

Port Hawkesbury Paper Q&A for Cape Breton Highlands Area Forest Activities

1. What checks and balances are in place regarding PHP's forest management on the Highlands?

Shared Responsibility

PHP is responsible to its workers, local communities, rights holders, and the public to manage Forest Activities in the forests of the Cape Breton Highlands. These public lands and traditional Mi'kmaq territory are important to all Nova Scotians for wildlife, culture, recreation, and the economy.

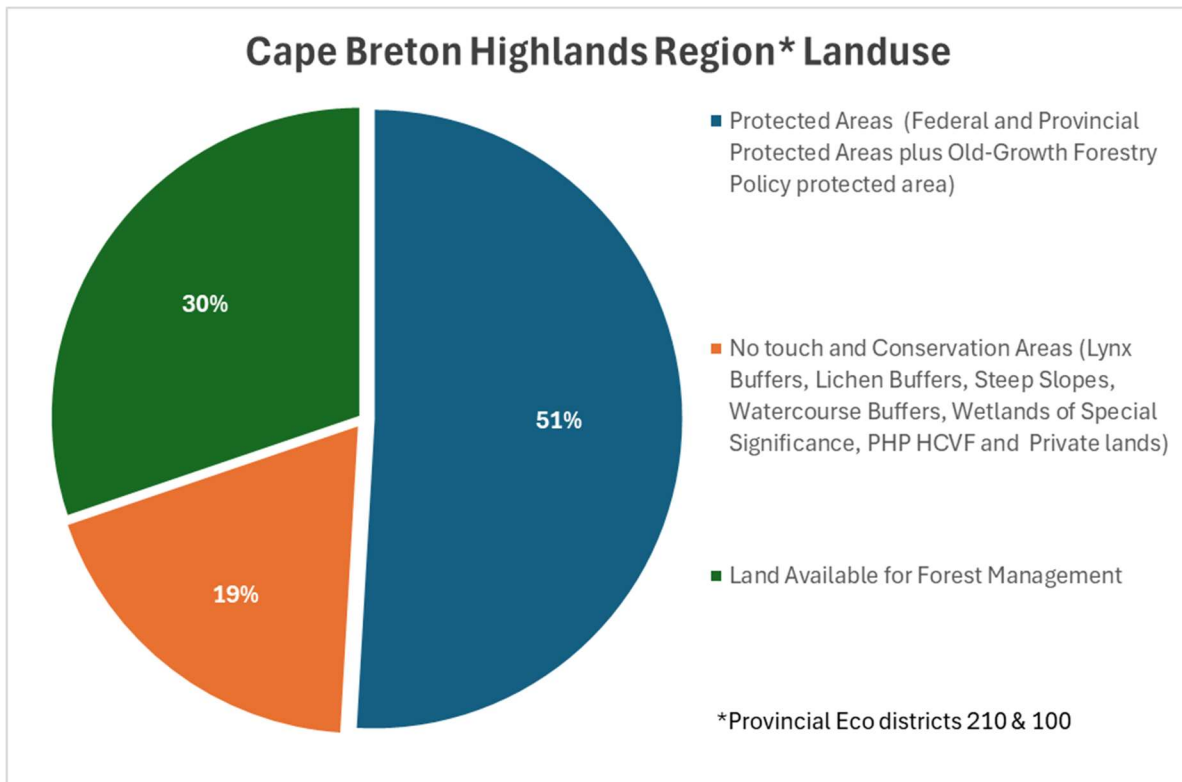
Government Oversight

The NS Department of Natural Resources set the rules for how Crown land forests are to be managed. The Department decides how much wood can be cut each year, reviews PHP's management plans, and ensures the company is including other important values such as culturally significant areas, riparian areas, old growth forests, and wildlife habitat. PHP cannot perform any forest activity until the government approves its plans based on the best available data and information. PHP is required to complete three levels of planning, which all fit together. The plans are developed by trained and experienced Woodlands professionals (Forest Technicians, Foresters, and Forest Engineers).

- **Strategic Long-Term Planning:** This is the 'big picture' vision of the future forest by setting goals and balancing things like wood supply, wildlife habitat, protected areas, and supporting communities. It helps predict the impacts of forest management decisions over multiple generations, while balancing, ecological, economic, cultural, and social values. This plan is updated every five years to ensure policy and guideline changes are included.
- **20-Year Landscape Plan:** This stage of planning maps out general areas where and when harvesting, conservation, and other activities will happen across the forest area over the next 20 years. Activities are spread out so wildlife habitat, water, and values are looked after while still providing wood.
- **Annual Operating Plan:** This is the 'on-the-ground' plan. It shows which areas will be cut soon. It guides the forest contractors, showing what can be harvested, what must be protected, and how the work will be done.

Special Conservation Areas

Approximately 51% of the Highlands region is legally protected. In addition to the Federally and Provincially Protected areas in the region, PHP is required to avoid harvesting in places important for certain species and water protection (Special Conservation Areas). For example, space is left for Canada Lynx, American Marten, old growth forests, steep slopes, and other wildlife, as well as around watercourses. Approximately 19% of Highlands region falls under these special management areas as well as private lands in the area. In total, the majority, 70% of the area in the highland's region is not available for forest activities.



A specific example is protection for medicinal plants by PHP. In 2009, the company was involved in a project with Unama'ki Institute of Natural Resources UINR and the Cape Breton Highlands National Park. The purpose of the project was to develop a mapping database with Membertou Geomatics Consultants that contained already known and new culturally significant plant areas for all of Cape Breton. This involved having discussions with knowledgeable Elders on species of importance, and where and in what habitats they are found. PHP has used this mapped data to make sure that any areas being cut are not in these culturally significant plant areas.

In the spring of 2021, a Crown forest stand of wisqoq (Black ash) was discovered by a PHP employee during a routine pre-treatment assessment of a 19.8 hectare area of forest. UINR and CMM were notified immediately so they could visit the area with Mi'kmaq elders and confirmed that the stand has a large cluster of trees with evidence of seed-bearing trees

(most known wisqoq populations in Cape Breton reproduce by stump sprouts and not seed). Many mature trees were also found in the area. This discovered stand of wisqoq is now protected and under the management of the Mi'kmaq Forestry Initiative.

Understanding where culturally significant areas are located is important for conservation and careful forest management. By sharing knowledge and working together, Mi'kmaq communities, Mi'kmaq organizations, and PHP can better identify areas of concern and ensure these places are protected and respected during forest planning.

Forest Certification

PHP has voluntarily been certified to different forest management standards since as far back as 2001. These certifications validate that the company is committed to managing the forest to the highest international standards. Forest certification is like a report card for how forests are looked after. An independent group of accredited certified professionals with Intertek checks whether a company is managing the forest in a good way—protecting water, wildlife, and cultural values—while also harvesting trees. If the company passes, it gets a “stamp of approval” (a certificate). The company has been certified to the Forest Stewardship Council® (FSC® C023189) since 2008 and by the Sustainable Forestry Initiative® (SFI®) since 2014. To learn more, please visit <https://ca.fsc.org>; <https://forests.org>; <https://www.intertek.com>.

Monitoring and Auditing

Staff with the Nova Scotia Department of Natural Resources, Department of Environment, and Department of Fisheries, check the work done in the forest to make sure that PHP is fulfilling its commitments (or – is living up to its promise) . This means following the rules set by government and by PHP’s own forest plans to ensure safety, environmental and operational expectations are met. Independent auditors for the certification also review PHP’s practices to confirm that harvesting and silviculture is done responsibly and safely, and in line with legislation. Woodlands staff with PHP monitor operations daily, and frequent auditing by government staff and independent auditors ensures that the company is continually improving, credible, and transparent in its management of the forest.

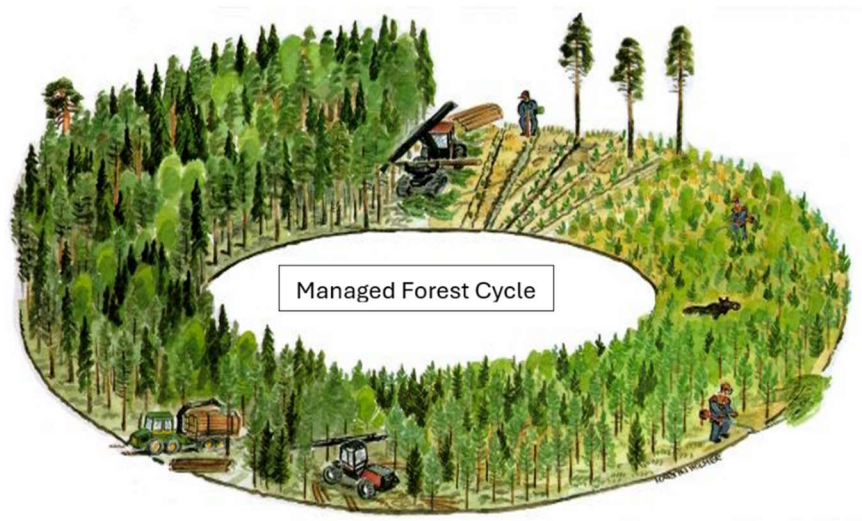
2. What opportunities are there for Mi'kmaq engagement on management plans?

Mi'kmaq organizations and/or Chief and Council are regularly invited to review forest management plans developed by PHP and share any comments, concerns, or recommendations. The company remains open and committed to hearing Mi'kmaq perspectives at any time. Other available opportunities are:

- Fill the currently open Mi'kmaq seat on PHP's Public Advisory Committee and Strategic Long-term Forest Management Planning Committee
- PHP & UINR Forest Management Committee
- PHP & CMM Forest Management Committee

3. When will the cutting be finished on the Highlands?

Approximately 30% the CB Highlands region is available for commercial harvesting and on average in each the last 10 years less than 1% of the available land-base was harvested. All area that is harvested is always re-forested to a healthy forest. That means out of the area that is available for harvesting, it would take over 100 years to harvest one time. Knowing that it only takes fir trees 50 years to reach maturity, there is always a surplus of mature forest as well as younger age classes to support biodiversity.



Harvesting in the Highlands doesn't mean the forest "runs out" or ends for good. Every year, trees are harvested, and previously harvested areas grow back following a natural stand replacing forest cycle appropriate for this Boreal forest type. The company's harvest is spread out over the land so no one area is cut too much at once, and new trees are always coming up to replace what is taken. This way, the forest continues to provide many important values for:

- Sacred or spiritual areas such as burial sites or ceremony locations.
- Traditional harvest areas for food, medicine, or materials like sweetgrass or birch bark.
- Cultural landmarks like old camps, travel routes, or rivers with historical meaning.
- Language, stories, and knowledge sharing.
- Social and recreational health and well-being.
- Economic and resource values including jobs, fibre, non-timber products, and tourism.
- Wildlife habitat for animals, birds, insects, and plants.
- Water protection to help keep rivers, lakes, and drinking water clean.
- Soil health by tree roots holding soil in place and preventing erosion.
- Air quality by trees filtering the air and producing oxygen.
- Climate regulation from forests absorbing carbon dioxide.
- Biodiversity to support a huge variety of living things working together in balance.

These values show how all people are connected to the land – not just for resources, but for identity, history, biodiversity, and community well-being. By looking after the land in a way that protects these important values plus winter snow amounts, means PHP currently only cuts trees in the Highlands from the beginning of September to end of October.

4. How much area on the Highlands is available for cutting?

The Highlands region is generally known as eco-districts 210 and 100 under the NS Department of Natural Resources Ecological Landscape Analysis process.

On average, in each year over the last ten years in the Highlands region, only 0.3% of the total area has been harvested. All of these areas are assessed to determine if there is enough natural seed source regeneration or if planting is needed. Most areas in this region regenerate naturally.

5. Does PHP use herbicide on the Highlands?

PHP has not used herbicide, such as Glyphosate, for more than 25 years.

6. Is wood supply PHP's only focus on the Highlands?

No. PHP's management focuses on many other important features on the Highlands. There are about 20 non-commercial objectives and 25 high conservation values managed for in the Highlands. It is only after these features are accounted for by either protection, conservation buffers, or habitat patches left for wildlife that the wood is cut for delivery to the paper mill.

To learn more about these important features, visit:

<https://www.porthawkesburypaper.com/sustainability.html>

7. What is the natural forest cycle on the Highlands?

There are four main stages of a natural boreal forest. These are young forest, middle-aged forest, mature forest, and old forest. Over time, these different ages of forest naturally grow into the next stage while some forest areas naturally die. There are also natural disturbance events like insects, hurricane winds, and fires. The biggest natural disturbance in the Highlands is the spruce budworm insect that has its own cycle. The insect kills the natural mature fir and spruce over very large areas. Hurricane winds can knock down stands of trees, and while fires are less common, they can occur. After the natural disturbance, the forest canopy opens, and the cycle starts again with young forests if it is not impacted by other natural events like over-browsing by moose, snowshoe hare, etc.

8. What is the history of commercial cutting on the Highlands?

1899: Oxford Paper Company of Rumford Maine

1953-1956: Mariana Timber Company exported logs to Germany

1957: Stora paper company granted first management license by Nova Scotia government to supply a pulp mill in Port Hawkesbury

1946-1969: Bowater Mersey (operated on Crowdis/Hunters Mountain) cut pulpwood to deliver to Liverpool, Nova Scotia.

1960s: Industrial harvesting expanded around the Highlands with the opening of the pulp mill in Port Hawkesbury in 1962. Road building and mechanized equipment expanded access to the Highlands forest outside of the national park.

1970s-1980s: A severe spruce budworm outbreak caused much of the balsam fir forest to die. Intensive salvage across Cape Breton (outside the National Park) then took place. Following the salvage (clearcutting), management activities began to regenerate the forest with healthy natural balsam fir and planted spruce trees.

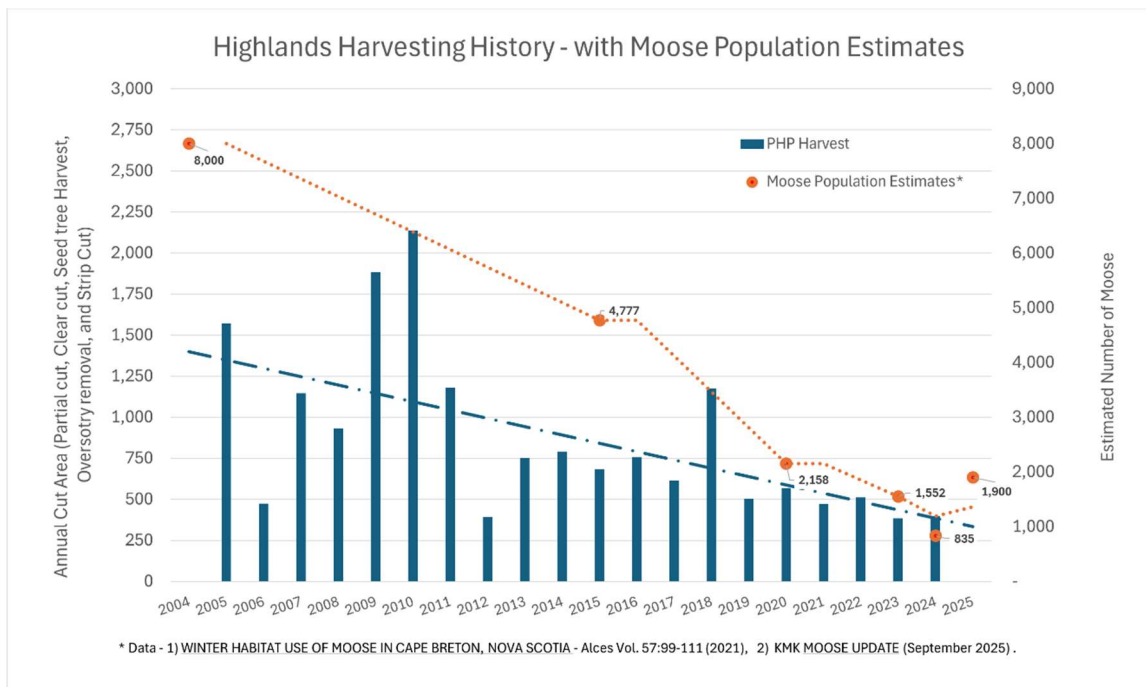
1990s-2000s: There is a move towards ‘sustainable forestry’ and certification on Crown lands in Nova Scotia. The company that owned the mill during this time, StoraEnso, began discussions with UINR on the development of a Forest Management Agreement between UINR and the company. This agreement has been in place since 2001 and provides opportunities for the Mi’kmaq communities of Cape Breton to participate in forest management activities. A similar agreement is also in place with the Confederacy of Mainland Mi’kmaq (CMM). The mill successfully became certified to the CSA and SFI standards in 2001, and FSC is first achieved in 2008 under the mill owners at the time, StoraEnso. The FSC and SFI certifications have been maintained by PHP since the company’s acquisition and reopening of the mill in 2012 .

2010s-2020s (today): PHP manages the Crown land under a long-term license agreement with the provincial government. This management follows all legislation, policies, guidelines, and certification requirements to ensure a balanced forest ecosystem. This includes using the Triad Forest Management approach required by the Nova Scotia government. This means the forest is managed in three ways – protection and conservation, ecological forestry, and high-production forestry.

9. What were the roads originally built for?

The roads were built mostly in the 1970s and 1980s by the company to access wood killed by the spruce budworm. All have remained open for full public use.

10. What happened to moose population relative to the cutting that has taken place over the last 20 years?



This graph shows two things happening over time in the Cape Breton Highlands:

1. How much forest was harvested (blue bars)
2. How many moose were estimated to live there (orange dots and line)

It is comparing how harvesting levels and moose populations have both changed between 2004 and 2025.

In 2004, there were about 8,000 moose in the area. Over the next 20 years, the number of moose dropped to less than 1,000 by 2025. During the same time, the amount of cutting by PHP generally went down. The blue bars show that fewer hectares of forest were being cut each year compared to the early 2000s.

Even though harvest levels have decreased, moose numbers have also declined. This suggests that something other than just cutting trees is affecting the moose population. Other possible reasons are:

- Disease like tick or brainworm
- Climate and weather impacts
- Over-hunting

(Source: [Temporary Suspension of Cape Breton Moose Hunt | Government of Nova Scotia News Releases](#), July 19, 2024)

Over the last 20 years, forest cutting has gone down, but moose numbers have also gone down. This means the decline in moose isn't just about cutting trees but is likely a mix of other environmental and biological issues affecting their survival.

11. What protections are in place for fish and water quality on the Highlands?

There are several protections taken for fish and water quality on the Highlands. Provincial regulations for rivers, lakes, streams and wetlands require a strip or buffer of trees along the water's edge to keep the banks strong and to shade the water to keep it cool for fish. The size of the treed buffer depends on the watercourse but can range from 20 meters to 60 meters, or sometimes more depending on the watercourse and surrounding ecosystem. The minimum 20-meter buffers of trees around streams in the Highlands is approximately 8%.

Communication

Any questions or requests for additional information regarding PHP's forest management activities can be directed to:

Andrea Doucette, Superintendent Certification Environment Outreach
902-870-0708; andrea.doucette@porthawkesburypaper.com



The mark of
responsible forestry



The mark of
responsible forestry



Port Hawkesbury Paper is certified to the above international forestry standards.