SOCIO-ECONOMIC IMPACT ASSESSMENT REPORT

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Prepared for:
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Executive Summary:

This Socio-Economic Impact Assessment (SEIA) Tool has been developed to help forest planners and decision-makers to make sound decisions when deciding on major changes in Corner Brook Pulp and Paper’s (CBPPL) operations in the future. The tool has been prepared as a requirement for FSC certification (Section 4.4.10 of the Forest Stewardship Council, National Boreal Standard). Based on the FSC Standard, the applicant is expected to be aware of the socio-economic impacts of its forest management activities, as well as the socio-economic impacts associated with processing forest products derived from the forest and the non-consumptive use of the forest.

Socio-economic impact assessments are generally used to evaluate the potential impacts (both social and economic) of some proposed development or change in a specific area or region. In this case the major change would be some deviation from ‘normal-course’ activities for Corner Brook Pulp and Paper operations in Newfoundland and Labrador. Some examples of situations where a significant deviation from normal-course activities is being proposed or contemplated include (1) situations of significant land use conflict with potentially significant consequences to either the people or businesses of a region, or (2) termination of forest management activities in an area or region. The tools presented in this document will enable CBPPL staff to properly consider the social and economic impacts of decisions that change the course of the company’s operations.

The document presents the purpose of the SEIA, and discusses the base-case. The socio-economic base case consists of existing and anticipated resource management strategies and land use designations, as well as the existing and anticipated biophysical, environmental, economic and social trends in the area. Corner Brook Pulp and Paper’s base-case is a measurement of “status-quo” operations throughout the defined forest area (DFA). This information is important, as it enables the measurement of change brought about by some change in normal-course activities.

Socio-economic assessment tools appropriate for CBPPL are presented, along with a number of social and economic indicators. These indicators are an important part of the assessment process. They are variables that can be used to quantify the extent to which a major change will impact regions within the province, communities, businesses, and individuals. These indicators can be measured at any time to determine the current profile of an area, and can be compared with the anticipated change in indicators to measure impact.

Finally, the SEIA tool discusses how to incorporate information prepared in this document to prepare a SEIA when the need arises. A socio-economic impact assessment should start as soon as there is sufficient information about the proposed action (Beckley & Aubé, 2006), and should follow the procedure discussed in this document.
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1.0 INTRODUCTION

1.1 Purpose of Report

This document has been prepared as a tool to evaluate the Socio-Economic impacts associated with any major changes in Corner Brook Pulp and Paper’s (CBPPL) operations in the future, as a requirement for Forest Stewardship Council (FSC) Certification. Decisions in forest management planning can have significant impacts on the local, regional and provincial economy, and the people that reside in the planning area; therefore, it is important to be knowledgeable about the social and economic impacts which can result from such decisions (Domtar Inc., 2007). Usually, it is difficult to attribute causality to a company’s operations; however, both certification systems and provincial guidelines are increasingly concerned with social and economic “performance” of companies with rights to Crown timber (Beckley & Aubé, 2006). This knowledge and understanding can be obtained by establishing a baseline socio-economic profile of the local economy as it relates to the company’s operations, by performing a socio-economic analysis of management decisions where a significant deviation from normal-course activities is proposed, and by observing differences in the socio-economic impacts among alternatives (Domtar Inc., 2007).

Socio-Economic Impact Assessments (SEIA) are generally used to evaluate the potential impacts (both social and economic) of some major proposed development or significant operational change in a specific area or region. The SEIA document should first summarize the proposed change that initiated the SEIA process, and discuss why the change was initially proposed (i.e. who proposed the change and based on what information?). It should then discuss why the change triggered a SEIA. For example, what are the forecasted impacts, and in what locations will the impacts be most prominent? For example, this SEIA could have been utilized in the past to evaluate the impacts of discontinuing forest management operations in the Main River watershed, or in the Humber Valley. Quite often SEIA’s are used as a decision-making tool to evaluate a range of scenarios or management options for some optimal solution based on a set of criteria.

The tools presented in this document will enable CBPPL staff to properly consider the social and economic impacts of decisions that change the course of the company’s operations within Newfoundland and Labrador (NL). The document has not been prepared to accommodate conflicts and decisions associated with daily operations, but rather for those decisions that have large scale social and economic impacts on the people and the economy within the Province.

The document will explain what a socio-economic impact analysis is in detail, what it will provide for the company, and why it has been prepared. It will also present a current social and economic profile for CBPPL, highlighting the company’s social and economic impacts here in NL. Finally, the document will present the SEIA tools for the company, and discuss how they can be incorporated into future decision making processes.
1.2 Forest Stewardship Council (FSC) Requirements

At the time of preparing this original document, CBPPL was in the process of seeking certification under the Forest Stewardship Council (FSC) for its forest operations in NL. This SEIA document is a requirement for FSC certification. CBPPL has since been awarded certification and is currently seeking re-certification under the Forest Stewardship Council (FSC). Section 4.4.10 of the Forest Stewardship Council (FSC), National Boreal Standard, states that "The applicant shall complete a social impact assessment (SEIA) and use it to assist with the selection of the desired management option during forest management planning" (Forest Stewardship Council, 2004). Along with the applicable SEIA reports, this criteria indicator also requires a provision of the list of the socio-economic impact assessment tools and procedures used to prepare the SEIA.

Based on the FSC Standard, the applicant is expected to be aware of the socio-economic impacts of its forest management activities, as well as the socio-economic impacts associated with processing forest products derived from the forest and the non-consumptive use of the forest (Forest Stewardship Council, 2004).
2.0 ABOUT SOCIO-ECONOMIC ASSESSMENTS

2.1 What is a Socio-Economic Impact Assessment and What Will It Provide?

According to the *Guidelines for Socio-Economic and Environmental Assessment* (for Land Use Planning and Resource Management Planning) developed by the British Columbia Ministry of Agriculture and Lands (2007), the purpose of a socio-economic impact assessment is to provide planners, stakeholders and decision makers with three types of information:

1. Background information on the socio-economic structure of a "plan area" and its communities;
2. A description of the key socio-economic parameters that may be affected by the plan;
3. An assessment of the expected socio-economic implications relative to a "base case" scenario, along with an assessment of the uncertainties involved in the analysis.

Within a SEIA document, there are two major themes that are considered – the social and economic impacts of decisions that cause major deviations from ‘normal-course’ activities. A social impact assessment considers measurable change in human populations, communities and social relationships resulting from a development project. It assesses the social and cultural impacts of the project and how it might alter the lives of residents - how they work and play, relate to each other, organize to meet their needs and generally cope as members of society. The assessment provides a realistic appraisal of possible social ramifications and suggests possible mitigation and enhancement measures. Much of the qualitative information for an assessment is gathered from interviews with major stakeholders and government and service providers, to capture an accurate picture of the various social components, their relationship to each other and some of the subtler dynamics. Since social and cultural systems are in many cases, fluid and very personal (e.g. health, social well-being), they can be more challenging to assess than other systems. An economic impact assessment estimates the implications for income and employment in specific communities, regions, or the Province as a whole (British Columbia Ministry of Agriculture and Lands, 2007). It summarizes how economic activity will be affected by a new development or change in operations, including indicators such as number of existing jobs, potential number of jobs, indirect and induced jobs and income, and general increase or decrease in economic activity in a community or region.

A SEIA is not simply a report on the base case or current situation in a particular region, describing the existing social and economic parameters and structures. A SEIA is appropriate for situations where a significant deviation from normal-course activities is being proposed. A SEIA would be used to fully evaluate the social and economic impacts of decisions that cause a significant deviation from normal-course activities, by comparing the anticipated impacts of decisions with the base case scenario. Examples of such deviations may include situations of significant land use conflict with potentially significant consequences or ramifications to either the people or businesses of a region; terminating normal-course activities in an area; or establishment of a new processing or manufacturing facility that would depend on the resources of that region. As was mentioned earlier in the report, a SEIA would have been very useful to CBPPL in recent years, to evaluate the social and economic impacts of discontinuing forest management operations in the Main River watershed, or in the Humber Valley.
This document will provide measurable indicators for social and economic impacts of major decisions in the company’s future. It will enable planners, managers and decision-makers to view and measure the impact that such decisions will have on the local economy, individual communities, and the residents that live in these communities. These indicators will enable the best and most informed decisions that area most beneficial to communities and its residents.

2.2 The Socio-Economic Base Case

In most cases, the socio-economic base case is the "status quo", including any recent regulations, and if external factors such as commodity prices and regulatory policy follow existing trends or remain the same (British Columbia Ministry of Agriculture and Lands, 2007). The socio-economic base case consists of existing and anticipated resource management strategies and land use designations, as well as the existing and anticipated biophysical, environmental, economic and social trends in the area - including the potential for resource use conflicts to frustrate the realization of socio-economic and environmental values (British Columbia Ministry of Agriculture and Lands, 2007).

By completing this SEIA tool, CBPPL is attempting to be able to adequately address any significant change of normal-course activities related to the actual operations or to the geographic areas in which operations occur. To adequately assess the impact of change, the base case must clearly be defined, since it will be used as a baseline against which to measure. Building a base case will involve researching and gathering data to evaluate the current social and economic impacts that CBPPL’s operations have in the Province. This will involve the following:

- Determine the latest demographics and overall community well-being in the areas that the company currently operates;
- Determine CBPPL employment and income levels by Economic zone;
- Determine the applicable economic “multipliers” to better gauge the current actual economic contributions being made by CBPPL at both the regional and Provincial levels;
- Outline CBPPL’s social contributions, including:
  - Company policies and practices;
  - Planning or making provisions for the interests of other stakeholder groups on the timber limits;
  - Contribution to forest education;
  - Support of recreation;
  - Support of employees in the community;
  - Special projects and initiatives;
  - Charitable initiatives;
  - Contributions to museums and the preservation of history;
  - Involvement in Model Forest activities;
  - Etc.

A social and economic profile for CBPPL (base case) is presented in Section 3 of this document.
2.3 Emphasis on Social or Economic Aspects

SEIA’s can sometimes place emphasis on either the social or the economic aspects when evaluating the impacts of a proposed change. There could be an emphasis on the economic side, where the analysis may focus more on financial impacts, values and net economic values, or the SEIA may be more sensitive to the social implications of a particular development or proposed change, and perhaps avail of “softer” data types for some of its analysis. The degree to which emphasis is placed in any given SEIA will depend on the proposed change and how it is forecasted to affect regions, communities and residents.

Socio-economic aspects have several quantitative and qualitative indicators which make up the SEIA tools. Based on the proposed change from normal-course activities that trigger a SEIA, the change in each indicator will be measured to evaluate how the development will affect social or economic variables.

For the social part, quantitative indicators can include population, employment, income levels, migration / immigration patterns, poverty levels, real estate values, and community well-being. Qualitative indicators can include things such as interviews with local stakeholders and opinion surveys. For the economic part, indicators will include financial contribution to Provincial GDP, the values of wages and purchased goods and services by economic zone, employment numbers by ECONOMIC zone, and multiplier models (including direct, indirect and induced economic effects).
3.0 A SOCIAL AND ECONOMIC PROFILE OF CORNER BROOK PULP AND PAPER

This section of the report will provide a socio-economic profile for CBPPL’s current operations. CBPPL currently provides several social and economic benefits to various regions of the Province and to its residents. These benefits will be summarized in this section. The current socio-economic profile as presented in this section is the “base-case” or “status quo” operations that the company is currently involved in.

The data presented in this section will separately describe social and economic components as they relate to base-case operations, and can be used in future socio-economic impact assessments. The data can be used as a baseline against which to measure any major deviations from normal course activities, and will help to evaluate what the social and economic impacts of such decisions are.

3.1 The Social Component

3.1.1 Introduction

CBPPL contributes a lot to the communities and residents within and around the Defined Forest Area (DFA). The company’s forest management planning process invites input from the public and local stakeholders. Their current operations provide jobs and forest education opportunities, and support local organizations, sporting events, special projects and initiatives, and generally increase the social well-being in the areas where it operates. The company’s policies are consistent with government regulations and policies, and apply to all internal and external employees. All those things that the company does (directly and indirectly) to increase the social well-being within the DFA will be discussed in this section.

3.1.2 Company Policies and Practices

CBPPL currently has several company policies, practices, programs and initiatives in place aimed at sustainable forest management practices, environmental protection, conservation of unique forest habitats, ensuring social and economic benefits to its employees and residents, among other things. Each policy has a unique objective, or has been prepared to address some social or economic factor related to the company’s operations. Some of these have been adopted from outside sources, and many have been developed internally within the company. Each of the company policies, practices, programs and initiatives listed below fall into one of three categories, including (1) Environmental Protection, (2) Safe Working Conditions, and (3) Interacting with Public.

**Environmental Protection** – Policies and practices that protect the environment ensure that forest resources will be available for future generations to manage and enjoy. These policies are designed to ensure that forest operations do not have negative effects on forest ecosystems and wildlife species that live in the forests, and aim to protect and maintain biodiversity throughout the DFA.
- **Forest and Environmental Policy** – CBPPL Woodlands fully endorses the Kruger Inc. Corporate Forest Policy, Environmental Policy and the Environmental Statement of the Forest Products Association of Canada. The company is committed to carrying out forest management activities to provide long-term sustainability and maintain natural biodiversity while supplying the fiber requirements of the Corner Brook Mill.

- **Canadian Boreal Forest Agreement** – CBPPL is a member and supporter of the CBFA process and have been a part of the Newfoundland and Labrador Regional Working Group since its inception (Higgins, 2015). CBPPL in conjunction with Kruger Inc. are a signatory the Canadian Boreal Forest Agreement.
  - “In 2010, the majority of Canada's forest industry, as represented by the Forest Products Association of Canada (FPAC), and a coalition of leading Canadian and International conservation organizations signed the Canadian Boreal Forest Agreement (CBFA). The CBFA commits the FPAC forest companies and conservation organizations to work together in the Canadian Boreal to, among other things, develop proposals for protected areas, plans for woodland caribou conservation, plans for reducing greenhouse gas emissions across the full life-cycle of forest products, an auditable, world-leading set of standards for forestry management practices and measures to ensure marketplace benefit for the implementation of these conservation plans.” (Canadian Institute of Forestry, 2013).

- **Sustainable Forest Management Plan** – The SFM plan was developed with the cooperation of a group of dedicated individuals and organizations, the Public Advisory Committee (PAC), interested in sustainable development of the forests within the DFA. The plan incorporates social, environmental and economic values in the development of NL’s forests.

- **Standard Operating Procedures** – Standard Operating Procedures (SOP) and Environmental Work Instructions ensure that activities associated with identified Significant Environmental Aspects (SEA) are performed with established and maintained operational procedures. The identification of SEA’s is a semi-qualitative risk assessment classification system that identifies any possible (non-health and non-safety) environmental impacts. SEA’s are identified by CBPPL to determine the environmental aspects of the company’s activities, products and service over which there is control considering planned or new developments, or new or modified activities, products or services. The identification of such SEA’s enables for the assessment and evaluation of that SEA to minimize negative impacts associated with it. They also ensure that the environmental policy and objectives, and targets of CBPPL Woodlands are attained.

- **Silviculture Technical Standards** – This document outlines the technical standards for silviculture activities in NL. It helps to ensure that all silviculture work completed meets an acceptable level of quality. The standards were developed in conjunction with DNR.
- **PCT Berry Bush Policy** – The policy states that wherever possible berry bushes will be left for birds and other wildlife. During the thinning operation, no berry bushes will be unnecessarily cut.

- **PCT Hardwood Policy** - The policy states that wherever possible hardwood trees will be left for biodiversity. During the thinning operation, no hardwood tree will be unnecessarily cut.

- **PCT Bird Nest Policy** – The policy states that when active bird nests are encountered during the thinning operation they must be avoided and a clump of trees left for protection of the nest.

- **Pre-Work Meeting** - Before the commencement of any harvesting or road building operation, a pre-work meeting is held between the harvesting contractor and CBPPL Woodlands operations and planning staff to discuss operational and environmental aspects related to the area.

**Safe Working Conditions** – Safe work procedures are of the utmost importance to CBPPL. The policies, procedures and programs listed below ensure that all employees can safely conduct the tasks associated with their job. They are designed to promote safe working conditions and create opportunities to identify any unsafe working conditions as soon as they occur.

- **Health and Safety Policy** – Outlines the company’s commitment to providing a safe and healthy working environment for all employees. It explains the roles and responsibilities of staff, contractors and employees to ensure there is a safety program which protects all employed with CBPPL.

- **Emergency Response Procedures Manual** – Designed to ensure that CBPPL Woodlands maintains procedures to identify the potential for environmental accidents, implement preventive measures, and effectively respond to emergencies. This manual covers emergency response procedures for personal injury, forest fires, siltation, fuel/oil (hydrocarbon) spills, herbicide spills, transportation hazards, and power line contact. There is also an attached appendix outlining first aid procedures, telephone directories, incident reports, and emergency marshalling points.

- **Whistleblower Policy** – The FSC Boreal Standard Principle 4, Criteria 4.4. Indicator 4.4.10 states: “Forest workers are encouraged to report any management activities that threaten the environment or cultural values or any instances of non-conformance with laws and regulations and are not penalized for reporting.” This policy ensures that a complainant may, in good faith, report an issue or concern about a serious violation. The Company encourages its employees, contractors, and consultants to feel comfortable in raising serious concerns. It will also strive to provide feedback on any action taken because of a complaint.
- **Contractor Incentive Program** – CBPPL Woodlands has an incentive program to raise awareness and interest while improving the overall level of professionalism in the workplace. This program looks at performance in the areas of safety, environment, and quality.

- **Behavior Based Safety Observation Program** – This program is based on observing behaviors of employees and identifying “at risk” and unsafe actions. These actions are then corrected or complimented as required.

- **Employee Recognition Program** – Through this program, outstanding performers are recognized at monthly operations meetings. Employees who have shown dedication to a worthwhile project on or off the job are given a token of appreciation in front of their peers.

- **Safety Incentive Program** – As employees achieve safety milestones they are rewarded with gift cards of varying values. These milestones may be weekly, monthly or jobsite specific targets.

- **Employee Assistance Program** – The program offers employees, spouses/partners and children, assistance in dealing with personal or family related matters that may, on occasion, affect an employee’s ability to perform his/her job in a safe and productive manner. All costs are paid directly by CBPPL.

- **Pre–Commercial Thinning Safety Program** – The PCT safety program adheres to all CBPPL’s regular policies and procedures plus a few which are unique to this operation, such as: daily bus inspections, daily worker check-in and check-out, bi-weekly banner and a year-end bush dinner.

- **Training** – CBPPL Woodlands is firmly committed to employee training regarding health and safety as well as the environment. It recognizes the company’s responsibility to ensure that employees have obtained the knowledge and skills necessary to perform their job function in a competent manner while maintaining Company policies, rules, and all legislated requirements relating operations and training.

**Interacting with Public** – CBPPL recognizes that there are many stakeholders and individuals who utilize the forest and its associated ecosystems for a variety of economic, social and cultural reasons. To ensure that these people can continue to utilize the land base, CBPPL has developed a number of agreements and policies to ensure that all stakeholders have an opportunity to be included in forest management, and can continue to utilize the forest.

- **Access Management** – Roads constructed and maintained by CBPPL Woodlands are available for public use, but may be closed when safety hazards, fire hazards, or other conditions dictate.

- **Domestic Harvesting** – CBPPL Woodlands sells domestic harvesting permits for individuals who wish to cut firewood on company limits. Individuals are permitted to harvest 25m³ of hardwood or deadwood from previously logged areas or hardwood stands unless otherwise posted.
- **Crown Land Referral Policy** – CBPPL recognizes that infrastructure for economic development and for recreation will be required as the population of the area grows and develops and this may require land from company timber limits.

- **Mineral Exploration Policy** – CBPPL Woodlands recognizes the importance of mineral exploration and will work, to the best interest of all parties involved, with mineral exploration companies planning to operate on CBPPL timber limits.

- **Memorandum of Understanding (MOU) with the Newfoundland and Labrador Outfitters Association (NLOA)** – CBPPL recognizes the importance of the outfitting to the economy of NL and the significant employment it creates. The MOU outlines reasonable and mutually acceptable measures to reduce conflicts between wood harvesting and existing outfitting operations.

### 3.1.3 Planning Process for the Social Component (Public Participation)

Public participation has formed a key component of CBPPL’s Sustainable Forest Management (SFM) system, and the company provides many opportunities for the public to be involved in the planning process. During the development of the five-year operating plan, the Department of Natural Resources is required by legislation to include participation of the public in the development of operating plans for each forest management district (FMD). In the development of the SFM plan, CBPPL invites input from all stakeholders within the DFA (Corner Brook Pulp and Paper Ltd., 2010).

#### 3.1.3.1 5-Year Operating Plans

A five-year operating plan is a document required under the *Forestry Act* for all developments within each forest management district. This document identifies where, when, and how forest management activities will occur in any FMD.

In the case of CBPPL, five-year operating plans are developed for each FMD in which the company operates, and are then submitted to the Department of Natural Resources and the Department of Environment and Conservation for review. During the development of a five-year operating plan, the company follows a public consultation process that invites input from all stakeholders, including the public (Corner Brook Pulp and Paper Ltd., 2010). This process involves several meetings in which stakeholders give input and help make decisions on the forest management activities proposed in the five-year plan. In a recent forest management planning exercise, approximately 100 people attended as planning team members in FMD’s 5, 6, 9, and 16. Many of the stakeholders attend to discuss specific issues including cabin areas, domestic harvesting, view sheds, forest access, caribou habitat management, inland fish management, wildlife habitat, and water quality. The public’s input is vital to the preparation of each plan.

When CBPPL has completed preparing the operating plan, it is registered with the Department of Environment and Conservation to undergo an environmental assessment. During this assessment, the plan is reviewed by interested government departments, and the public is once again consulted and
given an opportunity to give input. All submissions and comments are then reviewed before the plan is approved. Based on comments from government departments and the public, the Minister may add certain terms and conditions to the plan upon approval, to accommodate comments and requests.

3.1.3.2 Sustainable Forest Management Plan

CBPPL’s Sustainable Forest Management Plan sets the strategic direction and broad goals and objectives for the company’s forest management activities, while providing information on planned forest development activities (Corner Brook Pulp and Paper Ltd., 2010). To meet CAN/CSA Z809-08 standards, the company began a planning process separate from the 5-year operating plan process. The CAN/CSA-Z809-08 standards requires that certified organizations establish and implement a public participation process by starting a new process, building on an existing process or reviving a previous process by openly seeking representation from a broad range of interested parties, including DFA-related workers, and invite them to participate in developing the public participation process (Canadian Standards Association, 2010). The public participation process is a 2-way communication process since members provide important information into the planning process (e.g. selecting indicators), and the company provides information on its forest management activities.

Based on a list of participants of the five-year planning process and attendees at special SFM public meetings, individuals and organizations were asked to sit on a Public Advisory Committee (PAC), to help meet the requirements for the standard (Corner Brook Pulp and Paper Ltd., 2010). The PAC is responsible for helping CBPPL identify values, objectives, indicators and targets for each of the CSA SFM elements of the CSA Z809-08 standard. The company’s first SFM plan was developed by the PAC committee in 2004. In 2008, the committee reviewed the SFM to see if the indicators were relevant, measurable, understandable, valid, cost-effective and able to forecast. The plan was revised based upon input from the PAC committee, and changes in the CSA Z809-08 standard in 2008. The PAC gave its approval of the revised SFM in 2010. The SFM was revised based on the same standards in 2011, 2014 and 2016. CSA Z809-08 was re-registered in 2013 and again in 2016 (Corner Brook Pulp and Paper Limited, 2016).

Participation in the PAC has been a great success. Whether the members are involved in the forest industry, or in a totally unrelated field, they have agreed that being involved in the PAC responsible for the development of the sustainable forest management plan has been a worthwhile learning experience. The following is a recent quote from a member of the committee:

My involvement in this PUBLIC ADVISORY COMMITTEE or PAC, came easy, for my son is the third generation of the family logging/sawmilling business my father and I started 40 years ago. This was an opportunity for anyone with any concern whatsoever to have a say in, not only the harvesting of trees, but the holistic approach to the ecosystem, regardless of any obstacles they felt were in the way of the actual harvesting of timber. At the table were private contractors of the logging industry, as well as many of the major pulp woodcutters, outfitters and environmentalists, and private citizens, whose only vested interest in the working of the paper industry was their love for the way of life that persists in this Province. These sessions were both interesting and boring, depending on your point of view. They were
also meticulous and tedious. There were many heated discussions, but there was never a meeting closed without consensus and friendly farewells, and the following meeting was always among friends again. Source of quote: Gary Collins (2006) Corner Brook Pulp and Paper, Environmental Progress Report.

Table 1 shows a current list of the public advisory committee members.

<table>
<thead>
<tr>
<th>Last Name</th>
<th>First Name</th>
<th>Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baird</td>
<td>John</td>
<td>Freshwater Bay Alexander Bay Ecosystem Corporation</td>
</tr>
<tr>
<td>Bartlett</td>
<td>Wilfred</td>
<td>Private Citizen</td>
</tr>
<tr>
<td>Blackwood</td>
<td>James</td>
<td>Town of Gander</td>
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<tr>
<td>Brake</td>
<td>Mike</td>
<td>Private Citizen/Corner Brook Indian Band</td>
</tr>
<tr>
<td>Brown</td>
<td>Wayne</td>
<td>Private Citizen</td>
</tr>
<tr>
<td>Careen</td>
<td>Anthony</td>
<td>Private Citizen/Mill Employee</td>
</tr>
<tr>
<td>Chamberlain</td>
<td>David</td>
<td>CBPPL Woodlands</td>
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<tr>
<td>Colbourne</td>
<td>Overton</td>
<td>Private Citizen</td>
</tr>
<tr>
<td>Decker</td>
<td>Stephen</td>
<td>Grenfell Campus Memorial University</td>
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<tr>
<td>Dolter</td>
<td>Sean</td>
<td>Model Forest of Newfoundland and Labrador</td>
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<tr>
<td>Elkins</td>
<td>Barry</td>
<td>CBPPL Woodlands</td>
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<tr>
<td>English</td>
<td>Basil</td>
<td>Department of Natural Resources, Corner Brook</td>
</tr>
<tr>
<td>Fitzgerald</td>
<td>Ben</td>
<td>NL Snowmobile Federation</td>
</tr>
<tr>
<td>Foster</td>
<td>Cory</td>
<td>NL Outfitters Association</td>
</tr>
<tr>
<td>Fudge</td>
<td>Terrance</td>
<td>Burton’s Cove Logging &amp; Lumber</td>
</tr>
<tr>
<td>Goudie</td>
<td>Carl</td>
<td>Town of Deer Lake</td>
</tr>
<tr>
<td>Goulding</td>
<td>Keith</td>
<td>Qalipu Mi’kmaq First Nation Band</td>
</tr>
<tr>
<td>Harris</td>
<td>Darrell</td>
<td>Natural Resources Canada</td>
</tr>
<tr>
<td>Hearn</td>
<td>Debbie</td>
<td>Hearn Consulting Incorporated</td>
</tr>
<tr>
<td>Hounsell</td>
<td>Llew</td>
<td>Private Citizen</td>
</tr>
<tr>
<td>Howell</td>
<td>Carl</td>
<td>Indian Bay Ecosystem Corporation</td>
</tr>
<tr>
<td>Jesseau</td>
<td>Ron</td>
<td>Private Citizen</td>
</tr>
<tr>
<td>Knee</td>
<td>Glen</td>
<td>College of the North Atlantic, Forest Resources Instructor</td>
</tr>
<tr>
<td>Knott</td>
<td>Faron</td>
<td>CBPPL Woodlands</td>
</tr>
<tr>
<td>Lewis</td>
<td>Ted</td>
<td>Northern Peninsula Forest Resources Association – District 18</td>
</tr>
<tr>
<td>Major</td>
<td>Darcy</td>
<td>Major’s Logging</td>
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<tr>
<td>Miles</td>
<td>Randy</td>
<td>CEP Local 60N</td>
</tr>
<tr>
<td>Moulton</td>
<td>Tim</td>
<td>CBPPL Woodlands</td>
</tr>
<tr>
<td>Payne</td>
<td>Keith</td>
<td>Private Citizen</td>
</tr>
<tr>
<td>Pelley</td>
<td>Cyril</td>
<td>NL Outfitters Association</td>
</tr>
<tr>
<td>Philpott</td>
<td>Tom</td>
<td>Private Citizen</td>
</tr>
<tr>
<td>Rice</td>
<td>Ralph</td>
<td>Private Citizen</td>
</tr>
<tr>
<td>St. George</td>
<td>Sean</td>
<td>Private Citizen, RED Ochre Regional Board Inc.</td>
</tr>
<tr>
<td>VanDusen</td>
<td>George</td>
<td>Private Citizen</td>
</tr>
<tr>
<td>Vincent</td>
<td>Lindy</td>
<td>President Unifor Local 60N</td>
</tr>
</tbody>
</table>
3.1.4 Co-operation with Government on Social Issues

CBPPL regularly works with local government agencies on social issues that arise. From time to time the Department of Natural Resources and other Departments will make requests to CBPPL for a variety of reasons, and the company is generally accommodating with such requests.

A good example of such cooperation took place in FMD 17 and 18. The company decided in the past not to purchase hog-fuel for the mill’s boiler over a set price, to keep energy costs down and to ensure their paper product remained competitive and profitable. The government was interested in helping a contractor on the Northern Peninsula to sell local resources, to maintain employment in the region. CBPPL and the Department worked together to create a deal that resulted in CBPPL purchasing approximately 40,000m$^3$ of wood from the contractor on the Northern Peninsula. This relationship enabled the contractor to continue operations and sustain local jobs.

In another example, the government approached CBPPL and requested that several areas within the company’s limits be sold back to the Crown. The reasons for the request varied, but included securing land for domestic harvesting, securing land for Crown and private operators, and creating a wildlife reserve, among other things. Some of the areas requested were quite valuable to the company; however, officials willingly worked with the government to accommodate the requests.

In most cases, the requests result in fair exchanges (i.e. a decision results in a fair and equitable exchange between government and CBPPL), sometimes monetary exchanges and other times a transfer of timber limits to another area to accommodate social needs.

3.1.5 Forest Education

CBPPL has been committed to educating the public on its forest operations and sustainable management practices. The company’s involvement with individuals, educational institutions, and other organizations through a variety of presentations, seminars, field tours and meetings have proved invaluable to the company and the individuals involved.

Indicator 6.5.1 of the company’s most recent FMP is the “number of people reached through educational outreach”. The target of this indicator is “to sustain the number of people informed about ecosystem processes and management practices through external communications”. An external communication record is maintained to track the interactions of CBPPL woodlands staff with the public. The record tracks requests for tours, visits, meetings, etc., and starting in 2010 the external communication record began tracking CBPPL initiatives of public awareness activities (Corner Brook Pulp and Paper Ltd., 2010). Table 2 shows the status of activities that took place in 2015 and the number of participants.
Table 2. Participants in various CBPPL public awareness activities during 2015.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Number of Requests</th>
<th>Number of Participants (Approx)</th>
</tr>
</thead>
<tbody>
<tr>
<td>College of the North Atlantic/Grenfell Campus, MUN</td>
<td>4</td>
<td>38</td>
</tr>
<tr>
<td>Elementary School (Forestry Day in the Park)</td>
<td>1</td>
<td>250</td>
</tr>
<tr>
<td>High School Junior Achievement Program</td>
<td>1</td>
<td>20</td>
</tr>
<tr>
<td>Misc. Groups (Councils/Service Organizations/LCN/Outfitters/Businesses/Public)</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>PAC Tours</td>
<td>1</td>
<td>28</td>
</tr>
<tr>
<td>PAC Meetings</td>
<td>5</td>
<td>33</td>
</tr>
<tr>
<td>Canadian Boreal Forest Agreement</td>
<td>12 (meetings)</td>
<td>25</td>
</tr>
<tr>
<td>Forestry Services Branch</td>
<td>4</td>
<td>30</td>
</tr>
<tr>
<td>Research interests</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Other Government Agencies (Service NL, Water Resources, DFO)</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>Firewood Permits</td>
<td>1,046</td>
<td></td>
</tr>
<tr>
<td>Crown Land Applications (% of applications approved)</td>
<td>145/180 (81%)</td>
<td></td>
</tr>
<tr>
<td>Crown Land Applications (% of applications pending)</td>
<td>34/180 (19%)</td>
<td></td>
</tr>
</tbody>
</table>

3.1.5.1 Interactions with Educational Institutions

Company staff has been involved with educational institutions at all levels, from primary grades to University Undergraduate and Master’s level. In the past 10 years, CBPPL have conducted meetings, tours, and helped students with projects on over 100 occasions. These types of interactions are very important and provide not only a learning opportunity for students, but also an opportunity for staff to learn from a variety of students at various ages through their perspective and opinions.

Generally, in the past, interactions with educational institutions has been centered around a variety of forest management themes, including forest management practices, forest management issues (i.e. clearcutting, forest protection, forest access, mechanization, pine marten), forest ecology (flora and fauna), and wildlife management. The way in which education is shared with the different levels of individuals varies, but they all strive to teach students about the sustainable management of forest resources. In all cases, CBPPL invites questions, comments, opinions and suggestions from students of all ages.

Primary (Grade) Schools

Primary students can have a lot of power in how we manage our forests in the future, therefore CBPPL makes a considerable effort to teach and interact with students at that level. The company regularly conducts a variety of school visits and field trips, with a focus on forest ecology and management as well as discussion around perceived forest management issues including clearcutting, wildlife management, forest protection and mechanization.
In the past, the company has hosted a field trip for Deer Lake’s Elwood High School to a nearby forest area. The field trip has become quite popular and is remarkably effective in communicating the concept of sustainable communities using real life examples of people from current and past generations. During the tour the students can see first-hand how their local forest resource base has provided both a major source of employment and economic stability for their local communities as well as a place for recreation and social well-being. They are shown physical evidence (various forest age classes created by harvesting activities of past generations) which demonstrate that, if managed properly, their local forest resource base can indeed play a significant role in sustaining their communities indefinitely.

**Post-Secondary Institutions**

CBPPL has been involved with the local post-secondary institutions, and with many international educational institutions. Like the primary levels, the focus is generally on forest ecology and management as well as discussion around perceived forest management issues including clearcutting, wildlife management, forest protection and mechanization, but it is taught and applied differently to the college and university students. The company has also supported several on-the-job training placements for technical training institutions in the past.

Locally, the company is regularly involved with the College of the North Atlantic (CNA) and Memorial University Grenfell Campus (SWGC). It maintains a very close working relationship with CNA (Forest Resources Program), and hosts regular field tours and other interactions with students at both institutions, and is involved in the Master’s program at SWGC. The company’s communication log shows several instances where CBPPL staff has helped individual students with school projects by providing information and expertise in recent years. The company also supports these educational institutions by providing annual scholarships for students in resource-based programs.

During their educational training, students at CNA are regularly given the opportunity to tour a variety of forest operations. Many of the field visits are hosted by CBPPL staff. Field visits involve practical training in forest ecology and management, forest protection, timber scaling, management planning, silviculture techniques, logging operations as well as basic practical aspects of forest-based employment. In addition to involvement with the students, CBPPL maintains membership on the Forest Resources Advisory Board. The Board gives input and provides direction to ensure that the forestry curriculum and the topics being taught are consistent with, and relevant to the current forest industry. The members advise on program content, and assist and promote the forestry program.

Elsewhere in Canada, CBPPL has been affiliated with the University of New Brunswick (UNB), and has funded research by Dr. Dan Quiring. The goal of the research is to better forecast and control future
outbreaks of forest insects and to better manage forest stands to reduce their susceptibility to insect pests. The company’s collaboration with Dr. Quiring began in the early 2000s, when it faced a potentially devastating problem in pre-commercially thinned stands throughout the DFA (balsam fir sawfly started attacking thinned balsam fir stands near Stephenville about 10 years earlier and spread at a rate of 25 km per year). There was a need for researchers to 1) develop sampling plans for this insect; 2) develop accurate models to predict the effect of different densities of the sawfly on tree growth and mortality, so that CBPPL could predict the impact on future wood supply; 3) elucidate the population dynamics of the pest so that the company could relate the densities of the developmental stage sampled to that of old larvae that cause most of the damage, as well as develop models to relate defoliation to tree growth losses; 4) determine whether thinning was the primary cause of the outbreak; and 5) develop an environmentally acceptable suppression tactic. Dr. Quiring has been working to help CBPPL address all the objectives listed above, by forming a team and applying for additional funding through the NSERC-CFS-Industry partnership program. Fortunately, Dr. Quiring formed a well-functioning team with researchers from the University of Victoria and Laval University and researchers at the Canadian Forest Service that has addressed all the objectives listed above.

The company has also worked with UNB on its Forest Industry Competitive Advantage Project (FICAP). The FICAP project is a partnership between CBPPL, DNR – NL, FP Innovations – Pulp and Paper Division, UNB, FP Innovations – CWFC, and ACOA – AIF Project. The project started in 2007, and it aimed at maintaining and increasing the competitiveness of CBPPL and the Province’s forest industry by making better use of wood and fibre resources. More specifically, FICAP’s objectives are to 1) determine wood fibre properties in standing trees and on chip streams feeding CBBPL, 2) establish databases of wood and fibre properties that can be incorporated into the province’s digital forest inventory (GIS) framework, and 3) develop models relating key wood fibre properties to the mill’s processing parameters and end-product properties. UNB has been dominantly involved in the 3rd piece.

CBPPL aligned with a company that provides universities across the nation with research internship programs. The company called Mitacs, along with Memorial University of Newfoundland (MUN) came together on a project to explore solutions for sustainable rural drinking water systems. The intern put together a case study to describe the efforts CBPPL takes to protect drinking water supplies. This will be used when approaching communities that have concerns about CBPPL in their water supply area (Minnes, Exploring Solutions for Sustainable Rural Drinking Water Systems, 2014). In 2015, CBPPL partnered with Mitacs again to do another project called “Helping municipalities find solutions for sustainable drinking water systems” (Minnes, Water Liaison Mitacs Intern Application, 2015).

In 2015, together with Mitacs, MUN and the Department of Natural Resources, CBPPL partnered to study the effects of forest harvesting on population dynamics, distribution and stoichiometry of lynx-hare-plant food webs in Newfoundland. This project was started (1) To better understand how environmental changes due to forest harvest practices affect individual-based traits that could influence fitness (growth, reproduction, survival) (2) To apply the perspective of ecological stoichiometry to study the effects of forest harvesting on boreal nutrient budgets and food webs and (3) To better understand forest connectivity and definitions of ‘forest intactness, which in turn will assist with forest management (Memorial University of Newfoundland, 2015).
CBPPL is currently supporting a research project focusing on the effects of regenerating cutovers on native bees. In the past, they have also supported research to investigate the impact of forestry operations on pine marten, a threatened species. Findings from research projects like these can inform best management practices and support adaptive forest management (Fequet, 2015).

CBPPL has also been accepting students from Keyin College (Occupational Health and Safety Officer Program) in Grand Falls-Windsor to work in the Woodlands Department. The students have assisted in with day to day safety program responsibilities and are usually challenged with a special project of their own (e.g. health and wellness surveys and wood truck load binding assessments). CBPPL have found that providing OHS students with a work-term to be mutually beneficial and hope to continue working with Keyin College to provide work-term positions for their students.

Aside from involvement with local and national post-secondary institutions, CBPPL has been involved with many international universities in the past. The company has on occasion hosted several visits by US Universities, in particular Rutgers University who visit quite often, and more recently Yale. Rutgers Master’s students have been visiting the area for years, and are generally studying the practical aspects of forest ecology and forest management in the Province. Students from Yale visited on one occurrence, to research the same. CBPPL has hosted the students and provided opportunities and expertise for research in the area.

3.1.5.2 Forest Tours for Public

CBPPL has focused a lot of time and effort on conducting field tours for public in the past. The goal of these tours is to keep the public and interested parties educated and aware about ecosystem processes, management practices, and the progress of sustainable forest management on the DFA (Corner Brook Pulp and Paper Ltd., 2010).

In the past, the company conducted several annual woodland tours. Over the course of the 6 years that the tour was offered, the total number of participants included nearly 2,500 people. In the last year that the scheduled tour was offered (2002), 455 guests participated in the tour, which ran from July 28th to August 3rd, 2002. More recently, the company has hosted several field tours throughout the year to demonstrate forest management techniques and harvesting equipment. The tours are generally requested by local groups and organizations, and are arranged as requests are received. In 2010, 60 people participated in various woodlands field tours throughout the year.

Aside from the general public, the public advisory committee has met for meetings or field trips 3-7 times per year. The field trips have provided members with the opportunity to learn and share
information, discuss and solve problems, and set and meet objectives. CBPPL feels that educational opportunities through guest speakers and field trips are essential to meaningful participation in the PAC. Table 3 shows the number of meetings and field tours that have been held with the PAC over the past number of years.

During the meetings and field trips, the PAC members have learned a tremendous amount about the forest, the plants and animals that interact with the forest (Corner Brook Pulp and Paper Ltd., 2005), and sustainable forest management practices on a variety of operations.

Table 3. Number of PAC meetings and field trips since its formation in 2003.

<table>
<thead>
<tr>
<th>Year</th>
<th># of Meetings:</th>
<th># of Field Trips:</th>
<th>Total:</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>11</td>
<td>1</td>
<td>12</td>
</tr>
<tr>
<td>2004</td>
<td>4</td>
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<tr>
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</tr>
<tr>
<td>2009</td>
<td>5</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>2010</td>
<td>3</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>2011</td>
<td>4</td>
<td>1</td>
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<tr>
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<td>7</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>2016</td>
<td>4</td>
<td>1</td>
<td>5</td>
</tr>
</tbody>
</table>

### 3.1.5.3 Special Initiatives in Forest Educations

The company has been involved in several other special initiatives that support forest education and awareness in the region. Many of these initiatives support other programs both locally and nationally, and involve collaboration with other agencies. The goal is to give the public and other interested parties the opportunity to learn about CBPPL and its sustainable forest management practices. Some of these special initiatives include:

**Futures from Forests**

*Futures from Forests* teaching materials were produced by the Model Forest of Newfoundland and Labrador and the Provincial Forest Sector Communication Working Group on behalf of their project partners, who include CBPPL, the Department of Fisheries, Forestry and Agrifoods, Department of Business, Tourism, Culture and Rural Development, Service Canada, Natural Resources Canada, and Abitibi-Bowater.

The Model Forest of Newfoundland and Labrador and its partners identified the need to develop a teaching aid that helps students and teachers learn about our forests and the vital role that they play in sustaining and enhancing the lives of the people in the province. Forests within the Province are
ecologically, economically and culturally important to Newfoundland and Labrador and we rely on them to provide employment, recreation, products and a healthy environment (Model Forest of Newfoundland and Labrador, 2010). Because of this, the project partners felt it was important to develop a teaching aid aimed at junior high and high school students. CBPPL made significant contributions to the development of the teaching materials for the project.

The teaching resource is designed for teachers of high school environmental science but they can be used by teachers of science, social science, careers and other courses at the high school and junior high school levels (Model Forest of Newfoundland and Labrador, 2010). The teaching package includes an information package for teachers, including topics on forest ecology, forest management, the value of forest ecosystems, old growth forests, age class structure, etc., as well as a DVD, PowerPoint presentations, case studies, and worksheets on a variety of forest-related topics. This teaching resource is not being used currently but is completed and available if needed.

**Canadian Woodlands Forum Atlantic Teachers Tour**

Since 2001 CBPPL has been sending teachers to the Canadian Woodlands Forum Atlantic Teachers Tour in the Maritimes. In 2009, two teachers from Corner Brook High attended the teacher’s conference in Mactaquac, New Brunswick (Corner Brook Pulp and Paper Ltd., 2009).

The goal of the Conference is to present a balanced perception of forest management, forest product manufacturing, and the forest sector as a whole (Corner Brook Pulp and Paper Ltd., 2009). One of the teachers who attended the conference in 2015 stated that “I now understand how much science and planning go into decisions made by foresters. I realize now how complicated decisions are made keeping in mind sustainability and environmental concerns, which was a bit of a pleasant surprise for me.” (Atlantic Teachers' Tour, 2015).

Another teacher at the conference in New Brunswick commented that “I will incorporate the resource material and field trip ideas into the forestry unit of Environmental Science, and will present my students with the opportunity to explore the wide range of career information and exciting future of this industry” (Corner Brook Pulp and Paper Ltd., 2009).

**Knowledge, Education and Youth (KEY) Program**

CBPPL has regular involvement with the Knowledge, Education and Youth (KEY) program sponsored by the Provincial Department of Education, Department of Natural Resources and Gros Morne National Park. The program is a week-long field camp experience for teachers across the Province for education
and exposure to natural ecosystems and their management. CBPPL regularly plays host to the group for one day during the program, teaching them about a variety of forest management topics.

In 2010, CBPPL hosted 16 participants in August, including representatives from the Department of Education, and Fred Sheppard of Parks Canada. The program participants were given a tour of the Whitewash area with talks based on the theme “our past is our future” sustainable forest management.

The KEY program has been has become quite popular among teachers and sponsoring agencies, and has very successfully achieved its goals over many years.

3.1.6 Support of Recreation

CBPPL has always played a significant role in the support of recreation in the community. The company has supported several employee sports teams in the past, and has offered many opportunities for employees and their families to be involved in recreational activities outside of their place of work.

The company currently has relationships with several forest dependent recreational organizations, both on and off the DFA. Through agreements with CBPPL, these organizations are better able to provide economic and social benefits to the areas of the province they service.

Some of the specific organizations that CBPPL has developed relationships with to support recreation include:

- Thomas Howe Forest Foundation and Demonstration Forest;
- Airport Nordic Ski Club in Gander;
- Blow Me Down Ski Club in Corner Brook;
- Pasadena Ski and Nature Park;
- Corner Brook Stream Trail Association;
- Contribution to the Nature Conservancy of Canada.

Some of the specific agreements that CBPPL has entered to support recreation, include:

- Memorandum of Understanding with the International Appalachian Trail NL (creation of Special Management Areas);
- Agreement to use Hughes Brook Quarry as shooting range;
- Glynmill Inn Marsh Stewardship agreement;
- Upper Humber Wetlands Complex agreement;
- Cooks Marsh Wetlands Complex agreement;
Some of the other ways in which the company has supported recreation in the past includes:

- Sponsorship of a bowling league for current employees and retirees;
- Support of a local hockey team for employees;
- Providing ice time for employees and their families to go ice-skating (1 time per week);
- Providing pool time for employees and their families to go swimming (3 times per week);
- Support of the annual Log-A-Load Charity Hockey Tournament;
- Historically supported local schools and their associated sports teams;
- Support through the development of relationships with local recreation groups such as the Pasadena and Blomidon Ski Parks, as well as the Western Sno Riders, who provide recreational opportunities for residents and tourists;
- Support of outdoor recreational activities by providing access to the forest through the company’s open road access policy. This policy provides access to the forest for hunting, fishing, trapping and snaring, hiking, biking, recreational ATV use, etc.;
- Production of a local recreation map showing recreational areas and opportunities within the DFA;
- Accommodating the establishment of protected areas within the DFA, to provide places for recreational activities (e.g. Main River Waterway Provincial Park), and to preserve area for flora and fauna (e.g. Little Grand Lake Provisional Ecological Reserve).

The company’s support of recreation is a great contributor to the social well-being of the company’s employees, their families and residents of the province. By providing recreational opportunities the company is enhancing the quality of life of the people within and around the DFA. Recreational activities give employees an opportunity to build relationships with co-workers outside of work, and give them opportunity to meet and develop friendships with other members of the community. This helps to build community character and local camaraderie.

### 3.1.7 Support of Employee Volunteer Efforts within the Community

In addition to supporting recreational activities, the company has also shown significant support of its employees within the community by supporting volunteer efforts that its employees are involved in. By supporting such efforts CBPPL is enhancing the social benefits offered by other businesses and agencies, and is increasing social well-being in the community. Some examples of ways in which CBPPL has supported its employee’s volunteer efforts include:

- Support employees in the local swim for hope, to raise money for the Dr. H. Bliss Murphy Cancer Care Foundation and the swim clubs who are members of Swimming Newfoundland and Labrador;
Socio-Economic Impact Assessment (SEIA) Tools for CBPPL Woodland Operations

- Support of the Daffodil Campaign to raise money for the Canadian Cancer Society through employee donations;
- Support of the Muscular Dystrophy Foundation to raise funds for research and services for people with neuromuscular disorders through employee donations;
- Support of employee’s involvement in the annual Log-a-Load Charity Hockey Tournament to raise money for the Janeway Children’s Hospital.

### 3.1.8 Support of Other Charitable Initiatives

In the past, CBPPL has partnered with several other agencies in the region to support local charitable initiatives. Some of these initiatives raise money to support local charity groups (e.g. Rotary Music Festival), and others provide items to support such initiatives (e.g. local toy drive). Some of the more recent charitable initiatives that the company has been involved in are explained below.

**Woodlands Log-A-Load for Kids**

Log-A-Load for Kids Canada is an initiative of the Canadian Woodlands Forum. It is a national giving campaign through which loggers and other forest industry people donate the value of a load of logs, or any amount, to local Children’s Miracle Network-affiliated (CMN) hospital foundations and organize related fundraising events. One hundred percent of all contributions go to local CMN Canada hospital foundations.

To support the Log-A-Load initiative, CBPPL woodlands department hosts an annual hockey tournament to raise money, and all proceeds go to the Janeway Children’s Hospital. The 12th annual charity hockey tournament in 2016 raised over $61,000, increasing the total amount raised to date by this initiative to over $396,000.

**Newspapers and Education Program**

In partnership with the Western Star newspaper, CBPPL has been involved in an initiative to make newspapers available within schools. For this initiative, CBPPL has donated paper to the Western Star, who print newspapers which are placed in local schools.

**Rotary Music Festival**

In the past, CBPPL has made donations to the local Rotary Music Festival in Corner Brook. The Rotary Music Festival is an annual, non-competitive event run by a team of music educators and supporters. The objective of the festival is to provide an opportunity for students and educators in Atlantic Canada to meet, demonstrate, and share their musical achievement and creativity, to evaluate and reflect on musical achievements and creativity in a constructive and educationally focused way, to complement and enhance the teaching, learning, and growing process, and to foster and promote a lifelong interest in music as a basic human experience (Rotary International, 2011).
Local Food Bank

In the past, the company has made donations to the local food bank, operated by the Bay of Islands Ministerial Association. When CBPPL has received supplier awards from customers, it has donated any monetary proceeds associated with the awards to the local food bank.

Western Memorial Regional Hospital

In the past, the company has made significant contributions to the Western Memorial Regional Hospital (managed by Western Health) to support its local operations in the region. Western Health offers a broad range of health and community services to the people of the western region. The authority services a population of 79,460 residents with forty nine percent of the total population residing within the Corner Brook – Humber Valley area. CBPPL has a payroll deduction option which gives all employees the opportunity to contribute to the Western Memorial Hospital Fund, by directly donating a portion of each pay cheque to the initiative. In 2016, employee contributions totaled $10,678.

Local Toy Drive

CBPPL and its employees have made contributions to the local toy drive initiated by the local firefighters each Christmas. The toy drive is an initiative to ensure that all children in the area receive presents on Christmas morning. The group collects donated toys, and private donations which are used for the purchase of new toys. Using the donations, the group develops Christmas hampers, comprised of two new toys, combined with some used toys, which are distributed prior to Christmas morning. The Corner Brook firefighters have been putting together hampers for almost 40 years, and CBPPL has been a long-time contributor to the initiative.

Westside Tabernacle – Christmas Dinner Campaign

The company has also made donations to the Westside Tabernacle, to support their Christmas Dinner Campaign, aimed at providing a Christmas turkey dinner to residents and less fortunate families.

3.1.9 Special Projects and Initiatives

Aside from supporting education, recreation, volunteering and charitable events in the region, CBPPL has been involved in several other special projects and initiatives that support and enhance local capacity within the DFA.

3.1.9.1 Special Places Program

The Special Places Program is a project initiated during CBPPL’s Environmental Management System (EMS) review, which involved the development of a unique areas program. The company recognizes that there are areas within the DFA that provide far more than just a supply of fibre for the paper mill, and that special ecological, historical, cultural and sacred values exist and should be carefully managed (Corner Brook Pulp and Paper Ltd., 2009). The goal of the program is to locate, describe and place signage in locations that are special – i.e. places where people frequent to fish, camp or just spend time, or places that have features that make them unique and important.
CBPPL Woodland’s staff, along with the Public Advisory Committee, has developed a list of “special places” within the DFA, and intends on evaluating each of the identified sites to make decisions on how to maintain the special qualities or characteristics of the site. Each of the designated Special Places is considered significant for one or more of the following reasons:

- Areas containing rare plants;
- Wetland areas;
- Areas of value to animal species (bird, fish, invertebrate, mammal);
- Areas with unique geological features;
- Areas of sacred, cultural or historical significance;
- Areas containing high quality, representative or unusual forest types;
- Areas with aesthetic appeal (Corner Brook Pulp and Paper Ltd., 2010).

As of 2015, there were a total of 18 designated Special Places within or adjacent to the DFA.

CBPPL has identified that it is in best interest of the public and the company to support the Special Places program, and as such the company has developed criteria, values and objectives to help manage the special places within it most recent SFM plan. In areas identified as “special places”, the company has taken measures to ensure that the qualities of these areas are taken into consideration when operating in or adjacent to the areas (Corner Brook Pulp and Paper Ltd., 2010). By incorporating the Special Places Program into the current management strategy, CBPPL can decide how to maintain the special qualities or values of the sites, to the benefit of all, within the boundaries of the DFA (Corner Brook Pulp and Paper Ltd., 2010).

3.1.9.2 Ducks Unlimited

Ducks Unlimited Canada (DUC) is a national, private, non-profit organization, committed to conserving Canada’s wetlands. It has been active in NL since the early 1980’s. DUC’s mandate is to conserve, restore and manage wetlands and associated habitats for North America’s waterfowl. DUC’s partnership with CBPPL started in 1980 when DUC biologists began a wetland survey to identify potential sites for DUC’s wetland conservation areas in NL. This initial survey effort was facilitated by CBPPL through the assistance of Stu Weldon, former Woodland’s Manager for CBPPL. Stu Weldon’s involvement was instrumental in establishing the positive partnership between CBPPL and DUC.

CBPPL assisted DUC in conducting an initial assessment of key wetland areas on the west coast of NL and promoted Birchy Basin on the Humber River as an important area for waterfowl conservation. Following the establishment of a wetland restoration project at the Birchy Basin site, a tri-party stewardship agreement was signed by CBPPL, DUC and the province of NL to protect a substantial wetland complex and upland area (~25,000 hectares) near Birchy Basin on CBPPL managed lands. This area called the Upper Humber Wetlands Complex is reportedly the most productive waterfowl habitat in insular...
Newfoundland. This stewardship area is one of the largest established between forest industry and DUC anywhere in North America.

CBPPL has also been involved in several other DUC conservation projects on CBPPL managed lands. Table 4 shows the wetland conservation agreements for DUC project areas within the DFA.

**Table 4. Ducks Unlimited projects and agreements within the DFA.**

<table>
<thead>
<tr>
<th>DUC Wetland Projects within CBPPL forest management areas or land owned by CBPPL</th>
<th>Year Established</th>
<th>Number of hectares influenced</th>
<th>Type of Project</th>
<th>Conservation Agreement Signed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cook’s Marsh <em>(land managed by CBPPL)</em></td>
<td>1983</td>
<td>35.5 upland 15.0 wetland</td>
<td>Wetland Restoration*</td>
<td>Yes - 30-year agreement</td>
</tr>
<tr>
<td>Birchy Basin <em>(land managed by CBPPL)</em></td>
<td>1995</td>
<td>778 wetland ~25,000 wetland and upland</td>
<td>Wetland Restoration*</td>
<td>Yes - 40-year agreement plus tri-party stewardship agreement for Upper Humber wetland complex</td>
</tr>
<tr>
<td>Glynmill Marsh <em>(land owned by CBPPL)</em></td>
<td>1998</td>
<td>2.0 wetland</td>
<td>Wetland Restoration**</td>
<td>Yes - 30-year agreement</td>
</tr>
</tbody>
</table>

* Restoration project involved construction of a water control structure and fishway.  
** Restoration project involved construction of a water control structure.  
Note: All DUC projects on CBPP managed lands are designated ‘special places’ in their forest management plans.

CBPPL has also provided a wealth of in-kind support to DUC since its establishment in the Province. It has provided office space for at least two different DUC contract positions including use of internet, phone, printing, photocopying, mail services and all required office furnishings. This generosity has been integral to DUC’s ability to maintain staff in NL over the past few years. The company has also assisted with site maintenance for DUC projects and periodically provided transportation to DUC staff for annual inspection site visits.

In the past, CBPPL has agreed to allow DUC to host Project Webfoot field trips starting during June 2011 at the Glynmill Marsh, and has granted permission to build a dipping platform at the marsh for this purpose (CBPPL has also indicated that they will provide building materials for the dipping platform). In the fall of 2016, DUC moved their office to St. John’s, NL. CBPPL will continue to provide support to DUC if there is ever another requirement.

**3.1.9.3 Annual Forest Fair Participation**

The Annual Forest Fair has been held in Corner Brook for several years in the past, and CBPPL has participated in each event. This event is held to showcase the forest industry and all the businesses, professional expertise, products, and new innovations associated with the sector. The event is held over a 2-3 day period in May. In its initial opening in 2008, over 5,000 people attended the Forest Fair, including school students, families and other individuals.

In 2008, the Public Advisory Committee added an objective to inform the public about sustainable forest management practices, and three of the action items under this objective are commitments to annual events. During each of the forest fair events, CBPPL has set up a booth and various displays about the
company’s sustainable forest management practices, and has sponsored contractors to display woods equipment (Corner Brook Pulp and Paper Ltd., 2008).

### 3.1.9.4 Nominations and Other Projects

**Newfoundland and Labrador Environmental Awards**

In 2015, CBPPL was nominated for the Newfoundland and Labrador Environmental Awards by two organizations in the category for Business or Industry Leader. This category includes Entrepreneurs, businesses or private sector organizations involved in environmental enhancement or stewardship activities, through sound environmental and conservation management policy. They have adopted environmental policies, programs, and initiatives demonstrating social and environmental stewardship (Higgins, 2015). DUC being one of the organizations states “CBPPL consistently demonstrates a commitment to responsible forest management and adheres to a rigorous environmental management system. Their approach is to maintain healthy, productive forests to support competitive industry and operate in a manner that is environmentally and socially appropriate.” (Fequet, 2015). The second organization to nominate CBPPL for this award state “Over the past decade, through numerous initiatives, CBPPL has clearly demonstrated a commitment to sustainable forest management and sound environmental practices. It is with great pleasure the Association of Registered Professional Foresters and the Canadian Institute of Forestry – Newfoundland and Labrador Section nominates Corner Brook Pulp and Paper Ltd. for the Newfoundland and Labrador Environmental Awards.” (Higgins, 2015).

**LiDAR Enhanced Forest Inventory Project**

CBPPL is a strong supporter of the LiDAR Enhanced Forest Inventory Project for Atlantic Canada. LiDAR (light detection and ranging) is a remote sensing technique that is used to map objects in high three-dimensional detail. LiDAR systems measure the time it takes a laser pulse to reach an object and return to the sensor. Forests can be mapped using aerial LiDAR systems to get 3D data of forest cover, understory, vegetation and ground surface. Ground based or terrestrial LiDAR systems are used to capture the biophysical attributes and forest topology (Natural Resources Canada, 2016). This project is a collaboration with Natural Resources Canada and the Atlantic Canada Opportunities Agency. The research project will provide inventory solutions specific to operational needs and provide land managers and owners with the information needed to make informed decisions that will reduce costs and increase profits. By controlling the variability in fibre, CBPPL estimates a savings of $230,000 annually by each 1% substitution of high-density balsam fir in place of black spruce. This information will enable the mill to meet client demands such as strength (Natural Resources Canada, 2016).

### 3.1.10 Association with Model Forest

The Model Forest of Newfoundland & Labrador (MFNL) is not-for-profit partnership of communities, industries, organizations and governments working together to help build the province’s forest-based communities. (Model Forest of Newfoundland and Labrador, 2011). The partners of the Model Forest (see Table 5) have a shared vision of strong communities equipped and empowered to sustain our forest sector into the future. They are a group of diverse stakeholders working together to advance sustainable
forest management and initiate economic opportunities within rural areas (Model Forest of Newfoundland and Labrador, 2011). For 20 years, the MFNL (formerly called the Western Newfoundland Model Forest) has been the place where all forestry sector stakeholders have come together to deal with issues, collaborate with other resource managers, and find solutions to common issues in resource management. The partnership is expanding to become a truly provincial network, and will continue to develop solutions at a community level, where sound forest practices and economic development will have the most impact (Model Forest of Newfoundland and Labrador, 2011).

CBPPL has been a partner of the Model Forest of Newfoundland and Labrador since its beginning in the region in 1992. The company works together with other partners on specific projects to achieve balance in forest management planning and economic development. This allows the company and all other partners to provide and reap social and economic benefits from the forest while protecting its sustainability. Since 1992, CBPPL has been involved in a number of projects with the Model Forest, and have provided money, resources and expertise to implement projects in areas including wildlife protection and research, forest infrastructure mapping and inventories, environmental biodiversity, domestic and commercial wood harvesting, socio-economics, recreation, management planning, education and communications (Model Forest of Newfoundland and Labrador, 2011). In total, from 1998-2016, CBPPL has provided over $400,000 in funding to the Model Forest for various projects.

Table 5 shows the partners of the Model Forest of Newfoundland and Labrador, who work together and collaborate on various projects.

Table 5. Partners of the Model Forest of Newfoundland and Labrador.

<table>
<thead>
<tr>
<th>Partners of the Model Forest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canadian Forest Service – Natural Resources Canada</td>
</tr>
<tr>
<td>Canadian Institutive of Forestry</td>
</tr>
<tr>
<td>City of Corner Brook</td>
</tr>
<tr>
<td>College of the North Atlantic</td>
</tr>
<tr>
<td>Corner Brook Pulp and Paper Ltd.</td>
</tr>
<tr>
<td>Memorial University of Newfoundland</td>
</tr>
<tr>
<td>Newfoundland and Labrador Forest Service</td>
</tr>
<tr>
<td>Parks Canada – Gros Morne National Park</td>
</tr>
</tbody>
</table>

3.1.11 Contributions to Museums and the Preservation of History

In 1997 when the Corner Brook Museum & Archives was first preparing its exhibits for the grand opening, it was decided that one of the main permanent exhibitions should focus on the mill and its relation to the growth of Corner Brook (Sceviour, 2011). Per Kelly Sceviour, Assistant Curator with the museum, “CBPPL was approached to help with the development and research of the exhibit and the company was very helpful and enthusiastic about contributing to the museum”.

Socio-Economic Impact Assessment (SEIA) Tools for CBPPL Woodland Operations
In 1997 and 1998, then CBPPL manager Allan Vatcher donated a collection of artifacts and archival material to the museum including Sir Eric Bowater's desk and chair, as well as several industrial and clerical artifacts. The archival material includes aerial photographs, photos of mill construction, as well as other documents.

CBPPL also developed and donated a book "Hum on the Humber". These books were given to the museum to sell to visitors to generate more revenue. The "Hum on the Humber" outlines the history of the mill and its impact on the surrounding area.

In the past CBPPL has been a major contributor to the Corner Brook Museum & Archives through its donations of artifacts to the permanent collection and archives, in kind donations of books for resale, as well its contribution of information for exhibitions.

3.1.12 Communications

CBPPL has representation on the **Provincial Forest Sector Communication Working Group**, which prepares and guides communication strategies for the forest sector. The mandate of the Working Group is basically to provide information to the public about the forest sector, to communicate some of the positive things that are going on out there, and to address some of the misinformation that exists. In addition, it provides the public with the opportunity to provide information back to the working group, and promotes 2-way community.

The group is responsible for organizing both the Annual Forest Fair and the events that take place during National Forestry Week. It develops and promotes plans, workshops, fairs, teaching aids (e.g. Future from Forests Teaching Aid) and other communication aids to teach students, interested parties and the public about the forest industry and sustainable forest management practices.

3.1.13 High-Quality Employment

CBPPL provides a variety of high-quality jobs throughout the DFA, and employs many individuals from all over the Province. In total, CBPPL operations directly employ 524 individuals; 298 at the mill in Corner Brook, 200 in Woodlands, and 26 at Deer Lake Power (2015 budgeted numbers). These positions contribute significantly to the social well-being of the people within the DFA. It allows staff to live and work near their home, and provides revenue to purchase items that support a higher standard of living.

During the development of the sustainable FMP, the PAC developed Indicator 5.2.3 – Communities and Sustainability – DFA Wages. The value for this indicator is “fair wages for DFA workers”, and the objective it “to ensure that DFA workers are earning appropriate wages” for their position. In the company’s most recent SFM Plan, 2016, it states that CBPPL will continue to work with employees to maintain a high standard of employment, and will continue to negotiate in good faith with CEP Local 60N to maintain a Collective Agreement.

Wages and types of jobs associated with CBPPL will be discussed in further detail in Section 3.2.
3.1.14 Relationships with Communities in the DFA

Over many years of operations within the DFA, CBPPL has developed unique relationships with communities located with the area. The company regularly consults with a variety of communities to make management decisions and keep the public and communities aware of current and planned operations. Planning staff have sought input and opinions from the members and leaders of various communities to aid in sustainable forest management planning. In addition to working with communities within the DFA, CBPPL pays approximately $1.3 million in taxes, grants and fees within communities each year (Department of Finance, Taxation and Fiscal Policy Branch, 2010).

Three of the major communities in NL (Corner Brook, Deer Lake and Gander) have representation on the PAC and contribute significantly to sustainable forest management planning.

Throughout the DFA, CBPPL staff sits on various Watershed Management Committees (Corner Brook, Deer Lake, and Gander). These committees were formed initially to oversee the development of a watershed management plan in the respective communities, and now review development applications and other operations within the watershed boundaries. CBPPL plays an advisory role on these committees.

In Corner Brook, CBPPL contributed to the development of the most recent Watershed Management Plan, and works with the City to conduct forest operations within the watershed boundary, subject to conditions outlined in the plan.

In Deer Lake, CBPPL holds numerous meetings with community leaders to discuss forest operations and management plans. The Town of Deer Lake and CBPPL have had a long and productive history of working together to consult on forest operations. The company’s power plant is located within the Town and as such CBPPL pays significant taxes to it.

CBPPL also consults with the Town of Steady Brook for all plans to operate within the Steady Brook Watershed. Before operations are implemented, the company always consults with community leaders to identify and alleviate any concerns.

In all instances, CBPPL is very open and transparent with its plans to operate within the DFA. CBPPL staff make themselves available to meet with communities within the DFA upon request, to discuss forest operations and management planning.

3.1.15 Recognition of Environmental Values

CBPPL and its staff recognize that there are many other values on the landscape aside from wood fibre which must be considered and managed along with the forest resource. CBPPL Woodlands has established and implemented a procedure to identify its Environmental Aspects and identify those aspects which are significant and over which it has control (Corner Brook Pulp and Paper Ltd., 2010).

An Environmental Aspect is an element of an organizations activities, products, or services that can interact with the environment, and a Significant Environmental Aspect (SEA) is an environmental aspect
that has or can have a significant environmental impact (Corner Brook Pulp and Paper Ltd., 2010). CBPPL have implemented a semi-quantitative risk assessment classification system that identifies any possible environmental impacts. When identifying environmental aspects, forestry activities and services provided by contractors on company woodlands are considered. The process of identifying an environmental aspect involves considering each operation and identifying any potentially serious or irreversible environmental impacts associated with an operation, and identifying the environmental impacts associated with the environmental aspects. Several factors are considered when identifying environmental impacts, including exhaust emissions, potential for soil disturbance, brush mat establishment, potential for degradation of water quality, potential for fuel spill, retention of wildlife trees, maintenance of visual quality, recreational impact, fibre recovery, collection and disposal of garbage, and legal and other requirements / commitments.

Once an environmental impact is identified, the EMS review committee determines the significance of each impact using the semi-quantitative risk matrix. This matrix helps to determine whether an aspect is significant or not. Factors used to make this decision include frequency, severity, intensity, extent, legislation, other requirements, policy, stakeholder views, and strategy views. The risk matrix gives each aspect a numerical ranking based on the factors listed above. If the total calculated value of all impacts within an aspect in the environmental impact chart is greater than 40, then the aspect is significant. If the value is below 40, generally the aspect is not significant, unless the EMS review committee feels that the aspect should have been significant, in which case the committee can use professional judgment to make the aspect an SEA.

Identifying environmental aspects is an ongoing process for which the purpose is to utilize those identified as a basis for implementing its Environmental Management System (EMS). To date, the company has identified six SEA’s which include the following:

- Maintenance of visual quality;
- Potential for fuel spill;
- Fibre Recovery;
- Collection and disposal of garbage;
- Potential for degradation of water quality, and
- Potential for soil disturbance.

These SEA’s are used to develop environmental work instructions that guide how forest management operations take

![Figure 4. Standard Operating Procedure developed for leaving wildlife trees for biological diversity.](image_url)
place. Further to this, the environmental work instructions are used to develop standard operating procedures (SOP’s) for certain types of operations (see sample SOP in Figure 4). Through this process CBPPL has made significant efforts to identify how its operations can affect the environment. It minimizes environmental impacts by following the SOP’s and environmental work instructions on all its operations throughout the DFA.

3.2 The Economic Component

3.2.1 Introduction

The CBPPL mill is currently the only newsprint operation in the Province. The company is presently operating two paper machines with a combined capacity of 260,000 tonnes per year (Government of Newfoundland and Labrador, 2010). Production at the mill has been impacted by weak market conditions in recent years, and thus the company had to shut down paper machine #4 in March 2009, which resulted in the layoff of 70 mill and 60 woodlands workers in June 2009.

Although weak market conditions have caused the company to scale back its operations in the Province, it is still a major contributor to the Provincial economy. It provides hundreds of high-quality jobs in within the DFA, spends millions of dollars annually on goods and services, and contributes significantly to the Provincial gross domestic product (GDP). This section of the document will discuss the economic component of the company’s current operations. It will discuss all the things that the company is currently involved in that contributes to the local economy.

For this section of the report, financial data will be presented on an annual basis using 2015 data wherever available. To illustrate how the company contributes to the economy throughout the Province, economic data will be summarized and presented by Economic Zone.

Figure 5 shows the economic zones within the Province. See Table 6 for a full list of the economic zones in the Province.
3.2.2 Value of Goods and Services Purchased

In 2015, CBPPL spent a total of $124,214,438 on direct labour and other goods and services. This includes $41,985,218 in direct labour, and $82,229,220 for goods and services (Corner Brook Pulp and Paper, 2010).

Revenue spent on goods and services is distributed throughout various locations and communities within the Province. Table 6 shows the value of labour, goods and services purchased by CBPPL in 2015, by economic zone, and Figure 6 shows a statistical map for the value of total labour, goods and services purchased within the Province.
### Table 6. Spending by Corner Brook Pulp and Paper in 2015, shown by Economic Zone.

<table>
<thead>
<tr>
<th>Provincial Economic Zone</th>
<th>Economic Zone Title</th>
<th>Area</th>
<th>Value of Labour, Goods and Services Spent in 2015 ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Inukshuk EDC</td>
<td>Northern Labrador</td>
<td>$0</td>
</tr>
<tr>
<td>2</td>
<td>Hyron Regional EDC</td>
<td>Labrador City to Churchill Falls</td>
<td>$0</td>
</tr>
<tr>
<td>3</td>
<td>Central Labrador EDB Inc.</td>
<td>Happy Valley Goose Bay and South</td>
<td>$0</td>
</tr>
<tr>
<td>4</td>
<td>S/E Aurora DC</td>
<td>Cartwright to Port Hope Simpson</td>
<td>$0</td>
</tr>
<tr>
<td>5</td>
<td>Labrador Straits DC</td>
<td>Red Bay Area</td>
<td>$0</td>
</tr>
<tr>
<td>6</td>
<td>Nordic EDC</td>
<td>St. Anthony to Roddickton</td>
<td>$0</td>
</tr>
<tr>
<td>7</td>
<td>Red Ochre Regional Board</td>
<td>Rocky Harbour to Plum Point (Eastern Coast)</td>
<td>$1,144,231</td>
</tr>
<tr>
<td>8</td>
<td>Humber EDB Inc.</td>
<td>Corner Brook, Deer Lake, Hampden to Harbour Deep</td>
<td>$88,232,569</td>
</tr>
<tr>
<td>9</td>
<td>Long Range Regional EDB</td>
<td>Stephenville and Port au Port, Burgeo</td>
<td>$1,046,981</td>
</tr>
<tr>
<td>10</td>
<td>Marine and Mountain Zone Corp</td>
<td>Port aux Basques</td>
<td>$0</td>
</tr>
<tr>
<td>11</td>
<td>Emerald Zone Corp</td>
<td>Baie Verte, Springdale</td>
<td>$9,658,015</td>
</tr>
<tr>
<td>12</td>
<td>Exploits Valley EDC</td>
<td>Grand Falls and western part of Central</td>
<td>$1,732,444</td>
</tr>
<tr>
<td>13</td>
<td>Coast of Bays Corp</td>
<td>Harbour Breton</td>
<td>$0</td>
</tr>
<tr>
<td>14</td>
<td>Kittiwake EDC</td>
<td>Gander, Lewisporte, Terra Nova</td>
<td>$5,404,394</td>
</tr>
<tr>
<td>15</td>
<td>Discovery Regional DB</td>
<td>Clarenville, Bonavista</td>
<td>$9,334,839</td>
</tr>
<tr>
<td>16</td>
<td>Schooner Regional DC</td>
<td>Marystown, Burin, Grand Bank</td>
<td>$0</td>
</tr>
<tr>
<td>17</td>
<td>Mariner Resource Opps Network Inc.</td>
<td>Bay Roberts, Harbour Grace, Carbineer</td>
<td>$0</td>
</tr>
<tr>
<td>18</td>
<td>Avalon Gateway RED Inc.</td>
<td>Placentia, St. Bride's, Branch</td>
<td>$144,017</td>
</tr>
<tr>
<td>19</td>
<td>Capital Coast Development Alliance</td>
<td>St. John's, Mt Pearl, Conception Bay South</td>
<td>$7,516,947</td>
</tr>
<tr>
<td>20</td>
<td>Irish Loop REDB</td>
<td>Ferryland, Trespassey</td>
<td>$0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>Newfoundland and Labrador</strong></td>
<td></td>
<td><strong>$124,214,438</strong></td>
</tr>
</tbody>
</table>

*source for information: (Corner Brook Pulp and Paper, 2015)
3.2.3 CBPP Employment

As was discussed in Section 3.1, CBPPL provides a variety of high-quality jobs throughout the DFA, and employs many individuals from all over the Province. In total, CBPPL operations directly employs 524 individuals; 298 at the mill in Corner Brook, 200 in Woodlands, and 26 at Deer Lake Power (2015 budgeted numbers). These positions contribute significantly to the economy within the DFA. The money paid to employees allows them to purchase homes and other items necessary to live, and provides revenue to purchase items that support local businesses.

To date, DFA wages have been higher than the provincial average wage. In the company’s SFM Plan, 2010, CBPPL commits to continuing to work with employees to maintain a high standard of employment. The company will continue to monitor hourly rates paid to workers with non-union contractors to ensure that they are in line with the company’s policy whereby non-union rates are maintained at a percentage of union rates (Corner Brook Pulp and Paper Ltd., 2010). Table 7 shows the average annual earning for workers on the DFA, in Canada and in Newfoundland and Labrador. As can be seen, workers within the DFA receive wages that are above the provincial and national averages.
Table 7. Average annual earnings for workers on the DFA, in Canada, and in Newfoundland and Labrador.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>DFA</td>
<td>$34,585</td>
<td>$40,813</td>
<td>$41,276</td>
<td>$42,282</td>
<td>$49,756</td>
<td>$54,582</td>
<td>$55,026</td>
</tr>
<tr>
<td>Canada</td>
<td>$31,757</td>
<td>$36,896</td>
<td>$40,523</td>
<td>$41,538</td>
<td>$42,802</td>
<td>$43,959</td>
<td>$54,272</td>
</tr>
<tr>
<td>Newfoundland and Labrador</td>
<td>$24,165</td>
<td>$34,304</td>
<td>$40,781</td>
<td>$40,902</td>
<td>$44,619</td>
<td>$46,582</td>
<td>$52,324</td>
</tr>
</tbody>
</table>

Source: (Corner Brook Pulp and Paper, 2016)

In 2009, based on a report prepared by the Provincial Department of Finance, CBPPL operations directly supported 797 person years of employment. In addition to this, the company’s operations indirectly supported 719 person years of employment, and induced another 939 person years of employment for a total of 2,455 person years of employment in that year (Department of Finance, Taxation and Fiscal Policy Branch, 2010). However, employment levels are always subject to market conditions and may change from time to time. Updates to this section are pending and will be completed as soon as information is made available from the Department of Finance.

### 3.2.3.1 Mill

At the paper mill in Corner Brook, CBPPL directly employs 315 individuals who are directly involved with operations necessary for producing the end product. Staff are employed in a variety of positions which include Electricians, Mechanics, Electrical and Instrumental Supervisors, Mechanical Supervisors, Environmental Coordinators, Fiber Supply Superintendants, Wood Room Operators, Millwrights, Machinists, Pipe Fitters, Equipment Operators, Guards, Truck Drivers, Statisticians, Casual Laborers, and Cleaners.

### 3.2.3.2 Woodlands

Woods operations on the DFA directly employs woodlands staff in positions such as Planning and Development Superintendants, Operations Superintendants, Operations Supervisors, Environmental Management Representatives, Foresters, Forest Technicians, along with many others. Indirectly, the woodlands department employees a number of union and non-union contractors who have staff in positions such as Silviculture Supervisors, Harvest and Road Building Equipment Operators, Logging Truck Operators, Pre-Commercial Thinners, Tree Planters, Mechanics, Scaling Personnel, Forest Technicians, and Administrators to name a few. 200 individuals are directly employed by CBPPL woodlands.

### 3.2.3.3 Deer Lake Power

CBPPL also employs a number of individuals at the power plant in Deer Lake. Deer Lake Power Company has been supplying hydro-electric power to domestic and industrial centers of northwestern NL since the startup of the Deer Lake Power Plant on April 11, 1925 (Corner Brook Pulp and Paper Ltd, 2011). The power generation station directly employs 26 individuals in a variety of positions which include
Electricians, Mechanics, Control Room Operators, Maintenance Supervisors, Utility Operators and Technicians.

3.2.3.4 Value of Payroll

In 2015, CBPPL spent a total of $124,214,438 on direct labour associated with its woodland and mill operations. In 2009, CBPPL indirectly supported $48 million in labour income, and induced another $38 million. The total value of direct, indirect and induced labour income associated with CBPPL operations amounted to $167 million in 2009, according to a report prepared by the Provincial Department of Finance, Taxation and Fiscal Policy Branch (2010). Updates to this section are pending and will be completed as soon as information is made available from the Department of Finance.

3.2.4 Direct CBPPL Forest Operations

There are several forest operations associated with the company’s forest management within the DFA. Each type of operation provides opportunities for employment, and provides economic benefits to CBPPL, and to many other businesses who support and/or complete the operations.

The types of operations regularly conducted during forest management activities include:

- **Forest Harvesting:**
  - Approximately 4,000 hectares harvested on the DFA annually.
  - Harvesting is completed by 3 union and 1 non-union contractors.
  - Operations support approximately 125 jobs in these businesses.

- **Silviculture:**
  - Approximately 1,100 hectares planted on the DFA annually.
  - Approximately 250 hectares of pre-commercial thinning on the DFA annually.
  - Approximately 750 hectares of scarification on the DFA annually.
  - Planting is completed by one non-union contractor.
  - PCT is completed by approximately 10 union staff.
  - Scarification is completed by one non-union contractor.
  - Planting operations support over 20 seasonal jobs in these businesses.
  - Scarification operations support approximately 5 jobs in these businesses.

- **Road Building:**
  - Approximately 75 kilometers of road building on the DFA annually, as well as 35 kilometers of upgrades (2015 estimate).
  - Road Building is completed by 5 contractors.
  - Operations support approximately 20 jobs in these businesses.

- **Research:**
  - Research is generally coordinated by permanent staff and carried out by universities and other private businesses.
  - Currently 2 businesses involved in research with CBPPL. In the past CBPPL has dealt with various universities and agencies like ACOA, NSERC, FPInnovations, Paprican, and Forintek for research activities.
Planning:
- Management planning is generally completed by permanent staff and private consulting firms as required.

To implement each of these tasks, the company requires manpower (with specific expertise and experience), equipment, and support from other business (for local goods and services). To help meet the staffing and professional requirements of such operations, CBPPL has many union and non-union contractors who complete the work associated with growing, managing and providing wood fibre to the mill in Corner Brook. Each of these companies has staff to complete the operations, and utilize the services of even more businesses to support their operations. For this reason, the operations completed by CBPPL are extremely important to the local economy. Revenue is cycled from CBPPL through several business and individuals tied to the operation.

3.2.5 Other Commercial, Consumptive, Forest-Based Operations

CBPPL is also involved in some other commercial, consumptive, forest-based operations that support employment and generate revenue on the DFA. In most cases, the company is not actively involved in these operations, but it has made arrangements with other companies who either provide resources back to the mill, or make a trade of some product to support their own business. These operations/agreements include pulpwood purchases from Crown operators, biomass harvesting and purchase of hog-fuel, commercial and domestic firewood cutting, and sawlog arrangements with sawmills on or near the DFA.

3.2.5.1 Pulpwood Purchases from Crown Operators

CBPPL purchases pulpwood from a variety of Crown contractors to support its paper operations on the DFA. In 2011, the company purchased in the range of 130,000m$^3$ of pulpwood (purchase value of approximately $6.5 million) from these operators.

The pulpwood purchased supports nearly 40 small contractors throughout the Province, and gives 5 sawmills the opportunity to sell their pulpwood, which generates revenue for them to purchase sawlogs for their operations. This is very critical to the sawmill operators.

3.2.5.2 Sawlog-Pulpwood-Chip Exchange

In the company’s SFM plan, Indicator 5.2.1 sets a target to make 15% of its annual harvest levels available for sawlogs. CBPPL currently has sawlog/pulp fiber exchange agreements with two sawmills; Sexton Lumber in Bloomfield and Burtons Cove Logging in Hampden. These agreements give the sawmills access to approximately 86,000m$^3$ of sawlogs from which they will make around 36 mmfbm (million board feet), that they would otherwise not have access to. In return for the sawlog availability, the two companies provide CBPPL with an equal volume of pulp fiber (pulp chips, pulpwood or a combination of both) for the mill in Corner Brook. For the two companies currently receiving sawlogs from CBPPL, the agreements create lumber sales in excess of $5 million. Lumber prices remain high, thus having a positive effect on the sawmill industry again in 2015 (Corner Brook Pulp and Paper, 2016).
In 2015, 69% of Burton’s Cove Logging sawlog supply, and 22% of Sexton Lumber’s sawlog supply was provided because of timber exchange agreements (see Figure 7).

![Figure 7. Percent of sawlog furnish from CBPPL in 2015.](image)

The number of sawlog/pulp fiber exchange agreements, as well as the amount of sawlogs delivered to sawmills has reduced in recent years due to a downturn in the sawmill industry, and the closing of various mills within the Province. In 2008, CBPPL had agreements with 4 sawmills, including the two listed above, as well as Cottles Island Lumber and Eastwood Forest Products. Extremely low lumber prices in 2009 created difficult operating conditions for these sawmills, making their viability uncertain (Corner Brook Pulp and Paper Ltd., 2009). Due to reduced sawlog demand, Eastwood Forest Products closed in 2009, making the demand for sawlogs the lowest in the Province since 2001. However, despite the problems in the sawmill industry, CBPPL still delivered 58,000m$^3$ of sawlogs in 2009, 20,500m$^3$ of random-length sawlogs and 37,500m$^3$ of stud sawlogs (Corner Brook Pulp and Paper Ltd., 2009).

The decrease in log production in 2006, 2007, and 2008 was mainly due to reduced demand from sawmills, with a small impact from the reduced total harvest level. The effect of shutting down another paper machine in 2009 can be seen in the total annual harvest and the sawlogs exchanged. Lumber prices improved a little in the spring of 2010 but overall 2010 was a marginal year for profitability in the sawmill industry. Poor lumber markets continued in 2011 and into the first part of 2012, resulting in a sluggish demand for sawlogs. The second half of 2012 showed a steady improvement in lumber prices that continued into 2013 (Corner Brook Pulp and Paper, 2016).

Table 8 shows the volume of sawlogs (m$^3$) exchanged with integrated sawmills since 2001.
Table 8. Volume of sawlogs (m$^3$) exchanged with sawmills from 2001 – 2015.

<table>
<thead>
<tr>
<th>Year</th>
<th>Annual Harvest (m$^3$)</th>
<th>Sawlogs Exchanged (m$^3$)</th>
<th>(% of Total Harvest)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>787,700</td>
<td>61,000</td>
<td>7.8</td>
</tr>
<tr>
<td>2002</td>
<td>743,000</td>
<td>108,000</td>
<td>14.5</td>
</tr>
<tr>
<td>2003</td>
<td>889,200</td>
<td>106,000</td>
<td>11.9</td>
</tr>
<tr>
<td>2004</td>
<td>749,500</td>
<td>157,000</td>
<td>20.9</td>
</tr>
<tr>
<td>2005</td>
<td>829,000</td>
<td>115,000</td>
<td>13.9</td>
</tr>
<tr>
<td>2006</td>
<td>783,400</td>
<td>94,000</td>
<td>12</td>
</tr>
<tr>
<td>2007</td>
<td>699,400</td>
<td>83,000</td>
<td>11.8</td>
</tr>
<tr>
<td>2008</td>
<td>618,200</td>
<td>65,000</td>
<td>10.5</td>
</tr>
<tr>
<td>2009</td>
<td>434,322</td>
<td>58,000</td>
<td>12.6</td>
</tr>
<tr>
<td>2010</td>
<td>355,000</td>
<td>62,100</td>
<td>17.5</td>
</tr>
<tr>
<td>2011</td>
<td>463,889</td>
<td>60,856</td>
<td>13.1*</td>
</tr>
<tr>
<td>2012</td>
<td>391,529</td>
<td>57,500</td>
<td>14.7</td>
</tr>
<tr>
<td>2013</td>
<td>454,280</td>
<td>77,990</td>
<td>17.2</td>
</tr>
<tr>
<td>2014</td>
<td>503,488</td>
<td>71,875</td>
<td>14.3*</td>
</tr>
<tr>
<td>2015</td>
<td>546,374</td>
<td>86,405</td>
<td>15.8</td>
</tr>
</tbody>
</table>

* More sawlogs were available for exchange but were not purchased by sawmills (Corner Brook Pulp and Paper, 2016).

The company derives approximately 21% of its furnish in the form of pulp chips from sawmills through these agreements. These pulp chips are high quality since they come from the sapwood of trees and tend to have longer, stronger fibers. CBPPL directly purchases approximately 80,000m$^3$ of pulp chips each year, with a value of $4.7 million. These purchases are essential for the operation of three sawmills, since it gives them a market for their small diameter, lower quality trees. Since the pulp chips are already semi-processed, it also allows for extra maintenance downtime in the wood room.

### 3.2.5.3 Commercial and Domestic Firewood Operations

The company issues approximately 10-12 commercial firewood permits and approximately 900-1000 domestic firewood permits each year in areas that have been previously logged in FMD’s 5, 6, 15 and 16. The commercial permits are issued in specific areas upon request. The company allows the holders of commercial permits to cut hardwoods and sometimes softwoods depending on the request. These types of permits are generally kept under 100m$^3$. Domestic fuelwood permits are sold to individuals who wish to cut firewood on Company Limits. With a permit, individuals are permitted to harvest 25m$^3$ of hardwood or deadwood from previously logged areas or hardwood stands unless otherwise posted.
3.2.5.4 Hog Fuel Purchases

CBPPL purchases around 40,000 GMT (green metric tonnes) of hog fuel from sawmills annually, with a value of $1.5 million. This provides a waste solution and considerable revenue for sawmills, and saves CBPPL money by replacing more expensive oil in the heating boilers.

In addition to the hog fuel purchased, CBPPL utilizes approximately 60,000 m$^3$ of round-wood fuelwood annually, which it grinds for hog fuel with its own mobile hogger. This creates 50,000 GMT of hog fuel with a value of over $4 million.

CBPPL has also recently developed a partnership with the City of Corner Brook to operate a Waste Wood Diversion Program at the Wild Cove Landfill. At the site, CBPPL converts waste wood to fuel each year. This operation saves money on fuel, reduces the landfill cost, and reduces greenhouse gas emissions. The company also accepts used animal bedding from Chaffey’s Dairy Farm as hog fuel for the boiler.

In 2016, CBPPL received 4000 GMT to be used for hog fuel, from the widening of the Trans-Canada Highway through Terra Nova National Park.

In addition to the above initiatives, the company is always looking for hog fuel markets to support its operations (i.e. storm cleanups, land clearing, etc.).

All the biomass initiatives discussed in this section are replacing over 20 million liters of #6 Heavy Furnace Oil each year and reducing greenhouse gas emissions by around 100,000 tonnes per year over the life cycle of a forest rotation.

3.2.6 Other Commercial, Non-Consumptive, Forest-Based Operations

CBPPL supports several other commercial, non-consumptive forest-based operations throughout the DFA. The company operates on a land base that provides a wealth of opportunities for recreation and outdoor adventure type activities, and CBPPL has recognized that and shown support of businesses that provide these types of offerings.

Forest management operations provide access to the forest. Access is very important to companies that provide outdoor experiences; therefore, the company’s commitment to making forest access roads available to the public is very important to these businesses. Some examples of the businesses that benefit from CBPPL operations and from commitments made from them include hunting and fishing outfitters, and eco-tourism operators.

3.2.6.1 Outfitters

As recognition of the importance of the outfitting industry to the local economy of NL and the significant employment it creates, CBPPL has signed a memorandum of understanding (MOU) with the Newfoundland and Labrador Outfitters Association (NLOA). NLOA is a business organization whose members consist of hunting and fishing outfitters in NL. Its goal is to develop positive working relationships with all government departments and organizations that manage and/or impact the
outfitting industry; and continue to work to widen the outfitting industry and association for the betterment of its members and the province (Newfoundland and Labrador Outfitters Association, 2010).

The MOU outlines reasonable and mutually acceptable measures to reduce conflicts between wood harvesting and existing outfitting operations. CBPPL works with NLOA in various capacities. There is a member of NLOA on the public advisory committee who gives input for sustainable forest management planning, and CBPPL works with various outfitters during the 5-year operating plan team meetings to resolve isolated conflicts.

3.2.6.2 Eco-Tourism

CBPPL forest management operations provide many opportunities for eco-tourism based businesses throughout the DFA. The tourism sector in NL generates a lot of revenue each year and CBPPL works with business owners to allow them the opportunity to provide world class outdoor adventures to their clients. The company has an “open door” policy and is willing to meet and discuss any specific issue of concern from any stakeholder operating or wishing to operate on its DFA. This includes tourism operators, non-government organizations, and the public.

3.2.7 Commercial, Non-Forest-Based Companies

There are several commercial, non-forest-based companies that operate within the DFA. These companies do not utilize forest resources to support their businesses, but often rely on land within the DFA to operate. Some types of businesses are more involved in the forest management planning process and have regular dealings with CBPPL, including agricultural developments, and mining companies. These types of operations generally require land to operate, and often approach CBPPL and Crown Lands to request permits to develop land within the DFA.

CBPPL recognizes that infrastructure for economic development and for recreation will be required as society grows and develops and this may require land from company timber limits. Because of this the company developed a Crown Land Referral Policy for dealing with such requests.

Within the DFA, there are several agricultural developments, especially in Economic Zone 8 where the paper mill is located. CBPPL has a long-standing relationship with agricultural owners and has an “open door” policy and is willing to meet and discuss any specific issue of concern from any stakeholder operating or wishing to operate on its DFA. This includes agriculture and mining operators, non-government organizations, and the public.

There are also several mining and quarry permits throughout the DFA, and CBPPL has dealt with these applications through the Crown Land Referral Policy mentioned above, and through its Mineral Exploration Policy, in which the company recognizes the importance of mineral exploration and commits to work, to the best interest of all parties involved, with mineral exploration companies planning to operate on CBPPL timber limits. The company regularly reviews mining applications made to Crown Lands on the DFA, and works with individual mining operators to accommodate exploration and mining activities.
3.2.8 CBPP Economic Profile by Economic Zone

Table 9 presents an economic profile for CBPPL within several economic zones throughout the Province. Only the zones where the company currently has a presence have been shown. A map of all the economic zones on the island can be seen in Figure 5, on Page 32. In total, the company actively contributes to the local economy within 9 of the 20 economic zones within NL.

Although the company does not actively operate or employ full time staff in all the economic zones in Table 9, it does employ contractors who have staff within the zones, and therefore indirectly contributes to labour with various zones. It also spends money on goods and services within many of the zones, outside of the areas in which it operates. This helps to support local businesses in urban and rural areas throughout the province.

CBPPL has a major presence in two of the economic zones – Zone 8 (Humber Economic Development Board Inc.), and Zone 11 (Emerald Zone Corporation). In Zone 8, the company has its paper mill in Corner Brook, which is where most full-time staff (Woodlands and Mill workers) is employed. The company also conducts a variety of forest operations within the zone, and thus, large amounts of money are spent on employee wages and goods and services within the zone.

<table>
<thead>
<tr>
<th>Economic Zone</th>
<th>Operational Activities in Zone</th>
<th>Total Direct Labour Expense in Zone</th>
<th>Total Goods and Services Purchased in Zone</th>
<th>Total Spending in Economic Zone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nordic Economic Development Corporation (Zone 6)</td>
<td>None</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Red Ochre Regional Board Inc. (Zone 7)</td>
<td>Forest Harvesting, Tree Planting, PCT, Scarification, Road Building</td>
<td>$0</td>
<td>$1,144,231</td>
<td>$1,144,231</td>
</tr>
<tr>
<td>Long Range Regional Economic Development Board (Zone 9)</td>
<td>A lot of employees from this zone, Forest Harvesting, Tree Planting, PCT, Scarification, Road Building</td>
<td>$377,700</td>
<td>$669,281</td>
<td>$1,046,981</td>
</tr>
<tr>
<td>Marine &amp; Mountain Zone Corporation (Zone10)</td>
<td>Forest Harvesting, Tree Planting, PCT, Scarification, Road Building</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Emerald Zone Corporation (Zone 11)</td>
<td>Forest Harvesting, Tree Planting, PCT, Scarification, Road Building</td>
<td>$220,957</td>
<td>$9,437,059</td>
<td>$9,658,015</td>
</tr>
<tr>
<td>Exploits Valley Economic Development Corporation (Zone 12)</td>
<td>Forest Harvesting, Tree Planting, PCT, Scarification, Road Building</td>
<td>$0</td>
<td>$1,732,444</td>
<td>$1,732,444</td>
</tr>
<tr>
<td>Kittiwake Economic Development Corporation (Zone 14)</td>
<td>Forest Harvesting, Tree Planting, PCT, Scarification, Road Building</td>
<td>$164,528</td>
<td>$5,239,866</td>
<td>$5,404,394</td>
</tr>
<tr>
<td>Discovery Regional Development Board (Zone 15)</td>
<td>A number of agreements with local sawmills</td>
<td>$0</td>
<td>$9,334,839</td>
<td>$9,334,839</td>
</tr>
<tr>
<td>Avalon Gateway Regional Economic Development Inc. (Zone 18)</td>
<td>None</td>
<td>$36,527</td>
<td>$107,491</td>
<td>$144,017</td>
</tr>
<tr>
<td>Northeast Avalon Regional Economic Development Board (Zone 19)</td>
<td>None</td>
<td>$0</td>
<td>$7,516,947</td>
<td>$7,516,947</td>
</tr>
<tr>
<td>Irish Loop Development Board (Zone 20)</td>
<td>None</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
</tbody>
</table>
3.2.9 Local Community Networks

As was discussed earlier in this document, CBPPL has been a partner of the Model Forest of Newfoundland and Labrador since its beginning in the region in 1992. In 2007, the Model Forest initiated the Forest Community Program (FCP). This program is aimed at helping communities develop the tools, approaches and strategies that they need to respond to the new challenges facing Canada’s forest sector (Model Forest of Newfoundland and Labrador, 2011). Across Canada the FCP is a $25 million program that will provide initial five-year funding to 11 forest-based community organizations to develop and share knowledge, tools and strategies to address transitional challenges and capitalize on emerging forest-based opportunities (Model Forest of Newfoundland and Labrador, 2011).

As a partner of the Model Forest, CBPPL play an advisory role to help communities develop opportunities and strategies that will generate revenue and promote local jobs. David Chamberlain, CBPPL’s Woodlands Manager is on the Model Forest Board of Directors. Several other employees are also involved in specific initiatives.

The Board of Directors is the governing body that directs the actions of the Model Forest and the Management Group. Board members consist of senior officials or bureaucrats from federal, provincial and municipal governments, industry, and academia. The board serves a legal role for the organization. It’s the group that carries out the annual audit and provides the official approval for things like the annual work plans and past annual reports.

The Management Group has a more strategic role in terms of the management and direction of the Model Forest. Working with the General Manager, they evaluate needs, set the priorities, and develop the broad plans. They also ensure consistency in terms of overall direction on projects and communication initiatives. In the past, the management group have also set up working groups to deal with specific issues or projects. Members of the Management Group are representatives from the general membership of the organization.

Some of the Model Forest’s recent initiatives rely on CBPPL for their success. One such project involves the development of a community forest in the Main River area that may generate jobs, revenue for the communities in the area, and sawlogs for the sawmill in Hampden. CBPPL is very important in this initiative since they are the only market for pulpwood on the island that may be produced because of the project, and for wood chips and hog fuel generated by the sawmill.
Co-operative Agreements with Government

CBPPL works collaboratively with the government to implement sustainable forest management practices within the DFA and has cooperated with, and agreed to, several initiatives to meet requests made by the government in the past. The agreements are generally responses to requests made by the government, and often are aimed at supporting local businesses and communities, sustaining or enhancing employment in a region, or preserving land for other uses. CBPPL has always made efforts to accommodate the government’s requests focused on helping the economy. Some of the more recent agreements are explained below.

Cost Share Agreements

There are several cost share agreements that the company has with the Department of Natural Resources. These include:
Inventory Agreement – Forest inventory management.
Insect Control Agreement – Insect spray program.
Silviculture Agreement – Tree planting, pre-commercial thinning and site preparation.

In some cases, the Provincial Government runs the programs (e.g. insect spray program) to implement these operations, and the cost of the program is split with CBPPL. In other instances, the company implements the projects (e.g. tree planting) and the government provides a portion of the funds for the implementation. When the government runs the operation, the company only pays a portion of the cost for the area which is located inside the DFA. The proportion of revenue paid for the various projects have varied throughout the years, and usually are reviewed and revised every 3 years.

3.2.10.2 Timber Transfer Agreements

CBPPL has two timber transfer agreements in FMD’s 9 and 14 that are being reviewed in 2017. These agreements constitute a transfer of the management and cutting rights for hardwood tree species to the Crown, in areas where (1) hardwoods are not being utilized, and (2) where they Crown feels that management of illegal harvesting is a problem.

3.2.10.3 Timber Exchange Agreements

CBPPL has two timber exchange agreements with the Crown that are being reviewed in 2017. These agreements constitute an exchange of timber rights with Crown. The reason for such agreements is usually linked to logistics and feasibility of operations. One example is an exchange of property limits in the eastern end of the DFA. Timber rights for a particular area were transferred to Crown, to provide local sawmills with a timber resource, and in exchange CBPPL was given timber rights on land closer to the mill in Corner Brook.

3.2.10.4 Transfer Agreements

CBPPL has four transfer agreements with the Crown that are being reviewed in 2017. Transfer agreements take place when the Crown requests that timber rights be reverted to Crown for a particular reason or use. These types of agreements are generally requested by Crown to provide area for domestic harvesting, recreational activities, wildlife and ecological reserves, and protection of important viewscapes, among other things. Once a transfer agreement is in place, the Crown assumes all responsibilities for sustainable forest management practices. In many instances the Crown compensates the company for the transfer the timber rights for these purposes.

3.2.11 Issues

There are a number of issues that currently affect CBPPL’s ability to support the economy within the DFA. Some of the issues are related to the state of the pulpwood industry, the declining demand for newsprint, and exchange rates; other issues are linked to the specific forest management operations, and the workforce within the DFA. Below are some examples of the current issues that affect the company’s ability to provide and sustain economic opportunities.
**Foreign Exchange Rates:**

When the Canadian dollar was very strong, it outweighed its US counterpart. For manufacturers and exporters such as CBPPL, a strong Canadian dollar had a negative effect on the profitability of the operation. When the Canadian dollar was less than the US dollar in the past, companies that export product to the US (thus being paid in USD) were receiving more money for their product. Since the Canadian dollar gained strength, exporters were receiving less profit for the same product, and in some cases had to decrease their price to remain competitive with other businesses south of the border.

After rebounding throughout most of 2008, newsprint prices began to trend downward in December of that year – falling from a peak of US$775/tonne in November 2008 to just US$435/tonne in August 2009 (Government of Newfoundland and Labrador, 2010). The adverse impacts of the price declines were exacerbated by appreciation of the Canadian Dollar, putting further constraints on the competitiveness of Canadian newsprint manufacturers (Government of Newfoundland and Labrador, 2010).

This problem has had a negative effect on CBPPL for many years, and with the Canadian dollar at $1.02 USD at the time of writing this original document, the problem has improved.

**Land Use Pressures:**

The company’s DFA has been reduced significantly in recent years due to land use pressures and requests from various sources. Within the Province, there are a number of groups that place pressure on CBPPL to cease harvesting within the DFA (i.e. within viewshed areas, watershed areas, near hunting camps, etc.). In addition, there are a number of other developers who seek land to establish or expand their operations, including agriculture, mineral exploration, quarry’s, commercial development and housing sub-divisions.

**Markets:**

The demand for newsprint paper has reduced significantly in recent years, and CBPPL and other paper producers have felt a major impact as a result. U.S. newsprint consumption declined from 11.9 million tonnes in 2000 to 6.8 million tonnes in 2008, a drop of 43%. This downward trend continued in 2009; during the first eight months of that year U.S. newsprint consumption declined by 25.6% (Government of Newfoundland and Labrador, 2010).

**Labour Migration:**

Labour migration has been a major issue faced by many businesses and sectors here in the province. In recent years, many of the skilled trade’s people and other professionals from NL have relocated to Western Canada in search of higher paying positions. The result has been a general lack of qualified professionals able to work and complete important tasks within businesses. Many companies, including CBBPL are struggling to find and keep skilled professionals and laborers working in the province.
Certification-related Issues:

More and more publishers are now requesting that their papers come from certified forests than ever before. CBPPL is currently certified under the Canadian Standards Association (CSA) and the International Organization for Standardization (ISO), and is investing a great deal into becoming re-certified by the Forest Stewardship Council (FSC). The process of becoming certified under any body is generally long and arduous, and involves a lot of company time and money. CBPPL is continuing to take strides to become certified because the market is demanding it, and because it is in line with the company’s commitments to sustainable forest management practices.

Quality Requirements:

Managing the strength and quality of paper has been an ongoing challenge for CBPPL. To provide clients with higher quality paper, CBPPL must optimize species composition and blending, as well as improve the pulping and paper-making processes. Controlling the amount of spruce and fir going into the pulp process has been a challenge.
4.0 SOCIO-ECONOMIC ASSESSMENT (SEIA) TOOLS APPROPRIATE FOR CBPPL

The goal of developing socio-economic tools appropriate for CBPPL is to establish baseline data that can be incorporated into decision support systems and to use the data as a basis for future comparison of some major deviation from normal-course activities of the company. It is important to identify the types of information that should be obtained during a SEIA, and what tools decision-makers should use to collect the data.

To utilize specific tools to evaluate the socio-economic impacts of decisions, it is important to identify the key indicators to evaluate, those that will accurately reflect the change in characteristics that they represent. Beckley, et. al (2002) state that the challenge in measuring community sustainability is identifying meaningful and useful indicators for monitoring change over time. Like evaluating community sustainability, selecting and evaluating the most appropriate indicators for this SEIA will help the company to better evaluate the impacts of major decisions, and will allow the assessment process to be more efficient.

This section of the document will present the social and economic tools that can be utilized to collect information during a SEIA. It will present the social indicators and the economic indicators that can be utilized, and will provide baseline information for the indicators at the time of writing this document where information is available.

4.1 The Social Tools

There are several tools and indicators that can be utilized to evaluate the social impact of a major change from normal-course activities in specific areas throughout the DFA. Social indicators are statistics collected over time that can be used in policy and management decisions (Force & Machlis, 1997) in (A. den Otter & Beckley, 2002). They are used to illustrate the changing social conditions of a community to see if it is improving or declining (A. den Otter & Beckley, 2002). Social impact assessments help in (1) understanding and better anticipating the possible consequences for human populations and communities of social change resulting from proposed policies, plans, programs or projects and (2) identifying alternatives to a proposed action, as well as mitigation measures to alleviate possible negative impacts (Beckley & Aubé, 2006).

Social indicators are a vital component of the SEIA process because they can be used to evaluate how people and their quality of life will be affected in each area (for better or worse) if some major deviation takes place in CBPPL’s operations. During the last few decades, two scientific approaches to measuring quality of life have been initiated – “objective” indicators, and the measurement of subjective well-being (Diener & Suh, 1997). Evaluating indicators is an adequate way to place value on the affect that management decisions will have. Force and Machlis (1997) point out several advantages of indicators, including:
1. Comparisons between regions, which can help in deciding where certain management actions are appropriate.
2. Identification of unique conditions within one region.
3. Comparison of changes over time using historic data (i.e., employment).
4. Early identification of potential problems, such as regions at risk of increased unemployment.
5. Evaluation of responses to management decisions.

This section of the report will discuss the quantitative (objective) and qualitative (subjective) social indicators that can be evaluated to understand the impact to social well-being within the DFA, given some major change. It will also utilize the tools to give a snapshot of the social variables within the DFA at the time of writing this document.

4.1.1 Quantitative Indicators

Quantitative social indicators are those that can be measured, and are derived from data sets that record social structural variables. Quantitative statistical information is vital to an open and democratic society. It provides a solid foundation for informed decisions by elected representatives, businesses, unions and non-profit organizations, as well as individual Canadians (Federal Government of Canada, 2010). These indicators, once measured, accurately portray many social aspects within communities, and can be utilized to evaluate how they will deviate if there is a change in normal-course activities.

There are a number of quantitative indicators that can be used during a SEIA process to measure social well-being. The information for these indicators is regularly updated and is readily available through several sources. Two of the more notable sources for quantitative information for this purpose are (1) the Newfoundland and Labrador Statistics Agency, and (2) Statistics Canada.

The Newfoundland and Labrador Statistics Agency is the central point within Government for the collection, management and distribution of economic, social, demographic and fiscal data relating to Newfoundland and Labrador (Newfoundland and Labrador Department of Finance, 2011). It is a public-wide, online data retrieval system for locating, sharing and exchanging information related to the province and its people, providing users with a single comprehensive source of community, regional, and provincial data that would normally not be readily available, too costly to obtain, or too time consuming to retrieve and compile (Government of Newfoundland and Labrador, 2011).

The Statistics Agency website includes Community Accounts, an innovative information system providing users at all levels with a reliable source of community, regional, and provincial data (Government of Newfoundland and Labrador, 2011). Community Accounts contains a wealth of information for a SEIA. Information can be summarized by geographic region (i.e., community, economic zone, rural secretariat region, Province, school district, etc.). For a specific geographic region, it contains objective data on such topics as demographics, income, consumption and leisure, employment and working conditions, health, education, literacy, skills and training, as well as community safety and social vitality.
Statistics Canada, a member of the Industry Portfolio, produces statistics that help Canadians better understand their country—its population, resources, economy, society and culture (Federal Government of Canada, 2010). Eleven federal departments and agencies make up the Industry Portfolio. Together, these organizations are uniquely positioned to further the government's goal of building a knowledge-based economy in all regions of Canada and to advance the government's jobs and growth agenda (Industry Canada, 2010). In addition to conducting a Census every five years, Statistics Canada has about 350 active surveys on virtually all aspects of Canadian life (Federal Government of Canada, 2010).

In addition to the Newfoundland and Labrador Statistics Agency and Statistics Canada, Beckley and Aubé (2006) identify a number of other potential sources and types of data (Table 10) that can be collected during a SEIA for evaluating social impacts.

<table>
<thead>
<tr>
<th>Sources of Data:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Statistics Canada</td>
</tr>
<tr>
<td>- Newfoundland and Labrador Statistics Agency</td>
</tr>
<tr>
<td>- Natural Resources Canada, Canadian Forest Service</td>
</tr>
<tr>
<td>- Other Federal Government Departments</td>
</tr>
<tr>
<td>- Provincial Government Departments</td>
</tr>
<tr>
<td>- Municipalities</td>
</tr>
<tr>
<td>- Regional Planning Agencies</td>
</tr>
<tr>
<td>- Special Interest Organizations</td>
</tr>
<tr>
<td>- Wood Marketing Boards</td>
</tr>
<tr>
<td>- Universities</td>
</tr>
<tr>
<td>- Libraries</td>
</tr>
<tr>
<td>- Economic Development Groups</td>
</tr>
<tr>
<td>- Business and Industry (company records and files)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Types of Data:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Demographics, income, poverty, divorce, etc.</td>
</tr>
<tr>
<td>- Forest-dependence levels for communities</td>
</tr>
<tr>
<td>- RCMP – crime data</td>
</tr>
<tr>
<td>- Labour and Employment Data</td>
</tr>
<tr>
<td>- Tax Rates, Crime, etc.</td>
</tr>
<tr>
<td>- Housing Stats,</td>
</tr>
<tr>
<td>- Food bank clients, shelter occupants,</td>
</tr>
<tr>
<td>- # woodlot owners, # active woodlot owners,</td>
</tr>
<tr>
<td>- Business startups, economic diversity data,</td>
</tr>
<tr>
<td>- Employment levels (trends over time)</td>
</tr>
</tbody>
</table>

There are many social indicators that can be evaluated during a SEIA, and the type and abundance of those indicators will be determined by the event that triggered the SEIA. For example, if the company decides to cease operations in an economic zone, the SEIA may focus on the evaluation of how many people are directly employed because of CBPPL operations in the area, and what the social impact is on
the loss of those jobs. If the SEIA involves evaluating the potential to open a new processing facility in the same location, the SEIA may be more focused on the number of individuals who are trained and capable to fill positions in the area. Each SEIA will require the identification of appropriate indicators to evaluate social impacts. This will be discussed in more detail in Section 5 of this report.

The following two sections will provide a summary of the current quantitative social indicators within the Economic Zones in which CBPPL currently operates, or purchases goods and services.

### 4.1.1.1 Economic Zone Data

Economic zone data can be summarized and compiled on the Community Accounts section of the Newfoundland and Labrador Statistics Agency website. For this report, the author has chosen to summarize 6 social variables associated with communities and economic zones throughout the DFA. These variables were identified in work by Parkins and Beckley (2001) and are believed to be good indicators of community sustainability. Keep in mind that based on the event that triggers a SEIA, it may be necessary to consider different or additional indicators for this purpose. See Section 5 for additional information on selecting appropriate indicators for specific assessments.

The following baseline or “status quo” indicators will be presented in this section for the economic zones in which CBPPL currently operates:

1. Population
2. Average Income Levels
3. Poverty Rates
4. Educational Attainment
5. Migration Rates
6. Employment Conditions

All information for this section was compiled using Community Accounts (Newfoundland and Labrador Statistics Agency) and Statistics Canada. The information presented in this section, as well as additional regional data is presented in Appendix A.

**Population**

CBPPL currently operates in 5 economic zones throughout the Province, and purchases goods and services in another 4 zones. During a SEIA, it is important to evaluate the communities and economic zones that will be affected by management decisions. In total, approximately 394,740 people live in the economic zones in which the company operates and/or purchases goods and services from. This represents over 94% of the total population of NL. Figure 8 shows the population within each economic zone throughout the DFA and surrounding area.

Active forest management operations occur within economic zones 8, 9, 11, 14 and 18. The majority of the population within these economic zones is in Zone 19. Zone 19 contains the City of St. John’s (population 196,966) and a number of other communities that make up a large majority of the people living within the province. CBPPL’s contribution to Zone 19 is relatively low, thus the population of many
of the other zones is more important for this purpose. Table 11 shows the population in all economic zones which CBPPL currently operates.

Table 12. Population of economic zones (2011 figures) in which CBPPL currently operates.

<table>
<thead>
<tr>
<th>Economic Zone</th>
<th>Total Population within Economic Zone (2011 Figures)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nordic Economic Development Corporation (Zone 6)</td>
<td>8,340</td>
</tr>
<tr>
<td>Red Ochre Regional Board Inc. (Zone 7)</td>
<td>8,330</td>
</tr>
<tr>
<td>Humber Economic Development Board Inc. (Zone 8)</td>
<td>41,125</td>
</tr>
<tr>
<td>Long Range Regional Economic Development Board (Zone 9)</td>
<td>21,275</td>
</tr>
<tr>
<td>Marine &amp; Mountain Zone Corporation (Zone 10)</td>
<td>8,605</td>
</tr>
<tr>
<td>Emerald Zone Corporation (Zone 11)</td>
<td>13,745</td>
</tr>
<tr>
<td>Exploits Valley Economic Development Corporation (Zone 12)</td>
<td>26,190</td>
</tr>
<tr>
<td>Kittiwake Economic Development Corporation (Zone 14)</td>
<td>46,275</td>
</tr>
<tr>
<td>Discovery Regional Development Board (Zone 15)</td>
<td>27,950</td>
</tr>
<tr>
<td>Avalon Gateway Regional Economic Development Inc. (Zone 18)</td>
<td>6,525</td>
</tr>
<tr>
<td>Northeast Avalon Regional Economic Development Board (Zone 19)</td>
<td>203,325</td>
</tr>
<tr>
<td>Irish Loop Development Board (Zone 20)</td>
<td>7,975</td>
</tr>
</tbody>
</table>
Figure 8. Population of economic zones in which CBPPL currently operates or contributes money to the economy.

Average Income Levels

Average income levels (gross income per capita) throughout the economic zones vary considerably from $21,500/year in Zone 11 to $33,000/year in Zone 19. In zones where CBPPL currently operates, the average gross income per capita ranges from $21,500/year - $27,300/year. The average gross income per capita throughout these zones is $27,975/year, compared to the provincial average of $27,200/year.

Figure 9 shows the average gross annual income per capita for 2011.
Poverty Rates

Although many people may have adequate incomes to live comfortably in resource-dependent communities, there are usually some who live in relatively disadvantageous conditions (A. den Otter & Beckley, 2002). The ratio of these disadvantageous households and individuals to more prosperous ones is an indicator of overall well-being (A. den Otter & Beckley, 2002). The total percent of individuals in receipt of income support assistance has been used to summarize poverty within the economic zones. Figure 10 shows the percent of people that were on income support assistance within each economic zone in 2011.

Poverty rate ranges considerably within the economic zones, and is heavily dependent on the employment opportunities within each zone. The percent of people in receipt of income support assistance ranges from 5.6% - 19.2%. The provincial average is 10%.

![Figure 10. Percent of people in receipt income support assistance within each economic zone (2011 figures).](image)

Educational Attainment

In order for communities to survive and flourish, they must be able to adapt and change (A. den Otter & Beckley, 2002). Human capital measures the collective ability of a community to anticipate and respond to changes that may come from outside the community (A. den Otter & Beckley, 2002). Educational attainment is a good indication of human capital in a region, because if citizens are better educated, they will likely have the skill sets and ideas necessary to build sustainable communities and respond to change.

Within the province, approximately 74.9% of people aged 25-64 have received at least a high school diploma (as of 2011). In the economic zones in which CBPPL contributes, this figure ranges from 63.4%
in Zone 10 to 89.7% in Zone 19. Figure 11 shows the educational attainment within each economic zone in 2011.

![Figure 11. Educational attainment within each economic zone (2011 figures).](image)

**Migration**

Migration is a good indicator of the current and forecasted work force within an area, and a good indicator of social well-being. A negative net migration usually indicates issues with employment, poverty or low living standards, since people are generally leaving to fulfill their families living requirements. A positive net migration shows that something is drawing people to the area, and is generally an indication of good things. Over the past number of years, the province has witnessed a negative net migration. This is largely due to people moving to western Canada to seek higher paying jobs.

In NL in 2014, the province had a migration level of 0.38% (1945 people). In areas where CBPPL currently operates, the migration rate ranged from -1.80% (-145 people) in Zone 6 to 1.04% (275 people) in Zone 12 in 2014.

**Employment Conditions**

Employment measures are likely the most often used indicators of sustainability because of their importance to community well-being (A. den Otter & Beckley, 2002). Simply put, if people cannot find jobs to support their livelihood, then they are forced to leave unless they receive employment insurance or income support assistance. In resource-based communities, this can be especially problematic as

<table>
<thead>
<tr>
<th>Economic Zone</th>
<th>Migration (2014)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zone 6</td>
<td>-1.80%</td>
</tr>
<tr>
<td>Zone 7</td>
<td>-0.88%</td>
</tr>
<tr>
<td>Zone 8</td>
<td>0.34%</td>
</tr>
<tr>
<td>Zone 9</td>
<td>-1.01%</td>
</tr>
<tr>
<td>Zone 10</td>
<td>0.16%</td>
</tr>
<tr>
<td>Zone 11</td>
<td>0.13%</td>
</tr>
<tr>
<td>Zone 12</td>
<td>1.04%</td>
</tr>
<tr>
<td>Zone 13</td>
<td>0.21%</td>
</tr>
<tr>
<td>Zone 14</td>
<td>-0.26%</td>
</tr>
<tr>
<td>Zone 15</td>
<td>0.09%</td>
</tr>
<tr>
<td>Zone 16</td>
<td>0.94%</td>
</tr>
<tr>
<td>Zone 17</td>
<td>0.81%</td>
</tr>
</tbody>
</table>
these indicators can experience sudden changes due to global market forces (A. den Otter & Beckley, 2002). Although there has been some net loss in outlying communities in recent decades, based on research by A. den Otter & Beckley (2002), many people are apparently willing to trade off income and income-earning potential for other aspects of quality of life they feel are unique to the region (i.e. the ability to cut wood to heat their homes, hunt big game for food, etc.).

In the entire year of 2011 within the province, 50.7% of people age 15 and above reported some form of employment income throughout the year. This average ranges within the economic zones shown from 35.3% in Zone 9 to 61% in Zone 6. In 2011, approximately 17.8% of individuals in the province were in receipt of employment insurance at some point throughout the year. This value ranges from 7.87% in Zone 19 to 42.98% in Zone 7 in the same year. Figure 12 shows the percent of people reporting employment in 2011 within each economic zone, as well as the percent of people in receipt of employment insurance during 2011.

![Figure 12. The percent of people reporting employment, and the percent of people in receipt of employment insurance within each economic zone in 2011.](image)

### 4.1.1.2 Company Data

Company data can be obtained and summarized to measure the level of social interaction the company has had with organizations and members of the community over a given period of time, and its contribution to social well-being. During a SEIA, data can be summarized to show the contribution to social well-being.

As is discussed in Section 3, CBPPL contributes significantly to the social well-being within the area that it operates. The company has a planning process that involves the public and interested stakeholders in sustainable forest management; it interacts with several schools to support forest education, is involved with a number of associations involved in forest management (i.e. Model Forest of Newfoundland and
Labrador), and contributes to, and promotes a number of special initiatives (i.e. Ducks Unlimited, Forest Fair, KEY Program) throughout the Province and beyond.

CBPPL tracks interactions with individuals and organizations through its external communication records. This record is maintained to track the interactions of CBPPL woodlands staff with the public. The record tracks requests for tours, visits, meetings, etc., and starting in 2010 the external communication record began tracking CBPPL initiatives of public awareness activities (Corner Brook Pulp and Paper Ltd., 2010). It is a great tool for quantitative social data collection for the company.

Table 3 on page 17 shows the status of activities that took place in 2015. Section 3.1 provides a summary of all the things that CBPPL has is involved in (past and present) that supports social well-being in the areas that it operates. All the applicable information should be summarized and presented during a SEIA, depending on the action that triggered it.

Some of the more prominent indicators that can be measured and presented during a SEIA include:

- Number of field tours given by CBPPL staff;
- Number of school visits by CBPPL staff;
- Number of schools the company is affiliated with;
- Number of annual events attended;
- Efforts to include public in decision making (# meeting held, #people reached);
- Number of employees/other individuals sponsored for events and fundraising;
- Sports teams / sporting events sponsored.

Information for these indicators can be found in Section 3.1 of this document, or in company records.

### 4.1.2 Qualitative Indicators

Since quantitative indicators may not be able to capture the complexity of meanings and experiences of community residences (A. den Otter & Beckley, 2002), it is important to evaluate qualitative indicators during a SEIA, which may offer more insight into issues of overall community well-being and sustainability. Qualitative indicators are based on the opinions and feelings of the groups and individual people within an area (or the ‘subjective’ experience of their lives), and provide a measure of community cohesion, satisfaction and sense of place. These values, although hard to quantify can provide valuable information for a SEIA.

Diener & Suh (1997) state that subjective (qualitative) well-being consists of three interrelated components: life satisfaction, pleasant affect, and unpleasant affect. They go on to say that ‘affect’ refers to pleasant and unpleasant moods and emotions, whereas ‘life satisfaction’ refers to a cognitive sense of satisfaction with life. As the term indicates, subjective well-being is primarily concerned with the respondents’ own judgement of well-being, rather than what policy makers, academics, or others consider important (Diener & Suh, 1997). Because of this, qualitative indicators can be challenging to collect, quantify and validate.
According to A. den Otter and Beckley (2002), it is possible to measure qualitative indicators using statistical procedures in much the same way as quantitative indicators. In a report entitled \emph{This is Paradise}, the authors explain how planners can measure qualitative indicators using quantitative methods. They conducted surveys during a study to ask people about their perception of several indicators related to social well-being. While it is realized that qualitative measures cannot be analyzed as easily, it was found that this procedure can provide context for each indicator and bring in social and economic perspectives (A. den Otter & Beckley, 2002).

In future SEIA’s, it is recommended that those preparing the assessment use a methodology similar to A. den Otter and Beckley (2002) in \emph{This Is Paradise} for collecting information on subjective indicators. The report outlines a procedure for collecting information on subjective indicators using interviews and opinion surveys (qualitative methods). This will enable planners to view the subjective feelings of people within the affected areas, and will enable them to develop mitigation measures to accommodate people’s concerns.

During the SEIA, information should be collected from individuals and groups of people that are forecasted to be within the affected region. The questions and information collected should relate (1) to their perception of social well-being at that time (their “base-case”) and (2) to their perception of social well-being if there is a major change from normal-course activities. Surveys should be held with local stakeholders who are likely to be affected by the change, and as well with members of the public who are within the affected area.

### 4.1.2.1 Interviews and Opinion Surveys

Information on qualitative social indicators can be collected using interviews and opinion surveys with local stakeholders and the public. Before conducting these types of surveys, it is important to identify the qualitative indicators that are important for the SEIA being conducted. Also, it is important to identify a process for selecting interviewees to ensure that the selection represents the ‘average’ feeling of all groups and individuals in the area. There are a number of methods and procedures for selecting interviewees. The important thing is to ensure that the methodology allows for collection of data that will represent the whole of society within the affected area.

Each interview should follow a semi-structured format to ensure that all necessary information is collected, and that each respondent has had the opportunity to elaborate on their views and opinions. During their interviews, A. den Otter and Beckley (2002) had a series of common questions that were asked to all respondents, with additional opportunity for each interviewee to elaborate on an area of interest to them. This enabled them to fully collect information for the respondents feeling on all issues.

### 4.2 The Economic Tools

Economic tools can be used to evaluate the impact that a proposed change, or major deviation from normal-course activities has on the economy within an area. Economic impacts are those that affect the level of economic activity in an area - either positively or negatively. They directly affect the economic well-being of area residents and businesses by changing employment levels and retail expenditures. An
economic impact assessment traces spending through an economy and measures the cumulative effects of that spending. The economic tools outlined in this section will help decision makers to understand the economic impacts of proposed changes in the company operations will be during a SEIA. These tools can be measured quite accurately, since they are generally tracked and monitored over time. The economic tools that are available during a SEIA include company financial records (human resources, company expenditures), government records and reports (industry data and GDP contributions), as well as regional economic development zonal data (value of jobs and businesses in the DFA). These sources should be used and analyzed during a SEIA.

A SEIA will involve using the tools shown above to complete an economic impact assessment. The key steps in estimating the economic impacts include:

1. Describe the current economic situation, including estimates of direct income and employment;
2. Estimate the indirect and induced income and employment effects based on employment or income multipliers, and;
3. Forecast potential future uses of resources and estimate potential future jobs and income that may be generated by the plan area resources (British Columbia Ministry of Agriculture and Lands, 2007).

As with the social impact assessment outlined in the previous section, it is important to identify indicators for the economic analysis. Indicators are very important because they allow comparisons and analysis of economic performance between regions, and enable decision-makers to make predictions of future performance.

Most of the economic tools that can be used during a SEIA relate to the company’s economic impact throughout the Province, including the financial contribution to GDP, value of wages throughout the DFA, and the value of goods and services purchased. These variables are economic indicators that can be measured during a SEIA (all are readily available from the company). They are easy to measure, and provide instant value of CBPPL operations within economic zones and communities throughout the DFA.

4.2.1 Quantitative Indicators

Most indicators used during an economic analysis will be quantitative, and can be measured and forecasted. There are a number of quantitative indicators that can be used during a SEIA process to measure economic well-being throughout the DFA, and to evaluate economic impacts associated with CBPPL’s operations. The information for these indicators is regularly updated and is readily available through a number of sources.

CBPPL financial data is the best source of information for economic indicators relating to the company’s financial impact throughout the DFA. The company tracks and monitors data for payroll, goods and services purchased, taxes paid, etc., and has the information readily available for inclusion in a SEIA.

The Provincial Department of Finance is also a good source for data and data analysis for a SEIA. The Department has completed financial reports for CBPPL in the past which paint a clear picture of the
economic impact that the company currently and historically has made throughout the DFA. In 2010 the department prepared an economic impact analysis for CBPPL at the company’s request. The report summarizes the impacts that CBPPL’s operations have on the NL economy, including tax amounts, employment, total labour income and net labour benefits.

The following sections will summarize and discuss some of the main economic indicators that can be used during a SEIA. Each SEIA will require the identification of appropriate indicators to evaluate the economic impacts, based on the event that triggered the SEIA. It may be necessary to identify additional indicators to adequately analyze a proposed change. There are many indicators that can be used for this purpose. Some of the more prominent ones are identified here.

Much of the information in the coming sections has already been presented in Section 3.2 of this document, thus some references will be made to figures and tables in that section.

Economic Indicators Discussed in this Section:

1. CBPPL’s financial contribution to the provincial GDP;
2. The value of wages paid by CBPPL within each Economic Zone;
3. Employment within each Economic Zone;
4. Value of goods and services purchased by CBPPL within each Economic Zone;
5. Direct, indirect and induced (multiplier) effect of CBPPL’s expenditures.

### 4.2.1.1 Financial Contribution to Provincial GDP

The gross domestic product (GDP) is the total value of all goods and services produced annually in all sectors of the economy. Within Canada from 2006 to 2009, the timber products sector’s share of the national GDP dropped significantly, to a record low of 1.7% in 2009. Provincial and federal programs have made good progress in diversifying market opportunities for Canadian timber products. In 2009, Quebec, Ontario, Newfoundland and Labrador, British Columbia and the federal government all announced funding to enhance the competitive position of Canadian companies in forest products markets (Natural Resources Canada, 2010).

In 2015, CBPPL contributed $124 million to the Provincial Economy (Corner Brook Pulp and Paper, 2016).

### 4.2.1.2 Value of Wages

In 2015, CBPPL spent a total of $41,985,218 on direct labour associated with its woodland and mill operations. In 2009, CBPPL indirectly supported $48 million in labour income, and induced another $38 million. The total value of direct, indirect and induced labour income associated with CBPPL operations amounted to $167 million in 2009. Updates to this section are pending and will be completed as soon as information is made available from the Department of Finance.
4.2.1.3 **Employment**

In total, CBPPL operations directly employ 524 individuals; 298 at the mill in Corner Brook, 200 in Woodlands, and 26 at Deer Lake Power (2015 budgeted numbers). These positions contribute significantly to the economy within the DFA. The money paid to employees allows them to purchase homes and other items necessary to live, and provides revenue to purchase items that support local businesses.

4.2.1.4 **Value of Goods and Services Purchased**

In 2015, CBPPL spent a total of $124,214,438 on direct labour and other goods and services. This includes $41,985,218 in direct labour, and $82,229,220 for goods and services (Corner Brook Pulp and Paper, 2016).

Revenue spent on goods and services is distributed throughout various locations and communities within the Province. Table 6 on page 33 shows the value of goods and services purchased by CBPPL in 2015, by economic zone.

4.2.1.5 **Multiplier Factor Models**

The relationship between one form of economic activity and the total additional activity it generates is called the multiplier effect (Ontario Ministry of Natural Resoruces, 2007). An economic impact assessment is based on the concept of the multiplier. The multiplier is an estimate of how much additional economic activity will result from an investment in the economy. It is called the multiplier because total impacts are larger than the initial, direct impacts (Ontario Ministry of Natural Resoruces, 2007). Multipliers capture the size of the secondary effects from a change. Multiplier factor models track how a dollar spent on the provision of products, and how that money circulates and re-circulates within the economy, multiplying the effects of the original expenditure on the overall economic activity.

In 2010, the Provincial Department of Finance prepared an economic impact analysis for CBPPL’s operating in NL. The report summarizes the direct, indirect and induced impacts that CBPPL’s operations have on the provincial economy, including employment, total labour income and net labour benefits. The effect that CBPPL expenditures have on the economy reaches well beyond the company’s direct operations. It indirectly stimulates spending and induces even more spending by other businesses and individuals.

For all future SEIA’s, multiplier factors should be considered for the economic impact on various communities or regions within the DFA.

4.2.1.5.1 **Direct Effects**

Direct effects are the initial, immediate economic activities (jobs and income) generated because of a project or development (or in this case the company’s operations). Direct impacts associated with a development coincide with the first round of spending in the economy (Ontario Ministry of Natural Resoruces, 2007). For example, a new manufacturing plant with a payroll of $1,000,000, purchases from
local suppliers of $1,000,000 and property taxes of $50,000, would directly contribute $2,050,000 to the local economy (Ontario Ministry of Natural Resources, 2007).

According to a report prepared by the Department of Finance for CBPPL in 2010, the company’s operations directly created 797 person years of employment in its 2009 operations. The labour income associated with those operations amount to $80.33 million in salaries, wages and benefits. The company also directly paid $9.62 million in tax revenue throughout its 2009 operations.

4.2.1.5.2 Indirect Effects

Indirect effects are the production, employment and income changes occurring in other businesses/industries in the community that supply inputs to the project industry (Ontario Ministry of Natural Resources, 2007). According to the report prepared by the Department of Finance for CBPPL in 2010, the company’s operations indirectly created another 719 person years of employment in its 2009 operations. The indirect labour income associated with those operations amount to $48.51 million in salaries, wages and benefits. The company also indirectly contributed $7.09 million in tax revenue throughout its 2009 operations.

4.2.1.5.3 Induced Effects

Induced effects are the effects of spending by the households in the local economy as the result of direct and indirect effects from an economic activity (i.e. project, event, etc.) (Ontario Ministry of Natural Resources, 2007). The induced effects arise when employees who are working for CBPPL spend their income in the community.

According to the report prepared by the Department of Finance for CBPPL in 2010, the company’s operations induced approximately 939 person years of employment in its 2009 operations. It also induced $38.65 million in salaries, wages and benefits and $5.00 million in tax revenues.

### Table 14. Total direct, indirect and induced economic effects of CBPPL’s operations in 2009.

<table>
<thead>
<tr>
<th></th>
<th>Employment (person years)</th>
<th>Labour Income (salaries, wages and benefits, million $)</th>
<th>Tax Revenue (million $)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Effects</td>
<td>797</td>
<td>$80.33</td>
<td>$9.62</td>
</tr>
<tr>
<td>Indirect Effects</td>
<td>719</td>
<td>$48.51</td>
<td>$7.09</td>
</tr>
<tr>
<td>Induced Effects</td>
<td>939</td>
<td>$38.65</td>
<td>$5.00</td>
</tr>
<tr>
<td><strong>TOTAL:</strong></td>
<td><strong>2,455</strong></td>
<td><strong>$167.49</strong></td>
<td><strong>$21.71</strong></td>
</tr>
</tbody>
</table>

An Economic Impact Analysis Report from the Department of Finance is pending with current information. This section of the report will be updated as soon as information is made available.
5.0 INCORPORATING SEIA TOOLS – THE OVERALL PLAN

A socio-economic impact assessment should start as soon as there is sufficient information about the proposed action (Beckley & Aubé, 2006). There are various levels of SEIA depending on the type of development or change being proposed. A comprehensive SEIA, as outlined in this document, should be implemented in cases where significant social and economic impacts are anticipated, such as the opening or closing of a major processing facility, discontinuing operations in a large geographic area, changing the traditional product lines for the company, etc.

The basic steps in completing a SEIA are;

1. Conduct a preliminary assessment to determine if a SEIA is required, and to scope the nature and boundaries of the impact assessment.
2. Identify who will be impacted (regional zones, communities, businesses, other groups, individuals).
3. Build a base case assessment. Identify and describe the social and economic indicators that will be measured or evaluated during the assessment. Utilize the social and economic tools to assess the current social and economic variables within the affected areas, and evaluate how the proposed development will affect the indicators.
4. Formulate alternatives (other possible scenarios) in which impact scenarios are developed. Describe the potential impacts on social and economic variables for each alternative including status quo.
5. Identify and describe potential mitigation measures.

Each of these steps will be discussed in the following sections.

5.1 Preliminary Assessment

As soon as there is enough information about a proposed major change from normal course activities, a preliminary assessment should be conducted to determine (1) if a SEIA is required and (2) if so, what is the nature and boundary of the impact assessment.

It is important to determine first if the proposed development is significant enough to trigger a SEIA. As noted earlier, a SEIA is not meant to evaluate the impacts of normal-course activities, rather it is appropriate when significant deviations from normal-course activities are proposed. It is more appropriate for situations where a significant deviation from normal-course activities is being proposed. A SEIA will fully evaluate the social and economic impacts of decisions that cause a significant deviation from the base-case, or normal-course activities.

Important questions to answer in determining if a SEIA is required include:

- Will the proposed decision constitute a major change from the company’s current operations?
- Will the implementation of decisions have major social and economic impacts across a number of regional zones and communities?
Can the effects of the change be measured and evaluated through a SEIA?
Will the SEIA help to understand the social and economic impacts associated with the change, and allow for the development of alternatives and mitigation measures?

If the answer to these questions is yes, then a SEIA is required to evaluate the issue.

Some examples of major changes that could trigger a SEIA include:

- Termination of normal-course activities in a major geographic region;
- Establishment of a new processing facility of manufacturing facility that would depend on the resources of that region;
- Expropriation of timber rights in an area;
- Major employment lay-offs at the paper mill or in another geographic region;
- Significant land use conflict with potentially significant consequences or ramifications to either the people or businesses of a region.

Once it has been decided that a SEIA is required, it is important to identify the boundary and scale for the assessment. Important questions to answer to determine the boundary and scale are:

- Is the issue isolated within a single geographic region, or will the effect be prominent across the entire DFA?
- If isolated, will individuals and businesses be affected within other regions?
- What economic zones will be affected by the change?
- What communities will be affected within each economic zone?

### 5.2 Determine Who Will Be Impacted

It is important to identify who will be affected by the proposed change, as well as how they will be affected, before moving forward with the SEIA. For this purpose, it is a good idea to start big, by identifying what economic zones will be affected first. The economic zones cover large geographic regions throughout the Province, and have development boards that gather and analyze data pertaining to each zone; therefore, they are a good starting point. When the affected economic zones have been identified, look at the communities within each economic zone and decide which ones will be affected. Further to this, identify the businesses that are within each community that are likely to be affected and very importantly, what individuals live within the communities that will be affected.

To determine what economic zones, communities, businesses and individuals will be affected, decision-makers must review the company’s current and planned operations throughout the DFA. Important questions to ask include:

- Does the company currently operate within the economic zone, or does it have plans to operate within that zone within the next 5, 15 or 25 years?
- If so, what operations will be taking place and how will the proposed change affect those operations (will they be cancelled, will there be more, etc.?)?
➢ Does the company employ individuals who are from the economic zone, or have employees whose families reside within the economic zone?
➢ Are there operators or suppliers whose business is located within the economic zone?
➢ Are there any sponsored events or local organizations that will be affected by the proposed change?
➢ Will there be any other groups that will be impacted or have concerns (i.e. NGO’s)?

A detailed list of impacted areas, communities, businesses, groups and individuals should be compiled before starting to evaluate and measure variables. This will enable for decision-makers to focus attention on those areas that will be directly affected by the proposed change.

5.3 Build the Base Case Assessment

The base case assessment will be very similar to that which was prepared in Sections 3 and 4 of this document and a lot of the information in those sections can be used for the assessment. The base case assessment is basically an evaluation of the current social and economic variables within the affected areas at this time (i.e. what are the social and economic characteristics in the affected area, assuming normal course operations at this point in time?).

Before starting to measure social and economic variables, it is very important to select the indicators that will be used to characterize the current situation. Professional input is critical for determining the indicators to be measured and data to be used (Beckley & Aubé, 2006). Comprehensive assessments should be conducted by professionals trained in social sciences, working with other specialists, such as historians, anthropologists and economists; however, information monitoring and data collection can be done by anyone with basic research and writing skills (Beckley & Aubé, 2006). It is very important to select the most appropriate indicators given the proposed change.

The indicators that will be used should paint a clear picture of the affected areas, and once measured and evaluated should provide good insight into the effect that the proposed change will have on each indicator. Like in Section 4 of this document, decisions-makers should identify social indicators (quantitative and qualitative) and economic indicators that will be used for the base case assessment and the impact assessment. The decision-makers must identify criteria for selecting indicators and assessing the significance of impacts, and should describe data collection methods used to predict effects.

Once the indicators have been selected, use the social and economic tools outlined in Section 4 to gather data. Most of the data for quantitative indicators should be readily available from sources like Statistics Canada, Newfoundland and Labrador Statistics Agency, company records, and the Department of Finance. Gathering information for the qualitative indicators may involve conducting surveys and community assessment to gauge people’s feelings about various topics.

For guidance and information on the types of indicators to use, and the location of information to collect, refer to Section 4.
5.4 Formulate Alternatives

When the base case assessment has been completed, it is time to forecast what the impacts of the proposed change will be on the indicators, and formulate alternatives that minimize the negative impacts. Beckley and Aubé (2006) state that this part of the assessment should consider:

- Socio-economic effects (include changes in income, employment, population, local revenues and business activity);
- Socio-cultural effects (include changes in community institutions, values, interpersonal relationships, and perceptions of the environment);
- Sources of socio-economic effects (direct, indirect, induced, and cumulative);
- Duration and intensity of effects (short or long term, how significant);
- Location and magnitude of the action (local, regional, or Province wide).

This part of the analysis will involve an evaluation of how the proposed change will affect the social and economic indicators identified in the last step. A lot of thought and research will be necessary to ensure that all effects have been considered, identifying not only those directly affected, but those who will be indirectly affected by the change. This analysis will enable planners to fully understand what the impact will be throughout the DFA if the proposed change is implemented. It will also allow for the identification and quantification of impacts on the economic zones, communities, businesses, groups and individuals.

With this information planners and decision-makers should develop alternatives that will enhance the positive effects of the proposed change, and/or reduce the negative effects of the proposed change. Developing alternatives will enable planners to evaluate the changes in the indicators, and thus the changes in affected regions throughout the DFA. Questions should be asked like “What is the alternative to implementing this change?” or “Is there an alternative to this decision that will minimize the negative effects on people within the affected area?” When choosing alternatives, consider what the changes will be on the social and economic indicators, and how that will affect various groups of people within the affected area.

Using the knowledge of impacts and alternatives, a comprehensive consultation with government and with affected groups and individuals should take place within the DFA. The analysis process will help the population to understand, participate in, and cope with change as decisions are implemented. The consultation process will provide input that will shape the final decision, and ultimately the effects on people throughout the DFA.

5.5 Describe Potential Mitigation Measures

Developing alternatives and initiating a consultation process will help to shape the final decision, and before that decision is implemented, it is very important to describe potential mitigation measures that
will lessen the immediate and long-term negative impact on people in the DFA. These measures can be defined throughout the consultation process, in partnership with the government, stakeholders and affected communities, businesses and individuals.

Depending on the type of decision, activity or development being proposed, mitigation measures will vary considerably. The measures taken should focus on the most impacted indicators identified in the last steps. For example, if the most severe impact of the change is job loss, then mitigation measures can be put into place to support or enhance new job opportunities within the affected area, to support those likely to lose their job during the change.

### 5.6 Prepare SEIA Document

The SEIA document should first summarize the proposed change that initiated the SEIA process, and discuss why the change was initially proposed (i.e. who proposed the change and based on what information?). It should then discuss why the change triggered a SEIA. For example, what are the forecasted impacts, and in what locations will the impacts be most prominent?

The document should also spatially identify the affected area. A map of the entire DFA, showing what locations will be affected by the proposed change would be very helpful in illustrating the point (show economic zones, communities). The document should then identify who the affected businesses, individuals and groups are, and what the effect will be upon them should the change take place.

After rationalizing the reason for preparing the SEIA, the document should present information on the selected indicators and defend why the indicators were selected (i.e. why are these the best indicators and how will they help with the decision-making process?). Using the indicators, the document should then present the base case and show how the indicators will change should either alternative be implemented. This will give the reader, as well as the planning staff an opportunity to evaluate and measure the severity of the proposed change.

Following the indicator analysis, the document should present the alternatives and describe the consultation process (as well as the groups consulted) that enabled the development of the alternatives. It should explain each alternative and show how the indicators will change should either alternative be implemented. Lastly, the document should state what the final change will be, what effects are forecasted throughout the DFA, and what mitigation measures are designed to lessen the negative impacts to regions, communities, businesses, other groups and individuals.
6.0 FINAL COMMENTS

The information presented in this document was compiled at the time of writing in 2011 and updated in 2017. The data herein (company data, demographic information, etc.) should be reevaluated each time a SEIA is initiated. The data collected is time sensitive and will become out dated as time goes on. It is recommended that those preparing a SEIA review the statistical data to ensure that it is accurate and up to date.

The intent of this SEIA is to provide decision-makers with the best information possible to enable them to make the most appropriate management decisions. It is a great planning tool, and if used properly it will help to analyze and understand the consequences of major changes, enhance planning and decision-making processes, and allow for the development of mitigation measures that control the negative social and economic impacts associated with change.

The process of preparing a SEIA is very helpful in mitigating future conflicts or problems that arise, that have potentially significant impacts on CBPPL and the individuals, businesses and groups that reside in and around the DFA. First, it is important to ensure that the conflicts to be reviewed in the SEIA are outside of normal course activities, and that the conflict is significant enough to trigger the SEIA in the first place.

Throughout the development of this document, the regional economic development boards throughout the Province have been a wealth of knowledge and information. It is advisable during future SEIA’s, that the individual or team responsible for preparing the SEIA continue to consult with these boards. They are the best source of current community and regional data in the Province. It is important to update the boards on current and future SEIA processes, and to seek input and opinions on decisions that affect local communities and residents.
REFERENCES

A. den Otter, M., & Beckley, T. M. (2002). "This is Paradise" Community Sustainability Indicators for the Western Newfoundland Model Forest. Canadian Forest Service - Atlantic Forestry Center. Fredericton: Natural Resources Canada.


Canadian Institute of Forestry. (2013). Canadian Boreal Forest Agreement.


APPENDIX A. Social Indicators by Economic Zone within the DFA.
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</thead>
<tbody>
<tr>
<td>Nordic Economic Development Corporation (Zone 6)</td>
<td>8,340</td>
<td>48</td>
<td>40.0</td>
<td>$24,800</td>
<td>2,700</td>
<td>-1.80%</td>
<td>500</td>
<td>3,295</td>
<td>90.90%</td>
<td>70.8</td>
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<tr>
<td>Red Ochre Regional Board Inc. (Zone 7)</td>
<td>8,330</td>
<td>49</td>
<td>36.8</td>
<td>$23,200</td>
<td>3,580</td>
<td>-0.88%</td>
<td>640</td>
<td>3,480</td>
<td>88.30%</td>
<td>63.5</td>
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<tr>
<td>Humber Economic Development Board Inc. (Zone 8)</td>
<td>41,125</td>
<td>46</td>
<td>46.8</td>
<td>$26,500</td>
<td>7,025</td>
<td>0.34%</td>
<td>3945</td>
<td>16,740</td>
<td>76.40%</td>
<td>80.8</td>
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<tr>
<td>Long Range Regional Economic Development Board (Zone 9)</td>
<td>21,275</td>
<td>48</td>
<td>35.3</td>
<td>$21,700</td>
<td>4,760</td>
<td>-1.01%</td>
<td>4090</td>
<td>9,205</td>
<td>73.80%</td>
<td>70.3</td>
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<tr>
<td>Marine &amp; Mountain Zone Corporation (Zone 10)</td>
<td>8,605</td>
<td>50</td>
<td>37.4</td>
<td>$24,200</td>
<td>2,405</td>
<td>0.16%</td>
<td>730</td>
<td>3,685</td>
<td>87.20%</td>
<td>63.4</td>
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<tr>
<td>Emerald Zone Corporation (Zone 11)</td>
<td>13,745</td>
<td>49</td>
<td>41.3</td>
<td>$21,500</td>
<td>4,025</td>
<td>0.13%</td>
<td>1195</td>
<td>5,670</td>
<td>85.00%</td>
<td>64.6</td>
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<tr>
<td>Exploits Valley Economic Development Corporation (Zone 12)</td>
<td>26,190</td>
<td>48</td>
<td>41.9</td>
<td>$24,100</td>
<td>4,740</td>
<td>1.04%</td>
<td>3260</td>
<td>10,925</td>
<td>74.30%</td>
<td>75.9</td>
</tr>
<tr>
<td>Kittiwake Economic Development Corporation (Zone 14)</td>
<td>46,275</td>
<td>48</td>
<td>43.5</td>
<td>$23,700</td>
<td>11,600</td>
<td>0.21%</td>
<td>4215</td>
<td>19,035</td>
<td>82.40%</td>
<td>70.8</td>
</tr>
<tr>
<td>Discovery Regional Development Board (Zone 15)</td>
<td>27,950</td>
<td>48</td>
<td>42.4</td>
<td>$23,500</td>
<td>7,540</td>
<td>-0.26%</td>
<td>2320</td>
<td>12</td>
<td>85.00%</td>
<td>69.7</td>
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<tr>
<td>Avalon Gateway Regional Economic Development Inc. (Zone 18)</td>
<td>6,525</td>
<td>51</td>
<td>41.5</td>
<td>$26,200</td>
<td>1,835</td>
<td>0.09%</td>
<td>540</td>
<td>2,805</td>
<td>83.50%</td>
<td>78.4</td>
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<td>Northeast Avalon Regional Economic Development Board (Zone 19)</td>
<td>203,325</td>
<td>40</td>
<td>61.0</td>
<td>$33,000</td>
<td>15,995</td>
<td>0.94%</td>
<td>18535</td>
<td>81,750</td>
<td>70.70%</td>
<td>89.7</td>
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<td>Irish Loop Development Board (Zone 20)</td>
<td>7,975</td>
<td>49</td>
<td>48.5</td>
<td>$27,300</td>
<td>2,355</td>
<td>0.81%</td>
<td>450</td>
<td>3,310</td>
<td>93.40%</td>
<td>79.2</td>
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<td>Newfoundland and Labrador</td>
<td>514,535</td>
<td>44</td>
<td>50.7</td>
<td>$27,200</td>
<td>91580</td>
<td>0.38%</td>
<td>49090</td>
<td>208,845</td>
<td>77.60%</td>
<td>79.7</td>
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