

**A Response
to the
Proceedings and Recommendations
of the
Forestry Task Force Reports**

Submission
to the
Forestry Task Force Consultation

New Brunswick
Department of Natural Resources
P.O. Box 6000
Fredericton, NB E3B5H1

22 September, 2008

submitted by

Lawrence Wuest
P.O. Box 363
Stanley, NB
E6B 2K5
Phone 506-367-2280
e-mail wuestl@nbnet.nb.ca

Introduction

Reference:

- 1) Erdle Task Force report “Management Alternatives for NB Public Forests”
- 2) Roberts-Woodbridge report “Future Opportunities in the Forest Products Industry”.

I thank you for the opportunity to present my views on the two forestry reports outlining future alternatives for the forest industry in New Brunswick. I will give you my perspective as a woodlot owner, wood craftsman and ecologist, and as a resident of one of the many small communities that rely on New Brunswick’s forests for economic survival. I wish to point out shortcomings in both the Erdle Task Force report “Management Alternatives for NB Public Forests” and the Roberts-Woodbridge report “Future Opportunities in the Forest Products Industry”. These shortcomings, of which you need to be acutely aware, accrue from various factors of which the authors may or may not have been cognizant, and of which they may or may not have been constrained from considering, given their mandate. However, in either case, you as the government and decision makers need and should be aware of these factors in deciding where to proceed in the forestry sector.

I will state up front that I strongly object to successive Conservative and Liberal governments having cast aside most of the recommendations that evolved out of the extensive public consultation of the NB Legislature Committee on Wood Supply^{3,11} in 2003/2004. However, in spite of that disappointment, I will confine my comments to the current reports. My criticisms of recommendations in both the Erdle and Roberts reports are based equally on economic, ecological and procedural considerations.

Procedural Considerations

Erdle Task Force Report

The Erdle committee was tasked with developing quantifiable wood supply objectives for all commercial species while maintaining important ecological features of the Acadian Forest. An important facet of the Acadian Forest is its complex diversity. The mandate of the Erdle Task Force was ambiguous enough to permit an interpretation of natural diversity as limited to tree species diversity as opposed to the total vegetative diversity of the forest. Total vegetative diversity must include consideration of trees as well as understory species of shrubs, mosses and ferns and herbs and grasses. Consideration of only trees is a limited perspective ecologically and fails to comply with both the spirit and intent of Recommendation 11 of the Wood Supply Report. It also conflicts with public perceptions of their valued forest resource as voiced in that report. This failure has tremendous economic, as well as ecological, consequences for the future as discussed below.

The focus on “wood supply” rather than on the “economic potential” of that wood supply was also a shortcoming of the mandate. The economic potential of two equivalent volumes of wood differs greatly depending on the species involved. It also begs the question “wood supply for whom?”

The lack of government direction to the committee was also reflected in a lack of specific direction to consider climate change and large scale and catastrophic natural disturbances on forest growth. Both reports also failed to consider the impact of forest certification on the future merchantability of forest products evolving from the managed forest. Arguably the task force was composed of people who should have been able to appreciate the importance of all these issues. But the self-interests of the participants guaranteed that any ambiguity in their mandate, could and would be exploited to best advantage of those self-interests. To its credit, the government of the day attempted to appoint a spectrum of interested parties to the task force. But in view of the predictable consequences of that selection, the government failed to provide specific enough direction to fully realize government intent.

Roberts-Woodbridge Report

Again, in terms of process, the government failed to adequately direct the Roberts committee to explore opportunities consistent with current and future realities affecting wood supply and the merchantability of those wood products. It also failed to direct the committee to fully consider the social and ecological consequences of their suggestions. Presumably the committee was selected to be competent enough to be aware of the social and economic impacts of the ecological and climatic considerations of their proposed opportunities. However, the word “climate” appears once in the report and the word “ecology” and its derivatives do not appear in the report at all. With respect to process, the government should either have been more specific in its direction to the committee or have been more discerning in its selection of committee members.

Both Reports

With respect to process, the Conservative Government that struck the Erdle Task Force deserves credit for having attempted to 1) honestly consult the public with respect to the future of wood supply and 2) honestly respond to the spirit of that consultation^{3,11} in providing direction to the Erdle committee. To their discredit, the same government left the committee marooned by caving in to industry demands while the committee was barely underway.

In contrast to the initially genuine, consultative approach of the Conservative Government, the general perception is that the Liberal Government designed the current consultative processes to reinforce a predetermined government vision of the province as an “Energy Hub”. This perception was reinforced by the lingering suspicion of manipulation in the workings and report of the Self Sufficiency Task Force. Such interference was also apparent in the rescheduling of public information sessions associated with the Nadeau-Beckley survey on public values of NB forests. That suspicion in the public eye remains in the mandate and recommendations of the Roberts-Woodbridge report.

Ecologic Considerations with economic consequences

There are many ecological considerations neglected or ignored, by chance or design, in both reports. But I will limit this discussion to consideration of an issue with potentially disastrous consequences for the future merchantability of products from the wood supply. That issue is

Forest Certification, and more specifically the issue of vegetative community modification.. The issue of vegetative community modification under a plantation regime was not considered directly by either committee. This issue has serious consequences for the future certification and merchantability of forest products from New Brunswick timber. To consider future economic prospects without reference to the growing importance of the certification factor is economically suicidal. Large corporations have thus far operated on a strategy of avoidance and circumvention of the rules of certification. But eventually the buying public in Canada, the U.S., the E.U. and elsewhere will require strict adherence to universal and standardized principles of forest certification. The province would be well advised to weigh the options of both reports in light of this consideration. The issue of community modification is sometimes subtle and entails more than immediately meets the eye, so I will attempt to provide some insight.

There is growing scientific evidence that plantations violate community integrity principles of forest certification over spatial scales of ecological import. The province has invested heavily in a system of ecological land classification that defines the natural regions extant within the province as determined by environmental factors. There are natural vegetative assemblages associated with these environmentally defined communities. Haphazardly or systematically planting manipulated forests on this landscape leads to landscape scale ecological community assemblages that are significant modifications of the communities that previously resided in these environmental niches. When documented, and they most certainly will be, these violations will inevitably disqualify NB forest products from consideration as “green” products.

The Roberts report mentions “green” products no less than 16 times but fails to comprehend or appreciate that “green” products do not magically appear just by virtue of having come from a forest or having a connection to renewable resources. Green products must qualify under very specific principles and criteria laid out by internationally recognized bodies such as the Forest Stewardship Council (FSC)⁸. As an example of the potential for future impacts, the NB Department of Supply and Services is currently constrained from utilizing construction lumber originating in New Brunswick in any LEED certified “green” building project because the wood cannot be guaranteed to have originated from non-plantation forest. The handwriting is on the wall that further violations of FSC Principles and Criteria will severely handicap the merchantability of all NB forest products, both at home and abroad. There are also problems with the Roberts Report’s recommendations regarding bio-fuels and bio-chemicals that will be discussed below.

Community modification by plantations also results in reduction of biodiversity. The reduced overall diversity of NB plantations is discussed in several peer reviewed scientific publications^{1,2}. As the fraction of Acadian forest under plantation increases, biodiversity decreases. Several reports^{4,6} have documented the economic consequences of a less diverse forest, most important of which are

- lost opportunities for more proficient and more diverse utilization of the forest in providing employment
- lost opportunities for non-timber utilization of the forest

Proficiency in this context is defined as the number of jobs created per 1000 cubic metres of timber harvested. A more diverse forest provides the high value timber required for more

proficient secondary wood processing. Non-timber products are not pipe dreams. They are real and represent forest products that create more employment per acre of forest when compared to harvested forests.

GPI Atlantic⁴, The Suzuki Foundation⁶, the NB Wood Products group⁵, and reports commissioned by the Canadian Forestry Service^{9,10} have all identified greater proficiency in converting timber into employment as the key to an ecologically sound and sustainable forest economy. The vehicle for achieving greater proficiency in the forest industry is the secondary wood processing industry. Politicians and governments have not yet comprehended the fundamental shift in thinking required to achieve this objective of greater proficiency. If greater proficiency is to occur, governments must cease to view “timber into profit” as the mechanism to tangentially create employment.. The result of the “timber into profit” mentality is the desperate attempt to grow and throw more timber at the problem, as we have witnessed for the past 20 years or more. The forest cannot sustain such an approach. The real key to easing the pressure on the forest resource while returning to past levels of employment is an emphasis on innovation to use the forest more intelligently.

New Brunswick and Canada currently have proficiency levels of 1.3 jobs per 1000 cubic metres of harvested timber. Some European countries and other similar jurisdictions achieve proficiency levels of 1.8 to 2.0 j/MCM. Achieving these higher levels of proficiency should be the government’s number one priority. If the goal is to return to pre-crisis levels of employment, setting a proficiency objective of 1.8j/MCM could reduce the required fibre supply objective by over 38%, while simultaneously easing the pressure on all the ecological facets of the forest so valued by the public.

The government must come to realize the futility of attempting to increase the wood supply. Justifying an increase in annual allowable cut today, based on predictions of greater yield in the future, is sleight of hand illusion. There is not a shred of published scientific evidence to support inflated predictions of future yield in New Brunswick over the long-term. The yield assumptions of government and industry growth models have not been subjected to peer review and are based on short-term data. Plantations rely on, and draw down, soil fertility capital that has accumulated over millennia and this fertility will inevitably fade over time. Future reliance on artificial fertilizer will significantly raise the cost of growing fibre.

Consequently, it is imperative that the government retool its thinking to consider ways to convert the forest into employment in the most parsimonious way possible. This requires a glacial shift in governmental thinking with respect to management of the forest resource and requires a societal shift in buying and consumption habits. The government can assume a defeatist attitude and declare that the consumption habits of the public are beyond its sphere of influence. Conversely, the government can take a proactive approach and assume a leadership role in showing the public the way.

The Roberts report failed to consider the importance of the full spectrum of secondary wood processing in the future success and sustainability of the forest and the forest industry. If anything, the Roberts report steers the province further down the road to oblivion, promoting bio-fuel and bio-chemical industries that are consistent with further erosion of the proficiency

with which we transform the limited forest resource into employment . An emphasis on pulp and paper has resulted in a steady decline in NB proficiency from 2.2 jobs per 1000 cu. metres (J/MCM) of timber in 1968 to the level of 1.3 J/MCM in 2008 mentioned above. Promotion of the bio-fuels industry as encouraged by the Roberts report exacerbates that decline. As acknowledged by Roberts, bio-fuels can be created using 1/13th the labour of pulp and paper; very profitable but a death knell to workers and the forest.

The Roberts Report emphasizes, again and again, green energy, bio-fuels and bio-chemicals as the most promising new opportunities in the forest industry. The report also declares that the source must be within 60-80 kilometres of the processing point to be profitable. Implicit in this statement is the need to integrate these products within existing processing plants. Does this mean that only poor quality wood and wood residues will be used in the manufacture of these products? If so, then what are the trade-offs in employment between using these resources for bio-products as opposed to utilization in more proficient products? Will their profitability be so enticing that hi-grade timber will eventually be shunted to the manufacture of bio-fuels and bio-chemicals, bypassing more proficient secondary wood processing. The workers of the province and the forest cannot afford this kind of exploitation. The Roberts Report ignores these considerations.

The Roberts Report also ignores the growing evidence that bio-fuels actually consume more fuel in their generation and distribution than they create. Given the great lack of proficiency of these products in generating employment, as well as the very negative ecological effects of their manufacture, the province would do well to research this area very very carefully before committing millions upon millions of taxpayer dollars to the industry, the “Green Briklin” of 2008.

The Erdle Task Force analysis relied heavily on the use of quantifiable gradients, e.g. wood supply versus diversity. Members of the task force have acknowledged that the lack of quantifiable socio-economic outcomes greatly handicapped their analysis. I would contend that gradients and/or measures of potential proficiency and potential merchantability of the projected forest should have been included in their analysis. Wood supply was a driving measure in much of the analysis. However, wood supply as an objective devoid of the context of proficiency and merchantability is an empty measure. In today’s context “wood supply” is implicitly equated with being able to throw more wood at the problem. With globalization, the quest for more wood product with minimum labour and wages under a mantra of “productivity” is part of the global race to the bottom. A new paradigm is needed in New Brunswick that seeks the road to the greatest employment at a minimum of wood consumption...

Secondary Wood Processing Strategy

As stated above, the most effective strategy for utilization of the forest resource in the interest of the New Brunswick public and in the interest of the future integrity of the ecological function of the forests of New Brunswick, is to increase the proficiency of timber utilization. Specifically, the government of New Brunswick should set firm objectives for increased proficiency and

develop a comprehensive strategy for achieving that goal. Proficiency can only be effectively enhanced through promotion of the secondary wood processing industry, hereafter defined (after Cohen, DeLong and Kozac, 2005^{9,10}) as the manufacture of:

- a) Prefabricated Buildings
- b) Wood Windows
- c) Engineered Products & Systems
- d) Wood Cabinets
- e) Designer Furniture
- f) Wood Doors
- g) Commodity Wood Furniture
- h) Wood Flooring

Various reports and advice on strategies potentially beneficial to the forest and the forest economy, including GPI Atlantic's Forest Capital Report⁴, the Report of the NB Legislature Select Committee on Wood Supply³, the BC-Forum on Forestry Reports on the Secondary Wood Processing Industry^{9,10}, and Suzuki foundation reports⁶ have all pointed to promotion of the Secondary Wood Processing Industry as a mechanism to

- 1) diversify the economy
- 2) maintain total forest employment
- 3) ease the pressure on the supply of the forest resource
- 4) ease the pressure on the ecological values of the resource
- 5) attain sustainability in the forestry sector

These strategic goals must be incorporated into a provincial vision for the future of the forest industry. Given these goals, the government should undertake an initiative to encourage promotion of the secondary wood processing industry as a means toward greater proficiency and self-sufficiency in the forestry sector. Globalization, trade agreements and a high Canadian dollar present substantial obstacles and impediments to the success of such an initiative so federal/provincial cooperation will be essential.

The province needs to recognize that the buying habits of the public are one way to push back against those pressures. The province has a leadership role in creating a public mood conducive to success of NB products, specifically by promoting and raising awareness of the importance of the secondary wood processing industry in the minds of the public. The NB government should immediately implement the following strategies.

1. Encourage innovation and development of proficient forest products relevant to New Brunswick timbers
2. Provide incentives and mechanisms to link local talent and labour pools with businesses that manufacture proficient products, consistent with localized forest resources.
3. Develop mechanisms for the creation of an atmosphere conducive to acceptance of proficient products as mainstream, affordable and consistent with a public desire for green building practices

4. Immediately embrace a tendering policy with strong incentives for highly proficient forest products, produced within the province of New Brunswick.
5. Immediately seek to instate mechanisms for the adequate supply of wood of appropriate species and quality to all existing and future secondary wood processing enterprises within the province.

Given these broad strategies, the government should immediately undertake an intra-governmental round table discussion among the Departments of Supply and Services, Natural Resources, Business New Brunswick, and Secondary Education Training and Labour to consider ways to promote the secondary wood processing industry within the province. Acknowledging that certain initiatives such as Green Building Practices (CAGBP) are already encouraged, there exists a need for a more concentrated effort within government to coordinate the agendas and initiatives of these various government departments to move the secondary wood processing industry forward. It is in their common interest, as well as the public interest, to do so. At the conceptual stage, intra-governmental discussions are more important than discussions with specific product interest groups. There exist some contentious and fractious issues between government departments where a lack of communication between departments presents impediments to progress. These include

- 1) lack of local content advantages for bidders on government projects
- 2) lack of criteria and standards for construction design that would encourage and reward creative thinking and innovation on possible new products and processes involving secondary wood processing appropriate to NB. The practice of encouraging multiple submissions for design competitions for specific projects has been abandoned but should be reinstated. Historical initiatives that were used to promote the industry, including design competitions and design merit awards for industrial products have been abandoned and should be reconsidered.
- 3) lack of a cohesive forest policy with respect to Forest Certification, a shortcoming that compromises the ability of building design teams to better fulfill LEED Green Building Practice accreditation standards using local timber products.
- 4) lack of a cohesive forest policy to remove impediments that put small to medium secondary wood processing businesses at a disadvantage with respect to obtaining appropriate and adequate wood supply.
- 5) lack of an effective mechanism to identify why and where available local products fall short in fulfilling design criteria, and a lack of a mechanism to systematically convert those impediments into opportunity for innovation and improvement .
- 6) lack of communication between departments on how better to assist each other in fulfilling their respective mandates with respect to secondary wood processing.
- 7) lack of inter-departmental cooperation and liaison to systematically identify impediments to the promotion of secondary wood processing and a lack of initiative to encourage solutions to alleviate those impediments created as a result of departmental and overall governmental policy,.

The province should initiate these round table discussions between DNR, BNB, DSS and Post Secondary Education Training and Labour to discuss remedies for these obstacles in order to progress in the area of secondary wood processing. Other departments could be identified as

having a stake in this issue but these four departments are the most immediate to creating and ensuring

- 1) the human resource supply
- 2) the natural resource supply
- 3) the within province market
- 4) the atmosphere for success

The province should establish an expedited timeline for these discussions because rural communities are hurting and losing access to a resource intimately tied to their economic survival. Secondary wood processing presents the best opportunity for alleviating some of that economic pressure. Workers are quickly leaving the province for better employment opportunities elsewhere..

Conclusion

Many of the recommendations of the Roberts/Woodbridge report rely on hypothetical future changes in the world supply of wood and questionable projections of price trajectories. The report neglects many real factors already in play that negate their suggested opportunities. Many years of study have gone into the importance of the secondary wood processing industry in guaranteeing a prosperous future for forest economies. The government would do well to heed the advice of those well researched documents.

References:

1. Erdle, T. and Pollard, J. 2002. Are plantations changing the tree species composition of New Brunswick's forest? *The Forest Chronicle*. **78**(6): 812-821
2. Betts, M., Diamond, A.W., Forbes, G.J., Frego, K., Loo, J., Matson, B., Roberts, M., Villard, M.A., Wissink, R., Wuest, L. 2005. A comment on the plantations and biodiversity debate in New Brunswick. *The Forestry Chronicle* **81**(2): 265-269
3. The Final Report of, and contributions to, the NB Legislature Select Committee on Wood Supply (NBLSCWS) 2004.
4. The Nova Scotia Natural Capital: Forestry Report of the Genuine Progress Index (GPI) Atlantic 2002
5. The Report of the New Brunswick Wood Products Group (2002)
6. Travers, Ray. (2003). Getting more value - and more jobs from our forests. David Suzuki Foundation. Vancouver, Canada
7. The New Brunswick Ecological Land Classification System

8. Forest Stewardship Council (FSC) Principles and Criteria
9. Cohen, D., d. Delong and R. Kozak. 2005. Can Canada be a Global Competitor in the Secondary Wood Manufacturing Sector? A Current Assessment of the Canadian Secondary Wood Products Sector in a Global Context. Report prepared for the Canadian Forest Service
10. Cohen, D. and R. Kozak. 2006. Mapping the Value Chain of SMEs in the Forest Products Industry. Report Prepared for Environment Canada and the Canadian Forest Service.
11. Dept. of Natural Resources. 2004. Staff Review of the Jaakko Pöyry Report. New Brunswick Forests: Assessment of Stewardship and Management. Dept. of Natural Resources. Fredericton. NB

APPENDIX

Author's Background Information

Publications, Reports and Presentations

- Wuest, L.J. and Betts, M.G. 2008. Quantitative tracking of the vegetative integrity and distinctness of forested ecological communities: A case study of plantation impacts. Submitted for Publication Aug. 2008. In Review.
- Wuest, L.J. and Betts, M.G. 2007. Quantifying changes to the ecological landscape in the Acadian Forest Region. Presentation to the Acadian Forest Science Conference. Fredericton, NB. Oct.10-13, 2007.
- Wuest, L.J., B. G. Nickerson and R.A. Mureika (2003). Entropy of non-probabilistic processes. Geographical Analysis. Vol 35:3 215-248.
- Roberts, M.R. and Wuest, L.J. (1999). Plant communities of New Brunswick in relation to environmental variation. Journal of Vegetation Science. 10:321-334.
- Wuest, L.J. (1997) .Landscape pattern from an information entropy perspective. Presentation to the Joint Annual Meeting of the Atlantic Society of Fish and Wildlife Biologists and the Atlantic Cooperative Wildlife Ecology Research Network. Alma, NB Canada
- Wuest, L.J. (1997). An examination of mesoscale climate in UTM 21H. Report to the New Brunswick Fundy Model Forest Committee. Sussex, NB Canada.
- Zundel,P.E., Hovingh, A.J., Wuest, L., MacElveney, D. and Needham, T.D. (1996). Silviculture systems for the production of energy biomass in conventional operations in Atlantic Canada. Report of UNB Applied Stand Dynamics and Management Group to The International Energy Agency.
- Wuest, L.J. (1996). Statistical Analysis of Tree Species Communities, Vegetational Structure and Marten Track Occurrence in North Central New Brunswick. Report to NBDNRE Fish and Wildlife Branch.
- Roberts, M. R. & Wuest, L. J. (1994). Vegetation communities and their relation to environmental factors in New Brunswick. Report to New Brunswick Dept. Of Natural Resources and Energy.
- Holder-Franklin, M. A., Thorpe, A. & Wuest, L. J. (1992) Evaluation of tests employed in the numerical taxonomy of river bacteria. J. Microbiol. Methods 15, 263-277
- Holder-Franklin, M. A., & Wuest, L. J. (1983). Factor Analysis as an Analytical Method in Microbiology. In M. Bazin, (Ed.) Mathematics in Microbiology (pp. 139-169). London: Academic Press

- Holder-Franklin, M. A., & Wuest, L. J. (1983). Population Dynamics of Aquatic Bacteria in Relation to Environmental Change. Journal of Microbiological Methods. 1 209-227
- Holder-Franklin, M. A., & Wuest, L. J. (1978) Factor Analysis in Ecological Research. Am. Soc. Microbiol. Abstr. Annu. Meet. 178,94.
- Holder-Franklin, M. A., Franklin, M., Cashion, P., Cormier, C. & Wuest, L. (1978). Population Shifts in Heterotrophic Bacteria in a Tributary of the Saint John River as Measured by Taxometrics. In M. W. Loutit & J. A. R. Miles (Eds.), Microbial Ecology (pp. 44-50). Berlin: Springer-Verlag.
- Steward, F. R., Wuest, L., & Waibel, R. T. (1977). Some Characteristics of Fires Within Uniform Fuel Matrices. AICHE-ASME Heat Transfer Conference, ASME 77-HT-71, Salt Lake City, Utah.
- Miller, R., Wuest, L., & Cowan, D. (1972). Volume Analysis of Human Red Blood Cells I - General Procedures. Series Haematologica Vol. V,2 105-127.
- Miller, R., & Wuest, L. (1972) Volume Analysis of Human Red Blood Cells II - Nature of the Residue. Series Haematologica Vol. V,2 128-141.

Wood Processing Awards and Achievements

- 1986 Best Product Award Nova Scotia Designer Craftsmen Council Summer Craft Show.
- 1989 Best Product Award Nova Scotia Designer Craftsmen Council Winter Craft Show.
- 1987 Designed and crafted the Sculpture symbolic of the New Brunswick Human Rights Award. The sculpture is on permanent display at the Legislative Assembly Building in Fredericton, NB.