Kruger
Pulp and Paper

Sustainable Forest Management Plan

Corner Brook Pulp and Paper Limited

Woodlands Department

April 2026

Version 16

This Sustainable Forest Management (SFM) Plan is one of a number of documents required for sustainable management of the Defined Forest Area (DFA), timber limits of Corner Brook Pulp and Paper Limited. Separate but associated documents are located on the Woodlands computer network, the Environmental Management System Manuals, which serve as references for the implementation and maintenance of the Environmental Standards to which Corner Brook Pulp and Paper Ltd. is certified: the ISO 14001:2015 Environmental Management System Standard, and the SFI® 2022 Forest Management and Fibre Sourcing Standards.

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Kruger

Forest and Environmental Policy and SFI Principles

This Forest and Environmental Policy applies to the scope of the environmental management system for the Woodlands Division and the principals of the SFI Forest Management and Fibre Sourcing Standards.

We commit:

To conduct activities in a manner that protects the **health and safety** of our employees and the public.

To practice **sustainable forestry** to meet the needs of the present while promoting the ability of future generations to meet their own needs. This is accomplished by practicing a land stewardship ethic that integrates reforestation and the managing, growing, nurturing and harvesting of trees for useful products, and for the provision of ecosystem services such as the conservation of soil, air and water quality and quantity, climate change adaptation and mitigation, biological diversity, wildlife and aquatic habitats, recreation and aesthetics.

To provide for regeneration after harvest, maintain the health and productive capacity of the forestland base, and to protect and maintain long-term soil health and productivity. In addition, to protect forests from economically, environmentally and socially undesirable impacts of wildfire, pests, diseases, invasive species, and other damaging agents and thus maintain and improve long-term **forest health and productivity**.

To protect and maintain the water quality and quantity of water bodies and riparian areas, and to apply forestry best management practices to **protect water** quality, to meet the needs of both human communities and ecological systems.

To manage forests in ways that **protect and promote biological diversity**, including animal and plant species, wildlife habitats, ecologically and culturally important species, threatened and endangered species and native forest cover types at multiple scales.

To **prevent pollution** and protect key forest resources.

To manage the **visual impacts** of forest operations and to provide **recreational opportunities** for the public.

To manage lands and **special sites** that are geologically or culturally important in a manner that takes into account their unique qualities.

To meet or exceed applicable federal, provincial and local forestry and related environmental **laws, statutes and regulations**.

To support advances in sustainable forest management through **research**, science and technology.

To improve the practice of sustainable forestry through **training and education** programs.

To set appropriate environmental **objectives and targets**, develop action plans to meet them, monitor progress and regularly review and update them.

To broaden the practice of sustainable forestry on all lands through **community involvement**, socially responsible practices, and through recognition and respect of **Indigenous Peoples' rights** and traditional forest-related knowledge.

To broaden the understanding of forest certification to the Forest Management and Fibre Sourcing Standards by documenting certification audits and making the findings **publicly available**.

To **continually improve** the practice of forest management, and our environmental management system regularly. And to monitor, measure and report performance in achieving the commitment to sustainable forestry.

To use and promote sustainable forestry across a diversity of ownership and management types that is both scientifically credible and socially, culturally, environmentally, and economically responsible to **avoid sourcing from controversial sources** both domestically and internationally.

Geoff Clarke
Woodlands Manager

Gerald Crespeigne
General Manager

CBPPL Woodlands fully endorses the Kruger Inc. Corporate Environmental and Fibre Procurement Policies. 2025

INTRODUCTION

The forest industry in Canada has evolved from the management of the timber resource to the management of the forest ecosystem. Historically, forest managers developed forest management plans in isolation, focusing on timber. Over time, as the public began requesting the inclusion of other values, consultations with the public and other resource managers evolved simultaneously with the consideration of non-timber values. This has become a cornerstone of sustainable forest management.

Corner Brook Pulp and Paper Limited (CBPPL) is committed to sustainable forest management by incorporating social, environmental, cultural, and economic values in the sustainable development of Newfoundland's forests. While the primary objective of our forest management plan is to provide a sustainable supply of high-quality raw material to various fibre manufacturing processing facilities at a competitive cost, Corner Brook Pulp and Paper Woodlands recognizes that forests offer a multitude of economic, environmental, and social values and benefits. The Company is committed to managing the forests under its stewardship in a sustainable manner, to ensure that a full range of forest values and benefits are respected. Regulatory agencies and CBPPL have incorporated consultations from various stakeholders in the forest management planning process since the 1980s, developing a positive relationship among the government, CBPPL, and the community. Public involvement in the identification of values and the development of management plans benefit present as well as future generations.

This document is the Sustainable Forest Management (SFM) Plan for the forested land on insular Newfoundland for which CBPPL has management responsibility, described as the Defined Forest Area (DFA). It follows the principles of sustainable forest management. CBPPL's first SFM Plan was released in July 2004 and is an annually updated document. CBPPL wishes to illustrate to the public and to its customers that the DFA is being managed on a sustainable basis.

CBPPL Woodlands' Environmental Management System (EMS) is the vehicle that ensures fulfillment of the SFM. CBPPL's EMS is a registrant (2001) to the ISO 14001 Standard, a standard that incorporates environmental aspects and continual improvement into all forest operations. EMS applies to all Woodlands operations controlled by the Company including management planning, road construction and maintenance, harvesting operations, transportation of fibre, silviculture, and support services. The documented procedures of EMS provide the system to meet the requirements of ISO 14001:2015 and supports the Sustainable Forestry Initiative SFI 2022® Forest Management and Fibre Sourcing Standards. Rigorous and regular independent third-party audits are involved in certification to these standards.

Throughout the text of this plan, references are made to Indicator Profiles (e.g. Indicator Profile 1.1.2). The Indicator Profiles, contain the background information, management strategy, and implementation details for each of the indicators of sustainable forest management.

DESCRIPTION OF THE DEFINED FOREST AREA

The Defined Forest Area for this SFM Plan includes all forested land on insular Newfoundland for which Corner Brook Pulp and Paper Limited have management responsibilities. This does not include transmission lines that cross CBPPL limits. These timber limits span from the Codroy Valley on the southwest corner of the island, to Cat Arm on the Northern Peninsula, and east to Gander in central Newfoundland (Figure 1), and are contained within provincial forest management district's 5, 6, 9, 10, 14, 15, and 16.

CBPPL manages approximately 1.35 million hectares of Crown land on the Island of Newfoundland and Labrador. The provincial government has responsibility to supervise, control, and direct various activities relating to forest resources on Crown Lands (see page 9), and on their limits CBPPL is responsible for: preparing timber management plans for areas of productive forest; constructing and maintaining forest access roads and bridges during harvesting activities; harvesting timber; and carrying out programs of reforestation and silviculture.

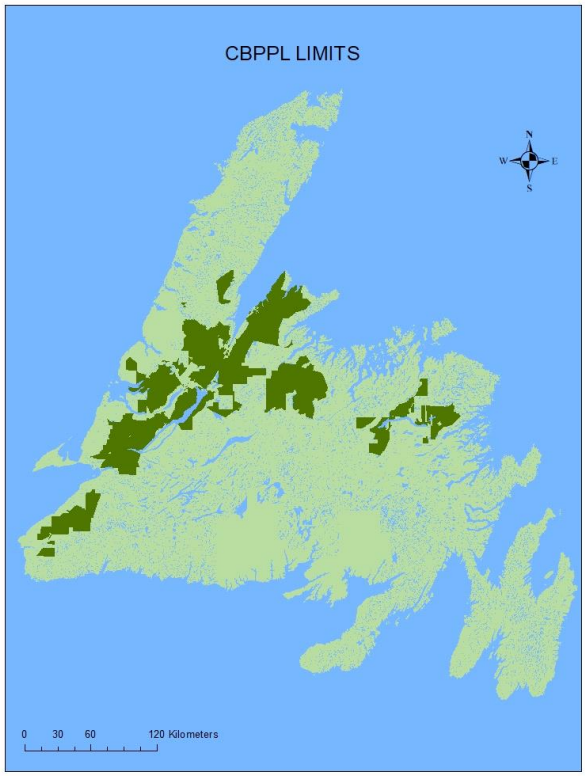

FIGURE 1 CBPPL DEFINED FOREST AREA

The DFA is the portion of CBPPL's total timber license that the company currently manages. Some areas of the total timber license are temporarily transferred or exchanged to Crown (see page 10) so cannot be included in the DFA.

BIOPHYSICAL

Geography and Terrain

The Island of Newfoundland marks the northern end of the Appalachian geological region in Eastern North America. The island has been shaped by glaciation and is rugged as a result. The DFA includes parts of the island that have been scraped bare, and many valleys and low-lying areas with thick mantles of rocky glacial deposits. The DFA – like the island – is also characterized by rolling hills, mountainous areas, upland plateaus, and numerous bogs, barrens, and ponds. There are abundant fresh water sources in the forms of large rivers, lakes, and streams. Elevation on the island peaks at 814 metres above sea level in the Lewis Hills and can average 600-800 metres above sea level on other plateaus (GNL 2003).

Geology and Soils

The geology of the DFA is typical of the island. The surface geology is characterized by large areas of coarse-textured material (glacial till deposits), washed sediments, peat deposits, and rock outcrops. Rock types tend to be predominantly limestone, predominantly sandstone, conglomerate and shale, or predominantly volcanic rock. Under well-drained conditions, the most common form of mineral soil in the province is podzols. These soils typically have an organic layer (duff) over a distinctive red or reddish-brown layer rich in iron. Most of these soils tend to be coarse textured and very acidic (DFRA 2003b).

Ecosystems

Damman (1983) divided the Island of Newfoundland into nine ecoregion classifications (Figure 2). Ecoregions are defined as areas where comparable vegetation and soil can be found on the same parent material provided that these sites have experienced a similar history of disturbance. A significant portion of CBPPL's DFA (~81%) lies within two of these ecoregions, the Central Newfoundland Forest and the Western Newfoundland Forest. Approximately 8% falls in the Long Range Barrens, over 6% in the Maritime Barrens, and almost 5% in the Northern Peninsula Forest. The North Shore Forest comprises less than 0.2% of the DFA. Following are the key characteristics of each ecoregion (DFRA 2003).

Ecoregions and Subregions of Newfoundland

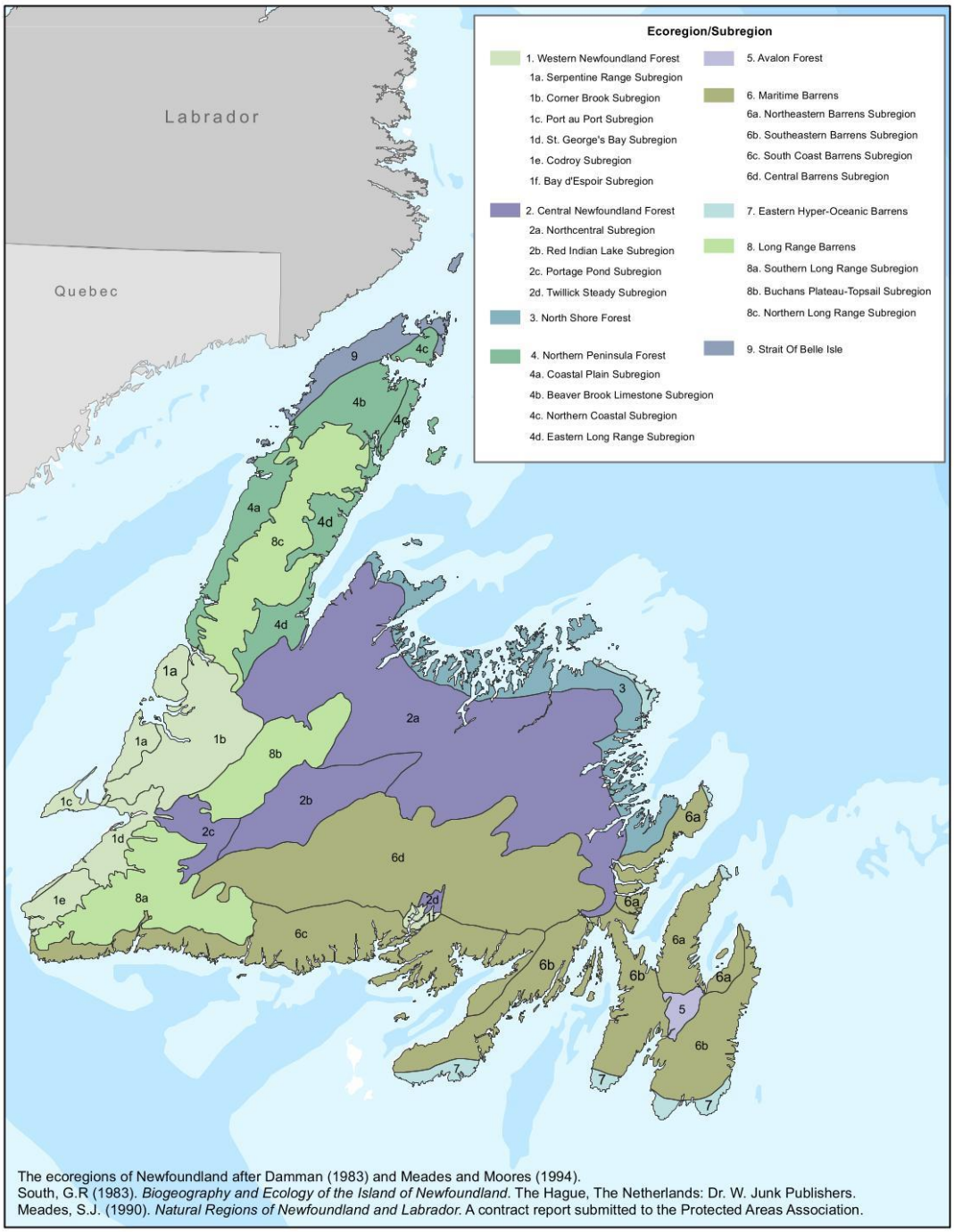

FIGURE 2 ECOREGIONS OF NEWFOUNDLAND

Northern Peninsula Forest

This ecoregion differs from most other forested parts of the island by a short growing season of 110-150 days, compared to 145-170 days for other areas. Precipitation is lower than in other regions, however, due to low summer temperatures and a shorter vegetation season, soil moisture supply is adequate. Limestone underlies most of the region, with acidic rocks more common on the eastern side of the peninsula.

Balsam fir is the dominant forest cover except at high elevations (300-400m) on the eastern side of the peninsula, where black spruce appears to be a natural component of the stands. There is very little fire history in this ecoregion. Approximately 100 species of plants are excluded from this ecoregion presumably because of the difference of climate (Damman 1965, 1976, and 1983).

Approximately 5% of the DFA is found in the Northern Peninsula Forest, in the Eastern Long Range subregion.

Western Newfoundland Forest

This ecoregion is characterized by a humid climate with a relatively longer frost-free period. It contains some of the most favourable sites for forest growth, although there is considerable variation due to altitude and proximity to the coast.

The absence of prolonged dry periods and presence of herbaceous growth appear to have excluded fires from all but the most coarse-textured soils. Consequently, balsam fir rather than black spruce is the dominant forest cover. White birch and yellow birch are common in protected valleys below 200m elevations, and red maple is more common and robust in this ecoregion than any other on the Island of Newfoundland.

The Western Newfoundland Ecoregion is subdivided into five sub-regions. The DFA's productive forest area overlaps with four: Corner Brook, St. George's Bay, Serpentine Range, and Codroy. The Corner Brook sub-region is hilly to undulating and supports some of the most productive forest stands of the island. The St. George's Bay sub-region differs in its soil types and consequently, serious growth and regeneration problems may be encountered. The Codroy sub-region has some of the most favourable conditions for growth in Newfoundland, and a large portion of the area has been cleared for agriculture. The forested landscape is dominated by steep slopes. The Serpentine Range sub-region is mountainous with low, sparse vegetation dominated by rock barrens. The serpentine and ultra-basic rock types support numerous rare plant species. Almost 30% of the DFA lies in the Western Newfoundland Forest.

Central Newfoundland Forest

This ecoregion comprises the largest portion of the DFA at over 50%. Central Newfoundland has the highest summer temperatures and lowest winter temperatures on the island. Due to the warm summers and high evapotranspiration losses, soils in the northern part of this ecoregion display soil moisture deficiency.

Forest fires have played a more important role in the natural history of this region relative to other ecoregions. Much of the balsam fir-feathermoss forest types have been converted by fire to black spruce, and some of the richer site types to hardwood forests dominated by white birch and aspen. Although aspen occurs in other regions, it is most abundant and vigorous in Central Newfoundland. Yellow birch is absent from this region primarily because of the short frost-free period. Red pine, designated as rare in Newfoundland, is most common in the Central Newfoundland Forest in small patches.

Most of the DFA in this ecoregion falls within the North-central sub-region. Pure black spruce forests and aspen stands dominate this area because of the prevalence of fire in the natural history of the sub-region. A much smaller portion of the DFA in the west lies in the Portage Pond sub-region, which is comprised of balsam fir on upland sites and some very productive black spruce stands of fire origin.

Long Range Barrens

Approximately 8% of the DFA is located in the Long Range Barrens ecoregion, and most of that is in the Northern Peninsula. This ecoregion includes the mountainous areas above tree line. Trees only occur as krummholz (stunted trees of poor form shaped by wind, salt or ice, and therefore non-productive), also called Tuckamore locally, usually dominated by black spruce, balsam fir and eastern larch. Small patches of forest may occur in sheltered valleys. The vegetation is dominated by arctic-alpine plants clearly indicating that these barrens, unlike the Maritime Barrens, were never forested.

North Shore Forest

This ecoregion has the warmest summers of any coastal region, with a frost-free season several weeks longer than in central Newfoundland. This is the driest part of the island, and summer temperatures can cause soil moisture deficiencies. There are no sub-regions within this ecoregion, and less than 0.2% of the DFA falls into this area.

The vegetation in this ecoregion is similar to that of the Central Newfoundland Ecoregion, except that white spruce is more abundant in the forests.

Maritime Barrens

The Maritime Barrens ecoregion has the coldest summers with frequent fog and strong winds. The landscape pattern consists of usually stunted, almost pure stands of balsam fir, broken by extensive open heathland. Good forest growth is localized on long slopes of a few protected valleys. Approximately 6% of the DFA falls in the Maritime Barrens, all of it within the Central Barrens sub-region. Residual forests that have not been destroyed by fire have moderate capabilities here.

Forest Types

Of the 1.35 million hectares of total land area on the DFA, only 715,535 hectares are harvestable forest land base. The remainder of the land is bog, barren, water, and scrub land.

The forests of the DFA form the most eastern part of the Boreal Forest Region of North America. The forests are relatively small, primarily coniferous trees intermixed with hardwoods. The variety of species is quite limited. Repeated fires have established black spruce as a characteristic species across much of Central Newfoundland. Elsewhere, the forests are dominated by the presence of balsam fir.

The forests of the west coast are predominately balsam fir (with minor components of white spruce and white birch) which prefer moist, well-drained soils and can attain heights of 10-14 meters at 70-100 years on the best sites. Black spruce has a very high tolerance for unfavourable conditions, and is thus common on very wet and dry sites. Black spruce grows well on fertile sites, but is a poor competitor among faster growing hardwoods. Black spruce is found primarily in the central plateau of Newfoundland where forest fires are common. White spruce may be found on more favourable sites.

Hardwoods have not formed a major component of forest cover types in this province. However, white birch and trembling aspen are significant components of mixed-wood and hardwood stands on better forest sites throughout the island, especially the deep river valleys of the Western Long Range Mountains, and the Humber River and Beothuk Lake watersheds. Hardwoods may reach heights of 22 meters at 80 years on moist, fertile sites. The land classes present on the DFA are delineated in Figure 3.

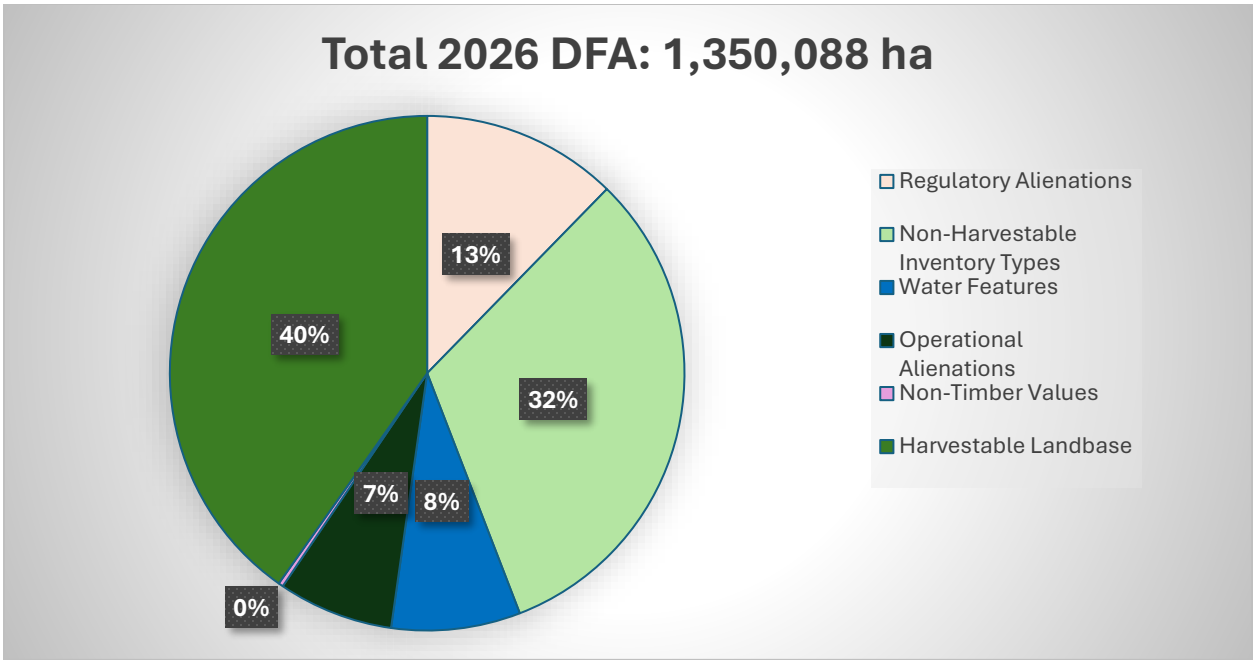

FIGURE 3 LAND CLASSES PRESENT ON THE DFA 2026

Wildlife and Fish

There are currently 28 species of mammals that make the DFA their home (FLR, 2018); 14 are native to the island and 13 have been introduced (Table 1). Of the 368 bird species that have been identified on the Island of Newfoundland (NHSNL 2003), approximately 70 are common forest-dwelling species. There are also 20 species of inland fish on the DFA, from the familiar trout, salmon and smelt to the lesser-known mummichog and windowpane (Scott and Crossman, 1964).

The provincial government is responsible for managing and conserving wildlife in Newfoundland and Labrador, while the federal government has a mandate to protect and conserve fish habitat for coastal and inland fisheries resources.

TABLE 1 NATIVE AND INTRODUCED MAMMALS ON CBPPL'S DEFINED FOREST AREA[1]

Family	Species/subspecies	Origin
Shrews	Masked (Common) Shrew (*Sorex cinereus*)	Introduced
Bats	Little Brown Bat (*Myotis lucifugus)*	Native
	Northern Long-eared Bat (*Myotis septentrionalis*)	Native
	Hoary Bat (Lasiurus cinereus)	Native

[1] Reference: FLR 2018 (Fisheries and Land Resources)

Hares	Arctic Hare (*Lepus arcticus/bangsii*)	Native
	Snowshoe Hare (*Lepus americanus*)	Introduced
Squirrels	Chipmunk (*Tamias striatus*)	Introduced
	Red Squirrel (*Tamiasciurus hudsonicus*)	Introduced
Beavers	American Beaver (*Castor canadensis/caecator*)	Native
Rats and Mice	Deer Mouse (*Peromyscus maniculatus*)	Introduced
	House Mouse (*Mus musculus*)	Introduced
	Meadow Vole (*Microtus pennsylvanicus/terraenovae*)	Native
	Bank Vole	Introduced
	Red-backed vole (*Clethrionomys gapperi*)	Introduced
	Muskrat (*Ondrata zibethicus/obscurus*)	Native
	Norway Rat (*Rattus norvegicus*)	Introduced
Insectivore	Masked Shrew	Introduced
Canids	Newfoundland Wolf (*Canis lupus/beothucus*)	Native
	Red Fox (*Vulpes vulpes/deletrix*)	Native
	Coyote (*Canis latrans*)	Introduced[2]
Bears	Black Bear (*Ursus americanus/ hamiltoni*)	Native
Weasels	Ermine (*Mustela erminea*)	Native
	Mink (*Mustela vison*)	Introduced
	Newfoundland Marten (*Martes americana/atrata*)	Native[3]
	Otter (*Lutra Canadensis/degener*)	Native
Cats	Lynx (*Lynx Canadensis/subsolanus*)	Native
Deer	Caribou (*Rangifer tarandus/caribou*)	Native[4]
	Moose (*Alces alces*)	Introduced

[1] Reference: FLR 2018 (Fisheries and Land Resources)
[2] New arrival, first sighting 1986
[3] Downlisted from Threatened to Vulnerable [Feb 2024]: Species at Risk Act and Endangered Species Act.
[4] Assessed Special Concern by COSEWIC in 2015

These wildlife species are an integral part of the Newfoundland environment. Species such as moose, snowshoe hare and grouse depend on early-successional stages of the forest. Over-mature forests are required by boreal owls for example, while many species use a mixture of forest types (CBPPL 2001). CBPPL funds research to study the effects of harvesting operations on some species inhabiting the DFA (see Indicator Profile 4.1.5).

Of the many mammals, bird, and fish species on the DFA, three mammal, 10 birds, and two fish species have been designated Species at Risk by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) and by the Newfoundland Species Status Advisory Committee (SSAC). Others, such as the Song Sparrow, Winter Wren, and numerous plant species, are considered endangered or threatened but have not been legally designated national or provincially. All these species at risk, designated or not, are considered in the Certificate of Managed Land, CBPPL's permit to operate, granted by the provincial government. See the

section on forest management planning for more information.

Forest Disturbances

On portions of the DFA in central Newfoundland, fire is the most common natural disturbance. Those portions of the DFA on the western side of the island, however, experience disturbance by insects. There are five main insects with a significant impact on the DFA's forests: hemlock looper, balsam fir sawfly, spruce budworm, balsam woolly adelgid, and birch casebearer.

SOCIO-ECONOMIC

Tenure (Ownership and Management Responsibilities)

The provincial government is responsible for the planning, development, and use of the forest resources of the province on provincial crown land. The provincial government supervises, controls, and directs all matters relating to:

- constructing and maintaining forest access roads;
- protecting the forests of the province from fire, insect, and disease;
- carrying out programs of afforestation, reforestation, forest improvement, and tree improvement;
- cutting, classifying, measuring, manufacturing, marking, and inspection of trees and timber;
- preparing timber management plans for areas of productive forest land; and
- developing and maintaining an up-to-date inventory of the timber resources of the province.

CBPPL has exclusive ownership of the timber resource on the Defined Forest Area (DFA). This right originates from several sources: a series of agreements, purchases, deeds, grants, and licenses dating from 1922 to 1994. The Bowater's Newfoundland Act of 1938 amended the term and conditions of all timber licenses currently held and subsequently acquired by CBPPL. By this Act, the term of all licenses held by CBPPL at that time and any future licenses subsequently acquired by the Company was extended to 99 years, commencing on the 29th day of November 1938. The Act states that during the term of the license

> "*… every such license shall operate to vest in the licensee during the continuance of such license the right to take and keep exclusive possession of the land therein described ... and shall vest in the holder thereof all right of property whatsoever in all trees and timber cut within the limit of the license…".*

The Bowater's Newfoundland Act also requires that

> "*The Company will at all times carry out its cutting operations in Newfoundland in accordance with good logging practice in such a manner as will best conserve the Company's forest areas so as to ensure both the permanent supply of timber for its mills*

and extensions aforesaid and the export of timber as herein provided."

CBPPL's commitment to "*good logging practices"* is further defined in its Forest and Environmental Policy (page vii). Implementation of this commitment is demonstrated in the Indicator Profiles, which are the foundation of CBPPL's SFM Plan. CBPPL is subject to the provisions of the Forestry Act 1990 and subsequent amendments, and as a condition of the Certificate of Managed Land issued to the Company annually under this Act, must operate in accordance with the Province's *Environmental Protection Guidelines for Ecologically Based Forest Resource Management.*

To facilitate economic development based on the hardwood timber resources in Forest Management Districts (FMD) 9, CBPPL transferred the management rights to this hardwood timber to the provincial government.

CBPPL has also entered into several other agreements with the provincial government concerning the transfer or exchange of cutting rights. These agreements are made at the request of the provincial government, to obtain the right to fibre in various areas. Some areas are specifically for Crown (commercial) operators (e.g., White's River, Cormack), some for local sawmills (e.g., Weir's Pond, Chouse Brook, Clam Pond), some for domestic cutters (e.g., Westport, Chouse Brook, Howley and McIvers), and some for a combination of the three (Baie Verte). Transfer agreements allow the harvest of a specified Annual Allowable Cut (AAC) of operable softwood stands (i.e. >60 years in Core or Operational), and any hardwood trees encountered during the harvest of operable softwood. Exchange agreements allow the harvest of all operable timber, both hardwood and softwood, on the exchange areas, tracked against the applicable AAC figures. There is no intent to balance the volume of the harvest from area to area.

In 2010, CBPPL sold some of its timber limits to the Crown; some to be used as protected areas, others as sources of fibre for Crown operators, sawmills, and domestic cutters. These areas can be sorted into three groups.

One group consists of areas where harvesting has been restricted. Rodney Pond Reserve (District 6) and Little Grand Lake Provisional Ecological Reserve (Districts 14 & 15) are two examples where CBPPL had already agreed to no harvesting whatsoever. However, these areas could not legally become ecological reserves while CBPPL held timber rights, even if no harvesting occurred. Two other areas in District 15 & 16 have become primarily viewshed corridors. A designated portion of the Humber Valley, from near the mouth of the Humber to the tip of Deer Lake, will be set aside for aesthetic purposes, and for agricultural development (a section on the north shore of Deer Lake). A corridor from Cormack to Gros Morne, along highway 430 and Bonne Bay Road, was designated a viewshed. Finally in this group, the Main River Management Area (watershed surrounding the Waterway Park), previously restricted to a partial harvest to conserve old-growth forest, has been handed over to the provincial government to be developed at its discretion.

A second group of areas that were previously CBPPL limits have been sold to the Crown to be used to supply fibre to Crown operators, sawmills, and domestic cutters. A large block of forest

south and southwest of Gander Lake and another block around Notre Dame Junction (both in District 6) are set aside for Crown operators and sawmills.

A third group of areas has also been included in this 2010 agreement – blocks of CBPPL limits where Crown currently had control. The Rodney Pond Exchange and Dead Wolf block in District 6 will be used for Crown operators, and all CBPPL limits in District 8 will be used for Crown operators and sawmills in central and eastern Newfoundland.

In 2017 another transfer of CBPPL limits occurred involving Agriculture Areas of Interest (AOI). To aid the Government initiative to promote agriculture development in the province, CBPPL entered into an agreement to relinquish approximately 10,000 ha of its timber license area. The areas consist of 17 blocks spread across 5 forest Management Districts, primarily on the west coast of the island.

The District 10 exchange of January 2020 was an Annual Allowable Cut (AAC) exchange between CBPPL and The Provincial Government. Areas were delineated to set boundaries around the AAC exchange volumes. In the agreement CBPPL acquired 45,000 m3 AAC in District 10 and the Crown received 45,000 AAC in Districts 6, 5 and 16. Also there were one-time volumes made available to both parties. The district 10 exchange agreement between Crown and CBPPL benefited both parties.

Forest Management District 10 is in central NL between Grand Falls and Springdale therefore closer to Corner Brook than the southern sections of District 6. Given the proximity of District 10 to the TCH it also provides an economical trucking distance for sawlogs being exchanged or sold to both sawmills at Hampden and Bloomfield. In this agreement, CBPPL also received 30,000m^3, a onetime harvest in District 15 adjacent to an operating area.

The Crown received 23,500 m^3 AAC in District 6 providing a fiber source for the sawmill at Bloomfield and a domestic fuelwood supply. A 1,500 m^3 AAC associated with an area along the Gander River (a proposed reserve to promote tourism in the area. In Districts 9, 16 and 15 the Crown received an additional 20,000 m^3 AAC to provide a source of Sawlogs for the sawmill at Hampden. In addition, crown received a one-time harvest of 40,000m^3 in District 16.

This agreement also provided for some areas previously transferred to the crown to remain so, for the life of the agreement (January 1, 2020, to December 31, 2037)

Through the transfers, exchanges, and sale of land, CBPPL has and continues to share its timber limits with other forest users of the forest for consumptive and non-consumptive purposes. The total timber rights relinquished in the sale transactions is outlined in Table 2.

TABLE 2 TIMBER RIGHTS RELINQUISHED BY CBPPL

Block Description	District	Land Base (less Water)		
		Productive (ha)	Non-Productive (ha)	Total (ha)
Rodney Pond NASP Area	6	5,125	5,156	10,281
Little Grand Lake Reserve	14/15	24,939	16,031	40,970
Humber Valley Viewshed	15	17,165	3,811	20,976
Gros Morne Corridor Viewshed	15/16	4,030	1,906	5,936
McIvers & Cox's Cove	15			10,893
Main River Watershed	16	26,477	27,418	53,895
Hampden Chouse Brook	16/9			11,899
Reidsville, Junction Brook, Crooked Feeder, Goose Steady, and Howley	16			21,058
Governors Pond	15			16,337
Adies Lake	16			394
White River	16			11,293
Faulkners Extension	16			1,952
Turners Ridge	16			5,188
Gander River	5			5,701
District 6 SW Gander	6			179,440
District 6, East of SW Gander (excluding Rodney Pond)	6	41,942	38,534	80,476
District 6, Notre Dame Junction	6	15,860	10,376	26,236
District 17, All Holdings	17	74,907	96,302	171,209
District 8, All Holdings	8	23,956	13,492	37,448
Agricultural Areas of Interest	5,9,14,15,16	9,045	1,107	10,152
Sub-Total				**721,734**

Communities within the DFA

Many communities in provincial economic zones within and proximity to the DFA benefit from the forest resource.

TABLE 3 COMMUNITIES THAT BENEFIT FROM CBPPL'S DFA

Provincial Economic Zone	Economic Zone Title	Area
2	Hyron Regional EDC	Lab City to Churchill Falls
3	Central Labrador EDB Inc	Happy Valley Goose Bay and South
6	Nordic EDC	St Anthony to Roddickton
7	Red Ochre Regional Board	Rocky Harbour to Plum Point (Eastern Coast)
8	Humber EDB Inc	Corner Brook, DL, Hampden to Harbour Deep
9	Long Range Regional EDB	Stephenville and Port au Port, Burgeo
11	Emerald Zone Corp	Baie Verte, Springdale
12	Exploits Valley EDC	Grand Falls and Western part of Central
14	Kittiwake EDC	Gander, Lewisporte, Terra Nova
15	Discovery Regional DB	Clarenville, Bonavista
18	Avalon Gateway RED Inc	Placentia, St Bride's, Branch
19	Capital Coast Development Alliance	St John's, Mt Pearl, CBS
20	Irish Loop REDB	Ferryland, Trepassey

Economic Impact

CBPPL Woodlands employs some 175 employees in their harvest operations from almost 50 Newfoundland communities. This total includes approximately 20 seasonal forestry workers, who carry out silviculture operations in the summer and fall. The Company employs another 340 people at the Mill in Corner Brook and in the Deer Lake Power Company.

In addition to this direct employment, the operation of the mill also has indirect and induced impacts. Indirect impacts are realized by employees working for firms supplying CBPPL with goods and services. Induced impacts are generated by the direct and indirect income earners

spending their earnings in the economy. Labour income impacts (direct, indirect, and induced) of CBPPL operations totals $128.49 million (CBPPL, 2024).

Forest Uses

For generations, Newfoundlanders and Labradorians have relied on the forests for survival in the province's harsh climate, as well as for livelihood and recreation, shaping strong cultural traditions and connections to the land. Indigenous communities, including the Qalipu and Miawpukek First Nations, likewise maintain long-standing cultural, spiritual, and harvesting relationships with these forested landscapes, grounded in traditions of stewardship, craftmaking, and sustainable resource use. CBPPL shares forest resources with residents of the province and other industries, supporting a wide range of uses throughout the DFA.

Timber

The forests within the DFA are primarily managed to supply sawlogs to the region's major sawmills, round wood and fibre to CBPPL's newsprint mill in Corner Brook. The DFA provides a steady supply of logs, to three large sawmills that operate year-round, and pulp wood. The newsprint mill receiving wood chips in return for logs from the sawmills. Domestic firewood harvesting is also widespread throughout the DFA, with permits issued to the public.

Tourism and Recreation

Many recreational opportunities exist throughout the DFA, which offers outstanding scenery and interesting topography, and provides opportunities for berry picking and viewing wildlife and flora. Hiking, skiing, and snowmobiling are just a few of the activities carried out on the DFA, and all are marketed as Adventure Tourism. This non-consumptive, recreation-based sector of the province's tourism industry has continued to rapidly grow. Many of these activities are enhanced by or are dependent on forest resources. CBPPL has developed a "Special Places" program in its SFM Plan, which identifies and promotes areas on the DFA with distinctive natural characteristics (Indicator Profile 6.1.2). In 2010, CBPPL signed an agreement with the International Appalachian Trail Newfoundland and Labrador, providing protection for five areas on the DFA in western Newfoundland where the trail network plans to expand.

Mining

Mineral rights on the DFA are owned and administered by the provincial government, with the exception of two mining grants owned by CBPPL. The Humber River Fee Simple Mining Grant is 8,707.7 ha and the Corner Brook Fee Simple Mining Grant is 780.7 ha. Exploration work on these mining grants is carried out annually.

Quarry development, Mineral Exploration and Mining on CBPPL License is covered in CBPPL's revised Crown Land referral Policy (2023). An agreement with the Mineral Lands division of the Department of Industry, Energy and Technology exists similar to the agreement

with crown lands, whereby quarry development approval is held until CBPPL is compensated for loss of land base. The agreement also insures CBPPL is notified of all Mineral exploration being carried out on its license. Other than extra ordinary land clearing for mineral exploration CBPPL waives the requirement for compensation provided rehabilitation is being conducted in accordance with the government Mineral exploration permit. Should Mineral exploration result in a mine, CBPPL will require compensation in accordance with its Crown Land referral policy.

Agriculture

Some areas of the DFA are suitable for agriculture. CBPPL recognizes this potential and will continue to work with the provincial government and individual proponents of potential agricultural developments. Through the five-year forest management planning process, CBPPL will consider the potential agricultural development on the DFA. Examples are the timber rights relinquished on the north shore of Deer Lake (see page 12-13). In 2017 CBPPL relinquished 10,152 ha of productive forest land for agriculture development in an agreement with the Provincial Government.

Outfitting

Numerous outfitters operate within the boundaries of the DFA, most of them catering to the big game hunter or angler. Some outfitters have diversified into non-consumptive areas of the tourism industry such as snowmobiling, dog sledding, kayaking, canoeing, nature viewing, hiking, and wildlife photography. These businesses depend on the forest for their livelihood. CBPPL and the Newfoundland and Labrador Outfitters Association have a Memorandum of Understanding in which both parties agree to seek reasonable and mutually acceptable measures to reduce conflicts. In Indicator Profile 5.4.1 CBPPL aims for the satisfaction of 100% of stakeholders inside CBPPL's 5-year operating plan for each Forest Management District, with whom CBPPL has an agreement.

Cabin Development

The construction of small cottages or cabins on public lands as a base for outdoor recreational activities such as hunting, fishing, or snowmobiling is a long-held tradition in Newfoundland and Labrador. The Provincial Government issues Licenses to Occupy (LTO) Crown land to individuals for recreational cottage development on public lands throughout the province, including the DFA. A License to Occupy does not grant, convey, or transfer any exclusive right, title, or interest in, or to, a defined cottage lot or land area. It merely gives the licensee permission to occupy Crown Land and construct a cabin. All applications for LTOs on the DFA are referred to CBPPL for review and comment. CBPPL works with Crown Lands staff to accommodate these cottages on the DFA in areas where there is no conflict with the Company's operations or forest management activities.

In recent years Crown Lands Division is encouraging applicants to apply for Crown Land Grants whereby applicants could buy exclusive rights to crown land for cottage development. In many cases these are existing structures currently holding a LTO or are illegal developments. Although

the Crown has the right to sell land, they recognize CBPPL right to be compensated for loss of land base, timber value, and AAC, where the cabin development falls on CBPPL Timber License Area.

An agreement between Crown Lands Division and CBPPL has been reached whereby Crown Lands Division will refuse (in most cases) applications that conflict with CBPPL forest management activities and in other cases hold approvals until CBPPL has been compensated (compensation to CBPPL is determined according to CBPPL Crown Land referral policy)

There are many personal cabins located on the DFA, both in cabin development areas and remotely. Cabin owners are generally appreciative of the forested land adjacent to and around their properties and the logging road access forestry operations provide.

Hunting, Fishing, Trapping and Snaring

Hunting, fishing, trapping, and snaring are all activities commonly practiced by residents on the DFA. These activities are regulated by the provincial government.

Protected Areas

CBPPL has designation of protected areas on its timber limits in various locations. Little Grand Lake Provisional Ecological Reserve was established on the DFA in 2002, to protect the areas' Newfoundland pine marten (listed Endangered at that time, current legal Federal status is listed as Special Concern as of Feb. 26, 2026). Main River, also part of CBPPL's DFA, was designated as Newfoundland and Labrador's first Canadian Heritage River in 2001 and established as a provincial park (Main River Waterway Provincial Park) in 2009. CBPPL relinquished all timber rights in these two areas to the provincial government and agreed to carry out only selective harvesting in the 49 km² Special Management Area adjacent to Waterway Park. In 2013, CBPPL relinquished timber rights in the Main River Special Management Area (see page 12).

In December of 2016, CBPPL developed a Voluntary Protected Areas Agreement with Canadian Parks and Wilderness Society (CPAWS) as part of the Canadian Boreal Forest Agreement (CBFA). This agreement establishes 16 voluntary protected areas within the forest tenure area, supports the Large Intact Landscape deferral for the Island of Newfoundland (Cat Arm, Hampden Downs, and the southwestern portion of District 6), and supports the Natural Areas System plan for the Island of Newfoundland.

FOREST MANAGEMENT PLANNING FRAMEWORK

In the early 1900s, Newfoundland's Forest Industry began with the establishment of timber cutting rights and the development of the newsprint industry. Forest stewardship evolved from simple protection of the resource to sustained yield management. In 1973, a Provincial Forestry Task Force spearheaded the implementation of a structured management regime (DFRA 2003c). Forest management districts were designated under the new regime, each requiring a forest management plan containing:

- A Forest Management Plan Report, outlining how the district will be strategically managed.
- Five-Year Operating Plans, prepared by each timber cutting right holder, outlining where timber harvesting, silviculture and road construction will take place.
- Annual Operating Plans, prepared by each timber cutting right holder, providing additional detail to the Five-Year Operating Plan.

By the 1980s, plans that had previously been prepared by forest managers alone, were being developed in consultation with other resource managers and the public. At the same time, new provincial environmental assessment legislation required five-year operating plans to be registered for review.

The 1990 Forestry Act outlined its approach as providing a "*continuous supply of timber in a manner that is consistent with other resource management objectives, sound environmental practices, and the principle of sustainable development*." The Act also ensured the participation of the public by requiring the Minister to consult with the public in the development of Five-Year Operating Plans.

In 1995, a "Proposed Adaptive Management Process" was implemented with three objectives:

- To establish a proactive planning framework to include all stakeholders.
- To learn more about forest systems while they are being actively managed (adaptive).
- To assume an ecosystem approach to forest management in order to sustain natural system integrity and health over the long term.

This process provided the foundation for the establishment of planning teams for each management district.

Public Participation in Planning Processes

There are various opportunities for the public to contribute to sustainable forest management of the DFA. In the Five-Year Operating Plan, the provincial government is required by legislation to include public participation in the development of operating plans for each management district. CBPPL invites input from all stakeholders in the development of a plan for the entire DFA. Public inquiries and input can also be submitted through the website at any time: www.CBPPLWoodlands.com

Five-Year Operating Plan

The provincial government produces a Sustainable Forest Management Strategy that outlines sustainable and adaptive ecosystem management strategies for the whole province. The provincial government released a 10-year Provincial Sustainable Forest Management Strategy (PSFMS) Document (2014-2024), which emerged through wide consultation with citizens of the province. The 2014-2024 PSFMS builds on the strengths of the previous strategy plans and uses a landscape-scale planning approach to implement the progressive and innovative ecological policies required for Sustainable Forest Management (SFM). The strategy also builds on the strengths of the many modern and high-quality forest management programs that are currently being implemented in this province to ensure a vibrant and competitive forest industry. This strategy is implemented through the Five-Year Operating Plan, a planning document required by the Forestry Act and submitted to the provincial government for each Forest Management District. The Five-Year Operating Plan has a detailed format that identifies where, when and how forest management activities will occur within a particular District.

Five-Year Operating Plans are prepared by each licensee in each Forest Management District and are developed following a public consultation process that invites input from stakeholders. As new five-year plans are being developed and implemented provincially, relevant issues raised from previous planning processes are considered to form the foundation of the new plans. In 2016, in addition to transferring issues/concerns/mitigations from previous planning processes, a revised approach of stakeholder involvement for the development of this plan was implemented. Known interested stakeholders from previous planning processes were engaged on a "one-on-one" basis to evaluate potential activity.

Once the Five-Year Operating Plan is completed, it must be registered with the provincial government to undergo an environmental assessment. During this process, interested government departments and the public are consulted and submissions are reviewed. A Plan is approved by the Minister of Environment & Climate Change is subject to any terms and conditions the Minister may set.

Annual Operating Plan

The 1990 Forestry Act also requires submission of Annual Operating Plans to the provincial government in advance of harvesting planned for the coming year. In addition to providing significant detail regarding wood supply, access road development, planned harvesting, environmental concerns and forest renewal activities, the Annual Operating Plan also addresses comments and recommendations generated during the development of the Five-Year Operating Plan. Following the approval of the Annual Operating Plan by these departments, a Certificate of Managed Land is issued to CBPPL, outlining the terms and conditions of the Plan's approval.

Sustainable Forest Management Plan

CBPPL's Sustainable Forest Management Plan complements the provincial government's Sustainable Forest Management Strategy, described in the previous section. CBPPL's 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. This plan is revised annually.

The Indicator Profiles and the Annual Update on Programs associated with this plan can be found in the remainder of this document. The Indicator Profiles outline in detail the values, objectives, indicators, and targets from the environmental certifications that cover CBPPL's DFA planning and operations, explain the status of the indicator as of 2023, and include the management strategies necessary to achieve the targets. The Indicator Profiles line up with the SFI FM certification numbers. The Annual Update on Programs is found after the Indictors and gives the values, objectives, and indicators and targets of programs such as Significant Environmental Aspects from the ISO 14001, as well as other programs that require an annual review.

Adaptive Forest Management

Management strategies for the indicators are currently being implemented, and their effectiveness is already being monitored. To follow the concept of adaptive forest management, monitoring must first determine if the management strategies are reflected in the operating practices (what we say is what we do), and then, if the management strategies are effective (targets are being met). Where desired outcomes are not met, management strategies can be changed to achieve targets, or more realistic targets can be set.

SFI OBJECTIVES & INDICATOR PROFILES

The next section contains the annual reports for programs that CBPPL have in place for the company's timber rights operating area (DFA) in the woodlands. The SFI certification, in which CBPPL Woodlands is certified to, is based on the 13 Principles, 17 Objectives, and 41 Performance Measures. Objectives of the SFI 2022 Forest Management Standard, are as follows:

- Forest Management Planning – To ensure forest management plans include *long-term* sustainable harvest levels and measures to avoid forest conversion or afforestation of ecologically important areas.

- Forest Health and Productivity - To ensure *long-term* forest *productivity* and *conservation* of forest resources through prompt *reforestation, afforestation,* deploying *integrated pest management* strategies, *minimized* chemical use, soil *conservation*, and protecting forests from damaging agents.

- Protection and Maintenance of Water Resources - To *protect* the water quality and quantity of rivers, streams, lakes, *wetlands,* and other water bodies.

- Conservation of Biological Diversity – To maintain or advance the *conservation* of *biological diversity* at the *stand*- and *landscape*-level and across a diversity of forest and vegetation cover types and successional stages including the *conservation* of forest plants

and animals including *aquatic species, threatened and endangered* species, *Forests with Exceptional Conservation Value, old-growth forests* and ecologically important sites.

- Management of Visual Quality and Recreational Benefits - To manage the visual impact of forest operations and provide recreational opportunities for the public.
- Protection of Special Sites - To manage lands that are geologically or *culturally important* in a manner that takes into account their unique qualities.
- Efficient Use of Fiber Resources - To *minimize* waste and ensure the efficient use of fiber resources.
- Recognize and Respect Indigenous Peoples' Rights - To recognize and respect *Indigenous Peoples'* rights and traditional knowledge.
- Climate Smart Forestry – To ensure forest management activities address climate change adaptation and mitigation measures.
- Fire Resilience and Awareness – To limit susceptibility of forests to undesirable impacts of wildfire and to raise community awareness of fire benefits, risks, and minimization measures.
- Legal and Regulatory Compliances – To comply with all applicable laws and regulations including, international, federal, provincial, state, and *local.*
- Forestry Research, Science and Technology - To invest in research, science, and technology, upon which sustainable forest management decisions are based.
- Training and Education - To improve the implementation of *sustainable forestry* through appropriate training and education *programs.*
- Community Engagement and Landowner Outreach - To broaden the practice of *sustainable forestry* through public outreach, education, and involvement, and to support the efforts of *SFI Implementation Committees.*
- Public Land Management Responsibilities - To participate and implement sustainable forest management on *public lands.*
- Communications and Public Reporting - To increase transparency and to annually report progress on conformance with the *SFI Forest Management Standard.*
- Management Review and Continual Improvement – To promote continual improvement in the practice of *sustainable forestry* by conducting a management review and monitoring performance.

Indicator profiles are a subsection of SFI objectives. The report is set up beginning with the SFI FM Objective, Performance Measure, Indicator, Target, and Acceptable Level of Variance, as well as the person responsible for that indicator. The profile then proceeds with detailed information as outlined in the topic headings below. Each indicator will be monitored through the Company's Management Review process and reported annually in this plan.

Definitions – This section defines any terms or phrases necessary for full comprehension of an indicator by the public.

Detailed Description – This section describes the indicator in detail. This section may include background information, indicator rationale, and methodology used for indicator measurement.

Status in 2025– This section describes the status of the indicator based on the most current available data at the time of printing in 2026.

Acceptable Level of Variance – This section will provide details about the range of values for the indicator that is considered acceptable.

Management Strategy – This section provides a description of the chosen strategy, i.e. the elements of CBPPL's management strategy that relate to the indicator, and links between this and other indicators.

Forecast, Predicted Results or Outcome – This section describes the long-term projection of future indicator levels. Some indicators will rely on complex computer models to satisfy the forecasting requirements, whereas others will rely on more simple methods. Forecasts will include, where appropriate, links to other indicators, and potential external factors that could affect indicator performance.

Implementation Schedule – This section outlines required actions for the successful tracking of each indicator. Where specific actions are required, this section identifies tasks, responsibilities and deadlines.

Monitoring / Reporting – This section outlines the frequency at which the indicator will be reported upon, as well as the frequency of monitoring/review. Sources of information necessary for reporting on the indicator are listed.

Links with Strategic and Operational Plans – This section identifies linkages between the indicator and the Newfoundland and Labrador Sustainable Forest Management Strategy, Five-Year Operating Plans, and Annual Operating Plans.

SFI Objective 1. Forest Management Planning

To ensure forest management plans include long-term sustainable harvest levels and measures to avoid forest conversion.

Indicator 1.1.2 AAC Harvested

Objective	1.0 Forest Management Planning
Performance Measure	1.1 Program participants shall ensure that forest management plans include long-term harvest levels that are sustainable and consistent with appropriate growth and yield models.

Indicator: **SFI 1.1.2**	**Target**	**Acceptable Level**
Proportion of the calculated long-term sustainable harvest level that is being harvested.	To harvest no more than 100% of the AAC over a 5- year period.	Not to exceed the AAC over a 5-year period
	Resource Person:	District Planner

Definitions

AAC – ANNUAL ALLOWABLE CUT – The volume of timber that can be harvested each year on a sustainable level, considering only the productive forest. Usually the annual average of a 5 year period.

Detailed Description

This indicator seeks to measure the proportion of the Annual Allowable Cut harvested from CBPPL limits and a figure is provided annually for this indicator. It can be assumed that harvesting the entire AAC will provide the maximum possible amount of timber-related benefits; however, harvesting less than the AAC will add to the production capacity of the remaining forest.

The AAC is derived from complex computer modeling and is set by the province's Chief Forester. Some of the programs running models for Newfoundland and Labrador are Remsoft and Patchworks, that allow us to produce a spatial model of our forest and see on maps how and where the forest changes over time. With this modeling our AAC was also broken down into three classes: Base AAC includes the timber stands we believe are readily accessible under normal operating conditions; Partition AAC is made up of small-scattered stands less than 50 hectares in size; Class III AAC encompasses timber stands that are isolated and on steep slopes, making them very difficult and costly to harvest.

Actual volumes harvested in any one year are updated by Oct. 15 of the following year. If the

actual harvest is greater than the AAC for one year, an adjustment will be made in the following year. AACs are calculated for a five-year period, with harvest figures being based on CBPPL's Report of Past Annual (ROPA) for those years.

Status in 2025

To reduce the time-consuming procedure of doing a complete island wide wood supply every five years, it was decided by Gov. to adjust the wood supply time frame to coincide with the five-year plan zones (5YP). The tables will be modified each year until all the five-year plan timelines are met. New softwood and hardwood tables for Districts 14 and 15 this year to follow the Five-Year Plan (2024-2028).

Reporting on the AAC is done through the Report of Past Annuals, the government accountability report where divisions publish their planned vs actual forestry results, including the Annual Allowable Cut utilization. Our tables will be one year behind as the update is not completed till Oct.1st the following year.

TABLE 4 SOFTWOOD ANNUAL ALLOWABLE CUT (AAC) AVAILABLE AND ACTUAL HARVESTED BY FOREST MANAGEMENT DISTRICT 5, 6, 9, &16 FOR 2022-2026

Forest Mgmt. District	Total Avalable (Net) (M3/Yr.)	Harvested 2022	Harvested 2023	Harvested 2024	Harvested 2025 To be Updated Oct 2026	Harvest 2026	Harvested 2022 - 2026 (Ave./Yr.) (3 year average based on 3 years of data)	% of AAC Harvested 2022-2026* (Based on 5 year average)
5	41,000	11,194	30,125	22,242	0	0	21,187	31.0
6	33,500	0	0	0	0	0	0	0
9	150,500	135,046	155,673	100,101	0	0	130,273	51.9
16	82,000	130,201	50,381	57,403	0	0	79,328	58.0
Total	**307,000**	**276,440**	**236,618**	**179,746**	**0**	**0**	**256,529**	**45.1**

***** In any one year the harvest may exceed the AAC, but the average for the 5 years cannot exceed the AAC available.

TABLE 5 SOFTWOOD ANNUAL ALLOWABLE CUT (AAC) AVAILABLE AND ACTUAL HARVESTED BY FOREST MANAGEMENT DISTRICT 14 & 15 FOR 2024-2028

Forest Mgmt. District	Total Avalable (Net) (M3/Yr.)	Harvest 2024	Harvest 2025	Harvest 2026	Harvest 2027	Harvest 2028	Harvest 2024-2028 (Ave./Yr.)	% of AAC Harvest 2024-2028*
14	80,000	69,017	0	0	0	0	69,017	17.2
15	174,500	237,199	0	0	0	0	237,199	27.1
Total	**254,500**	**306,216**	**0**	**0**	**0**	**0**	**306,216**	**24.0**

***** In any one year the harvest may exceed the AAC, but the average for the 5 years cannot exceed the AAC available.

TABLE 6 SOFTWOOD ANNUAL ALLOWABLE CUT (AAC) AVAILABLE AND ACTUAL HARVESTED BY FOREST MANAGEMENT DISTRICT 10 FOR 2021-2025

Forest Mgmt. District	Total Avalable (Net) (M3/Yr.)	Harvest 2021	Harvest 2022	Harvest 2023	Harvest 2024	Harvest 2025	Harvest 2021 - 2025 (Ave./Yr.)	% of AAC Harvest 2021-2025*
10	44,119	3,172	22,842	1,532	19,482	0	11,757	12.3
Total	**44,119**	**3,172**	**22,842**	**1,532**	**19,482**	**0**	**11,757**	**12.3**

* In any one year the harvest may exceed the AAC, but the average for the 5 years cannot exceed the AAC available

TABLE 7 HARDWOOD ANNUAL ALLOWABLE CUT (AAC) AVAILABLE AND ACTUAL HARVESTED BY FOREST MANAGEMENT DISTRICT 5, 6, 9 & 16 FOR 2022-2026

Forest Mgmt. District	Total Avalable (Net) (M3/Yr.)	Harvest 2022	Harvest 2023	Harvest 2024	Harvest 2025	Harvest 2026	Harvest 2017 - 2 (Ave./Yr.)	% of AAC Harvest 2017-2021*
5	800	32	27	27	0	0	28	2.2
6	500	0	0	0	0	0	0	0
9	2,500	0	707	638	0	0	448	10.8
16	400	0	0	219	0	0	73	11.0
Total	**4,200**	**32**	**734**	**884**	**0**	**0**	**550**	7.9

*** In any one year the harvest may exceed the AAC, but the average for the 5 years cannot exceed the AAC available.**

TABLE 8 HARDWOOD ANNUAL ALLOWABLE CUT (AAC) AVAILABLE AND ACTUAL HARVESTED BY FOREST MANAGEMENT DISTRICT 14 & 15 FOR 2024-2028

Forest Mgmt. District	Total Available (Net) (M3/ Yr.)	Harvested 2024	Harvested 2025	Harvested 2026	Harvested 2027	Harvested 2028	Harvested 2024 - 2028 (Ave./Yr.)	% of AAC Harvested 2024-2028*
14	1,900	0	0	0	0	0	0	0
15	1,700	0	0	0	0	0	0	0
Total	**8,180**	**0**	**0**	**0**	**0**	**0**	**0**	0

***** In any one year the harvest may exceed the AAC, but the average for the 5 years cannot exceed the AAC available.

TABLE 9 HARDWOOD ANNUAL ALLOWABLE CUT (AAC) AVAILABLE AND ACTUAL HARVESTED BY FOREST MANAGEMENT DISTRICT 10 FOR 2021-2025

Forest Mgmt. District	Total Available (Net) (M3/ Yr.)	Harvested 2021	Harvested 2022	Harvested 2023	Harvested 2024	Harvested 2025	Harvested 2021 - 2025 (Ave./Yr.)	% of AAC Harvested 2021-2025*
10	219	0	0	0	0	0	0	0
Total	**1095**	**0**	**0**	**0**	**0**	**0**	**0**	0

***** In any one year the harvest may exceed the AAC, but the average for the 5 years cannot exceed the AAC available.

Management Strategy

It is our intention to harvest 100% of the AAC available to CBPPL. Tracking the harvest will ensure we do not overcut our AAC.

Forecast, Predicted Results or Outcome

CBPPL will harvest 100% of the AAC.

Implementation Schedule

Task	Details	Responsibility	Frequency
Update harvests.	IWO and ROPA are used to verify and report what volumes were harvested from the DFA by operating area and Forest Management District*	District Planner	Annually

* Procedure – The volumes harvested each year in the AAC class are determined by overlaying the updated cutover and clipping it form the land base layer. This land base layer shows what AAC class each stand in the land base belongs to. The overlay is then used to determine the percentage of each AAC class harvested by areas.

Monitoring / Reporting

Frequency of Reporting	Frequency of Monitoring and Review	Sources of Information
Annually in the SFM Plan	Annually	Annual Updates

Links with Strategic and Operational Plans

NL Sustainable Forest Management Strategy	5-Year Operating Plan	Annual Operating Plan
Establishing and maintaining long-term sustainable wood supply levels for each management district is a goal identified in this document.	This plan documents the five-year AAC figure and its distribution over the five-year period by district.	This plan documents the specific areas in each district in which the AAC will be harvested.

Indicator 1.2.1 Working Groups

Objective	1.0 Forest Management Planning
Performance	1.1 Program participants shall ensure that forest management plans include long-term

Measure	harvest levels that are sustainable and consistent with appropriate growth and yield models.

Indicator:	**SFI 1.2.1**	**Target**	**Acceptable Level**
Forest area by type or species composition		To maintain representation (by area) of current working groups close to current levels. Report on area of wetlands, and other non-forest ecosystem types.	To be within the set range for each of the working groups. (See Acceptable Level of Variance).
		Resource Person:	District Planner

Definitions

FOREST STAND – A group of reasonably homogeneous trees that can be differentiated from surrounding stands by its age, composition, structure, site quality, or geography.

WORKING GROUP – A strata code that represents the **predominant** tree species of a forest stand. In the forest inventory database all forest stands are categorized by working group, as well as other measured features (e.g. height, crown density, etc.). The working group code is determined based on plot data and photo interpretation. The working groups present in the CBPPL DFA are:

Working Group	**Code**	**Working Group**	**Code**
Balsam Fir	bF	Black Spruce	bS
Engelmann Spruce	eS	Hardwood Softwood	hS
Jack Pine	jP	Red Maple	rM
Red Pine	rP	Softwood Hardwood	sH
Trembling Aspen	tA	White Birch	wB
White Pine	wP		

SPECIES COMPOSITION – A code that represents the tree species that comprise a forest stand. These codes are made up of one, two, or three species. One species (e.g. bF) indicates that 75-100% of the basal area in the stand is comprised of the identified species. Two species (e.g. bFwB) indicates that 50-75% of the basal area in the stand is comprised of the first identified species, while the remaining basal area is comprised of the second identified species. Three species (e.g. bFbSwB) indicates that 40% of the basal area in the stand is comprised of the first identified species, 30% is comprised of the second identified species, and 30% is comprised of the third identified species. The following is a list of species recognized in the inventory:

Species	**Code**	**Species**	**Code**
Balsam Fir	bF	Red Pine	rP
Balsam Poplar	bP	Sitka Spruce	sS

Engelmann Spruce	eS	Tamarack/Larch	tL
European Larch	eL	Trembling Aspen	tA
Jack Pine	jP	White Birch	wB
Japanese Birch	jB	White Pine	wP
Japanese Larch	jL	White Spruce	wS
Lodge pole Pine	lP	Yellow Birch	yB
Red Maple	rM	Non-Stocked	nS

Detailed Description

For this indicator, the area will be measured in hectares for each working group (Species composition is too specific of a measure and results in excessive data, which in turn renders it difficult to set targets at this level). Each set of species compositions has been "rolled up" to a working group using the provincial Foresty Agriculture and Lands Department Working Group Determination definitions (Table 7 below). Each area measurement for each working group will also be expressed as a percent.

TABLE 10 WORKING GROUP DEFINITIONS

Species Compositions in Each Working Group (bold)								
bF	**bS**	**sH**	**sH cont'd.**	**hS**	**hS cont'd.**	**tA**	**eS**	**wB**
bF	bFbStL	bFbSrM	bSwBwS	bFrMwB	wBtAbS	bP	rS	wB
bFbS	bFbSwP	bFbStA	bSwPwB	bFtAwB	wBtAtL	tAwB	sP	wBrM
bFbSwS	bFtLbS	bFbSwB	bSwStA	bFwBrM	wBtAsP	tA	sPjP	wBrMtA
bFtL	bS	bFrM	bSwSwB	bFwBtA	wBtAwS		sS	wBtA
bFwP	bSbF	bFtA	bSyB	bFwByB	wBtL		sSbS	wByB
bFwPbS	bSbFrP	bFtAbS	tAbFbS	bFyBwB	wBsW		sSsP	yB
bSbFwS	bSbFtL	bFtLwB	tAbSbF	bSrMtA	wBwStA		jB	yBtA
wS	bSbFwP	bFwB	tAbStL	bStArM	wBwSyB			yBwB
wSbF	bSjB	bFwBbS	tAbSwS	bStAwB	wByBbF			
wSbFbS	bSjP	bFwBtL	tAtLbS	bWwBrM	wByBwP			
wSbS	bSlP	bFwBwP	tLbSwB	bSwBtA	wByBwS			
wSbSbF	bSrP	bFwBwS	tLrM	rMbS	wSwBrM			
wSjL	bSsP	bFwPwB	tLrA	rMtAbS	yBbF			
wSsP	bSsS	bFwStA	tLwB	rMwBbF	yBbFwB			
wStL	bStL	bFwSwB	tLwBbS	tAbF	yBbS			
	bStLbF	bFwSyB	wBbFbS	tAbFwB	yBwBbF			
	bStLwS	bFyB	wBbFtL	tAbS	yBwBbS			
	bSwP	bSbFrM	wBbFwP	tAbSwB	yBwBwP		**jP**	**rM**
	bSwPbF	bSbFtA	wBbFwS	tAwBbF	yBwBwS		jP	rMwB
	bSwS	bFbSwB	wBbSbF	tAwBwS	yBwS		jPnS	
	bSwSbF	bSjPtA	wBbStL	tAwBbS				
	jL	bSrM	wBbSwS	tAwS				
	jLbS	bSrMtL	wBtLbS	sWbF				
	jLeLtL	bStA	wBwSbF	wBbFtA				
	rP	bStAbF	wBwSbS	wBbFyB				
	rPbS	bStAtL	wPwB	wBbS				
	sPrPjP	bStAwS	wSbSwB	wBbSrM				

	tL	bStLrM	wStA	wBbStA				
	tLbF	bStLtA	wSwB	wBbSyB				
	tLbFbS	bStLwB	wSwBbF	wBrMbS				
	tLbS	bSwB	wSwBbS	wBrMbF				
	tLbSbF	bSwBbF	wSwPwB	wBrMtL				
	tLbSwS	bSwBsS	wSyB	wBrMwS				
	tLwS	bSwBtL	yBbSbF	wBtAbF				
	wSbSjP							

This indicator can only be updated after calculation of the wood supply, which occurs every five years. This indicator was initiated in 2004, based on the 2001 wood supply, and reported only productive forest. The first update to report on productive forest, and non-productive forest and non-forest area was in 2010, and it reflected a significant land sale (>500,000ha) back to the Crown and changes in exchanges and transfers in Forest Management Districts (FMD) 6, 9, & 15. The resultant Defined Forest Area (DFA) was 1,493,403 ha (gross). Since 2010 there has been numerous changes to our total DFA. The most recent being 2020 which included the reduction of FMD-06 by over half of CBPPL timber rights and the addition of half of FMD-10. Currently our total DFA is 1,360,183 ha.

Status in 2025

The area of Corner Brook Pulp and Paper's Timber Limits (DFA) is represented in the following tables for 2025 as: working groups in productive forest; and non-productive forest, non-forested land, and water. The total area is 1,360,183 hectares (no change from 2024).

Tables 9 and 10 show that in 2025 all working groups have been maintained within the acceptable level of variance.

TABLE 11 AREA OF PRODUCTIVE FOREST PRESENT ON THE DFA, 2025

Working Group	Total Area (ha)	Percent of Productive Forest Area on the DFA (693,045 ha)	Percent of Total Area on the DFA (1,360,183 ha)
bF	277,911	40.1	20.4
bS	183,934	26.5	13.5
DI[1]	129,420	18.7	9.5
sH	69,944	10.1	5.1
hS	23,882	3.4	1.8
wB	7,208	1.0	0.5
tA	441	0.1	0.0
jP	397	0.1	0.0
eS	11	0.0	0.0
eL	3	0.0	0.0
rM	2	0.0	0.0
Total	**693,153**	**100**	**50.9**

[1] Disturbed by insects or fire
[2] Not sufficiently stocked

TABLE 12 NON-PRODUCTIVE FOREST AREA SUMMARY, 2025

Stand ID - Description	Total Area (ha)	% of Total DFA (1,360,183 ha)
Softwood Scrub	335,578	24.7
Bog	119,709	8.8
Water	109,548	8.1
Soil Barren	43,812	3.2
Wet Bog	23,145	1.7
Rock Barren	22,106	1.6
Treed Bog	4,327	0.3
ROW (Transmission)	1,775	0.1
Cleared Land	2,346	0.2
Residential Land	2,141	0.2
ROW (Road)	1,436	0.1
Agricultural Land	486	0.0
Sand	400	0.0
Small Island	221	0.0
Total Non-Productive Area (ha):	**667,030**	**49.1**

The information in the above tables has been grouped into major categories and is represented in Figure 4.

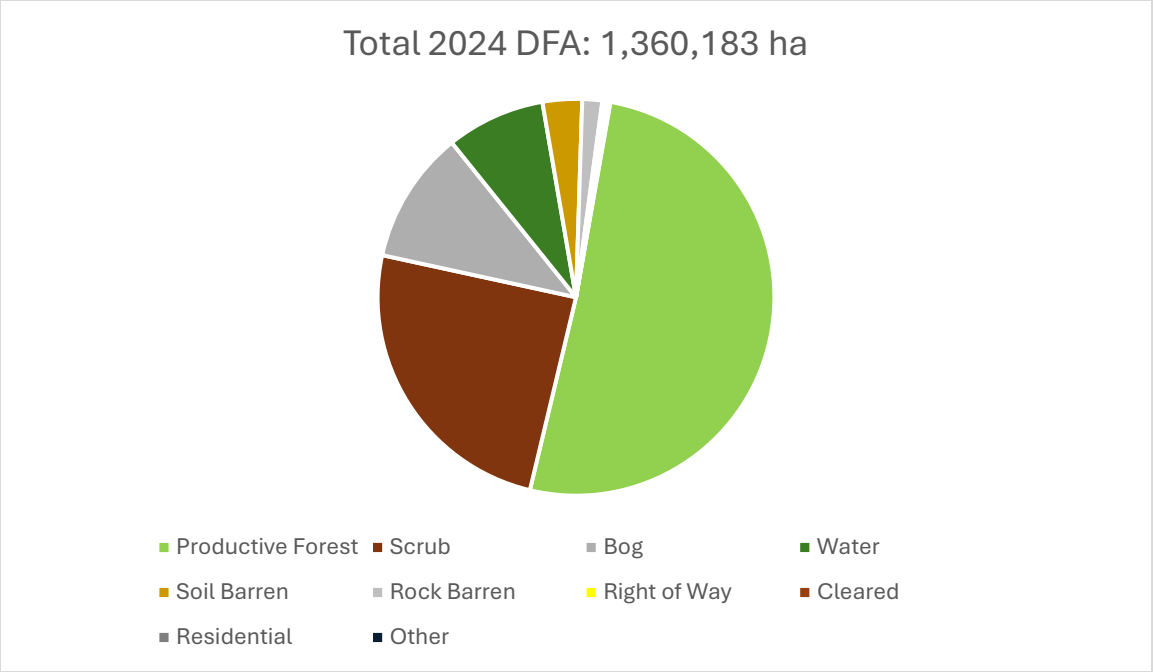

FIGURE 4 GENERAL LAND AND WATER CLASSES ON THE DFA AS OF DECEMBER 31, 2025

For comparison, the following tables represent working groups in productive forest and non-productive forest, non-forested land, and water for the base year of 2010, and for the years when the data was updated using the 2011 wood supply for 2012 and the government updates for 2020. For each working group and stand ID, a percentage of the DFA is indicated. The percentage change from the base year (2010) to 2012 and 2025 is also indicated. The results indicate there was little change in all stand types.

TABLE 13 COMPARISON OF PRODUCTIVE FOREST ON THE DFA BY WORKING GROUP

	2010	2012		2025	
Working Group	**% of the DFA**	**% of the DFA**	**Change of % From Base Year**	**% of the DFA**	**Change of % From Base Year**
Balsam Fir (bF)	23.6	22.9	- 0.7	20.4	- 3.2
Black Spruce (bS)	15.4	15.0	- 0.4	13.5	- 1.9
Disturbed by Insects (DI)	4.1	4.6	+ 0.5	9.5	+ 5.4
Softwood/Hardwood (sH)	3.6	3.8	+ 0.2	5.1	+ 1.5
Not Sufficiently Stocked (NS)	1.8	1.8	0.0	1.8	+0.2
Hardwood/Softwood (hS)	1.6	1.6	0.0	0.5	-0.3
White Birch (wB)	0.8	0.7	- 0.1	0.0	0.0
Trembling Aspen (tA)	0.0	0.0	0.0	0.0	0.0
Jack Pine (jP)	0.0	0.0	0.0	0.0	0.0
Engelmann Spruce (eS)	0.0	0.0	0.0	0.0	0.0
European Larch (eL)	0.0	0.0	0.0	0.0	0.0

Red Maple (rM)	0.0	0.0	0.0	0.0	0.0
Total Productive Area	**50.9**	**50.5**	**-0.4**	**50.8**	-0.1

2010 data based on a DFA of 1,493,403 ha
2012 data based on a DFA of 1,418,922 ha
2019 data based on a DFA of 1,399,901 ha
2020 data based on a DFA of 1,360,183 ha
2021 data based on a DFA of 1,360,183 ha
2022 data based on a DFA of 1,360,183 ha
2023 data based on a DFA of 1,360,183 ha
2024 data based on a DFA of 1,360,183 ha
2025 data based on a DFA of 1,360,183 ha

TABLE 14 COMPARISON OF NON-PRODUCTIVE FOREST AND NON-FOREST AREA ON THE DFA BY STAND

	2010	2012		2025	
Stand ID	**% of the DFA**	**% of the DFA**	**Change of % From Base Year**	**% of the DFA**	**Change of % From Base Year**
Softwood Scrub	22.7	22.9	+ 0.2	22.1	-0.6
Bog	10.7	10.6	- 0.1	8.8	-1.9
Water	7.6	7.5	- 0.1	8.1	+ 0.5
Soil Barren	2.6	2.7	+ 0.1	3.2	+ 0.6
Wet Bog	1.2	1.3	+ 0.1	1.7	+ 0.5
Rock Barren	1.7	1.8	+ 0.1	1.6	-0.1
Treed Bog	0.7	0.7	0.0	0.3	- 0.4
ROW (Transmission)	0.1	0.1	0.0	0.1	0.0
Cleared Land	0.1	0.1	0.0	0.2	+0.1
Residential Land	0.1	0.1	0.0	0.2	+0.1
ROW (Road)	0.1	0.1	0.0	0.1	0.0
Agricultural Land	0.1	0.1	0.0	0.0	-0.1
Sand	0.0	0.0	0.0	0.0	0.0
Small Island	0.0	0.0	0.0	0.0	0.0
Hardwood Scrub	1.1	1.1	0.0	N/A	N/A
Not Interpreted	0.3	0.3	0.0	N/A	N/A
Total Non-productive/non-Forest Area	**49.1**	**49.5**	**+0.4**	**50.2**	**+1.1**

2010 data based on a DFA of 1,493,403 ha
2012 data based on a DFA of 1,418,922 ha
2019 data based on a DFA of 1,399,901 ha
2020 data based on a DFA of 1,360,183 ha
2021 data based on a DFA of 1,360,183 ha
2022 data based on a DFA of 1,360,183 ha
2023 data based on a DFA of 1,360,183 ha
2024 data based on a DFA of 1,360,183 ha
2025 data based on a DFA of 1,360,183 ha

Target

The target is to maintain representation of current working group classes close to current levels. Maintaining these levels would be based on factors that can be controlled by CBPPL. Natural phenomena such as insect infestation, blow-down, or forest fires would not fall under the category of factors that can be controlled. We will also report on the areas of wetlands and other non-forest ecosystems.

Acceptable Level of Variance

The terms major and secondary are used here to classify working groups with respect to the relative area they represent on the land base.

Major working groups:

- bF will be maintained at $\pm$ 10% of current area.
- bS will be maintained at $\pm$ 10% of current area.
- sH will be maintained at – 10% to + 25% of current area.
- Secondary working groups (all others) will be maintained within $\pm$ 25% of the current area.

Management Strategy

To maintain representation of current working group classes, close to current levels, CBPPL can only control in what working groups they harvest wood, and ensure that cutovers regenerate to the same working group. Factors out of the company's control include natural phenomenon as mentioned above, but also how stands are interpreted from one inventory to the next, and land base changes through exchanges and transfers.

Current areas of working groups will be based on the inventory available at the time (the government aims to inventory each Forest Management District on a 10-year cycle). The variance will be based on the wood supply model.

CBPPL Woodlands will continue to harvest AAC in the DFA within the levels set forth by government. 25-Year Spatial Plan is developed by CBPPL staff and submitted to the government for approval. This plan will ensure CBPPL stays within the assigned AAC levels. The government re-calculates the AAC every five years using the latest data possible to incorporate into the analysis. The government repeatedly monitors regeneration assumptions used in the model for required changes. This continual improvement in regeneration assumptions ensures that future projections of the areas of working groups are more reliable than in the previous model, thus providing a framework to manage this indicator more accurately with the development of each successive model.

Forecast, Predicted Results or Outcome

As is indicated in tables 13 & 14, the working groups bF, bS and sH will continue to maintain their current area plus or minus the acceptable level of variance. Future models will be developed to incorporate the secondary working groups as well, creating a better predictive tool to measure secondary working groups into the future, as is currently done with the bF, bS and sH working groups.

Implementation Schedule

Task	Details	Responsibility	Frequency
Update area of working groups and non-forest ecosystems	Reassess area and percent of DFA in each working group and non-forest ecosystems	District Planner	Every five years after a new wood supply, or as the DFA footprint changes

Monitoring / Reporting

Frequency of Reporting	Frequency of Monitoring and Review	Sources of Information
Every five years after a new wood supply	Every five years after a new wood supply	Provincial forest inventory
One interim review within 5-year period to determine trends, causes, explanations, and actions.	One interim review within 5-year period	Provincial forest inventory updated with recent disturbances (soft updates)

Links with Strategic and Operational Plans

20-year Strategy	5-Year Operating Plan	Annual Operating Plan
Regeneration assumptions are built into the wood supply calculation, which is used as a tool in developing this strategy. Sustaining the spruce component of regenerating forests in Newfoundland is a goal identified in this strategy.	Five-year plans are determined by the AAC. These AACs are determined by the working group composition and age class structure among other factors.	AOPs are determined by AACs, which in turn are determined by the working group composition, among other factors.

SFI Objective 2. Forest Health and Productivity

To ensure long-term forest productivity, carbon storage and conservation of forest resources through prompt reforestation, afforestation, minimized chemical use, soil conversation, and protecting forests from damaging agents.

Indicator 2.1.1 Sufficiently Stocked

Objective	2.0 Forest Health and Productivity
Performance Measure	2.1 Program Participants shall promptly reforest after final harvest

Indicator:	**SFI 2.1.1**	**Target**	**Acceptable Level**
Proportion of areas sufficiently stocked after harvest.		To have a minimum of 97% of areas sufficiently stocked after harvest.	-3%
		Resource Person:	Silviculture and Scaling Supervisor

Definitions

STOCKING – refers to the degree or level to which disturbed forest sites are regenerated with seedlings, either by artificial means (planting or seeding) or through natural processes. *Sufficient* stocking is defined by the Province's Minimum Stocking Standard, which states in part that the percent stocking of seedlings must be at least five percent more than stocking of merchantable trees in the pre-harvest stand, to a maximum of seventy percent stocked. Anything past the 70% stocking level would be in a "no-gain threshold"; in other words, the same volume could exist but would be spread out within a higher number of smaller diameter trees.

NATURAL REGENERATION – regeneration on disturbed forest sites occurring through natural processes. This can be in the form of "advanced regeneration" which becomes established on the forest floor or understory of a mature forest stand; or it can occur from seed dissemination *after* the disturbance has occurred.

BIOLOGICAL DIVERSITY – the variation of life forms within a given ecosystem.

GENETIC DIVERSITY - a level of biological diversity that refers to the total number of genetic characteristics in the genetic makeup of a species.

Detailed Description

Genetic diversity and biological diversity are dependent upon each other - diversity within a species is necessary to maintain diversity among species, and vice versa. Natural regeneration of

harvested or disturbed areas ensures the maintenance of diversity that already exists in the ecosystem. Therefore, the *proportion of areas sufficiently stocked after harvest* can provide some measure of genetic diversity. For example, if we harvest a balsam fir stand and it regenerates naturally to balsam fir, then we can be relatively confident that the genetic diversity of this ecosystem is intact. If a fire in a balsam fir stand, results in the regeneration of white birch, genetic diversity is still present.

Regeneration surveys conducted on recent cutovers indicate the amount of regeneration present, and consequently if planting is required. Cutovers that require planting will also maintain their genetic diversity, as 100% of seedlings planted are produced from seed of local species. The provincial tree nursery collects seed from enough different sources to ensure genetic diversity and does not practice genetic modification.

The genetic improvement of Newfoundland's planting stock has been researched for over 30 years. The early thrust was to identify the fastest growing, straightest, and healthiest individual trees in the wild and either collect seed or clone them by grafting branch tips. To date, over 850 of these individual trees representing 5 native species are planted in seed orchards. Currently the province is mating these superior trees with one another, trying to find the parent combinations that produce even faster growing and are more resistant to insect and disease trees. All white and black spruce seedlings grown for reforestation are "improved", that is, they come from seed produced in the province's seed orchards.

CBPPL conducts regeneration surveys to assess harvested areas for sufficient stocking using the provincial government's *Regeneration Stocking Standard for Newfoundland and Labrador*, and *Regeneration Assessment Procedures for Newfoundland and Labrador*. The assessment procedures record the presence of acceptable softwood regeneration (black and white spruce and balsam fir), and other species on predetermined plots. CBPPL's Certificate of Managed Lands requires that the company provide results of the regeneration surveys to the provincial government. As of 2016, in harvested areas of previously mixed wood stands, regeneration surveys assess the presence of hardwood species as well as spruce and fir.

The analysis for this indicator is based on a ten-year average, back dated to allow 5 years to conduct a regeneration survey plus 3 years to plan for and implement a planting program. An analysis of the 2008-2017 cutovers within the DFA indicates that 57% of harvested areas have adequate regeneration, i.e., stocking levels that meet the Minimum Stocking Standard, based on 35,714 ha of regeneration surveys. The (natural) regeneration success rate for the balsam fir working group is approximately 85%, and 45% for the black spruce working group. Fill tree planting is undertaken in areas with insufficient stocking to ensure fully stocked stands.

Status in 2025

Tree planting is undertaken in areas with insufficient stocking to ensure fully stocked stands. As of the end of 2025, 97.8% of all cutovers had been surveyed. The analysis of the 2008-2017 cutovers shows that 98.0% of the area surveyed was adequately stocked either by natural regeneration or by planting. The remaining 2.0% is regenerating, but not to fully stocked

standards. Approximately 1% will be re-assessed to re-check stocking levels, and some areas are not able to be planted due to isolation or site conditions. CBPPL plants approximately 2.0 million seedlings per year.

TABLE 15 PERCENT OF AREAS ON THE DFA THAT ARE SUFFICIENTLY STOCKED

Year	Areas Sufficiently Stocked
2008	97%
2009	94%
2010	94%
2011	95%
2012	95%
2013	96%
2014	98.7%
2015	96.1%
2016	95.1%
2017	95.6%
2018	95.6%
2019	95.7%
2020	96.1%
2021	96.1%
2022	96.4%
2023	97.6%
2024	98.5%
2025	98.0%

Acceptable Level of Variance

CBPPL will endeavour to ensure that 97% (-3%) of areas harvested are sufficiently stocked.

Management Strategy

Provincial guidelines stipulate that regeneration assessments should be made within 5 years of harvesting, and that areas not sufficiently stocked must be brought up to stocking standards. Depending on the nature of the area, these assessments are sometimes done much earlier (e.g. 2 years), so that any required remedial treatments can begin sooner. Stocking survey records will be maintained on all harvested areas, and we will work towards being able to generate reports on a regular basis for harvested areas. Our regeneration survey record system is regularly made available for periodic audit by the provincial government.

By ensuring harvested areas are sufficiently stocked, either through natural regeneration or planting, CBPPL will ensure the maintenance of genetic diversity.

Forecast, Predicted Results or Outcome

Based on historic patterns, we would anticipate that natural regeneration will continue to be a dominant factor in overall softwood stocking levels. The extent to which natural regeneration

coupled with tree planting will approach this level will be determined as we compile our regeneration status reports.

Implementation Schedule

Task	Details	Responsibility	Frequency
Annual SFM report on stocking*	SFM report prepared every year	Silviculture and Scaling Supervisor	Annually

* For procedures see *Regeneration Assessment Procedures for Newfoundland and Labrador* and *A Regeneration Stocking Standard for Newfoundland and Labrador*, both in the *Forest Regeneration Binder.*

Monitoring / Reporting

Frequency of Reporting	Frequency of Monitoring and Review	Sources of Information
Annually in SFM report	Annually (after completion of report).	Regeneration stocking surveys.

Links with Strategic and Operational Plans

NL Sustainable Forest Management Strategy	5-Year Operating Plan	Annual Operating Plan
Assumptions relating to natural regeneration levels on various site types within the province are used in the calculation of the Annual Allowable Cut. Planting areas that do not regenerate naturally following disturbance is a goal identified in this Strategy.	5-Year tree-planting operating plans are in place based on historic natural regeneration levels by site type.	Annual tree-planting plans are developed based on regeneration survey results from the previous year. Annual planting activities are relatively predictable and in line with the 5-year plan and the 20-year Strategy outlooks.

Indicator 2.1.3 Non-native Tree Species

Objective	2.0 Forest Health and Productivity
Performance Measure	2.1 Program Participants shall promptly reforest after final harvest

Indicator: SFI 2.1.3	Target	Acceptable Level
Proportion of regeneration	On a five-year basis, to	

comprised of native species;	average no more than 0.1% annually, and 5% at any given time, of the productive forest land base of the DFA regenerated with non-native species.	0.03% annually
	Resource Person:	Silviculture and Scaling Supervisor

*A decrease in the area of the DFA could cause an increase in the percentage.

Definitions

NATIVE TREE SPECIES – Tree species that are native to a specific geographic area. Such species are regenerated through either natural processes or artificial means including direct seeding, or through use of planting stock grown from local (native species) seed sources.

NON-NATIVE TREE SPECIES – Tree species that are not native to a specific geographic area.

Detailed Description

A cornerstone of biological diversity, conservation is the retention and maintenance of natural ecosystems. As indigenous tree species form a huge component of these natural (forest) ecosystems, it is important that these native species continue to predominate across the DFA. Indigenous species have evolved and adapted over time to the various site conditions, climatic factors and disturbances peculiar to our local area, and as such, have a considerable measure of resilience.

Approximately 65% of disturbed sites in the DFA regenerate naturally. This is particularly true for balsam fir forest types whose regeneration success rate averages 85%. While there is also a certain level of natural regeneration on black spruce sites (45%), these areas are more prone to insufficient stocking levels as black spruce is a fire-origin species, requiring forest fires to open their cones for natural regeneration. Generally, black spruce areas with insufficient regeneration are planted with black spruce seedlings grown from local seed.

Norway spruce were typically been planted on rich, balsam fir sites that have been infested with balsam wooly adelgid, which causes severe, long-term stunting of growth. The balsam fir adelgid is itself a non-native insect and at present there is no recourse for treatment. The only option is stand replacement with an alternate species. In such cases, the spruces have been the species of choice, with Norway and White Spruce performing the best.

Status in 2025

In 2025, there was only native black spruce, white spruce and a small amount of white pine seedlings planted on the DFA. Therefore, the annual target of no more than 0.1% non-native species was met. The total planting of non-native species to date is 1,668 ha. This translates to 0.231% of the productive forest portion of the DFA. This is well below the aim to not exceed 5%

of productive forest land regenerated with non-native species at any given time. Table 13 shows the proportion of non-native species planted on the DFA in the past.

TABLE 16 PORTION OF NON-NATIVE SPECIES PLANTED AS A PERCENTAGE OF THE TOTAL PRODUCTIVE FOREST ON THE DFA

Year	Percent for Year	Percent Total
2009[1]	0	0.119
2010[2]	0.028	0.184
2011	0.023	0.207
2012[3]	0	0.220
2013	0	0.220
2014[4]	0	0.220
2015	0	0.220
2016	0	0.220
2017[5]	0	0.226
2018	0	0.226
2019	0	0.226
2020[6]	0.013	0.241
2021	0	0.241
2022	0	0.241
2023	0	0.241
2024	0	0.241
2025	0	0.233

[1] Productive forest up to 2009 was ~1,000,000ha. [4] Productive forest was ~715,535ha.
[2] Productive forest was ~760,000ha. [5] Productive forest was ~696,509ha.
[3] Productive forest was ~716,000ha. [6] Productive forest was ~693,045ha

Management Strategy

Tree planting is a deliberate forest management activity and it is fully within the control of CBPPL.

Forecast, Predicted Results or Outcome

As tree planting is entirely within our control, we will be within the defined target range.

Implementation Schedule

Task	Details	Responsibility	Frequency
Report on regeneration	Determine the proportion of non-native species on the DFA through regeneration reports	Silviculture and Scaling Supervisor	Annually

Survey existing Norway spruce planted areas	Determine if existing Norway Spruce on the DFA are self-regenerating	Silviculture and Scaling Supervisor	Every 5 years

Monitoring / Reporting

Frequency of Reporting	Frequency of Monitoring and Review	Sources of Information
Report on annual number in SFM Report	Annually	Tree planting records
Every 5 years	Every 5 years	Norway spruce monitoring records

Links with Strategic and Operational Plans

Provincial Sustainable Forest Management Strategy	5-Year Operating Plan	Annual Operating Plan
This Strategy makes provision for the use of non-invasive, fast-growing, non-native species as a means to partially satisfy increased long-term fibre demands, and to offset the loss of productive forest land to non-industrial consumption.	N/A	Tree planting species is typically decided or planned on an annual basis.

Indicator 2.3.3 Downed Woody Material

Objective	2.0 Forest Health and Productivity
Performance Measure	2.3 Program participants shall implement forest management practices to protect and maintain forest and soil productivity

Indicator:	**SFI 2.3.3**	**Target**	**Acceptable Level**
Level of downed woody material		To leave a minimum of 10% of the Annual Operating Plan area, by district, in residual structure after harvesting activities.	N/A
		Resource Person:	District Planner

Definitions

ANNUAL OPERATING PLAN (AOP) – All operating areas planned for harvest across the DFA in one year.

RESIDUAL STRUCTURE: Elements such as living trees (individuals or patches), snags, cavity trees, downed woody material and plants that are left behind following a harvest operation to maintain the biological legacies of the stand.

SNAGS are dead or dying, standing trees. They are utilized by a wide range of wildlife for nesting (primarily cavity nesters) and for foraging. Species include a wide variety of small mammals, different forest birds and owls, and a wide range of insects and fungi communities that function as the prey base for many other species. There are three aspects of snag management that need to be considered: quantity, quality and distribution.

WILDLIFE TREES**:** Trees with a minimum height of 2.0m and a minimum diameter at breast height of 10cm.

Detailed Description

Dead wood is an important component of a healthy forest ecosystem. Live trees can blow down and die, or trees can die standing (snags). These snags serve as important habitat for a wide range of decomposing organisms, as well as cavity-nesting species such as woodpeckers. Coarse woody material includes both downed woody material and standing trees that have been left to allow the woody material to decompose, both resulting in organic matter that eventually becomes part of the soil. Living trees may be left as well, with the intent that they will die or are dying by the next rotation. Downed woody material can be managed by leaving both dead and live trees, downed decayed stems, as well as residual structure, during a harvesting operation.

The amount of downed woody-material left on site is, in part, a factor of the harvesting system used. CBPPL uses a shortwood harvesting system whereby all trees are felled, limbed, topped, and cut into 2.5 metre lengths in the woods. This means that only the merchantable wood is brought to roadside, and everything else is left on the cutover as downed woody material. Leaving snags and wildlife trees in harvested operating areas can also eventually contribute to downed woody material. A third way forest management planning can contribute to downed woody material is to plan for residual retention.

CBPPL manages “for the retention of stems or residual structure to be left after stand management activities in normal or salvage operations (following natural disturbances).” Maintaining residual structures in sufficient quantities and distribution will fulfill their ecological functions. One of these functions is to provide downed woody material.

Status in 2025

Downed woody material can be managed by residual structures during a harvesting operation. Cutover updates are required to report residual structure, and for any one year, cutover updates

will be completed shortly after the harvest operation is finished. The following table reports on residual structure left on operating areas after harvest. CBPPL has left the minimum (and in most cases well above the minimum) of 10% of the operating area in residual structure after harvesting activities.

TABLE 17 THE AMOUNT OF RESIDUAL STRUCTURE RETAINED IN HARVEST OPERATIONS AS A PERCENT OF THE ANNUAL OPERATING PLAN AREA, BY DISTRICT

Year	Forest Management District						
	5	**6**	**9**	**10**	**14**	**15**	**16**
2014	19	42	24	N/A	N/A	33	*
2015	N/A	34	40	N/A	51	31	35
2016	N/A	35	33	N/A	16	19	*
2017	87	N/A	81	N/A	98	52	66
2018	97	N/A	86	N/A	99	90	94
2019	96	N/A	95	N/A	N/A	92	91
2020	95	N/A	94	94	N/A	93	92
2021	96	N/A	93	99	99	95	96
2022	99	N/A	95	95	98	98	94
2023	95	N/A	95	99	96	96	97
2024	98	N/A	97	96	98	96	95
2025	98	N/A	97	N/A	98	96	95

N/A – No harvesting in that district in that year
* - Unavailable

Management Strategy

CBPP is committed to continuous environmental improvement of its woodlands operations. Through managing for within-stand structural retention, the company will be able to contribute to downed woody material and ultimately ecosystem diversity, a process that involves more than a supply of fibre for the mill.

The company's management strategy for retaining residual structure is outlined in detail in Standard Operating Procedure PL-07. It involves four stages:

- During the office preparation stage, Planners identify leave areas such as riparian and other required buffers, and harvest deferral areas.
- On the ground, during their pre-harvest operational layout, Contractor Foremen identify leave areas such as insular and peninsular patches and small blocks of inaccessible timber.
- During the actual harvesting, Harvester Operators leave areas around wet or soft sites, steep slopes, ledges or drop-offs, bird nests, and denning sites.
- After harvest is complete the best available information will be used to create cutover updates, using sentinel which is satellite imagery. The cutover mapping stage will capture the remaining residual retention areas left for a variety of reasons.

An evaluation of the level of retention can be determined after the final stage, based on a sample of the harvested areas in each district where harvesting occurred.

Forecast, Predicted Results or Outcome

CBPPL conducts surveys to determine the amount of productive residual structure left on operating areas after harvest. Results show that in western Newfoundland, due to the topography, at least 10% of the operating area is already left in residual structure due to buffers, harvest deferral areas, steep slopes, ledges or drop-offs, and inaccessible timber. In some areas of central Newfoundland, however, efforts must be made to ensure the appropriate amount of residual structure remains after harvest. CBPPL is committed to reaching the target set for residual structure. In addition, we expect to maintain the high level of downed woody material that currently exists in CBPPL cutovers after harvest solely because of the short-wood harvesting system used.

Implementation Schedule

Task	Details	Responsibility	Frequency
Retain residual structure on operating areas	Follow stages outlined in SOP PL-07 to retain at least 10% of the operating area in residual structure.	District Planner	Annually
Evaluate level of retention	After cutover photography is available by using the sentinel explorer program, then we determine the level of retention of residual structure.	District Planner	Annually

Monitoring / Reporting

Frequency of Reporting	Frequency of Monitoring and Review	Sources of Information
Annually in SFM Plan	Annually	Results of evaluation

Links with Strategic and Operational Plans

NL Sustainable Forest Management Strategy	5-Year Operating Plan	Annual Operating Plan
The Strategy is largely grounded in the promotion of integrated forest management. This project is totally in line with these integrated forest management principles.	The 5-year operating plan identifies harvesting and silviculture treatment areas, and as such, would identify the stand types where operations will occur over the next 5 years.	The link to our annual operating plan is similar to the 5-year plan link, only on a more site-specific basis.

SFI Objective 3. Protection and Maintenance of Water Resources

To protect the water quality of rivers, streams, lakes, wetlands, and other water bodies through meeting or exceeding best management practices (BMP)

Indicator 3.1.1 Water Buffers and No Grub Zones

Objective	3.0 Protection and Maintenance of Water Resources
Performance Measure	3.1 Program Participants shall meet or exceed all applicable federal, provincial, state, and local water quality laws, and meet or exceed BMPs developed under Canadian water quality programs

Indicator:	**SFI 3.1.1**	**Target**	**Acceptable Level**
Proportion of forest management activities, consistent with prescriptions to protect identified water features		To have zero nonconformances associated with watercourse buffers and 30m no grub zones	0
		Resource Person:	Environmental Management Representative

Definitions

WATERCOURSE BUFFER: A band of forest vegetation left relatively undisturbed to protect a water body from erosion.

NO GRUB ZONES: Areas extending on either side of a water crossing, adjacent to a road, where the removal of stumps or shrubs from the ground is prohibited.

Detailed Description

Fresh water is considered one of the most precious natural resources in the world today. A large percentage of Newfoundland's freshwater filters through the ecosystem before entering our rivers and lakes, and is found in wetlands such as swamps, marshes, and bogs. In Newfoundland almost 50% of the land base is made up of such areas. Forested watersheds provide a range of important services to residents including the provision of clean (potable) water and the support of healthy aquatic ecosystems.

There are many aspects of forest management activities including infrastructure construction (roads, bridges, landings, etc.) that may affect water quality and quantity and each of these activities may have immediate or long-term effects. Direct measurements of water quality and quantity are largely unfeasible across entire working forests. Established research on the effects of certain field practices on local water quality and flows have been used to establish regulations and guidelines to control field practices. These regulations and guidelines address such topics as fish habitat, stream crossings, and riparian areas. Forest planning and operational strategies may be guided by best management practices to minimize and mitigate impacts to water quality and

quantity. Having detailed maps of surface water and wetland systems can help identify areas within a management area where certain planning, avoidance and mitigation strategies might be required.

Environmental Protection Guidelines for Forestry Operations in Newfoundland and Labrador (EPG) 2025 edition, section 1.2.4, Leaving Buffers and wildlife Trees, states:

- *A 30-metre, no harvesting activity buffer zone shall be established around all water bodies that are identified on the latest 1:50,000 topographic system (NTS) maps.*

  Streams greater than two meters in width that do not appear on the NTS maps require a 30-meter buffer and can be identified using the below criteria:

  - *The stream must have defined bottom;*
  - *Banks that exceed 30 centimeters in depth:*
  - *Meets or exceeds an average 2 meters in width measured at 40 meter intervals over a 200 meter distance along the stream.*

- *Where the slope is greater than 30 per cent there shall be a no harvest buffer of 30 metres plus 1.5 times per cent slope. All equipment or machinery is prohibited from entering waterbodies; thus, structures must be created to cross over such waterbodies from the protection of aquatic habitat. Every reasonable effort will be made to identify intermittent streams, and they will be subject to this buffer requirement.*

The EPG also states that “A "no-grub" zone of 30 metres of undisturbed ground vegetation must be maintained around any waterbody crossing to minimize the damage to the lower vegetation and organic cover, thus reducing erosion potential.” Thirty metre no-grub zones are marked on brooks on the latest 1:50,000 topographic maps and other brooks greater than or equal to 2m in width.

All required watercourse buffers are marked with pink flagging tape with the lettering “Lake and Watercourse Buffer Zone” prior to harvesting activities. Winter and spring operating areas are surveyed by CBPPL staff before snowfall, collecting the digital location of all waterbodies to be buffered, which are then displayed on the contractor’s operations map. This ensures that Contractor Supervisor will be able to establish watercourse buffers on brooks which may be buried in snow and therefore indiscernible. For areas to be harvested during the summer period, waterbodies to be buffered are indicated on operational maps. Contractor Supervisor establish these watercourse buffers and all other permanent brooks not visible on inventory maps. When CBPPL staff mark the location of new access roads or plan for the upgrade of old roads, the required no grub zones are identified at every water crossing with yellow flagging tape bearing the words “No Grub Zone”. In addition to the marking of watercourse buffers and no grub zones on the ground, these are also indicated on the operational maps found on the onboard computers in every harvesting, processing, forwarding, and excavating piece of equipment on

Corner Brook Pulp and Paper Ltd.'s operations.

Status in 2025

There were zero nonconformances in 2025.

Cutting established watercourse buffers and disturbing the no grub zones are considered legal non-compliance by CBPPL. Harvesting and road construction contractors report any occurrences of these incidents to CBPPL. who in turn report them to the Provincial Government.

The table below reports occurrences of these incidents for the past ten years.

TABLE 18 OCCURRENCES OF NONCONFORMANCES ASSOCIATED WITH BUFFERS AND 30M NO GRUB ZONES

Year	# Buffers Cut	# No Grub Zones Disturbed	Total
2020	0	0	0
2021	0	0	0
2022	0	0	0
2023	0	1	1
2024	0	0	0
2025	0	0	0

Management Strategy

Corner Brook Pulp and Paper Ltd.'s target is to have zero nonconformances associated with watercourse buffers and no grub zones.

CBPPL has been works to reduce the possibility of watercourse buffer and no grub zone infractions through continually education with our Qualified Logging Professional (QLP) training program, scheduled environmental incident tests during operations, and regular field audits and inspections, and by improvement of our Standard Operating Procedures (SOPs) when there are changes in governmental regulations and through continual communication, education, and monthly Environmental, Health, & Safety Meetings. All environmental incidents and actions across CBPPL DFA are reviewed with contractors quarterly at the Environmental Health and Safety (EHS) meeting.

Implementation Schedule

Task	Details	Responsibility	Frequency
Discuss watercourse buffer and no grub zone infractions	Determine the cause of the infractions and	EMS	As watercourse buffer and no

	develop corrective actions to prevent recurrence.	Management Review Committee. Review all environmental incidents with contractors at the EHS meetings.	grub zone infractions occur
Determine the number of watercourse buffer and no grub zone infractions each year	Review records of environmental incidents	Environmental Management Representative	Annually

Monitoring/Reporting

Frequency of Reporting	**Frequency of Monitoring and Review**	**Sources of Information**
Annually in the SFM Report	As watercourse buffer and no grub zone infractions occur	• Incident Reports and Investigations

Links with Strategic and Operational Plans

NL Sustainable Forest Management Strategy	**5-Year Operating Plan**	**Annual Operating Plan**
Evaluating the influence of forest management actions on water quality is a goal of this strategy	Environmental Assessment (a condition of the 5-Year Planning Process) addresses requirements for the protection of water quality	The Environmental Protection Guidelines for Forestry Operations in Newfoundland and Labrador (as per CBPPL's Certificate of Managed Lands) addresses requirements for watercourse buffers and no grub zones

Indicator 3.2.1 Preharvest Planning

Objective	3.0 Protection and Maintenance of Water Resources
Performance Measure	3.2 Program participants shall implement water, wetland and riparian protection measures based on soil type, terrain, vegetation, ecological function, harvesting system, state BMPs, provincial guidelines and other applicable factors.

Indicator:	**SFI 3.2.1**	**Target**	**Acceptable Level**
Additions and deletions to the forest area.		To carry out pre-harvest planning on 100% of the annual operating area.	-20%
		Resource Person:	Sustainable Forest Management Forester

PRE-HARVEST PLANNING **-** On-the-ground field surveys of operating areas before and after road construction but before harvesting occurs, to verify forest inventory information.

RESOURCE ROADS – Include all unpaved roads constructed to access resources and developments (forest access roads).

Detailed Description

Resource roads are customarily permanent structures that provide a route by which transportation to and from the forest is possible. The primary function of these roads is the extraction of wood fibre, but various groups such as hikers, hunters, anglers, snowmobilers and berry pickers utilize these roads to access the forest for recreational activities.

Although resource roads are necessary, it is beneficial both financially and environmentally to build the minimum amount of road required. This can be accomplished through proper planning. The environmental benefits of minimizing the amount of roads include keeping the maximum amount of land in productive forest. Sustainability involves matching actual timber harvest to the long-term production capability of the forest. The long-term capability is strategic level calculation, that uses forest inventory data interpreted using 40,000:1 imagery to an minimum 2 ha polygon. It does not 100% accurately capture all of the detail when on the ground. Healthy, productive forests also help mitigate climate change by sequestering and storing carbon from the atmosphere.

Residual retention (preharvest) planning is another way to maintain productive forest ecosystems. CBPPL must develop a management strategy and operating procedures that:

- Generate clusters of small to medium size cutover areas scattered in the landscape (10-50% by area) that are in line with the results of the Pre Industrial Forest Condition (PIFC) analysis,

- Evaluate the degree to which harvest/silvicultural operations compare with best estimates on sizes and spatial patterns in the pre-industrial era (PIFC report) and sizes and patterns associated with ecological values,

- Specify objectives for the retention of stems or residual structure to be left after stand management activities in normal harvesting or salvage operations (following natural disturbances).

CBPPL Planners carry out on-the-ground field surveys of operating areas to verify forest inventory information before harvesting and road building occurs. Verifying forest inventory prior to building roads allows CBPPL Planners to locate roads in a more cost-effective manner, maximizing forwarder distance and eliminating any unnecessary road building. In the office, they also capture leave areas such as required buffers, permanent sample plot (PSP) buffers, harvest deferral areas, etc. Harvester operators also play a significant role in the creation of residual structure. In addition to instructions from the foremen, operators are constantly making decisions that result in leave patches. They often use their professional judgment when working around wet or soft areas, on steep slopes, and ledges or drop-offs. Operators will also avoid and buffer bird nests and denning sites when encountered.

In 2021 and 2022 Summit software was purchased which allows district planners to use GovNL stereo photography to view operating areas in 3D. Further delineation of productive stands and road placement is refined to optimize field work. GovNL Forestry Division aims to gather new stereo photography for each district on a 10-year cycle. When new imagery is available staff at CBPPL are provided the updates.

Status in 2025

In 2025 the planning technicians did winter field surveys for multiple locations on CBPPL limits. These areas were assessed for potential 2026 road building and harvest opportunities. Winter reconnaissance is critical to making sound planning decisions. Planners availed of the 3D station for refinement of stands to be used by harvesting contractors during operations.

Use of an external contractor for timber cruising also took place in 2025. Metrics were gathered for six operating areas which included: tree count by species, height and DBH, and ground roughness. This data further allows managers to determine the future use of harvested timber (pulp vs fuelwood vs logs).

From 2011, when this indicator profile was developed, until 2025, 100% of operating areas had forest inventory information verified before roads were built.

Management Strategy

CBPPL will endeavour to conduct preharvest planning on 100% of annual operating areas in a given year. When forest inventory information is verified, roads can be constructed in the best

possible location to maximize forwarder haul distance and minimize the amount of productive land converted to road. Pre-harvest planning and operational layout will also identify leave areas of residual retention.

Forecast, Predicted Results or Outcome

Preharvest planning will result in a reduction in the amount of productive area lost due to permanent roads and landings on an operating area basis. Preharvest planning and operational layout will also contribute to maintaining productive forest ecosystems.

Implementation Schedule

Task	Details	Responsibility	Frequency
Carry out preharvest planning	CBPPL Planners will verify forest inventory information before roads are constructed and ensure forwarder distance is maximized.	District Planner	Annually
Carry out preharvest operational layout	Contractor Foremen will identify leave areas before harvesting is conducted.	Contractor Foreman	At each operating area

Monitoring / Reporting

Frequency of Reporting	Frequency of Monitoring and Review	Sources of Information
Annually in the SFM Plan	Annually (after completion of report).	Progress reports from District Planner

Links with Strategic and Operational Plans

NL Sustainable Forest Management Strategy	5-Year Operating Plan	Annual Operating Plan
The proportion of forest land base occupied by permanent forest access roads is an indicator identified by the Newfoundland and Labrador Sustainable Forest Management Strategy	The preharvest planning work will be incorporated into the 5-Year Operating Plan.	The preharvest planning work will be incorporated into the Annual Operating Plan.

Indicator 3.2.2 Stand Replacing Disturbance

Objective	3.0 Protection and Maintenance of Water Resources
Performance Measure	3.2 Program Participants shall implement water, wetland and riparian protection measures based on soil type, terrain, vegetation, ecological function, harvesting system, state BMPs, provincial guidelines and other applicable factors

Indicator:	**SFI 3.2.2**	**Target**	**Acceptable Level**
Proportion of watershed or water management areas with recent stand-replacing disturbance		To limit the proportion of watershed with recent stand-replacing disturbance within the DFA to 25% or less.	+ 5%
		Resource Person:	District Planner

Definitions

STAND-REPLACING DISTURBANCES: Any disturbance to a forest ecosystem (human or natural-caused) that will result in the removal of the over story. For CBPPL this will include clear-cutting, selection cutting, forest fires and wind throw.

WATERSHED: The tributary region draining catchment area into a river, river system or other body of water.

Detailed Description

Fresh water is considered one of the most precious natural resources in the world today. A large percentage of Newfoundland's freshwater filters through the ecosystem before entering our rivers and lakes, and is found in wetlands such as swamps, marshes, and bogs. In Newfoundland almost 50% of the land base is made up of such areas. Forested watersheds provide a range of important services to residents including the provision of clean (potable) water and the support of healthy aquatic ecosystems.

Research has shown that the most significant impacts to forested watersheds following timber harvest are changes in water table levels and stream flow. It is likely that similar changes occur after fire. As a general rule, harvesting impacts on streamflow regimes are usually short-lived and less severe than those brought about by land-use changes, provided that forests soils are protected, and vegetation recovery is rapid. In more well-watered areas, rapid revegetation often limits meaningful water yield increases to the first 3-5 years after treatment (Megahan & Hornbeck, 2000). Research by Natural Resources Canada provides a basis for the improvement of harvesting regulations by the provinces. This, coupled with the strict process management provided by forest certification, helps CBPPL evaluate and manage water quality and quantity on

our land base.

A GIS analysis was undertaken in April 2011 to investigate the area in each watershed on CBPPL limits that had undergone a stand replacing disturbance in the past five years. Watershed boundaries used (Figure 6) were based on Forestry Agriculture and Lands defined watersheds for the province of Newfoundland. This scale of watershed classification was the only one available at the time with a GIS layer, which was necessary for the analysis.

In 2017 an analysis of watershed size was carried out to determine if watershed data was available to help downsize the watersheds currently being used, yet still maintain a scale that could provide reliable results. Digital watershed data was used to build a hydrology component/layer to the conservation feature analysis to develop a series of watersheds that intersect our DFA. Although some smaller watersheds were found, there were a number that were much larger. Consequently, we will continue using the current data set, but will keep looking for new watershed data to satisfy this core indicator.

Status in 2025

To report on recent stand replacing disturbances within a watershed, we had to define “recent”. The research discussed in the previous section, indicates that “rapid revegetation often limits meaningful water yield increases to the first 3-5 years after treatment”. Based on this we defined recent as five years after harvesting with an update every year. The results in the table below for two five-year periods show that CBPPL harvesting falls within the target of 25% or less disturbance in a watershed.

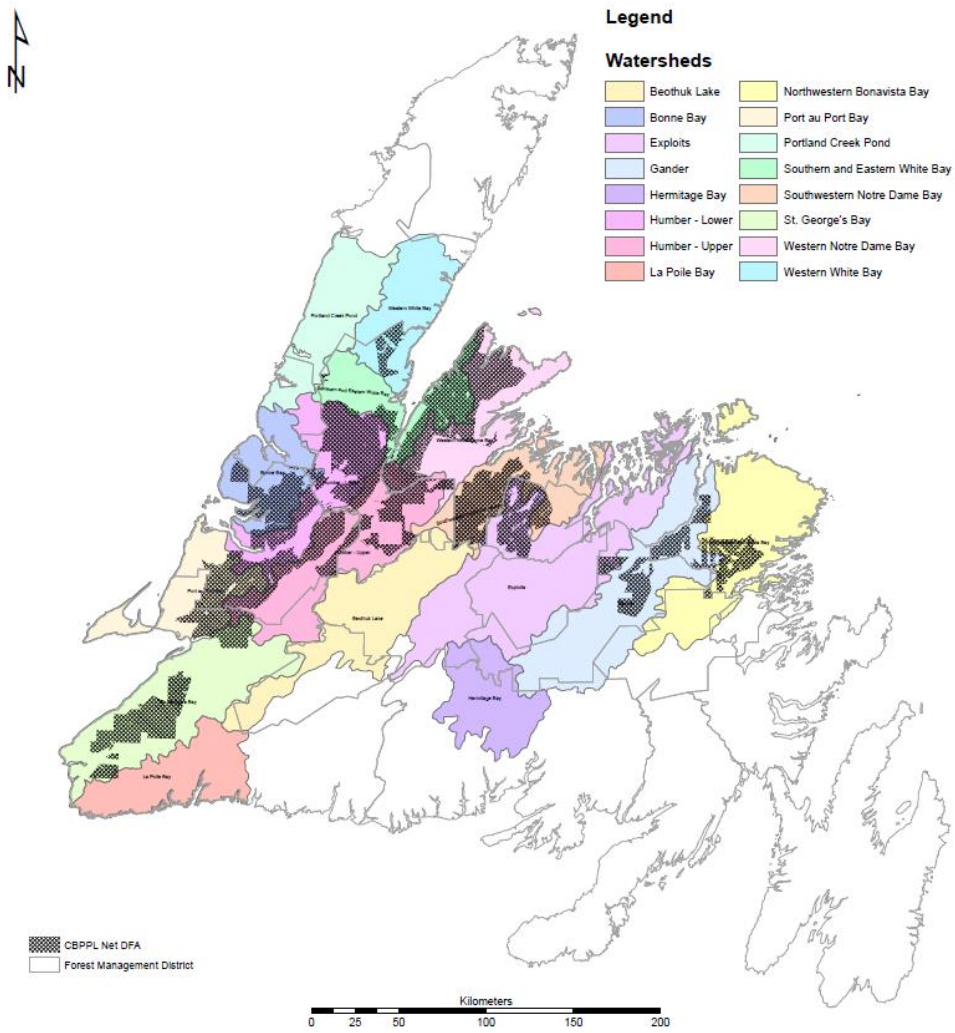

FIGURE 5 WATERSHEDS FOR THE ISLAND PORTION OF THE PROVINCE OF NEWFOUNDLAND AND LABRADOR AS DEFINED BY FORESTRY AGRICULTURE AND LANDS DEPARTMENT

TABLE 19 PERCENT OF LAND AREA IN WATERSHEDS ON CBPPL LIMITS WITH A STAND-REPLACING DISTURBANCE

Watershed	CBPPL DFA Within Watershed (2020)	2017-2021 Cuts Within Watershed		CBPPL DFA Within Watershed (2021)	2021-2025 Cuts Within Watershed	
	Area (ha)	Area (ha)	%		Area (ha)	%
Bonne Bay	79,106	644	.81	79,106	268	0.34
Exploits	70,048	785	1.12	70,048	368	0.52
Gander	82,794	1,044	1.26	82,794	641	0.77
Hermitage Bay	0.00	0.00	0.00	0.00	0	0
Humber—Lower	195,680	3,466	3.30	195,680	2,217	1.13
Humber—Upper	190,055	3,630	1.91	190,055	1,670	0.88
La Poile Bay	1,074	0.00	0.00	1,074	0	0
Northwestern Bonavista Bay	49,333	677	1.37	49,333	160	0.33
Port au Port Bay	93,300	4,628	4.96	93,300	3,702	3.97
Portland Creek Pond	459	0.00	0.00	459	0	0
Beothuk Lake	2,031	0.00	0.00	2,031	0	0
Southern and Eastern White Bay	107,004	1,061	1	107,004	851	0.80
Southwestern Notre Dame Bay	115,319	65	.05	115,319	538	0.47
St. George's Bay	135,593	400	.30	135,593	1,079	0.80
Western Notre Dame Bay	111,950	1543	1.38	111,950	1,957	1.75
Western White Bay	21,111	0.00	0.00	21,111	0	0
Grand Total	**1,254,857**	**17,878**	**1.42**	**1,254,857**	**13,452**	**0.78**

*All area figures are of the watershed area within 2021 CBPPL DFA and not the total watershed area.

Management Strategy

Corner Brook Pulp and Paper's target is to have no more than 25% of a watershed within the DFA affected by some sort of recent stand-replacing disturbance, natural or human caused. Literature reviews indicate that effects of forest harvesting on water quality are negligible when disturbance levels are below 30% (Kotak et al, 2009), and minor effects on water yield (quantity) at harvesting levels of 30-40% of a watershed area (Rothwell, 1997). This level of disturbance is

generally used as an upper limit for harvesting in watersheds in forest management plans. CBPPL has chosen as a management strategy to limit recent (within five years) disturbance levels, both human and natural caused, in each watershed to 30% or less. Harvesting events will not exceed 25%.

This is the first step in our management approach to stabilize water quantity and will be reviewed and updated every two years through GIS analysis. To ensure recent harvesting disturbances do not exceed 25% of the watershed, another step is required.

Cutover updates are done annually by Corner Brook Pulp and Paper Planners and submitted to Foresty Agriculture and Lands Department, which conducts a wood supply analysis every five years to calculate the Province's growing stock, which helps make adjustments to Annual Allowable Cuts. This analysis also includes all recent cutover updates provided by CBPPL and any other major disturbances to the Province's forest.

During the preparation of Annual Operating Plans (AOP) by CBPPL, planners will monitor the amount of area recently disturbed in any watershed. Not all watersheds will have operations annually so the system is always in a state of flux, with older disturbances re-vegetating and consequently, actively contributing to water retention and carbon sequestration.

There are many factors to be assessed before an area is submitted to provincial government in an AOP. In addition to Annual Allowable Cuts in a forest management district, the amount of area disturbed in a watershed will play a factor in the planning of the wood supply for CBPPL.

Coniferous forests have a greater influence on water yield than deciduous forests, and species conversions from softwood to hardwoods or grass will usually increase water yields (Megahan & Hornbeck, 2000). CBPPL has no stand conversion from softwood to hardwood occurring on our land base. Each stand replacing disturbance is quickly regenerated either naturally or through the help of planting coniferous tree species. Vegetation re-growth is usually very rapid with a complete coverage after one year. Since recent changes to the species mix required by the pulp mill, all hardwood species are being left standing on cut blocks to help with water retention, wildlife habitat, biodiversity, and fuel wood.

Forecast, Predicted Results or Outcome

Initial analysis of the stand replacing disturbances created by Corner Brook Pulp and Paper Ltd. in each watershed over a five-year period was 0.75%, well within the acceptable level. More recent analyses show harvesting disturbances remain at a very low percentage of the watershed land base.

Corner Brook Pulp and Paper Ltd. does not forecast any major change to the percentage of area disturbed in the future.

Implementation Schedule

Task	Details	Responsibility	Frequency
Calculate the amount of stand replacing disturbance in each watershed	% of area disturbed	District Planner	Bi-annually
Review with District Planner	Create awareness and gather input	District Planner	Bi-annually

Monitoring/Reporting

Frequency of Reporting	Frequency of Monitoring and Review	Sources of Information
Annually in the SFM Plan	Annually (after the completion of analysis)	• Cutover Updates • Gov't Watershed Layer

Links with Strategic and Operational Plans

NL Sustainable Forest Management Strategy	5-Year Operating Plan	Annual Operating Plan
Evaluating the influence of forest management actions on water quantity is a goal of this strategy	Harvest areas are outlined and volume estimates calculated on a 5-year basis.	Harvest blocks are identified and net down volume calculations are completed annually.

SFI Objective 4. Conservation of Biological Diversity

To manage the quality and distribution of wildlife habitats and contribute to the conservation of biological diversity by developing and implementing stand- and landscape-level measures that promote a diversity of types of habitat and successional stages, and the conservation of forest plants and animals, including aquatic species, as well as threatened and endangered species, forests with exceptional conservation value, old growth forest and ecologically important sites.

Indicator 4.1.2 Within-Stand Structural Retention

Objective	4.0 Conservation of Biological Diversity
Performance Measure	4.1 Program Participants shall conserve biological diversity

Indicator:	SFI 4.1.2	Target	Acceptable Level
Degree of within-stand structural retention		To leave a minimum average of 10 wildlife trees or snags per hectare, individually, in clumps, or in patches.	100 wildlife trees or snags in clumps or patches per 10ha opening.
		Resource Person:	Sustainable Management Forester

Definitions

WITHIN-STAND STRUCTURAL RETENTION refers to the retention of patches, clumps, or corridors of trees in the vicinity of a harvested area. Newly cut areas interspersed with patches, clumps, or corridors of trees help to maintain the natural diversity of forest types and age classes in an ecosystem.

SNAGS are dead or dying standing trees. They are utilized by a wide range of wildlife for nesting (primarily cavity nesters) and for foraging. Wildlife species that use snags include a wide variety of small mammals, different forest birds and owls, and a wide range of insects and fungi communities that function as the prey base for many other species. There are three aspects of snag management that need to be considered: quantity, quality and distribution. As part of the annual harvest that now occurs in stands that had been pre-commercially thinned (PCT), snags can also be created by removing the tops of merchantable trees in areas where naturally occurring snags are not present.

QUANTITY: From a quantitative perspective more research is needed. For now, the guide used is “Where safety is not an issue, a minimum average of 10 trees or snags per hectare (average on a cut block) or a clump of trees is to be left on all sites (harvesting and silviculture)” (*Environmental Protection Guidelines*).

QUALITY: The Department of Environment and Climate Change is currently looking at a qualitative way of assessing trees and snags for wildlife. Preliminary results of CBPPL’s Snag Management Program suggest that trees or snags with a minimum of 21cm diameter at breast height are preferred. From the Environmental Protection Guidelines 2026: “Preference should be given to the largest trees (i.e., standing dead trees or live hardwoods). Research has shown that larger diameter snags are more valuable (last longer and contribute more to the biomass pool) than smaller diameter snags. Consequently, the trees retained should be ones, which are from the dominant or co-dominate portion of the stand and be left in a fairly evenly distributed manner”.

WILDLIFE TREES: Trees with a minimum height of 2.0 m and a minimum diameter at breast height of 10 cm.

DISTRIBUTION: From a distribution point of view, the Wildlife Division has indicated that it is beneficial to leave trees in clumps or patches rather than distributing individual stems evenly

across the landscape. This promotes within-stand structure.

Detailed Description

At the stand level, the key to creating higher biodiversity involves the retention of key structural elements in the stand. One example is retaining snags (dead or dying trees) on a cutover during harvest. Leaving live trees, individually and in clumps, also adds structural elements to the cutover. Leaving a combination of snags and living trees on cutovers will provide biodiversity at the time of harvest and well into the future.

Snags provide essential habitat requirements for cavity-using birds and mammals. Snags are often utilized for safe nesting sites in the form of cavities and platforms, roosting and denning sites, hunting perches, display stations, and foraging sites. They also contain numerous insects for food. When a snag eventually tumbles it becomes downed woody debris that provides shelter and denning sites for mammals and birds, as well as providing a nutrient-rich base in which the next generation forest will take root.

In Newfoundland, snags are used by both primary and secondary cavity nesters. Primary cavity nesters such as woodpeckers (hairy, downy, three-toed and northern black-back) create and use cavities in snags while secondary cavity nesters such as chickadees, nuthatches and goldeneyes nest in cavities already formed. Raptors such as boreal owls and merlins use snags for hunting perches, and bats (little brown and eastern long-eared) utilize them for roosting. Downed woody debris is used by pine marten and small mammals such as voles, shrews and squirrels.

Live trees left on cutovers also provide habitat requirements for birds and animals, as nesting sites, hunting perches, and foraging sites. Clumps of live trees provide even more value to wildlife. As well, live trees retained in cutovers become snags in the next rotation.

CBPPL measures wildlife trees (snags and living trees) on cutovers in conjunction with fibre utilization surveys. Standard sampling procedures are utilized to provide a qualitative and quantitative assessment. Criteria for wildlife tree assessment is based on the number of wildlife trees in a sample plot, the percentage of trees over 30 cm dbh, an ocular assessment to determine if 10 wildlife trees/ha can be seen in the area around the plot, and an ocular assessment to determine if there is evidence of clumps of trees, buffers, or leave areas on the surrounding cutover.

Given the existing biodiversity native to Newfoundland, managing for snags and wildlife trees will be of great value to maintain ecosystem diversity. Even one standing snag per hectare can result in a considerable increase in biodiversity.

It is important to note that the *Environmental Protection Guidelines* set forth by the provincial government, state that a minimum average of 10 wildlife trees or snags per hectare must be retained on our harvest blocks. This guideline consists of both living and non-living standing tree structures (wildlife trees). Snags refer to dead or dying trees. Beginning in 2009, an ocular assessment was conducted of wildlife trees left over on the cutover, visible from the plot location during No. 3 Inspections.

Status in 2025

In 2025, sixteen #2 Inspections and twenty-five #3 Inspections were completed. There was one noted deficiency recorded on the #2 inspections with respect to wildlife trees. Not all areas inspected on the harvest block had the 10 trees/ha. Discussion with the contractor supervisor on expectations took place during inspection. Overall, inspections showed that completed areas did have the required number of wildlife trees remaining. Continued education to harvest operators during inspections and audits are expected to take place in 2026.

Management Strategy

CBPP is committed to continuous environmental improvement of its woodland's operations. Through managing for snags and wildlife trees, the company will be able to contribute to within-stand structural retention and ultimately ecosystem diversity, a process that involves more than a supply of fibre for the mill.

The following is an outline of the company's strategy to ensure within-stand structural retention:

- Where possible, leave trees with a diameter greater than or equal to 30 cm at breast height.
- Promote education and awareness amongst all employees. A standard operating procedure (H-06 Leaving Wildlife Trees for Biological Diversity) has been developed to help operators understand the importance of leaving wildlife trees, and the characteristics of the best quality snags.
- Review and discuss results with contractors during Safety and Environmental meetings.

Forecast, Predicted Results or Outcome

Recommendations from the Wildlife Division indicate that standing living, and dead or dying trees are of equal value in terms of the maintenance of biodiversity. The snag management program will change its focus to include in the assessment not only snags, but also the number of standing living trees retained, to get a better representation of within-stand retention.

From our snag management program and other snag studies, it is apparent that both the physical appearance and dimensions of snags and their relative abundance is affected by forest stand and site type. Therefore, we can expect slight shifts in our snag retention patterns as determined by the specific stand types that we harvest on an annual basis. From the perspective of snag (habitat) value, we are expecting an increase in the retention level of higher value snags. This will be accomplished through a training and awareness program for our machine operators.

Implementation Schedule

Task	Details	Responsibility	Frequency
Report on results of	Report results	Sustainable	Annually

inspections in SFM Plan		Management Forester	

Monitoring / Reporting

Frequency of Reporting	Frequency of Monitoring and Review	Sources of Information
Annually	Annually	Results of surveys

Links with Strategic and Operational Plans

NL Sustainable Forest Management Strategy	5-Year Operating Plan	Annual Operating Plan
The Strategy is largely grounded in the promotion of integrated forest management. This project is totally in line with these integrated forest management principles.	The 5-year operating plan identifies harvesting and silviculture treatment areas, and as such, would identify the stand types where operations will occur over the next 5 years. This would allow us to determine whether we might expect any significant shifts in snag retention pattern on a broader landscape level.	The link to our annual operating plan is similar to the 5-year plan link, only on a more site-specific basis.

Indicator 4.1.5 Pine Marten Habitat

Objective	4.0 Conservation of Biological Diversity
Performance Measure	4.1 Program Participants shall conserve biological diversity

Indicator:	**4.1.5**	**Target**	**Acceptable Level**
Degree of suitable habitat in the long term for selected species, including species at risk.		To ensure no harvesting in pine marten core and critical areas during denning period	0
		Resource Person:	District Planner

Definitions

INDICATOR SPECIES**:** a representative species of plant or animal whose presence or absence indicates the general health of the community upon which species is most dependent. Generally, providing for the needs of the indicator species will also meet the needs of most other organisms in the community.

Detailed Description

The American Marten (Newfoundland population), also known as Newfoundland Pine Marten, is found only on the island of Newfoundland. Due to its geographic separation, this species is genetically distinct from its mainland cousins. This rare member of the weasel family is a forest - dweller who prefers conifer forests. It makes its home in dens, crevices and hollowed trees. Contrary to its small stature, the marten needs a large territory in which to live – between 10-30 square kilometers. Pine marten habitat has a very diverse structure, which benefits small mammal species that are the prey base for marten, as well as predators of marten such as lynx, fox, and coyote. It also offers shelter for wintering moose and caribou and provides habitats for various bird species. Given the existing biodiversity native to Newfoundland, managing for pine marten habitat is a great benefit to managing overall species diversity. For these reasons, Pine marten has been chosen as an indicator of overall species diversity.

In 2022, the American Marten's status was upgraded to special concern by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC). In 1996, it was listed as Endangered due to the rate of decline in the estimated population since the last population estimate; approximately 300 animals were thought to be left, down from the between 630 to 875 animals estimated in the early 1980s.

Since 1997, improved modelling tools and ecological data for Newfoundland marten have become available to better manage for landscape-scale habitat availability. Temporally and spatially explicit models now allow both forest and wildlife managers to predict future forest landscapes and subsequently, assess the effects of forest harvesting on marten habitat.

In April 2007, the Canadian Forest Service, the Newfoundland Forest Service, and the Newfoundland and Labrador Wildlife Division, with assistance from Corner Brook Pulp and Paper, initiated a cooperative project to assess the impacts of the 25-year (2006 – 2031) forest harvest schedule for the island portion of the province. The intent was to maximize the extent to which productive forestland is managed sustainably for both marten and timber.

Forest Management District (FMD) 15 was identified as having the highest priority and initial focus of the project. A Marten Occupancy Model predicted the amount of suitable habitat and the number of potentially suitable home ranges for marten, first based on the 2005 forest inventory, and then based on CBPPL's 10-year harvesting plan. For a complete description of the project please see *Integrated Marten Habitat – Timber Harvesting Plan for Western Newfoundland, Project Report for Forest Management District 15* (Hearn et al, 2008).

The modeling results showed an increase in potential habitat in all forest management districts where CBPPL operates except one, where the amount of potential habitat would remain the same. As the forest continues to age, even with harvesting, habitat will increase. The Marten Occupancy Model assessed the probability (0-100%) that an area can support an adult resident marten, based on the underlying and surrounding forest types.

In 2007, the status marten was assessed again and it was downgraded to Threatened, due to possible stabilization in the previous 10 years. A variety of factors are attributed to the increase in population since 1994:

- effective regulations to reduce accidental catch by trappers;
- use of specific weight wire or cord for snaring hares which help release accidentally captured marten
- operative guidelines for forest harvesting in areas containing pine marten

Status in 2025

The target, to ensure no harvesting in marten areas during denning period within core & critical areas, excludes legal authorizations granted by the provincial government. CBPPL has received approval from the Wildlife Division to harvest during the pine marten denning period within a number of specified core & critical areas. There were no infractions observed in 2025.

Due to ongoing recovery efforts, marten have recaptured many parts of their historical range, notably the Baie Verte Peninsula, Stephenville area, and forested areas in southcentral Newfoundland. Recent data has the range moving into the Bay D'Espoir area and several sightings on the Avalon. The population estimate, based on modeling completed in 2019, is approximately 2,500-2,800 animals.

The Newfoundland population of Pine Marten has had multiple 'species at risk' ratings updates. The current status is as follows:

Current Scientific Assessment

- COSEWIC (2022): **Special Concern**
  This means the species is not currently threated but could become threatened if conditions worsen.

Current Legal Status

Federal:

- Species at Risk Act (SARA): **Special Concern** (Updated Feb. 26, 2026)

  Shifted from Threated to Special Concern and now aligns with COSEWIC. Now requires a management plan, rather than a recovery strategy. No automatic prohibitions or critical habitat designation.

Provincial:

- Newfoundland and Labrador Endangered Species Act: **Vulnerable** (2024)
  Downlisted from Threatened, reflecting population recovery trend within the province.

FIGURE 6 PINE MARTEN CORE AND CRITICAL HABITAT ON THE ISLAND

Management Strategy

CBPPL will continue to be a leader in the management for species at risk and work with the provincial Wildlife Division.

Implementation Schedule

Task	Details	Responsibility	Frequency
Update SFM plan of marten habitat	Verify observance of no harvesting in pine marten core and critical areas during denning period.	District Planner	Annually

Monitoring / Reporting

Frequency of Reporting	Frequency of Monitoring and Review	Sources of Information
Annually in the SFM Plan	Annually	Cutover updates, harvesting and roads pre-work forms, updated operations map review
Annually after cutover updates	Annually	Sentinel 2 updates
Annually to Gov't	Quarterly EMS Meetings	Field staff

Links with Strategic and Operational Plans

NL Sustainable Forest Management Strategy	5-Year Operating Plan	Annual Operating Plan
Maintaining and protecting terrestrial wildlife habitat is identified as a goal in this document.	Management requirements for pine marten with respect to forest harvesting are contained in the five-year operating plan.	AOP areas to respect the pine marten timing windows.

Indicator 4.2.3 Age Classes

Objective	4.0 Conservation of Biological Diversity
Performance Measure	4.2 Program Participants shall protect threatened and endangered species, Forests with Exceptional Conservation Values (FECV) and old-growth forests

Indicator:	4.2.3	Target	Acceptable Level
Forest area by serial stage or age class		To maintain representation by age class of the productive forest close to current levels.	± 10%
		Retain a minimum of 20 % of the productive forest on the DFA as old forest (81+ years old)	NA
		Resource Person:	District Planner

Definitions

FOREST STAND – A group of reasonably homogeneous trees that can be differentiated from surrounding stands by its age, composition, structure, site quality, or geography.

AGE CLASS – A general classification of age given to each stand in the forest inventory based on age data derived from plots and photo interpretation. The age classes are grouped into 20-year intervals, starting at 0 – 20 years (age class 1) and ending at 121+ years (age class 7). A separate age class (9) exists for stands of mixed ages.

Detailed Description

Measuring forest area by age class relies on some form of classification that takes into account the time since stand-replacing disturbance, as well as evolving forest structural development. Older age classes are often the most difficult to manage, primarily because they require so much time to develop. However, they are often host to unique communities that would not otherwise be present across the forest landscape. Older age classes at 15% of the Defined Forest Area (DFA) are maintained.

One measure of sustainability when harvesting is having a forest with an even age-class distribution. Having a balanced forest ensures there is always a range of habitat for biodiversity. As the forest grows there is always a replacement much like a human population. This also allows for an equal amount of forest to be harvested each year over time. The premise is, by having an equal amount of forest at various stages or ages of development and only harvesting at the mature and over-mature stages, we will always have younger forests developing into later stages, hence sustainability. Past management practices, repeated insect attacks, and forest fires have skewed the age class distribution of the forest in Newfoundland and Labrador, so that there is a disproportionate amount of forest in the youngest (0-20 years) and oldest (81-121+) age classes. This presents problems for forest managers because older timber needs to be harvested in a timely manner, before being lost to fire, insect, disease, or blowdown. However, if harvested too quickly, the younger forest will not have time to grow to the late successional stages, and therefore will not reach their full productive capacity, or provide the specialized habitat of old forest required by some species. Thinning young stands can help move a proportion of the young age class into a structurally-harvestable stage, so the remainder of the young age class can grow to the mature and over-mature age classes.

It is the responsibility of the provincial government to set the Annual Allowable Cut. This is done by first removing from the equation forest required for other values – protected areas, buffers, habitat for species at risk, viewsheds, etc. Growth curves, anticipated losses to fire, insects and disease, and operational constraints (e.g. steep slopes) are then used to set the AAC. CBPPL must restrict their harvest to within the AAC allotted to them.

This indicator can be updated after the calculation of the wood supply, which occurs every five year plan interval. To show progression towards the target, it can be verified annually if the past year's harvest fell within the AAC levels. These AAC levels ensure sustainability by including the constraint of harvesting older stands (81yrs +) first, while ensuring a minimum of 15% of old growth forest is maintained. See Indicator 2.1.4 for the AAC harvested in past years.

Over the past number of decades CBPPL landbase has changed for various reasons. In 2012 the spatial database to determine the DFA footprint was updated to reflect changes in exchanges and transfers in Forest Management Districts (FMD) 6, 9, & 15. In 2014 through exchanges and transfers and the Muskrat Falls transmission line ROW that intersected CBPPL limits also resulted in a decrease of the DFA area to 1,417,831 Ha. Further changes in 2017 through exchanges and transfers, agricultures areas, and areas in FMD 10 have resulted in a further decrease of the DFA area to 1,399,901 ha. However, in 2025 the DFA has further decreased to 1,350,087 ha due to updates to agriculture areas that were not removed from the limits of the 2017 Master Agreement.

Status in 2025

As stated in the detailed description section of this indicator, calculations of the wood supply occur every five years for each Forest Management Zone and follows the five-year plan schedule.

Updates to this indicator will follow the same schedule as the wood supply projections. The new wood supply analysis has started, and it was released early 2026 for Zones 3 (District 5 & 6) and 7 (Districts 9 & 16).

Since conception of this indicator, the levels of old growth forest on our land base have been maintained over 25% of the productive forest area. Most of the company's harvest has taken place in managed stands of age class 3-4. Therefore, the impact on age class 5 (81+) has been at a minimum. In 2025 from age class 5 and older, we harvested 550 ha of land. This by percentage is only .08% of the total area for this age class on productive forest land.

In 2025 both the Age Class Table and Percent of Each Age Class table will be updated using the new DFA with hard updates once the new wood supply is complete. Changes based on cutovers can be reported each year and will be provided in the text as shown above.

TABLE 20 AGE CLASS OF THE FOREST ON THE DFA FROM LAST WOOD SUPPLY MODELING 2025

Age Class	Total Area (Ha)
1 – (0 – 20)	97,043
2 – (21 – 40)	139,468
3 – (41 – 60)	114,448
4 – (61 – 80)	76,437
5 – (81+)	212,664
Total Productive Area	**640,060**

TABLE 21 PERCENT OF EACH AGE CLASS OF THE TOTAL PRODUCTION FOREST ON THE DFA

Age Class of the Forest (Years)	2020	2025	
	Percent of Productive Forest on the DFA	Percent of Productive Forest on the DFA	Change in Percent
1 – (0 – 20)	13.5	15.16	1.66
2 – (21 – 40)	22.9	21.79	-1.11
3 – (41 – 60)	18.1	17.88	-0.22
4 – (61 – 80)	10.6	11.94	1.34
5 – (81+)	34.9	33.23	-1.67

*2025 based on 640,060 ha of productive forest

Target

The target is to maintain representation of current age classes close to current levels, and to retain a minimum of 20% of the productive forest on the DFA as old forest. Maintenance would be based on factors that can be controlled by CBPPL. Natural disturbance event such as insect infestation, blow-down, or forest fires would not fall under the category of factors that can be controlled.

Acceptable Level of Variance

The acceptable level of variance in the current age class structure is $\pm$ 10%. There is no acceptable level of variance for the retention of 20% of the productive forest on the DFA as old forest.

Management Strategy

CBPPL Woodlands continues to harvest AAC in the DFA within the levels set forth by government (Indicator 1.1.2). Although AAC calculations are based on retaining a minimum of 15 % old forest, CBPPL will monitor the percentage of old forest and normally exceeds that

target. Government re-calculates the AAC every five years, per zone, using the latest data possible to incorporate into the analysis. The government repeatedly monitors regeneration assumptions used in the model for required changes. This continual improvement in regeneration assumptions ensures that future projections age classes are more reliable than in the previous model, thus providing a framework to manage this indicator more accurately with the development of each successive model. More reliable data will allow us to make better management decisions.

Forecast, Predicted Results or Outcome

CBPPL will continue with the management strategy to ensure the age class of the productive forest is maintained close to current levels, while working towards a more balanced age class.

Implementation Schedule

Task	Details	Responsibility	Frequency
Update current age class	Re-assess area and percent of DFA in each age class	District Planner	Starting in 2020 and every 5 years after, or as the DFA footprint changes significantly

Monitoring / Reporting

Frequency of Reporting	Frequency of Monitoring and Review	Sources of Information
Every five years in SFM Report	Every five years (after completion of report)	Provincial forest inventory

Links with Strategic and Operational Plans

20-year Strategy	5-Year Operating Plan	Annual Operating Plan
Regeneration assumptions are built into the wood supply calculation, which is used as a tool in developing this strategy. Sustaining the spruce component of regenerating forests in Newfoundland is a goal identified in this strategy.	Five-year plans are determined by the AAC. These AAC's are determined by the working group composition and age class structure among other factors.	AOPs are determined by the AAC, which in turn is determined by the working group composition and age class structure among other factors.

SFI Objective 5. Management of Visual Quality and Recreational Benefits

To manage the visual impact of forest operations and provide recreational opportunities for the public.

Indicator 5.2.1 Average Clearcut Size

Objective	5.0 Management of Visual Quality and Recreational Benefits
Performance Measure	5.2 Program Participants shall manage the size, shape and placement of clearcut harvests

Indicator:	**5.2.1**	**Target**	**Acceptable Level**
Average size of clear-cut harvest area does not exceed 50 hectares, except when necessary to meet regulatory requirements, achieve ecological objectives, or respond to forest health emergencies or other natural catastrophes.		Cut blocks not to exceed 50 hectare average. Block boundaries may include: adjacent stands, buffers, roads, waterbodies, or wetlands.	50 hectares/cut block +/- 5 hectares.
		Resource Person:	General Operations Superintendent

Definitions

CLEARCUT - A silvicultural system in which the stand of trees is cleared (leaving a 10% retention) from an area at one time. Clearcutting can be implemented in blocks, strips, or patches.

CLEARCUTTING METHOD – A method of regenerating an even-age forest stand by the cutting of essentially all trees, producing a fully exposed microclimate for the development of a new age class.

Detailed Description

The Provincial Sustainable Forest Management Strategy (2014-2024, there has not been a new edition as of Jan. 2026) describes commercial forestry on the island of Newfoundland as follows: "Commercial forestry has been concentrated in Central and Western Newfoundland Ecoregions and has focused on the harvest of the conifer species black spruce and balsam fir. From a forest management perspective, the most important differences between these ecoregions are the differences in the natural disturbance regimes. The Central Newfoundland Forest Ecoregion disturbance dynamics are driven primarily by fire, which tends to produce large-scale. disturbances (up to tens of thousands of hectares). The Western Newfoundland Forest Ecoregion

disturbance dynamics are driven primarily by insect outbreaks and wind events. Many of the forest management polices presented in this strategy are derived from our understanding of these ecoregion-specific dynamics."

The forests on the island are part of the boreal forest, which is characterized as being disturbance driven resulting in the formation of relatively even aged stands. The clear-cut method most closely emulates this natural disturbance pattern and therefore is the preferred method employed for harvest. The size, shape, arrangement and juxtaposition of clear-cut areas vary across the landscape depending on localized topography and terrain conditions. The clear-cut method is the only harvest system used by CBPPL at this time. Previously, data was collected from Harvester points from FP Data collectors which were then combined to create cutover polygons. In 2019 and going forward the cutover information will be taken from Sentinel 2 satellite imagery and cutovers are digitized in ArcGIS. This method of data collection allows the user to get accurate cutover shapes and remove buffers, fly-away points and roads that are not considered part of the cutover for this analysis.

Status in 2025

Clear-cut area data was extracted from the cutover geodatabase. Queries were set up in ArcGIS to display only 2025 data. Since 2022 a new process was used in determining cutblock size. Using these new parameters to connect cutovers which are in close proximity (within 50m of each other) has resulted in an overall increase in average size, but still well below the 50ha target.

TABLE 22 AVERAGE CUT BLOCK SIZE ON DFA BY YEAR

	2017	2018	2019	2020	2021	2022	2023	2024	2025
Size (ha)	14.5	19.5	13.5	9.7	8.1	34.4	28.7	20.4	36.8

Management Strategy

Each year, the data set will be made available for the previous year's cutovers. In 2019 and going forward, the method at which the data is collected has changed and Sentinel 2 imagery will be used to create cutover polygons. Staff will continue to review the data collected and monitor the trends in cutover size. If the averages continue to increase over time a strategy will need to be developed to plan cut block size in areas where the potential is high.

Implementation Schedule

Task	Details	Responsibility	Frequency
Report on results of GIS	Report results	General	Annually

analysis in SFM Plan		Operations Superintendent	

Monitoring / Reporting

Frequency of Reporting	Frequency of Monitoring and Review	Sources of Information
Annually	Annually	GIS analysis of cut blocks

Links with Strategic and Operational Plans

NL Sustainable Forest Management Strategy	5-Year Operating Plan	Annual Operating Plan
The Strategy is largely grounded in the natural disturbance regimes of the province. The clear-cut method most closely emulates these patterns and therefore is the most preferred method for harvest.	The 5-year operating plan identifies harvesting and silviculture treatment areas. The clear-cut method is the only harvest system used by CBPPL at this time.	The link to our annual operating plan is similar to the 5-year plan link, only on a more site-specific basis. The size, shape, arrangement and juxtaposition of clear-cut areas vary across the landscape depending on localized topography and terrain conditions.

Indicator 5.4.1 Forest Stakeholders

Objective	5.0 Management of Visual Quality and Recreational Benefits
Performance Measure	5.4 Program Participants shall support and promote recreational opportunities for the public

Indicator:	**SFI 5.4.1**	**Target**	**Acceptable Level**
Evidence of open and respectful communications with forest dependent businesses, forest users and local communities to integrate non-timber resources into forest management planning. When significant disagreement		To aim for the satisfaction of 100% of stakeholders inside CBPPL's 5-year operating plan for each Forest Management District, with whom CBPPL has an agreement.	-10%

occurs, efforts towards conflict resolution are documented.	**Resource Person:**	Environmental Management Representative & Sustainable Management Forester

Definitions

STAKEHOLDER - A person, group or organization that has interest or concern in an organization. Stakeholders can affect or be affected by the organization's actions, objectives, policies, or assets/resources.

Detailed Description

There are many stakeholders on CBPPL limits, with interests in the social, cultural, ecological, and economic benefits the forest can provide. Some draw their livelihood from the forest (outfitters and other tourism operators and commercial firewood operators), some use the forest for their recreational activities (e.g., snowmobiling, skiing, camping, fishing, hunting, hiking, boating) while others aim to ensure conserve, restore, and manage forest habitat for wildlife and humans alike. Interactions between stakeholders and CBPPL occur on several levels, some with the Planning Department of CBPPL through details of an Agreement or Memorandum of Understanding, and others through requirements to environmental and forestry certifications.

CBPPL is committed to ensuring the interests of stakeholders are maintained on the DFA. This is demonstrated in the proactive approach CBPPL takes when approaching stakeholders to discuss proposed forest management operations in the vicinity of their interests. This mainly occurs during the 5-year planning process. Cooperating with stakeholders on the DFA can help to ensure their interests are protected.

A target has been established to include all stakeholders inside CBPPL's 5-year operating plan for each Forest Management District, with whom CBPPL has an agreement. This target will aim to meet with and satisfy the concerns of these stakeholders during the 5-year planning process and during consultations concerning the environmental and forestry certifications.

Status in 2025

In 2025, CBPPL developed and submitted the next 5YP for Zone 5 (District 10) which covers the time frame of 2026-2030. During this plan development various stakeholders were contacted and feedback was requested. The number of groups/organizations/individuals contacted numbered approximately100. From this outreach further meetings were arranged to discuss the plans and stakeholder concerns in more detail.

The plan for Zone 5 was released with further condition to develop and submit a Stakeholder Engagement Plan. This plan was to be approved by the Department of Tourism and the Minister of Environment and Climate Change. The plan was approved in early 2026.

During the development of any 5YP CBPPL seeks the input of all stakeholders located within or in proximity to the company's timber license areas. This consultation approach can result in site

specific mitigation measures, Memorandum of Understandings, harvest deferrals or continual communication regarding yearly activities. Agreed upon action items are warehoused in the Woodlands Department and reviewed during the preparation of Annual Harvest Plans to ensure compliance.

Annual consultations with stakeholders continue to occur with such groups as the Newfoundland and Labrador Snowmobile Federation, certain outfitters, and the Wildlife Division. The next 5YP process will take place in 2026 and will cover Zone 3 (Districts 5 and 6) and Zone 7 (Districts 9 and 16).
Additionally in 2025 a Stakeholder Committee was formed which included the following interested parties:

1. Grenfell Campus – Memorial University of Newfoundland
2. Atlantic Salmon Federation
3. International Appalachian Trails NL
4. College of the North Atlantic
5. Newfoundland and Labrador Snowmobile Federation
6. Newfoundland and Labrador Outfitters Association
7. Gros Morne National Park – Parks Canada
8. Forestry, Agriculture and Lands GovNL
9. Qalipu First Nation

Meetings held in 2025 included discussions around our Annual Operating Plans. In 2026 the group will meet in person and a review of the upcoming 5YP's will be the topic of discussion.

CBPPL has been tracking its compliance with Agreements signed with various stakeholders since 2014. The following table lists the stakeholder, and the type of mutual arrangement that exists between the two parties (agreement or memorandum of understanding).

TABLE 23 STAKEHOLDER AGREEMENT/MOU LIST ON CBPPL'S DFA

Stakeholder	**Agreement or Memorandum of Understanding (MOU)**
Ducks Unlimited Canada – NL	Ducks Unlimited Cooks Marsh Agreement Data Use Agreement
Freshwater-Alexander Bays Ecosystem Corporation (FABEC)	FABEC Memorandum of Understanding

NL Dept. of Fisheries and Land Resources	Hardwood Agreements- FMD's 9, 14
Indian Bay Ecosystem Corporation (IBEC)	IBEC Memorandum of Understanding
International Appalachian Trail NL (IATNL)	IATNL Memorandum of Understanding
Newfoundland and Labrador Outfitters Association (NLOA)	NLOA Memorandum of Understanding
Newfoundland and Labrador Snowmobile Federation	NLSF Memorandum of Understanding Crossing & Bridges Understanding
Airport Nordic Ski Club	Agreement
Camp 33 Trailer Park Inc.	Trailer Park Agreement
Spruce Trails Snowshoeing Association	Spruce Trails Agreement
Town of Baie Verte	Multipurpose Trail Agreement

Management Strategy

It is our intention to continue meeting with stakeholders as required in the agreements. As new

Five-Year Plans are developed, we will endeavor to involve all stakeholders with interests in our DFA and get them involved in the public consultation process to develop Five-Year Forest Management Plans. Through this process we should be able to reduce any future conflicts with our plans. Any conflicts that cannot be settled at the Five-Year Planning Team level will be dealt with through the process agreed to in the Agreement/Memorandum of Understanding that Corner Brook Pulp and Paper Limited signed with the stakeholder.

Forecast, Predicted Results or Outcome:

Cooperation between CBPPL, and its stakeholders with agreements should result in the resolution of all outstanding issues.

Implementation Schedule

Task	Details	Responsibility	Frequency
Meet or consult with stakeholders as required.	Purpose of meeting/consultation will be to review status of agreements/MOUs and any unresolved issues, or to discuss existing and potential high conservation values.	EMR & Sustainable Management Forester	Annually

Monitoring / Reporting:

Frequency of Reporting	Frequency of Monitoring and Review	Sources of Information
Annually in SFM Report	Annually	Notes from meetings with stakeholders; correspondence with stakeholders

Links with Strategic and Operational Plans

NL Sustainable Forest Management Strategy	5-Year Operating Plan	Annual Operating Plan
The Provincial Sustainable Forest Management Strategy identifies numerous goals and indicators to help maintain ecological, social, cultural, and non-timber economic values of the forest.	Stakeholders will be invited to participate in a renewed public planning team process, a goal of the Provincial Sustainable Forest Management Strategy.	Arrangements agreed to with stakeholders through Agreements and MOUs will be implemented in the AOP as required.

SFI Objective 6. Protection of Sites of Special Significance

To manage lands that are geologically or culturally important in a manner that takes into account their unique qualities.

Indicator 6.1.2 Special Places

Objective	6.0 Protection of Special Sites
Performance Measure	6.1 Program Participants shall keep a list of identified special sites and manage them in a manner appropriate for their unique features

Indicator:	**6.1.2**	**Target**	**Acceptable Level**
Protection of sites of special significance		To implement a "Special Places" program that will identify, describe, and promote a special sites on the DFA, and maintain them through management strategies specific to each site.	EMS committee review new special places put forward for consideration. Effort to maintain identified sites.
		Resource Person:	Environmental Management Representative

Definitions

SPECIAL PLACES / SPECIAL SITES – A project initiated from CBPPL Environmental Management System (EMS) review was the development of a "unique" areas program. There are plenty of special places on our limits - places people frequent to fish, camp, or just spend time. The goal of CBPPL is to locate and describe these locations. They will be highlighted on our operating maps, and measures will be implemented to ensure the particular qualities that make the sites special places are considered when operating in or adjacent to these areas.

Detailed Description

CBPPL recognizes that our DFA provides more than just a supply of fibre for our mill. Other ecological, historical, cultural, and sacred values exist and should be carefully managed.

Through different partnerships, Woodlands staff as well as members of the public, have developed a list of Special Places. The Company intends to evaluate all listed sites so that CBPPL can make decisions on how to maintain the special qualities or characteristics of the sites.

Each 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)
- interesting or unique geological features
- areas of sacred, cultural or historical significance
- areas containing high quality, representative or unusual forest types
- areas with aesthetic appeal
- areas of education and public outreach

The list was reviewed with the goal of ensuring that controls are in place to manage them, and preserve or maintain the attributes that make the areas special. Adding sites to this list in no way indicates that CBPPL will never operate there; it means these areas will be highlighted in our database so that appropriate management measures are taken to ensure contractors are fully aware of their existence and importance when operating near them.

These controls will include:
- identifying and evaluating suggested sites
- recording the location of each site
- entering the information into the Woodlands GIS database so it will appear when developing annual and five-year operating plans
- ensuring that before any operation commences, a Pre-Work Form will be completed and reviewed with the contractor. The Pre-Work Form will identify the significance of the special place and include any requirements for the contractor.

Our Special Places program was implemented in 2007 and launched via the CBPPL website. Three of the Special Places listed below (Little Grand Lake Provisional Ecological Reserve, Main River Waterway Provincial Park and Pasadena Ski and Nature Park) were at one time part of CBPPL's timber limits. These areas were sold back to the provincial government, the first two based on their value as protected areas and Pasadena Ski and Nature Park as part of a tourism initiated viewshed corridor from the mouth of the Humber River to the northeast tip of Deer Lake. T'Railway Provincial Park runs through CBPPL's timber limits in many areas and frequently influences CBPPL's management plans. CBPPL timber limits surround West Brook Ecological Reserve on three sides.

Several of the Special Places already have various forms of management strategies in place. Existing strategies developed by various agencies such as Ducks Unlimited, the provincial government, and the Corner Brook Stream Trail Association are incorporated into site-specific management strategies developed for the Special Places program.

Status in 2025

22 Special Places have been identified:

Healing Forest
Newfoundland & Labrador Snowmobile Federation Groomed Trails
Airport Nordic Ski Park
Birchy Basin (Upper Humber Wetlands Complex)
Blow-Me-Down Trails
Bottom Brook Arboretum
Chimney Cove
Cook's Marsh
Corner Brook Stream Trail
Crescent Pond Sitka Spruce Stand
Freshwater-Alexander Bays Watershed
Hampden Downs
Indian Bay Watershed
Inner Loon Pond Forest
International Appalachian Trail Newfoundland & Labrador
**Little Grand Lake Provisional Ecological Reserve*
Lomond Sink Hole
**Main River Waterway Provincial Park*
**Pasadena Ski and Nature Park*
Spruce Trails
Thomas Howe Demonstration Forest
**T'Railway Provincial Park*
**West Brook Ecological Reserve*

* Some of these Special Places were at one time part of CBPPL's timber limits, while others are on Crown land within or adjacent to CBPPL's timber limits. None of the sites indicated are maintained by CBPPL.

There were no new special places dedication for 2025. **Newfoundland & Labrador Snowmobile Federation (NLSF) Groomed Trail Network** continues to have additions onto the trail system that is entered into our Special Places data base. The NLSF is a group dedicated to providing strong leadership and support to safe, organized family-oriented snowmobiling in the province of Newfoundland & Labrador through a network of well-marked and maintained groomed trails and to promote the province of Newfoundland and Labrador as Canada's snowmobiling destination. Their mandate is to ensue the interests of "all" members are put forward as a united voice with special emphasis on maintaining the freedom of "back country" snowmobiling which is currently available in all parts of the province. Much of the NLSF groomed trails are located on CBPPL logging roads and timber limits. CBPPL is committed to supporting local recreational activities and have committed to allow the NLSF to groom the logging roads in the winter for recreation. As well we consult with the NLSF annually with their preparation for the upcoming snowmobile season and during preparation of Five Year Management Plans. It is our commitment to locals to allow recreation to continue the trail system.

All CBPPL's Special Places can be viewed at www.cbpplwoodlands.com on the "Special

Places" page.

Management Strategy

Our intent is to have all these sites fully evaluated so that CBPPL can make informed decisions on how to maintain the special attributes or qualities of the site, within the boundaries of a larger operating area. Information including photographs, why the site is special, vegetation surveys where applicable, and appropriate management recommendations will be gathered for these Special Places.

CBPPL also supports in principle the provincial government's protected areas strategy, administered by the Natural Areas Program of the Department of Fisheries and Land Resources. Where these protected areas fall on CBPPL's DFA, they will be incorporated into the special places program. An example is the West Brook Ecological Reserve. A complete list of protected areas can be found at: http://www.env.gov.nl.ca/env/parks/apa/index.html.

Areas of sacred or archaeological significance on the DFA are identified and protected through an Environmental Assessment of the Five-Year Operating Plan. Submitted to the Department of Municipal Affairs and Environment, the Five-Year Operating Plan is sent to various government departments for comments. Areas of sacred or archaeological significance are identified by the Department of Tourism, Industry and Innovation, and requirements for protection of these areas are included in the Certificate of Managed Land, which is rendered annually by the Foresty Agriculture and Lands Department. However, CBPPL may not be able to add all of these areas to the Special Places program, as some archaeological/sacred sites might not be public knowledge.

Forecast, Predicted Results or Outcome

Corner Brook Pulp and Paper Limited believe it is in the best interest of the public and the Company to support a Special Places Program. By incorporating a 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 our DFA.

The site locations will be marked on a Special Places Map. This information, available on the Company's website, will allow users of the DFA to enjoy sites identified as having special ecological, cultural or recreational significance.

Before any operation commences in or adjacent to these areas, a Pre-work Form will be completed and reviewed with the contractor to ensure that the special attributes of these sites are maintained for future generations.

Inviting interested persons, local recreational groups, and other special-interest groups to suggest additional Special Places will ensure the program continues in the future.

Implementation Schedule

Task	Details	Responsibility	Frequency
Describe the special sites	A description should be provided for special place's sites as they are designated	Environmental Management Representative	Annually
Map the special sites	Each special site should be identified in the GIS database	District Planner	Annually

Monitoring / Reporting

Frequency of Reporting	Frequency of Monitoring and Review	Sources of Information
Annually in SFM Report	Annually (after completion of report)	CBPPL staff and employees and the public

Links with Strategic and Operational Plans

20-year Strategy	5-Year Operating Plan	Annual Operating Plan
The designation of special places has been identified as a value in the Newfoundland and Labrador Sustainable Forest Management Strategy	As special sites are entered in the GIS database, they will be incorporated in the 5-year plan	Any special sites will be located on relevant operational maps to ensure that they are maintained on the DFA. Pre-work meetings with contractors before any operation commences in these areas will further ensure that their special significance is maintained for future generations.

SFI Objective 8. Recognize and Respect Indigenous Peoples' Rights

To recognize and respect Indigenous Peoples' rights and traditional knowledge.

Indicator 8.3.1 Engagement of Aboriginal People

Objective	8.0 Recognize and Respect Indigenous Peoples' Rights
Performance Measure	8.3 Program Participants are encouraged to communicate with and shall respond to local Indigenous Peoples with respect to sustainable forest management practices on their private lands

Indicator:	**8.3.1**	**Target**	**Acceptable Level**
Evidence of understanding and use of Aboriginal knowledge through the engagement of willing Aboriginal communities, using a process that identifies and manages culturally important resources and values. Level of management and/or protection of areas where culturally important practices and activities occur.		1. Offer to meet with Miawpukek First Nation and Qalipu Mi'kmaq First Nation Band to understand their forest values, knowledge and uses, as they apply to the 5 year plan areas. 2. Discuss adaptive forest management strategies for the above values, knowledges and uses. 3. Indicate in annual operating plan agreed-upon strategies.	1. No variance 2. No variance 3. No variance
		Resource Person:	Sustainable Management Forester

Definitions

ABORIGINAL PEOPLE - In the Constitution Act, 1982, "Aboriginal peoples of Canada" includes the Indian, Inuit, and Metis peoples of Canada.

Detailed Description

Aboriginal people on the Island of Newfoundland are primarily Mi'kmaq and have Aboriginal rights. There are two First Nation Bands on the island of Newfoundland that follow their traditional values on CBPPL limits: Miawpukek First Nation (MFN) and Qalipu Mi'kmaq First Nation Band (QFN). Miawpukek First Nation has a reserve of 548 hectares in Baie D'Espoir (outside of CBPPL limits) and their own forest management Area in District 6; Qalipu Mi'kmaq First Nation Band is a landless band.

First Nation's knowledge of sustainable forest management and their culturally important resources and values will be considered in the development of CBPPL's Sustainable Forest Management Plan and in operating plans.

Kruger Inc. has a *Policy to Promote Harmonious Relations with First Nations* that is promoted throughout the organization.

Both QFN and MFN were members of the Newfoundland Regional Working Group (NRWG) of the Canadian Boreal Forest Agreement (CBFA) and CBPPL engaged with Aboriginal partners through this process.

Representatives from Miawpukek First Nation, Qalipu First Nation, and Kruger Inc. are co-leads and partners on a number of committees which met in 2020 as part of the provincial government's "The Way Forward" process. These committees include Sustainable Forest Management, Research, Innovation and Diversification, Forest Business Development and Risk Management, Public Awareness and Human Resources, and Skills and Labour.

Status in 2025

In 2025 there was one renewal of CBPPL 5YP's which required public consultation. As part of this process the Qalipu First Nations Band was contacted. Meetings were arranged with Ian Sullivan, Director of Natural Resources with the Qalipu First Nations and Denika Kelly, Manager of Environment and Natural Resources. Shapefiles were provided so that any overlapping land use concerns could be determined. In follow-up meetings the land use for hunting, fishing and berry picking was discussed but no area omission was requested.

In 2026 CBPPL will be developing two new 5YP's for Zone 3 and 7. Meetings will be requested as plan development begins.

Management Strategy

CBPPL meets with forest stakeholders during the 5-Year Planning Process to discuss their values. CBPPL will continue to meet with Miawpukek First Nation and Qalipu Mi'kmaq First Nation Band, to identify their values, which will then be integrated into the 5-Year Operating Plan and Annual Operating Plans. CBPPL will provide digital data from each Annual Operating Plan for the First Nation bands to review, to ensure that the commitments of the 5-Year Operating Plan are being followed.

Forecast, Predicted Results or Outcome

CBPPL will offer to meet with Miawpukek First Nation and Qalipu Mi'kmaq First Nation Band to discuss the incorporation of their values into the 5-Year Operating Plan. By providing the First Nation Bands with digital data of the Annual Operating Plans, they can verify that their values are being respected and incorporated into the plans as agreed.

Implementation Schedule

Task	Details	Responsibility	Frequency
Meet with First Nation Bands	Offer to meet with Miawpukek First Nation and Qalipu Mi'kmaq First Nation Band to identify First Nation values.	Sustainable Management Forester	During 5-Year Planning Processes
Incorporate values	Once a management strategy has been agreed upon by CBPPL and First Nations, incorporate First Nation values into the 5-Year and annual operating plans when applicable.	Sustainable Management Forester	Annually as required
Provide Annual Operating Plan	Provide digital data from each annual operating plan to Miawpukek First Nation and Qalipu Mi'kmaq First Nation Band, to show integration of identified First Nation values.	Sustainable Management Forester	Annually as required

Monitoring / Reporting

Frequency of Reporting	Frequency of Monitoring and Review	Sources of Information
Annually in SFM Plan	Annually	Annual Operating Plans

Links with Strategic and Operational Plans

20-year Strategy	5-Year Operating Plan	Annual Operating Plan
Aboriginal perspectives and involvement have been identified as a value in the Newfoundland and Labrador Sustainable Forest Management Strategy	Participation in the public consultation process, to prepare 5-Year Forest Management Plans is open to all groups and individuals.	Aboriginal perspectives and involvement will be sought concerning annual operating plans affecting their traditional areas.

SFI Objectives 9. Climate Smart Forestry

To ensure forest management activities address climate change adaption and mitigation measures.

Detailed Description

Corner Brook Pulp and Paper Limited (CBPPL) is committed to sustainable forest management by incorporating social, environmental, cultural and economic values in the sustainable development of Newfoundland forests. This report is to address the changing climate on our operations and outline the adaption plan for priority climate change risks to CBPPL wood supply on the Defined Forest Area (DFA). This plan sets up a basic framework for adapting DFA forest management practice to foster resilient forests in a changing climate. The strategies in this report are based on best scientific information available.

In 2023 the Woodlands department identified and prioritized climate change risks and vulnerabilities per district area. Climate change vulnerabilities have been discussed in the past and continue to be planned for in our 5 year plans, but this was the first solely climate change-based meeting of the department. The possible risk to the wood supply, the likelihood, nature of risk, and possible severity were all reviewed and ranked. These rankings are laid out on a table that will be reviewed periodically and changes made to severity if needed. This process was undertaken to meet the requirements of SFI FM 9.1.1. to help build the framework for the Woodlands *Adaptation Plan for Priority Climate Change Risks* as laid out in objective 9.1.2 of SFI FM 2022.

The effects of climate change projections for Newfoundland and Labrador report that the province will notably be warmer, wetter and experience more extreme weather events. Climate change is projected to severely challenge the management of Newfoundland's forests, primarily due to potential changes in temperature and water regimes, along with more variable local weather pattern. Increased incidence of fire and insect outbreaks is also expected to complicate forest management. Adaptive capacity defined by the Intergovernmental Panel for Climate Change (IPCC) is "the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or to respond to consequences" (IPCC 2018). Corner Brook Pulp and Paper has identified potential climate change risk priorities across our land base and have created a table of adaptation options to apply to reduce these risks as part of the *Adaption Plan for Priority Climate Change Risks*. A table of Exposure to hazard, susceptibility, and Adaptation options was compiled.

TABLE 24 ADAPTATION OPTIONS FOR CLIMATE CHANGE RISKS

Exposure to hazard	Susceptibility	Adaptation options
Increase in winter temperatures/Shorter periods of frozen soil/increase in freeze &	-Shorter seasons of winter operations - Wood fiber cut and unable to recover b/c of	-Larger road building plan. Multiple areas allow for greater flexibility for seasonal changes. -Less winter road building

thaw fluctuations	temperature events	-Harvested wood that is left because of extreme temperature fluctuations will be recovered and used for hog fuel for mill operations.
Increase in extreme water events	-Flooding; Drought -Road infrastructure damage -Heavy snow events loss of accessibility	-Culverts installed for 50-100 year events on large water crossings. -continued identification of water sheds and monitoring for buffer sizes. -Possibility to use more heat-resistant spruce for planting
Increase in forest fire activity	-Reduction in wood supply -Loss of equipment -Increased potential for worker exposure to wildfire	-Support the Provincial government in maintaining or restoring natural fire regimes where historical fire cycles have been disrupted by past fire exclusion and made them more vulnerable to severe future fires. -Maintain fire control capabilities and have emergency response procedures in place for fire prevention and control. -CBPPL does not issue any domestic cutting permits during fire season. -reducing vertical and horizontal vegetation continuity will make woodlands more resistant to fires. Small clear-cut areas ensure regrowth stands are small in continuity. -Look at forest-urban interface and identify defensible spaces and create safe area (fire break applications?) -As part of the 5 year plans, run a forest fire scenario
Large scale insect outbreak	-Reduction in wood supply -increased fire hazard	-Actively manage forest pests through partnerships with the provincial insect and disease department. -Early intervention programs & strategies

		-salvage harvests
Severe windstorms in Atlantic Canada	-Increased tree damage/wind throw -Loss of retention trees	-continue to focus on cutting matured PCT stands -Plan to use windthrow stands as hog fuel area -Through 5 year plans: Design cut blocks to follow contours and natural boundaries to mitigate risk of windthrow to natural forest.

Objective 9.1.3 The Adaptation plan objects and strategies fit within the boarder regional climate strategies and plans of the province. It is based on the framework from the National Resources Can report *Risk assessment in Newfoundland and Labrador Resource-Based Industries and Municipalities (March 2021).* CBPPL Woodlands took the framework and then applied the scenarios based on the Western and Central regions of the DFA climatic conditions and tree species in the areas and looked at the possibility of impacts to the wood supply to the mill. Once the likelihood, nature of risk, and severity was identified, the adaptation options in the woodland operations were identified. The adaptation options identified in the Woodlands Department Adaptation plan are more focused on DFA scenarios but still align closely with the Risk assessment report for NL Resource-Based Industries and Municipalities.

Since the Natural Resources Canada report, localized studies and action plans have been published within the Province by Barnett Clark Associates group through a joint initiative by the Newfoundland and Labrador Forestry Industry Association (NLFIA), in which Corner Brook Pulp and Paper and other invested groups are a part of. Corner Brook Pulp and Paper Woodlands is aware of the finding in the reports and have worked closely in providing information for them.

The company's' adaptation plan, objectives, and strategies fit within the findings from the Natural Resources Canada report of 2021 and the Barnett Clarke Associates reports *Assessing Newfoundland and Labrador Forest Sector Vulnerability to Extreme Climate Events (June 14 2021, August 31 2022, & November 2022).*

Management Strategy

The Climate Smart Forestry objectives will be reviewed annually with the Environmental Management Systems Quarterly review to ensure the adaptation plan is up to date and reflects what is happening in the woodlands.

Forecast, Predicted Results or Outcome

The Woodlands department will continue to monitor and plan for addressing climate change

adaptation and mitigation measures. As well, the department will continue to work alongside provincial and federal partners to stay up to date with requirements and best management practices.

Monitoring / Reporting

Frequency of Reporting	Frequency of Monitoring and Review	Sources of Information
Annually in SFM Plan	Annually 4th quarter EMS meeting	Annual Operating Plans

Links with Strategic and Operational Plans

20-year Strategy	5-Year Operating Plan	Annual Operating Plan
Waiting to review new 20-year plan for climate change measures.	Refer to adaptation plan during planning.	Refer to adaptation plan during planning.

SFI Objective 11. Legal and Regulatory Compliance

To comply with all laws and regulations including internal, federal, provincial, and local.

Indicator 11.2.2 Women's Employment Plan

Objective	11.0 Legal and Regulatory Compliance
Performance Measure	11.2 Program Participants shall take appropriate steps to comply with all applicable social laws at the federal, provincial, and local levels in the country in which the Program Participant operates.

Indicator:	**11.2.2**	**Target**	**Acceptable Level**
Written policy demonstrating commitment to comply with social laws, such as those covering civil rights, equal employment opportunities, anti-discrimination and anti-harassment measures, workers compensation, Indigenous Peoples rights, workers' and communities' right to know, prevailing wages, workers' right to organize, and occupational health and safety.		To report annually the statistics related to the Women's Employment Plan, to the Minister responsible for Women and Gender Equality.	No variance
		Resource Person:	Sustainable Management Forester

Definitions

Detailed Description

The Women's Employment Plan (WEP) was prepared as a conditional requirement by the Government of Newfoundland and Labrador. It describes the gender-equity goals and initiatives that Corner Brook Pulp and Paper has implemented by working collaboratively with our contractors and relevant community stakeholder organizations to help ensure a diverse and inclusive workforce during the various activities in our forest operations.

CBPPL is an equal opportunity employer in all sectors of its operation. The company encourages and supports the growth of women within the organization in many ways including identifying women for succession roles and providing equal opportunity in all job competitions.

Corner Brook Pulp and Paper is committed to establishing qualitative and quantitative goals for gender equity to improve employment outcomes for women in Newfoundland and Labrador. CBPPL has developed this Women's Employment Plan (WEP) to establish a proactive approach toward a workplace environment with policies and practices that help ensure a work environment free from harassment and discrimination.

The company will report yearly, through the SFM plan, to the Minister responsible for Women and Gender Equality. Employment targets, duration of work, and initiatives, will be represented in the status and tables below.

Status in 2025

In 2025 there were several new hires within the woodlands division of CBPPL. Each posting includes appropriate language to encourage women to apply for all job opportunities. A gender equity and diversity statement is included in any such promotional material.

Decreases were noticed across the board for 2025. Professional staff continues to take the lead with respect to women in the forestry industry.

CBPPL is willing to work with gender equity groups as the opportunity arises.

TABLE 25 EMPLOYMENT TARGETS BY OCCUPATIONAL GROUP

Occupation	FT/PT / Seasonal	Direct (DH) Hire/Contractor (CH)	Estimated Time Frame	Total # of Employees	Target Female %	2021 % Female	2022 % Female	2023 % Female	2024 % Female	2025 % Female
Project Management/Administration	N/A									

Supervisors of Skilled Trades	FT	CH	Continuous	6	25	17	0	0	0	0
Professionals/Semi-professionals, Technicians	FT/PT	CH/DH	Continuous	13	25	20	29	23	33	23
Skilled Trades	Seasonal	CH	Continuous	98	25	1.5	3	2	2	1
Manual Workers/Laborers	Seasonal	CH	Continuous	16 Planting	25	0	13	12.5	13	6.2
Apprentices	N/A									

Management Strategy

CBPPL will monitor the progress of the WEP and work closely with contractors to discuss opportunities to advance the plan.

Implementation Schedule

Task	Details	Responsibility	Frequency
Report progress	Report previous years efforts and statistics	Sustainable Management Forester	Annually

Monitoring / Reporting

Frequency of Reporting	Frequency of Monitoring and Review	Sources of Information
Annually	Annually	Woodlands Operational Staff

Links with Strategic and Operational Plans

NL Sustainable Forest Management Strategy	5-Year Operating Plan	Annual Operating Plan
N/A	The WEP is included in all 5 Year Plans.	NA

SFI Objective 13. Training and Education

To improve the implementation of Sustainable forestry through appropriate training and education programs.

Indicator 13.1

Objective	13.0 Training and Education
Performance Measure	13.1 Certified organizations shall require appropriate training of personnel and contractors so that they are competent to fulfill their responsibilities under the SFI Forest Management Standard and

Indicator:	**3.1.4**	**Target**	**Acceptable Level**
Contractor education and training sufficient to their roles and responsibilities.		Train 100% of the workforce to the requirements set out in the training matrix	-10%
		Resource Person:	EMR

Definitions

SKILLS DEVELOPMENT – A learned power of doing something competently: a developed aptitude or ability.

Detailed Description

Forests represent not only a return on investment for the organization but also a source of income and non-financial benefits for a DFA-related workers, contractors, and others; stability and opportunities for communities; and revenue for local, provincial, and federal governments. Investment in the training and skills development of its workers and contractors serves to strengthen the organization and its viability, which in turn strengthens the viability of forest-based communities in its DFA.

One of the goals of CBPPL's Forest and Environmental Policy is that the Company will "Promote environmental awareness among our employees and contractors and train employees in their specific environmental and forest management responsibilities." This commitment to training and skills development is incorporated into the company's Environmental Management System (EMS).

Training needs were identified by the General Safety Committee and form the basis for any training plans required. A training Needs Matrix lists every possible job classification in CBPPL Woodlands and the training requirements for each. The training database, in Intelex and

SiteDocs, tracks the employees' training and skills development, based on the requirements of the job classifications established in the Matrix.

When the EMS was implemented in 2000, job specific training needs were determined using a Training Skills Analysis and Record Form in which each employee's training records were reviewed to ensure they had the training required to manage Significant Environmental Aspects (SEA's) and emergency response. At the time, Superintendents and Contractors evaluated each employee and completed the form based on training received or assessed competency based on job experience.

Status in 2025

In 2025, an app called SiteDocs was adopted for contractor document management. In this application, training records are filed for each employee, along with recertification dates from training records. This application will send out notifications when training certificates are reaching expiry. SiteDocs will be used for training records going forward for all Woodland employees and contractors.

Management Strategy

Skills development training will continue to be a very important component of CBPPL's Safety and Training Program and the Environmental Management System. The active employee list in the database will be reviewed bi-annually against the Training Needs Matrix to determine an annual training program.

Forecast, Predicted Results or Outcome

Investment in the training and skills development of its workers and contractors serves to strengthen the organization and its viability. Training tracking and outcomes will be improved for 2026.

Implementation Schedule

Task	Details	Responsibility	Frequency
Review training data base and training matrix	Determine annual training program for employees based on results of data base and matrix review.	EMR	Annually

Arrange for required training	Organize course offerings for required training if economies of scale permit	EMR	Bi-annually

Monitoring / Reporting

Frequency of Reporting	Frequency of Monitoring and Review	Sources of Information
Annually in SFM Plan	Annually	Training Needs Matrix Intelex SiteDocs

Links with Strategic and Operational Plans

20-year Strategy	5-Year Operating Plan	Annual Operating Plan
Newfoundland and Labrador Sustainable Forest Management Strategy to continue to train department staff and district Planning Team members on factors pertaining to managing forests.	Training requirements for all personnel involved with developing and implementing 5 year operating plans.	Training requirements for personnel involved in carrying out all aspects of the annual operating plans i.e. planning, layout and harvesting.

Annual Update on EMS Programs

The next section contains the Annual Update on the Environmental Management Systems' (EMS) Programs. This section gives the values, objectives, and targets of Significant Environmental Aspects from the ISO 14001: 2015.

Significant Environmental Aspects

The Significant Environmental Aspects (SEAs) programs were refreshed in 2023. An environmental aspect is the way your activity, service, or product impacts the environment. The year prior there were six SEAs in which the continuous improvement programs were based around, being: Fuel Spill, Fibre Recovery, Fibre Utilization, Garbage, Water Quality, & Soil Disturbance. The refresh has combined these SEAs and has included them into new categories as well as the addition of Climate Change and Fire.

There are now four SEA categories: Green House Gas Emissions & Climate Change, Fire,

Release to Water and Land, & Natural Resources Management.

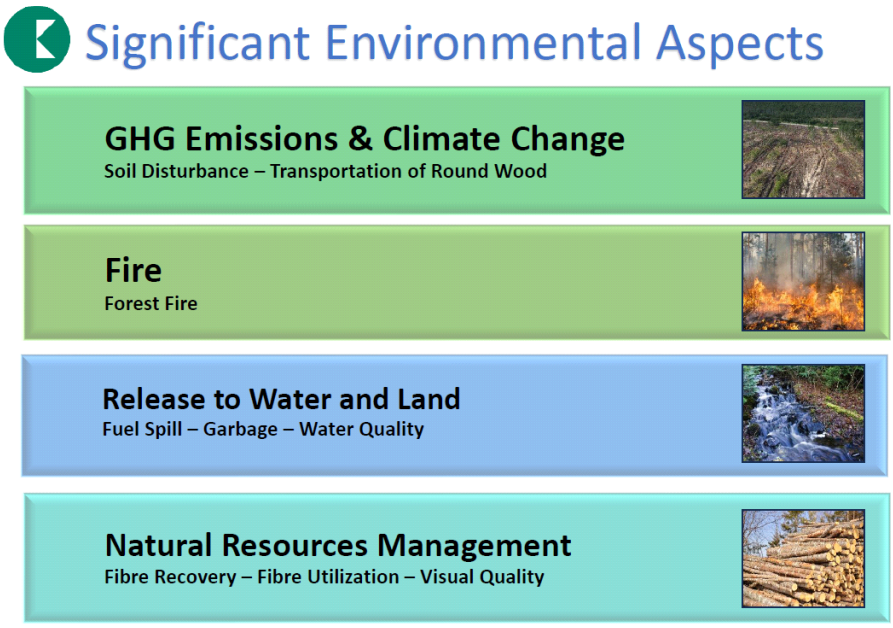

FIGURE 7 SIGNIFICANT ENVIRONMENTAL ASPECTS

GHG Emissions & Climate Change Program

Objective	Increase back haul across operations
Performance Measure	• Track monthly back hauls to collect improvement data

A monthly track log was set up for the operation superintendents to track the monthly backhaul numbers to acquire baseline data. Back hauls that are set up in contracts are easy to track, but daily back haul opportunities aren't well known. The performance measure looks to better understand how much transported wood is being backhauled so we can look for ways to improve the numbers over time. Through this program tracking in 2024 it was identified that more contracts could be set up for back haul opportunity. A landing site at CBPPL wood yard for back haul and an additional site in Deer Lake was set up for opportunity back hauls. This initiative increased the back haul numbers as well as provided greater opportunity for last minute back haul loads for truckers. This SEA program will be continued into 2026.

Update for 2025: Back haul numbers were tracked in 2025. There was a decrease in back haul contracts step up and daily back haul opportunities during this time. The decrease can be

partially explained through climate related woodlands operation shutdowns during 2025. The summer forest fire season led to harvesting operations being stopped because of high fire weather indexes, which in turn affected the trucking. There was also a shut in November linked to low lake levels caused by drought conditions which in turn affected the available power supply to the mill and the fibre demand, paper production and drought conditions affecting the power supply of the mill.

Moving into 2026 a new program objective has been set for the GHG Emissions & Climate Change based around the aspect of changing climate conditions influencing forest operations. The object of the program has been set to improve awareness and understanding among woodlands staff of how climate change is affecting harvesting, fire risk, and silviculture operations, and ensure operational planning considers these risks.

Fire Program

Objective	To limit susceptibility of forests to undesirable impacts of wildfire and to raise community awareness of fire benefits, risks, and minimization measures.
Strategy	Awareness & Education
Performance measure:	To provide the information and check all operations to help ensure they are prepared for fire season.

Fire season audits take place in the first week of May with focus on legal permits and required fire suppression equipment. New employee training/ Qualified Logging Professional presentation slides include information on concentration on effects of fire. Contractor and public outreach and awareness continue throughout the forest fire season.

Update for 2025: The Fire SEA program ran through the 2025 season. It helped track and understand possible contractor gaps and ensure that contractors were prepared across the land base. This year, cabin owner outreach packages were added to the program. These packages are based around the ‘fire smart’ program and were handed out to cabin owners in harvesting and road construction areas across the DFA. A total of 22 packages were handed out, with UTMs on location recorded. The SEA program was closed for the year at the end of fire season but the topic of Fire on the land base continued with the Woodlands department joining a working group for the City of Corner Brook Wildfire Protection Resiliency Plan.

Corner Brook is one of three communities in Canada selected by the Canadian Interagency Forest Fire Centre (CIFFC), with support by FireSmart Canada, to pilot the development of a national Community Wildfire Resilience Plan template. The project began fall 2025 and focuses on completing a detailed local wildfire risk assessment and analysis, which will both guide a Corner Brook-specific resilience plan and help refine a standardized template for use by communities across Canada.

The pilot is designed to:

- Assess wildfire hazards and exposure based on Corner Brook's unique landscape and conditions
- Identify priority risk areas and mitigation needs (e.g., fuels, wildland-urban interface, preparedness)
- Develop a locally tailored plan to reduce wildfire risk and improve readiness
- Test and improve the national planning framework so it can be applied elsewhere.

The work is expected to produce a complete plan and finalized template, with pilot targeted for completion by the end of March.

CBPPL's participation in the Community Wildfire Resilience Plan directly supports our Significant Environmental Aspect (SEA) – Fire under ISO 14001 by strengthening fire prevention, education, and awareness at both the operational and community level. ISO 14001 requires organizations to identify environmental risks and implement controls, training, and communication to mitigate them. By engaging in the wildfire resilience planning process, CBPPL demonstrates proactive risk management, enhances employee and contractor awareness, supports community preparedness, and reinforces our commitment to preventing fire-related environmental impacts across the operating area.

Release to Water and Land Program

Objective	Fuel spill awareness program
Strategy	Education & Awareness
Performance Measure	Reduction in number of hydrocarbon stains found left after operation is finished.

CBPPL Woodlands staff continued to focus on prevention of fuel spills on the land base. Training continued with all new employees with the Qualified Logging Professional program stressing the importance of prevention and containment. Also, on site discussions with contractors and spill kit handouts supported awareness. During onsite (#2) inspections equipment is checked for drips and leaks and employees are asked if they know and understand fuel and oil guidelines.

In 2025, the program objective was focused on decreasing the hydrocarbon stain deficiencies found on #3 inspection. #3 inspections being the last inspection on the land base after the harvesting contractor has pulled out their operations. The target was to reduce the number of hydrocarbon stains identified during the #3 inspections by 50% by December 31, 2025, compared to the 2024 results. The target was achieved in 2025; Oil and fuel stain findings were identified in 12% of inspections (3 out of 25) compared to 36% of inspections in 2024 (12 out of 33). This represents a 67% reduction in the oil and fuel stain findings year after year, indicating a significant improvement in site environmental performance and housekeeping practices. In October 2025 all workers on the land base received Hydrocarbon Awareness Training.

Objective	Fibre utilization/ Biomass recovery
Strategy	Education and Awareness
Performance Measure	Increase utilization of biomass from harvesting operations

In 2025 there was a continued focus on fibre utilization through the SEA program looking at a new harvesting practice, the use of a skidder, to the Environmental Management System (EMS). The objective of the program was to increase utilization of biomass from harvesting operations with a target to meet the government requirements for utilization; no more than $6M^3$ per hectare left on the cutover. Continued supervision throughout 2025 ensured that pulp wood standards were being met and fibre utilization and biomass recovery were being optimized. Once the contractor is done harvesting in the operating area, an inspection (called the #3 Inspection) of the site will be performed to measure the volume of residual biomass left per hectare.

Fibre utilization continues to be a topic during the Qualified Logging Professional course and with onsite toolboxes and operator interaction. Planners work closely on areas for biomass recovery efforts and prime hog fuel sites.

Going into 2026, skidding operations will continue to be measured. As well, the focus is placed on the management of insect-damaged forest stands within all harvesting operations with an objective to proactively identify and harvest insect-damage stands within the operational land base before significant standing mortality occurs, using defoliation mapping to improve natural resources utilization.

REFERENCES

Bowers, W.W. (2020). Climate Change Action Plan: Adaptation and Mitigation Capacity Within The Newfoundland and Labrador Forest Sector. Barnett Clarke Associates, Report to Newfoundland and Labrador Forest Industry Association, July 14, pp. 1-67.

Bowers, W.W. (2022). Assessing Newfoundland and Labrador Forest Sector Vulnerability to Extreme Climate Events. Barnett Clarke Associates, Report to Newfoundland and Labrador Forest Industry Association, August 31, pp. 1-12.

CBPPL. 2001. Five Year Operating Plan (2002-2006) Forest Management District 16.

CBPPL. 2015. Social Economic Assessment Report.

CSA. 2008. Sustainable forest management. Canadian Standards Association. 81p.

Damman, A.W.H. 1983. An ecological subdivision of the island of Newfoundland. Monographiae Biologicae 48:163-206. Biogeography and Ecology of the Island of Newfoundland. Edited by G. R. South, Dr. W. Junk Publishers, The Hague.

DEC. 2008. Five-year caribou strategy seeks to address declining populations. http://www.releases.gov.nl.ca/releases/2008/env/0207n06.htm. Accessed on October 16, 2009.

DEC. 2010. Land Mammals of Newfoundland. Department of Environment and Conservation. http://www.env.gov.nl.ca/env/snp/programs/education/animal_facts/mammals/index.html. Accessed June 3, 2010

DEC. 2015. A report on the Newfoundland caribou. http://www.env.gov.nl.ca/env/caribou_complete.pdf. Accessed March 14, 2016

DFRA. 2003. Ecoregions of Newfoundland. Department of Forest Resources and Agrifoods. . Accessed on May 26, 2003.

DFRA. 2003b. Soil and Land Overview. Department of Forest Resources and Agrifoods. . Accessed on May 26, 2003.

DFRA. 2003c. Forest Management and Planning Alternatives. (unpublished).

DFRA. 1995. Proposed Adaptive Management Process.

FLR. 2018. Mammals Native to Newfoundland. http://www.flr.gov.nl.ca/wildlife/snp/programs/education/animal_facts/mammals/index.html. Accessed April 12, 2018.

FSB. 2014. Provincial Sustainable Forest Management Strategy: Growing our Renewable and Sustainable Resource 2014-2024.

GNL. 2003. Newfoundland and Labrador: Discovering, Learning, Living. Government of Newfoundland and Labrador. Accessed on May 26, 2003.

Hearn, Brian J., John T. Neville, William J. Curran, and Dean P. Snow. 2006. First record of the Southern Red-Backed Vole, *Clethrionomys gapperi,* in Newfoundland: implications for the endangered Newfoundland Marten, Martes americana atrata. Canadian Field Naturalist 120(1): 50–56.

Hearn et al. 2008. Integrated Marten Habitat – Timber Harvesting Plan for Newfoundland. Project Report for Forest Management District 15. Draft. 32 pp.

Kotak, B.G., V.T. Keenan, J. Lidgett and S. Day. 2009. High Conservation Value Forest Assessment, Tembec Forest Management License (FML) 01. 216 pp.

Megahan, Walter F. and J. Hornbeck, 2000. Lessons Learned in Watershed Management: A Retrospective View. USDA Forest Service Proceedings RMRS-P-13. 2000.

NHSNL. 2003. Natural History Society of Newfoundland and Labrador. http://naturenl.ca/wp-content/uploads/2011/06/bird_checklist.pdf . Accessed on May 26, 2003.

NRC, 2009. Forest Carbon Accounting: The Operational-Scale Carbon Budget Model of the Canadian Forest Sector (CBM-CFS3).

Rothwell, R.L. 1997. Saskfor MacMillan Limited Partnership Twenty-Year Forest Management Plan and Environmental Impact Statement for the Pasquia-Porcupine Forest Management Area: Forest Hydrology and Watershed Management. 70pp.

SARA. Species at Risk Public Registry. http://www.sararegistry.gc.ca/default.asp?lang=En&n=24F7211B-1. Accessed on June 3, 2016.

Scott, W.B. and E.J. Crossman. 1964. Fishes occurring in the freshwaters of insular Newfoundland. Dept. of Fisheries and Oceans.

Weirathmueller, F. 2018. NL Forest Industry Strategic Opportunities Analysis. F.W. Technologies.