

Overallocation of forests to Louisiana-Pacific Yesterday and today

By Dan Soprovich, Bluestem Wildlife

In an April 5, 2005 article ('Province cuts back on harvesting of forests'), Winnipeg Free Press reporter Ms Helen Fallding observed that Manitoba Conservation had "drastically cut back" the amount of wood that Louisiana-Pacific Canada Ltd. could log from the forests of west-central Manitoba. However, the article was short on important detail and was misleading.

The Winnipeg Free Press article indicated that the Manitoba government had implemented a 25% reduction in the Annual Allowable Cut of hardwoods (deciduous trees) for the Mountain Forest Section. This reduction is of considerable interest in relation to the conclusions and assertions of Louisiana-Pacific and their 'environmental' consultants prior to the Environmental Licensing of the Louisiana-Pacific forestry development, and the assertions, conclusions, recommendations, and approvals of the government-of-the-day (i.e., the bureaucrat/politico symbiosis-of-the-day) and 'independent' Clean Environment Commission of the time.

Overallocation of the forest

The Annual Allowable Cut (AAC) represents the Manitoba Forestry Branch-defined 'sustainable' amount of wood fibre that can be cut on an annual basis. The primary focus of the AAC is to provide fibre to the forestry industry, as opposed to being designed to allow for the forest to be sustained. This point is perhaps illustrated by a statement in the recent report on the wood supply analysis for the Duck and Porcupine Mountains (Manitoba Forestry Branch 2004) ... "The Forestry Branch has adopted a more open and consultative approach, jointly discussing key modelling inputs with the industry prior to inclusion into the analysis model." There is no mention of seeking the input or approval of groups within Manitoba Conservation that represent interests other than the forestry industry, or consideration of the interests and input of ENGOs, First Nations, and the many other owners and users of public forest lands.

Furthermore, when one recognizes that the *raison d'être* of the Forestry Branch is principally to supply fibre to the forestry industry, when one understands the degree of decision-making power resident within the Forestry Branch, and when one observes present government practices (e.g., addressing protected areas needs within Forest Management License Areas subject to the collection of new inventory data to quantify implications to the forestry industry), one is left to conclude that the focus of the Department of Conservation, and by extension the political arm of government, is on fibre supply.

While the 25% reduction in the hardwood AAC for the Mountain Forest Section is factually correct, in terms of making relevant comparison, the number is misleading. The Mountain Forest Section consists of five Forest Management Units (FMUs), whereas the new AACs were calculated only for the Duck Mountain (FMU 13) and Porcupine Mountain (FMU 14). Therefore,

the relevant comparisons are to the government AACs at the time of the overallocation to Louisiana-Pacific for these two FMUs. When these comparisons are made, we observe that the initial government allocation for FMU 13 was 36.1% greater than the new AAC, and that the difference for FMU 14 was 30.4%.

While AACs have not been recalculated for the other three FMUs of the Mountain Forest Section, we can expect that these will also drop once calculated, because many of the problems inherent to the overallocations in FMUs 13 and 14 were also

inherent to the AACs for the other three FMUs (e.g., liberal assumptions respecting the size of trees that Louisiana-Pacific would use, ridiculously high growth and yield assumptions on the part of Louisiana-Pacific and their consultants). Indeed, in light of the major reductions for the two FMUs that have been examined, it would be irresponsible not to reevaluate the AACs of the other FMUs in the Mountain Forest Section.

It is important to understand that Repap Manitoba Inc. (now Tolko Industries Ltd.) was responsible for management of the two northern FMUs in the Mountain Forest Section, and that the environmental impact

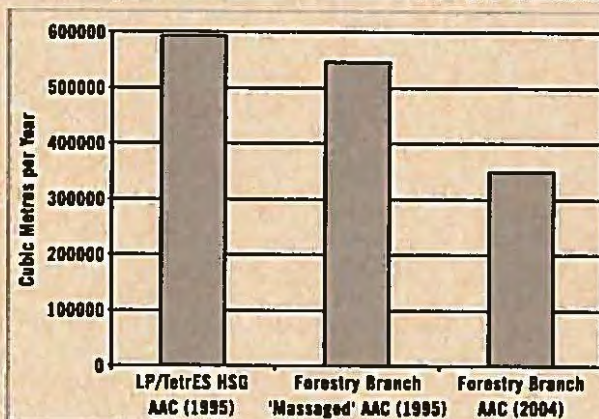
assessment and review process for Louisiana-Pacific's Forest Management License Area related only to FMUs 10, 11, and 13. It is therefore of greatest relevance to closely examine the numbers that pertain to FMU 13.

Closer examination of the numbers

For FMU 13, the 1995 government allocation ('Forestry Branch 'Massaged' AAC (1995)') was 545,691 m³ of hardwoods annually (i.e., Provincial AAC Crown Open Land and Crown Restricted Land; Table 8-1; TetrES 1995), and Louisiana-Pacific proposed to cut 542,530 m³ of hardwoods per year. Louisiana-Pacific and their consultants concluded that 597,125 m³ of hardwoods ('LP/TetrES HSG AAC (1995)') could be sustainably cut each year for the next 100 years (i.e., HSG Sustainable Crown Land; Table 8-1; TetrES 1995), with no 'significant' impact on the environment. Less than a decade later, the Manitoba government has now reduced the allocation to 348,823 m³ of hardwoods per year ('Forestry Branch AAC (2004)'; i.e., Net Harvest Volume; Table 14; Manitoba Forestry Branch 2004). This represents a 36.1% reduction, or, looking at this from another perspective, an original government allocation that was about 56.4% greater than what should have been allocated.

In relation to what Louisiana-Pacific and their consultants concluded was sustainable over a 100-year period (i.e., 597,125 m³ per year), the new Manitoba government AAC represents a drop of 41.6%. Or, looking at this from another perspective, the amount that Louisiana-Pacific and their consultants indicated

see "L-P Overallocation" next page ►



100-year 'sustainable' hardwood Annual Allowable Cuts for the Duck Mountain (FMU 13). Sources were TetrES (1995) for the LP/TetrES HSG and Forestry Branch 'Massaged' AACs, and Manitoba Forestry Branch (2004) for the Forestry Branch AAC.

L-P Overallocation

continued from page 5...

was sustainable over a 100-year period was about 71.2% greater than what should have been allocated (see chart).

The recalculated AAC establishes a number of matters. Of significant importance, it can now be considered a truth that the 'Concerned Citizens of the Valley', First Nation peoples, environmentalists, and the many other concerned citizens of the area and other parts of Manitoba were correct when they argued that the allocation to Louisiana-Pacific was a major overallocation, and that an allocation of that magnitude would result in substantive environmental damage to the forest ecosystems of the area. And it can now be considered a truth that Louisiana-Pacific, their highly paid consultants (e.g., some \$5.5 million for the development of Louisiana-Pacific's 'Forest Management Plan' per a presentation by Louisiana-Pacific's Mr. Barry Waito; Swan Valley Star & Times May 24, 2005), and government were very wrong in this matter.

Some nine years after the fact, the recalculated AAC represents tacit admission by government that 'the little people' were right. And implicit recognition that, in matters of trust, it was 'the little people' who were to be trusted. It is perhaps a positive development to witness that government is beginning to catch up to where many of us were almost a decade ago.

Some of the reasons behind the numbers

How could these highly paid quasi-professionals be so very wrong when so many average citizens were right? Those of us who have been 'around the block', or even a small part of the way 'around the block', will not be completely surprised by this outcome, and will be able to come up with a number of plausible explanations. And certainly, those of us who were there at the time understood some of the reasons. Given the sheer magnitude of the now established error for FMU 13, apparent so soon after public hearings on environmental impact and sustainability (especially soon in terms of 'forest' time), the need for some form of public inquiry certainly comes to mind and seems appropriate in the context of today's circumstances—e.g. to determine how the system could have gone so wrong, with the aim to make corrections to minimize the possibility of such things occurring in the future. Does not the wise stewardship of our forest ecosystems and the environment deserve this level of attention (e.g., at least comparable to the value placed on 'Gomery' and 'Crocus')? Further to this, the truth that Louisiana-Pacific's Environmental Impact Assessment was fatally flawed and essentially irrelevant can only lead to questions respecting the validity of Clean Environment Commission processes, and adversely influence the public's confidence in governmental management of the environment on our behalf.

Technical reasons for overallocation

In terms of the technical reasons for the massive overallocation by government, and the conclusions of Louisiana-Pacific and their consultants that the allocation would have no 'significant' impact on the environment, there were many problems with the original calculation of AAC by government, and the assumptions used by Louisiana-Pacific and their consultants—problems that were obvious to a number of independent observers. For example, Mr. Jim Ball, a Canadian Forest Service forester who sat on the Technical Advisory Committee on

the development, in his letter of December 15, 1995 as posted to the Public Registry, wrote, "How was the FRI massaged to double the hardwood AAC?" Some of these problems were communicated to the proponent and government, but were subsequently ignored by Louisiana-Pacific and its consultants, government, and the Clean Environment Commission. For example, the Manitoba Forestry Branch based its AAC calculation on the assumption that Louisiana-Pacific and other users of hardwoods would cut and process trees down to a 7.6 cm top for an ~2.4 m log, and would log in extremely low volume stands. These assumptions were obviously liberal and wrong to the independent observer. The new AAC calculation (Manitoba Forestry Branch 2004) more realistically assumes that industry will process to a larger top diameter (e.g., for trees of Diameter at Breast Height 21-40 cm, processing to a top of 12.7 cm), and excludes the low volume stands that industry would reject logging due to low or negative returns (i.e., where the road building and other costs would not justify the low available volumes). Almost a decade after it developed the Annual Allowable Cut for Louisiana-Pacific, Manitoba Forestry Branch has utilization standards that "... now recognize log processing limitations and mill delivery specifications" (Manitoba Forestry Branch 2004).

In the original overallocation by government, the Manitoba Forestry Branch effectively ignored the influence of a number of government policies (e.g., the Forestry Branch did not explicitly account for the buffering of streams and other 'waterbodies') and environmental limitations (e.g., the Forestry Branch included trees from steep slopes that could only be logged with substantive environmental damage). The new allocation accounts for some of these factors.

Part Two will appear in a later issue of Eco-Journal.

ECO



Helping communities create a healthy environment
Aider les collectivités à créer un environnement sain

Have an idea for an environmental project?
Contact us at:

Avez-vous une idée pour un projet
environnemental dans votre communauté ?
Contactez-nous au :

1-800-567-1570
www.ec.gc.ca/ecoaction



Environment
Canada

Environnement
Canada

Canada

Overallocation of Forests to Louisiana-Pacific

By Dan Soprovich, Bluestem Wildlife

Editor's Note: Part One of this article appeared in Volume 16 # 4 of *Manitoba Eco-Journal* (Sept/Oct 2006). You can read the article in its entirety, with endnotes, on the EcoNetwork website, at www.mbeconetwork.org.

Relative to the volume that Louisiana-Pacific and TetrES asserted was sustainable on an annual basis over 100 years (LP/TetrES HSG AAC (1995)), by far the greatest reason for their substantive errors of conclusion related to the 'growth and yield' figures that were derived by Louisiana-Pacific and its consultants, and used by Louisiana-Pacific and TetrES. Growth and yield assumptions are the assumptions on how fast a forest grows, and how much fibre the forest will yield to industry. The growth and yield assumptions are fundamental and critical to modeling forest 'sustainability'. For example, if one assumes that a forest will yield twice the volume per unit area than it really does (i.e., a case where a modeling assumption confronts the 'real world'), then one will have to cut twice the area predicted on the basis of the faulty assumptions to achieve the same total volume (e.g., cut an area of 200 km² vs 100 km²). An error of this magnitude has huge implications to the real-world impact of a forestry development on biological diversity, the number of ovenbirds in the forest, water yield, soils, etc..

Incongruity in yield values

Prior to, and during, the 1995 Clean Environment Commission (CEC) hearings, independent experts challenged the hardwood growth and yield assumptions developed by Louisiana-Pacific and its consultants, and accepted by the provincial bureaucrats and government-of-the-day. For example,

- Canadian Forest Service forester Jim Ball, in his August 17, 1995 letter as posted to the Public Registry, wrote "... the company should explain this apparent incongruity and reconcile the yield values of 150-170 m³/ha-1 to be cut in the first three years with volumes of 300-400 m³/ha-1 for well stocked stands used in the HSG simulation (7-17) to project future stands". In his December 15, 1995 letter, Mr. Ball wrote "If plot selection was biased to well drained sites where greater growth occurs (Jameson 1963), and if such elevated growth data—for example, 400 m³/ha—were used in the Harvest Schedule Generator it follows that the sustainability analysis should be rejected."

- Soprovich (1995) outlined a number of sampling problems respecting the data from which Louisiana-Pacific had derived its growth and yield assumptions. On that basis, and on the basis of published growth and yield data from the scientific literature, Soprovich concluded that the assumptions represented substantive overestimates, and recommended that the growth and yield assumptions, and Environmental Impact Statement, be rejected by the Commission. Soprovich stated "In the absence of being able to independently assess LP's data collection methodology, and to quantify the impact of this methodology on bias and precision, we cannot have a great deal of confidence in the LP data." and "If growth and yield is considerably overestimated,

as I suggest, this invalidates all analyses presented in the EIS."

Over a decade later, with its long-term Environmental License expired on December 31, 2005, Louisiana-Pacific is in the process of the development and licensing of a second long-term Forest Management Plan. Importantly, Manitoba Forestry Branch has derived new yield assumptions from a new sampling effort in support of the wood supply analysis and Annual Allowable Cut (AAC) determination for the Duck Mountain (Manitoba Forestry Branch 2004). For aspen and other hardwoods, the Manitoba Forestry Branch yield assumptions were substantially lower

then those used by Louisiana-Pacific and TetrES in their Forest Management Plan and Environmental Impact Assessment.

Comparison of Forestry Branch and Louisiana-Pacific/TetrES yield assumptions

The Manitoba Forestry Branch and Louisiana-Pacific/TetrES yield assumptions are not directly comparable for various reasons. For example, the Forestry Branch made methodological changes to

forest inventory (e.g., changes to the derivation of crown closure) and changes to its classification of forest ecosystems (e.g., stratification in relation to species composition and crown closure). Valid comparison of the yield assumptions required a number of assumptions and adjustment to develop 'Forestry Branch Modified' yield assumptions (see Soprovich 2006).

Perhaps the most useful comparison of yield assumptions is for forests of age 60 years post-disturbance, because this was the hardwood rotation age in the Duck Mountain at the time of the Environmental Impact Assessment (Manitoba Natural Resources 1992). For the purpose of their 'sustainability' analysis, Louisiana-Pacific and TetrES assumed the aspen forest to yield an average of 328 m³ per ha across the Duck Mountain (see trembling aspen chart). In contrast, the Forestry Branch Modified assumption was 158.4 m³ per ha. Given the almost decade of experience, the obvious sampling biases by Louisiana-Pacific and its consultants (Soprovich 1995), and a presumed increase in sample size, one must conclude that the Manitoba Forestry Branch (2004) yield assumptions are 'correct'. Therefore, for the purpose of their Environmental Impact Assessment, Louisiana-Pacific and TetrES assumed that Duck Mountain aspen forests would yield 2.07 times the true yield at rotation age.

Louisiana-Pacific and TetrES assumed that balsam poplar and white birch forests would yield at the same rate as aspen forests, and applied a universal set of yield assumptions. This assumption was also challenged. For example, in his December 15, 1995 letter, Mr. Jim Ball wrote on mixedwood sites in Riding Mountain, "balsam poplar (both reproduction and mature trees) grows more slowly and does not reach the same diameter as aspen; I suspect that this is also generally true for FML #3."

continued on next page ►

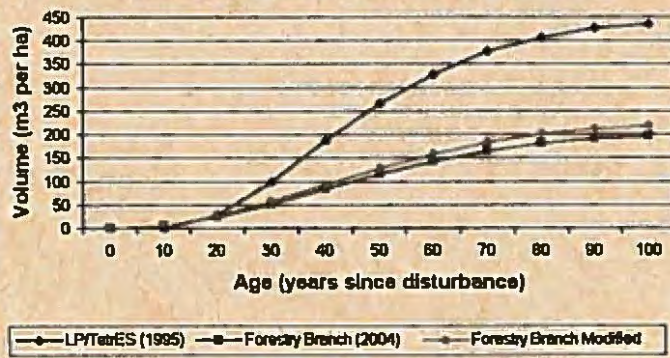


Figure 1. Trembling aspen yield assumptions for the Duck Mountain, Manitoba.

and "... arguments for grouping, as presented by TetrES ... are seriously flawed."

The Manitoba Forestry Branch (2004) did not provide yield curves for balsam poplar or white birch forests. However, the availability of curves for the MDE stratum (mixes of aspen, poplar, and birch) provides an opportunity to compare yield assumptions. Louisiana-Pacific and TetrES assumed that mixes of the three species would yield 328 m³ per ha at age 60 across the Duck Mountain. In contrast, the Forestry Branch Modified assumption was 129.8 m³ per ha (Soprovich 2006). For the purpose of their Environmental Impact Assessment, Louisiana-Pacific and TetrES assumed that these hardwood forests would yield 2.53 times the true yield at rotation age. The even greater disparity for the MDE stratum as compared to the aspen forest stratum is clear evidence in support of Mr. Ball's assertion that Louisiana-Pacific and TetrES had wrongly assumed that yields of the three species would be equivalent.

It is now obvious that Louisiana-Pacific and TetrES used grossly inflated yield assumptions for their examination of the 'sustainability' and environmental impact of the Louisiana-Pacific Canada Ltd. forestry development. Most importantly, because future forest age structure is extremely sensitive to yield assumptions, the disparity is so great that one can only conclude that Louisiana-Pacific's environmental impact assessment and 'sustainability' analysis were not valid. Therefore, it is fair to state that Louisiana-Pacific has been operating for more than a decade in the absence of an environmental impact assessment, and that the Manitoba government has allowed it to do so.

Does the present government have it right?

While it is now established that government was not credible in terms of fibre management or forest management at the time of the Louisiana-Pacific deal, it is also clear that the present government continues to lack credibility respecting the management of forests (i.e., management for things other than fibre). For example, per the Manitoba Forestry Branch AAC determination methodology of the day, Louisiana-Pacific and its consultants applied a 15% netdown for their 'sustainable' harvest level to account for assumptions on fibre losses to fires and other factors (TetrES 1995). However, for its recent AAC determination, Manitoba Forestry Branch (2004) assumed that fires would not occur in the Duck Mountain over the 200-year simulation period. If the wood supply analysis had assumed a reasonable impact of fire

(i.e., because fires will occur in the 'real world'), and made reasonable assumptions respecting other factors that were ignored, the reduction in the hardwood AAC would have been even greater than 36.1%. The decision to ignore obvious factors that will influence the forest age structure of the Duck Mountain demonstrates that the present government-of-the-day is prepared to compromise the maintenance of the biological diversity, and other ecological 'goods and services' of the forest, for short-term fibre sustainability. Further to this, the basis for the wood supply analysis is clearly not in keeping with the 'precautionary principle'.

Given that the previous Environmental Impact Assessment was fatally flawed and therefore irrelevant, and given that the present government has allowed Louisiana-Pacific to operate in the absence of a valid Environmental Impact Assessment since 1999, we are left to conclude that 'Today's NDP' differs little from 'Yesterday's Conservatives' when it comes to sustainable management of the people's forests. And to understand that, in this province, it is fine and well to table invalid Environmental Impact Assessments.

Literature Cited

- Manitoba Forestry Branch. 2004. Wood supply analysis report for Forest Management Unit 13 and 14. 38 pp. + Appendices.
- Manitoba Natural Resources. 1992. Forest Inventory Field Instruction Manual. 66 pp. + Appendices.
- Soprovich, D.W. 1995. A submission to the Clean Environment Commission. November 30, 1995. 20 pp. + Figure.
- Soprovich, D.W. 2006. Environmental Impact Assessment Information Note No 6., Bluestem Wildlife, Swan River, MB. 12 pp.
- TetrES. 1995. Environmental Impact Statement. Louisiana-Pacific Canada Ltd. Forest Management License #3 10-Year Forest Management Plan (1996-2005). TetrES Consultants Inc., Winnipeg, Manitoba.

ECO



Illustration by David Henry

A Successful, Caring Company

With corporate social responsibility
as our foundation and driving force, we are
proving a company can be both compassionate
and profitable. We are that company.

Good things happen here.