

Comments on Ontario's draft Forest Biomass Action Plan, April 2021
ERO Notice #019-3514
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To MNRF:

I appreciate the opportunity to contribute to the Forest Biomass Action Plan. These are some opportunities I see for improvement.

Benefit to Silviculture

The draft version is missing a major benefit of biomass use.

The Biomass Action Plan must address the benefit to silviculture from being able to remove undesirable species. The benefit to silviculture is one of the most significant implications of biomass harvest, yet is completely neglected in this draft Strategy. This is a major aspect of the subject that warrants inclusion in detail, and in the Introduction.

On page 8, under 'Improving our environmental stewardship', the text about silviculture should be more specific than merely "promotes healthy and resilient forests", such as "improves silviculture and regeneration of a more natural/desirable species mix."

Biomass includes 3 types of unused fibre:

#1 - fibre from trees already cut, i.e. slash

#2 - fibre from trees left standing in harvested areas

#3 - fibre from trees in unmerchantable stands

Use of #1 fibre frees up space for trees to regenerate, and is far cheaper and more effective than piling or burning it. Slash is an issue on most Forests in Ontario, as they are a waste of land and of fibre. The Independent Forest Audit on the Hearst Forest 2019 required action to reduce slash piles.

Use of #2 fibre generates significant savings to silviculture, and a more desirable stand regenerating. Instead of a new stand starting with mature trees of unmarketable species, the forest manager can decide which species of residuals are desirable, leave the residual trees required for habitat, and start with a cutover that's more natural, more like what a fire would leave.

Use of #3 fibre is only way unmerchantable stands will be restored to a desirable condition. It's important to keep in mind that without fire, stands which are low stocked or of unmerchantable species cannot be 'managed'. If a different condition is desired (e.g. for habitat), there is no opportunity to work towards that condition. But a biomass market can provide the opportunity.

Where I am (Hearst District) we are now harvesting areas which were harvested ~80 years ago. They are full of balsam fir, larch, and/or balsam poplar, unmerchantable species which remained or grew in after

the spruce was harvested. We also have sites in which the trees that originated with historical fires are now falling and being replaced with young balsam fir and brush. After we harvest the merchantable timber, the remainder takes up space that otherwise could be regenerating to spruce, pine or aspen. Mechanical site prep is expensive and only pushes these unmerchantable trees into windrows, which is still lost space. Some sites are so dense with balsam fir post-harvest that they are virtually untreatable. MNRF Fire has examined the prescribed burn potential for some such sites, and found that tramping would be needed to create the structure to carry a fire; however, as MNRF hasn't carried out a prescribed burn of such a site in Northern Ontario the past decade, the risk of no burn happening is too high to invest in. A biomass market would accomplish what site prep cannot.

Innovation - p11

- MNRF should innovate its business system to separate Larch and Balsam Fir from Spruce/Jack Pine/ Scots Pine/Balsam Fir/Larch in the Stumpage Matrix, so that Larch and Balsam Fir can be charged a lesser Renewal Rate (because they regenerate naturally and require no renewal expense). Currently, the renewal rate for these species is an obstacle to their utilization. In this part of Northern Ontario, larch is ingressing into openings such as harvested sites, and balsam fir is growing under upland spruce.

Objective 1: Identify Pathways to Markets for Forest Biomass

- Action 1.7 focuses on ensuring biomass use doesn't damage ecological sustainability. There needs to be a companion Action to study the *benefit* to ecological sustainability from the improvement of regeneration. As with any action, both the downside and upside of biomass use needs to be understood. The existing perspective ignores half the story.

Objective 3: Improve the Business and Regulatory Environments for the Use of Forest Biomass

- Biomass needs to be incentivized as are wind and solar, since it is equally renewable. Biomass use is arguably more environmentally friendly than wind and solar, since the infrastructure for biomass use has lower environmental impact, including on climate change.

- There needs to be an economic mechanism to transfer the savings in regeneration costs to the cost of producing biomass. Currently, the major obstacle to biomass usage is economic. The savings to silviculture is immense. MNRF needs to address economic transfer mechanisms; e.g. can biomass collection/harvest be reimbursable from the Renewal Trust Fund.

- MNRF needs to continue to support existing facilities that use biomass as a feedstock. The environmental benefit of existing facilities needs to be considered when proposals that affect their survival are made. Seemingly innocuous changes in a system can have far-reaching deleterious impacts. For example, the Atlantic Power co-gen plant in Calstock near Hearst is affected by the changes in electricity transmission routes near Kapuskasing.

- The Biomass Action Plan should be supported by other Government of Ontario ministries, such as Ministry of Energy and Ministry of Infrastructure. For example, the Government of Ontario announced a program to extend natural gas pipelines to un-served communities, e.g. on the north shore of Superior.

- "Ontario is providing \$100 million for the new Natural Gas Grant Program, part of the province's Moving Ontario Forward plan."
- "Natural gas is the dominant heating source in Ontario and continues to be consistently **less expensive than alternative sources such as electricity, heating oil and propane.**"

Firewood and wood pellets are omitted from 'alternative sources' even though some communities are surrounded by more biomass than they could ever use! Was biomass omitted because it's less expensive than natural gas? Or was it just never thought of, even though more and more people are heating with pellet furnaces?

Best End Use

The Biomass Action Plan needs to acknowledge, and contribute to, the best end use being made of trees harvested on Crown land. MNR needs to ensure that the use of fibre for biomass promotes best-end use (and assure the public of that), while allowing incidental inclusion of merchantable stems that are part of otherwise unmerchantable stands. Market economics generally ensures best end use, but the public needs assurance that trees that are marketable for solid wood products will not entirely be turned into pellets, only the unmarketable parts. Biomass use should focus on the parts of trees, or trees, or stands that are otherwise unused.

Making it Happen

SFLs in Northern Ontario have been working with the forest industry to try to move biomass from harvested sites to biomass-using facilities, but currently the economics preclude the utilization of all but a small amount. The forest industry is doing what it can to move biomass within the current economic and regulatory environment. If the government does what it can to improve the economic and regulatory environment, win-wins can happen at the site scale right across Northern Ontario, translating into significant benefits for the economy and environment at the provincial scale.

The test of this policy's success will be whether, via economic and regulatory means, and by thoroughly addressing the issues involved, the policy results in greater biomass utilization. I hope for a strong Biomass Action Plan, because those who care for the forest need it to succeed.

Sincerely,



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