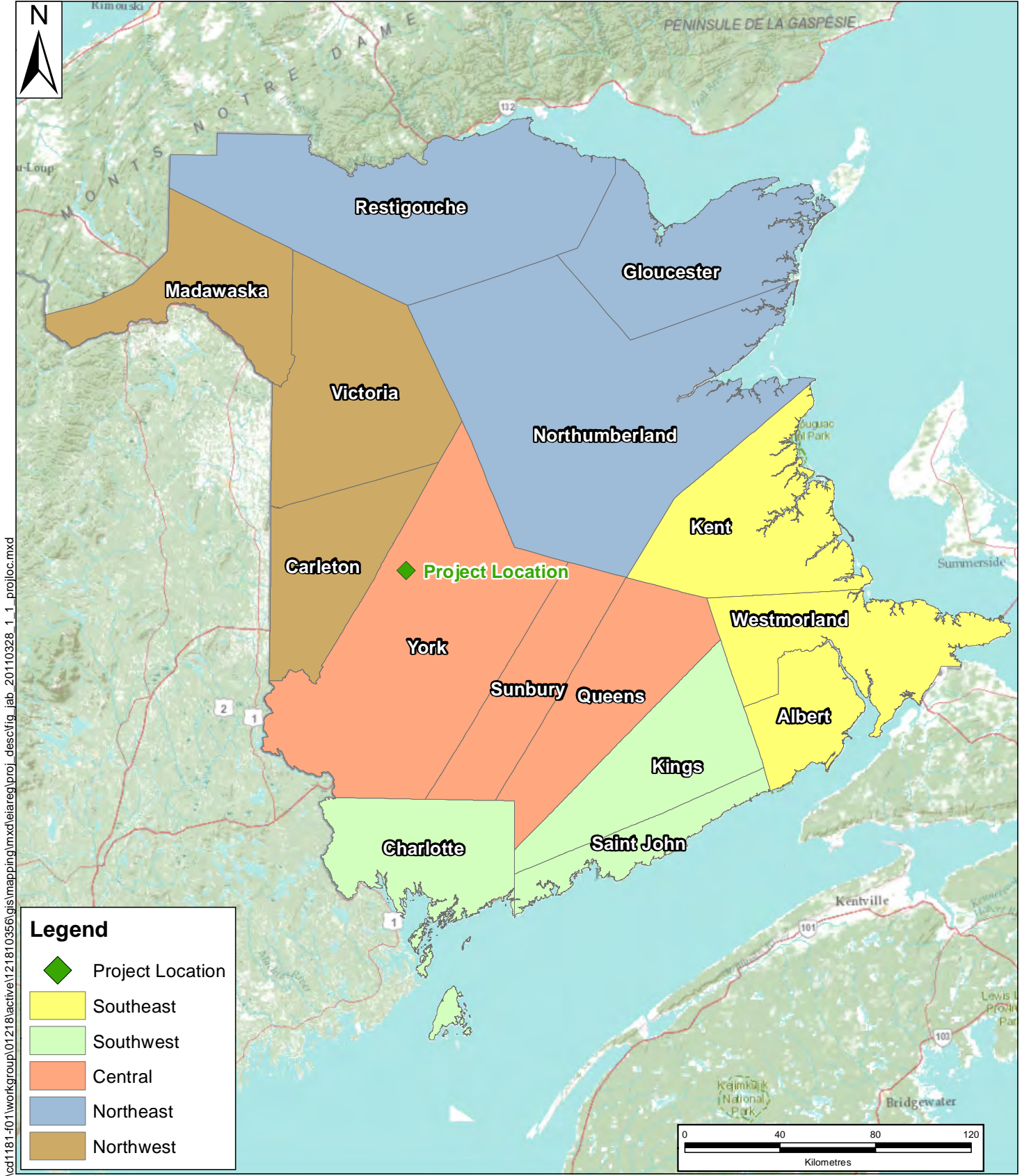
The province’s major employment sectors include:

- mining, energy, and oil and gas;
- commercial fisheries and aquaculture;
- forestry;
- agriculture;
- tourism; and
- military.

4.1.1.1 Mining, Energy, and Oil and Gas

The mining, energy, and oil and gas sectors in New Brunswick are strong and continue to grow. The value of mineral production in New Brunswick for 2010 was \$1.15 billion, which is up from \$1.1 billion in 2009 (NBDNR 2012). The Province possesses a variety of rich mineral deposits including metals such as zinc, gold, copper, lead, tungsten, molybdenum, antimony, bismuth, cadmium and silver, as well as non-metals, such as peat moss and potash. New Brunswick’s importance for Canadian exports has increased over the past four years, with the percentage of domestic exports from the province reaching a historical high relative to the national total (Gas Investing News 2011).

Oil and gas exploration and production expenditures in New Brunswick have been gaining momentum. Most recently, the Government of New Brunswick identified shale gas exploration and related industrial development as potentially having considerable benefits for the economic future of New Brunswick. Several natural gas exploration companies continued with seismic programs and exploration drilling throughout 2011. Nine companies hold 71 oil and natural gas agreements covering nearly 1.5 million ha in the province. No call for tenders was issued in 2011 for oil and natural gas rights, although interest in petroleum resources in New Brunswick remains very high (NBDNR 2012). Exploration companies have invested more than \$374 million in the exploration and development of oil and natural gas in New Brunswick since 2000 (NBDNR 2011).



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Legend

- ◆ Project Location
- Southeast
- Southwest
- Central
- Northeast
- Northwest



NOTE: THIS DRAWING ILLUSTRATES SUPPORTING INFORMATION SPECIFIC TO A STANTEC PROJECT AND SHOULD NOT BE USED FOR OTHER PURPOSES.							
Economic Regions of New Brunswick			Scale: 1:2,200,000	Project No.: 121810356	Data Sources: SNB NRCAN, ESRI	Fig. No.: 4.1	 Stantec
Sisson Project			Date: (dd/mm/yyyy) 07/03/2012	Dwn. By: JAB	Appd. By: DLM		
Napadogan, N.B.							
Client: Northcliff Resources Ltd.							

Corridor Resources Inc. averaged over approximately half a million gross standard cubic metres per day of natural gas from 30 wells in the McCully Field near Sussex, while Contact Exploration Inc. averaged approximately 4,700 litres per day of oil from 16 wells in the Stoney Creek Field south of Moncton. Oil and natural gas production revenues in fiscal 2010-2011 resulted in a little over \$1 million dollars paid to the province in royalties (NBDNR 2012).

New Brunswick is home to the largest oil refinery in Canada. The Saint John Refinery, owned and operated by Irving Oil Limited, produces approximately 47.7 million litres (300,000 barrels per day) of finished petroleum products.

4.1.1.2 Commercial Fisheries and Aquaculture

There are 50 varieties of fish and shellfish included in the commercial fishing and aquaculture industries in the province. New Brunswick's largest seafood export is lobster. This species alone represents close to 50 percent of the value of all seafood exports from the province, with the principal market being the US. As a result, the sector is significantly affected by both the economic challenges faced by the US and the strength of the Canadian dollar (GNB 2010a). The New Brunswick commercial fisheries sector generates \$1.1 billion in direct and indirect GDP, and it generates 25,500 full-time equivalent jobs and \$950 million in earned income. In the context of the New Brunswick economy, commercial fisheries activities represent 4.1 percent of total GDP, 7.4 percent of total employment and 7.6 percent of total income (DFO 2008).

Aquaculture operations in New Brunswick are based primarily on the east and southwest coasts of the province. The shellfish industry is concentrated along the East coast while the finfish industry is concentrated in the Bay of Fundy along the southwestern coast. Aquaculture now accounts for 14 percent of total Canadian fisheries production and 33 percent of its value. Farmed Atlantic salmon is the largest crop in the New Brunswick agri-food sector, with the province representing \$250 million in aquaculture production value, and accounting for 2,000 direct and 2,500 indirect jobs (Canadian Aquaculture Industry Alliance 2011).

4.1.1.3 Forestry

In New Brunswick, the forestry industry includes tree planting and harvesting, wood processing facilities such as lumber mills, particle board mills, wood pellet mills, and pulp and paper mills. Since 2000, the forestry industry in New Brunswick has declined, with a job loss of approximately 40%. In 2000, 5,700 persons worked in this field in New Brunswick, compared to 3,400 in 2011 (HRSDC 2012). Forest harvesting activities remain active throughout many areas of New Brunswick, including, among other areas, rural York and Carleton counties. Lumbermills in Juniper and Deersdale have recently ceased or suspended operation. Lumber, wood products and pulp and paper mills remain active in areas of southern and central New Brunswick, including Nackawic, Napadogan, St. Stephen, Saint John and Lake Utopia, and northern New Brunswick, including Atholville, St. Leonard, Edmundston, and Belledune.

4.1.1.4 Agriculture

The 2006 Census of Agriculture identified 2,776 farms in New Brunswick, an 8.5 percent decrease in the five years previous. This decrease is slightly higher than the 7.1 percent national-level decrease.

The Census indicated there were 629 fewer farms in New Brunswick than there were in 1996. New Brunswick's farms accounted for 1.2 percent of Canada's total farms in 2006, ranking eighth in Canada. New Brunswick is the third largest producer of potatoes in Canada, after Prince Edward Island and Manitoba. Potatoes, especially seed potatoes, are the province's chief agricultural export and account for 16 percent of the national total. Production is concentrated along the upper Saint John River Valley, with Carleton and Victoria counties accounting for approximately 80 percent of the crop. Between 2001 and 2006, the province's potato area increased 2.6 percent to 24,229 hectares. In addition, the province has experienced a 270 percent increase in corn grown for grain, with the total area increasing from 480 hectares in 2001 to 1,770 hectares in 2006. Additionally, fall rye area more than doubled between 2001 and 2006. (Statistics Canada 2006).

The agriculture and agri-foods sector has an extensive network of export markets comprising 88 countries, with total exports estimated at \$359 million in 2010. This represents a decrease of 0.8 percent from 2009. In 2010, New Brunswick farms produced farm cash receipts (*i.e.*, the cash income received from the sale of agricultural commodities as well as direct government subsidy payments) of \$478 million and processed agri-food products worth \$1.12 billion. In terms of employment, the sector generated about 5,800 and 7,140 full-time equivalent jobs in primary production and secondary processing activities, respectively, in 2010 (NBDAAF 2010).

4.1.1.5 Tourism

The tourism industry in New Brunswick is an important contributor to the economy of New Brunswick.

Visits to and within the province of New Brunswick in 2008 contributed an estimated \$989 million in tourism-related expenditures on accommodations, restaurants, shopping, travel, and travel activities. The total impact on provincial GDP by these tourism expenditures in 2008 was \$765 million, representing 3 percent of provincial GDP. In 2009, tourism-related expenditures decreased by approximately 6 percent to \$932 million and contributed \$711 million to the provincial GDP. Despite this decrease, tourism continues to contribute more to the provincial GDP than the primary industries of agriculture, forestry, and fishing combined (NBDTP 2011a).

In 2009, the tourism industry in New Brunswick sustained an estimated 18,400 full-time equivalent jobs, down from 21,400 in 2008. Visitor spending in 2009 also benefitted New Brunswick's provincial and municipal governments through estimated tax revenues of \$99 million and \$16 million, respectively (NBDTP 2011a). In 2010, the New Brunswick Department of Tourism and Parks and the Tourism Industry Association of New Brunswick, in consultation with industry stakeholders, released a tourism strategy to provide a blueprint for revitalizing the province's tourism industry through to 2013 (NBDTP and TIANB 2010).

4.1.1.6 Military

Canadian Forces Base (CFB) Gagetown near Oromocto is the largest military base in Canada and contributes over \$600 million dollars annually to the New Brunswick economy. The base employs approximately 4,500 military members and 1,500 civilians (City of Fredericton 2011).

4.1.2 York County

York County's economy is centered primarily within the Greater Fredericton Area. As the only city located within the County, the Greater Fredericton Area is home to many communities and nearby rural areas. York County's urban areas have modern, service-based economies dominated by health care, education, civil service, retail, finance, and insurance sectors, while rural areas within the County have an economy primarily known for forestry, mining, mixed farming, and fishing (Jacques Whitford 2008).

Many residents of the total employed labour force aged 15 years and over list themselves as having worked in a different Census subdivision (municipality) within the Census division (county) of residence (Statistics Canada 2007d). This is demonstrated in the Fredericton area, where many residents commute between communities and the City of Fredericton. The Fredericton region has experienced a trend of sustained growth in the past decade, which is evidenced by changes in such demographic indicators as regional population over 15 years, active labour force, employment growth, and new permanent landed immigrants. Fredericton has one of the highest per capita income levels in New Brunswick for a community in its population range. This is reflected in its retail sales, which are estimated at 24 percent above the national average (City of Fredericton 2011).

As the provincial capital, Fredericton has an economy that is closely tied to the public sector, and the provincial government is one of the largest employers in the County. Additionally, the region offers expertise in the fields of engineering, technology, forestry, agriculture, and local business. The University of New Brunswick and St. Thomas University, two of the province's largest post-secondary institutions and major employers in the city, bring thousands of domestic and international students to the city. More than 60 research organizations can be found in the city of Fredericton, including the National Research Council's Institute for Information Technology.

The forestry sector remains one of the main employers in central New Brunswick. AV Nackawic, for instance, produces approximately 800 tonnes per day of northern bleached hardwood craft wood pulp, used in a variety of paper products (Enterprise New Brunswick 2011). Grand Lake Timber, operates a softwood sawmill in Chipman, New Brunswick with an annual production capacity of approximately 100 million board feet of dimensional lumber (Enterprise New Brunswick 2011).

4.1.3 Carleton County

Key economic activities for the Carleton County region include agriculture and food processing, forestry and value-added wood products, metal fabrication, and transportation. Strong growth in the retail and service sector has been reported in Woodstock, Hartland, and Florenceville-Bristol.

The agricultural sector in Carleton County includes potatoes, grain, soybeans, and other crops grown in the region. Also located in the region are specialty chemical plant and distribution facilities, farm equipment dealers, specialized contractors, and consulting firms (Enterprise Carleton Region 2011). Carleton County is located in the "potato belt" of the province, with the provincial potato association, Potatoes NB, located in the region. The local potato industry generates approximately \$1.3 billion dollars toward New Brunswick's economy annually (Enterprise Carleton Region 2011).

Carleton County's manufacturing industry ranges from modular home construction to a cymbal factory. In addition, a Bio-Oil Development Centre, the first of its kind in Atlantic Canada, recently opened in the

region. Carleton County’s local manufacturing sector employs more people aged 15 years and over than any other industry, and it is forecasted to experience substantial growth in the future (Enterprise Carleton Region 2011).

The county is close to the American northeast primary four-lane highway (Interstate 95), making it easily accessible to northeastern American and eastern Canadian markets, which facilitates economic growth in the manufacturing industry.

4.2 LABOUR

This section describes the characteristics of the labour force and business sectors for New Brunswick as a whole, and for York and Carleton Counties in particular.

4.2.1 New Brunswick

In 2006, the labour force of the province was 382,970 (Table 4.2). The participation rate in the province (*i.e.*, the percentage of the working-age population employed or actively looking for employment) was 63.7 percent in 2006, a nominal increase from 63.1 percent in 2001 (Statistics Canada 2002a; 2007a).

Table 4.2 Labour Force Characteristics, New Brunswick, York and Carleton Counties, 2006

Location	Total Population 15 years and Over	Labour Force	Employed	Participation Rate (percent)	Employment Rate (percent)	Unemployment Rate (percent)
Provincial Total	601,420	382,970	344,770	63.7	57.3	10
York County	75,040	50,830	47,145	67.7	62.8	7.3
Fredericton	42,560	28,840	26,940	67.8	63.3	6.6
Stanley Parish*	1,510	825	615	54.6	40.7	24.8
Douglas Parish**	4,730	3,320	3,060	70.2	64.7	7.7
Millville	245	160	145	65.3	59.2	9.4
Carleton County	21,390	14,105	13,140	65.9	61.4	6.8
Aberdeen Parish***	790	520	445	65.8	56.3	15.4
Woodstock	4,140	2,565	2,380	62	57.5	7
Hartland	715	505	460	70.6	64.3	7.9
Notes:						
* Data discussed include the Village of Stanley.						
** Data discussed include the communities of Burts Corner and Napadogan.						
*** Data supplied by Statistics Canada include the community of Juniper						

Source: Statistics Canada 2007a; 2007c; and 2007d.

From 2001 to 2006, the number of persons employed at the provincial level increased by 6 percent from 325,330 to 344,770. In 2006, the employment rate in New Brunswick was 57.3 percent whereas the national average was 62.4 percent (Statistics Canada 2007a).

Of the 20 industry sectors identified by the New Brunswick Department of Finance, the most significant job growth in the province over the 2001 to 2006 period came from construction, which increased by 3,500 jobs, followed by administrative and support services (3,500), retail trade (2,900) and health care and social assistance (2,800). During the same period, employment declines occurred in manufacturing

(-3,200); agriculture, forestry, fishing and hunting (-700); and utilities (-300) (Government of New Brunswick 2006).

From 2001 to 2006, the unemployment rate in the Atlantic Provinces dropped from 12.5 percent to 10 percent. The 10 percent unemployment rate was still higher than the national average of 6.6 percent. As of October 2011, New Brunswick’s Central Economic Region had an unemployment rate of 7.9 percent, while the unemployment rate in the Northwest Economic Region was 7.5 percent (Table 4.3). Labour force statistics for the economic regions are reported as three month moving averages.

Table 4.3 Labour Force Statistics by Economic Region, October 2011

Economic Region	Labour Force Population	Employed Persons	Unemployed	Unemployment Rate (percent)	Participation Rate (percent)
Central*					
2011	71,100	65,500	5,600	7.9	65
Northwest**					
2011	39,900	37,000	3,000	7.5	61.5
Notes:					
* Denotes Economic Region including communities within York County.					
** Denotes Economic Region including communities within Carleton County.					

Source: GNB 2011a.

In 2006, the main sources of employment by industry for New Brunswick were business services, which employed 63,835 people or 18.4 percent of the labour force, retail trade (44,290, or 11.7 percent), health care and social services (43,030, or 11.4 percent) and other services (79,580, or 21.1 percent) (Table 4.4). Industries that employed the fewest people were wholesale trade (13,500, or 3.6 percent) and finance and real estate (15,870, or 4.2 percent) (Statistics Canada 2007a).

Table 4.4 Experienced Labour Force by Industry, Province of New Brunswick, 2006

Sector	Experienced Labour Force by Industry in New Brunswick (total)	Experienced Labour Force by Industry (by percent)
Total Experienced Labour Force	376,985	100
Agriculture and Other Resource-based Industries	26,150	6.9
Construction	25,415	6.5
Manufacturing	40,700	10.8
Wholesale Trade	13,500	3.6
Retail Trade	44,290	11.7
Finance and Real Estate	15,870	4.2
Health Care and Social Services	43,030	11.4
Educational Services	24,615	6.5
Business Services	63,835	18.4
Other Services	79,580	21.1

Source: Statistics Canada 2007a.

In 2009, the largest employers in the province included the Irving Group of Companies, several large multinational forest companies, the Government of New Brunswick, and the McCain group of companies (Canadian Tourism Development Corporation 2009).

New Brunswick's labour force is concentrated in three main occupations: sales and services (26 percent), business services (18 percent), and trades and transport (16.4 percent). The lowest percentage is represented in the art, culture, recreation and sport occupations at 1.9 percent. The service sectors account for over a quarter of all employment (Table 4.5).

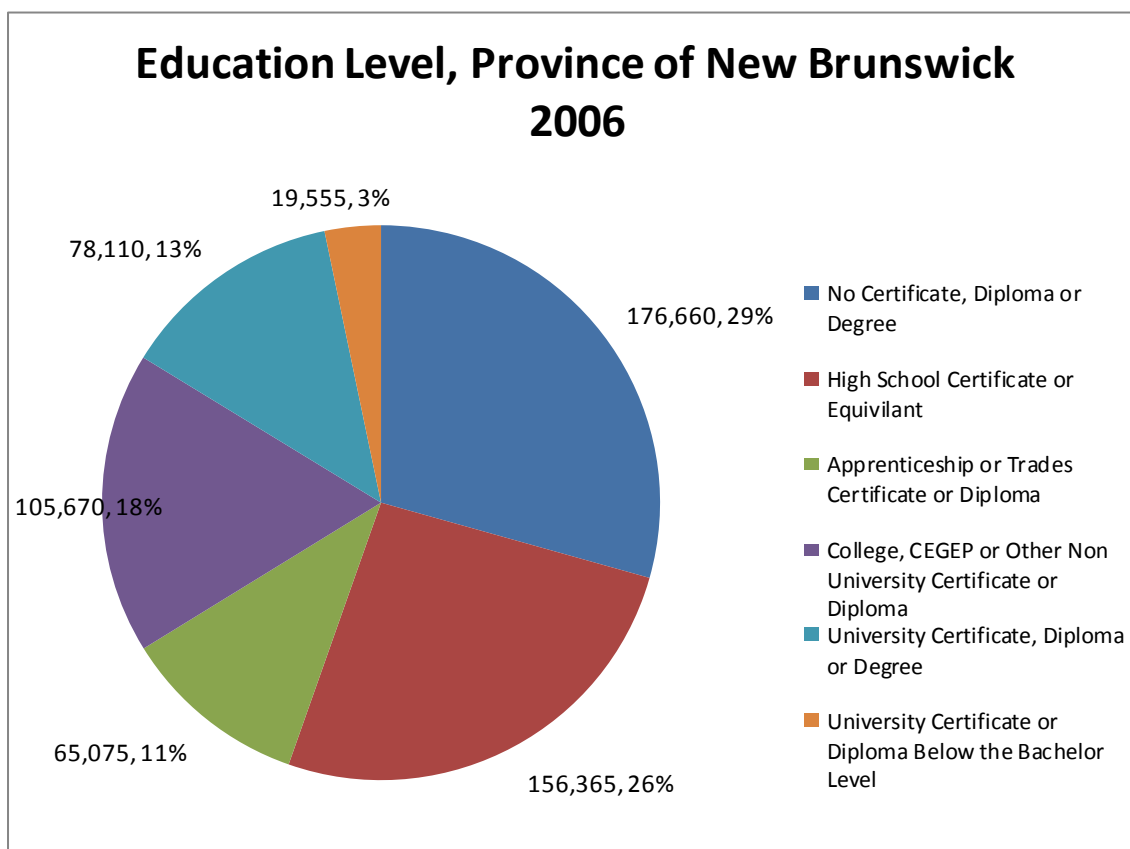
Table 4.5 Experienced Labour Force by Occupation, Province of New Brunswick, 2006

Occupation	Experienced Labour Force by Occupation in New Brunswick (total)	Experienced Labour Force by Occupation (by percent)
Total Experienced Labour Force	376,980	100
Management Occupations	29,555	7.8
Business, finance and administration Occupations	67,695	18
Natural and Applied Sciences and Related Occupations	19,705	5.2
Health Occupations	24,010	6.3
Occupations In Social Science, Education, Government Service and Religion	27,690	7.3
Occupations in Art, Culture, Recreation and Sport	7,325	1.9
Sales and Service Occupations	98,040	26
Trades, Transport and Equipment Operators and Related Occupations	62,015	16.4
Occupations Unique to Primary Industry	19,020	5
Occupations Unique to Processing, Manufacturing and Utilities	21,925	5.8

Source: Statistics Canada 2007a.

In 2006, 29 percent of the province's adult population had not completed high school (Figure 4.2), and 13 percent had a university certificate, diploma or degree (Statistics Canada 2007a). Just over half of New Brunswick's working population (those aged 25 to 64 years of age) had completed some form of post-secondary education in 2006, the smallest proportion of all provinces (GNB 2011a).

The median income for all Census families in New Brunswick in 2005 was \$52,878 while the provincial median income for all persons aged 15 years and over was \$22,000. In 2005, the median income for all Census families and for persons aged 15 years and older was higher in York County than in Carleton County. Within the counties, both types of income were lowest in Stanley Parish and the Village of Millville and highest in Fredericton and Douglas Parish. Throughout the Study Area males had higher median income than females (Table 4.6) (Statistics Canada 2007a).



Source: Statistics Canada 2007a.

Figure 4.2 Education Level, Province of New Brunswick, 2006

Table 4.6 Incomes in the Study Area

Location	Median Income - All Census Families	Median Income - Persons 15 Years and Over	Male	Female
Provincial Total	52,878	22,000	28,019	17,586
York County	59,447	24,536	30,272	20,294
Fredericton	60,705	24,718	30,094	21,604
Stanley Parish*	36,958	17,522	21,553	14,410
Douglas Parish**	60,328	26,738	30,144	21,127
Millville	37,477	17,000	20,084	12,932
Carleton County	50,528	21,442	27,581	17,189
Aberdeen Parish ***	52,630	22,302	29,510	17,188
Woodstock	53,290	21,320	28,400	17,403
Hartland	52,394	23,912	31,375	20,079

Notes:
 * Data discussed include the Village of Stanley.
 ** Data discussed include the communities of Burts Corner and Napadogan.
 *** Data discussed include the community of Juniper.

Source: Statistics Canada 2007a.

4.2.2 York County

In 2006, the total experienced labour force in York County was 50,165 (Table 4.7). The experienced labour force is the total labour force (*i.e.*, the total population 15 years of age or older who are employed or unemployed), with the exception of all individuals who have never worked, or who have not worked in the past ten years. In 2001, York County's participation rate was 68 percent, just slightly higher than the 67.7 percent reported for 2006. From 2001 to 2006, the unemployment rate decreased from 10 percent to 7.3 percent (Statistics Canada 2002b; 2007a), with the highest percentage of employed workers (92.3 percent) living in the City of Fredericton. Comparatively, there was a 24.8 percent unemployment rate in the Parish of Stanley (Statistics Canada 2007e).

Labour force numbers reported by industry for York County reflect the same pattern as those for the province, with the highest percentages in business services (19.4 percent), retail trade (11.3 percent) health care and social services (9.7 percent), educational services (9 percent), and other services (26.4 percent) (Table 4.7). Industries employing the fewest people were wholesale trade (2.4 percent) and manufacturing (4.8 percent) (Statistics Canada 2007d).

Table 4.7 Experienced Labour Force by Industry, York County, 2006

Sector	Experienced Labour Force by Industry in York County (total)	Experienced Labour Force by Industry (by percent)
Total Experienced Labour Force	50,165	100
Agriculture and Other Resource-based Industries	2,765	5.5
Construction	3,010	6
Manufacturing	2,420	4.8
Wholesale Trade	1,210	2.4
Retail Trade	5,670	11.3
Finance and Real Estate	2,700	5.4
Health Care and Social Services	4,865	9.7
Educational Services	4,535	9
Business Services	9,745	19.4
Other Services	13,255	26.4

Source: Statistics Canada 2007d.

Similar to the pattern presented for the province, York County's main labour force occupational groups are sales and services, employing 12,745 people or 25.4 percent; business services (9,970, or 19.8 percent); and trades and transport (6,495, or 12.9 percent), with service sectors accounting for over a quarter of all employment (Table 4.8). However, social science, education, and government services occupations represented 10.3 percent of the labour force, as compared to 7.3 percent for the province. Occupations with the fewest experienced workers include health occupations (2,595, or 5.2 percent); art, culture, recreation, and sport occupations (1,505, or 3 percent); and occupations unique to processing, manufacturing, and utilities (1,100, or 2.2 percent).

Table 4.8 Experienced Labour Force by Occupation, York County, 2006

Occupation	Experienced Labour Force by Occupation in York County (total)	Experienced Labour Force by Occupation (by percent)
Total Experienced Labour Force	50,165	100
Management Occupations	4,710	9.4
Business, finance and administration Occupations	9,970	19.8
Natural and Applied Sciences and Related Occupations	4,170	8.3
Health Occupations	2,595	5.2
Occupations In Social Science, Education, Government Service and Religion	5,165	10.3
Occupations in Art, Culture, Recreation and Sport	1,505	3
Sales and Service Occupations	12,745	25.4
Trades, Transport and Equipment Operators and Related Occupations	6,495	12.9
Occupations Unique to Primary Industry	1,705	33.9
Occupations Unique to Processing, Manufacturing and Utilities	1,100	2.2

Source: Statistics Canada 2007d.

A large concentration of economic activity within the county occurs in Fredericton. As of January 2011, the Greater Fredericton Area was home to 3,245 businesses, with the largest percentages being in the retail trade; professional, scientific and technical services; health care and social assistance; and other services (except public administration) (Canada New Brunswick Business Service Centre 2011). The largest employers in the region are in the public sector (Table 4.9).

Fredericton was one of the only regions of New Brunswick to experience an increase in employment between 2009 and 2010 (GNB 2010a). An Atlantic Provinces Economic Council (APEC) study shows that the City of Fredericton surpassed all other Atlantic Canadian cities in employment growth between 2005 and 2010.

Table 4.9 Largest Public and Institutional Sector Employers, York County, 2011

Largest Employers	Number of Employees
Province of New Brunswick (Fredericton)	4,100
Horizon Health Network (formerly River Valley Health Corporation)	3,700
New Brunswick Power (NB Power)	2,500
School District 18	2,500
University of New Brunswick	1,400
City of Fredericton	600
Mactaquac Provincial Park	300
Service Canada	230

Source: City of Fredericton 2011.

The City of Fredericton also has the fourth highest percentage of university-educated citizens in major Canadian cities (31 percent), well above the national and provincial averages (18 percent and 13 percent, respectively). Similarly, York County accounts for a higher percentage of university-educated people (24 percent), which is above both the national and provincial averages (Figure 4.3).

Four universities located within the city account for a concentration of young persons who contribute to a skilled workforce, primarily in the information technology, research and development, life sciences, consulting engineering, aerospace and defense and e-learning sectors (City of Fredericton 2011).

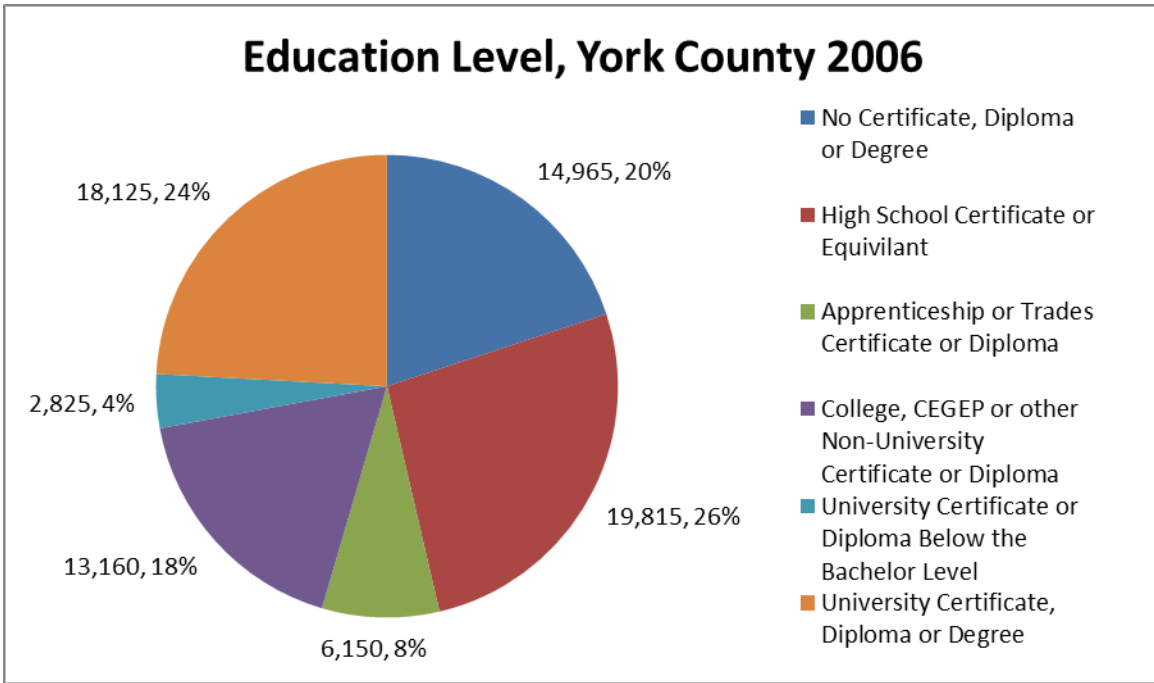


Figure 4.3 Education Level, York County, 2006

4.2.3 Carleton County

In 2006, the total experienced labour force in Carleton County was 14,020 (Table 4.10), with the most employed workers (92.7 percent) living in the Town of Woodstock. In 2006, Carleton County’s participation rate was 65 percent, compared with the 66.4 percent for 2001. From 2001 to 2006, the unemployment rate decreased from 8.6 percent to 6.8 percent with Aberdeen Parish having the highest unemployment rate, 15.4 percent (Statistics Canada 2002c; 2007f).

Between 2001 and 2006, the participation rate for Carleton County decreased from 66.4 to 65.9 percent (Statistics Canada 2002c; 2007c). The Town of Hartland has the highest participation rate in the County (70.1 percent) (Statistics Canada 2007g).

Table 4.10 Experienced Labour Force by Industry, Carleton County, 2006

Sector	Experienced Labour Force by Industry in Carleton County (total)	Experienced Labour Force by Industry (by percent)
Total Experienced Labour Force	14,020	100
Agriculture and Other Resource-based Industries	1,550	11
Construction	840	5.9
Manufacturing	2,845	20.3
Wholesale Trade	565	4
Retail Trade	1,390	9.9
Finance and Real Estate	375	2.7
Health Care and Social Services	1,290	9.2
Educational Services	815	5.8
Business Services	2,230	15.9
Other Services	2,120	15.2

Source: Statistics Canada 2007c.

In 2006, the main source of employment by industry for Carleton County was manufacturing, which employed 2,845 people or 20.3 percent of the experienced labour force. Manufacturing only accounts for 4.8 percent of jobs in York County and 10.3 percent of jobs in the province. See Table 4.10 for additional data regarding the other main sources of employment.

Carleton County's main labour force groups by occupation include sales and services (3,020 people or 21.5 percent), trades and transport, and business services, with service sectors accounting for almost a quarter of all employment (Table 4.11). In Carleton County, trades and transport occupations represent 20 percent of the labour force (by occupation). In comparison, these occupations represent only 14.9 and 12.9 percent for the province and York County, respectively. Natural and applied sciences and related occupations represent only 3.6 percent of the population in Carleton County, or 500 people.

Table 4.11 Experienced Labour Force by Occupation, Carleton County, 2006

Occupation	Experienced Labour Force by Occupation in Carleton County (total)	Experienced Labour Force by Occupation (by percent)
Total Experienced Labour Force	14,020	100
Management Occupations	1,010	7.2
Business, finance and administration Occupations	2,065	14.7
Natural and Applied Sciences and Related Occupations	500	3.6
Health Occupations	735	5.2
Occupations In Social Science, Education, Government Service and Religion	1,020	7.3
Occupations in Art, Culture, Recreation and Sport	195	1.4
Sales and Service Occupations	3,020	21.5
Trades, Transport and Equipment Operators and Related Occupations	2,810	20
Occupations Unique to Primary Industry	1,365	9.7
Occupations Unique to Processing, Manufacturing and Utilities	1,300	9.3

Source: Statistics Canada 2007c.

While 19 percent of Carleton County’s population had a college, CEGEP or other non-university certificate or diploma, the percentage of the population with a university certificate, diploma or degree was below both the national and provincial averages at 10 percent.

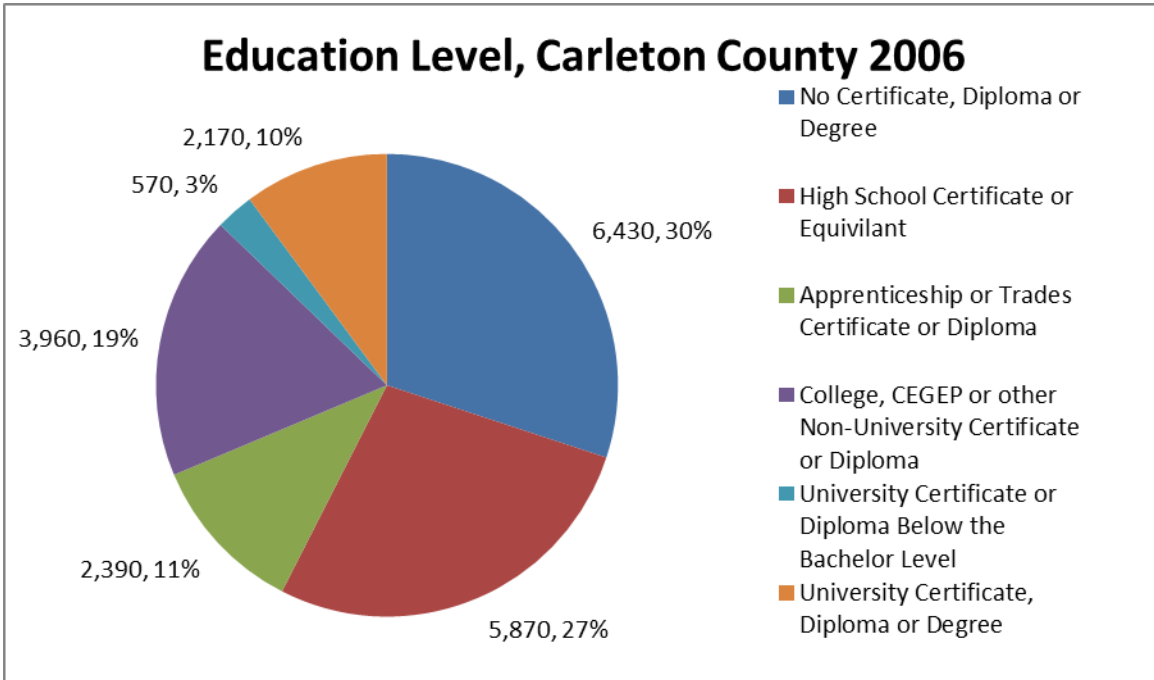


Figure 4.4 Education Level, Carleton County, 2006

5.0 COMMUNITY SERVICES AND INFRASTRUCTURE

This section describes the community services and infrastructure that will service the Project, those individuals employed directly or indirectly by the Project, and their families, including:

- municipal administration and planning;
- policing;
- fire protection;
- housing;
- temporary accommodations;
- income support and employment services;
- community health; and
- recreation and entertainment.

The following sections describe existing conditions for each of these community services and infrastructure generally for the Province of New Brunswick and specifically for York and Carleton counties.

5.1 MUNICIPAL ADMINISTRATION AND PLANNING

This section will discuss municipal administration and planning generally for the province of New Brunswick and specifically for York and Carleton Counties.

5.1.1 New Brunswick

New Brunswick has a large number of local administrative units—over 100 incorporated municipalities and rural communities, 267 local service districts (LSDs) and multiple agencies, boards, and commissions (Finn 2008; GNB 2011b).

A municipality (city, town or village) or a rural community is a geographic unit that is provided a governance structure under the New Brunswick *Municipalities Act*, with a locally-elected council that has the authority to make decisions on behalf of the community it serves. The elected council also has the responsibility to provide local services and to enact by-laws that benefit the municipality, as well as to provide zoning and local planning services within their municipal boundaries (GNB 2011b).

Outside these incorporated areas of New Brunswick, the New Brunswick Department of Local Government (through LSDs) provides residents with a variety of services such as fire protection, solid waste collection and disposal, and street lighting. District planning commissions provide land use planning services in unincorporated areas of the province to satisfy the requirements of the New Brunswick *Community Planning Act*.

The *Municipalities Act* provides for the election of an LSD to assist the Department of Local Government in providing local services and ensuring residents' input is considered. An LSD Advisory Committee is composed of three to five members; it has no financial or contractual authority. The department, through the Local Services Advisor, is responsible for the administration of the district, including provision of local services and the expending of public funds.

5.1.2 York County

York County includes the City of Fredericton, the Village of Stanley, the communities of Burtts Corner and Napadogan, and the village of Millville. The following sections describe municipal administration and planning in each of these locations.

5.1.2.1 Fredericton

The City of Fredericton, approximately 60 km southeast of the Project, is an incorporated municipality with an elected council consisting of a mayor and twelve council members. The city administrator and staff are responsible for providing policy advice to city council and for coordinating and managing the administrative operations of the city. They are also responsible (and accountable to city council) for the efficient and effective conduct and operation of all city departments and offices (City of Fredericton n.d.). These departments include development services, engineering and public works, and community services.

The development services department provides service in the areas of land use planning, development control regulations, zoning, building permits and building inspections, building code enforcement, parking services, by-law enforcement, heritage and culture, and tourism (City of Fredericton n.d.).

The engineering and public works department is responsible for water and sewer, roads and streets, and engineering services. It operates numerous facilities throughout the city, including wells, water booster stations, sewage lift stations, and the water treatment plants on Woodstock Road and Waterloo Row. One hundred percent of municipal sewage is treated. The majority of sewage collected is treated at a treatment plant located on the City's north side, which is operated by Fredericton Area Pollution Control Commission. Water and Sewer also operates two sewage lagoons (City of Fredericton n.d.).

The Community Services department provides services to meet the recreational and leisure needs of city residents and visitors (City of Fredericton n.d.).

The engineering and public works department is responsible for the collection and disposal of residential solid waste for the municipality. The department works with a contractor, selected through a tender process, to carry out the collection of residential solid waste. The contractor delivers the residential solid waste to a landfill owned and operated by the Fredericton Region Solid Waste Commission (FRSWC).

The Fredericton landfill opened in 1986. There the waste is placed in lined cells, which are approximately one hectare in size, and it is covered daily with clean soil. When a cell is filled to capacity, it is covered with clay to slow the formation of leachate (FRSWC 2006). The landfill currently collects approximately 85,000 tonnes of waste each year, and it is expected to have a remaining lifespan of at least 20 years. Surface water quality, groundwater, and landfill gases are monitored at the

Fredericton landfill. There are no plans to further upgrade or enhance the landfill in the near future (McCrae, B. Personal communication, December 7, 2011).

5.1.2.2 Stanley

The municipality of Stanley, which is incorporated as a village and is approximately 25 km southeast of the Project, belongs to the census area of Stanley Parish. It has an elected local government with a mayor and three councillors, and a village clerk. The clerk is the village's only employee, and there are no immediate plans to hire any additional staff (Douglass, S. Personal communication, November 28, 2011). Stanley does not have a water distribution system, and all residents have their own wells. The village does have a sewage collection and treatment system that services dwellings within village boundaries. There are plans to install two new lift stations in 2012. Currently, there are 112 customers connected to the village's system. The sewage system would likely need to be upgraded to accommodate any new customers should the town consider expansion, and this issue has been discussed by council over the last few years. However, the village has no plans to do upgrade in the near future because of the associated costs (Douglass, S. Personal communication, November 28, 2011).

The Village of Stanley has a contracted residential solid waste pick-up service, as well as a recycling pick-up service through the FRSWC (Douglass, S. Personal communication, November 28, 2011). Residential solid waste from Stanley is transported to the Fredericton landfill (McCrae, B. Personal communication, December 7, 2011).

5.1.2.3 Burtt's Corner and Napadogan

Burtt's Corner is an unincorporated rural community located approximately 35 km southeast of the Project on the Keswick River, a tributary of the Saint John River. Napadogan is a small unincorporated community on Highway 107, approximately 10 km northeast of the Project. Both communities are part of the Douglas Parish Census area. Burtt's Corner belongs to the Douglas LSD, an advisory board with five members. The Board is currently discussing the possibility of bringing Napadogan into the LSD (Noel, T. Personal communication, December 6, 2011).

There are few services offered in the communities of Burtt's Corner and Napadogan. Residents of these communities have their own water wells and septic systems. Residential solid waste is picked up by collectors that are contracted by the City of Fredericton, and it is transported to the Fredericton landfill. The LSD receives a yearly budget to pay for recreation, fire protection and other community services (Noel, T. Personal communication, December 6, 2011).

5.1.2.4 Millville

The Village of Millville is an incorporated municipality located 25 km southwest of the Project. Millville has an elected council consisting of a mayor and three councillors. It also has one part-time clerk/treasurer, and there are no plans to hire additional staff. All residents of Millville have private water wells and septic systems (Hill, N. Personal communication, December 16, 2011). Solid waste collection occurs weekly by a private contractor and is delivered to the Fredericton landfill (Hill, N. Personal communication, February 1, 2012).

5.1.3 Carleton County

Carleton County includes the municipalities of Woodstock and Hartland and the community of Juniper. The following sections describe municipal administration and planning in each of these locations.

5.1.3.1 Woodstock

The municipality of Woodstock, located approximately 45 km west of the Project, is the oldest incorporated town in New Brunswick and the largest municipality in Carleton County. Many businesses are located in Woodstock because it is close to the two major highways in the area, the Trans-Canada Highway (connecting New Brunswick to Quebec to the north and to Nova Scotia to the south) and Highway 95 (connecting to Interstate 95 at the State of Maine). Woodstock is a major service centre of the Upper Saint John River Valley.

Woodstock was the first town in New Brunswick to have a town manager and council system of municipal administration. It currently has an elected council consisting of a mayor, a deputy mayor, and five council members. The administration department is responsible for all town financial matters including accounting, budgeting and reporting, record keeping, direct support to all other departments and to town council, and the implementation of policies and directives from town council and the chief administrative officer. Administration has five full-time staff (Town of Woodstock 2010). In addition, the Town of Woodstock has departments for business development, development and inspection, public works, recreation, and tourism. The town has approximately 80 employees working in its various departments, as well as the police and fire departments, with no immediate plans to add additional staff (Voutour, A. Personal communication, December 6, 2011).

The department of public works is responsible for the water and sewer systems in the town. The water system consists of two wells, which are approximately 150 feet deep and located on an island in the middle of the St. John River. The system is able to store approximately 850,000 gallons of water in a number of water storage tanks and booster stations throughout the town (Town of Woodstock 2010).

In 2005, Woodstock introduced a 136 million-litre wastewater-treatment lagoon. This lagoon was designed to handle the Woodstock community plus future growth and still maintain highly treated levels of effluent. The seven lift stations are checked regularly to ensure they are working correctly. Woodstock also has a storm sewer system that is separate from the sanitary sewer system (Town of Woodstock 2010).

Solid waste disposal in Woodstock, and all other communities in Carleton County, is managed by the Valley Solid Waste Commission (VSWC). Since there is no landfill in Carleton County, waste from all communities within the County is picked up by a contractor and taken to the Woodstock transfer station (VSWC 2010). The landfills that receive waste from Carleton County are the Commission de gestion enviro-ressources du Nord-Ouest (COGERNO) landfill near Edmundston and the South West Solid Waste Commission in Lawrence Station (NB SWA 2011). Since 2004, waste in the area managed by VSWC has decreased by 22 percent (Antworth, T. Personal communication, December 6, 2011).

5.1.3.2 Hartland

The Town of Hartland, located approximately 35 km west of the Project, is a municipality with a mayor and six council members. The town provides municipal infrastructure within the town, including the water supply and distribution system, storm water collection, and wastewater collection and treatment. Water for the town is supplied via two wells, and there are pumping and storage facilities. Wastewater from the town's sanitary sewer system is treated via an aerated lagoon. Storm water is collected through a series of storm sewers and ditches (Town of Hartland 2009). Solid waste management in the town involves collection of solid waste by a private contractor. The waste is transported to the Woodstock transfer station.

5.1.3.3 Juniper

Juniper is a small, unincorporated rural community located approximately 25 km northwest of the Project. Juniper is located within the Parish of Aberdeen, which is the LSD for the communities of Glassville, Juniper, Argyle and most of Knowlesville. The community does not currently have an elected governing body, but it does have a recreation council. Juniper employs no permanent staff. It does employ a small number of casual employees in the summer and winter through a federal government employment program. The community does not have any water, waste, or sewer management, as each home has its own drilled well and septic systems (Gauvin, T. Personal communication, November 30, 2011). Residential waste is collected by a contracted waste hauler and delivered to the Woodstock transfer station.

5.1.4 Policing

This section will discuss policing generally for the province of New Brunswick and specifically for York and Carleton Counties.

5.1.5 New Brunswick

In 2010, New Brunswick employed a total of 1,398 police officers, including both Royal Canadian Mounted Police (RCMP) and locally-managed municipal police officers (Statistics Canada 2010). In 2010, the officer-to-resident ratio was 186 officers per 100,000 provincial residents, which was an increase of 2.2 percent from the previous year (Statistics Canada 2010). The national average in 2010 was 203 police officers per 100,000 people (Statistics Canada 2010).

The New Brunswick RCMP, or "J" Division, is comprised of a variety of professional employees specifically trained to address policing needs in New Brunswick communities. As of January 1, 2011, the New Brunswick RCMP had 928 regular members, 87 civilian members, and 160 public-service positions responsible for providing policing service to provincial residents. It operates out of 12 district offices, 57 satellite offices, seven federal offices. Its provincial headquarters are located in Fredericton. J Division maintains 530 established vehicles, 80 snowmobiles/all-terrain vehicles and 17 boats to patrol 98 percent of the New Brunswick land mass, 400 km of land border and 2,300 km of coastline in partnership with other law enforcement agencies (RCMP 2008; 2011).

Based on a regional policing model, each district consists of several detachments located within a specified geographic region of the province. There are 11 RCMP districts, or regional police forces, in New Brunswick (Figure 5.1). The Codiac Regional RCMP also operates a district office. Each district is overseen by a District Commander, who is the RCMP equivalent of a Chief of Police, in charge of operations for that area (RCMP 2011).

There are two RCMP districts within the Study Area: District 2 (Oromocto) lies in the central part of the province and includes an office in Stanley; and District 7 (Carleton-York) is in the western central region and includes offices in Hartland and Woodstock. A summary of criminal offences for the province and for these two districts between 2008 and 2010 is provided in Table 5.1.

The most common type of crimes committed in New Brunswick between 2008 and 2010 were those against property and provincial statutes. Federal offences increased by 9 percent between 2008 and 2010, and traffic collisions increased by 5 percent during the same period (RCMP 2011).

In addition to the RCMP, municipal police forces provide police services in the province. These forces are members of the New Brunswick Police Association and include the Fredericton Police Force and the Woodstock Police Force.

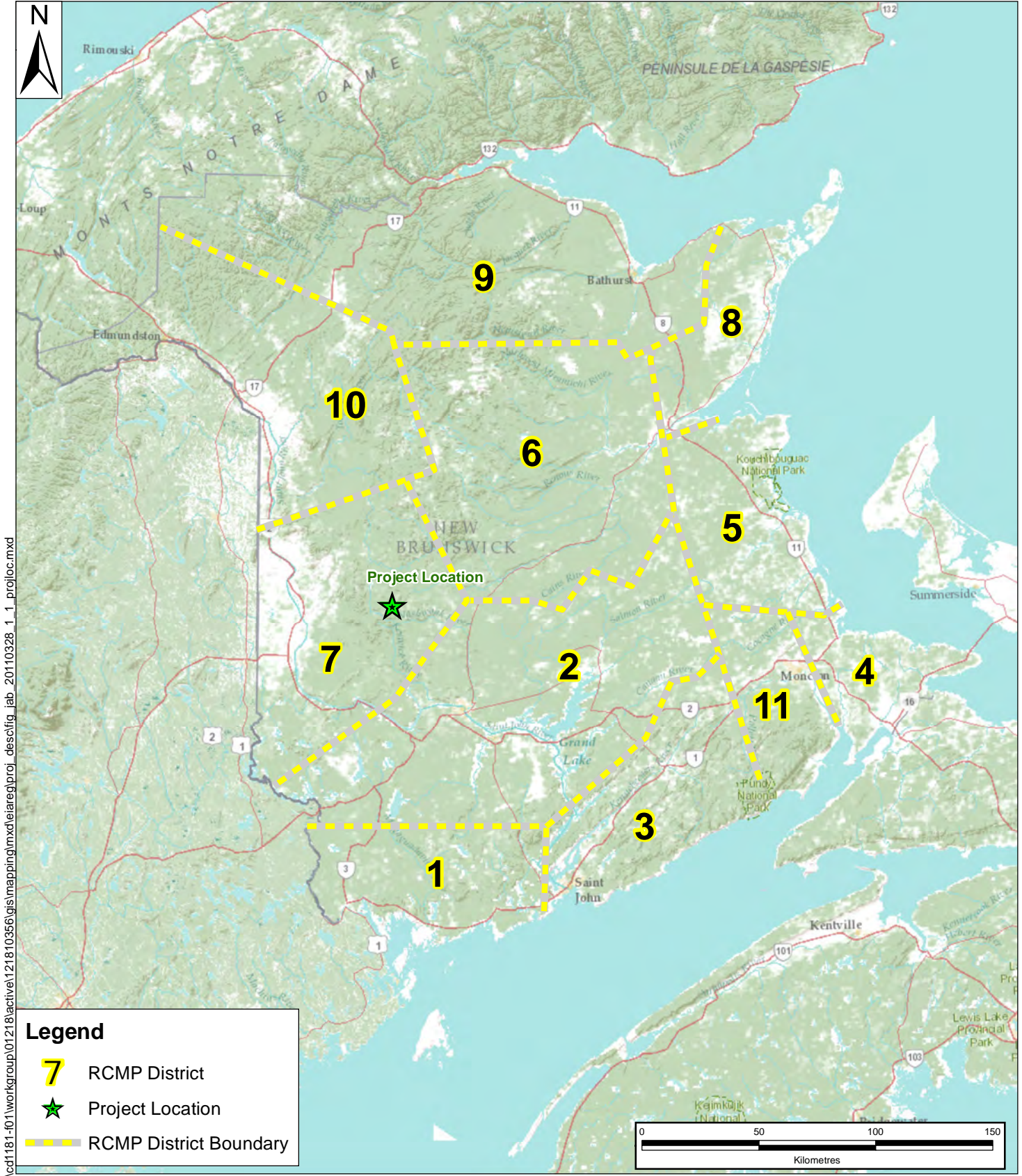
5.1.6 York County

There are eight RCMP offices in District 2 (Chipman, Minto, Gagetown, New Maryland, Keswick, Oromocto, McAdam, and Stanley), and the regional headquarters is in Fredericton. The district employs 67 officers, and the Keswick office, which is responsible for policing Burtt's Corner and Napadogan, employs 17 officers with no immediate plans to hire additional officers (Stenger, D. Personal communication, December 5, 2011).

In 2010, crimes against persons, provincial statutes, traffic collisions, and criminal code traffic offenses decreased in District 2 from the previous year. Crimes against property, other criminal code offenses, and federal offenses increased between 2009 and 2010. The region saw a slight increase in crimes against property, and break and enters rose from 258 to 289. Theft equal to or under \$5,000 rose by 20 percent (RCMP 2011).

The Fredericton Police Force provides policing services to the Fredericton area and works in partnership with other policing agencies when required. In 2010, there were 114 municipal police officers working for the Fredericton Police Department (Statistics Canada 2010). As of April 2010, the Department also had 22 civilian staff and 16 auxiliary members. Auxiliary members have the power to conduct patrol duties in police vehicles and on foot with regular police officers, participate in traffic enforcement initiatives and crime prevention programs, assist with crowd and traffic control at various community events, and assist with securing and protecting crime scenes, among other duties (New Brunswick Department of Public Safety 2010).

In 2010, there were 24,151 calls for service and an additional 4,021 requests for security clearance letters and taxi licences. The total number of calls for service in 2010 was 1 percent lower than in 2009 but 1 percent higher than the five-year average (Fredericton Police Force 2010).



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Legend

- 7 RCMP District
- ★ Project Location
- RCMP District Boundary

New Brunswick RCMP Districts						Scale: 1:2,250,000		Project No.: 121810356		Data Sources: SNB NRCAN, ESRI		Fig. No.: 5.1		 Stantec
Sisson Project						Date: (dd/mm/yyyy) 31/01/2012		Dwn. By: JAB		Appd. By: DLM				
Napadogan, N.B.														
Client: Northcliff Resources Ltd.														

5.1.7 Carleton County

District 7 (Carleton-York) of the RCMP has one district office in Woodstock and one in Hartland. It also has offices in the communities of Florenceville-Bristol and Nackawic, approximately 44 km west and 44 km southwest of the Project location, respectively.

Between 2008 and 2010, most crimes committed in District 7 were provincial statutes and crimes against property. Crimes against property increased by 17 percent between 2008 and 2010, while provincial statutes decreased by 21 percent. Federal offenses increased by 41 percent between 2008 and 2010 (RCMP 2011).

In 2012, District 7 will continue to take a proactive approach to preventing future crime by focusing efforts on youth at risk by providing them with the necessary support and guidance to help steer them away from criminal activities (RCMP 2011). District 7 will also continue to work in partnership with the Woodstock Police Department (Statistics Canada 2010), which provides twenty-four hour coverage to the Town of Woodstock. It has thirteen police officers, five auxiliary officers, and two secretaries (Town of Woodstock 2010).

5.2 FIRE PROTECTION

This section will discuss fire protection in York and Carleton Counties.

5.2.1 York County

The Fredericton fire department has five stations and 118 employees. The department services the City of Fredericton and eight LSDs under a Fire Protection Services Agreement with the Province. It also has mutual aid agreements with neighbouring municipalities to provide them with dispatch services.

The Fredericton fire department responded to 3,626 calls for service in 2010, 3.5 percent fewer than in 2009. This was the lowest number of calls received by the department in four years. Most of the calls for service were for medical assistance, with 1,948 calls in 2010. This number was a decrease of 3.6 percent from 2009, and represented another four-year low. There were 446 fire calls in 2010, down 9.5 percent from 493 in 2009. Of the 446 fire calls, 28 were for actual structure fires, one of the lowest numbers in the last 10 years. The Department also responded to 23 calls under the Provincial Local Service District agreement and four calls under the Capital District Mutual Aid agreement (Fredericton Fire Department 2011).

The Fredericton Fire Department also provides regular maintenance and testing of fire-fighting equipment and apparatus and conducts building inspections to ensure safety standards are maintained. In addition, public awareness and education programs are offered through the department's prevention division. This division conducted 811 inspections in 2010 and investigated 118 fires. It also concentrated on public education, delivering 96 presentations to 6,148 people (Fredericton Fire Department 2011).

The Villages of Stanley and Millville each have volunteer fire departments with 25 and 18 members, respectively. The Stanley fire department has two pumper trucks and a rescue vehicle with first responder medical equipment on-board (Sampson, S. Personal communication, July 13, 2012). The Millville fire department has one rescue vehicle and two trucks, and it is in the process of purchasing new rescue equipment. There is also a volunteer fire department in Burtt's Corner with approximately 15 members (Noel, T. Personal communication, December 6, 2011; Hill, N. Personal communication, December 16, 2011).

5.2.2 Carleton County

There is one fire department in Woodstock, which consists of four full-time drivers, a full-time fire chief, a deputy chief, two captains, a lieutenant, and 22 volunteer firefighters. The Fire Department provides 24-hour emergency fire protection and rescue services to the Town of Woodstock and adjacent rural communities. It also has mutual aid agreements with neighbouring municipalities to provide them with dispatch services.

The Hartland fire department has one station with 32 volunteer fire fighters for fire/accident response and an eight-person volunteer rescue team. The department does not employ any full-time staff. It owns three tanker/pumper combination vehicles with water capacity ranging from 1,000 gallons to 2,500 gallons (Walton, M. Personal communication, November 29, 2011). The Hartland Fire Department has recognized a need for ongoing equipment replacement and upgrades. The Town of Hartland's municipal plan for 2009-13 has identified that purchasing new fire department equipment will be a project in 2012 (Town of Hartland 2009).

There is also a volunteer fire department in Juniper that has 12 members and no full-time staff. The department owns two tanker/pumpers, each with 1,200-gallon water capacity, and one rescue van (Rousselle, J. Personal communication, January 13, 2012).

5.3 PERMANENT HOUSING

This section will discuss permanent housing in the province of New Brunswick as a whole and in York and Carleton Counties specifically.

5.3.1 New Brunswick

In 2006, there were 295,960 occupied private residential dwellings in New Brunswick. Seventy-five percent of these were owned and 25 percent of them were rented. The Multiple Listings Service (MLS) average housing price in New Brunswick was expected to increase by 1.8 percent from \$157,240 in 2010 to \$160,000 in 2011 (CMHC 2011a). There were expected to be 3,100 housing starts in New Brunswick in 2011, a decrease of 24.4 percent from 2010. MLS sales were also expected to be down 4.1 percent, from 6,702 in 2010 to 6,425 in 2011 (CMHC 2011a).

According to the CMHC Spring Rental Market Survey conducted in April 2011, the overall vacancy rate in New Brunswick's large urban centres was 4.5 percent, which was a decline of 0.2 percent from spring, 2010. In most of New Brunswick's smaller urban centres, the vacancy rate increased (e.g., 11.6 percent in Bathurst, 11.3 percent in Campbellton, and 4 percent in Miramichi). CMHC stated that this was primarily a result of declining populations and reduced demand for rental units (CMHC

2011b). The only exception was Edmundston, where the vacancy rate remained relatively stable at 9 percent. The availability rate (*i.e.*, rental units that are either vacant or for which the current tenant has given or received notice to move and a new tenant has not signed a lease) of private apartments in the province was down to 5.2 percent in April 2011 compared to 6 percent during the same period in 2010. Among the province's three large urban centres, Fredericton posted the lowest apartment availability rate at 3.3 percent. The average rent for all types of rental housing units in New Brunswick in April 2011 was \$645 per month, compared to \$631 in April 2010, a 2 percent increase over the year (CHMC 2011b).

The New Brunswick Department of Social Development is the government agency responsible for the province's social assistance and affordable housing programs. Social housing programs administered by the department include public housing, rent supplement, rural and native housing programs, non-profit and cooperative housing programs, a federal/provincial repair program, an energy efficiency retrofit program, an affordable rental housing program, home completion and home ownership assistance programs, and other housing loan programs (New Brunswick Department of Social Development 2011).

The latest Statistics Canada Census numbers (2006) indicate that the province of New Brunswick has 29,400 households in core housing need (New Brunswick Housing Corporation n.d.). Core housing need refers to households with problems related to adequacy (*i.e.*, housing requires major repairs), suitability (*i.e.*, housing does not have enough bedrooms for the size and make-up of resident households) and/or affordability (*i.e.*, housing costs more than 30 percent of total before-tax household income). Based on these statistics, New Brunswick has the second lowest percentage of households in core housing need in the country, after Alberta (CMHC 2009). Affordability is the major housing problem for low-income households in New Brunswick. However, there also exists an adequacy problem as over 40 percent of households in need reside in inadequate dwellings. New Brunswick's high level of adequacy need is caused by four factors: the age of New Brunswick's housing stock, the preponderance of homeownership units owned by low-income households, the absence of province-wide building code enforcement, and the rural nature of New Brunswick (New Brunswick Housing Corporation n.d.).

In 2011, New Brunswick's Department of Social Development operated 4,639 social housing units. This included 853 rural and Aboriginal housing units and 3,786 public housing units, 1,700 of which are for senior tenants. The waiting list for rental assistance in the province is just under 5,000 units. The demand for social housing currently exceeds the supply by a considerable margin, and the available units are awarded to new applicants based on a determination of their need.

The Department's non-profit housing program also provides subsidies to non-profit organizations to maintain their social housing portfolios. In 2009-10, 4,942 rental units and 3,622 nursing home beds were funded under this program. Subsidies are provided either to cover net operating losses or in the form of an interest write-down. In 2009-10, subsidies for this program totaled \$11.7 million (New Brunswick Department of Social Development 2010).

A rent supplement program helps low-income households obtain affordable, adequate and suitable rental housing by subsidizing eligible rental dwellings in the private sector. In 2009-2010, 248 new rent supplement units were created under the rent supplement program. Of those provincially-funded units, 225 went towards new construction under the Affordable Rental Housing Program, and the remaining

21 went to existing landlords to accommodate low-income households (New Brunswick Department of Social Development 2010).

The New Brunswick Non-Profit Housing Association Inc. provides expertise and support for the non-profit and affordable housing sector in New Brunswick. In partnership with government and housing interest groups, it provides education and training programs to meet association member needs in housing management and development. It also promotes the exchange of information on housing best practices between other non-profit associations, government, and housing interest groups. The New Brunswick Non-Profit Housing Association Inc. also has a number of units assisted by monthly subsidies from the Province (New Brunswick Department of Social Development. Personal communication, November 21, 2011).

In 2009-10, \$5.2 million was committed to construct 115 seniors units and 15 units for persons with disabilities. In addition, \$12.7 million was committed to renovate and upgrade 2,315 existing social housing units and to meet modern energy-efficiency standards (New Brunswick Department of Social Development 2010). On November 9, 2011, the province announced the signing of a three-year affordable housing agreement with the federal government with funds allocated for new affordable housing (New Brunswick Department of Social Development. Personal communication, November 21, 2011).

Within the Study Area there are approximately 451 Public Housing units, 323 of which are designated for seniors, and 137 rural and Aboriginal housing units. Rent supplements were given to 718 households in 2011. The waiting list for social housing in this region is slightly less than 1,200 (New Brunswick Department of Social Development. Personal communication, November 21, 2011).

5.3.2 York County

The number of private dwellings occupied by residents in York County in 2006 was 37,155, of which 73 percent (26,970) were owned and 27 percent were rented. The average value of an owned dwelling in York County in 2006 was \$153,664, approximately 23 percent above the provincial average. In 2006, renters in York County paid an average of \$699 each month (Statistics Canada 2007d).

The provincial Rural Planning District Commission (RPDC) provides building inspection, development and planning services to unincorporated areas of New Brunswick within its jurisdiction on behalf of the Minister of Environment. In 2011, the RDPC issued 350 building permits in rural areas of York County. In 2010-11, the RPDC approved plans for 224 subdivisions ranging in size from one lot to 34 lots (Euteneier, T. Personal communication, December 7, 2011).

5.3.2.1 Fredericton

In 2006 the number of private dwellings occupied by residents in Fredericton totaled 22,120, of which 61 percent were owned and 39 percent were rented. The average value of an owned dwelling in Fredericton was \$169,468 in 2006 and average monthly rent was \$709 (Statistics Canada 2007b). Levels of ownership were lower than average in the province, which may relate to the fact that the cost of living is generally higher than the rest of the province, and housing affordability is lower in cities than elsewhere in the province.

MLS sales in Fredericton during the first three quarters of 2011 were slightly higher than during the same period in 2010. This is not expected to continue in 2012 because of decreased demand for existing homes, particularly in the higher price ranges. Despite the weakening demand, house prices were predicted to increase modestly with the average MLS sale price expected to reach \$172,000 by the end of 2011 and to increase slightly in 2012 to \$175,000 (CMHC 2011c).

In the spring of 2011, the vacancy rate in Fredericton was down 0.5 percentage points to 3 percent, the lowest vacancy rate in the province. Fredericton is one of only two urban centres in the province that has benefitted from significant in-migration in recent years. The resulting population increase has bolstered the local rental market, as individuals recently moving to the city tend to rent first before moving to homeownership. Apartment starts in the provincial capital region were above the 10-year average during 2009 and 2010, as more rental units were constructed to meet demand. However, this increase in the supply of apartment units was not sufficient to meet local demand, which caused a decline in the local vacancy rate (CMHC 2011b). The local vacancy rate was expected to be between 3 and 3.4 percent by the end of 2011, and a further increase is anticipated in 2012 (CMHC 2011c).

In 2011, 454 new dwelling units were constructed in Fredericton. These included single units, two-unit dwellings, basement apartments, apartment units, and townhouses. Several new housing developments for single-family houses, semi-detached houses and townhomes had been registered with the City of Fredericton and more were expected to be registered in early 2012. The majority of these are located on the north side of the City where developable land is more plentiful than on the south side. The City of Fredericton issued 1,234 building permits in 2011 (Battilana, M. Personal communication, December 1, 2011; Brown, A. Personal communication, February 2, 2012).

In October 2010, a 12-unit apartment building opened in Fredericton offering permanent affordable housing for people who had previously relied on emergency shelters. The \$1.7 million project, operated by the John Howard Society of Fredericton (JHSF), was funded by the Federal Homelessness Partnership and the Provincial Housing Strategy, and financing was obtained for the amount that was not funded. The three-storey building also has JHSF offices and training rooms on the ground floor. The JHSF provides programs and services to over 1,000 people per year. Of this total, 250 to 400 people are homeless, nearly homeless or at risk of being homeless. In Fredericton, an estimated 800 people are on waiting lists for safe, affordable housing (CMHC 2011d).

5.3.2.2 Stanley Parish

Stanley Parish encompasses primarily the village of Stanley. In 2006, approximately 720 private dwellings were occupied by residents in Stanley Parish, of which 89 percent were owned and 11 percent were rented. Single-detached homes accounted for 94 percent of the private dwellings with an average value of \$85,399, which was well below the provincial and regional averages (\$119,549 and \$153,664, respectively). The average rent in 2006 was \$541 (Statistics Canada 2007e). Ownership levels in Stanley Parish were relatively high compared to the remainder of the province.

In the Village of Stanley, there were 164 occupied private dwellings in 2006, of which 88 percent were owned and the remainder were rented. The average house price in Stanley was \$91,061, and the average rent was \$620 per month (Statistics Canada 2007e).

In 2011, the RPDC approved four building permits in Stanley Parish and in 2010-11 there were plans to develop 12 lots (Euteneier, T. Personal communication, December 7, 2011). In addition, there is land for sale within the village that could be used for new development (Douglass, S. Personal communication, November 28, 2011).

5.3.2.3 Douglas Parish

Douglas Parish encompasses the communities of Douglas, Burtts Corner and Napadogan. In 2006, approximately 2,150 private dwellings were occupied by Douglas Parish residents, of which 91 percent were owned and 9 percent rented. Eighty-nine percent of private dwellings were single-detached homes with an average value of \$137,827 (14 percent above the provincial average). The average monthly rent in the area was \$601 (Statistics Canada 2007h).

Seventy-four building permits were approved in Douglas Parish in 2011, and in 2010-11 there were plans to develop 34 subdivisions ranging in size from one to 60 lots (Euteneier, T. Personal communication, December 7, 2011).

5.3.2.4 Millville

There were 115 occupied private dwellings in the Village of Millville in 2006, of which 96 percent were single-detached homes. Eighty-three percent of dwellings were owned, and the average value of a house was \$74,530. Twenty-two percent of dwellings in Millville were rented in 2006, and the average monthly rent was \$541 (Statistics Canada 2007i).

5.3.3 Carleton County

Carleton County had 10,374 occupied private dwellings in 2006. The majority of these (81 percent) were owned, and 18 percent were rented. The average rent in the area was \$545 each month, and the average value of an owned dwelling was \$106,406 (Statistics Canada 2007c).

In 2011, RPDC issued 144 construction permits in Carleton County. In 2010-11, there were plans to develop 85 subdivisions, with the largest having four lots (Euteneier, T. Personal communication, December 7, 2011).

5.3.3.1 Woodstock

In 2006, residents of Woodstock occupied 2,159 houses, of which 65 percent were owned. The average value of a house in 2006 was \$122,668. Thirty-five percent of dwellings in Woodstock were rented in 2006, and the average monthly rent was \$559. Sixty-one percent of homes were single-detached houses in 2006 (Statistics Canada 2007j).

Between 2009 and 2010, Woodstock saw a decrease of 18 percent in the number of building permits that were issued and a 16 percent decrease in the number of new subdivisions being developed (Rural Planning District Commission 2010). In 2010-11, RPDC received plans to develop seven lots in Woodstock Parish and issued 46 building permits in 2011 (Euteneier, T. Personal communication, December 7, 2011).

5.3.3.2 Hartland

There were 353 occupied private dwellings in Hartland in 2006. Seventy-six percent of dwellings were owned and the average value of a house was \$105,454. Twenty-four percent of dwellings in Hartland were rented in 2006 and the average monthly rent was \$511. Seventy-five percent of dwellings were single-detached homes (Statistics Canada 2007g).

According to its municipal plan, the major issue facing Hartland is a shortage of developable land. Existing residential development in Hartland is contained within a relatively small portion of the town. Due to the lack of developable land, there has been very little new residential development over the past 10 years. If Hartland's population increases, it will need to take measures to allow for that growth, such as facilitating the purchasing or development of land within Town limits, some of which is registered under the Farmland Identification Program, or amalgamating with part of at least one of the surrounding LSDs (Town of Hartland 2009).

The primary residential neighbourhood of Hartland, found in the northwest portion of the Town, is quite densely developed. Detached single-family dwellings are the predominant housing type although there are some apartment complexes located in the area. The most recent area of residential development is a small subdivision located just west of the industrial park. This location's proximity to the industrial park and the potential for land-use conflicts results in it not being desirable to promote any additional residential development (Town of Hartland 2009).

5.3.3.3 Aberdeen Parish

Aberdeen Parish encompasses the communities of Juniper, Argyle, Glassville, Juniper Station and Knowlesville. Aberdeen Parish residents occupied 396 private dwellings in 2006, of which 90 percent were owned and 10 percent rented. The average value of a home was \$72,687, significantly below the provincial average of \$119,549. The average rent in the area was \$470 per month and the majority of dwellings (95 percent) were single-detached homes (Statistics Canada 2007f).

In 2010-11, RPDC received plans to develop 12 lots in Aberdeen Parish. Five construction permits were issued in this area in 2011 and two of these were in Juniper (Euteneier, T. Personal communication, December 7, 2011).

5.4 TEMPORARY ACCOMMODATIONS

Temporary accommodations are short-term, temporary or transient accommodations, such as a hotels, motels, bed-and-breakfasts, or boarding houses. This section will discuss temporary accommodations in the province of New Brunswick as a whole and in York and Carleton Counties specifically.

5.4.1 New Brunswick

There are 533 hotels, inns, vacation homes, bed-and-breakfasts, and fishing and hunting lodges in New Brunswick, and 36 of these are located in the Study Area (Tourism New Brunswick 2010). In 2010, New Brunswick had room-night sales of 1,710,803 out of a possible 3,342,612, which resulted in an occupancy rate of 51 percent. These numbers are virtually unchanged from the previous year. In 2011,

New Brunswick had an occupancy rate of 52 percent, up 1 percent from the previous year (New Brunswick Department of Tourism and Parks 2011b; 2011c).

5.4.2 York County

Sixty-four percent of the temporary accommodations in the Study Area are located in Fredericton where there are 20 hotels, motels and resorts, and six bed-and-breakfasts, inns, and tourist homes. Though not accounted for as accommodations, there are also two campgrounds in the Fredericton area (Tourism New Brunswick 2010).

In 2010, the Fredericton area had an occupancy rate of 59 percent, which was an increase of 1 percent over the previous year. Room-night sales, on the other hand, decreased by 1 percent between 2009 (322,095) and 2010 (318,843). In 2011, the Fredericton area had room-night sales of 243,952 and an occupancy rate of 59 percent, which is a decrease of 23 percent over 2010 (New Brunswick Department of Tourism and Parks 2011b; 2011c).

There are no motels, hotels, inns, or bed and breakfasts in the Village of Stanley. The two closest accommodation options to Stanley are the River's Edge campground and the Riverbend Bed and Breakfast/Inn in Durham Bridge, approximately 26 km from Stanley.

Neither Napadogan nor Burtts Corner has temporary accommodations. The closest options are the On the Pond Country Retreat in Mactaquac and the Riverside Resort and Conference Centre in Keswick. Located in Millville are MacFarlane Sporting Camps, a hunting and fishing lodge offering cabin/log style accommodation, as well as Larsen's Log Lodge, a country retreat with five suites. An inn and a motel are also located in Nackawic, and a bed and breakfast is located in Nortondale.

5.4.3 Carleton County

There are several accommodation options in Woodstock, including bed and breakfasts, inns, hotels, motels, cottages, and campgrounds (Tourism New Brunswick 2010).

Accommodations in Hartland include the Ja-Sa-Le Motel, the Covered Bridge Bed and Breakfast, and Brigitte's Bed and Breakfast (Tourism New Brunswick 2010).

The main listing for accommodations in the Juniper area is for the Governor's Table/Paper Birch Lodge, a facility that offers a number of cabins. It is located on the Miramichi River. Other nearby options include the River Country Campgrounds and Cabins in Wicklow, or the Shamrock Suites, a 19th century home conversion that offers private nightly, weekly and monthly accommodations located in Florenceville-Bristol.

There are a number of outfitters operating throughout Carleton County that offer accommodations.

New Brunswick's Department of Tourism and Parks collects tourism/accommodation data for the Saint John River Valley region, which includes the area between Woodstock and Fredericton. In 2010, the Saint John River Valley region had an occupancy rate of 43 percent, which was a decrease of 1 percent over the previous year. Room-night sales decreased by 4 percent between 2009 (237,907) and 2010 (228,989). In 2011, the Saint John River Valley area had room-night sales of 180,681 and an

occupancy rate of 45 percent, which is a decrease of 21 percent from the same period in 2010 (New Brunswick Department of Tourism and Parks 2011b; 2011c).

5.5 INCOME SUPPORT AND EMPLOYMENT SERVICES

This section will discuss income support and employment services in the province of New Brunswick as a whole and in the Study Area specifically.

5.5.1 New Brunswick

New Brunswick's Department of Social Development administers the province's social assistance program. The program provides financial assistance to people who require help to meet their basic needs of food, clothing, and shelter. Social assistance is the "payer of last resort", which means that all other income must be considered when determining how much money will be provided. Social assistance cannot be paid if there is any other income (New Brunswick Department of Social Development 2011).

The Department of Social Development also provides career development services, which include a wide range of programs and services to help individuals. Career development services are made available to all individuals receiving social assistance (New Brunswick Department of Social Development 2011).

The province's social assistance program includes the transitional assistance and extended benefits programs. Transitional assistance is provided to those individuals who are highly employable, as well as those requiring support and intervention to become employable. Most social assistance recipients are part of this program. The extended benefits program is intended for individuals who are certified by the Medical Advisory Board as blind, deaf or otherwise disabled. It also includes some clients who have been on assistance for many years and were grandfathered into the program (New Brunswick Department of Social Development 2011).

During the 2009-10 fiscal year ending March 31, 2010, the department's social assistance case load remained relatively stable with an average monthly case load of 23,289. In November 2011, there were 25,068 residents of New Brunswick on Social Assistance, 76 percent of whom received transitional assistance. This total is a 3 percent increase over November 2010 when there were 24,394 New Brunswick residents on Social Assistance (New Brunswick Department of Social Development 2011).

Employment Insurance (EI), a program of the Government of Canada, provides regular benefits to individuals who have lost their jobs through no fault of their own (for example, due to shortage of work, seasonal or mass lay-offs) and are available for and able to work but cannot find a job. The EI program is delivered by Service Canada on behalf of Human Resources and Skills Development Canada. There are 29 Service Canada centres in New Brunswick.

5.5.2 Study Area

The Department of Social Development collects social assistance data for regions which correspond with the province’s health zones. The Fredericton region covers the same area that is included in health zone 3 (Fredericton) (Figure 5.2), and therefore contains all of the communities in the Study Area.

In 2008-09, an average of 5,499 individuals received transitional assistance each month in the Fredericton Region (Table 5.1). This increased to 5,820 in 2009-10. The average monthly case load for the Fredericton Region was 2,643 in 2008-09, and in 2009-10 this increased to 2,846 (New Brunswick Department of Social Development 2010).

The average number of individuals receiving extended benefits each month in the Fredericton region was 1,236 in 2008-09, and in 2009-10 it rose slightly to 1,267. The average monthly case load of extended benefits recipients in 2008-09 was 1,069, and this increased to 1,093 in 2009-10 (New Brunswick Department of Social Development 2010).

Table 5.1 Social Assistance Recipients and Case Load, New Brunswick and Fredericton Region, 2008-10

Social Assistance - Transitional Assistance				
Region	Average Monthly Case Load		Average Monthly Recipients	
	2008-09	2009-10	2008-09	2009-10
Fredericton Region	2,643	2,846	5,499	5,820
New Brunswick	16,033	16,472	30,939	31,304
Social Assistance - Extended Benefits				
Region	Average Monthly Case Load		Average Monthly Recipients	
	2008-09	2009-10	2008-09	2009-10
Fredericton Region	1,069	1,093	1,236	1,267
New Brunswick	5,929	5,954	6,751	6,782

Source: New Brunswick Department of Social Development 2010.

There are two Service Canada centres in the Study Area: one in Fredericton and one in Woodstock. There is also a Scheduled Outreach Site in Florenceville-Bristol. Scheduled Outreach Sites provide services tailored to the needs of the community, such as information and transaction support. Service Canada staff travel to pre-determined locations on a regular basis (Service Canada 2011).

5.6 COMMUNITY HEALTH

This section provides a description of community health programs in the Study Area, including a brief discussion of the administration of health services in the province, healthcare facilities, community programs (e.g., public health, addition services, rehabilitative services), and emergency response services.

5.6.1 Health Administration

In 2008, New Brunswick's eight Regional Health Authorities (RHAs) merged to form two new RHAs: Horizon Health Network (Horizon) and Vitalité Health Network (Vitalité). The purpose of these two RHAs is to deliver health services within New Brunswick. The areas managed by Horizon Health Network and Vitalité Health Network are outlined in Figure 5.2. The two Health Networks are divided into smaller Health Zones, which are also shown in Figure 5.2.

Horizon, which operates all of the healthcare centres in the Study Area, includes 12 hospitals, with more than 1,600 beds, and over 100 facilities, clinics and offices. It provides medical services ranging from acute care to community-based health services to New Brunswick, northern Nova Scotia, and Prince Edward Island (Horizon Health Network 2011a). These services include:

- public health;
- community services;
- community health clinics;
- health centres;
- addiction services;
- mental health services;
- extra-mural programs;
- long-term residential care; and
- acute care hospitals.

A continuing challenge for Horizon is the number of patients waiting for an alternate setting of care. On average, 26 percent of acute care beds located in Horizon's regional hospitals were occupied by patients waiting to be transferred to another facility. These patients no longer require the acute care services of a hospital, but they are unable to return home or to an alternate care facility. This represents an average of 310 patients in regional hospitals and an average of 40 patients in community hospitals. Horizon is continuing to work collaboratively with the province's Department of Health, the Department of Social Development, and Vitalité Health Network to develop solutions to this issue (Horizon Health Network 2011a).

In October 2011, Horizon Health Network announced several initiatives to reduce costs by about \$4 million annually, ranging from job cuts to reduced hours at community health centres and changes in surgery scheduling (Horizon Health Network 2011b).

The Vitalité Health Network provides health care and services to nearly 250,000 people in northern and southeastern New Brunswick. It has 11 hospitals, a psychiatric hospital centre, six community facilities, four addiction treatment centres, and 11 main offices for the Extra-Mural Program, which specializes in home visits (Vitalité Health Network 2011).

The Government of New Brunswick's Hospital Services Branch is responsible for ensuring the availability of hospital services through planning, funding, and monitoring the ongoing operational needs of the two Regional Health Authorities with their healthcare facilities.

5.6.2 Health Facilities

A brief description of the various health care facilities in York County and Carleton County is provided below.

5.6.2.1 York County

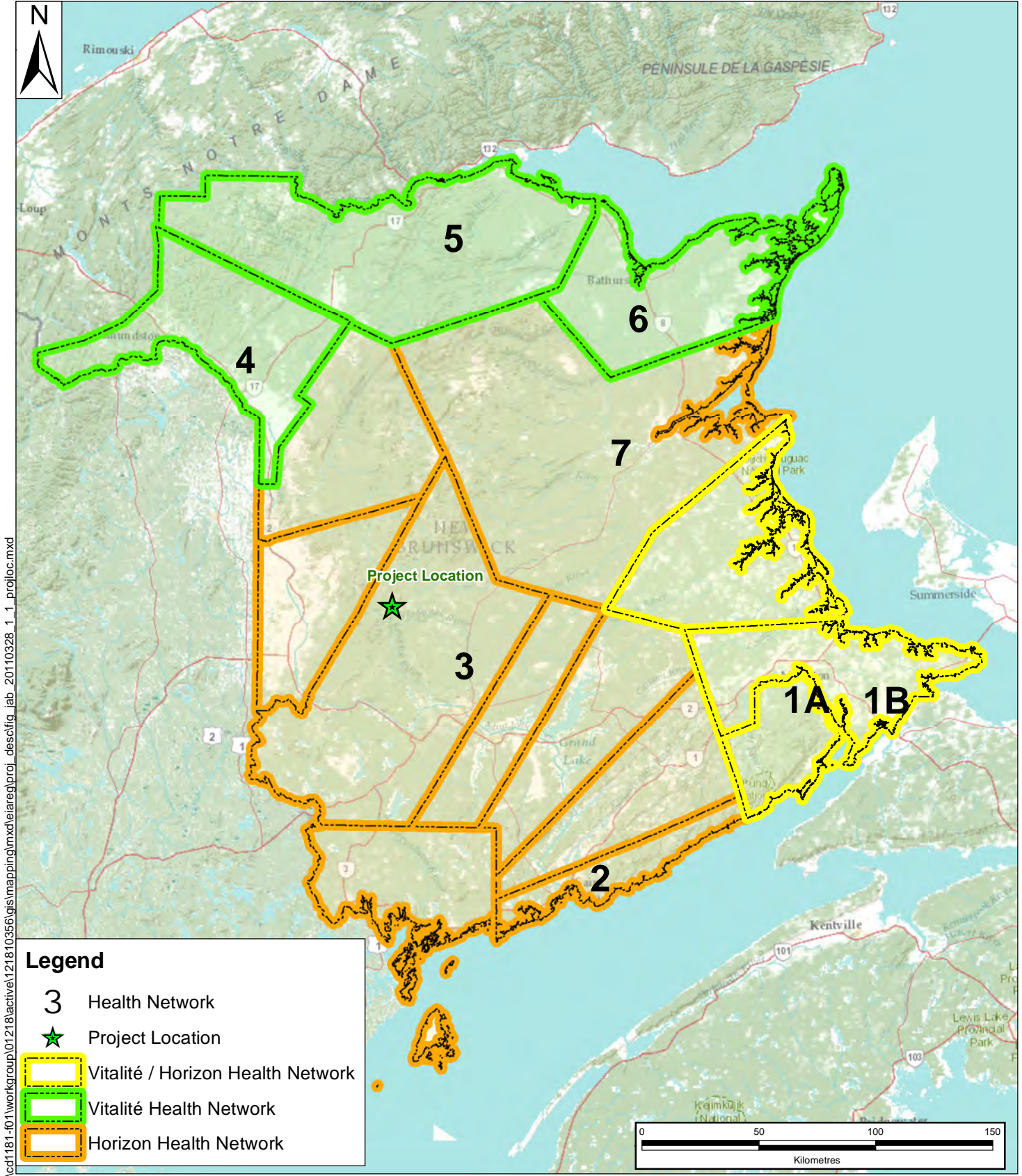
Horizon operates a network of health facilities and services in the Fredericton area, including a regional hospital, a community hospital and 14 community health centres and clinics. In Fredericton there is a veterans' health unit and the Stan Cassidy Rehabilitation Centre, which are tertiary centres of rehabilitation services for the Province of New Brunswick. Over 3,500 employees and over 220 physicians work in the Fredericton area, assisted by more than 500 volunteers (Horizon Health Network 2011c).

The Dr. Everett Chalmers Regional Hospital in Fredericton has 315 beds and receives approximately 50,500 patients to its emergency department each year. It offers 24/7 emergency, ambulatory care, cardiology, dermatology, gastroenterology, geriatrics/restorative care, intensive care, pediatric care, laboratory services, and others. The acute care occupancy rate at the Dr. Everett Chalmers Regional Hospital was 95 percent in 2009-10 and rose to 98 percent in 2010-11 (Horizon Health Network 2011a).

An enhanced Cardiac Diagnostic Department will be built in 2012.

The Stan Cassidy Centre for Rehabilitation, located adjacent to the Dr. Everett Chalmers Regional Hospital in Fredericton, is New Brunswick's Provincial Tertiary Neurological Rehabilitation Centre with specialized programs for the rehabilitation of neurologically-based conditions in adults and children. It has 20 beds and provides services such as online education programs, pediatric autism rehabilitation service, specialty clinics, and specialized rehabilitation for adults and pediatrics. In 2009-10, 134 patients were admitted to the Stan Cassidy Centre and 133 were admitted in 2010-11 (Horizon Health Network 2011a).


There are also 11 community healthcare centres and clinics in the Fredericton Region, one of which is in the Village of Stanley, and another is in Nackawic. These community health centres provide primary care, chronic disease management, health promotion, disease prevention, and community development (Horizon Health Network 2011c).



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Legend

- 3 Health Network
- ★ Project Location
- 1A 1B Vitalité / Horizon Health Network
- 4 5 6 7 Vitalité Health Network
- 2 Horizon Health Network

New Brunswick Health Networks						Scale: 1:2,250,000		Project No.: 121810356		Data Sources: SNB NRCAN, ESRI		Fig. No.: 5.2		 Stantec
Sisson Project						Date: (dd/mm/yyyy)	Dwn. By:	Appd. By:						
Napadogan, N.B.						31/01/2012	JAB	DLM						
Client: Northcliff Resources Ltd.														

The Veteran's Health Unit in Fredericton provides residential care for veterans requiring long-term care and special care needs that are not generally provided in the community. It is located adjacent to the Dr. Everett Chalmers Regional Hospital and has 47 beds (Horizon Health Network 2011c).

5.6.2.2 Carleton County

The Upper River Valley Hospital is located in Carleton County, in Waterville, north of the Town of Woodstock. It is the newest hospital in New Brunswick with 45 beds and it receives approximately 30,200 emergency patients annually. It provides services to Woodstock and surrounding communities. These services include 24/7 emergency, ambulatory care, breast screening, cardiac testing, laboratory, maternal and child services, ophthalmology, outpatient oncology and palliative care (Horizon Health Network 2011c). The acute care occupancy rate at the Upper River Valley Hospital was 118 percent in 2010-11 and 108 percent the previous year (Horizon Health Network 2011a).

5.6.3 Human Resources

Human resources in provincial healthcare will be affected by two demographical trends: A declining population in younger age groups and an aging population. From 2001 to 2006 there was a 9.1 percent decrease in the number of New Brunswick residents aged 0-14 years. This decline in the younger age groups has negative implications for future workforce numbers in the province (New Brunswick Department of Health 2009).

The second factor is that although New Brunswick continues to experience a population decrease (738,133 in 1996, 729,997 in 2001, and 729,498 in 2006), the province's population is among the oldest in Canada, and it is aging faster than the country as a whole. The incidence of age-related diseases is projected to rise, and this will have a major influence on future demand for healthcare services and an associated increase in the requirement for certain types of health human resources (New Brunswick Department of Health 2009).

In 2008, there were 1,447 physicians in New Brunswick. Between 2004 and 2008, the number of physicians increased by 14.7 percent, which was a faster rate than the national average of 8 percent. Given that the number of physicians increased while the size of the general population decreased (by 0.5 percent) between 2004 and 2008, the physician-to-population ratio increased from 168 to 193 physicians per 100,000 population. New Brunswick had 86 specialists per 100,000 population, compared to the national average of 95. However, there were 107 family medicine physicians per 100,000 population, compared to the national average of 101. In 2008, New Brunswick lost physicians to inter-jurisdictional migration, but it gained physicians from international migration (CIHI 2009).

During the 2009-10 fiscal year, New Brunswick developed a Physician Resource Strategy that resulted in the recruitment of 111 physicians, which represented a net gain of 53 (26 family practitioners and 27 specialists). This was the sixth largest increase in new physicians in the last 15 years (New Brunswick Department of Health 2010).

There has been a shift in healthcare professionals from rural areas to urban settings in New Brunswick. Recruiting and retaining registered nurses (RNs) in rural areas in the province, coupled with linguistic requirements to service the population in these areas, will continue to be a challenge in the coming years, as many professionals are drawn to larger urban centres. Efforts in recent years to recruit nurse

practitioners to help fill healthcare gaps have met with similar challenges. This rural to urban shift subsequently creates a gap in meeting the healthcare needs of the province’s rural communities, which are generally comprised of an older population with increased healthcare needs compared to urban populations (New Brunswick Department of Health 2009).

Between 2001 and 2007, the number of RNs in New Brunswick increased from 8,259 to 9,094. However, since 2000, the number of RNs aged 55 years and over has doubled in the province. This aging workforce poses RN-planning challenges in terms of keeping pace with increased retirement numbers, when coupled with other permanent and temporary attrition from the nursing workforce (New Brunswick Department of Health 2009).

According to a study conducted by the New Brunswick Department of Health, which forecasts the supply of healthcare professionals in the province between 2008 and 2015, New Brunswick’s supply of RNs will increase over the next three years. However, unless a considerable number of RNs enters the workforce, this increase will not be sufficient to meet the growing needs of the province’s aging population unless the model of healthcare delivery is changed to require fewer RNs (New Brunswick Department of Health 2009).

5.6.3.1 Study Area

Horizon employed 13,000 staff, including 976 physicians and 290 medical residents, and it admitted 54,889 acute, rehab and chronic patients in 2010-11 (Horizon Health Network 2011a). In 2008, health zone 3 (in which the Study Area is located) had 275 physicians. At that time, there were 98 family medicine physicians per 100,000 people, which was slightly lower than the provincial average of 107. The specialist-to-patient ratio in zone 3 was 62 specialists per 100,000 people, which was also lower than the provincial ratio of 86 (CIHI 2009). In 2009, there were 287 physicians in the Study Area and the family medicine physician-to-patient ratio was 101 physicians per 100,000 people. The specialist-to-patient ratio in 2009 was 65 specialists per 100,000 people (CIHI 2010).

The number of physicians on staff at the hospitals and clinics in the Study Area are shown in Table 5.2. Horizon hopes to hire additional family physicians and specialists to the area within the next year (Mason, K. Personal communication, November 30, 2011).

Table 5.2 Number of Physicians at Healthcare Facilities in the Study Area

Hospital / Clinic	Total Number of Physicians
Dr. Everett Chalmers Regional Hospital	195
Stan Cassidy Centre for Rehabilitation	6
Upper River Valley Hospital	35
Stanley Health Centre	2
Nackawic Health Centre	1

Source: Mason, K. Personal communication, November 30, 2011.

5.6.4 Community Programs

The following sections describe community programs in the Study Area.

5.6.4.1 Addictions and Mental Health Services

New Brunswick provides comprehensive addiction and mental health services, including a range of acute, inpatient, outpatient, and community services. Programs are organized in the areas of assessment and crisis intervention, children and youth, adult, geriatrics, and community care.

In the Fredericton area, there are approximately 55 inpatient acute care beds at the Dr. Everett Chalmers Regional Hospital to provide psychiatric and addictions services. The hospital also offers emergency mental health services. Other addiction and mental health services in the area include children and youth treatment programs, gambling and methadone treatment programs, and individual and family and group counselling.

There are three Addiction and Mental Health Services centres in the Fredericton area and one Mobile Mental Health Crisis Intervention Team. There are two Addiction and Mental Health Service centres in Woodstock and one Mobile Mental Health Crisis Intervention Team in the Woodstock area (Horizon Health Network 2011c).

5.6.4.2 Public Health

Public Health Services prevent, manage and control communicable diseases, promote healthy lifestyles and healthy families, and provide environmental protection. The services offered by Public Health include anonymous HIV/AIDs testing; communicable disease prevention, management, and control; early childhood initiatives; a healthy learners program; health emergency planning; immunization; and a sexual health program (Horizon Health Network 2011c).

There are four public health units in the Fredericton Area and one in Woodstock (Horizon Health Network 2011c).

5.6.4.3 Extra-Mural Program

The Government of New Brunswick's Extra-Mural Program provides a comprehensive range of coordinated healthcare services for individuals of all ages for the purpose of promoting, maintaining, and/or restoring health within the context of their daily lives or to enable individuals with terminal illnesses to remain at home. This is accomplished through the provision of services in the home, schools and community, and includes acute care, palliative care, chronic care, long-term care, rehabilitation, and home oxygen therapy. Extra-Mural units within the Study Area are located in Fredericton and Woodstock (Horizon Health Network 2011c).

The Extra-Mural Program has 789 funded, full-time equivalent positions in the province. In 2009-10, 19,584 clients were discharged from the program (26.2 discharges per 1,000 population estimate). During that year, 631,382 visits and telephone contacts were carried out. This is up 8.5 percent from 2006-07 when 581,876 contacts were made (New Brunswick Department of Health 2010).

5.6.5 Emergency Services

Ambulance New Brunswick Inc. (ANB) is contracted by the Department of Health to provide air and land ambulance services in New Brunswick (New Brunswick Department of Health 2011).

There are over 64 stations throughout the province, including one in Stanley and a fleet centre/paramedic station/regional office in Fredericton. Construction is currently underway on a station in Hartland (ANB 2011a).

In 2009-10, ANB had a fleet of 134 vehicles operating out of 80 stations. It employed approximately 1,000 people, including paramedics, critical care nurses and medical transportation dispatchers. In 2009-10, it received 93,062 calls, a decrease of approximately 15,000 calls from the 2008-09 fiscal year. During the 2010-11 fiscal year, ANB received 94,063 calls, an increase of approximately 1,000 calls over the previous year (ANB 2010; 2011a). The air ambulance service currently employs nine full-time critical care flight nurses, three part-time and three casual employees (Steeves, K. Personal communication, November 29, 2011). In 2009-10, the air ambulance service responded to 724 calls, including 554 patient transfers. In 2010-11, they completed 564 patient transfers out of 719 requests for service (ANB 2010; 2011a).

ANB indicates that it is becoming increasingly difficult to staff many rural stations in the province. In 2008, there were 68 stations divided into four regions: North, South, East and West. In 2007, there were consistently between 80 and 100 job postings amongst the stations. Recruitment to the eastern and western regions of the province is not difficult from a clinical perspective; however, fulfilling the linguistic profile remains a challenge. In addition, attracting and retaining paramedics to the northern and southern regions has been increasingly difficult (New Brunswick Department of Health 2009).

ANB's contract with the Department of Health says that in 90 percent of calls, the ambulance must reach an urban caller within nine minutes and a rural caller within 22 minutes. All performance requirements were met in the year ending March 31, 2011, and in ANB's western region where the Study Area communities are located, response times were achieved for over 95 percent of all calls (ANB 2011a).

5.7 RECREATION AND ENTERTAINMENT

This section will discuss recreation and entertainment in York and Carleton Counties.

5.7.1 York County

5.7.1.1 Fredericton

Fredericton has a number of entertainment options, including dance clubs, pubs, billiard rooms, and a movie theatre. Other forms of entertainment in Fredericton include paintball, curling, golf courses, indoor swimming facilities, harness racing, indoor skating, and bowling (Fredericton Tourism n.d.). A listing of the arenas and indoor recreational facilities in Fredericton is included in Table 5.3.

Table 5.3 Recreational Facilities, Fredericton

Name of Facility	Type of Facility	Services
Nashwaakis Field House	Recreation	Racquet sports courts, indoor track, weight room, mezzanine, and a meeting room for community use; also offers free rental of equipment to members for badminton, volleyball, indoor soccer, basketball and table tennis.
Fredericton Indoor Pool	Aquatic	A 25 m pool with adult and children’s swim instruction, activity-based classes, public swimming, water slide, aquatic fitness classes.
York Arena	Skating Arena	Hockey, ringette, lacrosse, ball hockey, dressing rooms, canteen. Arena has seating capacity of 1,500.
Lady Beaverbrook Arena	Skating Arena	Hockey, figure skating, ringette, speed skating, dressing rooms, canteen. Arena has seating capacity of 1,300.
Northside Youth Centre	Youth Recreation	Indoor skateboard park, video games, canteen, in house skateboard shop, skateboard day camps, youth groups and many other youth centered activities.
Fredericton YMCA	Recreation	A new 60,000 square foot YMCA opened in October 2011 with programs such as basketball, dance, gymnastics, and fitness for adults, teens and children; gymnasium, squash courts, wellness centre, two pools, child development centre, community rooms, and childcare.
Willie O’Ree Place	Recreation / Skating Rink	Two NHL sized ice surfaces (one with a seating capacity of approximately 1,500, the other with a seating capacity of approximately 250), 11 large dressing rooms, offices for officials and event organizers, indoor walking track, three rooms for community use, canteens operated by the Nashwaakis Y’s Men Club, the Fredericton YMCA, seasonal youth centre, and indoor skateboard park; houses Fredericton’s Celebration of Sport. Each individual room has the capacity to host up to 60 people in theatre style seating or 40 people around tables. For larger events, all three rooms can be opened up to accommodate up to 200.
Grant Harvey Centre		Opening in March 2012, this centre will have one Olympic-size ice surface and an NHL-size ice surface for hockey, figure skating and speed skating; will be home to local men’s and women’s ice hockey teams; will also have an indoor track, meeting rooms, kitchen facilities, and will accommodate trade shows and home shows; the grounds will include an artificial turf multi-use athletic field, a six-court indoor tennis facility, a two-acre, and a fenced dog-walking park. One rink will seat 500 and the other will seat 1,500; parking lot will accommodate 600 vehicles.

The City of Fredericton Recreation Master Plan, which was completed in 2008, indicates that aquatic facilities in the Fredericton area currently have a service ratio of 1 facility for 50,535 people. The restrictions placed on daytime access for community usage at the existing pools, as well as the use of pools by surrounding communities, brings the level of supply closer to 1 facility for 70,000 people (City of Fredericton 2008).

The Recreation Master Plan also indicates that hockey and skating facilities in Fredericton are comparable to other similar-sized communities, and that there is a good supply of outdoor natural ice surfaces. The arenas that have been constructed since the Plan was written were expected to adequately meet the demand for organized ice time. However, there appears to be outstanding demand for informal and family/public skate use (City of Fredericton 2008).

Fredericton has a network of over 85 km of trails extending on both sides of the St. John River and Nashwaak River. These trails are connected to the Greater Trans Canada Trail System and are frequented by walkers, runners, and bikers as well as cross-country skiers during the winter.

The City of Fredericton developed a Trails/Bikeways Master Plan in 2007 which outlined a strategy to improve active transportation within the City (SGE Acres 2007). A network of ATV and snowmobiling trails exists around Fredericton and extends to various rural areas in the Study Area.

Other outdoor entertainment offered in the area includes outdoor skating, snowmobiling, and sailing. Downhill skiing is available for residents of the Fredericton region at Crabbe Mountain. There are beaches at Killarney Lake and Mactaquac Provincial Park (Fredericton Tourism n.d.). The Small Craft Aquatic Centre, on the banks of the St. John River, offers canoeing and kayaking, rowing, and outdoor adventure camps (City of Fredericton n.d.). A number of tubing operators between Stanley and Taymouth offer inner-tube adventures along the Nashwaak River. These operators often offer canoe and kayak rentals as well as outfitting services for hunting and fishing excursions.

Art and cultural offerings are available through Fredericton's Beaverbrook Art Gallery, as well as other galleries, a science centre, heritage museums, concert halls, and theatres. The Historic Garrison District is a National Historic Site, which informs visitors about Fredericton's history as a garrison town. It offers daily free entertainment with concerts, live theatre, outdoor films, festivals and storytelling (Fredericton Tourism n.d.).

There are over 150 eating establishments in Fredericton including pizzerias, coffee/sandwich shops, pubs/taverns, cafés, and a wide variety of fast food establishments. There are also Indian/Pakistani, Caribbean, Greek, Mexican, and Asian-fusion restaurants (Fredericton Tourism n.d.).

5.7.1.2 Stanley

Stanley is home to the longest running agricultural fair in New Brunswick. The community has a multi-use community facility in which many of the fair activities and other community functions take place (Stanley Fair 2008).

Other indoor entertainment venues in Stanley include a public library, a curling club, an arena, and the Upper Nashwaak Lions Club. Outdoor recreation in Stanley includes canoeing, kayaking, fishing, cross-country skiing, snowshoeing, and snowmobiling (Village of Stanley 2011).

Stanley has two restaurants: - McCoy's and Billy's Restaurant.

5.7.1.3 Burtts Corner and Napadogan

Burtts Corner has one arena, the Keswick Valley Arena, which is used for hockey and skating. There is one restaurant in Burtts Corner (Noel, T. Personal communication, December 6, 2011).

5.7.1.4 Millville

Millville has one outdoor rink for skating and hockey. There is also a baseball field and a playground at the local elementary school and two parks with playground equipment. There are no restaurants in the Village (Hill, N. Personal communication, December 16, 2011).

5.7.2 Carleton County

5.7.2.1 Woodstock

Entertainment options in Woodstock include a movie theatre, nightclub, pool hall, and bowling alley. The town also has a yacht club at the Woodstock Marina, and a golf and curling club. Outdoor recreation includes walking, cycling, and jogging at the trails along the Meduxnekeag River. The Maliseet Trail, just outside of Woodstock, is part of the historic portage and canoe transportation route linking the St. John River system with the St. Croix River. There are also ATV and snowmobile trails, berry and apple picking farms, farm and craft markets, and a public library (Town of Woodstock 2010).

The Woodstock Civic Centre is a multi-purpose arena operated by the Town of Woodstock. It has offers a skating rink, pool, fitness centre, and meeting rooms. It is the only arena of its type in the town, and demand for the skating rink is high. The town currently has plans to expand the Civic Centre, including installing a second ice surface (Voutour, A. Personal communication, December 6, 2011).

Woodstock has more than 30 eating establishments. The majority of these are fast food establishments and coffee/sandwich shops. Other options include Japanese, Chinese, Indian and German restaurants (Town of Woodstock 2010).

5.7.2.2 Hartland

The Town of Hartland has established walking trails and other recreational amenities. The walkway following the St. John River and the Becaguimac Nature Trail provide residents with year-round recreational opportunities. A golf and country club is a venue for sport and entertainment in summer and winter. Hartland Recreational Park has two baseball diamonds, two tennis courts and swimming and wading pools. The Town has a recreation director who works to enhance the recreational programs and facilities within the Town (Town of Hartland 2009).

The Town of Hartland is working to secure the necessary funding to develop a new arena and recreation facility and to continue development of the trail network and establish at least one area that provides easy and safe access to the St. John River. This would present the opportunity for a playground and/or picnic area (Town of Hartland 2009).

In addition to a few fast food establishments, Hartland has five restaurants: Chester Chicken, Tim Horton's, Foster's Bar & Grill, My Place Café and Glenn's Family Restaurant.

5.7.2.3 Juniper

The Juniper Community Recreational Centre has a baseball diamond and an outdoor skating rink. There is also a picnic/camping area and a playground. Juniper's Recreation Council has a mandate to provide activities to the children, adults and seniors in the community. It offers a limited number of winter and summer programs, including a day camp for kids, mixed martial arts training and supervised skating and hockey. Throughout the year, the Council organizes a number of community festivals and jamborees, as well as senior socials, children's entertainment evenings, occasional movie nights and dances. Juniper receives funding from the federal government through the SEED Program to hire a limited number of employees each year to supervise the summer and winter programs (Gauvin, T. Personal communication, November 30, 2011).

There is one restaurant in Juniper, Trudy's Family Restaurant, which is open from mid-spring to late fall. There is also one local tavern, the Village Pour House, which is open from Thursday to Saturday and serves a limited menu (Gauvin, T. Personal communication, November 30, 2011; Brooks, H. and P. Personal communication, December 1, 2011).

6.0 LAND AND RESOURCE USE

This section describes the use of land and resources in the area of the Project. It will discuss the following:

- regional setting;
- regulation of land use and development;
- commercial, institutional, and industrial land and resource use;
- residential land use;
- outdoor recreational activities; and
- current use of land and resources for traditional purposes by Aboriginal persons.

6.1 REGIONAL SETTING

As discussed in Section 1.0, the Project is located approximately 10 km southwest of the community of Napadogan, New Brunswick, and approximately 60 km directly northwest of the city of Fredericton (Figure 1.1). It is not located within the boundaries of an incorporated municipality, or within a Local Service District (LSD). Nearby communities in the vicinity of the Project include Juniper, Glassville, Florenceville-Bristol, Woodstock, Millville, and Stanley.

The Study Area consists mainly of Crown land that has a variety of uses determined by the provincial government. With the exception of portions of the proposed transmission line to be built to service the Project, the Project is located entirely on Crown land. The majority of land in and around the Study Area for land and resource use has been routinely used for forestry activities for many decades. Timber is presently being harvested in the vicinity of the Project, and logging vehicles frequently travel to, from, and through the Study Area.

In addition to the forestry and logging activity that occurs throughout the Study Area, there is a considerable amount of recreational activity. Recreational land uses include primarily hunting, trapping, fishing, and ATV and snowmobile riding.

6.2 REGULATION OF LAND USE AND DEVELOPMENT

Land use and development in the province of New Brunswick is governed by two key pieces of legislation, namely the *Community Planning Act* (for private land) and the *Crown Lands and Forests Act* (for Crown land). Incorporated areas are further subject to the *Municipalities Act*.

6.2.1 Community Planning Act

The New Brunswick *Community Planning Act* divides the province into planning regions and establishes planning districts to coordinate community planning in unincorporated areas of the province.

As mentioned in Section 5.4.2, the Rural Planning District Commission (RPDC) is the planning district that provides building inspection, development, and planning services to unincorporated areas of New Brunswick within their jurisdiction. The Study Area is within RPDC's jurisdiction, which encompasses approximately 40 percent of the province and includes the unincorporated areas of:

- Carleton County, Charlotte County, Sunbury Country, and York County;
- the Parishes of Greenwich and Westfield in Kings County;
- the Parishes of Canning, Chipman, Gagetown, Hampstead and Petersville in Queens County;
- the Parish of Musquash in Saint John County; and
- the Parishes of Gordon, Lorne, Andover, and Perth in Victoria County (RPDC 2012).

Rural plans are in place for many areas of the RPDC's jurisdiction to set forth acceptable uses of land (*i.e.*, zoning) within its boundaries. There is not currently a rural plan in place for the Study Area.

6.2.2 Crown Lands and Forests Act

The New Brunswick *Crown Lands and Forest Act*, administered by the New Brunswick Department of Natural Resources (NBDNR), regulates the development, use, protection, and management of the resources of Crown Lands in New Brunswick, including:

- access;
- timber harvesting and renewal;
- habitat for the maintenance of fish and wildlife populations;
- forest recreation; and
- rehabilitation.

A disposition, which includes a lease, or a licence of occupation, may be issued for Crown lands by NBDNR.

6.3 COMMERCIAL, INSTITUTIONAL, AND INDUSTRIAL LAND AND RESOURCE USE

The following sections provide a summary of commercial, institutional, and industrial activities in the Study Area.

6.3.1 Commercial

Commercial land and resource use within the Study Area consists primarily of forestry-related activities such as timber harvesting. There are also several outfitting and guiding businesses offering services during the hunting season within and surrounding the Study Area. In the area surrounding the Project, there is a low level of commercial activity that includes cabins available for short- and long-term rental, convenience stores, and several restaurants.

6.3.2 Industrial

Industrial land use is limited to areas outside of the Study Area and includes the Napadogan veneer mill. The Deersdale Sawmill, also in the vicinity of the Study Area, recently ceased operations.

6.3.3 Institutional

There is no known institutional land or resource use in or in the immediate vicinity of the Study Area.

6.4 RESIDENTIAL LAND USE

There do not appear to be any permanent residences located in the immediate vicinity of the Project. The closest residences to the Project appear to be located in Napadogan, which is a small community, located along Highway 107, approximately 10 km to the northeast of the Project.

There are approximately 39 recreational campsite leases, including cabins, in the vicinity of the Project (Figure 6.1). The closest cabin to the Project is located approximately 1.5 km to the east of the proposed location of the open pit. These cabins are not serviced by the New Brunswick electrical grid, though some appear to operate generators. The cabins are often used year-round.

6.5 OUTDOOR RECREATIONAL ACTIVITIES

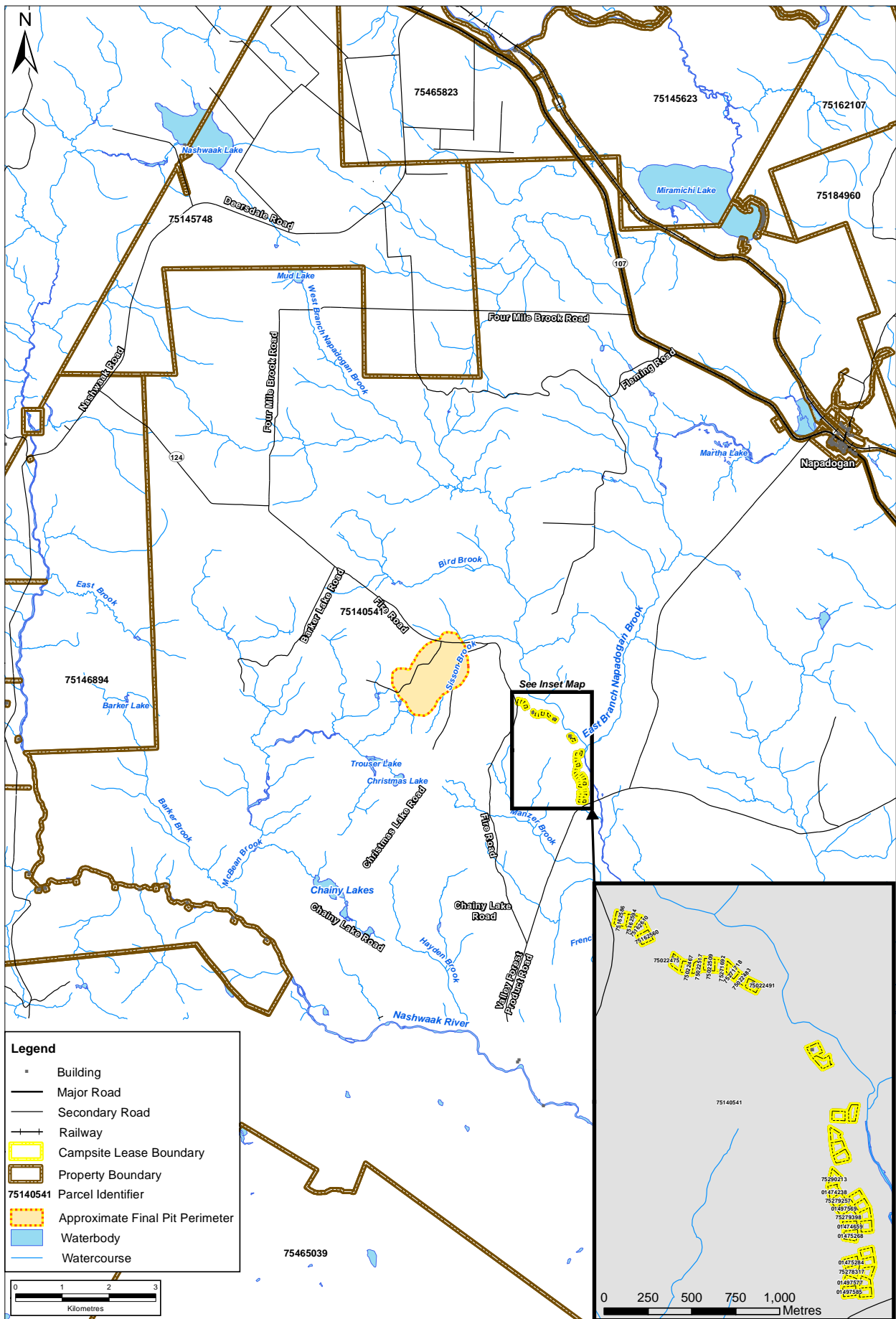
Evidence of recreational land use is present throughout much of the Study Area. Forestry roads and trails are used informally for snowmobiling, ATV use, and hiking. Recreational fishing of brook trout occurs seasonally on various watercourses within and surrounding the Study Area.

The Study Area is used for hunting a variety of game, including deer, moose, black bear, ruffed grouse and woodcock (O'Donnell, G. Personal communication, July 31, 2012). Trapping (e.g., hare snaring) also occurs in parts of the Study Area. The hunters and trappers using the Study Area generally are residents of the surrounding communities, though some tourists also use the area for bear and moose hunting, especially through the services of the local guides and outfitters (Heagney, S. Personal communication, July 30, 2012; Lindsay, C. Personal Communication, July 30, 2012).

6.6 CURRENT USE OF LAND AND RESOURCES FOR TRADITIONAL PURPOSES BY ABORIGINAL PERSONS

Given its rural nature, it is possible that the Study Area has been used for activities involving traditional uses of land and resources by Aboriginal persons. The location of the Project is in the headwaters of the Nashwaak River a place that is understood to be in traditional Maliseet territory.

The historical or current use of land and resources for traditional purposes by Aboriginal persons is beyond the scope of this Technical Report. An Aboriginal Traditional Use Study will document the historical, current, and future use of the land and resources by Aboriginal persons for such purposes and will be prepared under separate cover.



NOTE: THIS DRAWING ILLUSTRATES SUPPORTING INFORMATION SPECIFIC TO A STANTEC PROJECT AND SHOULD NOT BE USED FOR OTHER PURPOSES.

Recreational Campsite Leases Sisson Project Napadogan, N.B.		Scale:	Project No.:	Data Sources:	Fig. No.:
		1:75,000	121810356	NBDNR, SNB NHN	6.1
Date:	Dwn. By:	Appd. By:			
03/02/2012	JAB	DM			
Client:	Northcliff Resources Ltd.				

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7.2 PERSONAL COMMUNICATIONS

Antworth, Toby. Personal communication, email December 6, 2011. General Manager, Valley Solid Waste Commission.

Battilana, Marcello. Personal communication, email and telephone call November 24, 2011. Manager of Planning and Development, City of Fredericton.

Brooks, H. and P. Personal communication, telephone call December 1, 2011. Residents of Juniper.

Brown, Alicia. Personal communication, email February 2, 2012. Planning/GIS Technician, City of Fredericton.

Douglass, Shelley. Personal communication, email November 28, 2011. Clerk-Administrator, Village of Stanley.

Euteneier, Tianne. Personal communication, email December 5, 2011. Office Assistant, Rural Planning District Commission.

Gauvin, Travis. Personal communication, email November 30, 2011. Recreation Council President, Juniper.

Heagney, Stacey. Personal communication, telephone call July 30, 2012. Co-owner, Paper Birch Lodge.

Hill, Natalie. Personal communication, emails December 9, 2011 and February 1, 2012. Clerk/Treasurer, Village of Millville.

Lindsay, Charles. Personal communication, telephone call July 30, 2012. Owner, Lindsay Sporting Camps.

Mason, Karen. Personal communication, email November 29, 2011. Medical Staff Office - Zone 3 Fredericton.

McCrae, Brett. Personal communication, telephone call December 7, 2011. Operations Manager. Fredericton Region Solid Waste Commission.

New Brunswick Department of Social Development. Personal communication, email November 21, 2011.

Noel, Tim. Personal communication, telephone call December 6, 2011. Resident of Douglas and member of Douglas LSD.

O'Donnell, Gene. Personal communication, telephone call July 31, 2012. Owner, Ryan Brook Sporting Camps.

Rousselle, Jerry. Personal communication, telephone call January 13, 2012. Fire Chief. Juniper Fire Department.

Sampson, S. Personal communication, telephone call July 13, 2012. Fire Chief, Stanley Fire Department.

Steeves, Kirk. Personal communication, telephone call, November 29, 2011. Operations Manager, Ambulance New Brunswick (Air Component).

Stenger, Don. Personal communication, telephone call. December 5, 2011. Sgt. District 2 - OPS NCO North, Keswick, New Brunswick.

Voutour, Ann Marie. Personal communication, telephone call December 6, 2011. Payroll Clerk, Town of Woodstock.

Walton, Mike. Personal communication, telephone call, November 29, 2011. Fire Chief, Hartland Fire Department.

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Appendix A

List of Acronyms and Units

LIST OF ACRONYMS AND UNITS

Acronym/Unit	Definition
ANB	Ambulance New Brunswick
CFB	Canadian Forces Base
CIHI	Canadian Institute for Health Information
CMHC	Canadian Mortgage and Housing Corporation
COGERNO	Commission de gestion enviro-ressources du Nord-Ouest
EI	Employment Insurance
EIA	environmental impact assessment
FRSWC	Fredericton Region Solid Waste Commission
GDP	Gross Domestic Product
JHSF	John Howard Society of Fredericton
km	kilometres
LSD	Local Service District
MLS	Multiple Listings Service
MCMC	Medical Communications Management Centre
RBC	Royal Bank of Canada
RCMP	Royal Canadian Mounted Police
RHA	Regional Health Authority
RN	Registered Nurse
TUS	Traditional Use Study
VEC	valued environmental component
VSWC	Valley Solid Waste Commission

