

# Shaw Resources – Eastern Embers Supply Base Report

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## Version 1.2 June 2016

### **NOTE:**

**This template, v1.2, is effective as of the date of publication, that is, 23 June 2016. Template v1.1 may still be used for those audits undertaken prior to 23 June 2016 and where the certificate is issued to Certificate Holders before 1 October 2016.**

*For further information on the SBP Framework and to view the full set of documentation see [www.sustainablebiomasspartnership.org](http://www.sustainablebiomasspartnership.org)*

#### *Document history*

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# 1 Overview

**Producer name:** Eastern Embers  
 Shaw Resources, (A member of The Shaw Group Limited)

**Producer location:** 9091 Highway 15, Hardwoodlands, Nova Scotia, B0N 1Y0

**Geographic position:** Latitude: 45.06640; Longitude; -63.51990, Datum 1983

**Primary contact:** Julie Griffiths  
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 902 750 0173  
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**Company website:** [www.shawresources.ca](http://www.shawresources.ca)

**Date report finalised:** June 30, 2017

**Close of last CB audit:** January 19, 2018

**Name of CB:** SCS Global Services

**Translations from English:** No

**SBP Standard(s) used:** Standards 2, 4, and 5 (version 1.0)

**Weblink to Standard(s) used:** <http://www.sustainablebiomasspartnership.org/documents>

**SBP Endorsed Regional Risk Assessment:** N/A

**Weblink to SBE on Company website:** <https://shawresources.ca/about-shaw/why-shaw/>

Indicate how the current evaluation fits within the cycle of Supply Base Evaluations				
Main (Initial) Evaluation	First Surveillance	Second Surveillance	Third Surveillance	Fourth Surveillance
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## 2 Description of the Supply Base

### 2.1 General description

Eastern Embers manufactures and supplies wood pellets to the Atlantic Canada region. Raw material is primarily sourced from Nova Scotia with a small percentage of residual feedstock originating from New Brunswick (<8%) and a negligible amount from Prince Edward Island (<1%), in Canada. Sawmill residuals (I.e. sawdust, shavings, flakes, woodchips, bark) supplied by locally sourced sawmills is the only feedstock used in wood pellet processing at Eastern Embers. Currently, about 10-15% of Eastern Embers secondary feedstock originates from certified forests and would be classified as SBP-compliant, whereas the other ~85-90% of secondary feedstock originates from non-certified forests and would be considered SBP-controlled.

#### Nova Scotia Forestry

In Nova Scotia, the Department of Natural Resources (NSDNR) has the authority over forestry on Crown lands. NSDNR staff monitors and enforces activities on Crown lands to prevent unauthorized harvest. Companies with Crown allocations must pay stumpage royalties for timber products harvested.

The majority of primary wood products supplied to industry in Nova Scotia are from privately owned woodlots, so the provincial government implements and develops forest management programs to encourage and assist private woodlot owners to manage their land more effectively.

The Nova Scotia Registry of Buyers is a registry where businesses and individuals register to acquire primary forest products for processing. The registry provides reliable data to help understand the demand and estimate sustainable harvest levels, as well as aiding in the long-term management of Nova Scotia forests. An annual report is released by the Registry of Buyers, which outlines the volumes of wood harvested throughout the province. Registered buyers are required to contribute to a silviculture program (i.e. Sustainable Forest Fund) based on a rate per volume basis. Silviculture and training programs are implemented by NSDNR to encourage the sustainable use of Nova Scotia Forests. At the current state harvest levels on Crown, industrial, and private lands are sustainable. The provincial government is currently enhancing silviculture programs to ensure the continued sustainability of forestlands in Nova Scotia.

Nova Scotia's Code of Forest Practice provides the guidelines for sustainable forest management, which are mandatory on Crown lands (administered by NSDNR), and highly encouraged on private woodlots. The Code is implemented through various provincial and federal legislation and regulations. The Nova Scotia Forests Act was implemented to develop a healthy productive forest capable of yielding high volumes of high quality product and is directed towards both private woodlot owners and Crown lands in the province. The enforcement division of NSDNR completes regular visits to areas being harvested on both Crown and private lands to ensure that both the Forests Act and the Crown Lands Act are being followed. The provincial government is currently implementing an increased level of silviculture programs to ensure the continued sustainability of forestlands in Nova Scotia

#### New Brunswick Forestry

The New Brunswick provincial government proclaimed the Crown Lands and Forests Act in 1982, and this is the legal foundation of Crown forest management in New Brunswick. The Act divides NB's Crown land into 10 timber licences; each license is leased through a 25 year forest management agreement to a large forest based company called a Licensee. On a 5 year cycle, the New Brunswick Department of Natural Resources assesses how the licensee has managed the Crown forest during the previous five years, and if satisfactory, will renew the agreement for another 5 year period. Each licensee must produce a forest management plan that covers a 25 year period, and must be sustainable over an 80 year planning horizon. Annual operating plans are also required of licensees and are monitored by the government to ensure that each licensee is following the regulations and standards. All forest operations on Crown land must be ISO 14001 certified and certified under an independent sustainable Forest Management System (i.e. CSA, FSC, SFI), making NB the first jurisdiction in the world to require certification of licensee operations.

## Focusing on sustainable sourcing solutions

The provincial government sets the annual allowable cut (AAC) for both Crown and private woodlots based on on-going research on forest inventory. New Brunswick has one of the best forest inventory programs in Canada. Data obtained from aerial photography analysis and ground sample plots chart the province's timber growth and yield and are updated on an annual cycle using a computerized geographical information system.

All feedstock originating from private sources in New Brunswick is monitored through 1 of 7 regional marketing boards. The marketing boards provide forest management assistance to private woodlot owners such as calculating timber inventory, harvesting layout, management plan development and programs that encourage the improved management of woodlots. Private woodlot owners operating under regional marketing boards can also obtain annual subsidies for silvicultural programs.

### Prince Edward Island Forestry

A very small percentage (<1%) of secondary feedstock originates from Prince Edward Island (PEI). Most of PEI's forests are privately owned (87%). The provincial government provides technical advice and assistance to land owners. Most of PEI's commercial softwood is sold to mills in NB and NS. As required by the Forest Renewal Program Regulations, commercial softwood harvested from private and public lands are subject to a cord fee. The fee is reinvested into forest management programs on both private and public lands.

<b>Eastern Embers Feedstock (2016)</b>				
<b>Feedstock Product Groups</b>	<b>% of Certified Feedstock</b>	<b>% of Uncertified Feedstock</b>	<b># of Suppliers</b>	<b>Species Mix</b>
Controlled Feedstock		87%	4-5	(See 2.5c, below)
SBP-Compliant Primary Feedstock				
SBP-Compliant Secondary Feedstock	13%		1-2	(See 2.5c, below)
SBP-Compliant Tertiary Feedstock				
SBP Non-Compliant Feedstock				

**Table 1 - Feedstock Product Groups**

## 2.2 Actions taken to promote certification amongst feedstock supplier

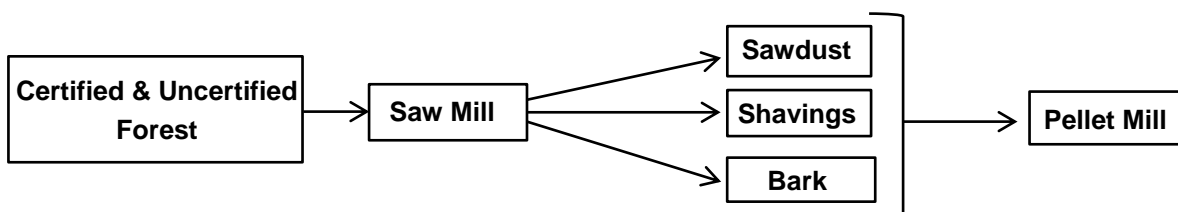
Shaw Resources’ suppliers have been informed of Shaw Resources current PEFC chain of custody and the Sustainable Biomass Partnership certification. Sustainability is a common practice amongst many current suppliers of Shaw Resources. Suppliers continue to seek third party sustainable forest management certifications (CSA, FSC, SFI) where possible. Suppliers are asked to sign quarterly supplier declarations and Scoping-in Agreements as part of the PEFC chain of custody certification. Furthermore, all suppliers are required to sign a Supplier Assertion which declares that feedstock originates from within our supply base and not from controversial sources.

Company-wide, Shaw Resources has implemented training programs to ensure that employees understand the objectives of each of the certifications. Shaw Resources’ sustainability mission statement is publicly available and is posted on the company website.

## 2.3 Final harvest sampling programme

N/A

## 2.4 Flow diagram of feedstock inputs showing feedstock type [optional]



## 2.5 Quantification of the Supply Base

### A) Nova Scotia Supply Base

a) *Total Supply Base Area (ha): Cumulative forest area of all forest types within SB*  
 4,275,000 ha

b) *Tenure by type (ha): Privately owned/Public/Community concession*  
 1,994,000 ha (47%) of the forested lands is public, and the remaining 2,281,000 ha (53%) is private. Public forest land subject to forest management agreements make up 604,000 ha and parks and protected areas make up 736,800 ha.

c) *Forest by type (ha): Boreal/Temperate/Tropical*

The forested area is part of the **Acadian Forest** Region. Common species include spruce, balsam fir, white pine, maple and birch.



*d) Forest by management type (ha): Plantation/Managed Natural/Natural*

The majority of forest woodlots in NS are replanted forests, while some are naturally regenerated forests (**Managed Natural and Natural**)

*e) Certified forest by scheme (ha): Hectares of FSC or PEFC certified*

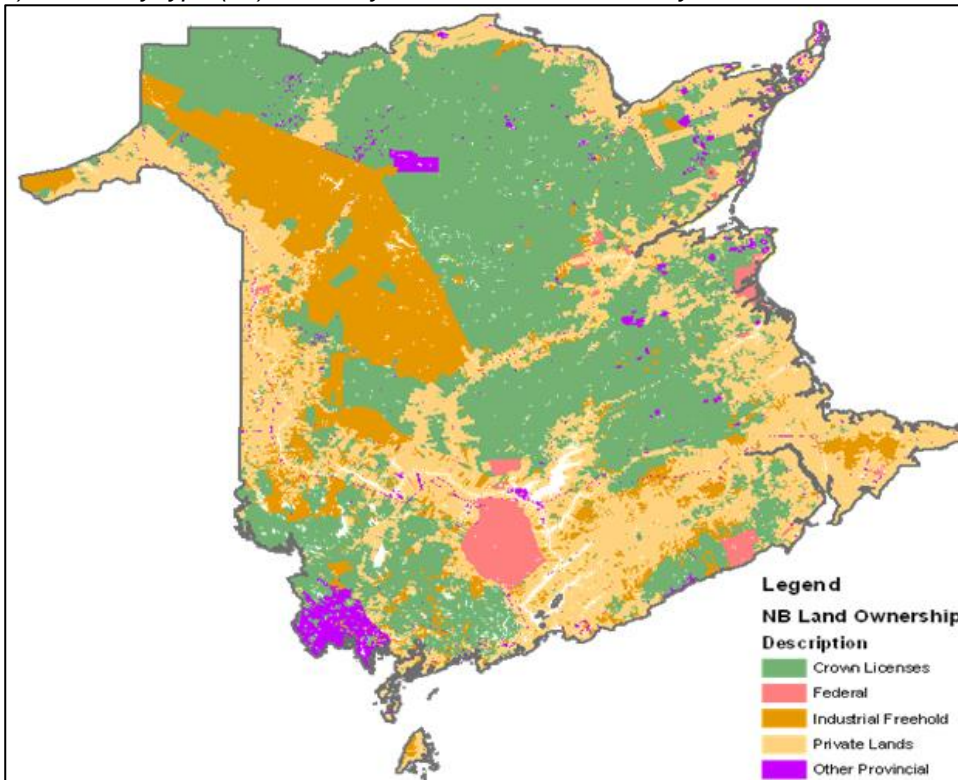
As of 2014, 1,300,000 ha of land in Nova Scotia were certified to CSA, FSC, or SFI (Certification Status Report, Nova Scotia-SFM-Year End 2014, [www.certificationcanada.org](http://www.certificationcanada.org))

### B) New Brunswick Supply Base

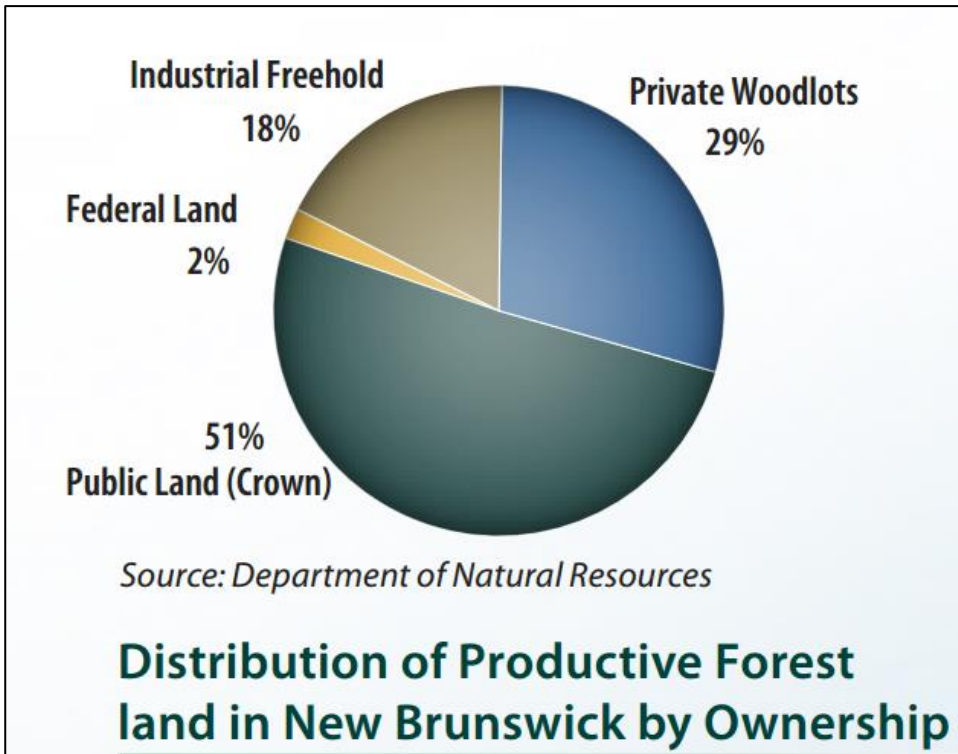
*a) Total Supply Base Area (ha): Cumulative forest area of all forest types within SB*

New Brunswick forests cover more than 6 million hectares of the provinces 7 million hectares of land. This equates to 83% of the province being covered in forest (NB Forests brochure, NBDNR). The remaining 17% is made up of agricultural land and urban areas.

*b) Tenure by type (ha): Privately owned/Public/Community concession*



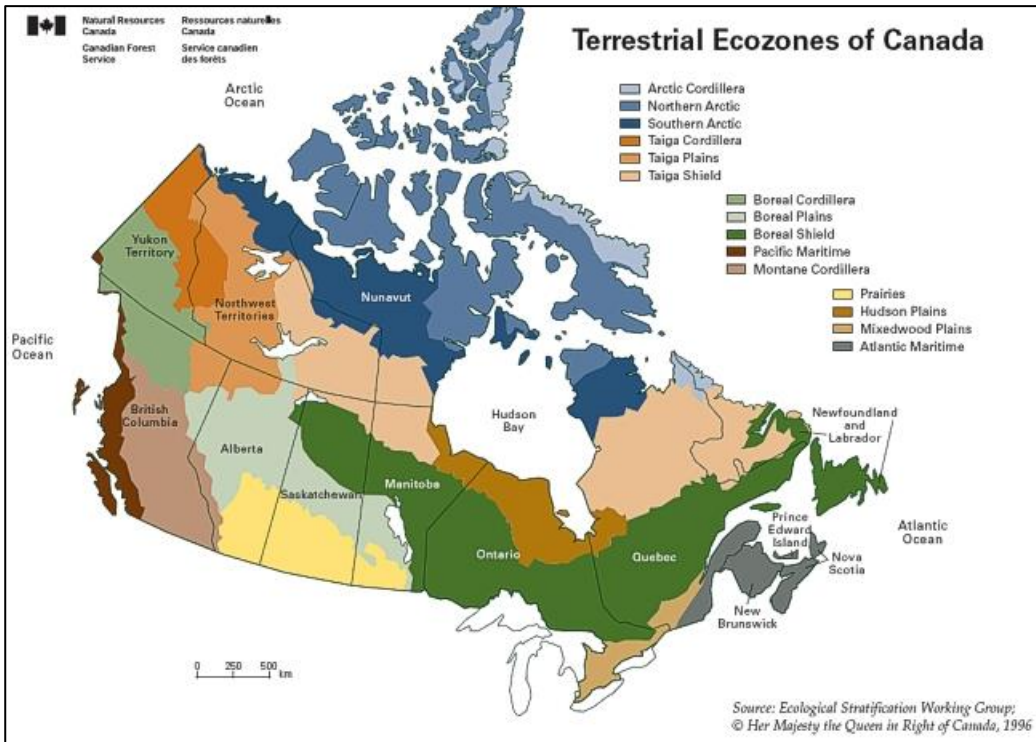
Map of NB Land Tenure by Type (from [www.nbforestry.com](http://www.nbforestry.com))



Tenure by type (from State of the Forest Report, NBDNR, 2008)

*c) Forest by type (ha): Boreal/Temperate/Tropical*

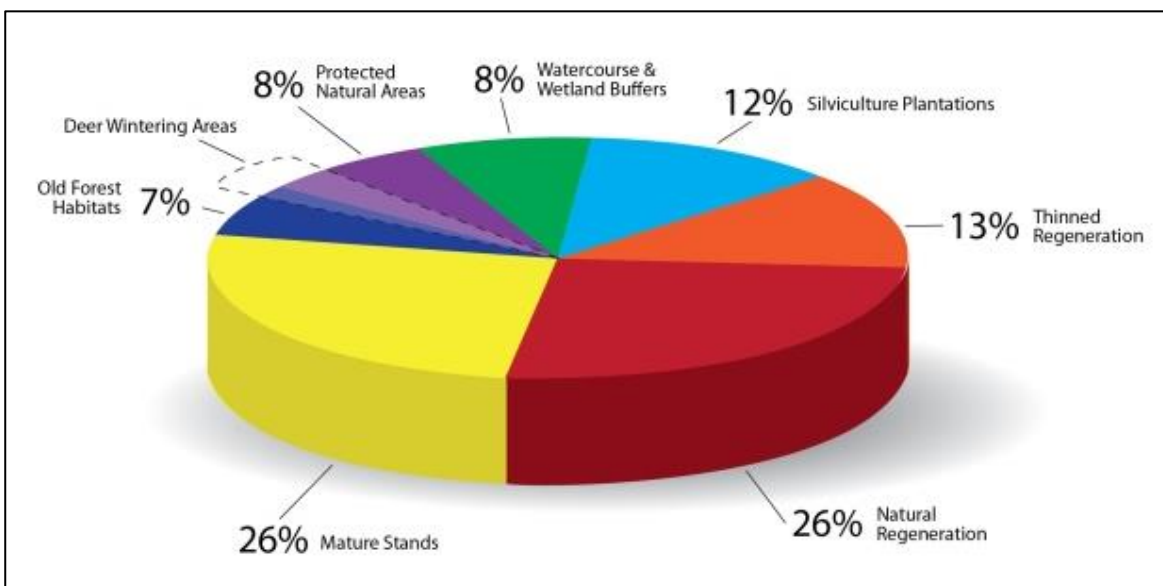
The Maritime Provinces are designated as the Atlantic Maritime Eco zone. They are made up of two major regions, the Appalachians and the coastal plains. About 50% of NB, most of NS, and some regions in QC are made up of the **Acadian forest**. The Acadian forest can be described as a transitional forest between the boreal spruce-fir to the north, and the deciduous forest to the south.



**Eco zones of Canada (from NBDNR, Ecological Stratification Working Group, 1996)**

**d) Forest by management type (ha): Plantation/Managed Natural/Natural**

There are 6.1 million hectares of forest in New Brunswick. 3.2 million hectares are designated as Crown forests. The government projects that of those 3.2 million hectares, 26% are natural regeneration forests, 26% are mature stands, 13% are thinned regenerations, 12% have silviculture plantations and the remaining are conservation areas (protected natural areas, watercourses and wetland buffers, deer wintering areas and old forest habitats). The management type is primarily **Managed Natural and Natural**.

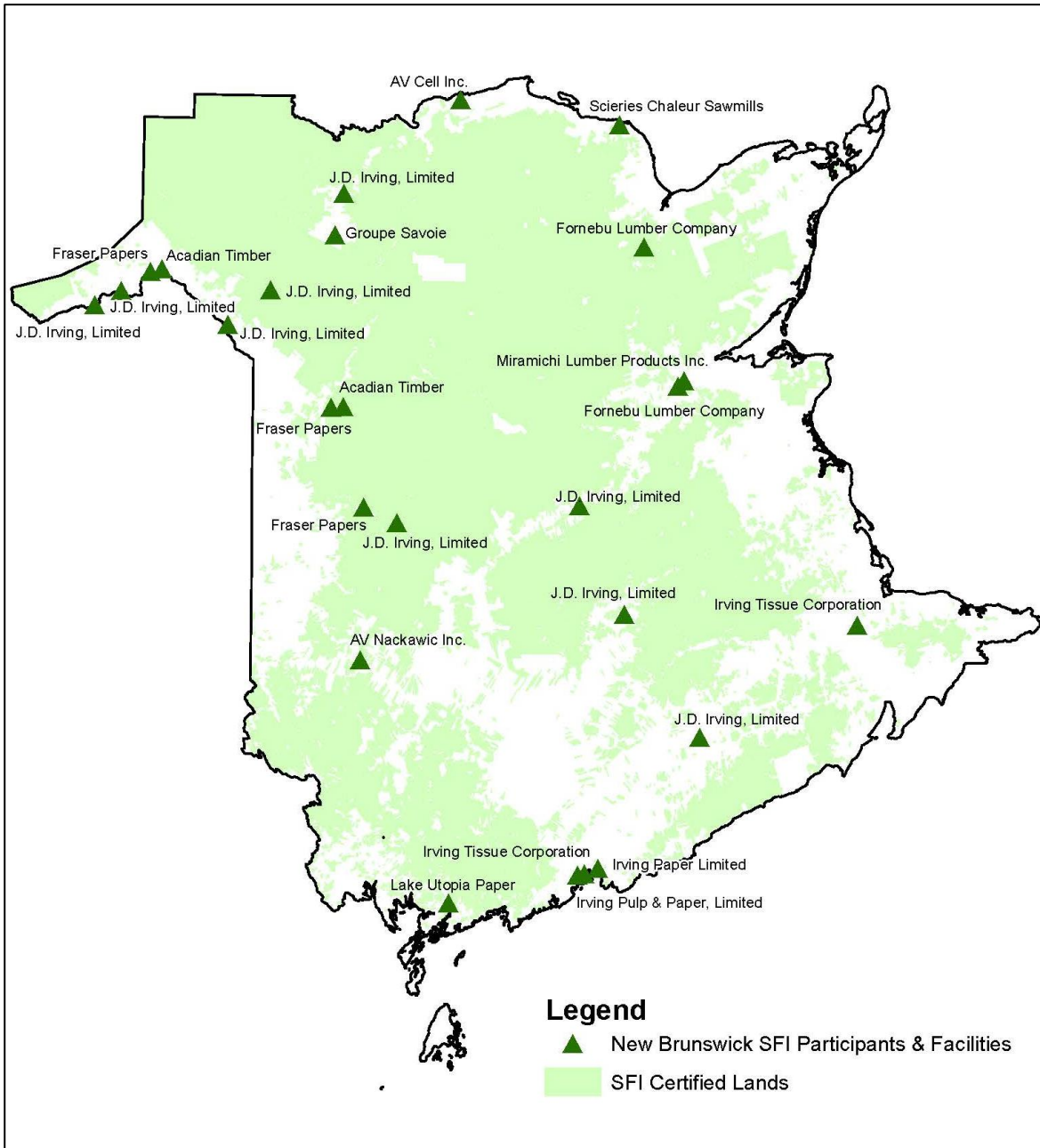


**New Brunswick Crown forests projection (GNB, 2014)**

## Focusing on sustainable sourcing solutions

### e) Certified forest by scheme (ha): Hectares of FSC or PEFC certified

The map below shows SFI Certified lands, and SFI program participants in New Brunswick. In 2005, the SFI forest management program was endorsed by the Programme for the Endorsement of Forest Certification schemes (PEFC). In total 4.2 million Ha are certified to the SFI standard in New Brunswick.



**SFI Certified Lands and Participants in NB (From NBSIC, 2009)**

### C) Prince Edward Island Supply Base

a) Total Supply Base Area (ha): Cumulative forest area of all forest types within SB  
 250,084 ha

b) Tenure by type (ha): Privately owned/Public/Community concession  
 33,011 ha (13.2%) of the forested lands is public, and the remaining 217,073 ha (86.8%) is private. Parks and protected areas make up 18,417 ha.

*c) Forest by type (ha): Boreal/Temperate/Tropical*

The forested area is part of the **Acadian Forest** Region and common species include spruce, balsam fir, white pine, maple and birch.

*d) Forest by management type (ha): Plantation/Managed Natural/Natural*

Forest woodlots in PEI are replanted forests, and some are naturally regenerated forests (**Managed Natural/Natural**).

*e) Certified forest by scheme (ha): Hectares of FSC or PEFC certified*

As of 2014, 170 ha of land in south-eastern PEI were certified to FSC. 446 ha of privately-owned forest land are certified to FSC.

## Feedstock

*f. Total volume of Feedstock: tonnes or*

~55,000 Tonnes

*g. Volume of primary feedstock: tonnes or m<sup>3</sup>*

No primary feedstock is used.

*h. List percentage of primary feedstock (g), by the following categories.*

No primary feedstock is used.

*i. List all species in primary feedstock, including scientific name*

No primary feedstock is used.

*j. Volume of primary feedstock from primary forest*

No primary feedstock is used.

*k. List percentage of primary feedstock from primary forest (j), by the following categories. Subdivide by SBP-approved Forest Management Schemes:*

No primary feedstock is used.

*l. Volume of secondary feedstock: specify origin and type*

~55,000 Tonnes. All secondary feedstock (sawmill and forest residuals) originate from Nova Scotia and New Brunswick, and a small fraction of the volume from PEI (<1%).

*m. Volume of tertiary feedstock: specify origin and composition*

There is no tertiary feedstock.



### 3 Requirement for a Supply Base Evaluation

SBE completed	SBE not completed
<input type="checkbox"/>	<input checked="" type="checkbox"/>

An SBE is not required for Eastern Embers because Shaw Resources is not seeking to obtain a certification with an SBE at this time.

## 4 Supply Base Evaluation

### 4.1 Scope

N/A

### 4.2 Justification

N/A

### 4.3 Results of Risk Assessment

N/A

### 4.4 Results of Supplier Verification Programme

N/A

### 4.5 Conclusion

N/A



## 5 Supply Base Evaluation Process

N/A

## 6 Stakeholder Consultation

N/A

### 6.1 Response to stakeholder comments

N/A

## 7 Overview of Initial Assessment of Risk

N/A

## 8 Supplier Verification Programme

### 8.1 Description of the Supplier Verification Programme

N/A

### 8.2 Site visits

N/A

### 8.3 Conclusions from the Supplier Verification Programme

N/A

## 9 Mitigation Measures

### 9.1 Mitigation measures

N/A

### 9.2 Monitoring and outcomes

N/A

## 10 Detailed Findings for Indicators

N/A

## 11 Review of Report



### 11.1 Peer review

The final version of the Supply Base Report was reviewed by the Operations Manager for the pellet mill. A peer review was completed by Nate Ryant on January 19, 2016 a consultant with the Wood Pellet Association of Canada.

### 11.2 Public or additional reviews

N/A

## 12 Approval of Report

Approval of Supply Base Report by senior management			
Report Prepared by:	<b>Julie Griffiths</b>	<b>Geology/Environmental Specialist</b>	<b>August 31, 2018</b>
	Name	Title	Date
The undersigned persons confirm that I/we are members of the organisation's senior management and do hereby affirm that the contents of this evaluation report were duly acknowledged by senior management as being accurate prior to approval and finalisation of the report.			
Report approved by:		<b>Carol MacMillan Chief Financial Officer</b>	<i>Sept 14/18</i>
	Name	Title	Date
Report approved by:	 <i>Lindsay Hawker</i>	<i>Corporate Secretary and Legal Counsell</i>	<i>Sept 14/18</i>
	Name	Title	Date



## 13 Updates

### 13.1 Significant changes in the Supply Base

There were no significant changes in the supply base.

### 13.2 Effectiveness of previous mitigation measures

There were no mitigation measures required.

### 13.3 New risk ratings and mitigation measures

There are no new risks or mitigation measures.

### 13.4 Actual figures for feedstock over the previous 12 months

a. *Total volume of Feedstock: tonnes or m<sup>3</sup>*

~40,000 Tonnes

b. *Volume of primary feedstock: tonnes or m<sup>3</sup>*

0 Tonnes

c. *List percentage of primary feedstock (g), by the following categories*

0%

d. *List all species in primary feedstock, including scientific name*

No primary feedstock is used.

e. *Volume of primary feedstock from primary forest*

No primary feedstock is used

f. *List percentage of primary feedstock from primary forest (j), by the following categories. Subdivide by SBP-approved Forest Management Schemes:*

No primary feedstock is used

g. *Volume of secondary feedstock: specify origin and type*

~40,000 Tonnes. All secondary feedstock (sawmill residuals) originate from Nova Scotia, New Brunswick and PEI.

*h. Volume of tertiary feedstock: specify origin and composition*

No tertiary feedstock is used.

## 13.5 Projected figures for feedstock over the next 12 months

*a. Total volume of Feedstock: tonnes or m<sup>3</sup>*

~40,000 – 50,000 Tonnes

*b. Volume of primary feedstock: tonnes or m<sup>3</sup>*

0 Tonnes

*c. List percentage of primary feedstock (g), by the following categories*

0%

*d. List all species in primary feedstock, including scientific name*

No primary feedstock is used.

*e. Volume of primary feedstock from primary forest*

No primary feedstock is used

*f. List percentage of primary feedstock from primary forest*

No primary feedstock is used

*g. Volume of secondary feedstock: specify origin and type*

~40,000 – 50,000 Tonnes. All secondary feedstock (sawmill residuals) originate from Nova Scotia, New Brunswick and PEI.

*h. Volume of tertiary feedstock: specify origin and composition*

No tertiary feedstock is used.

\*