



2004 ANNUAL REPORT

SUSTAINABLE FOREST MANAGEMENT PLAN

MANITOBA SOLID WOOD DIVISION

June 7, 2005

Table of Contents

Introduction.....	4
FRAC Advisory Committee Review	4
Woodlands Staff Review	4
Management Review.....	4
Audit	5
CSA SFM Performance Indicator Staff Champions.....	5
Indicators:	
1.1.1.1	9
1.1.1.2.1	10
1.1.1.3.1	12
1.2.1.1.1	14
1.2.1.2.1	15
1.2.1.3.1	17
1.3.1.1.1	18
1.4.1.1.1	20
1.4.2.1.1	21
2.1.1.1.1	22
2.2.1.1.1	24
2.2.2.1.1	25
2.2.2.2.1	27
3.1.1.1.1 (A/B).....	29
3.1.1.1.2	32
3.1.1.1.3	33
3.1.1.1.4	35
3.1.1.1.5	37
3.2.1.1.1	38
3.2.1.1.2	39
3.2.1.2.1	41
4.1.1.1.1 (A/B).....	42
4.1.1.1.2	44
4.1.1.1.3	45
4.1.2.1.1	47
4.1.2.1.2	48
4.2.1.1.1	49
4.2.1.1.2	51

5.1.1.1.1	53
5.1.1.2.1	55
5.1.2.1.1	56
5.1.2.1.2	57
5.1.3.1.1	59
5.1.4.1.1	61
5.1.5.1.1	62
5.2.1.1.1	63
5.2.1.2.1	64
5.2.2.1.1	66
5.3.1.1.1	67
5.3.2.1.1	68
6.1.1.1.1	69
6.1.1.2.1	71
6.2.1.1.1	73
6.3.1.1.1	75
6.4.1.1.1	76
6.4.1.1.2	77
6.4.1.1.3 (A/B)	78
6.4.1.2.1	80

Introduction

Attached is the first ever Tolko Manitoba CSA SFM report for 2004. The report focuses on the performance framework with a review of progress, successes, shortcomings, emerging issues, future plans and corrective action plans to maintain the Sustainable Management Standard required by the CSA Z809:02 standard.

This report was reviewed with the FML Area FRAC, Woodlands staff, Woodlands EMS Staff Committee and Senior Woodlands Management. This report can be found at the Tolko Manitoba web site located at www.tolkomanitoba.com.

FRAC Advisory Committee Review

The CSA SFM plan was initiated in 2003 with the help of a public advisory committee and a facilitator. A total of 8 advisory committee meetings were held between June 2003 and May 2004. The final version of the CSA SFM Plan was dated and release in August 2004.

After the May 2004 meeting the CSA SFM advisory committee became the Forest Management Licence Area (FML Area) - Forest Resource Advisory Committee (FRAC). At subsequent FRAC meetings held in September and December 2004 the topic of CSA SFM was reviewed and discussed.

At the May 2005 FML Area FRAC meeting the draft 2004 CSA SFM Annual Report was reviewed with the committee. Most of the committee comments centred on clarification. A complete review of the committee comments can be found in the minutes of the May 31, 2005 FRAC minutes. The key comments are as follows:

- The fine for high stumps is not a good fit with indicator 5.1.1.2.1
- Column numbers don't add up to the total shown for Indicator 1.1.1.2.1
- Committee would like to see the public concerns table placed on the Tolko web site.
- Tolko should note operational changes as the result of public consultation.
- Committee would like to see a copy of the Tolko truck haul safety program.

Woodlands Staff Review

On May 11, 12 and 13, 2005 the Woodlands staff group got together for the annual review of EMS and CSA SFM Plan. For EMS one standard operating procedure (Field Marking) was changed and a number of guidelines around safety and operations were introduced. Staff reviewed the entire group of performance indicators and no changes were suggested. Staff felt the indicators were still too new to make a change.

Management Review

Both the EMS staff committee and the Woodlands Manager reviewed the 2004 CSA SFM Annual report.

Audit

In October 2004 the CSA SFM plan was audited for certification to CSA Z809-02 standard and the Company was successful in meeting this standard with no non-conformances. During the same period the Tolko Manitoba EMS was assessed a surveillance audit and again the Company was successful in maintaining the ISO 14001 standard with no non-conformance. A summary of the October 2004 audit was provided to the FML Area FRAC and it was also placed on the Tolko Manitoba web site.

CSA SFM Performance Indicator Staff Champions

Each performance indicator was assigned to a Woodlands staff person to oversee and ensure monitoring and measuring was done. The CSA performance indicators and the Woodland Staff Champions are as follows:

Indicator #	Indicator	Champion
1.1.1.1.1	Area (ha.) and frequency distribution of harvest and natural disturbance areas (by size class)	Fiona Donald
1.1.1.2.1	Forest cover composition of reforested cutover areas	Paul Chapman
1.1.1.3.1	Harvest levels in cubic metres as compared to the AAC	Mike Paddock
1.2.1.1.1	Woodland caribou habitat for the Kississing-Naosap Lakes Herd	Richard Gibbons
1.2.1.2.1	Staff awareness of current COSEWIC & MESA lists for DFA	Fiona Donald
1.2.1.3.1	Abundance of residual stand structure	Andrew Forward
1.3.1.1.1	Percentage of areas planted with stock from the same or approved government seed zone	Paul Chapman
1.4.1.1.1	Percentage of proposed harvest blocks subject to pre-harvest surveys (PHFI)	Mike Paddock
1.4.2.1.1	Protected Areas and ASIs recognized in forest management plans (FMP and AOP)	Don Aikman

2.1.1.1.1	Forest cover composition of reforested cutover areas	Paul Chapman
2.2.1.1.1	Provision of information on insects and disease to MC for the DFA	Fiona Donald
2.2.2.1.1	Company caused forest fires	Dan O'Brien
2.2.2.2.1	Re-curing mistletoe infections in regenerating stands	Paul Chapman

3.1.1.1.1 (A/B)	Extent and duration of in-block seasonal roads and landings	Don Aikman
3.1.1.1.2	Adherence to Work Permit conditions and Tolko SOPs guiding Tolko and contractor forestry operations on the DFA including those pertaining to rutting, protection of non-timber values and for operations adjacent to watercourses including buffers and the handling and storage of fuels, lubricants and herbicides	Bruce Bodie
3.1.1.1.3	Amount of area in all-weather roads (Categories 1 & 2) in place at any given time	Richard Gibbons
3.1.1.1.4	Forest cover composition of reforested cutover areas	Paul Chapman
3.1.1.1.5	Amount and distribution of coarse woody debris	Fiona Donald
3.2.1.1.1	Adherence to Work Permit conditions and Tolko SOPs guiding Tolko and contractor forestry operations on the DFA including those pertaining to rutting, protection of non-timber values and for operations adjacent to watercourses including buffers and the handling and storage of fuels, lubricants and herbicides	Bruce Bodie
3.2.1.1.2	Condition of stream crossings and roadways in terms of erosion control	Richard Gibbons
3.2.1.2.1	Reporting on evolution of watersheds research specific to forestry planning and operations	Fiona Donald

4.1.1.1.1 (A/B)	Amount of area in all-weather roads in place at any given time & decommission 150 km's of older roads.	Richard Gibbons
4.1.1.1.2	Harvest blocks are regenerated as soon as possible	Paul Chapman
4.1.1.1.3	Forest cover composition of reforested cutover areas	Paul Chapman
4.1.2.1.1	Percentage of wood hauled by truck versus train	Bruce Bodie
4.1.2.1.2	Level of awareness of Woodlands staff of effects on unnecessary vehicle idling	Greg Tavener
4.2.1.1.1	Amount of area in all-weather roads (Categories 1 & 2) in place at any given time	Richard Gibbons
4.2.1.1.2	Forest cover composition of reforested cutover areas	Paul Chapman

5.1.1.1.1	Harvest levels in cubic metres as compared to the AAC	Mike Paddock
5.1.1.2.1	Adherence to Work Permit conditions and Tolko SOPs guiding Tolko and contractor forestry operations on the DFA including those pertaining to rutting, protection of non-timber values and for operations adjacent to watercourses including buffers and the handling and storage of fuels, lubricants and herbicides	Bruce Bodie
5.1.2.1.1	Harvest blocks are regenerated as soon as possible	Paul Chapman
5.1.2.1.2	Forest cover composition of reforested cutover areas	Paul Chapman
5.1.3.1.1	Documentation of public consultation process followed, communities consulted, concerns raised and strategies/mitigation developed to address concerns of local Aboriginal and other communities and non-timber resource users within forest management plans for the DFA (FMP, AOP, Road Management Plans)	Andrew Forward
5.1.4.1.1	Proposed all-weather roads reviewed for the potential for the occurrence of heritage resources	Don Aikman
5.1.5.1.1	Protected Areas and ASIs recognized in forest management plans (FMP and AOP)	Don Aikman
5.2.1.1.1	Extent of local involvement in forest operations in the DFA	Joyce Totte
5.2.1.2.1	Documentation of public consultation process followed, communities consulted, concerns raised and strategies/mitigation developed to address concerns of local Aboriginal and other communities and non-timber resource users within forest management plans for the DFA (FMP, AOP, Road Management Plans)	Andrew Forward
5.2.2.1.1	Programs in place related to public safety during truck haul operations on DFA Company roads	Wally Quiring
5.3.1.1.1	Extent of local involvement in forest operations in the DFA	Joyce Totte
5.3.2.1.1	Cost per cubic metre of delivered wood	Bruce Bodie

6.1.1.1.1	Percentage of Woodlands staff who have participated in Aboriginal, treaty rights and culture awareness sessions	Don Aikman
6.1.1.2.1	Documentation of public consultation process followed, communities consulted, concerns raised and strategies/mitigation developed to address concerns of local Aboriginal and other communities and non-timber resource users within forest management plans for the DFA (FMP, AOP, Road Management Plans)	Andrew Forward
6.2.1.1.1	Documentation of public consultation process followed, communities consulted, concerns raised and strategies/mitigation developed to address concerns of local Aboriginal and other communities and non-timber resource users within forest management plans for the DFA (FMP, AOP, Road Management Plans)	Andrew Forward
6.3.1.1.1	Degree of satisfaction with the public participation component of the planning process	Doug Hunt
6.4.1.1.1	Training and awareness opportunities for contractors on the DFA	Wally Quiring
6.4.1.1.2	Tolko understanding and practices based on current and emerging knowledge and recommended practices	Doug Hunt
6.4.1.1.3 (A/B)	Training members of the Forest Resource Advisory Committees (FRAC) and the SFM Committee	Doug Hunt
6.4.1.2.1	Access of the broad public to information on SFM, FMP and AOP plans and related public participation processes	Doug Hunt

2004 Report for Each Performance Indicator

The 48 performance indicators set up in the CSA SFM Plan were reviewed for progress, successes and shortcomings up to the end of the 2004 calendar year. Attached is a brief summary for each of the indicators.

CCFM Criterion 1.0	Conservation of Biological Diversity
CSA SFM Element 1.1	Ecosystem Diversity Conserve ecosystem diversity at the landscape level by maintaining the variety of communities and ecosystems that naturally in the DFA
FML Area No. 2 DFA Value 1.1.1	A resilient forest ecosystem that emulates natural disturbances and landscape patterns
Objective 1.1.1.1	Create a range of harvest disturbance patches across the landscape that is consistent with the size, frequency, distribution and shape of disturbance patches created under a natural fire regime

Indicator 1.1.1.1.1	Target 1.1.1.1.1
Area (ha.) and frequency distribution of harvest and natural disturbance areas (by size class)	Monitor and report on patch size and distribution resulting from natural and timber harvest disturbances for the DFA Acceptable Variance: No variance in undertaking the measurement and reporting program is acceptable. No targets are set for patch size and distribution for the DFA at this time and as such, no variances for patch size or distribution are applicable at this time.

2004 Report

In 2004 the Inventory Forester initiated web searches on natural range of variability (NRV) and fire patterns. During that time the Inventory Forester also contacted some forest industry and consultants regarding their approaches to determining NRV and fire patterns. The summary of these efforts can be found in the Corporate EMS website.

Also in 2004, the Inventory Forester, in consultation with Manitoba Conservation, determined the size classes to be used. It was decided to use the same classes as reported to Natural Resource Canada. A test run on one year of the fire data was completed. The files of the fires occurring in 2003 and 2004 were obtained from Manitoba Conservation.

The Divisional and Inventory Foresters attended a NRV session to calibrate the Tembec model. The session included information on the program, LANDIS, and its function.

CCFM Criterion 1.0	Conservation of Biological Diversity
CSA SFM Element 1.1	Ecosystem Diversity Conserve ecosystem diversity at the landscape level by maintaining the variety of communities and ecosystems that naturally in the DFA
FML Area No. 2 DFA Value 1.1.1	A resilient forest ecosystem that emulates natural disturbances and landscape patterns
Objective 1.1.1.2	Reforest all harvested areas to the previous forest covertype

Indicator 1.1.1.2.1	Target 1.1.1.2.1
Forest cover composition of reforested cutover areas	100% of all harvested areas to be reforested to the standards set in the MC Regeneration and Free-to-Grow requirements Acceptable Variance: No variance in meeting MC renewal standards for all areas harvested to meet the Company's requirements within government approved timeframes

2004 Report

Regeneration and Free-to-Grow (FTG) surveys were conducted in 2004 by a contractor using staff licensed by Manitoba Conservation to perform the surveys. 5,986 ha of regeneration survey and 3,682 ha of FTG survey were conducted. Not all the areas eligible for regeneration survey were completed in 2004 due to crew scheduling issues but they will be a priority to complete in 2005.

The regeneration survey data was manually reviewed to determine success in meeting provincial standards, of the 5,986 ha surveyed only 4 ha did not meet the softwood regeneration standard. This 4 ha block (DV-30) was a pine block that was anchor chained in 1998. This block will be assessed for follow up treatment to bring it to the standard by 2007.

The Free-to-Grow survey database was reviewed and a summary of blocks surveyed in 2004 was provided. The following is the summary of the standards achieved.

Free-to-Grow, softwood standard	56 blocks	1,279 ha
Free-to-Grow, mixed wood standard	7 blocks	127 ha
Not Free-to-Grow, softwood	15 blocks	219 ha
Not Free-to-Grow, mixed wood	39 blocks	853 ha
Mixed wood	54 blocks	889 ha
Regen	2 blocks	86 ha
Not Sufficiently Restocked	7 blocks	199 ha
Hardwood	1 block	29 ha
Total survey area		3,682 ha

Approximately one-third of the area has met the softwood FTG standard, with the remainder requiring some action to meet the standard. Generally blocks that fall into the mixed wood FTG, or not FTG mixed wood and softwood categories will be released to

reduce the hardwood competition that is holding the block back. 1,246 ha of blocks surveyed in 2004 are identified for herbicide release in the 2005 AOP. Aerial photography of these blocks has been ordered to assist in developing a release strategy. Of the remaining blocks additional field investigation or remote sensing may be required to form a remedial action plan. Those blocks meeting the regen standard should develop in time since height is mainly the limiting factor. NSR blocks will likely require fill planting but the hardwood and mixed wood blocks will possibly require a combination of vegetation management and fill planting. Following block investigations it is likely that a number of blocks will be requested for a special status. Over the last two years there is an increasing feeling among foresters and biologists within MC that there is a need to recognize that some blocks that do not meet the FTG standard as it exists, appear on examination, to be fully stocked with the softwood growing unhindered by the hardwood. These blocks appear to meet multiple resource values in terms of timber production and habitat, and there has been a request to certify these to maintain this. Blocks that are retreated will have an additional survey scheduled to confirm that the treatment was successful.

CCFM Criterion 1.0	Conservation of Biological Diversity
CSA SFM Element 1.1	Ecosystem Diversity Conserve ecosystem diversity at the landscape level by maintaining the variety of communities and ecosystems that naturally in the DFA
FML Area No. 2 DFA Value 1.1.1	A resilient forest ecosystem that emulates natural disturbances and landscape patterns
Objective 1.1.1.3	Harvest within sustainable levels and harvest operating guidelines to promote the presence of a range of age classes on the DFA

Indicator 1.1.1.3.1	Target 1.1.1.3.1
Harvest levels in cubic metres as compared to the AAC	Harvest levels to remain within Government approved AAC Acceptable Variance: No variance in harvest levels outside of MC approved AAC levels based upon 5-year cut control periods is acceptable. Variation in any given year may occur. MC approved AAC levels may include accommodation of underutilized AAC from the previous period.

2004 Report

AAC

The AAC for each of the 21 FMU's located on the DFA were not exceeded during the current cut control period of January 1, 1999 to May 31, 2005. The AAC for two FMU's (53 & 60) was exceeded during the 2004/05 operating year. These overcuts were approved by Manitoba Conservation.

PSP

In 2004 fourteen permanent sample plots (PSPs) were established. These plots can be categorized as: a) regular PSPs in natural forests, b) paired emulating natural disturbance (END) plots that are located in fire-origin stands and in stands established after harvest and c) treatment response plots where plots are located in treatment areas and in control areas.

There were nine (9) regular plots established on various soil types in the Highrock Forest Section. Their forest cover included mature black spruce, mature black spruce - jack pine or jack pine - black spruce mixed conifer and conifer dominated mixed woods with a white spruce component.

One pair of END plots was also established in the Highrock Forest Section. One plot was in a fire-origin stand from 1989 fire and the other plot was located in an area harvested in 1984.

Three treatment plots were established in areas to be aerial sprayed with glyphosate. All three plots were on the same soil landscape: Gray Luvisolic soils with clayey parent material. There is one plot in each of Saskatchewan River, Highrock and Nelson River Forest Sections.

Several potential PSPs sites were located for the 2005 season including the control plots for the above treatment plots, a pair of END plots in the Nelson River Forest Section and several regular plots in all three forest sections. Also located were a treatment plot and a control plot on soil landscape Eutric Brunsollic soil with a loamy parent material. The treatment will be aerial spray of glyphosate.

CCFM Criterion 1.0	Conservation of Biological Diversity
CSA SFM Element 1.2	Species Diversity Conserve species diversity by ensuring that habitats for the native species found in the DFA are maintained through time
FML Area No. 2 DFA Value 1.2.1	Continued existence of all animal and plant species native to the DFA within the historical natural range of variability
Objective 1.2.1.1	To maintain wildlife habitat for woodland caribou

Indicator 1.2.1.1.1	Target 1.2.1.1.1
Woodland caribou habitat for the Kississing-Naosap Lakes Herd	Implement forest management strategy for the Kississing-Naosap Lakes woodland caribou range Acceptable Variance: No variance from agreed-to critical habitat area restrictions is acceptable

2004 Report

The Woodland Caribou (Boreal population) is listed as a threatened species under Schedule 1 of the federal Species At Risk Act (SARA).

Currently, a strategy for the Kississing–Naosap herd that was implemented in 1999 as an integral part of harvesting activities occurring in the Naosap Operating Area is in the final stages and the results will continue to be monitored to verify impact, assess strategy objectives and modify future harvest proposals.

Examination of the 2004 cutover records indicates that the habitat preservation proposals for the Kississing-Naosap caribou strategy were completed as per the management strategy with no harvest activities taking place in any of the designated leaves.

In 2004 the Company contributed, as a member of the Northwest Region caribou management team, with direct financial aid and in-kind services of its professional forestry and field operations staff.

The regional management team is collecting data through a GPS collaring program under the Habitat Stewardship Program to identify critical caribou habitat. This will ensure an adequate level of species and habitat preservation/enhancement planning. Going forward the management strategy will be based on the broader landscape planning level rather than micro managing at an operating level. A compatible combined caribou habitat preservation and timber harvesting strategy will be designed into the Annual Operating Plans to accommodate simultaneously for those areas where the caribou herds' range overlap proposed harvest in multiple forest sections and operating areas.

CCFM Criterion 1.0	Conservation of Biological Diversity
CSA SFM Element 1.2	Species Diversity Conserve species diversity by ensuring that habitats for the native species found in the DFA are maintained through time
FML Area No. 2 DFA Value 1.2.1	Continued existence of all animal and plant species native to the DFA within the historical natural range of variability
Objective 1.2.1.2	Ensure species at risk are considered in planning and operations

Indicator 1.2.1.2.1	Target 1.2.1.2.1
Staff awareness of current COSEWIC and MESA lists for DFA	100% of Tolko Woodlands staff to undertake review of COSEWIC and MESA lists annually Acceptable Variance: No variance from 100% complete review by all staff is acceptable

2004 Report

In January 2004 the Inventory Forester accessed the COSEWIC website and obtained a copy of the most recent species assessment results (November 2003). The results were reviewed to identify species occurring in Manitoba. Reference material for the identified species was printed from the COSEWIC and SARA sites. The material was copied and organized into binders for circulation amongst Tolko Woodlands staff. Binders were given to contractor's PSP and survey crews.

In March 2004, the Inventory Forester accessed the Manitoba Conservation (MC) site and obtained a copy of the most recent Manitoba Endangered Species (MESA) list. Reference material for the species was printed from the Manitoba Conservation Data Centre (MBCDC), COSEWIC and SARA websites. The material was copied and organized into binders for circulation amongst Tolko Woodlands staff. Binders were given to contractor's PSP and survey crews. Also in regard to MESA, prior to the field season the Inventory Forester contacted Kent Whaley, MC Northwest Regional Wildlife Manager, to inquire if there would be any changes to the MESA list in the near future. Mr. Whaley said no changes were upcoming for 2004.

In May 2004, the Inventory Forester gave a presentation outlining the Committee on the Status of endangered Wildlife in Canada (COSEWIC), Species at Risk Act (federal) and the Manitoba Endangered Species Act and their provision for protection and offenses/convictions. Also discussed were Tolko species at risk (VTER) list (distributed during meeting), the binders circulating, CSA requirements and the draft corporate strategy for species at risk. A copy of the presentation was given to contractor's supervisors and it, along with the binders, were reviewed by PSP and survey crews.

The circulation of the binders ensured that almost 100% of Tolko's Woodlands staff reviewed the COSEWIC and MESA lists. The exception was one term employee who had left before the documents were circulated to him. To eliminate this problem in the

future, review of the current Company species at risk list will occur during the employee orientation.

Other activities undertaken during 2004 included attendance of the Inventory Forester and the Divisional Forester at a SARA workshop in September and review of Tolko's VTER list, in consultation with the MBCDC.

CCFM Criterion 1.0	Conservation of Biological Diversity
CSA SFM Element 1.2	Species Diversity Conserve species diversity by ensuring that habitats for the native species found in the DFA are maintained through time
FML Area No. 2 DFA Value 1.2.1	Continued existence of all animal and plant species native to the DFA within the historical natural range of variability
Objective 1.2.1.3	Plan and implement forest operations incorporating general wildlife habitat considerations

Indicator 1.2.1.3.1	Target 1.2.1.3.1
Abundance of residual stand structure	At least 5 standing trees (alive and dead) per hectare retained across harvested areas on a forest section basis Acceptable Variance: The measurement of the indicator will be on a forest section basis weighted by block size estimates with some variance expected at the cutblock and operating area level dependent upon considerations such as insect or disease management requirements

2004 Report

12 blocks were surveyed in the Saskatchewan River forest section and the number of standing trees (alive or dead) (hardwood and softwood) ranged from a low of 19 trees per hectare to a high of 101 trees per hectare. The average for the blocks surveyed in this forest section was 56 trees per hectare.

8 blocks were surveyed in the Highrock forest section and the number of standing trees (alive or dead) (hardwood or softwood) ranged from a low of 39 trees per hectare to a high of 99 trees per hectare. The average for all the blocks surveyed in this forest section was 69 trees per hectare.

8 blocks were surveyed in the Nelson River forest section and the number of standing trees (alive or dead) (hardwood or softwood) ranged from a low of 11 trees per hectare to a high of 95 trees per hectare. The average for all blocks surveyed in this forest section was 58 trees per hectare.

CCFM Criterion 1.0	Conservation of Biological Diversity
CSA SFM Element 1.3	Genetic Diversity Conserve genetic diversity by maintaining the variation of genes within species
FML Area No. 2 DFA Value 1.3.1	Maintain native tree species
Objective 1.3.1.1	Sustain genetic diversity through naturally occurring species which are well adapted to local conditions

Indicator 1.3.1.1.1	Target 1.3.1.1.1
Percentage of areas planted with stock from the same or approved government seed zone	100% of planted areas utilize stock from the same or approved seed zone Acceptable Variance: No areas planted shall be from stock not collected from the same seed zone or pre-approved by MC

2004 Report

2004 activities: Both nurseries that supply seedlings to Manitoba Solid Wood and Woodlands were informed of this requirement prior to beginning seedling shipments. The nurseries were asked to ensure that seed zone origin (of the seed lot used in each crop) and the seed zone of the destination site was the same. Tree plant contractors were also informed of the requirement and were provided with the seed zone for all tree planting blocks. Contractors were asked to check all deliveries to ensure that no boxes of trees were used that came from a different seed zone unless authorized. A summary report was produced and posted to the EMS web site at the end of the season. Copies of all load slips are retained showing seed zones of trees and planting areas.

The CSA registration audit conducted October 5-7, 2004 included an OFI-Review as follows: "Ensure that controls are in place at the seed extraction plant and nurseries for accurate origin tracking of Tolko seed and planting stock." Both nurseries (Pineland Forest Nursery and PRT Nurseries) were advised of the finding and asked to produce a standard procedure for ensuring the origin of each seed lot and seedling lot grown for Tolko. Pineland Forest Nursery was asked to include the receipt and processing of cones into seed lots and storage and handling of seed lots in the procedure as they carry out all of the Company's seed processing and storage. Both nurseries were asked to indicate the personnel responsible for each stage of the process. To date a single audit was carried out at PFN. As a result of the audit the nursery has modified its procedures slightly at Tolko's request.

Summary of 2004 compliance: all seedlings planted on the DFA were grown from seed from the correct seed zone. The monitoring process was effective in tracking the single seed lot that was planted by the Company outside the seed zone of origin. That seed lot was planted outside the DFA, however, a request to move the stock outside the seed zone was requested and approved by Manitoba Conservation. Block renewal strategies created in 2004 contained the seed zone prominently and were provided to the tree plant

contractor in advance of the plant. A compliance binder was created and is in the Silviculture Forester's office.

2005 forecast: 2005 will begin random monitoring of the nurseries' seed handling procedures to ensure compliance with the process, and continual improvement of the process by identifying any risks and improving the process. It is expected that monitoring and reporting on compliance will be done using the capabilities of Woodlands The System (WTS) software.

CCFM Criterion 1.0	Conservation of Biological Diversity
CSA SFM Element 1.4	Protected Areas and Sites of Special Biological Significance Respect protected areas identified through government processes. Identify sites of special biological significance within the DFA and implement management strategies appropriate to their long-term maintenance.
FML Area No. 2 DFA Value 1.4.1	Protect unique and important (for biological diversity) features
Objective 1.4.1.1	Plan and implement forestry operations to ensure the protection of unique and important (for biological diversity) features

Indicator 1.4.1.1.1	Target 1.4.1.1.1
Percentage of proposed harvest blocks subject to Pre-harvest Forest Investigation (PHFI) surveys	100% of all proposed first year blocks in the AOP will be subject to a PHFI survey Acceptable Variance: No variance in ensuring that all submitted first year AOP cutblocks receive a PHFI survey. In some cases of contingency requirements that occur subsequent to the AOP approval, the PHFI survey for such blocks may need to be undertaken in conjunction with the submission of the work permit application.

2004 Report

All first year blocks in the 2004 Annual Operating Plan as well as the 2004 Extension were reviewed for completion of PHFI surveys. Please note that both AOP submissions were made prior to the Company's certification to the CSA standard and are being reported on for the purpose of benchmarking and establishment of the reporting process only.

The review was conducted by querying the Planning database for Yes/No responses to the question of whether or not PHFI had been completed (see attached table). In the past, this segment of the Cutblock Information Sheet (CBIS) has often been overlooked and, as the default answer is "N" for No, a lot of "N's" appeared on the query. The PHFI database was then reviewed to confirm the query results and it was found the majority of blocks that the query had identified as not having PHFI done actually had had it completed.

There were 6 cutblocks found without PHFI out of 171 first year cutblocks in the 2004 AOP and Extension. Of the 6 cutblocks without PHFI, 4 were never activated. The other 2 were amended into the 2004 AOP at the request of a quota holder, harvested during the 2004 Operating Year and then included in the Extension Plan to facilitate completion of the operation.

In the future, a standard report will be constructed on the new computerized Woodlands activity tracking system: Linnet's Woodlands – The System (WTS) to monitor this indicator by electronic comparison of the 2 databases (Planning and PHFI) rather than relying on a manually keyed indicator and labour-intensive review.

CCFM Criterion 1.0	Conservation of Biological Diversity
CSA SFM Element 1.4	Protected Areas and Sites of Special Biological Significance Respect protected areas identified through government processes. Identify sites of special biological significance within the DFA and implement management strategies appropriate to their long-term maintenance.
FML Area No. 2 DFA Value 1.4.2	Large areas of forest minimally impacted by humans
Objective 1.4.2.1	Company to participate in the Manitoba Protected Areas and ASIs Initiative led by the Government and respect identified Protected Areas in the DFA

Indicator 1.4.2.1.1	Target 1.4.2.1.1
Protected Areas and ASIs recognized in forest management plans (FMP and AOP)	No harvesting proposed in recognized Protected Areas and ASIs Acceptable Variance: No variance in ensuring that harvesting plans are excluded from within recognized Protected Areas and ASIs is acceptable

2004 Report

Protected areas and ASIs are recognized in Forest Management Plans (FMP) and Annual Operating Plans (AOP).

At the present time actual protected areas have not been established under the program for the DFA, however, a series of areas of Special Interest (ASI) have been established with associated geographical boundaries as interim units for continuing review.

The boundaries of all ASIs are established by Manitoba Conservation and are identified on the AOP maps.

No harvesting has been proposed within the ASI areas. All ASI areas currently in place for the DFA will continue to be indicated on AOP harvest plan maps as areas excluded from consideration for harvest while the Province continues to move forward in the finalization of the status of these areas.

Once an area on the DFA has been confirmed and finalized as being changed from FML area status and open Provincial Crown land ownership to protected area status, such areas would be excluded from harvesting proposals. In the interim, the currently set out ASI areas will continue to be shown on AOP harvest plan maps as excluded from harvest.

Starting with the 2004 cutover records (in 2005 year), an annual review of cutover records produced from aerial photographs and/or satellite imagery of operating areas in the DFA will enable monitoring and reporting on the status of this indicator. Woodlands the System (WTS) developed by Linnet, will be used to monitor this indicator in future years.

CCFM Criterion 2.0	Maintenance and Enhancement of Forest Ecosystem Condition and Productivity
CSA SFM Element 2.1	Forest Ecosystem Resilience Conserve ecosystem resilience by maintaining both ecosystem processes and ecosystem conditions
FML Area No. 2 DFA Value 2.1.1	Renewal of harvested areas
Objective 2.1.1.1	Renewal of harvested areas that result in similar stand conditions expected from natural disturbance

Indicator 2.1.1.1.1	Target 2.1.1.1.1
Forest cover composition of reforested cutover areas	100% of all harvested areas to be reforested to the standards set in the MC Regeneration and Free-to-Grow requirements Acceptable Variance: No variance in meeting MC renewal standards for all areas harvested to meet the Company's requirements within government approved timeframes

2004 Report

Regeneration and Free-to-Grow (FTG) surveys were conducted in 2004 by a contractor using staff licensed by Manitoba Conservation to perform the surveys. 5,986 ha of regeneration survey and 3,682 ha of FTG survey were conducted. Not all the areas eligible for regeneration survey were completed in 2004 due to crew scheduling issues but they will be a priority to complete in 2005.

The regeneration survey data was manually reviewed to determine success in meeting provincial standards, of the 5,986 ha surveyed only 4 ha did not meet the softwood regeneration standard. This 4 ha block (DV-30) was a pine block that was anchor chained in 1998. This block will be assessed for follow up treatment to bring it to the standard by 2007.

The Free-to-Grow survey database was reviewed and a summary of blocks surveyed in 2004 was provided. The following is the summary of the standards achieved.

Free-to-Grow, softwood standard	56 blocks	1,279 ha
Free-to-Grow, mixed wood standard	7 blocks	127 ha
Not Free-to-Grow, softwood	15 blocks	219 ha
Not Free-to-Grow, mixed wood	39 blocks	853 ha
Mixed wood	54 blocks	889 ha
Regen	2 blocks	86 ha
Not Sufficiently Restocked	7 blocks	199 ha
Hardwood	1 block	29 ha
Total survey area		3,682 ha

Approximately one-third of the area has met the softwood FTG standard, with the remainder requiring some action to meet the standard. Generally blocks that fall into the mixed wood FTG, or not FTG mixed wood and softwood categories will be released to reduce the hardwood competition that is holding the block back. 1,246 ha of blocks surveyed in 2004 are identified for herbicide release in the 2005 AOP. Aerial photography of these blocks has been ordered to assist in developing a release strategy. Of the remaining blocks additional field investigation or remote sensing may be required to form a remedial action plan. Those blocks meeting the regen standard should develop in time since height is mainly the limiting factor. NSR blocks will likely require fill planting but the hardwood and mixed wood blocks will possibly require a combination of vegetation management and fill planting. Following block investigations it is likely that a number of blocks will be requested for a special status. Over the last two years there is an increasing feeling among foresters and biologists within MC that there is a need to recognize that some blocks that do not meet the FTG standard as it exists, appear on examination, to be fully stocked with the softwood growing unhindered by the hardwood. These blocks appear to meet multiple resource values in terms of timber production and habitat, and there has been a request to certify these to maintain this. Blocks that are retreated will have an additional survey scheduled to confirm that the treatment was successful.

CCFM Criterion 2.0	Maintenance and Enhancement of Forest Ecosystem Condition and Productivity
CSA SFM Element 2.2	Forest Ecosystem Productivity Conserve forest ecosystem productivity and productive capacity by maintaining ecosystem conditions that are capable of supporting naturally occurring species
FML Area No. 2 DFA Value 2.2.1	Maintain forest ecosystem productivity and productive capacity
Objective 2.2.1.1	Monitor how the characteristics of the forest change over time

Indicator 2.2.1.1.1	Target 2.2.1.1.1
Provision of information on insects and disease to MC for the DFA	Provide information annually to MC on insects and disease compiled from PHFI, Regeneration surveys and Free-to-Grow surveys Acceptable Variance: No variance from undertaking the insect/disease information compilation and communication to MC annually

2004 Report

In 2004 forms for the PHFI, Regeneration and Free-to-grow (FTG) surveys included sections to record occurrences of significant insects and diseases as identified as important by Manitoba Conservation. MC trained Tolko's contractor crews that performed these surveys in identification of these insects and diseases on May 15, 2004. Manuals for all three surveys outline the methodology of recording occurrences of any of the relevant insects and diseases.

The data for the PHFI survey was compiled and submitted, to MC, thirteen times during the 2004 field season. The FTG data was compiled and submitted at the end of the field season. No occurrences were recorded for the regeneration survey.

CCFM Criterion 2.0	Maintenance and Enhancement of Forest Ecosystem Condition and Productivity
CSA SFM Element 2.2	Forest Ecosystem Productivity Conserve forest ecosystem productivity and productive capacity by maintaining ecosystem conditions that are capable of supporting naturally occurring species
FML Area No. 2 DFA Value 2.2.2	Protect current ecosystem conditions
Objective 2.2.2.1	Reduce forest productivity losses due to forest fires

Indicator 2.2.2.1.1	Target 2.2.2.1.1
Company caused forest fires	Limit individual accidental fire incidences to less than 2 hectares in size (productive forest land) Acceptable Variance: Some variance in individual fires may occur with no more than 50 hectares of productive forest land burned over a 5 year period (measured on a rolling 5-year basis)

2004 Report

Each harvesting and site preparation contractor working in fire season completed a mini fire plan detailing the operations mechanical and fire equipment as well as prevention, communications and level of training. The Forest Operation Modification Guideline system continued in 2004 and resulted in 17 days of code 3 (operations restricted between 12-7) and 9 days of code 4 (operations suspended) for one or more operations on the DFA. Contractor call in compliance to the Forest Operation Modification Guideline system was audited for 3 different one-week periods and was found to be good. These results were charted and distributed to Woodlands staff.

The Annual Fire Protection and Suppression Plan was updated and distributed internally and to MC. Meetings were held with MC staff in The Pas and in Thompson to review the plan and discuss the upcoming fire season.

In 2004 a 4-person initial attack fire crew was hired to respond to new fire starts. This fire crew attacked 2 fires in 2004. Preparedness assistance was provide to MC by placing the fire crew and Company helicopter at MC bases for a total of 5 days. Other activities the fire crew conducted included the Emergency Fire Fighter EFF training of 6 Tolko staff, hover exit re-certification of 11 Tolko staff and contractor fire training. 45 contractor personnel representing 8 different contractors and sub contractors received the ½ day Tolko fire-training course qualifying them as trained and capable under the Company Forest Operation Modification Guideline system. Trained and capable operations have prevention, suppression and communications capabilities and meet training requirements. In addition they have completed a mini fire plan. Any operation not meeting one of the criteria would be classed as a limited operation. Trained and capable operations are allowed to work under higher hazard conditions than limited

operators. In addition to fire training these contractors were also instructed on the basics of spill response, recovery and re-mediation. Contractor fire equipment inspections were also conducted during these training sessions. Emergency preparedness testing on the fire SOP was conducted on one logging contractor operation. Additionally a tree plant contractor discovered a wildfire in a planting block, utilized the Fire SOP for reporting purposes, and extinguished the fire.

There were no fires resulting from contractor operations. There was one 6 ha fire resulting from Company debris burning activities that was suppressed and extinguished by the Company initial attack crew. This fire was recorded under the Company's EMS environmental incident report along with a corrective action plan to help minimize another similar event.

CCFM Criterion 2.0	Maintenance and Enhancement of Forest Ecosystem Condition and Productivity
CSA SFM Element 2.2	Forest Ecosystem Productivity Conserve forest ecosystem productivity and productive capacity by maintaining ecosystem conditions that are capable of supporting naturally occurring species
FML Area No. 2 DFA Value 2.2.2	Protect current ecosystem conditions
Objective 2.2.2.2	Reduce forest productivity losses due to dwarf mistletoe infestations

Indicator 2.2.2.2.1	Target 2.2.2.2.1
Re-curing mistletoe infections in regenerating stands	Prevent re-infection of regenerating jack pine stands to achieve Free-to-Grow certification status Acceptable Variance: No variance from all regenerating jack pine stands achieving Free-to-Grow certification status

2004 Report

In 2004 mistletoe management took 3 main methods of control. Eastern dwarf mistletoe was identified in block OV-1 prior to silviculture activities and inspected. As a result the renewal prescription for that block included a buffer of resistant species (in this case pine) around the edge of the cutover, and removal of residual susceptible species (spruce) in portions of the block where mistletoe had been observed. Both control activities were conducted by the tree plant contractor in May. A number of older blocks were treated for mistletoe infection in the fall, these blocks were DN-14, 15, 17, 19 and 21, and TD 14 and 17. Control activities included girdling of larger trees and cutting of smaller trees within harvested blocks. If larger patches of residual pine were left for wildlife values the crew would remove trees on the fringe to reduce the effect of the area. Finally the renewal strategy for RW-4 was developed to control the spread of Lodgepole pine dwarf mistletoe in that block in 2005. Total area for blocks treated in 2004 was 539 ha for Lodgepole pine dwarf mistletoe and 42 ha for eastern dwarf mistletoe.

Survey databases were produced for forest health information and provided to MC through the course of the year. The 2004 forest health summary from Free-to-Grow survey blocks did not indicate the presence of either Lodgepole pine or eastern dwarf mistletoes in the data summary. Unfortunately block summaries were not produced by the regeneration survey contractor in 2004; this was reviewed with the contractor and surveyors in 2005 to ensure it does not happen again. Data bases submitted by J. Morton and copies reside on directory I:\SHARE-WOODLANDS\MC Health Data.

Future work. It is expected that the PHFI and other survey data will be linked to the blocks in the WTS program. This will enable identifying blocks with a history of mistletoe in advance, providing better opportunities to plan treatments and ensure surveyors conduct thorough follow-up inspections. Although the SFM target is for

mistletoe on jack pine, in practice the Company is treating for eastern dwarf mistletoe on spruce as well with a complimentary program. Scheduling of follow-up treatments can be done in WTS to allow for monitoring and scheduled sanitation work.

CCFM Criterion 3.0	Conservation of Soil and Water Resources
CSA SFM Element 3.1	Soil Quality and Quantity Conserve soil resources by maintaining soil quality and quantity
FML Area No. 2 DFA Value 3.1.1	Healthy soils that will sustain forest-related ecosystems
Objective 3.1.1.1	Maintain soil productive ability, extent and variety

Indicator 3.1.1.1.1	Target 3.1.1.1 (A)
Extent and duration of in-block seasonal roads and landings	Limit extent of in-block roads and bulldozed landings and campsites to less than 10% of total harvested area each year Acceptable Variance: No variance from the target of less than 10% of total harvested area to be occupied by in-block roads and bulldozed landings and campsites on a forest section and DFA basis. Variation on an individual cutblock basis is expected to occur, particularly related to the placement of any campsites within a given cutblock area.
	Target 3.1.1.1 (B)
	Reduce duration of in-block roads and bulldozed landings and campsites by addressing these areas within the renewal implementation program for each cutblock Acceptable Variance: No variance from inclusion of landings and seasonal in-block roads for renewal activities and regeneration success assessment within cutblock. Regeneration of any given in-block road may vary, however all such areas will be included within applicable cutblocks for determination of block renewal success.

2004 Report

Target 3.1.1.1.1 (A)

To limit the extent of in-block roads and bulldozed landings and campsites to less than 10% of the total harvested area each year.

The basis for the target is to minimize the effects of soil disturbance associated with timber harvesting.

The means of achieving the objective and target are through supervisor and crew awareness and training (FMPOP Operators Guide). The direction of contractors by the Tolko Area Supervisor through EMS project tailgate checklist and operations inspections forms.

The monitoring and measurement:

The 2003 cut over records were selected because they are the most complete at this time. Portions of the 2004 cutover areas will not be available in photo form until later in the summer of 2005.

Each individual 2003 cutover was digitized to calculate the total cut block area. The length of in-block roads were measured and recorded in kilometers. The standard width of 5 meters was used for each in-block road, and the area covered by in-block roads was calculated. The percentage of in-block roads to total cut block area was determined by forest section as follows:

Nelson River	– 3.24%
Highrock	- 3.64%
Saskatchewan River	- 2.20%

In future, WTS (Woodlands The System) program developed by Linnet will be used to monitor this indicator.

Target 3.1.1.1.1 (B)

In 2004 block renewal strategies were prepared for each block identifying, among other things, how roads and landings were to be treated. The general operating guideline was that on roads that were not to be used in future years that planting would take place if conditions to allow seedling growth were available. In practice winter access blocks had sufficient organic material and un-compacted soils to allow planting. Treatments for debris piles were also developed and landings and burned piles were planted. Where debris piles were not treated by planting time they were left for follow-up the next year. A number of blocks planted before 2004 were completed by planting where the burn piles or wood piles had been. Block renewal strategies for natural regeneration sites called for anchor chaining across roads to encourage re-vegetation on the roads unless the roads were needed for future access. Camp sites were not specifically discussed on the renewal strategies or on the survey requirements, simply because they are basically indistinguishable from landings to field crews and treated the same.

Survey crews were notified to include roads and landings where plots fell on them.

Future years. Survey crews have been reminded to include roads and landings in the surveys if plots randomly fall there. Renewal strategies continue to include road treatments and blocks are being fill planted to ensure that area under burn piles or log piles is recovered where possible.

CCFM Criterion 3.0	Conservation of Soil and Water Resources
CSA SFM Element 3.1	Soil Quality and Quantity Conserve soil resources by maintaining soil quality and quantity
FML Area No. 2 DFA Value 3.1.1	Healthy soils that will sustain forest-related ecosystems
Objective 3.1.1.1	Maintain soil productive ability, extent and variety

Indicator 3.1.1.1.2	Target 3.1.1.1.2
Adherence to work permit conditions and Tolko SOPs guiding Tolko and contractor forestry operations on the DFA including those pertaining to rutting, protection of non-timber values, and for operations adjacent to watercourses including buffers and the handling and storage of fuels, lubricants and herbicides	No major non-compliance's with government work permit conditions for Tolko and contractor operations (major non-compliances are those that result in issuing of a "Summary Procedure" or an "Indictment Notification" by MC) Acceptable Variance: No variance from the target of no major non-compliances related to work permit conditions is acceptable. There may be some instances where minor non-compliances may occur and be documented for follow-up action within the EMS or through communication of from MC via the MC Timber Harvest Inspection Report.

2004 Report

Through a process of Contractor Orientation Records, Project Tailgate Meetings, Operations Inspections and Soil Disturbance Awareness Workshops, the Company ensures that contractors comply with government work permits and Tolko Standard Operating Procedures.

In 2004 there were no violations of warnings from the government regarding soil.

CCFM Criterion 3.0	Conservation of Soil and Water Resources
CSA SFM Element 3.1	Soil Quality and Quantity Conserve soil resources by maintaining soil quality and quantity
FML Area No. 2 DFA Value 3.1.1	Healthy soils that will sustain forest-related ecosystems
Objective 3.1.1.1	Maintain soil productive ability, extent and variety

Indicator 3.1.1.1.3	Target 3.1.1.1.3
Amount of area in all-weather roads (Categories 1 & 2) in place at any given time	Total amount of Company Category 1 and 2 all-weather roadbed across the DFA not to exceed half of one percent (0.5%) of the total productive forest landbase Acceptable Variance: No variance is acceptable in limiting Company all-weather roadbed to not exceed half of one percent (0.5%)

2004 Report

This indicator is a measure of Tolko’s CSA-SFM objective to maintain the ability, extent and variety of productive soils across Tolko’s DFA.

New infrastructure development is balanced against the decommissioning of all-weather road networks no longer required to support forestry activities.

The current measure of all-weather roads existing on the FMLA has been documented in Tolko’s Road Ledger. This dynamic inventory will serve to measure and report on the status of this indicator. Annual cutover photography will be used to modify and verify the existing infrastructure inventory through new construction additions; or decommissioned road deletions. Monitoring of the status of the Roads Ledger will be via Woodlands The System (WTS).

The specifications for the class of road included in the inventory allows for a design width of 5 to 7 meters which could potentially produce a footprint of up to 9 meters. The base line inventory survey of Class I and II roads for CSA-SFM reporting purposes is divided into either “Active” or “Decommissioned” (1). Active roads will include all applicable roads that do not have “Decommissioned” “documentation on file.

The length of a given road multiplied by the given constant 9m width of the road produces an area expressed in hectares (2).

The percentage of productive landbase occupied is calculated as the total area of productive forested land (3,722,608 ha) divided into the area occupied by the active roads as listed in Tolko’s Road Ledger.

The end of 2004 closed a number of older roads. The total length currently listed, in Tolko’s Road Ledger, as interim decommissioned is 136.30 km.

Using the larger 9m criteria, as a constant for all measured roads the current total area occupied by all of Tolko's all-weather road infrastructures (current baseline inventory) is 0.0266 % of the productive forest land base.

The area occupied by interim decommissioned:

1. At this very early stage of implementation the closed roads enter a 2-year status of interim decommissioning. At the two-year anniversary, providing all permit conditions are satisfactory, the Province will issue documentation advising that the road is no longer a Tolko responsibility. The road will be considered at that time to be fully decommissioned and removed from Tolko's Road ledger file.
2. The baseline inventory is inclusive of all Class I and II roads built since the various predecessors of Tolko have operated. Some of these roads have been abandoned to regular use for periods exceeding twenty years. As such, many have regenerated naturally and availability for travel has been eliminated or severely restricted. With the overgrown condition of these older roads their width is considerably less (in some cases the effective width was only 1 to 1.5 meters wide sufficient only for quad or snow machine type ATV access). However, until a road is officially reviewed and documented as decommissioned with the Province the area it occupies, as an "Active" status category road will be calculated as having a width of 9meters.

CCFM Criterion 3.0	Conservation of Soil and Water Resources
CSA SFM Element 3.1	Soil Quality and Quantity Conserve soil resources by maintaining soil quality and quantity
FML Area No. 2 DFA Value 3.1.1	Healthy soils that will sustain forest-related ecosystems
Objective 3.1.1.1	Maintain soil productive ability, extent and variety

Indicator 3.1.1.1.4	Target 3.1.1.1.4
Forest cover composition of reforested cutover areas	100% of all harvested areas to be reforested to the standards set in the MC Regeneration and Free-to-Grow requirements Acceptable Variance: No variance in meeting MC renewal standards for all areas harvested to meet the Company's requirements within government approved timeframes

2004 Report

Regeneration and Free-to-Grow (FTG) surveys were conducted in 2004 by a contractor using staff licensed by Manitoba Conservation to perform the surveys. 5,986 ha of regeneration survey and 3,682 ha of FTG survey were conducted. Not all the areas eligible for regeneration survey were completed in 2004 due to crew scheduling issues but they will be a priority to complete in 2005.

The regeneration survey data was manually reviewed to determine success in meeting provincial standards, of the 5,986 ha surveyed only 4 ha did not meet the softwood regeneration standard. This 4 ha block (DV-30) was a pine block that was anchor chained in 1998. This block will be assessed for follow-up treatment to bring it to the standard by 2007.

The Free-to-Grow survey database was reviewed and a summary of blocks surveyed in 2004 was provided. The following is the summary of the standards achieved.

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Not Sufficiently Restocked	7 blocks	199 ha
Hardwood	1 block	29 ha
Total survey area		3,682 ha

Approximately one-third of the area has met the softwood FTG standard, with the remainder requiring some action to meet the standard. Generally blocks that fall into the mixed wood FTG, or not FTG mixed wood and softwood categories will be released to reduce the hardwood competition that is holding the block back. 1,246 ha of blocks

surveyed in 2004 are identified for herbicide release in the 2005 AOP. Aerial photography of these blocks has been ordered to assist in developing a release strategy. Of the remaining blocks additional field investigation or remote sensing may be required to form a remedial action plan. Those blocks meeting the regen standard should develop in time since height is mainly the limiting factor. NSR blocks will likely require fill planting but the hardwood and mixed wood blocks will possibly require a combination of vegetation management and fill planting. Following block investigations it is likely that a number of blocks will be requested for a special status. Over the last two years there has been an increasing feeling among foresters and biologists within MC that there is a need to recognize that some blocks that do not meet the FTG standard as it exists, appear on examination, to be fully stocked with the softwood growing unhindered by the hardwood. These blocks appear to meet multiple resource values in terms of timber production and habitat, and there has been a request to certify these to maintain this. Blocks that are retreated will have an additional survey scheduled to confirm that the treatment was successful.

CCFM Criterion 3.0	Conservation of Soil and Water Resources
CSA SFM Element 3.1	Soil Quality and Quantity Conserve soil resources by maintaining soil quality and quantity
FML Area No. 2 DFA Value 3.1.1	Healthy soils that will sustain forest-related ecosystems
Objective 3.1.1.1	Maintain soil productive ability, extent and variety

Indicator 3.1.1.1.5	Target 3.1.1.1.5
Amount and distribution of coarse woody debris	Implement a research project to assess and document levels of coarse woody debris retention for various covertypes and logging systems on the DFA Acceptable Variance: No variance in conducting the research project for the DFA. No targets are set for woody debris levels for the DFA at this time, and as such no variances for coarse woody debris levels are applicable at this time.

2004 Report

In 2004 the Company completed coarse woody debris surveys in relation to a delimiting study. Two blocks were surveyed in 2003 and a third block in 2004. The methodology was an adaptation of surveys conducted in British Columbia and Saskatchewan.

Preliminary data analysis was presented to Manitoba Conservation. Two main points were discussed during the presentation: that the volume per hectare values seemed high and that fine woody debris should be considered. Phil Keenan (Manitoba Conservation) and Tolko's Inventory Forester, agreed to evaluate the volume per hectare values in the spring of 2005.

The Inventory Forester discussed with Brad Sutherland (FERIC) and Ken Van Rees (U of S) coarse woody debris and soil quality. Literature review on coarse woody debris and soil quality continued in 2004.

The Company committed funding for coarse woody debris surveys to be undertaken on harvest blocks in 2005.

CCFM Criterion 3.0	Conservation of Soil and Water Resources
CSA SFM Element 3.2	Water Quality and Quantity Conserve water resources by maintaining soil quality and quantity
FML Area No. 2 DFA Value 3.2.1	Healthy watersheds
Objective 3.2.1.1	Maintain water quality and quantity as a result of woodlands operations

Indicator 3.2.1.1.1	Target 3.2.1.1.1
Adherence to work permit conditions and Tolko SOPs guiding Tolko and contractor forestry operations on the DFA including those pertaining to rutting, protection of non-timber values, and for operations adjacent to watercourses including buffers and the handling and storage of fuels, lubricants and herbicides	No major non-compliances with government work permit conditions for Tolko and contractor operations (major non-compliances are those that result in issuing of a “Summary Procedure” or an “Indictment Notification” by MC) Acceptable Variance: No variance from the target of no major non-compliances related to work permit conditions is acceptable. There may be some instances where minor non-compliances may occur and be documented for follow-up action within the EMS or through communication of from MC via the MC Timber Harvest Inspection Report.

2004 Report

Through a process of Contractor Orientation Records, Project Tailgate Meetings, Operations Inspections and Soil Disturbance Awareness Workshops the Company ensures that contractors comply with government work permits and Tolko Standard Operating Procedures.

In 2004 there were no violations of warnings from the government regarding water.

CCFM Criterion 3.0	Conservation of Soil and Water Resources
CSA SFM Element 3.2	Water Quality and Quantity Conserve water resources by maintaining soil quality and quantity
FML Area No. 2 DFA Value 3.2.1	Healthy watersheds
Objective 3.2.1.1	Maintain water quality and quantity as a result of woodlands operations

Indicator 3.2.1.1.2	Target 3.2.1.1.2
Condition of stream crossings and roadways in terms of erosion control	Construct and maintain stream crossings and roadways in a condition that prevents siltation and blockage that results in serious impacts to water quality of rivers, streams and headwaters Acceptable Variance: No variance in maintenance of crossings or roadways to prevent siltation and blockage that results in serious impacts to commercial or recreational fish-bearing watercourses

2004 Report

This indicator is a measure of Tolko’s objective of maintaining water quality as a result of woodlands operations. This indicator measures the results achieved during the construction and maintenance of roads and water course crossings. Efforts to minimize erosion, siltation, or flooding impacts will avoid serious detrimental damage to water quality on the DFA. Tolko has developed a Road Inventory and Inspection Program, which will allow for due diligence and monitoring of the conditions present in Tolko’s road, drainage, and stream crossing infrastructure. A survey is completed a minimum of annually across the DFA for all-applicable roads culverts and bridges.

The inspection protocol also provides for more frequent “mini-surveys” by Tolko staff as they travel the more active roads during the normal course of their activities. The purpose of the survey is to document potential negative impacts in the areas of fish, fish habitat, safety for all road users and other detrimental impacts on water or soil quantity/quality as committed to under Tolko’s EMS and CSA-Sustained Forest Management certifications.

The survey is completed using the Road Inventory Checklist that allows for evaluating factors such as road and bridge running surfaces, road subgrade and bridge supporting structures, road shoulder and ditch for erosion or erosion control adequateness, culvert installations, or drainage impacts that reduce the amount of productive forest land. The Inspection Checklist allows for all necessary information for any particular road, including recording a unique location ID with GPS way point and kilometer marker for any substandard condition found during the survey. If the level of risk to the environment or safety to road users is high then an immediate plan to remedy the

situation is implemented. Normally, once completed the annual survey is summarized and submitted to the Area Superintendents for their review.

The Area Superintendent drafts either a Corrective Action Plan (CAP) for (impending risk) or a maintenance schedule (for less imminent situations) to correct deficiencies documented during the survey. The options are dependant upon the level of risk under the three basic criteria (potential for H.A.D.D. on fish bearing water, safety for travelers using the road, or water/soil/productive land base damage under CSA-SFM commitments).

An individual file has been established for each road and all surveys or activities completed under any CAP or maintenance projects to correct deficiencies documented during the survey are filed in one central location. Woodlands the System (WTS) will monitor the activity for this indicator.

Reporting for any non-compliance will be through Tolko's EMS programming - specifically an Environmental Incident Report (EIR). The Process Improvement Form (PIF) will be used to document cases of non-conformance or a potential non-compliance (near miss).

Annual Contractor Orientation meetings will communicate Tolko's expectations for adherence to work permit and Standard Operating Procedures (SOPs) regarding construction of roads and crossings.

Project Tailgate forms will document the review/discussions on each specific project re permit conditions, SOP implementation, and applicable guidelines. Ongoing discussion and inspections (Operations Inspection Form) will monitor contractor progress in meeting requirements and objectives.

In-house training for contractors will be implemented in the Spring 2005 by providing awareness and distributing documents such as Forest Management Planning and Operating practices - Operators Guide (FMPOP); Road Maintenance Guidelines; and Stream Crossing Guidelines for protection of fish/fish habitat.

In 2004 the Road Inspection program documented conditions on 72 individual roads across the DFA. Individual surveys were filed in the appropriate road file and an electronic way point database was compiled for reference during subsequent surveys. The survey results were submitted to the Area Superintendent for their CAP.

Area North replaced a medium risk culvert installation on North Jonas Road. Area South completed three activities. One a medium-high risk culvert failure on Naosap Road was repaired. The second, a preventative maintenance activity at a high risk stream crossing on Kississing River (Duval Road). The third was an intermediate maintenance project on two medium-risk and one high-risk water crossings also on Duval Road.

Other low risk situations are scheduled for rectification during 2005 construction season.

CCFM Criterion 3.0	Conservation of Soil and Water Resources
CSA SFM Element 3.2	Water Quality and Quantity Conserve water resources by maintaining soil quality and quantity
FML Area No. 2 DFA Value 3.2.1	Healthy watersheds
Objective 3.2.1.2	Work towards an understanding of watershed health impacts/influences of forest operations

Indicator 3.2.1.2.1	Target 3.2.1.2.1
Reporting on evolution of watersheds research specific to forestry planning and operations	Report on research annually Acceptable Variance: No variance in conducting research project for the DFA. No targets are set for forest management at the watersheds level for the DFA at this time, and as such, no variances are applicable at present.

2004 Report

Three watershed research programs were viewed in 2004.

The Manitoba Model Forest – Watershed Management Planning Tools Project: This project is evaluating what factors influence water quality in lakes on the Manitoba Tembec Forest Management Licence. The program will provide tools, such as computer models, that will provide resource managers guidance on how to manage watersheds to ensure water quality objectives are met and the spatial scale at which watershed management should occur.

Ducks Unlimited – Western Boreal Forest – The Pasquia Project: Ducks Unlimited along with a number of partners has been working in the Pasquia and Porcupine Hills, Saskatchewan River Delta and the Duck Mountains to generate a satellite based habitat classification, conduct water bird inventories and collect water chemistry and traditional land use information. The information will be used by industry and government to make improved land management decisions and to develop a detailed conservation strategy.

Virginia Hills, Alberta Forest Watershed and Riparian Disturbance (FORWARD): This project is modeling process that links disturbance to quantity and quality of water leaving watersheds.

CCFM Criterion 4.0	Forest Ecosystem Contributions to Global Ecological Cycles
CSA SFM Element 4.1	Carbon Uptake and Storage Maintain the processes that take carbon from the atmosphere and store it in forest ecosystems
FML Area No. 2 DFA Value 4.1.1	Healthy forest making a positive contribution to global carbon balance
Objective 4.1.1.1	Increase carbon storage

Indicator 4.1.1.1.1	Target 4.1.1.1 (A)
Amount of area in all-weather roads (Categories 1 & 2) in place at any given time	Over the next 5 years the Company will decommission 150 kilometres of older logging roads no longer required to reduce backlog road area to allow re-vegetation Acceptable Variance: Variance from the target of 150 kilometres over a 5 year period may occur dependant upon availability of old roads for decommissioning once other resource and public uses are considered and MC approval is obtained
	Target 4.1.1.1 (B)
	Total amount of Company Category 1 and 2 all-weather roadbed across the DFA not to exceed half of one percent (0.5%) of the total productive forest landbase Acceptable Variance: No variance is acceptable in limiting Company all-weather roadbed to not exceed half of one percent (0.5%)

2004 Report

This indicator is a measure of Tolko's CSA-SFM objective to increase carbon storage. By the end of the next five years Tolko commits to decommissioning 150 km of old road network so that the area they occupy may return to a status of productive forest landbase Target (A).

Concurrently, new infrastructure development will be balanced with reductions by decommissioning roads no longer required for active forestry purposes. This balance will limit the extent of Tolko's active road network (categories I and II) to not exceed 0.05% of the productive forest landbase –Target (B).

The current measure of all-weather roads existing on the FMLA has been documented in Tolko's Road Ledger. This dynamic inventory will serve to measure and report on the status of this indicator.

Annual cutover photography will be used to modify and verify the existing infrastructure inventory through new construction additions; or decommissioned road deletions. Monitoring of the status of the Roads Ledger will be via Woodlands The System (WTS).

The percentage of productive landbase occupied is calculated as the total area of productive forested land (3,722,608 ha) divided into the area occupied by the active roads as listed in Tolko's Road Ledger.

TARGET (A) The end of 2004 closed a number of older roads. The total length currently listed, in Tolko's Road Ledger, as interim decommissioned is 136.30 km. It is anticipated that by the end of the next 5 years, the current Interim Decommissioned roads will have achieved decommissioned status and contribute to achieving the target level of 150.0 km. of Class I and II roads decommissioned.

TARGET (B) The current total area occupied by all of Tolko's active all-weather road infrastructure (current baseline inventory) is 0.0265 % of the productive forest land base.

CCFM Criterion 4.0	Forest Ecosystems Contributions to Global Ecological Cycles
CSA SFM Element 4.1	Carbon Uptake and Storage Maintain the processes that take carbon from the atmosphere and store it in forest ecosystems
FML Area No. 2 DFA Value 4.1.1	Healthy forest making a positive contribution to global carbon balance
Objective 4.1.1.1	Increase carbon storage

Indicator 4.1.1.1.2	Target 4.1.1.1.2
Harvest blocks are regenerated as soon as possible	100% of all harvest blocks, for which the Company has renewal responsibility, receive a forest renewal treatment within 3 years of harvest Acceptable Variance: Minor variances may occur in scheduling of initial renewal treatments for small areas to be combined for treatment or for areas with limited access. No areas will be left beyond 5 years without receiving initial prescribed treatment.

2004 Report

A summary report (CSA 41112 compliance 2004.doc) was produced and posted on the CSA-SFM portion of the web site in 2004. All blocks harvested in 2001 were cross referenced with the silviculture records and a list of untreated blocks was generated. Seven blocks were identified as not having silviculture completed at that time. One of these blocks was found to be Manitoba Conservation's responsibility to renew. Three of the blocks were identified to be natural regeneration blocks with no treatment necessary and were updated in the records to show that as the 'treatment'. The three remaining blocks had had initial silviculture (site preparation) but were not completely planted and were scheduled to be completed in 2005.

There were no blocks identified in 2004 that did not receive a renewal treatment within 3 years of harvest and less than 2% of the area harvested that year had not had basic silviculture completed in the same period.

Future plans: With implementation of Woodlands the System (WTS) it is expected that tracking this indicator will be straightforward and it will become routine to screen for outstanding blocks during silviculture planning.

CCFM Criterion 4.0	Forest Ecosystems Contributions to Global Ecological Cycles
CSA SFM Element 4.1	Carbon Uptake and Storage Maintain the processes that take carbon from the atmosphere and store it in forest ecosystems
FML Area No. 2 DFA Value 4.1.1	Healthy forest making a positive contribution to global carbon balance
Objective 4.1.1.1	Increase carbon storage

Indicator 4.1.1.1.3	Target 4.1.1.1.3
Forest cover composition of reforested cutover areas	100% of all harvested areas to be reforested to the standards set in the MC Regeneration and Free-to-Grow requirements Acceptable Variance: No variance in meeting MC renewal standards for all areas harvested to meet the Company's requirements within government approved timeframes

2004 Report

Regeneration and Free-to-Grow (FTG) surveys were conducted in 2004 by a contractor using staff licensed by Manitoba Conservation to perform the surveys. 5,986 ha of regeneration survey and 3,682 ha of FTG survey were conducted. Not all the areas eligible for regeneration survey were completed in 2004 due to crew scheduling issues but they will be a priority to complete in 2005.

The regeneration survey data was manually reviewed to determine success in meeting provincial standards, of the 5,986 ha surveyed only 4 ha did not meet the softwood regeneration standard. This 4 ha block (DV-30) was a pine block that was anchor chained in 1998. This block will be assessed for follow-up treatment to bring it to the standard by 2007.

The Free-to-Grow survey database was reviewed and a summary of blocks surveyed in 2004 was provided. The following is the summary of the standards achieved.

Free-to-Grow, softwood standard	56 blocks	1,279 ha
Free-to-Grow, mixed wood standard	7 blocks	127 ha
Not Free-to-Grow, softwood	15 blocks	219 ha
Not Free-to-Grow, mixed wood	39 blocks	853 ha
Mixed wood	54 blocks	889 ha
Regen	2 blocks	86 ha
Not Sufficiently Restocked	7 blocks	199 ha
Hardwood	1 block	29 ha
Total survey area		3,682 ha

Approximately one-third of the area has met the softwood FTG standard, with the remainder requiring some action to meet the standard. Generally blocks that fall into the mixed wood FTG, or not FTG mixed wood and softwood categories will be released to reduce the hardwood competition that is holding the block back. 1,246 ha of blocks surveyed in 2004 are identified for herbicide release in the 2005 AOP. Aerial photography of these blocks has been ordered to assist in developing a release strategy. Of the remaining blocks additional field investigation or remote sensing may be required to form a remedial action plan. Those blocks meeting the regen standard should develop in time since height is mainly the limiting factor. NSR blocks will likely require fill planting but the hardwood and mixed wood blocks will possibly require a combination of vegetation management and fill planting. Following block investigations it is likely that a number of blocks will be requested for a special status. Over the last two years there is an increasing feeling among foresters and biologists within MC that there is a need to recognize that some blocks that do not meet the FTG standard as it exists appear on examination to be fully stocked with the softwood growing unhindered by the hardwood. These blocks appear to meet multiple resource values in terms of timber production and habitat, and there has been a request to certify these to maintain this. Blocks that are retreated will have an additional survey scheduled to confirm that the treatment was successful.

CCFM Criterion 4.0	Forest Ecosystems Contributions to Global Ecological Cycles
CSA SFM Element 4.1	Carbon Uptake and Storage Maintain the processes that take carbon from the atmosphere and store it in forest ecosystems
FML Area No. 2 DFA Value 4.1.2	Reduce the use of fossil fuels
Objective 4.1.2.1	Minimize the amount of greenhouse gases produced to transport wood to the mills

Indicator 4.1.2.1.1	Target 4.1.2.1.1
Percentage of wood hauled by truck versus train	50% of the sawlogs required by The Pas mills from the DFA will be transported by train provided that rail opportunities are in place (averaged for the previous 2 year period) Acceptable Variance: No variance in the percentage of sawlogs to be delivered by train is acceptable provided that sufficient rail opportunities are retained in place across the DFA to offer this haul option from areas being operated in the DFA (averaged for the previous 2 year period)

2004 Report

In 2000 Tolko Industries began a capital investment program to construct several rail spurs to reduce the amount of wood delivered to the sawmill in The Pas and reduce delivered log costs. Presently the Company has rail spurs at Pipun, Jungle Lake, Massan and Radar that are operated year round to deliver wood to The Pas.

This indicator outlines that 50% of the sawlogs required by The Pas mills from the DFA will be transported by train provided that rail opportunities are in place.

Detailed below are the rail delivery summaries for 2003 and 2004.

	<u>2003</u>	<u>2004</u>
Sawlogs Delivered from DFA	674,859 m ³	695,126 m ³
Total Sawlog Delivered by Rail	352,245 m ³	443,336 m ³
Percentage of Sawlog by Rail	52.2%	63.8%

CCFM Criterion 4.0	Forest Ecosystems Contributions to Global Ecological Cycles
CSA SFM Element 4.1	Carbon Uptake and Storage Maintain the processes that take carbon from the atmosphere and store it in forest ecosystems
FML Area No. 2 DFA Value 4.1.2	Reduce the use of fossil fuels
Objective 4.1.2.1	Minimize the amount of greenhouse gases produced to transport wood to the mills

Indicator 4.1.2.1.2	Target 4.1.2.1.2
Level of awareness of Woodlands staff of effects of unnecessary vehicle idling	Increase level of awareness of Woodlands staff of the importance of reducing unnecessary vehicle idling Acceptable Variance: No variance in undertaking steps to increase the level of awareness of Woodlands staff of the importance of reducing unnecessary vehicle idling

2004 Report

An article on the effects of carbon emission caused by excessive idling of vehicles was sent to all Woodlands staff on September 13, 2004, via e-mail. At the Woodlands safety meeting of January 10, 2005, a handout was distributed for the discussion of the effects of vehicle idling. A painted metal sign indicating an idle free zone is posted at the Weigh Scale Office, Tolko Millsite, to remind staff not to leave their vehicles idling.

CCFM Criterion 4.0	Forest Ecosystem Contributions to Global Ecological Cycles
CSA SFM Element 4.2	Forest Land Conversion Protect forestlands from deforestation or conversion to non-forests
FML Area No. 2 DFA Value 4.2.1	Maintain the forested area of the DFA
Objective 4.2.1.1	Minimize the conversion of Crown forested to non-forested land

Indicator 4.2.1.1.1	Target 4.2.1.1.1
Amount of area in all-weather roads (Categories 1 & 2) in place at any given time	Total amount of Company Category 1 and 2 all-weather roadbed across the DFA not to exceed half of one percent (0.5%) of the total productive forest landbase Acceptable Variance: No variance is acceptable in limiting Company all-weather roadbed to not exceed half of one percent (0.5%)

2004 Report

This indicator is a measure of Tolko’s CSA-SFM objective to minimize the conversion of Crown forested land to non-forested land.

New infrastructure development will be balanced with reductions from decommissioning roads no longer required for active forestry purposes. This balance will limit the extent of Tolko’s Active road network (Categories I and II) to not exceed 0.05% of the productive forest landbase across the DFA.

The baseline measure of all-weather roads existing on the FMLA has been documented into Tolko’s Road Ledger. Additions and deletions to the net road areas occurring in 2004 and for subsequent years will also be documented.

This dynamic inventory will be monitored through Tolko’s GIS departments Woodlands The System (WTS). A summary report on the status of this indicator will be submitted as part of the SFM Annual report.

2004 Construction

- A total of 13.5 km of new Class II all-weather road was constructed in 2004
- Nelson River Forest Section: Bruneau Lake Road Km 0.0 to km.6
- Saskatchewan River Forest Section: Okaw Road Km 18.0 to km 25.5
- Highrock Forest Section: No all-weather road construction.
- Mountain Forest Section: No all-weather road construction.
- Interlake Forest Section: No all-weather road construction.

2004 Road Decommissioning:

- A total of 136.60 km of Class I and II road were closed during 2004
- Nelson River Forest Section 13.2 km of Class I and II roads decommissioned. *
- Saskatchewan R. Forest Section: 87.1 km of Class I and II roads decommissioned. *
- Highrock Forest Section: 36.3 km of Class I and II roads decommissioned. *
- Mountain Forest Section: No all-weather road decommissioned.
- Interlake Forest Section: No all-weather road decommissioned.

* Due to the protocol for decommissioning roads agreed to between Manitoba Conservation and Tolko, a Class I and II road closed by Tolko will hold an Interim Decommissioned designation for the two years immediately following the closure project. If at the end of the 2-year interim period the permit conditions required on the authorizing work permits are functioning as intended, Manitoba Conservation will issue documentation relieving Tolko of continued responsibility for the road and the road will be removed from the Active Roads Ledger.

CCFM Criterion 4.0	Forest Ecosystem Contributions to Global Ecological Cycles
CSA SFM Element 4.2	Forest Land Conversion Protect forestlands from deforestation or conversion to non-forests
FML Area No. 2 DFA Value 4.2.1	Maintain the forested area of the DFA
Objective 4.2.1.1	Minimize the conversion of Crown forested to non-forested land

Indicator 4.2.1.1.2	Target 4.2.1.1.2
Forest cover composition of reforested cutover areas	100% of all harvested areas to be reforested to the standards set in the MC Regeneration and Free-to-Grow requirements Acceptable Variance: No variance in meeting MC renewal standards for all areas harvested to meet the Company's requirements within government approved timeframes

2004 Report

Regeneration and Free-to-Grow (FTG) surveys were conducted in 2004 by a contractor using staff licensed by Manitoba Conservation to perform the surveys. 5,986 ha of regeneration survey and 3,682 ha of FTG survey were conducted. Not all the areas eligible for regeneration survey were completed in 2004 due to crew scheduling issues but they will be a priority to complete in 2005.

The regeneration survey data was manually reviewed to determine success in meeting provincial standards, of the 5,986 ha surveyed only 4 ha did not meet the softwood regeneration standard. This 4 ha block (DV-30) was a pine block that was anchor chained in 1998. This block will be assessed for follow-up treatment to bring it to the standard by 2007.

The Free-to-Grow survey database was reviewed and a summary of blocks surveyed in 2004 was provided. The following is the summary of the standards achieved.

Free-to-Grow, softwood standard	56 blocks	1,279 ha
Free-to-Grow, mixed wood standard	7 blocks	127 ha
Not Free-to-Grow, softwood	15 blocks	219 ha
Not Free-to-Grow, mixed wood	39 blocks	853 ha
Mixed wood	54 blocks	889 ha
Regen	2 blocks	86 ha
Not Sufficiently Restocked	7 blocks	199 ha
Hardwood	1 block	29 ha
Total survey area		3,682 ha

Approximately one-third of the area has met the softwood FTG standard, with the remainder requiring some action to meet the standard. Generally blocks that fall into the mixed wood FTG, or not FTG mixed wood and softwood categories will be released to reduce the hardwood competition that is holding the block back. 1,246 ha of blocks

surveyed in 2004 are identified for herbicide release in the 2005 AOP. Aerial photography of these blocks has been ordered to assist in developing a release strategy. Of the remaining blocks additional field investigation or remote sensing may be required to form a remedial action plan. Those blocks meeting the regen standard should develop in time since height is mainly the limiting factor. NSR blocks will likely require fill planting but the hardwood and mixed wood blocks will possibly require a combination of vegetation management and fill planting. Following block investigations it is likely that a number of blocks will be requested for a special status. Over the last two years there is an increasing feeling among foresters and biologists within MC that there is a need to recognize that some blocks that do not meet the FTG standard as it exists appear on examination to be fully stocked with the softwood growing unhindered by the hardwood. These blocks appear to meet multiple resource values in terms of timber production and habitat, and there has been a request to certify these to maintain this. Blocks that are retreated will have an additional survey scheduled to confirm that the treatment was successful.

CCFM Criterion 5.0	Multiple Benefits to Society
CSA SFM Element 5.1	Timber and Non-timber Benefits Manage the forest sustainability to produce an acceptable and feasible mix of both timber and non-timber benefits
FML Area No. 2 DFA Value 5.1.1	To supply industrial wood needs, while maintaining forest ecosystems sustainability
Objective 5.1.1.1	To provide a continuous, predicable and sustainable supply of timber consistent with existing wood supply commitments

Indicator 5.1.1.1.1	Target 5.1.1.1.1
Harvest levels in cubic metres as compared to the AAC	Harvest levels to remain within Government approved AAC Acceptable Variance: No variance in harvest levels outside of MC approved AAC levels based upon 5-year cut control periods is acceptable. Variation in any given year may occur. MC approved AAC levels may include accommodation of underutilized AAC from the previous period.

2004 Report

AAC

The AAC for each of the 21 FMU's located on the DFA were not exceeded during the current cut control period of January 1, 1999 to May 31, 2005. The AAC for two FMU's (53 & 60) was exceeded during the 2004/05 operating year. These overcuts were approved by Manitoba Conservation.

PSP

In 2004 fourteen permanent sample plots (PSPs) were established. These plots can be categorized as: a) regular PSPs in natural forests, b) paired emulating natural disturbance (END) plots that are located in fire-origin stands and in stands established after harvest and c) treatment response plots where plots are located in treatment areas and in control areas.

There were nine (9) regular plots established on various soil types in the Highrock Forest Section. Their forest cover included mature black spruce, mature black spruce - jack pine or jack pine - black spruce mixed conifer and conifer dominated mixed woods with a white spruce component.

One pair of END plots was also established in the Highrock Forest Section. One plot was in a fire-origin stand from 1989 fire and the other plot was located in an area harvested in 1984.

Three treatment plots were established in areas to be aerial sprayed with glyphosate. All three plots were on the same soil landscape: Gray Luvisolic soils with clayey parent material. There is one plot in each of Saskatchewan River, Highrock and Nelson River Forest Sections.

Several potential PSPs sites were located for the 2005 season including the control plots for the above treatment plots, a pair of END plots in the Nelson River Forest Section and several regular plots in all three forest sections. Also located were a treatment plot and a control plot on soil landscape Eutric Brunsollic soil with a loamy parent material. The treatment will be aerial spray of glyphosate.

CCFM Criterion 5.0	Multiple Benefits to Society
CSA SFM Element 5.1	Timber and Non-timber Benefits Manage the forest sustainability to produce an acceptable and feasible mix of both timber and non-timber benefits
FML Area No. 2 DFA Value 5.1.1	To supply industrial wood needs, while maintaining forest ecosystems sustainability
Objective 5.1.1.2	Minimize impacts upon non-timber ecosystem values

Indicator 5.1.1.2.1	Target 5.1.1.2.1
Adherence to work permit conditions and Tolko SOPs guiding Tolko and contractor forestry operations on the DFA including those pertaining to rutting, protection of non-timber values, and for operations adjacent to watercourses including buffers and the handling and storage of fuels, lubricants and herbicides	No major non-compliances with government work permit conditions for Tolko and contractor operations (major non-compliances are those that result in issuing of a “Summary Procedure” or an “Indictment Notification” by MC) Acceptable Variance: No variance from the target of no major non-compliances related to work permit conditions is acceptable. There may be some instances where minor non-compliances may occur and be documented for follow-up action within the EMS or through communication of from MC via the MC Timber Harvest Inspection Report.

2004 Report

Through a process of Contractor Orientation Records, Project Tailgate Meetings and Operations Inspection reports the Company ensures that contractors comply with government work permits and Tolko Standard Operating Procedures.

In 2004 there were 2 non-compliance’s regarding work permit conditions from Manitoba Conservation:

1. GU-13 Fire from burning debris piles
2. OL-41A High Stumps

Both items were recorded on the Tolko EMS site as environmental incident report and a corrective action plan developed to help minimize future occurrences.

CCFM Criterion 5.0	Multiple Benefits to Society
CSA SFM Element 5.1	Timber and Non-timber Benefits Manage the forest sustainability to produce an acceptable and feasible mix of both timber and non-timber benefits
FML Area No. 2 DFA Value 5.1.2	Balance of economic, social and environmental benefits of the forest without comprising sustainability
Objective 5.1.2.1	To replace the area just harvested with composition similar to pre-harvest

Indicator 5.1.2.1.1	Target 5.1.2.1.1
Harvest blocks are regenerated as soon as possible	100% of all harvest blocks, for which the Company has renewal responsibility, receive a forest renewal treatment within 3 years of harvest Acceptable Variance: Minor variances may occur in scheduling of initial renewal treatments for small areas to be combined for treatment or for areas with limited access. No areas will be left beyond 5 years without receiving initial prescribed treatment.

2004 Report

A summary report (CSA 41112 compliance 2004.doc) was produced and posted on the CSA-SFM portion of the web site in 2004. All blocks harvested in 2001 were cross referenced with the silviculture records and a list of untreated blocks was generated. Seven blocks were identified as not having silviculture completed at that time. One of these blocks was found to be Manitoba Conservation's responsibility to renew. Three of the blocks were identified to be natural regeneration blocks with no treatment necessary and were updated in the records to show that as the 'treatment'. The three remaining blocks had had initial silviculture (site preparation) but were not completely planted and were scheduled to be completed in 2005.

There were no blocks identified in 2004 that did not receive a renewal treatment within 3 years of harvest and less than 2% of the area harvested that year had not had basic silviculture completed in the same period.

Future plans: With implementation of Woodlands the System (WTS) it is expected that tracking this indicator will be straightforward and it will become routine to screen for outstanding blocks during silviculture planning.

CCFM Criterion 5.0	Multiple Benefits to Society
CSA SFM Element 5.1	Timber and Non-timber Benefits Manage the forest sustainability to produce an acceptable and feasible mix of both timber and non-timber benefits
FML Area No. 2 DFA Value 5.1.2	Balance of economic, social and environmental benefits of the forest without compromising sustainability
Objective 5.1.2.1	To replace the area just harvested with composition similar to pre-harvest

Indicator 5.1.2.1.2	Target 5.1.2.1.2
Forest cover composition of reforested cutover areas	100% of all harvested areas to be reforested to the standards set in the MC Regeneration and Free-to-Grow requirements Acceptable Variance: No variance in meeting MC renewal standards for all areas harvested to meet the Company's requirements within government approved timeframes

2004 Report

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Total survey area		<u>3,682 ha</u>

Approximately one-third of the area has met the softwood FTG standard, with the remainder requiring some action to meet the standard. Generally blocks that fall into the

mixed wood FTG, or not FTG mixed wood and softwood categories will be released to reduce the hardwood competition that is holding the block back. 1,246 ha of blocks surveyed in 2004 are identified for herbicide release in the 2005 AOP. Aerial photography of these blocks has been ordered to assist in developing a release strategy. Of the remaining blocks additional field investigation or remote sensing may be required to form a remedial action plan. Those blocks meeting the regen standard should develop in time since height is mainly the limiting factor. NSR blocks will likely require fill planting but the hardwood and mixed wood blocks will possibly require a combination of vegetation management and fill planting. Following block investigations it is likely that a number of blocks will be requested for a special status. Over the last two years there is an increasing feeling among foresters and biologists within MC that there is a need to recognize that some blocks that do not meet the FTG standard as it exists appear on examination to be fully stocked with the softwood growing unhindered by the hardwood. These blocks appear to meet multiple resource values in terms of timber production and habitat, and there has been a request to certify these to maintain this. Blocks that are retreated will have an additional survey scheduled to confirm that the treatment was successful.

CCFM Criterion 5.0	Multiple Benefits to Society
CSA SFM Element 5.1	Timber and Non-timber Benefits Manage the forest sustainably to produce an acceptable and feasible mix of both timber and non-timber benefits
FML Area No. 2 DFA Value 5.1.3	Multiple use of the forest, including the consideration of cultural values, recreational uses, tourism, and other non-timber resources
Objective 5.1.3.1	Forestry operations will be planned and implemented in a manner that considers the diversity of social, economic, cultural and environmental values on the forest and use of localized knowledge of local species

Indicator 5.1.3.1.1	Target 5.1.3.1.1
Documentation of public consultation process followed, communities consulted, concerns raised and strategies/mitigation developed to address concerns of local Aboriginal and other communities and non-timber resource users within forest management plans for the DFA (FMP, AOP, Road Management Plans)	Forest management planning will take into account Aboriginal and other Community and stakeholder interests and concerns for development of SFM Plans, FMPs, AOPs and Road Management Plans Acceptable Variance: No variance is acceptable in making reasonable efforts to incorporate the interests and concerns of communities and stakeholders in the planning process. Although differences in view may occur, all concerns brought forward and the response of the Company will be documented.

2004 Report

During 2004, the Company continued to take a pro-active role in communicating planned harvest and forest renewal activities to the general public. In May, prior to the 2004 Annual Plan Extension being submitted to the Manitoba Government, the Company undertook a series of public meetings. These meetings included most communities across the FML Area in proximity to proposed forest management activities and in Winnipeg. The purpose of these meetings was to provide an opportunity for those people who have an interest in the Company's operations to learn more about the proposed activities in each of the operating districts. These meetings were also designed to provide the public with an opportunity to discuss their interests and concerns with Company representatives, prior to the 2004 Annual Plan Extension being submitted to the MC for approval.

Notices (750) of these meetings were sent to community groups, First Nations and special interests groups, as well as being advertised in various local newspapers, radio announcements, community bulletin boards and local TV channel in Snow Lake and Nelson House. The meetings followed an open-house format with participants encouraged to review the preliminary information on upcoming plans as displayed on maps and photographs.

In 1996, the Company established a Forest Resource Advisory Committee (FRAC) to provide an additional opportunity for ongoing public involvement in forest management activities within the FML Area. FRAC membership is comprised of a broad spectrum of interest groups, stakeholders and individuals from across FML Area that has an interest in forest management activities. The objectives of the FRAC are to provide an opportunity for the Company to learn the diverse interests, values, and concerns of Committee members and to provide an opportunity for members to comment on forest management activities in FML Area No. 2. The FRAC met on two occasions in 2004.

Also two community based FRAC's were in operation in 2004 – Snow Lake and Sherridon. The Snow Lake FRAC which started in 2002 held two meetings while the Sherridon FRAC initiated in late 2004 held two meetings. The community based FRAC's were initiated to address local concerns with pending harvest plans near the communities. A representative from each of the community FRAC's sits on the FML Area FRAC. Meeting minutes from all FRAC meetings are distributed to committee members plus a copy is placed on the Company's web site.

Tolko staff also undertook a variety of communication activities with special interest groups, other resource users, community groups, local governments, schools and other stakeholders to communicate forest management activities and practices as well as general information on our business activities that was of interest to the public. These activities not only provided an opportunity to provide information on Tolko's operations, but also afforded opportunities for stakeholders to ask questions and express their interest and concerns to Tolko representatives.

As recommendation from the SFM Plan, Tolko created a Public Concerns Table where concerns and/or questions raised by the public could be placed to provide a central file for review of issues that had been raised and the responses to those issues.

In 2004 the main issues and concerns raised were primarily in relation to harvest amendment proposals near rural communities. Other questions and concerns were related to general operating practices, decommissioning and closing of roads, employment opportunities, etc. At each FRAC meeting the most recent public concerns table is distributed to committee members.

CCFM Criterion 5.0	Multiple Benefits to Society
CSA SFM Element 5.1	Timber and Non-timber Benefits Manage the forest sustainably to produce an acceptable and feasible mix of both timber and non-timber benefits
FML Area No. 2 DFA Value 5.1.4	Respect for the diverse aspirations, interests and plans of other users of the forests
Objective 5.1.4.1	Include heritage and cultural resource values in the planning process

Indicator 5.1.4.1.1	Target 5.1.4.1.1
Proposed all-weather roads reviewed for the potential for the occurrence of heritage resources	100% of new all-weather roads to be reviewed for the potential for the presence of heritage resources Acceptable Variance: No variance in ensuring that all new all-weather roads be screened for the presence of heritage resources is acceptable

2004 Report

The basis for the target is covered in the FMPOPs and the EMS-SOP-WL032 with the premise that main road access development is the most likely activity to lead to the discovery of heritage resources.

The legal requirements are the Heritage Resources Act and Tolko’s Environmental Act, licence 2302-E.

The means of achieving the objective and target is through various means. The IRMT review of the FMP, AOP, and road access management plans for category 1 and 2 Main Forestry Access Roads. Public consultation at the AOP Open House meetings in various Communities throughout the licence area, assist to identify values.

An archaeologist review of all new planned all-weather roads and revisions of the FMPOPs to include use of archaeologist services for all-weather road review.

In 2004, only one main all-weather road was reviewed by an Archaeologist, David McLeod, of Northern Lights Heritage Services Inc., who did an assessment of the extension of the Buckingham Lake Road. The extension of the Buckingham Lake Road is a category 2, all-weather road from kilometer 22 to kilometer 34, east of Thompson, Manitoba. The investigations were conducted on October 6, 2004 and three areas have been identified as possibly being of Heritage significance. A report titled “Heritage Resource Impact Assessment: Buckingham Lake Road Extension (Heritage Permit No. A57-04)” was prepared for Tolko Industries Ltd. by Northern Lights Heritage Services Inc. A copy of this report is on file in The Pas, Manitoba and the Thompson, Manitoba Tolko offices.

CCFM Criterion 5.0	Multiple Benefits to Society
CSA SFM Element 5.1	Timber and Non-timber Benefits Manage the forest sustainably to produce an acceptable and feasible mix of both timber and non-timber benefits
FML Area No. 2 DFA Value 5.1.5	Large areas of forest minimally impacted by humans
Objective 5.1.5.1	Company to participate in the Manitoba Protected Areas Initiative led by the Government and respect identified Protected Areas and ASIs in the DFA

Indicator 5.1.5.1.1	Target 5.1.5.1.1
Protected Areas and ASIs recognized in forest management plans (FMP and AOP)	No harvesting proposed in recognized Protected Areas and ASIs Acceptable Variance: No variance in ensuring that harvesting plans are excluded from within recognized Protected Areas and ASIs is acceptable

2004 Report

Protected areas and ASIs are recognized in Forest Management Plans (FMP) and Annual Operating Plans (AOP).

At the present time actual protected areas have not been established under the program for the DFA, however, a series of areas of Special Interest (ASI) have been established with associated geographical boundaries as interim units for continuing review.

The boundaries of all ASIs are established by Manitoba Conservation and are identified on the AOP maps.

No harvesting has been proposed within the ASI areas. All ASI areas currently in place for the DFA will continue to be indicated on AOP harvest plan maps as areas excluded from consideration for harvest while the Province continues to move forward in the finalization of the status of these areas.

Once an area on the DFA has been confirmed and finalized as being changed from FML area status and open Provincial Crown land ownership to protected area status, such areas would be excluded from harvesting proposals. In the interim, the currently set out ASI areas will continue to be shown on AOP harvest plan maps as excluded from harvest.

Starting with the 2004 cutover records (in 2005 year), an annual review of cutover records produced from aerial photographs and/or satellite imagery of operating areas in the DFA will enable monitoring and reporting on the status of this indicator. Woodlands the System (WTS) developed by Linnet, will be used to monitor this indicator in future years.

CCFM Criterion 5.0	Multiple Benefits to Society
CSA SFM Element 5.2	Communities and Sustainability Contribute to the sustainability of communities by providing diverse opportunities to derive benefits from forests and to participate in their use and management
FML Area No. 2 DFA Value 5.2.1	The long-term viability of local forest-based communities and businesses
Objective 5.2.1.1	To continue to provide opportunities for local employment in resources sectors that are dependent on the use of forest resources

Indicator 5.2.1.1.1	Target 5.2.1.1.1
Extent of local involvement in forest operations in the DFA	To have at least 75% of the financial value of signed contracts to be conducted on the DFA, held by local contractors Acceptable Variance: No variance in having 75% of the value of signed contracts to be conducted in the DFA, held by local contractors, provided that local contractor's are cost competitive and possess the capabilities and capacity to conduct the work

2004 Report

During 2004, 61 signed contracts on the DFA were acted on. The value of the contracts on the DFA was \$28,406,283.

Of the 61 contracts, 55 were with resident contractors. Resident contractors held 90% of the 2004 contracts. The total value of the contracts held by resident contractors was \$23,573,066, which represents 83% of the total value paid by Tolko to contractors in 2004.

The remaining six contracts were with non-resident contractors. Non-resident contractors held 10% of the 2004 contracts. The total value of the contracts held by non-resident contractors was \$4,833,217, which represents 17% of the total value paid by Tolko to contractors in 2004.

The target to have at least 75% of the financial value of signed contracts to be conducted on the DFA to be held by local contractors was met in 2004. Resident contractors received 83% of the financial value while non-resident contractors received 17% of the financial value.

Tolko Industries Ltd. took initiative to encourage local contractors through advertisements in local newspapers on the DFA for harvesting and delivering softwood to Tolko from the Bess Lake area, north of Sherridon. The successful contractor was a local contractor from The Pas.

CCFM Criterion 5.0	Multiple Benefits to Society
CSA SFM Element 5.2	Communities and Sustainability Contribute to the sustainability of communities by providing diverse opportunities to derive benefits from forests and to participate in their use and management
FML Area No. 2 DFA Value 5.2.1	The long-term viability of local forest-based communities and businesses
Objective 5.2.1.2	Endeavor to understand and take into account implications of forest planning on other users of the forest

Indicator 5.2.1.2.1	Target 5.2.1.2.1
Documentation of public consultation process followed, communities consulted, concerns raised and strategies/mitigation developed to address concerns of local Aboriginal and other communities and non-timber resource users within forest management plans for the DFA (FMP, AOP, Road Management Plans)	Forest management planning will take into account Aboriginal and other Community and stakeholder interests and concerns for development of SFM Plans, FMPs, AOPs and Road Management Plans Acceptable Variance: No variance is acceptable in making reasonable efforts to incorporate the interests and concerns of communities and stakeholders in the planning process. Although differences in view may occur, all concerns brought forward and the response of the Company will be documented.

2004 Report

During 2004, the Company continued to take a pro-active role in communicating planned harvest and forest renewal activities to the general public. In May, prior to the 2004 Annual Plan Extension being submitted to the Manitoba Government, the Company undertook a series of public meetings. These meetings included most communities across the FML Area in proximity to proposed forest management activities and in Winnipeg. The purpose of these meetings was to provide an opportunity for those people who have an interest in the Company's operations to learn more about the proposed activities in each of the operating districts. These meetings were also designed to provide the public with an opportunity to discuss their interests and concerns with Company representatives, prior to the 2004 Annual Plan Extension being submitted to the MC for approval.

Notices (750) of these meetings were sent to community groups, First Nations and special interests groups, as well as being advertised in various local newspapers, radio announcements, community bulletin boards and local TV channel in Snow Lake and Nelson House. The meetings followed an open-house format with participants

encouraged to review the preliminary information on upcoming plans as displayed on maps and photographs.

In 1996, the Company established a Forest Resource Advisory Committee (FRAC) to provide an additional opportunity for ongoing public involvement in forest management activities within the FML Area. FRAC membership is comprised of a broad spectrum of interest groups, stakeholders and individuals from across FML Area that has an interest in forest management activities. The objectives of the FRAC are to provide an opportunity for the Company to learn the diverse interests, values, and concerns of Committee members and to provide an opportunity for members to comment on forest management activities in FML Area No. 2. The FRAC met on two occasions in 2004.

Also two community based FRAC's were in operation in 2004 – Snow Lake and Sherridon. The Snow Lake FRAC which started in 2002 held two meetings while the Sherridon FRAC initiated in late 2004 held two meetings. The community based FRAC's were initiated to address local concerns with pending harvest plans near the communities. A representative from each of the community FRAC's sits on the FML Area FRAC. Meeting minutes from all FRAC meetings are distributed to committee members plus a copy is placed on the Company's web site.

Tolko staff also undertook a variety of communication activities with special interest groups, other resource users, community groups, local governments, schools and other stakeholders to communicate forest management activities and practices as well as general information on our business activities that was of interest to the public. These activities not only provided an opportunity to provide information on Tolko's operations, but also afforded opportunities for stakeholders to ask questions and express their interest and concerns to Tolko representatives.

As recommendation from the SFM Plan, Tolko created a Public Concerns Table where concerns and/or questions raised by the public could be placed to provide a central file for review of issues that had been raised and the responses to those issues.

In 2004 the main issues and concerns raised were primarily in relation to harvest amendment proposals near rural communities. Other questions and concerns were related to general operating practices, decommissioning and closing of roads, employment opportunities, etc. At each FRAC meeting the most recent public concerns table is distributed to committee members.

CCFM Criterion 5.0	Multiple Benefits to Society
CSA SFM Element 5.2	Communities and Sustainability Contribute to the sustainability of communities by providing diverse opportunities to derive benefits from forests and to participate in their use and management
FML Area No. 2 DFA Value 5.2.2	Public safety
Objective 5.2.2.1	Increase public safety

Indicator 5.2.2.1.1	Target 5.2.2.1.1
Programs in place related to public safety during truck haul operations on DFA Company roads	Ensure the Haul Safety Program is in place annually for operators hauling on DFA Company roads Acceptable Variance: No variance in ensuring the Haul Safety Program is in place annually for wood delivery to the Company on DFA Company roads

2004 Report

A draft version of the Truck Haul Safety Program was distributed to all stump-to-dump and hauling contractors on January 28, 2005. The purpose of the draft document was to introduce the program to our contractors and solicit feedback from them before the final version is distributed at the spring 2005 contractor meeting.

CCFM Criterion 5.0	Multiple Benefits to Society
CSA SFM Element 5.3	Fair Distribution of Benefits and Costs Promote the fair distribution of timber and non-timber benefits and costs
FML Area No. 2 DFA Value 5.3.1	Local sense of ownership and sharing in the benefits of the forest industry
Objective 5.3.1.1	To continue to have local presence in the forest industry through the ongoing participation of local contractors in the DFA

Indicator 5.3.1.1.1	Target 5.3.1.1.1
Extent of local involvement in forest operations in the DFA	To have at least 75% of the financial value of signed contracts to be conducted on the DFA, held by local contractors Acceptable Variance: No variance in having 75% of the value of signed contracts to be conducted in the DFA, held by local contractors, provided that local contractor's are cost competitive and possess the capabilities and capacity to conduct the work

2004 Report

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The target to have at least 75% of the financial value of signed contracts to be conducted on the DFA to be held by local contractors was met in 2004. Resident contractors received 83% of the financial value while non-resident contractors received 17% of the financial value.

CCFM Criterion 5.0	Multiple Benefits to Society
CSA SFM Element 5.3	Fair Distribution of Benefits and Costs Promote the fair distribution of timber and non-timber benefits and costs
FML Area No. 2 DFA Value 5.3.2	Successful sustained forestry operations on the DFA
Objective 5.3.2.1	Maintain competitive stable short-term and long-term wood costs

Indicator 5.3.2.1.1	Target 5.3.2.1.1
Cost per cubic metre of delivered wood	Strive to achieve delivered wood costs that meet the average costs for regional forest industry of comparable operating circumstances Acceptable Variance: The Company will strive to achieve delivered wood costs within 10% of the average costs for comparable regional forest industry benchmarks

2004 Report

Several initiatives were taken to reduce delivered wood costs in 2004.

1. Non-economic harvest areas were removed from the 2004 log flow
2. Trial conducted for expandable trailer bunks on off highway truck haul
3. All overhead costs were reviewed and several programs were reduced
4. 2 central tire inflation (CTI) truck configurations were purchased and on contract
5. Full Time Positions reduced as a result of attrition

The 2004 WaterhouseCoopers Forest Industry Study ranked Tolko Industries Ltd. (Manitoba) 6th out of 9 for Eastern Canadian operations. Tolko Manitoba was 3.4% above the average cost for this study group.

CCFM Criterion 6.0	Accepting Society's Responsibility for Sustainable Development
CSA SFM Element 6.1	Aboriginal and Treaty Rights Recognize and respect Aboriginal and treaty rights
FML Area No. 2 DFA Value 6.1.1	Respect Aboriginal and treaty rights
Objective 6.1.1.1	Raise awareness of Aboriginal and treaty rights

Indicator 6.1.1.1.1	Target 6.1.1.1.1
Percentage of Woodlands staff who have participated in Aboriginal, treaty rights and cultural awareness sessions	100% of all Woodlands staff will receive Aboriginal, treaty rights and cultural awareness training Acceptable Variance: No variance is acceptable

2004 Report

The basis for the target is for the Company to improve and maintain the level of aboriginal, treaty rights and cultural awareness among staff.

Several individuals have been contacted regarding participation in an Aboriginal Awareness Workshop for all Tolko Manitoba Woodlands staff. Initially Don Aikman met with Erwin Keller, in the spring of 2004, but unless the training was done immediately Erwin was not available. Jack Lavallee contacted Mr. John Martin an Elder from Moose Lake, Manitoba. John Martin works with the University College of the North in The Pas, Manitoba and he was also recommended by a representative of Manitoba Hydro, in presentations and workshops they had for their employees on aboriginal awareness training.

Ron Beardy, from Cross Lake, Manitoba was also contacted to see if he would be available to give a one hour or so presentation on an aspect of aboriginal awareness to Tolko Manitoba Woodlands staff. Ron Beardy said he would be willing to pick out a topic on historical, cultural or other aspect of aboriginal awareness.

Don Aikman spoke with Bob Yatkowsky, of Tembec in Pine Falls, Manitoba to see what direction they were taking in the presentation of aboriginal awareness to their Woodlands staff. Bob suggested we keep it local, pick individuals within Tolko's licence area and keep the politics out of the workshop.

Jack Lavallee also contacted Ms. Maria Moore, of the Swampy Cree Tribal Council in The Pas, Manitoba. Maria said she would not be available for a workshop on June 1, 2005, but she suggested Mr. John Martin.

Don Aikman spoke with Ron Spence in Nelson House, Manitoba and he suggested I contact Mr. Jeff Hunter. Ron added if we only wanted an hour or so presentation then he would need to know what aspect of aboriginal cultural awareness the other speakers were presenting.

The aboriginal, treaty rights and cultural awareness training for all Tolko Manitoba Woodlands staff is tentatively scheduled for June 1, 2005 in an all-day workshop.

CCFM Criterion 6.0	Accepting Society's Responsibility for Sustainable Development
CSA SFM Element 6.1	Aboriginal and Treaty Rights Recognize and respect Aboriginal and treaty rights
FML Area No. 2 DFA Value 6.1.1	Respect Aboriginal and treaty rights
Objective 6.1.1.2	Seek Aboriginal input to FMP and AOP plans

Indicator 6.1.1.2.1	Target 6.1.1.2.1
Documentation of public consultation process followed, communities consulted, concerns raised and strategies/mitigation developed to address concerns of local Aboriginal and other communities and non-timber resource users within forest management plans for the DFA (FMP, AOP, Road Management Plans)	Forest management planning will take into account Aboriginal and other Community and stakeholder interests and concerns for development of SFM Plans, FMPs, AOPs and Road Management Plans Acceptable Variance: No variance is acceptable in making reasonable efforts to incorporate the interests and concerns of communities and stakeholders in the planning process. Although differences in view may occur, all concerns brought forward and the response of the Company will be documented.

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Notices (750) of these meetings were sent to community groups, First Nations and special interests groups, as well as being advertised in various local newspapers, radio announcements, community bulletin boards and local TV channel in Snow Lake and Nelson House. The meetings followed an open-house format with participants encouraged to review the preliminary information on upcoming plans as displayed on maps and photographs.

In 1996, the Company established a Forest Resource Advisory Committee (FRAC) to provide an additional opportunity for ongoing public involvement in forest management activities within FML Area. The FRAC membership is comprised of a broad spectrum of interest groups, stakeholders and individuals from across FML Area that has an interest in forest management activities. The objectives of the FRAC are to provide an opportunity for the Company to learn the diverse interests, values, and concerns of Committee members and to provide an opportunity for members to comment on forest management activities in FML Area No. 2. The FRAC met on two occasions in 2004. The FRAC met on two occasions in 2004.

Also two community based FRAC's were in operation in 2004 – Snow Lake and Sherridon. The Snow Lake FRAC, which started in 2002, held two meetings in 2004 while the Sherridon FRAC initiated in late 2004, held two meetings. The community based FRAC's were initiated to address local concerns with pending harvest plans scheduled near the communities. A representative from each of the community FRAC's sits on the FML Area FRAC. Meeting minutes from all FRAC meetings are distributed to committee members plus a copy is placed on the Company's web site.

Tolko staff also undertook a variety of communication activities with special interest groups, other resource users, community groups, local governments, schools and other stakeholders to communicate forest management activities and practices as well as general information on our business activities that was of interest to the public. These activities not only provided an opportunity to provide information on Tolko's operations, but also afforded opportunities for stakeholders to ask questions and express their interest and concerns to Tolko representatives.

As recommendation from the SFM Plan, Tolko created a Public Concerns Table where concerns and/or questions raised by the public could be placed to provide a central file for review of issues that had been raised and the responses to those issues.

In 2004 the main issues and concerns raised were primarily in relation to harvest amendment proposals near rural communities. Other questions and concerns were related to general operating practices, decommissioning and closing of roads, employment opportunities, etc. At each FRAC meeting the most recent public concerns table is distributed to committee members.

CCFM Criterion 6.0	Accepting Society's Responsibility for Sustainable Development
CSA SFM Element 6.2	Respect for Aboriginal Forest Values, Knowledge, and Users Respect traditional Aboriginal forest values and uses identified through the Aboriginal input process
FML Area No. 2 DFA Value 6.2.1	Respect Aboriginal traditional knowledge
Objective 6.2.1.1	Incorporating traditional knowledge into the development of forest operating plans

Indicator 6.2.1.1.1	Target 6.2.1.1.1
Documentation of public consultation process followed, communities consulted, concerns raised and strategies/mitigation developed to address concerns of local Aboriginal and other communities and non-timber resource users within forest management plans for the DFA (FMP, AOP, Road Management Plans)	Forest management planning will take into account Aboriginal and other Community and stakeholder interests and concerns for development of SFM Plans, FMPs, AOPs and Road Management Plans Acceptable Variance: No variance is acceptable in making reasonable efforts to incorporate the interests and concerns of communities and stakeholders in the planning process. Although differences in view may occur, all concerns brought forward and the response of the Company will be documented.

2004 Report

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Tolko staff also undertook a variety of communication activities with special interest groups, other resource users, community groups, local governments, schools and other stakeholders to communicate forest management activities and practices as well as general information on our business activities that was of interest to the public. These activities not only provided an opportunity to provide information on Tolko's operations, but also afforded opportunities for stakeholders to ask questions and express their interest and concerns to Tolko representatives.

As recommendation from the SFM Plan, Tolko created a Public Concerns Table where concerns and/or questions raised by the public could be placed to provide a central file for review of issues that had been raised and the responses to those issues.

In 2004 the main issues and concerns raised were primarily in relation to harvest amendment proposals near rural communities. Other questions and concerns were related to general operating practices, decommissioning and closing of roads, employment opportunities, etc. At each FRAC meeting the most recent public concerns table is distributed to committee members.

CCFM Criterion 6.0	Accepting Society's Responsibility for Sustainable Development
CSA SFM Element 6.3	Public Participation Demonstrate that the SFM public participation process is designed and functioning to the satisfaction of the participants
FML Area No. 2 DFA Value 6.3.1	Local public satisfaction with the planning process
Objective 6.3.1.1	To obtain local broad public satisfaction with the planning process

Indicator 6.3.1.1.1	Target 6.3.1.1.1
Degree of satisfaction with the public participation component of the planning process	The majority of the SFM Committee members responding to the survey indicate being satisfied (or better) with the public participation process of the SFM Committee Acceptable Variance: No variance is acceptable

2004 Report

Tolko Manitoba commissioned a survey in order to gauge the level of satisfaction of participants with the public involvement process for SFM on the Defined Forest Area (DFA) and to provide the opportunity for participants to offer input on strengths and weakness of the current process. The survey was conducted as two components to measure the satisfaction of the membership of the SFM Committee and the interested parties who were included in mail-outs of information on the Company's SFM development process.

GeoSpatial Consulting was contracted by Tolko to conduct the survey, to compile the results and to provide a summary of the findings to the Company for its use and for the information of the SFM Committee. The summary of the responses for the satisfaction component of the survey indicated the satisfaction level of the SFM Committee members to be very high with 91% of the responses being satisfied. The results indicate satisfaction of committee members generally with the process utilized to involve the public in the development and implement the SFM Plan.

The Company also requested the satisfaction of the interested parties who received information on the CSA SFM process. The overall satisfaction indicated by interested parties was 57%.

Overall, the level of satisfaction with the public participation process was described as good by the participants of the survey. The operation of the committee, support by the Company, the openness of the proceedings and the contribution of the process to decision-making in planning for the DFA were generally rated as being satisfactory. A desire to promote further First Nation participation and to continue to build upon the current representation on the committee to expand the values represented are noted as areas that should be strengthened. A copy of consultant's report was distributed to committee members.

CCFM Criterion 6.0	Accepting Society's Responsibility for Sustainable Development
CSA SFM Element 6.4	Information for Decision Making Provide relevant information to interested parties to support their involvement in the public participation process, and increase knowledge of ecosystem processes and human interactions with forest ecosystems
FML Area No. 2 DFA Value 6.4.1	Continuous improvement of sustainable forest management practices on the DFA
Objective 6.4.1.1	Continual increase in the knowledge ecosystem processes and impacts of management practices

Indicator 6.4.1.1.1	Target 6.4.1.1.1
Training and awareness opportunities for contractors on the DFA	Provide annual information sessions to 100% of all contractors on the DFA Acceptable Variance: It is recognized that for a number of circumstances some contractors may be unable to attend a given meeting, however there shall be no variance in ensuring that all contractors will either attend the meeting or will be briefed by a Tolko Woodlands representative and provided with a Summary Report on the meeting including minutes and all handout materials.

2004 Report

In 2004 Contractor Meetings were held as follows:

General Meeting - April 24, 2004. 26 contractors were invited - 12 attended. Items discussed included log quality, Environment Management System (EMS), previous winter's safety incidents, hauling safety program, presentations by Workplace Safety and Health and Manitoba Transportation and Government Services.

Contractor EMS Awareness Training. Three sessions were held in different communities in late May 2004. Work Place Safety and Health and EMS Awareness Training were discussed at the meetings. Meetings were held in Cranberry portage (21 people attended), The Pas (71 people attended) and Grand Rapids (22 people attended).

CSA Contractor Meeting – September 17, 2004. 32 contractors were invited, 27 attended. Those contractors who did not attend the meeting were sent the minutes of the meeting.

CCFM Criterion 6.0	Accepting Society's Responsibility for Sustainable Development
CSA SFM Element 6.4	Information for Decision Making Provide relevant information to interested parties to support their involvement in the public participation process, and increase knowledge of ecosystem processes and human interactions with forest ecosystems
FML Area No. 2 DFA Value 6.4.1	Continuous improvement of sustainable forest management practices on the DFA
Objective 6.4.1.1	Continual increase in the knowledge ecosystem processes and impacts of management practices

Indicator 6.4.1.1.2	Target 6.4.1.1.2
Tolko understanding and practices based upon current and emerging knowledge and recommended practices	Representatives of Woodlands staff will attend conferences, workshops and field trips related to current and emerging knowledge and recommended practices and bring forward any relevant recommendations for process improvement Acceptable Variance: No variance in providing the opportunity for all Woodlands staff to attend conferences, workshops and field trips to enable continual learning is acceptable. Annual evaluation of staff will include the opportunity for staff to bring forward suggestions for attending functions. Attendance to any given function is dependent upon scheduling related to staff work responsibilities, budgets and other factors.

2004 Report

Woodlands staff attended the following meetings and conferences in 2004:

- Tolko Divisional Forester meeting - High Level Alberta
- Tolko Prairie Divisional Forester meeting - Slave Lake Alberta
- Tolko EMS Champion meeting - Kamloops BC
- SARA information session - Winnipeg
- National Forest Fire Strategy - Winnipeg
- Computer forest tracking system review – Manitoba, Saskatchewan and Alberta
- Swampy Cree Tribal Council model forest presentation – The Pas
- Presentation on Natural Range of Variability – U of W in Winnipeg
- Manitoba Forestry Association annual meeting – Winnipeg
- Manitoba Conservation wood supply workshop – Winnipeg
- Presentation on Sustainable Forest Network – Winnipeg

CCFM Criterion 6.0	Accepting Society's Responsibility for Sustainable Development
CSA SFM Element 6.4	Information for Decision Making Provide relevant information to interested parties to support their involvement in the public participation process, and increase knowledge of ecosystem processes and human interactions with forest ecosystems
FML Area No. 2 DFA Value 6.4.1	Continuous improvement of sustainable forest management practices on the DFA
Objective 6.4.1.1	Continual increase in the knowledge ecosystem processes and impacts of management practices

Indicator 6.4.1.1.3	Target 6.4.1.1.3 (A)
Training members of the Forest Resource Advisory Committees (FRAC) and the SFM Committee	FRAC and SFM Committee members will receive forest management presentations and information updates from the Company at least 2 times per year and the opportunity to participate in at least 1 field tour per year Acceptable Variance: No variance is acceptable
	Target 6.4.1.1.3 (B)
	FRAC and SFM Committees will be provided with the opportunity to place a representative on SFM audits for the DFA Acceptable Variance: No variance is acceptable

2004 Report

Indicator 6.4.1.1.3 (A)

After the May 2004 CSA SFM Committee meeting members were asked to continue their participation by joining the FML Area FRAC. In 2004 the FRAC met in September and December. Minutes from both meetings were taken and distributed to committee members and interested parties and placed on the Company web site.

Highlights from the September FRAC meeting included a presentation by the Planners on the extension to the 2004 annual operating plan, road closure plans, draft ground rules for the FRAC committee, review of the CSA SFM Plan, upcoming CSA audit, public concerns table, and a review on the Minister of Manitoba Conservation letter to the committee.

Highlights from the December FRAC meeting included a review of the results from the CSA SFM audit, the public concerns table, draft ground rules for the FRAC, the current public mailing list, ASI, and the CSA SFM survey questionnaire form. Also Mr. Buck from the University of the North presented an overview on the Northern Forest Diversification Centre.

Indicator 6.4.1.1.2 (B)

At the September 2004 FRAC meeting committee members were asked if they would like to participate as an observer on the upcoming October 2004 CSA audit. Several members showed an interest and during the audit 5 committee members were interviewed by a third party auditor and one committee member was an observer on the field portion of the audit. Committee members involved with the audit discussed their participation with other members at the December FRAC meeting.

CCFM Criterion 6.0	Accepting Society's Responsibility for Sustainable Development
CSA SFM Element 6.4	Information for Decision Making Provide relevant information to interested parties to support their involvement in the public participation process, and increase knowledge of ecosystem processes and human interactions with forest ecosystems
FML Area No. 2 DFA Value 6.4.1	Continuous improvement of sustainable forest management practices on the DFA
Objective 6.4.1.2	Increase broad public access to information pertaining to SFM for the DFA

Indicator 6.4.1.2.1	Target 6.4.1.2.1
Access of the broad public to information on SFM, FMP and AOP plans and related public participation processes	Sufficient information sharing mechanisms so the broad public will have access to the recent SFM Plan, FMP and AOPs and Annual SFM Report Acceptable Variance: No variance is acceptable

2004 Report

The following material was mailed out in 2004 to members of the CSA SFM committee, FML FRAC, Snow Lake FRAC and Interested Parties.

- Draft and final version of the CSA SFM Plan
- Paper on Large Tracts of forest Minimally Disturbed by Man
- Paper on Ideally No Net Gain in Road Kilometres
- Paper on the Use Of Manitoba Trappers Harvest to measure forest health
- Paper on Assumptions for the Calculation of Annual Allowable Cut
- Paper on Public Involvement in Forest Management & Planning in Manitoba
- Paper on Cumulative Effects Assessment – Learning from Canadian Case Studies
- Paper on Improving the Practice of Cumulative Effects Assessment in Canada
- Paper on Cumulative Effects Assessment Framework
- CSA SFM Advisory Committee operating ground rules
- Repap Manitoba FRAC operating ground rules
- FML Area committee draft operating ground rules
- CSA SFM meeting minutes for January, March and May 2004
- FML FRAC meeting minutes for September and December 2004
- Snow Lake FRAC meeting minutes for May and October 2004
- Sherridon FRAC meeting minutes from November and December 2004
- Presentation package on Protected Areas Initiative
- Presentation on Resource Roads
- Paper on Natural Range of Variability and Fire Disturbance Patterns
- paper on fuel savings when comparing trains and trucks
- CSA SFM letter to Minister of Manitoba Conservation

- CSA SFM letter from Minister of Manitoba Conservation.
- Presentation on the Manitoba Stumpage System
- Paper on Mountain Lynx cycle
- Paper on Moose questionnaire data
- Importance of Aspen Mixedwood Forest of Different Ages to Breeding Birds
- Tolko announcement on a successful CSA SFM registration audit
- CSA SFM October 2004 audit summary
- T.R.E.E. review of the CSA SFM Plan
- Tolko response to T.R.E.E. of the CSA SFM Plan
- Public Issues and Concerns Tables for 2004
- Tolko Public Mailing Lists
- Paper on Protected Area Planning Project
- Newspaper article on proposed Lowland National park
- Background material on the Northern Forest Diversification Centre

The following material was mailed out to over 700 people listed on Tolko public mailing list plus the material was advertised in newspapers located in The Pas, Flin Flon, Snow Lake, Thompson, Winnipeg, and ads were also placed on radio stations in The Pas, Flin Flon, Thompson and NCI (First Nation communities)

- Announcement about the Tolko Manitoba new web site
- June 2004 notice for community public meeting on the 2005 Annual Operating Plan
- December 2004 notice for community public meetings on the 2005/06 AOP

The following material was placed on the Tolko Manitoba web site:

- Background on Tolko Industries
- CSA SFM committee meetings
- CSA SFM Plan both draft and final versions
- Tolko Manitoba newsletter for March 2004
- CSA Z809 2002 audit summary
- Satisfaction survey of CSA SFM committee and interested parties
- Overview of EMS
- Summary of the 1997 to 2009 Forest Management Plan
- Proposed Operations Map for the 1997 to 2009 FMP
- 2004 Annual Harvest and Renewal Plan plus maps
- June 2004 community meeting minutes on the Annual Plan
- Community meeting schedule for the 2005/06 Annual Plan
- Overview of the FMLA – FRAC plus meeting minutes
- Overview of Snow Lake FRAC plus meeting minutes
- Manitoba woodlands contact list
- Links to other forestry sites