

A Scan of Land Use Issues

in the Grand Falls-Windsor - Baie Verte - Harbour Breton Region



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A Scan of Land Use Issues **in the Grand Falls-Windsor - Baie Verte - Harbour Breton Region**

Introduction

The Canadian Institute of Planners defines planning as “*the scientific, aesthetic, and orderly disposition of land, resources, facilities and services with a view to securing the physical, economic and social efficiency, health and well-being of urban and rural communities.*”¹ According to the Land Management Division at the Department of Environment and Conservation², land use planning determines:

- What will be done and to what extent to land and resources;
- Where activities can and cannot take place; and
- How the activities should be carried out.

Successful land use planning can prevent (or resolve) land use conflicts and is a key tool for governments, businesses and industry to plan for long-term usage of land and natural resources. It allows communities to plan for growth and to make decisions regarding allocation of land for future growth, conservation, aesthetics and quality of life. Planning is inherently important because it “leads to orderly growth, efficient provision of infrastructure and services, and compatible economic development.”³ In fact, without adequate planning or planning personnel, communities are prone to dispersed development patterns, inefficient use of infrastructure, uncontrolled shoreline development, environmental degradation, and use of inappropriate sites for commercial development. This can in turn negatively affect the attractiveness, economic opportunities, and sustainability of communities.⁴

Integrated land use planning seeks to manage an area by seeking a balance of the economic, social and cultural opportunities through the management of two or more resources in that area.⁵ The traditional idea of a land use is one of resource extraction and development, such as mining, forestry, or residential uses. However,

¹ Canadian Institute of Planners (2012), < <http://www.cip-icu.ca/web/la/en/pa/3FC2AFA9F72245C4B8D2E709990D58C3/template.asp> > (accessed 3 May 2012).

² Reginald Garland, “Presentation on Land Use Planning to the Provincial Council of the Rural Secretariat,” paper presented Rural Secretariat Provincial Council provincial land use planning citizen engagement event, St. John’s NL, 7 April 2009.

³ Dave Curran and Associates, *Land Use Planning & Municipal Economic Development* (St. John’s, NL: Municipalities Newfoundland and Labrador, 2010), 7.

⁴ Ibid., 11.

⁵ Sustainable Forest Management in Canada (2012), < <http://www.sfmcanada.org/english/topics-land.asp> > (accessed 3 May 2012) and Garland, “Presentation on Land Use Planning to the Provincial Council of the Rural Secretariat”.

it should be noted that activities such as hiking, wildlife viewing or photography, ATV use and snowmobiling are all considered land use as well, and should be treated as such with careful consideration of impacts and interactions on other activities. Activities such as wood cutting, hunting, or fishing are also important land uses. New (or often forgotten) uses of lands and resources create new challenges for assessing values associated with the land and natural resources. In the past planners have often placed value on the environment based on physical attributes and quantified values such as the annual allowable cut in forestry. However, for the full range of land uses and environmental values to be taken into account other forms of assessment are needed to incorporate such values as spirituality, wilderness appreciation, and enjoyment.⁶

In their response to the Draft Newfoundland and Labrador Sustainable Forest Management Strategy the Sierra Club of Canada recommended an integrated approach to land use planning. They noted that rather than treating uses other than logging as “constraints” to forestry operations, integrated planning would consider the full range of values that can be supported on the land, including extractive non-renewable resources, renewable resources, non-extractive resources and services.⁷ This view of existing planning processes in the province brings attention to the disparities between the forest industry and other users of the land and the need for processes that consider land use issues and concerns from a variety of perspectives.

Overall, Newfoundland and Labrador has a poor record in land use planning. The last province-wide review of land use policy and planning was in 1995 with the formation of the Interdepartmental Review Committee on Land Use Policy and Planning (ILUC). This resulted in a report (also known as the Flemming Report) with a series of key recommendations:⁸

- Consolidation of like legislation
- One central agency for proposals related to land use
- Expanded ILUC mandate
- Mandatory land registration

Since 1995, there has been no consolidated approach to tackling land use planning and conflicts in the province. Although there are plans that exist, they are often focused on a single issue or area of usage. For example there is a Natural Areas Systems Plan, Forest Ecosystem Management Plans, a Wilderness and Ecological Reserves Plan, Cottage Management and Development Plans, Coastal Management Plans and Municipal Plans. However, there is no unified approach for dealing with land use issues in a single document or process. Municipal and regional plans where they exist tend to deal with the zoning designation of land (for example, industrial,

⁶ Sierra Club of Canada, *Response to the Draft Newfoundland and Labrador Sustainable Forest Management Strategy* (St. John's NL: Sierra Club of Canada, 2003).

⁷ Ibid., 7.

⁸ Garland, “Presentation on Land Use Planning to the Provincial Council of the Rural Secretariat”, Ibid.

economic, commercial, etc.) but not with the usage of the natural resources in that area. The lack of an overarching land use plan and land use conflict resolution process has led to increased user conflicts without the capacity to resolve them through a designated framework. This has led to increased frustration amongst user groups but can also be negatively affecting the province's economic future and our legacy for future generations.

In 2010, the Rural Secretariat Provincial Council arranged a provincial land use planning citizen engagement event that aimed to “consider and deliberate on the current status of land use planning in Newfoundland and Labrador with emphasis on generating ideas about how to improve and advance it.”⁹ The council has since reviewed the input received during the event combined with input from regional councils as a base to develop an advice document submitted to government in the 2011-2012 fiscal year.¹⁰ This document represents a Rural Secretariat effort at the regional level, through the Grand Falls-Windsor - Baie Verte - Harbour Breton Regional Council to explore how land use planning might best be addressed. It was determined that an appropriate first step was to better understand the land use considerations in the region.

Methodology

This report is mainly the product of a literature scan of documents, reports and files on Newfoundland and Labrador land use conflicts and concerns (herein referred to as land use issues), with a particular focus on those applicable in the Grand Falls-Windsor - Baie Verte - Harbour Breton Region. As part of the “Developing Innovative Approaches for Community Engagement” project (see Mirza et al. 2012), land use was also identified as an important issue for the region; one which community engagement techniques might be used to help address in the future. As a part of the Developing Innovative Approaches for Community Engagement project, 20 community leaders in the region were interviewed and were asked to identify any land use issues or conflicts that they were aware of within the region as a starting point, together with literature review, for understanding land use-related concerns.

Although some documents and reports exist that identify land use issues in the Grand Falls-Windsor - Baie Verte - Harbour Breton Rural Secretariat Region, they are few and far between. The lack of data was a challenge in completing this report and represents a data gap that has been identified in a variety of recent reports regarding alternative usage for land in the province.

⁹ Provincial Council of the Rural Secretariat, *Executive Council Activity Report 2010-11* (St. John's, NL: Government of Newfoundland and Labrador, 2011),
<http://www.exec.gov.nl.ca/rural/publications/provincial_council_201011_report.pdf> (accessed 3 May 2012).

¹⁰ Ibid.

The Grand Falls-Windsor - Baie Verte - Harbour Breton Region

The Grand Falls-Windsor - Baie Verte - Harbour Breton region is the largest Rural Secretariat region in insular Newfoundland and spans 33,180 square kilometres with a population of almost 50,000.¹¹ Within the region there are 81 communities, only one with more than 5000 residents (Grand Falls-Windsor, population 13,725 as of 2011 Census).¹² As of 2006, 47 of these communities had a population of fewer than 1000 residents and nearly half of the population (41%) lived in communities that have fewer than 1000 people.¹³

In terms of demographics, the region saw a population decline of 5.2% between 2001 and 2006 while the province as a whole only saw a decline of 1.5%. In 2006, the median age in the region was 44 years old, slightly above the median age of 42 for the province.¹⁴ From 2006-2011, some communities in the region grew (such as Grand Falls-Windsor: 1.2%, Springdale: 5.2%, Samiajij Miawpukek: 6.1%, Port Anson: 6.5% and Baie Verte: 7.5%) while many others shrank (such as Lushes Bight-Beaumont-Beaumont North on Long Island: -20%, Beachside: -18%, Fleur de Lys: -17% and Harbour Breton: -8.8%).¹⁵

The region boasts a rich history, with the Maritime Archaic Indians settling the area over 4,000 years ago; Dorset Paleo-Eskimos migrating to the area around 2,000 years ago; and French and English settlers first inhabiting the area around 400 years ago.¹⁶ There are seven noted service centres in the region: Grand Falls-Windsor, Bishop's Falls, Botwood, Springdale, Baie Verte, Harbour Breton, and St. Alban's.¹⁷

In terms of economy, the region hosts activity in three major economic sectors: marine resources, industrial manufacturing, and harvesting of natural resources.¹⁸ An estimated 3,280 residents worked in primary resources sectors as of 2006 (13.9% of the working population), indicating a heavy reliance on the primary

¹¹ Rural Secretariat, "Grand Falls-Windsor - Baie Verte - Harbour Breton" (St. John's, NL: Government of Newfoundland and Labrador, 2011), <http://www.exec.gov.nl.ca/rural/regional_councils/grandfalls_windsor_baieverte_hrbreton.html#o> (accessed 8 March 2012).

¹² Statistics Canada, "Population and dwelling counts, for Canada, provinces and territories, and census subdivisions (municipalities), 2011 and 2006 censuses," (Ottawa: Government of Canada 2012), <<http://www12.statcan.gc.ca/census-recensement/2011/dp-pd/hlt-fst/pd-pl/Table-Tableau.cfm?LANG=Eng&T=302&SR=176&S=51&O=A&RPP=25&PR=10&CMA=0>> (accessed 8 March 2012).

¹³ Rural Secretariat. "Grand Falls-Windsor - Baie Verte - Harbour Breton", 2011. <http://www.exec.gov.nl.ca/rural/regional_councils/grandfalls_windsor_baieverte_hrbreton.html#o> (accessed 8 March 2012).

¹⁴ Ibid.

¹⁵ Statistics Canada, "Population and dwelling counts, for Canada, provinces and territories, and census subdivisions (municipalities), 2011 and 2006 censuses"

¹⁶ Rural Secretariat. "Grand Falls-Windsor- Baie Verte- Harbour Breton Regional Council Vision Development," (St. John's, NL: Government of Newfoundland and Labrador, 2007).

¹⁷ Ibid.

¹⁸ Ibid.

industry and natural resources.¹⁹ Of the 3,280 residents working in primary industries, 1,730 identified themselves as fishers, 550 as loggers, and 995 as other. Oil and gas extraction provided 70 jobs in the region and mining 215, with an additional 480 jobs provided in support activities related to mining and oil and gas.²⁰ Out of the 5,850 persons employed in sales and services, 950 (16%) were listed as food and beverage workers with an additional 1,590 (27%) cited as retail salespersons, clerks and cashiers.²¹ These two categories can act as indicators of tourism in the region by showing the number of residents involved in occupations frequently required for a strong tourism base. In 2007, the gross income per capita for the region was \$21,400 while the figure for the province came in at \$24,900.²² In 2005, the employment rate for the entire year was 72.6% while the rate for the province was 76.7%.

The 2006 Census disclosed that 33.8% of people aged 18-64 years within the Grand Falls-Windsor – Baie Verte – Harbour Breton Rural Secretariat region did not have a high school diploma, which is higher than the level for the province at 25.1%. Of the 66.2% in the region who had at least a high school diploma, 8% had a Bachelor's degree, while for the province as a whole 13.3% had a Bachelor's degree. In terms of trades, 12% of residents in the region aged 18-64 had obtained an apprenticeship or trades certificate or diploma. This figure was the same (12%) for the province.²³

Another key social factor is how one rates their own health. In the Grand Falls-Windsor – Baie Verte – Harbour Breton region in 2009-2010, 15.5% of individuals aged 12 and over rated their overall health as “excellent” (vs. 16.2% in the province), while 46.7% rated their health as “very good” (vs. 43.9% provincially). In 2009-2010, the rate of smoking among individuals in the region aged 12 and over was 21.5% while the provincial rate was only 18.6%. The percentage of residents 18 years and over who were considered overweight or obese (having a body mass index of 25 or greater) in the region was 67.9% while the provincial rate was 63.5% during the 2009-2010 period.²⁴ These indicators suggest the importance of encouraging healthy lifestyles in land use decisions.

The Legislative Basis for Land Use Planning

It is important to understand the legal context before engaging in a land use planning effort or even attempting to understand land use-related issues. Effective land use planning requires legislation to guide policies and practices. Legislation and policies will outline types of plans, planning, decision-making and resource

¹⁹ Community Accounts, “Grand Falls-Windsor – Baie Verte – Harbour Breton Rural Secretariat Region - Employment and Working Conditions, Worker Type and Occupation” <http://nl.communityaccounts.ca/table.asp?_0bfAjlydpaWrnbSTh5-FvKRtxKFIVoGNb4q1x6OllJfFn6OP> (accessed 8 March 2012).

²⁰ Ibid.

²¹ Ibid.

²² Ibid.

²³ Ibid.

²⁴ Ibid.

allocation processes, the responsibilities of various agencies for planning, implementation and monitoring, information and analysis requirements and economic, social, and ecological aspects to be considered.²⁵

Land use planning is also inherently complicated, with many agencies and levels of jurisdiction involved. Jackson and Curry explain of British Columbia, "Shared political responsibility for regional planning adds to the geographical difficulties. Several tiers of government (federal, provincial, municipal, and the beginnings of devolved First Nations self-administration) have some role in managing land and resource use across this vast area."²⁶ The same is true for Newfoundland and Labrador.

Under the federal constitution, they add, resource use is primarily a matter of provincial jurisdiction. The federal government role includes ocean fisheries, First Nations land claims, and international trade implications associated with natural resource exports. ACOA's support for infrastructure and economic development projects also has land use implications in Newfoundland and Labrador. Finally, the 1995 Canadian Environmental Assessment Act (CEAA) "created a new federal agency which established procedures to support the goals of sustainable development, introduced a funding programme to support public participation in reviews, and widened its scope to include strategic assessment of policies, plans and programmes."²⁷

With many projects subject to both federal and provincial assessments, "frustration over overlap and duplication" led to a 1998 Canada-Wide Accord on Environmental Harmonisation and a Sub-Agreement on Environmental Assessment to facilitate coordination between provincial and federal governments where both are legally required to assess the same project.²⁸ Development projects are subject to federal environmental assessment when a federal authority is involved in a project. In Newfoundland and Labrador a provincial process applies when "an enterprise, activity, project, structure, work or proposal ... may, in the opinion of the minister, have a significant environmental effect."²⁹

The provincial government plays a major role in land and resource use planning in large part because it controls the vast majority of the land in the province;

²⁵ Reginald Garland, "Presentation on Land Use Planning to the Provincial Council of the Rural Secretariat".

²⁶ Tony Jackson & John Curry, "Regional Development and Land Use Planning in Rural British Columbia: Peace in the Woods?," *Regional Studies*, 36(4) (2002), 439.

²⁷ Ibid.

²⁸ Ibid., 440.

²⁹ Department of Environment and Conservation. *Environmental Assessment: A Guide to the Process*, (St. John's, NL: Government of Newfoundland and Labrador, 2009), 4.

<http://www.env.gov.nl.ca/env/env_assessment/index.html> (accessed 8 March 2012).

approximately 88% remains in public ownership (Crown land).³⁰ Thus, land use policy outside municipal boundaries lies largely in the hands of the provincial government. Much of this public land has been leased to forestry companies for logging purposes in support of the sawmill and pulp and paper industries.

There are numerous Acts in the province that must be taken into consideration during land use planning activities. These include:³¹

- Water Resources Act
- Endangered Species Act
- Historic Resources Act
- Tourism
- Outfitters - Tourism
- Provincial Parks Act
- Wilderness and Ecological Reserves Act
- Forestry Act
- Mineral Act
- Quarry Materials Act
- Urban and Rural Planning Act

Protected road zoning plans, cottage management and development plans, and coastal management plans have been developed in some areas and must also be considered in evaluating land use alternatives. The provincial Interdepartmental Land Use Committee (ILUC) is charged with coordination of Crown land planning and allocation.³² All Crown-funded silviculture and road construction projects are submitted to the ILUC for approval. Government departments then review these projects for any conflicts with their objectives.³³

The Urban and Rural Planning Act (2000) sets out the ground rules for land use planning in Newfoundland and Labrador, including how land uses are controlled and by whom. The Act provides for preparation of both regional and municipal plans and land use policies as well as requirements for consultation and consideration of provincial interests.³⁴ There has been limited regional-scale land use planning in the province with the exception of forestry plans, the St. John's Regional Plan created in 1976, and now the Humber Valley and Northeast Avalon Regional Plans, which are currently underway. According to Garland, four Regional

³⁰ Department of Environment and Conservation, "Crown Lands Administration Division" (2011) < http://www.env.gov.nl.ca/env/departement/branches/divisions/crown_land.html > (accessed 6 May 2012).

³¹ Reginald Garland, "Presentation on Land Use Planning to the Provincial Council of the Rural Secretariat".

³² Ibid.

³³ Department of Forest Resources and Agrifoods, *Provincial Sustainable Forest Management Strategy* (Government of Newfoundland and Labrador: 2003).

³⁴ Dave Curran and Associates, *Land Use Planning and Municipal Economic Development*.

Crown Land Plans were also prepared in the 1980s, applying only to Crown Lands and resource use.³⁵

Focused primarily on the planning at the municipal rather than regional level, the Department of Municipal Affairs' Land Use Planning Section (within the Engineering and Land Use division) administers the Act and helps municipalities interpret the legislation and implement their Municipal Plans and Development Regulations.³⁶ The Department of Environment and Conservation's Land Management Division manages Crown Lands under policy direction from the Interdepartmental Land Use Committee.

Land Use Issues Identified Within the Region:

i. Forestry

Most of the reports and studies surrounding land use and land use conflicts that have emerged for Newfoundland and Labrador have dealt with the forestry sector, traditionally an important sector holding the majority of lands within the province. Of the total land area of the island of Newfoundland 17 percent is considered productive forest land.³⁷ Most of this land is under tenure arrangements with private companies that have exclusive rights on the land. These existing structures have been identified as an obstacle to the diversification of the forest sector because licensees can hold timber rights whether their facilities are in operation or not. Therefore, a forest resource can be unused but still under tenure by commercial companies and cannot be reallocated to alternative or multiple uses. Often there has been little consideration given to the alternative and competing uses of forestry areas such as:³⁸

- Buffer zones around outfitters camps to aid hunting and fishing activity;
- Ecosystem and wildlife preservation;
- Landscape for residential developments;
- Areas to support recreation and sport; unique wilderness and parks; and
- Buffer zones around communities and/or waterways.

Potential conflicts in tenure-held forestry land have caused over 50% of the land held by Corner Brook Pulp and Paper Ltd. (CBPP) to be limited in some way. Some of these issues include:

- Emerging demands for alternative or multiple land uses in an area, for example the harvesting of plants for medicinal or nutraceutical purposes;

³⁵ Ibid.

³⁶ Department of Municipal Affairs, "Engineering and Land Use Planning" (2011). < http://www.ma.gov.nl.ca/ma/departments/branches/divisions/landuse_planning.html > (accessed 8 March 2012).

³⁷ Peter Milley, *Newfoundland Forest Sector Strategy: Final Report*, (2008).

³⁸ Michael Wernerheim and Blair Long, *Commercial Forestry at a Crossroads: Emerging Trends in the Forest Sector of NL*, (Leslie Harris Centre Applied Research Fund, 2011), 63.

- Competing usage between commercial forestry and household or domestic harvesting for firewood;³⁹ and
- Conflict between the protection of Woodland Caribou, an at-risk species, and commercial forestry, with recommended buffer zones that are needed to protect caribou habitat.

Despite these limitations, concerns have been raised that government focus has been on diversification of timber usage instead of looking at alternative non-timber usage.⁴⁰

Another forestry-related concern in the region is the harvesting of forest resources near communities. For example, in April 2010, the mayor of Buchans wrote a letter to the Chair of the Five Year Plan Operating Committee expressing concern and displeasure at the amount of tree harvesting that had taken place to close to the community. He argued that not only does logging negatively impact the aesthetic views from the community, it also poses threats to moose, caribou and the already endangered pine marten populations.⁴¹

Several studies have recommended the formation of a long-term land use planning and conflict resolution system.⁴² It has also been recommended that the Government establish working groups to increase the input of rural communities and other regional stakeholders into the management of community forest resources.⁴³ "There is a well-established cultural belief that the forest resource located within an area that is accessible from a particular community 'belongs to that community'. That belief extends to include the premise that decision making about how that resource is to be used should be made within the community and should supersede the interests of even long term tenure holders."⁴⁴

Three levels of plans are prepared for various forest management districts in the province to guide forest management. These include the: 1) Management Plan Report (sometimes called the Forest Ecosystem Strategy Document), which outlines a management strategy for the district based on the direction of the provincial strategy; 2) Five-Year Operating Plan, which outlines where forest management activities are proposed.; and 3) Annual Work Schedule, which more specifically identified where forest management will occur each year.⁴⁵

³⁹ Department of Natural Resources, *Forest Management Districts 4, 5, 6 & 8 Planning Zone 3: Sustainable Forest Management Plan*

⁴⁰ Ibid., 76.

⁴¹ Department of Environment and Conservation. *Crown Five Year Operating Plan: Appendix II*

⁴² Michael Wernerheim and Blair Long, *Commercial forestry at a crossroads: Emerging trends in the Forest Sector of Newfoundland and Labrador*, (Leslie Harris Centre, Memorial University: 2011), 60

⁴³ Ibid., 60.

⁴⁴ Peter Milley, *Newfoundland Forest Sector Strategy Final Report*, (Department of Natural Resources: 2008).

⁴⁵ Department of Natural Resource, "How We Manage Our Forests" (2012).
<http://www.nr.gov.nl.ca/nr/forestry/manage/manage.html>(accessed 8 March 2012).

Parts of several forest management districts are present within the region, including: 4, 5, 6, 7, 8, 9, 10, 11, 12, 13 and 16 (see Figure 1). Many of the individual FMDs have been combined, based loosely on their characteristics as ecoregions, to form planning zones. Districts within each zone share a plan and planning team. For example districts 4, 5, 6, 8 in central Newfoundland are considered Planning Zone 3 and have one plan and planning team, as do districts 9 and 16 from Deer Lake to Cat Arm and all of the Baie Verte Peninsula (Planning Zone 7), and districts 10 to 13 (Zone 5 – see Figure 1). District 7 has its own planning zone (Planning Zone 4).

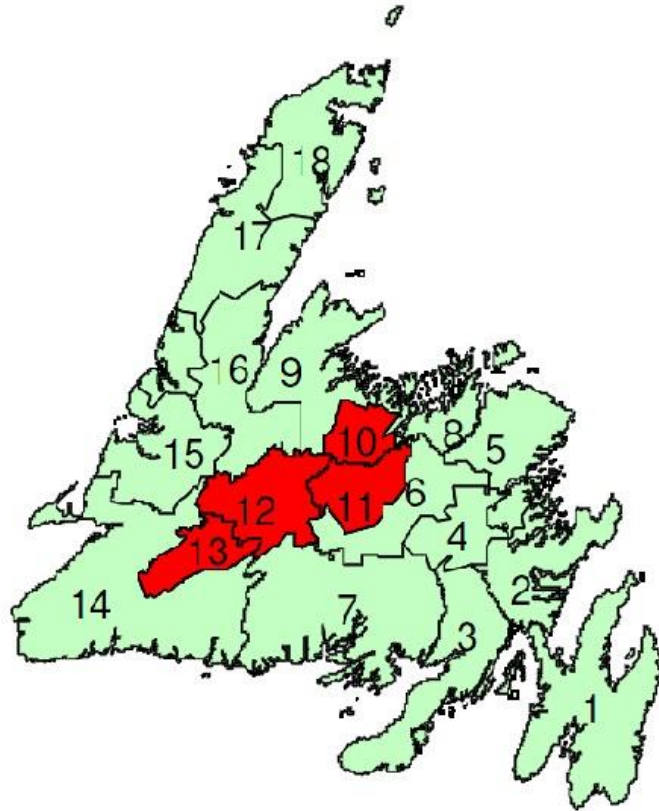


Figure 1: Forest Management Districts with 10,11, 12 and 13 (Zone 5) highlighted.
Source: Department of Environment and Conservation

Preparation of both District Management Plan Reports and five-year Operating Plans involve a consultation process with various interests represented on a planning team, including resource managers, local organizations and the public. In the Forest Management Districts 4, 5, 6, and 8, for example, management plan consultations involved various departments of federal and provincial governments, including the Inland Fish and Wildlife Division, Department of Fisheries and Oceans, Water Resources Division, Agrifoods Branch, and the Department of Tourism, Culture and Recreation.⁴⁶

⁴⁶ Government of Newfoundland and Labrador, *Provincial Sustainable Forestry Management Strategy 2003*, (Forest Service of Newfoundland and Labrador, Department of Forest Resources and Agrifoods: 2003) <<http://www.nr.gov.nl.ca/nr/forestry/manage/sfm.pdf>> (accessed 23 February

While the 2009 closure of the AbitibiBowater mill in Grand Falls-Windsor has dealt a blow to the region's forest economy, forestry activities continue in the region, including a search for alternative fibre uses, and forestry remains an important aspect of land use to consider in land use planning discussions.

As of February, 2011, the provincial government had announced its ongoing commitment of responsible stewardship in the forestry sector.⁴⁷ The Forestry Services Branch openly acknowledges that both forest management and timber harvesting must be practiced with environmentally sound means as well as be consistent with other resource uses, including wildlife, fish, recreation, water, and land.⁴⁸ The first of the five-year forest management plan reports, were released in 2003. The newest round of forest management plans is still in the process of completion. However, during this research a current operating plan for districts 9 and 16 was available. The most recent available forest management and/or operating plans were reviewed for all relevant districts in the completion of this literature scan.

These plans are comprehensive in seeking to understand the dynamics of land uses between forestry and numerous other activities that take place on a common landscape. A common point among all the plans is that forests provide residents with more than just forestry products; old growth forests are valued for their contributions to society in the sense of heritage, culture, aesthetics, and spirituality and non-timber recreational values are expected to play an increasing role in forest management practices. All note that agricultural purposes can strain the availability of land for forestry production and the importance of archaeology to both our culture and tourism industry. Through these plans the forestry industry commits to preserve any archaeological findings that may occur in forested areas. Another potential land use issue is that forest management activities such as "road construction, use and maintenance, timber harvesting, and silviculture may potentially alter the quality of water draining from watersheds as well as other defining characteristics such as stream hydrology, sediment loadings, stream characteristics, and aquatic discharges from municipalities."⁴⁹

Existing forestry plans also note the importance of protecting wildlife habitat, particularly the Pine Marten as well as the caribou. The Pine Marten is an endangered species, and as such measures are being undertaken such as protecting marten habitat by leaving remnant stands of old growth forest as well as possible corridors (connections) between these stands. The region includes significant

2012). and K. Vodden, *Understanding Regional Governance in Newfoundland and Labrador: A Survey of Regional Development Organisations* (Working Paper: 2011).

⁴⁷ Government of Newfoundland and Labrador, "Consultations to Begin to Develop New Forest Management Plans", <<http://www.releases.gov.nl.ca/releases/2011/nr/0207n05.htm>> (accessed 6 May 2012).

⁴⁸ Department of Natural Resources, "How We Manage Our Forest", <<http://www.nr.gov.nl.ca/nr/forestry/manage/manage.html>> (accessed 6 May 2012).

caribou populations. In areas where caribou utilize lichens, a minimum amount of forest which supports these lichens should be maintained for caribou. Protecting waterfowl also remains an important point in forestry plans. For districts 9 and 16, for example, a 50-metre buffer is to be established around designated sensitive waterfowl areas and no forestry activities are recommended to be undertaken during the brood rearing, breeding, and staging period of such animals.⁵⁰

In terms of preserving rare plants, the known rare plant distribution is mostly limited to a “strip about a kilometre wide adjacent to major roads.”⁵¹ Only a few botanists have ventured onto the forest resource roads of the region and therefore most rare plant locations likely remain undiscovered.⁵² Notably Eastern White Pine stands can still be found in parts of the region (e.g. the Coast of Bays), requiring special consideration.⁵³

The presence of protected areas is considered intrinsically important to the vitality of ecosystems and conservation of biodiversity. Established protected areas are removed from Annual Allowable Cut (AAC) calculations. Several protected areas and reserves exist within the region. For instance, in district 7, the Bay du Nord Wilderness Reserve and the Middle Ridge Wildlife Reserve are present.⁵⁴ In their 2003 response to the Draft Newfoundland and Labrador Sustainable Forest Management Strategy, the Sierra Club of Canada notes that forestry practices are a potential infringement on lands used by migratory animals such as caribou. Instead of simply designating “protected areas”, they suggest that the province also needs to look at the networks that are used by migratory animals that are outside of protected (or potentially protected) regions.⁵⁵

ii. Agriculture

According to a 1998 agricultural study, the most “basic land issue affecting Newfoundland and Labrador is the availability of land.”⁵⁶ Specifically, competing uses such as forestry, water supply and growth of cities contribute to limited availability of land for agricultural purposes. In the Central Region, specific land use issues such as water supply areas and wildlife are perceived as the most significant barriers for the development of agriculture.⁵⁷ Further, “prime farming land has been

⁵⁰ Department of Natural Resources, *Crown Five Year Operating Plan: Districts 9 and 16 (2012-2016)*

⁵¹ *Ibid.*, 75.

⁵² *Ibid.*

⁵³ Coast of Bays Corporation, “Natural Resources” (2010).

<<http://www.coastofbays.nl.ca/nature.htm>> (accessed 6 May 2012).

⁵⁴ Department of Natural Resources, *Crown Five Year Operating Plan: District 7 (2008-2012)*

⁵⁵ Sierra Club of Canada. *Response to the Draft Newfoundland and Labrador Sustainable Forest Management Strategy*, (2003), 6.

⁵⁶ R.D. Ramsey, *Land Competition Issues Affecting the Development of Agriculture in Newfoundland and Labrador* (Rural Research Centre, Nova Scotia: 1998), 2.

⁵⁷ *Ibid.*

under pressure to have such rezoned for residential use due to babyboomers moving back to Newfoundland to retire.”⁵⁸

Despite this challenge, the Emerald Zone which encompasses the Baie Verte and Green Bay areas boasts an abundance of land for potential farms, including sheep, mink, blueberry, cranberry and seabuck thorne in their Strategic Economic Plan (SEP).⁵⁹ In the eastern portion of the region, there are 70 commercial farms in forestry Planning Zone 3 (districts 4, 5, 6, and 8) with “total farm cash receipts amounts of \$5.7 million annually with \$3.2 million contributed from the livestock sector (poultry, beef, hogs, sheep and fur) and 2.5 million contributed from the Crops Sector including which includes vegetables, small fruit, forages, Christmas trees and greenhouses production.”⁶⁰ In the region, Northern Arm and Pleasantview are communities within the planning zone where the presence of agriculture is noted.

The following agriculture sectors exist in the province and, although no specific land use conflicts have been identified within the scope of this report, future reports should consider the specific issues of the region and needs of these various agricultural stakeholders through a thorough consultation process:

1. Berry and Fruit Producers:

- In 2003, an estimated 1 million kilograms of both wild and cultivated berries were produced from more than 485 ha. in Newfoundland. Central Newfoundland is one of the major production areas.
- Strawberry production increased from 55,000 quarts in 1980 to an estimated 180,000 in 2005. There are 43 commercial strawberry producers in the province.⁶¹
- Partridgeberries and bakeapples are important exporting businesses, a total of 28,000 ha. of productive partridgeberry land is available.
- Since 1996, the Department of Natural Resources has been developing a commercial cranberry industry in Newfoundland. Some of these sites are located within the Central Region, where expansion of berry production is anticipated. In the Emerald Zone, seven farms are engaged in commercial root crop and/or berry production.⁶²
- Some hobby apple and plum farms occur on the island.

2. Christmas Tree Growers

⁵⁸ Emerald Zone Corporation, *Strategic Economic Plan 2008-2011* (Regional Economic Development Boards: 2007) <<http://www.ezc.ca/files/plan/1/SEPFinal.pdf>> (accessed 6 May 2012).

⁵⁹ Ibid.

⁶⁰ Department of Natural Resources, *Forest Management Districts 4, 5, 6, and 8 Sustainable Forest Management Plan-Crown (2007-2011)*

⁶¹ Government of Newfoundland and Labrador, “Present level of farming in Newfoundland and Labrador” (2008) <https://www.cdli.ca/courses/envsci3205/unit03_org03_ilo02b/b_activity.html> (accessed 14 February 2012).

⁶² Ibid. and Exploits Valley Development Corporation, “About Us” (2010)<<http://www.theexploitsvalley.ca/about#>> (accessed 6 May 2012).

- NL has 30 Christmas tree farms producing 5,000 trees in 2004. It is a developing industry with the majority of sites on cutovers producing balsam fir.

3. Forage Producers

- Forage is animal food such as clover, timothy, red top fescues, alfalfa and silage corn. In 2006, the province was 80% self-sufficient in forage production with the Western and Central areas almost completely self-sufficient.

4. Turf Grass Producers on Peatlands

- Although peatlands are important habitat for many species of animals and plants, they can be drained for vegetable or turf grass production.
- There are 1.1 million hectares of peatland or 11% in Newfoundland and Labrador. Over 150 hectares of land is producing turf grass.
- In the Central region, Hi-Point Industries in Bishop's Falls produces oil absorbent products and horticultural peat moss for global export.⁶³

5. Poultry and Livestock Production

- The poultry industry in NL is strong and is expected to keep growing. The 2006 Census of Agriculture lists 25 Newfoundland and Labrador farms involved in poultry and egg production.⁶⁴
- Turkey farms in Newfoundland and Labrador are primarily located on the Avalon Peninsula but include one farm in the study region as of the 2006 census.⁶⁵
- Newfoundland beef farms are usually part time operations, most of which are located in the western and central west part of the province. To reduce costs and be competitive with out of province producers, the province's cattle industry is exploring the use of alternative feeds which can be grown locally.⁶⁶
- Commercial goat farming is on the rise.
- Eight livestock farms with about 150 sheep are present in the Emerald zone.⁶⁷
- Secondary production of sheep products like wool, hide and meat is creating employment opportunities in rural Newfoundland and Labrador.
- There are small scale swine farms across the province.

⁶³ Emerald Zone Corporation, *Emerald Zone Corporation Strategic Economic Plan 2008-2011* (2007) <<http://www.ezc.ca/files/plan/1/SEPFinal.pdf>> (accessed 6 May 2012).

⁶⁴ Statistics Canada. "2006 Census of Agriculture, *Farm Data and Farm Operator Data*", catalogue no. 95-629-XWE, 2009. <<http://www.statcan.gc.ca/pub/95-629-x/3/4123861-eng.htm#10>> (accessed 14 Feb. 2012).

⁶⁵ Statistics Canada. "Farms reporting turkeys in Canada, 2006", 2009. <<http://www.statcan.gc.ca/pub/96-325-x/2007000/m/5220929-eng.pdf>> (accessed 14 Feb. 2012).

⁶⁶ Ibid.

⁶⁷ Emerald Zone Corporation, *Emerald Zone Corporation Strategic Economic Plan 2008-2011* (2007) <<http://www.ezc.ca/files/plan/1/SEPFinal.pdf>> (accessed 6 May 2012).

- In 2009, there were three fox farms, 22 mink farms, and nine mixed farms in the province (mixed farming includes any combination of blue fox, silver fox, mink, chinchilla, lynx and pine marten).⁶⁸

In their operating plans, it is noted that forest landholders will work with the Department of Agriculture to determine if opportunities exist for an exchange between agriculturally viable forest areas with unsuitable agriculture land within the Agriculture Development Areas, indicating that that forest landholders may only be willing to let go of land for some sort of exchange.⁶⁹

For future studies, there is a broad range of stakeholder/interest groups that should be consulted with regards to land issues in agriculture in the Central West Region. For the purpose of this paper, these are included in Appendix I: Key Contacts.

It should also be noted that while historically, outport and remote coastal communities had to be self-sufficient in terms of food resources, and this remains an important consideration in land use planning, with fewer youth choosing to remain in rural communities and a decreasing interest in farming, many arable lands are being left fallow. Similarly, in many communities, knowledge of local wild plants and the location of the best berry-picking areas or hunting grounds are being lost with the older generations due to the lack of interest and need from younger residents.⁷⁰

iii. Mining

Land acquisition for mining (and other extractive industries) is a global trend, and has had impacts in the Central West Region. The trend poses a potential threat to indigenous communities, farmers and local food systems, as well as waterways and other environmental aspects. One of the major land use conflicts globally regarding mining is that of available water resources, since they are essential in the extractive sector for operation (such as tailings ponds)⁷¹ Similarly, many of the environmental impacts of mining activities can turn into land use issues, such as acid drainage into soil, rivers, and aquifers; deforestation; and loss of topsoil through mining as well as afterwards through erosion of the site.⁷²

Mining-related operations in the region include the Aur Resources Duck Pond Mine, which extracts copper and zinc near the community of Millertown and two mines that are operated near Baie Verte by Anaconda Mining and Rambler Mines and

⁶⁸ Government of Newfoundland and Labrador. "Present level of farming in Newfoundland and Labrador". *ibid.*

⁶⁹ *Ibid.*, 74.

⁷⁰ Raisa Mirza, *Engaging Youth for Sustainable Coastal Community Economies* (Leslie Harris Centre, Memorial University: 2012).

⁷¹ Philippe Sibaud *Opening Pandora's Box: The New Wave of Land Grabbing by the Extractive Industries and the Devastating Impact on Earth* (The Gaia Foundation: 2012), 35.

⁷² *Ibid.*

Minerals.⁷³ The Rambler mine is a copper-gold mine. Gold is also mined at Anaconda's Pine Cove site.⁷⁴ ⁷⁵ Future prospects for mining in the region include the Buchans Minerals Lundberg project (with copper, lead, zinc and silver potential) and the Belleoram Granite Quarry. Terra Nova Granite Inc. is also present in the region, but is currently inactive.⁷⁶

An asbestos mine operated approximately eight kilometres north of the town of Baie Verte from 1963 to 1990. Recent environmental impact assessments found that the site still contains remnants of chemicals related to asbestos mining.⁷⁷ Following the assessment, Jacques Whitford recommended in 2008 that a decision needed to be made as to whether or not carry out soil remediation or risk management. Under a risk management approach, the site owner maintains the long-term liability for impacts on the site.⁷⁸

The Soapstone Quarry in Fleur de Lys is not only the oldest known mine on the Baie Verte Peninsula, but is also historically significant as a national historic site, and a popular tourist destination. The site shows how early Aboriginal groups from 1600 years ago mined the soapstone to produce cooking pots and lamps. In fact, it is the most extensive and accessible quarry mined by the Dorset Paleo-Eskimo known to date.⁷⁹

The forestry plans in the region each note that mineral-based exploration taking place in forested areas should be undertaken with minimal disturbance and should take into consideration the areas deemed of importance for wildlife conservation, with compensation provided as required to forestry tenure holders. Also, forestry planners should avoid silviculture activities in areas adjacent to mines or quarries.

Waste and tailings from mining operations in the Central West Region have been identified as a concern related to mining land use. Of particular controversy is the Aur Resources Duck Pond Mine that is disposing mining waste in two ponds that are

⁷³ Department of Natural Resources, *Mining in Newfoundland and Labrador* (2012) <<http://www.nr.gov.nl.ca/nr/mines/Overview%20February%202012%20Final%20Feb%2016%20revised%20April%2012.pdf>> (accessed 6 May 2012).

⁷⁴ Anaconda Mines, "Pine Cove Mine" (2007) <<http://www.anacondamining.com/projects/pine-cove>> (accessed 6 May 2012).

⁷⁵ Proactive Investors, "Rambler Metals reports first revenue as Ming mine approaches production start" (2011) <<http://www.proactiveinvestors.com/companies/news/19715/rambler-metals-reports-first-revenue-as-ming-mine-approaches-production-start-19715.html>> (accessed 6 May 2012).

⁷⁶ Department of Natural Resources, *Mining in Newfoundland and Labrador* (2012) <<http://www.nr.gov.nl.ca/nr/mines/Overview%20February%202012%20Final%20Feb%2016%20revised%20April%2012.pdf>> (accessed 6 May 2012).

⁷⁷ Jacques Whitford, *Phase III ESA and Hazardous Materials Assessment, Former Baie Verte Asbestos Mine, Baie Verte, NL* (2008), 18.

⁷⁸ Jacques Whitford. *Ibid.*, 8.

⁷⁹ Emerald Zone Corporation, *Strategic Economic Plan 2008-2011* (2007).

an important habitat for different species, including trout and salmon. These ponds are also situated at the tributary of the Exploits River, a scheduled salmon river which has seen an investment of over 30 million dollars since 1978 for increased salmon production.⁸⁰ Compensation plans are considered inadequate as the mine will need perpetual care and maintenance. This means that after an average of between eight to ten years in operation, the abandoned mine will need to be monitored and maintained for generations to come. This is a serious environmental and societal burden for the communities and the province. As the cases of the Baie Verte asbestos and Aur Resource mines both demonstrate, mining operations in the region, must consider waste management and site remediation as important land use concerns.⁸¹

A recent study revealed another potential impact of mining activities in relation to the environment and wildlife. Weir et al. suggest that caribou populations often suffer from mining activities.⁸² In turn, and in the context of the Central West region, this can affect recreational hunting activities of caribou populations as well as potentially impact the herds themselves.

Finally, interviews held within the region suggest that mining companies were not engaging with local communities when setting up mining operations to the extent that community leaders would like and that communities have not always been properly informed when mines were being set up close to them.

iv. Cottage/Cabin Development

Cabins are considered an important social and recreational asset for many Newfoundlanders and provide an important economic stimulus in rural Newfoundland. However, as a permanent fixture on the landscape, they can also have important ecological impacts that must be considered such as the impairment of water quality, encroachment upon wildlife habitat, increasing hunting and fishing pressures and destruction by ATV use of remote ecologically sensitive areas. They can also cause crowding around important fish and game resources and remove productive forest land-base from commercial forestry activity.⁸³ During our consultations traditional cabins and inheritance rights were identified as an issue because, respondents explained, families cannot inherit traditional cabins located within forest management areas after the last registered owner has died.

⁸⁰ Catherine Coumans, *Issues of Concern Regarding Aur Resources' Proposed Duck Pond Mine in Central Newfoundland* (Canadian Environmental Network: 2006).

⁸¹ Catherine Coumans, *ibid.* and See also Exploits report for more on mining impacts: <<http://www.env.gov.nl.ca/env/waterres/quality/background/exploits.pdf>> (accessed 6 May 2012).

⁸² Jackie Weir et al., "Effects of Mine Development on Woodland Caribou *Rangifer tarandus* distribution," *Wildlife Biology* 13, no.1 (2007): 66.

⁸³ Department of Natural Resources, *Crown Five Year Operating Plan: District 7 (2008-2012)*, 67.

v. Aquaculture

During interview consultations, there did not appear to be many outstanding issues with the increased presence of aquaculture in the Coast of Bays. A Coast of Bays Coastal Planning Committee has been in place since 2005 and has worked to develop relationships among the sectors in this part of the region. Their efforts appear to be paying off. One issue identified was that there were some problems with cabin owners in areas where aquaculture requires room for expansion, although no specific example was put forward. However, the literature (dating back to 2007) suggests that some issues might exist due to the increasing pressures related to the rise of aquaculture in the region. More recent data is necessary before policy recommendations are made, however, related concerns are worthy of review:

- Ability of road infrastructure, waste management infrastructure, and existing support industries to support the growing aquaculture industry;
- Conflict between fish harvesters and aquaculture, e.g. lobster fish harvesters concerned with the loss of access to fishing grounds and some fish harvesters in communities, such as Belleoram feel that they have not been adequately consulted about aquaculture growth in Fortune Bay;⁸⁴
- Miawpukek First Nation Band Council member concerns that the aquaculture industry is impacting traditional use areas, creating competition for space and polluting beaches;⁸⁵
- Sharing of marine infrastructure among many users and the need for improvements to the current marine infrastructure in the area;
- Waste management pressures for existing waste facilities due to aquaculture industry growth, as well as. Due to the municipal dumps, there leaching concerns (note: waste management concerns should be considered in light of the recently opened Central Waste Management facility);
- Residential and industrial zoning concerns, including conflicts between cottage and residence owners and the industry (e.g. in the Emerald Zone);
- Issues with waterfront access due to roads that are too narrow; and
- Suggested annual consultations with stakeholders by aquaculture operations.⁸⁶

vi. Competing Waterfront Usage

Municipalities are experiencing conflicts and differing points of view surrounding the development of waterfront areas. Different stakeholder groups including tourism, recreation, residential and commercial interests must be balanced when creating zoning maps and long-term land-use plans. In Grand Falls-Windsor, for example, development around the Exploits River was controversial. Proposed residential and commercial development in the area was seen as a concern by environmental groups due to the area's rich wildlife (e.g. salmon) and the potential decrease in tourism.

⁸⁴ BAE-Newplan Group Ltd. and SNC Lavalin, *Issues scan of selected coastal and ocean areas of Newfoundland* (Department of Fisheries & Aquaculture and Department of Environment & Conservation: 2007).

⁸⁵ Ibid.

⁸⁶ Ibid.

Another concern surrounds the uses of waterfronts in areas typically associated with an aging population and shifting demographics. According to Mirza, while young people often leave rural communities there is a trend that sees retirees, families and tourists moving into some of these areas, increasing the demand for recreational opportunities such as hiking or snowmobiling paths. Furthermore, lands located near the ocean or near ponds can become homes or cabins creating potential for waterfront land use conflicts.⁸⁷

According to the forestry operating plan for districts 9 and 16, recreational waters are used for activities such as fishing, boating and as a water supply source for numerous cabin owners.⁸⁸ In terms of industrial purposes, waters within the planning zone are also used for “hydroelectric production at Cat Arm, Deer Lake and Rattle Brook and for irrigation on agriculturally developed land, primarily in the Cormack and Green Bay areas with smaller hobby type farms dispersed throughout the zone.”⁸⁹

vii. Access to Crown Lands

Approximately 88% of Newfoundland and Labrador is crown lands, which in turn are often leased out or tenured to commercial interests. During consultations in the region, municipalities have listed the on-going inaccessibility of crown lands adjacent to communities as a major development and land use hurdle. Many communities in the Coast of Bays region are growing at a rapid pace due to the growing aquaculture industry. This creates the need for housing for workers and infrastructure within the region, however, there is little support for communities that must access these lands to establish residential properties for workers and their families. This hurts their industry and the region.

The issue of access to crown lands at an affordable cost for municipal development is a subject of ongoing discussion between municipal governments, through Municipalities Newfoundland and Labrador, and the Province. Municipal representatives suggest that one way to help to address affordable housing issues in their communities is to increase access to affordable land for development. Currently, the Government of Newfoundland and Labrador charges municipalities the market value to purchase crown land, but this price is often too high for cash-strapped towns and the cost of developing a property can be at least \$20,000.⁹⁰ Towns have requested that the provincial government waive land fees to allow town expansion. If a waiver cannot be granted then alternative payment or financing arrangement could be considered. Several communities in the region have noted

⁸⁷ Raisa Mirza, *Engaging Youth for Sustainable Coastal Community Economies* (Leslie Harris Centre, Memorial University: 2012).

⁸⁸ Department of Natural Resources, *Crown Five Year Operating Plan: Districts 9 and 16 (2012-2016)*

⁸⁹ *Ibid.*, 79.

⁹⁰ *Summary of Mayors' Breakfast and Joint Mayors' Council in Coast of Bays Homelessness and Accessing Affordable-Quality Housing* (March 2010).

that they require more access to crown lands for town expansion, including Brighton, South Brook, King's Point, Triton, and Robert's Arm.⁹¹

viii. Tourism and Recreation

Participation in outdoor recreational activities has been growing in Canada since the 1960s, largely due to demographic and economic trends, with documented social, health and even spiritual benefits. This trend has also been observed in the Newfoundland context.⁹²⁹³ Differing interests among recreationalists can also be a source of conflict in terms of land and resources. For instance, the use of all-terrain vehicles (ATVs) in the province is a growing recreational activity; however, it also causes issues from a resource management/conservation perspective by potentially damaging the landscape and environment.⁹⁴

During consultations undertaken in the Central West Region, there was an opinion that recreation usage among young people and competing demands for land was an issue. Younger people want access to trails and waterfront access for recreational activities such as kayaking and scuba diving. This access is not always easy to negotiate with timber and other uses. These same recreational uses also have tourism values. Exploits Valley Economic Development Corporation has identified opportunities in winter as well as experiential and adventure tourism more generally.

The district forest operating plans also provide insight into land use conflicts between the forestry sector and recreation and tourism. They note that there are critical elements to tourism and recreation, like views, wilderness ambiance, accessibility, and remoteness. To ensure that people taking part in tourism and recreation related activities enjoy the outdoors to its full potential, no-cut buffer zones are established along pathways and around waterways so that impacts from forest harvesting are minimized and mitigated. In fact, according to the forest operating plans, the Province of Newfoundland's Natural Areas Systems Plan recommends that a minimum of 12% of the province's entire land base be protected, however, as Garland notes, Newfoundland and Labrador is currently only at 10%.⁹⁵ Similarly, the plans also note that "no harvest" buffer zones that are agreed upon by all involved parties need to be established around outfitting camps and that cottage development should be prohibited in areas adjacent to outfitting operations. Similarly, activities with various agencies responsible for land

⁹¹ Ibid.

⁹² J. Pigriam & J. Jenkins, *Outdoor Recreation Management*, (2nd edition) (London, EN: Routledge: 2006).

⁹³ Canadian Parks and Wilderness Society. "Responsible ATV Use" <<http://cpawnsnl.org/campaigns/responsible-atv-use>> (accessed 6 May 2012).

⁹⁴ N. Catto, "Anthropogenic Pressures on Coastal Dunes, Southwestern Newfoundland," *The Canadian Geographer* 46, no.1 (2002).

⁹⁵ Reginald Garland, "Presentation on Land Use Planning to the Provincial Council of the Rural Secretariat".

management much be coordinated outside the T’Railway corridor to ensure that the integrity of the park is maintained and only traditional (hiking, berry picking, hunting etc.) activities, educational activities and scientific research within protected areas should be allowed, but only if they do not compromise the integrity of the area.⁹⁶ It is also noted that if possible, forest operations should avoid areas where high concentrations of recreational activities occur and that “if operations are necessary, stakeholder meetings could prevent conflicts through temporal scheduling” and that decommissioning of forest access roads when harvesting is complete could be a possible option.⁹⁷ Decommissioning these roads will eliminate damage to the hunting area by “reducing the possibilities of increased hunting pressure.”⁹⁸ The plan also notes that when roads are in use actively for harvesting purposes, access to hunters should be restricted or limited.⁹⁹

Archaeology has much to offer in the way of attracting tourists. In fact, it is noted in all reviewed forestry plans to be of incredible value for both tourism as well as cultural significance. Archaeological sites remain well preserved and maintained. Sites such as Furby’s Cove and the quarry at Fleur de Lys exist within the region and are inherently important to both residents and tourists alike. However, any project based on land use has the potential to negatively affect historic resources, which is why industry must be cautious when excavating or harvesting any resources. In fact, the forestry plans note that known archaeological sites must be avoided and buffers will be required around them. Also, “buffers will also be required along all rivers and ponds, as well as along the coastline and areas where there is potential for archaeological resources to be found.”¹⁰⁰

iv. Other

- Little River Estuary has been suggested as a protected area due to its biodiversity and importance as a traditional harvest and recreation area for the Mi’kmaq. Other proposed protected areas in the region should be explored.
- Leachate from municipal dumps is a concern, particularly in aquaculture production areas (referred to above), as is the management of municipal sewage effluents.

⁹⁶ Department of Natural Resources, *Forest Management Districts 4, 5, 6, & 8 (Planning Zone 3) Sustainable Forest Management Plan – Crown (2007 - 2011)*, 80.

⁹⁷ Ibid., 82.

⁹⁸ Department of Natural Resources, *Crown Five Year Operating Plan: Districts 9 and 16 (2012-2016)*, 94.

⁹⁹ Ibid.

¹⁰⁰ Department of Natural Resources, *Crown Five Year Operating Plan: Districts 9 and 16 (2007-2011)*, 88.

Conclusions and Recommendations

Despite the lack of data surrounding land use in Newfoundland and Labrador, there are some insights into the specific issues faced in the Grand Falls-Windsor – Baie Verte – Harbour Breton region outlined above as well as some general policy directions that can be recommended. A future study should focus more on data gathering in the region through the use of formal and informal data-gathering and consultation. More research is needed within non-forestry fields in particular, although the current data on forestry is also outdated considering the closure of the Grand Falls-Windsor plant and the yet-to-be released recent forestry planning process.

Recommendations:

- Undertake an evaluation of current issues surrounding land planning in the region and, more broadly, within Newfoundland and Labrador.
- Use innovative community engagement techniques to engage communities within the Central West Region to identify, prioritize and find solutions to on-going or potential land use issues.
- Undertake an analytical study by a third party observer to assess non-timber values of forestry lands.
- Undertake diversification efforts aimed at balancing timber and non-timber industries for long-term resilience of the sector and providing multiple-uses for the forest sector and the resources of the land.¹⁰¹
- Develop a provincial land planning protocol and conflict resolution program.
- Develop clear guidelines and principles for municipalities to gain access to Crown Lands for development and growth of rural communities in Newfoundland and Labrador.

¹⁰¹ Michael Wernerheim and Blair Long, *Commercial forestry at a crossroads: Emerging trends in the Forest Sector of Newfoundland and Labrador* (Leslie Harris Centre, Memorial University: 2011), 78.

Appendix I: Key Contacts

Group	Key contacts
Forestry	<ul style="list-style-type: none"> • Department of Natural Resources, Forestry Services Branch • Central Forest Products • Abitibi-Consolidated • Sierra Club • Springdale Forest Resources • Twin Lakes Outfitters • Osmonds Sawmill Limited • Meyer Dunsworth Geological Consulting • Canadian Wildlife Service • Notch Mountain Outfitters • Central Outfitters • Newfoundland and Labrador Lumbers Producers Association • Snowshoe Lake Hunting & Fishing • Exploits Rod & Gun Club • Sple'tk First Nations • Valley Forest Products Inc. • Hi-Point Industries • Exploits Pelletizing • Inland Fish and Wildlife Division • Department of Fisheries and Oceans, Water Resources Division • Agrifoods Branch • Department of Tourism, Culture and Recreation
Agriculture	<ul style="list-style-type: none"> • Chicken Farmers of Newfoundland and Labrador • Cattleman's Association of Newfoundland and Labrador • Egg Producers of Newfoundland and Labrador • Newfoundland Labrador Fur Breeders Association • Dairy Farmers of Newfoundland and Labrador • NL Young Farmers • NL Chicken Marketing Board • Landscape NL • Blueberry Growers Association NL • Sheep Producers Association NL • Provincial Farm Women Association

	<ul style="list-style-type: none"> • Pork Producers Association NL • NL Horticulture Producers Council Inc. • Strawberry Producers • Cranberry Producers • Other berry pickers • Beekeepers of Newfoundland and Labrador • Young Farmers Forum • Christmas tree Producers • Hunters/Fishermen/Trappers • Country Rose Greenhouses • Feathers and Feed Poultry • G.W. Sails • Kippens Ridge Farm • Pearl's Farms • R & G Farms • Rowsell's Farm Ltd. • Sap World Company Limited • Toms, Joshua & Sons Farms • Topping's Family Farm
Mining	<ul style="list-style-type: none"> • Anaconda Mining Inc. • Beaver Brook Antimony Mine Inc. • Hi-Point Industries (1991) Ltd. • Rambler Metals and Mining Canada Ltd. • Teck Duck Pond Operations • Geological Survey of NL
Cottage/Cabin development	<ul style="list-style-type: none"> • Newfoundland Outdoor Adventures • Green Bay Snowmobile Association • Exploits Snowmobile Association
Aquaculture	<ul style="list-style-type: none"> • Newfoundland Aquaculture Industry Association • Cooke Aquaculture
Competing Waterfront Usage	<ul style="list-style-type: none"> • Town of Bishop's Falls • Town of Grand Falls-Windsor
Access to Crown Lands	<ul style="list-style-type: none"> • Central Regional Lands Office
Tourism and Recreation	<ul style="list-style-type: none"> • Adventure Central • Arts and Culture Centres (Grand Falls-Windsor, Gander) • Catamaran Park • Mary March Regional Museum • Exploits Valley Salmon Festival (Town of Grand Falls-Windsor – Centennial Field) • Mary March Wilderness Park

	<ul style="list-style-type: none"> • Riverfront Chalets and Rafting • Various local walking trail routes • Baie Verte Peninsula Miner's Museum & Information Centre • Salmon Viewing Ladder/Interpretation Centre • Provincial Archaeology Office
Other	<ul style="list-style-type: none"> • Department of Environment and Conservation

Bibliography

- Anaconda Mining Inc. 2007. Pine Cove Mine. Accessed at:
< <http://www.anacondamining.com/projects/pine-cove>> May 3rd, 2012
- BAE-Newplan Group Ltd. 2004. Central Newfoundland Solid Waste Management Plan. Central Newfoundland Waste Management Committee
- BAE-Newplan Group Ltd. and SNC Lavalin. 2007. Issues scan of selected coastal and ocean areas of Newfoundland. Department of Fisheries & Aquaculture and Department of Environment & Conservation
- Canadian Institute of Planners, 2012, Accessed at: <<http://www.cip-icu.ca/web/la/en/pa/3FC2AFA9F72245C4B8D2E709990D58C3/template.asp>>, February 14th, 2012
- Catto, N. 2002. Anthropogenic pressures on coastal dunes, southwestern Newfoundland. *The Canadian Geographer*, 46(1):17-32
- Corner Brook Pulp and Paper Ltd. 2004. Sustainable Forest Management Plan. Version 2
- Coumans, Catherine. 2006. Issues of concern regarding Aur Resources' Proposed Duck Pond Mine in Central Newfoundland. Canadian Environmental Network
- CPAWS. 2011. Responsible ATV use. St. John's, NL: Canadian Parks and Wilderness Society – Newfoundland and Labrador Chapter
- Curran, Dave and Associates for Municipalities Newfoundland and Labrador. 2010. Land Use Planning & Municipal Economic Development: A Community Development Project. Accessed at:
<<http://www.nlreda.ca/system/filestore/OM%20resource%20materials/Municipal%20Economic%20Development/Land%20Use.pdf>> May 4th, 2012
- Daigle, Jean-Louis, Y. Cyr, and G. Fairchild. 2009. Towards an Atlantic riparian Health and Management Strategy for agricultural lands: White Paper. Eastern Canada Soil and Water Conservation Centre/Université de Moncton
- Department of Environment & Conservation. 2010. Environmental Assessment Bulletin. Government of Newfoundland and Labrador
- Department of Environment & Conservation. 2010. Crown Five Year Operating Plan: Forest Management Districts 10, 11, 12 and 13, January 1, 2011-December 31, 2015. Government of Newfoundland and Labrador

Department of Environment and Conservation. 2011. Engineering & Land Use Planning. Government of Newfoundland and Labrador. Accessed at: <http://www.ma.gov.nl.ca/ma/departement/branches/divisions/landuse_planning.html> May 4th, 2012

Department of Forest Resources and Agrifoods. 2003. Provincial Sustainable Forest Management Strategy. Government of Newfoundland and Labrador. Accessed at: <<http://www.nr.gov.nl.ca/nr/forestry/manage/sfm.pdf>> May 6th, 2012

Department of Natural Resources. 2006. Crown Five Year Operating Plan: Forest Management Districts 9 and 16 (January 1st, 2007-December 31st, 2011). Government of Newfoundland and Labrador

Department of Natural Resources. 2006. Forest Management Districts 4, 5, 6, & 8 (Planning Zone 3) Sustainable Forest Management Plan – Crown (2007 - 2011). Government of Newfoundland and Labrador

Department of Natural Resources. 2007. Crown Five Year Operating Plan: Forest Management District 7 Bay d’Espoir (January 1st, 2008-December 31st, 2012). Government of Newfoundland and Labrador

Department of Natural Resources. 2009. Overview of environmental permitting in NL: Cranberry Industry Related. Government of Newfoundland & Labrador

Department of Natural Resources. 2011. Forest Management Districts 4,5,6,8 Sustainable Forest Management Plan- Crown (2007-2011). Government of Newfoundland and Labrador

Department of Natural Resources. 2011. Crown Five Year Operating Plan: Forest Management Districts 9 and 16 (January 1st, 2012-December 31st, 2016). Government of Newfoundland and Labrador

Department of Natural Resources. 2012. How We Manage Our Forests. Government of Newfoundland and Labrador. Accessed at: <http://www.nr.gov.nl.ca/nr/forestry/manage/manage.html> > April 23rd, 2012

Department of Natural Resources. 2012. Mining in Newfoundland and Labrador. Government of Newfoundland and Labrador. Accessed at: < <http://www.nr.gov.nl.ca/nr/mines/Overview%20February%202012%20Final%20Feb%2016%20revised%20April%2012.pdf>> May 6th, 2012

Emerald Zone Corporation. 2007. Strategic Economic Plan 2008-2011. Accessed at: < <http://www.ezc.ca/files/plan/1/SEPFinal.pdf>>, May 3rd, 2012.

Exploits Valley Economic Development Corporation. 2011. Strategic Economic Plan 2011-2013. Accessed at:

<<http://www.nlreda.ca/system/filestore/REDB%20SEP/EXPLOITS%20VALLEY%20ECONOMIC%20DEVELOPMENT%20CORPORATION%20SEP%202011%20TO%202013%20FINAL%20with%20logo.pdf>> May 3rd, 2012

Garland, Reginald. April 7, 2009 . “Presentation on Land Use Planning to the Provincial Council of the Rural Secretariat”

Green, Randal. 2010. Addressed accessibility challenges of GOS-based Multiple-Criteria Decision Analysis for integrated land management: Case study in the Humber Region of NL, Canada

Government of Newfoundland and Labrador. “Present level of farming in Newfoundland and Labrador”, 2008. Accessed at <https://www.cdli.ca/courses/envsci3205/unit03_org03_ilo02b/b_activity.html> Feb. 14th, 2012

Government of Newfoundland and Labrador, “Provincial Sustainable Forestry Management Strategy 2003”, Forest Service of Newfoundland and Labrador, Department of Forest Resources and Agrifoods, accessed on February 23, 2012, <<http://www.nr.gov.nl.ca/nr/forestry/manage/sfm.pdf> >

Government of Newfoundland and Labrador, “Consultations to Begin to Develop New Forest Management Plans”, 2011. Accessed at <http://www.releases.gov.nl.ca/releases/2011/nr/0207n05.htm>, April 23rd, 2012

Hart, Ramsey. 2011. Submission on NL Mineral Strategy. MiningWatch Canada and Minerals Strategy Working Group

Heaney, H.D. 1963. Conflicts in the use of forest land in the Atlantic Provinces. The Forestry Chronicle

Jackson, Tony and John Curry. 2002. Regional Development and Land Use Planning in Rural British Columbia: Peace in the Woods?. Regional Studies 36(4): 439-443

Jacques Whitford. 2008. Phase III ESA and Hazardous Materials Assessment, Former Baie Verte Asbestos Mine, Baie Verte, NL. Newfoundland and Labrador Department of Natural Resources-Mineral Development Division

Lawson, Jamie. 2006. Occupational Health and Safety in Newfoundland Forestry--- A pilot study: Report on findings

Milley, Peter. 2008. Newfoundland Forest Sector Strategy. Forest Engineering and Industry Services Division

Natural Resources Canada. 2012. Model Forest of Newfoundland & Labrador. Government of Canada.

Newfoundland and Labrador Forest Campaign. 2006. Forest Planning Team Toolkit. Sierra Club of Canada

Pigram, J.J. & Jenkins, J.M. 2006. Outdoor recreation management (2nd ed.). London, EN: Routledge

Proactive Investors. 2011. Rambler Metals reports first revenue as Ming mine approaches production start. Accessed at: <<http://www.proactiveinvestors.com/companies/news/19715/rambler-metals-reports-first-revenue-as-ming-mine-approaches-production-start-19715.html>> May 3rd, 2012

Provincial Council of the Rural Secretariat. 2011. Executive Council Activity Report 2010-11. Accessed at <http://www.exec.gov.nl.ca/rural/publications/provincial_council_201011_report.pdf> May 3rd, 2012

Rambler Metals and Mining Canada Limited. 2011. Ming Copper-Gold Mine Construction and Operations Activities Environmental Protection Plan. Accessed at: <http://www.env.gov.nl.ca/env/env_assessment/projects/Y2010/1487/1487_epp.pdf> May 4th, 2012

Ramsey, R.D. 1998. Land competition issues affecting the development of agriculture in Newfoundland and Labrador. Nova Scotia Agricultural College

Roy, M.A. 1989. Guided change through community forestry: A case study in forest management Unit 17--- Newfoundland. The Forestry Chronicle

Rural Secretariat. 2010. Integrated Land Use Planning. Government of Newfoundland and Labrador

Rural Secretariat. 2007. Grand Falls-Windsor- Baie Verte- Harbour Breton Regional Council Vision Development. Government of Newfoundland and Labrador. Accessed at: <http://www.exec.gov.nl.ca/rural/publications/Vision-GrandFallsDec11_2007.pdf>, March 8th, 2012

Sibaud, Philippe. 2012. Opening Pandora's Box: The New Wave of Land Grabbing by the Extractive Industries and the Devastating Impact on Earth. Commissioned by the Gaia Foundation and printed by Mobius Green Print

Sierra Club of Canada. 2003. Response to the Draft Newfoundland and Labrador Sustainable Forest Management Strategy. Accessed at <<http://www.sierraclub.ca/national/programs/biodiversity/forests/sfms-nl-response-2003.pdf>>, May 1st, 2012

Statistics Canada. 2012. Population and dwelling counts, for Canada, provinces and territories, and census subdivisions (municipalities), 2011 and 2006 censuses. Accessed at: <http://www12.statcan.gc.ca/census-recensement/2011/dp-pd/hltfst/pd-pl/Table-Tableau.cfm?LANG=Eng&T=302&SR=176&S=51&O=A&RPP=25&PR=10&CMA=0>>, May 1st, 2012

Sustainable Forest Management in Canada, 2012, Accessed at: < <http://www.sfmcanada.org/english/topics-land.asp>>, February 14th, 2012

Vodden, K. 2011. Understanding Regional Governance in Newfoundland and Labrador: A Survey of Regional Development Organisations.

Weir, J., Mahoney, S., McLaren, B., and S. Ferguson. 2007. Effects of Mine Development on Woodland Caribou *Rangifer tarandus* distribution. *Wildlife Biology* 13. 66-74. Accessed at <http://www.umanitoba.ca/science/zoology/faculty/ferguson/files/Weiretal_2007-WildlBiol.pdf>, April 30th, 2012

Wernerheim, C. Michael and B. Long. 2011. Commercial forestry at a crossroads: Emerging trends in the Forest Sector of Newfoundland and Labrador. Leslie Harris Centre, Memorial University.