

Implementing a Network of Wood Hubs in Cape Breton– Discussion and Proposal

Nova Scotia suffers from a lack of opportunities for woodlot owners to add value to the products that their forests produce. There are several reasons why these markets have failed to develop, but one reason of particular importance is an inability for potential investors to access niche forest products at an appropriate scale and cost. Because our forests are managed by several thousand individual owners, coordination of product flows to deliver very specific, non-commodity forest products has been virtually impossible.

At the same time, because processing of softwood lumber in Nova Scotia is concentrated in the center of the province, access to these markets by woodlot owners on Cape Breton is difficult due to the high cost of transportation.

The decreasing size of harvest jobs also makes it more and more difficult for individual woodlot owners and contractors to process and sort out higher value products. Where these products typically make up only a small portion of a harvest, a significant size operation is needed before this becomes a feasible option.

There are several factors developing that point to the development of a network of forest product ‘value adding centers’ or ‘wood hubs’ as a mechanism to help address these, and other problems for woodlot owners. At the same time, a network of wood hubs could provide for the development of new value adding industries, while increasing the profitability of existing industries.

The flow of roundwood biomass to the cogen facility in Port Hawkesbury provides for a steady flow of low value product that could be tapped to provide niche products at a sufficient scale. Availability of a market for low value products is often cited as a pre-requisite to accessing higher

What is a ‘Wood Receiving Yard’?

A wood receiving yard aggregates wood products from multiple locations. It can then be further processed before shipping, or sorted and shipped with wood from other destinations.

A wood receiving yard has the potential to add value to forest products, but the added value must exceed the added cost of extra handling of the products.

Why do wood receiving yards make sense for Nova Scotia?

Unlike most other jurisdictions in Canada, Nova Scotia’s forests are dominated by thousands of individually owned woodlots. The economics of producing higher value products from individual woodlots is difficult; aggregating these products through a network of wood receiving yards is one way of making this more feasible.

Who is proposing to do this?

This project is a joint proposal of the Cape Breton Privateland Partnership (www.CBWoodlots.org) and the Nova Scotia Landowners and Forest Fibre Producers Association (www.NSLFFPA.org).

value products sustainably; now that we have a low value market we need to ensure that the right conditions exist for higher value markets to develop. At the same time, there is developing a network of woodlot 'Service Areas' in eastern Nova Scotia that can provide the organizational and technical infrastructure to allow for the development of these centers.

The following paper presents the concept of 'Wood Hubs', outlines how the network could be organized, the advantages that such a network could provide to the industry, and presents the results of a feasibility analysis and outlines the necessary implementation steps.

Concept

A network of centrally coordinated wood receiving and processing yards would be established in Cape Breton. Sites would be selected based on factors such as access to transportation, availability of land for future expansion, availability of 3 phase power and logistical considerations such as proximity to existing markets and expected supply. Appropriate site selection would be a key factor in the success of the project, and the network as a whole would be need be considered rather than each site individually.

Each of these sites would carry out several basic functions:

1. Wood is received, scaled and unloaded.
2. Wood is sorted according to available markets.
3. Basic processing of wood is carried out. For example, hardwood logs could be cut out of random length hardwood biomass, biomass is chipped to reduce trucking costs.
4. Seller is paid based on final sorting and processing.
5. An inventory of forest products is maintained.
6. Forest products are loaded and shipped from the yards to final markets

Management and coordination of the yards would be centrally administered. This central office would be responsible for several functions, including:

1. Coordinating deliveries of forest products to and from the yard facilities
2. Identifying and implementing transportation efficiency opportunities
3. Identifying potential new and existing markets based on available forest and yard inventory information
4. Assisting in the development of on and off site value adding opportunities
5. Promotion of Nova Scotia forest products
6. Payment, sales and contract management

There may also be an opportunity for the yard network to offer services to woodlot owners that would assist in the small scale management of woodlots. These potentially could include:

1. Delivering small and mixed loads of wood to the yards
2. Contract forwarding of wood to roadside

Transportation Efficiency

The proposed network would help reduce the overall cost of transporting forest products by collecting and holding inventory on sites where they could then be trans-shipped at reduced cost. Traditional logging trucks would deliver forest products to the yard. From there the products could then be either trucked on b-train configurations to more distant markets. This has the advantage of making existing markets more profitable, while also opening market opportunities to more distant markets that do not exist today.

Perhaps the most efficient transportation consideration however is the ability to stockpile enough product to make delivery to a distant market feasible. For example, it is often the case that high quality hardwood logs and veneer are not sold at their full potential because there is not sufficient volume from any particular harvest job to make a full truck load. By delivering these logs to a local facility, where they can then be combined with other logs from other jobs could result in many new markets becoming available to woodlot owners. As well, since the yards are centrally coordinated, product from throughout eastern Nova Scotia could be combined. And, this central point of contact could also be used to coordinate the timing and delivery of harvest for distant or niche forest products. In some cases the activities of the yard may also be 'virtual'. That is, the yard could coordinate the pick-up and delivery of higher value products from woodlots to more distant markets.

Value-Adding Opportunities

An important focus of the proposed network would be identifying and promoting value adding opportunities. Because of the large volume of wood flowing through these facilities the opportunity to extract value from this chain becomes possible. Further, each center could act as a forest product business 'incubator', where much of the needed infrastructure is already in place, and transportation and coordination of deliveries is already occurring.

Feasibility

Before proceeding with the project, work has been carried out to determine whether it is financially feasible. This was done through consultation with local wood producers and through a feasibility analysis carried out by Seaview Forest Consulting. Availability of contractor capacity, and therefore a low volume of wood moving through the yards was identified through consultation as potentially the largest risk to the project. As a result, Seaview was asked to examine the economic viability of a small yard handling low volumes of wood. The assumption being that if operating costs could be covered at low volumes and the operation is viable at this scale, it would be viable at larger scales as well.

Seaview concluded that:

The Centre could provide a cost effective way for landowners/small contractors to gain maximum value from their woodlots, while increasing the supply of higher value material available to local sawmills and specialty woodworking shops.

Summary results are provided below. More detailed results can be provided on request. In the scenario examined, product flow through the woodyard resulted in a net increase of approximately \$20/tonne.

<i>Item</i>	<i>Value</i>
<i>Total Annual Volume GMT</i>	8140
<i>Total Annual Revenue for Sales</i>	\$686,000
<i>Total Annual Yard Fixed and Operating Costs</i>	\$487,600
<i>Net Annual Result of Yard operations</i>	\$198,400

Implementation

Based on the results of the feasibility study, NSLFFPA and CBPP intend to proceed with Phase 1 of the implementation plan outlined below. Funding for Phase 1 has been allocated by NSLFFPA through the Cape Breton Privateland Partnership ACOA project.

<i>Implementation Phase</i>	<i>Project</i>	<i>Notes</i>
<i>Phase 1</i> <i>April 2015 to October 2015</i>	Standing Volume Study	NSLFFPA woodlots identified for selection management will be sampled to determine what volumes are available by potential product.
	Market Research	Potential high quality and niche markets in New Brunswick and Maine will be researched.
	Review of wood yard approaches	Existing wood yards in Maine will be visited to determine best practices.
	Woodlot owner and contractor outreach	Meetings will be held with woodlot owners and contractors to make them aware of the project, gather feedback and determine interest in the project.
	Partner selection	Existing operations and facilities with potential to contribute to the project will be reviewed.
	Site Selection	The initial number and location of sites will be determined.
	Business plan development	A 5 year business plan will be developed for the project
<i>Phase 2</i> <i>October 2015 – October 2016</i>	Secure necessary funding	A mixture of public and private funding will be secured to cover the start-up of the operation. Ongoing funding will be generated through the sale of products.
	Contracts for ongoing operation of the facilities.	
	Supply agreements.	
	Site preparation	
	Ongoing operation	

Phase 3
October 2016 – April 2018

Expansion of the network to include more wood hubs.	Expansion of the network will occur when and where appropriate, based on the supply and demand for its products.
Examination of alternative markets	Analysis of supply will be used to examine the potential for developing other value added markets.

QUESTIONS OR COMMENTS?

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