

Submission to the Public Consultation on the Reports: “*Management Alternatives for New Brunswick’s Public Forest - A Report of the New Brunswick Task Force on Forest Diversity and Wood Supply*” and “*Future Opportunities for the Forest Products Industry in New Brunswick - Report of the Task Force on Investment Opportunities in the New Brunswick Forest Sector*”

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General Comments

CPAWS strongly believes we need to decide what kind of future forest we need in New Brunswick to support clean, productive ecosystems, vibrant human communities, and viable populations of native wildlife, and then decide what industries can be supported by the forest.

Because of the uncertainty caused by climate change, the conservation of forests and freshwater has become more important than ever. Our public forests do not provide an endless supply of resources – every time we make a management choice, we risk altering the way the forest functions forever.

Forest Management Objectives

We believe that New Brunswick needs to develop the regulatory system and set objectives for public land management that will do the following:

- 1. Establish more protected areas** – New Brunswick has the lowest proportion of its public land in protected areas of all of Canada’s provinces and territories¹ (4% of public forest in NB is protected from development). Protected areas are an important tool for conservation of biodiversity, as they provide habitat for species that are sensitive to disturbance or fragmentation, provide legal protection of ecosystems into the future, act as benchmarks against which forest management experiments can be evaluated, and are managed primarily for biodiversity conservation. Conservation biologists have stated that it is extremely important to keep remaining road-less or relatively road-less ecosystems in their natural state, given the difficulty of fully mitigating against the many impacts of roads on ecosystems.² Protected areas are the strongest tool we have to prevent the negative biodiversity impacts associated with roads. Conservation experts recommend that approximately 22% of New Brunswick’s public forest should be designated in protected areas, to represent the full range of ecosystem and enduring feature diversity across Crown land³. Specific areas in the Restigouche River watershed have been identified as being of high conservation value to New Brunswick and the larger Maritimes/southern Quebec/ northern New England region, for conservation of significant intact ecosystems^{4,5} and ecosystem connectivity for wide-ranging species such as Canada lynx⁶ between the Gaspé and northern Maine. These high conservation value areas, and those identified in other parts of public land, should be added to the protected areas system.
- 2. Conserve and restore old forests** – Already much reduced from previous levels, which are estimated to have been approximately 85% of the overall Acadian forest⁷, old (mature and late-successional) forest currently makes up 45% of today’s public forest. In the most wood supply intensive Task Force alternative (Alternative “E”), old forest would be reduced to 30% in 50 years (a loss of one-third from today’s levels), which would put us well below the amounts needed to sustain breeding populations of old-forest wildlife, especially those that live in gap-replacing forest types (need 40 – 80% in late-successional age classes).⁷ Older forests store more carbon than younger forests, so conserving and restoring old forests (through special management to conserve existing old forest functions, and longer rotations in managed forests), should help sequester more forest carbon.⁸
- 3. Conserve and restore tolerant mixed-wood and tolerant hardwood forest stands** - Specific forest management objectives to ensure the conservation of tolerant mixed-wood and tolerant

hardwood forests (especially old) are needed to ensure these forest types remain on the landscape⁹. CPAWS believes that the emulation of natural disturbance regimes as described in the Task Force report (Alternatives “A”, “B”, “C”, “F” and “G”) is a good start, but the map currently being used to identify stand-replacing and gap-replacing needs refinement before implementation. This is especially true since large parts of Crown forest have been identified as being a combination of gap and stand replacing, with forest types at a finer scale showing different patterns than the general ecodistrict maps show¹⁰. It is important that we not over-estimate the extent of stand-replacing forest.

4. **Increase protection provided by riparian buffers and establish objectives to specifically conserve the functions of shade and productivity provided by the forest around headwater streams** – In Quebec, main salmon rivers have 60 meter no-harvest buffers.¹¹ Researchers in Maine have recommended that, to protect Atlantic salmon habitat, there should be a no-harvest buffer of at least 10 meters starting at the edge of the complex that includes salmon rivers and attached streams, associated wetlands, and ephemeral streams.¹² An additional buffer of between 10 to 100 meters of light-touch harvesting is recommended (width depends on presence of adjacent wetlands), or up to 300 meters in areas where the slope is steeper than 25%. This is consistent with a Greater Fundy Ecosystem Research Group recommendation to start measuring the 30 to 60 meter buffer from the top of the slope.¹³ We recommend implementing these riparian buffer objectives in New Brunswick. Temporary vernal pools of water are used by some species of amphibians and insects almost exclusively for breeding and other aspects of their life cycle.¹⁴ We recommend that NB's forest management policies incorporate objectives for identifying, mapping and buffering vernal pools, as has been done in the state of Maine.¹⁵
5. **Conserve the habitat and nutrient-cycling structure and function provided by coarse woody debris, snags, downed dead trees** – Approximately twenty percent of all forest biodiversity is associated with standing and fallen deadwood¹⁶. Therefore, forest management policies and regulations need to include: enforceable stand-level retention targets, including the retention of standing deadwood and representative patches of standing live trees; enforceable downed wood retention targets; and enforceable site soil-disturbance limitations. While the Task Force report only shows the implications for snags, Alternatives “A” and “B” do the best job of conserving this structural aspect.
6. **Cap the establishment of plantations at 15% of Crown forest**, as recommended by the Greater Fundy Ecosystem Research Group in 2005¹⁷. Plantations should be located on sites close to mills, and should be managed to ensure diverse stand structures, age classes, and tree species diversity. The establishment of plantations must be conditional on their removing pressure to harvest other less-disturbed parts of the forest, and permitting the establishment of a corresponding percentage of new protected areas.

This kind of management should achieve the following goals - create greater resiliency of ecosystems against disturbances; help conserve clean water and riparian habitats; help buffer the impacts of climate change; sequester carbon in old forests, bogs and forest soils; provide habitat to support viable populations of native species in the province, and provide a diverse array of seed sources.

New Brunswick needs less reliance on clearcutting and less plantation forestry, as these weaken the forest's ability to survive climate change impacts (fires, insects, droughts and floods), and reduce habitat for species that need old forest, less disturbed forests, or diverse mixed-wood forests. These forest management practices can lead to a greater risk of flooding, species loss, and soil erosion.

Future Opportunities for Forest Products

If the province is going to develop a policy that would pave the way for a bioenergy market for traditionally underutilized woody debris and other previously non-commercial forest biomass, there are a number of biodiversity related objectives that must be added. The development of such a market, while assisting a struggling forest industry, threatens to place additional demands on New Brunswick's forested ecosystems with risks to biodiversity and ecosystem services. The biomass that would be removed plays a significant role in the forest ecosystem – it provides habitat for vertebrate wildlife¹⁸, is critical for soil

formation¹⁹, and stores carbon.²⁰ Biodiversity impacts, including the maintenance of advanced non-commercial regeneration, and ecosystem functioning, including the retention of the soil carbon sequestration cycle, should be over-riding considerations in determining stand suitability for biomass removal. Particular attention should be paid to the risk that biomass harvesting may exacerbate the homogenization of forest composition in the mixed forests of New Brunswick by removing advanced regeneration (small standing live trees) of non-commercial species.²¹

Public values

A 2007 survey of the New Brunswick public showed that the majority of people surveyed place highest priority on the forest's protection of fresh water and wildlife habitat.²² 58% of respondents said that the amount of timber cut in NB's forests is too high, 56.9% said they wanted more protected areas, and 55.8% disagree that the economic contributions of the forest industry outweigh environmental impacts. Generally, the survey results indicate that New Brunswickers are concerned about the state of the forests and do not want to see the forest ecosystem further degraded by increased or more intensive harvesting. This is consistent with the conclusions of the Select Committee on Wood Supply, resulting from their public hearings in 2004.²³

Task Force on Forest Diversity and Wood Supply Alternatives:

The Task Force on Forest Diversity and Wood Supply alternatives were never meant to be seen as the only management options that could be chosen for New Brunswick's public forests. Any number of combinations of the alternatives, which are simply examples of management combinations, could be used to design the forest management planning and regulatory framework. Therefore, CPAWS New Brunswick believes it is too restrictive to choose a "preferred alternative", as has been asked by the provincial government. If we were to identify an option that will most closely meet the objectives we outlined above, it would be Alternative "A", modified to include a 15% cap on plantations. Alternative "A" results in a restoration of old forest above today's amounts, increases total conservation forest to permit wider riparian buffers in steep slopes and salmon rivers, and meets goals for representation of ecosystem diversity in protected areas.

We have also been asked to identify our least preferred alternative, which would be Alternative "E", as it suggests allocating 37% of the public forest to plantations, and reduces conservation forest to a level that would be unsustainable for the conservation of old forest habitat and the species that require those habitat types. This alternative would also eliminate the flexibility to establish wider riparian buffers in steep areas and salmon/trout rivers.

Next Steps

CPAWS New Brunswick hopes that the Report of the Task Force on Forest Diversity and Wood Supply and the Future Opportunities for the Forest Products Industry in New Brunswick report do not represent an end point, but the beginning of an enlightened dialogue to identify new protected areas candidates, high conservation value forests, and the forest management tools that will prepare us for a changing climate and changing global forest products markets.

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