

Nicola Thompson Fraser
Sustainable Forest Management Plan



Annual Monitoring Report

January 1, 2011 to December 31, 2011

Released March 2012

Cover Photo: Maxwell Plateau in the Raft River, showing lakeside retention, and progression of regeneration over time of areas logged in the mid 1970's and 1980's

Photo taken in August 2011, by Dave Dobi, Canfor

PARTICIPATING Replaceable Forest Licensees (FL)
and Non-Replaceable Forest Licensees (NRFL):

Adams Lake Indian Band ▪ Ardeu Wood Products Ltd. ▪ Ashcroft Indian Band ▪ Aspen Planers Ltd. ▪ British Columbia Timber Sales ▪ Canadian Forest Products Ltd. ▪ Gilbert Smith Forest Products Ltd. ▪ Interfor, Adams Lake Lumber ▪ Lower North Thompson Community Forest Society ▪ Neskonlith Indian Band ▪ Nicola Pacific Forest Products Ltd. ▪ Nicomen First Nation ▪ Tolko Industries Ltd. ▪ Upper Nicola First Nation

PARTICIPATING Small Scale Salvage Program:

Ministry of Forests and Range - Cascades & Kamloops Districts

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1.0 Background

Between February 2000 and May 2001 the forest Licensees operating in the Merritt and Kamloops Timber Supply Areas worked with local public groups and First Nation representatives (the SFM Advisory Group) to develop Sustainable Forest Management (SFM) Plans for the Merritt and Kamloops areas. A similar process occurred in the Lillooet Timber Supply Area in 2004.

Members of all three of these SFM Advisory Group represented a cross section of local interests including recreation, ranching, forestry, conservation, water, community, and First Nations. The Nicola Thompson Fraser SFM Plan brings together these three separate SFM Plans into one larger area plan with involvement of forest licensees, First Nations and public members from the broader area.

The Nicola Thompson Fraser Plan area is situated in the southern interior, east of the Coast Mountains and encompassing the Thompson-Okanagan Plateau. The area extends south to the Canada-USA border and northward to Wells Gray Provincial Park. The overall Plan area follows the administrative boundaries of the Kamloops, Merritt, and Lillooet Timber Supply Areas. See [Appendix II](#) for a detailed map of the Plan Area.

The Plan is based on the Canadian Standards Association (CSA) Sustainable Forest Management System, which is one of the primary certification systems currently being used in British Columbia. The CSA system sets performance goals and targets over a defined forest area to reflect local and regional interests. Consistent with most certifications, the CSA standards expect compliance with existing forest policies, laws and regulations.

Any licensee wishing to become registered to the Canada's national standard, known as CAN/CSAZ809 could use the plan, in part, to meet the forest certification requirements. The SFM Plan serves as a "roadmap" to current and long-term management, setting performance targets and management strategies that reflect the ecological and social values across the Plan area. See [Appendix III](#) for the CSA Registered Licensee Summary Reports.

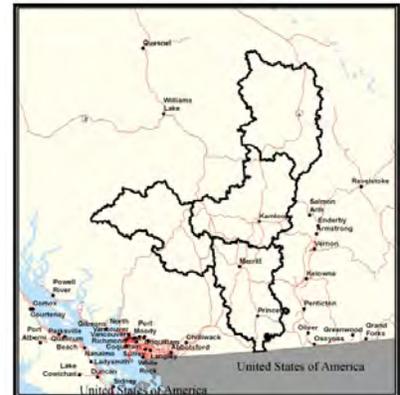
2.0 Continual improvement

The SFM Plan contains Indicators for sustainable forest management. Targets for these Indicators are monitored annually based on information provided by each licensee. Annual monitoring reports, prepared each spring, will indicate whether performance measures for each of the Indicators have been met.

The effectiveness of the SFM Plan will continually be improved by reviewing annual monitoring results. This review will provide licensees and the public with an opportunity to bring forward

Vision Statement

The Nicola Thompson Fraser Sustainable Forest Management Plan will foster forest management practices based on science, professional experience and local public and First Nations input that contribute to the long-term health and productivity of forest ecosystems, a strong economy and thriving communities throughout the Plan area



new information and to provide input concerning new or changing public values that can be incorporated into future updates of the SFM Plan. Performance measures (Indicators and Targets) may also change as additional information becomes available.

3.0 Opportunities for Involvement

More information about sustainable forest management in the Kamloops, Merritt and Lillooet TSAs (including a copy of the SFM Plan) is available on the Nicola Thompson Fraser Sustainable Forestry website:

<http://thompsonokanagansustainableforestry.ca>

If you wish to be further involved or wish to know more about the annual performance results, please use the “Contact Us” tab on the above website or link to one of the replaceable Forest Licensees whose logos are listed on the website.



Photo Credit: Reuben Irvine, MOFLNRO

4.0 Licensee Reporting

Sustainable Forest Management Plan reporting for the 2011 period was completed by eight major licensees (Replaceable Forest Licences) as well as by the holders of Non-replaceable Forest Licences (NRFL) managed by them. These licences are located throughout the Kamloops, Lillooet and Merritt Timber Supply Area. Some licensees have more than one licence and, consequently, have combined their reporting for each licence into one company report. Reporting for TFL 18 has been rolled up into the Kamloops TSA reporting results.

a) Non-Replaceable Forest Licence Reporting

Non-replaceable Forest Licences (NRFL) reported on a subset of the SFM Plan Indicators that were agreed to with the SFM Public Advisory Group (PAG). The short term (5 year) NRFLs reported on Targets 2, 5, 6, 11-12, 14, 16, 18, 20-21, 23, 27, 30 and 36. The remaining Indicators are not reported on as they are operational Indicators beyond the scope of their licence.

b) Small Scale Salvage Program Reporting

Over the past several years, the small scale salvage operations, managed by the BC Ministry of Forests, Lands and Natural Resource Operations (MOFLNRO), have significantly increased their operations to deal with the growing need to salvage trees killed by Mountain Pine Beetle with this program as well as the Forests for Tomorrow program. The Ministry of Forests, Lands and Natural Resource Operations (MoFLNRO) Clearwater, Kamloops and Cascade Districts are committed to the achievement of the Plan and will report on their performance against the Targets they do influence. The Small Scale Salvage Program and the Forests for Tomorrow Program will report against the following Targets 2, 5, 6, 12, 14, 16, 18, 20-21, 23, 27, 30 and 36.

4.1 Highlights 2011

The following summarizes highlights from the Nicola Thompson Fraser Sustainable Forest Management Plan 2011 monitoring period:

- Provision for wildlife tree patches/individual wildlife trees/stubs in 97 percent of the cutblocks greater than 10 hectares in size.
- The harvested area occupied by permanent roads and landings was 3.5 percent of the total harvest area in the Kamloops TSA, and 2.4 percent in the Merritt TSA, compared to the target of 6 percent. While harvesting and road construction did occur in the Lillooet TSA in 2011, no cutblocks were completed by the end of the reporting period - reporting for these will occur in 2012.
- All 91 recreational trails influenced by harvest were successfully managed.
- There were no landslides resulting from operations.
- There were 232 meetings and meaningful communications with First Nations.
- There were 57 working relationships with First Nations in the Nicola Thompson Fraser SFM Plan area.
- There were 140 local business initiatives and partnerships.
- Across the plan area, licensees with timber processing facilities reported 1,480,000 man hours worked and 838 full or part time manufacturing employees on payroll.
- The average timeframe for road cut and fill slope grass seeding on new road construction was 7.1 months, against a target of 12 months.
- One hundred percent of forest contractors had both environmental and safety training. Ninety-three percent were SAFE Company registered or certified. Ninety-six percent of BCTS awarded contracts and licensees were to SAFE Company registered and/or certified entities.
- In the Kamloops TSA, 12% of the AAC was allocated to First Nations, in the Lillooet TSA – 45%, and in the Merritt TSA – 36%. The total allocated volume was 1,597,000m³.
- Just 50% of water quality targets were met.

5.0 Performance 2011

Environmental, social and economic performance was assessed according to the six criteria in the CSA standard.



Annual performance related to the implementation of the SFM Plan is determined by the extent to which Targets for individual Indicators have been met. The overall achievement of sustainable forest management is assessed by reviewing progress toward the values and objectives identified for criteria and elements in the SFM Plan.

Photo Credit: Corey Peterson, MoFLNRO

The six criteria included in the CSA standard define the broad parameters of sustainable forest management (i.e. biological diversity, forest ecosystem condition and productivity, soil and water resources, contributions to global ecological cycles, economic and social benefits, and society’s responsibility for sustainable development).

A summary of the performance results for the Targets relating to each of the CSA criterion is provided as follows. Specific details on all performance Targets are provided in Section 5.1. Targets not met are shown in bold in the table below. Overall, 36 out of 42 targets (86%) were achieved.

Criterion	Related Target	Percent Achieved
1. Conservation of Biological Diversity	1, 2, 3, 4 , 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15	93%
2. Maintenance and Enhancement of Forest Ecosystem Condition and Productivity	16, 17, 18, 19, 20	100%
3. Conservation of Soil and Water Resources	11,18, 20, 21, 22, 23, 24, 25	63%
4. Forest Ecosystem Contribution to Global Ecological Cycles	3,16, 17, 18	100%
5. Multiple Benefits to Society	19, 27, 28, 29, 30, 31, 32, 33, 34, 35	100%
6. Accepting Society’s Responsibility for Sustainable Development	14, 27, 28, 29, 31, 35, 36, 37, 38, 39 , 40, 41 , 42	85%

5.1 2011 Performance Summary by Indicators and Targets

In an SFM Plan, Indicators and Targets provide the performance measures that are to be met through on-the-ground forest management activities. Full compliance is required for many Indicators i.e., there is no variance. Where full compliance may not be achievable, an acceptable level of variance is indicated for the Indicator.

Indicators are measures to assess progress toward a value and objective.

Targets are specific short-term commitments to measure progress against identified Indicators.

The table that follows indicates whether or not the targets in the SFM Plan were achieved (indicated by a checkmark “✓”) or not achieved (“x”) and how the targets fit into the SFM framework.

ELEMENT	1.1 Ecosystem Diversity	
VALUE	Healthy, functioning ecosystems that support natural processes.	
OBJECTIVE	Healthy, connected ecosystems with a representation of natural attributes.	
INDICATOR	TARGET	2011
1.1.1 Ecosystem area by type	1. Maintain the presence of Biogeoclimatic Zones to the subzone level within the Plan area.	✓
1.1.2 Forest area by type or species composition	2. 70% of harvested cutblocks having three or more tree species (non-ESSF) or two or more species (ESSF) identified in the free growing inventory.	✓
1.1.3 Forest area by seral stage or age class	3. Progress towards a stable forest age class distribution on the timber harvesting land base 4. Maintain the existing old growth management area (no net loss).	✓ x
1.1.4 Degree of within-stand structural retention or age class	5. 80 percent of cutblocks greater than 10 hectares will have individual wildlife trees/stubs and/or wildlife tree patches within the block. Of the blocks that have individual wildlife trees/stubs and/or wildlife tree patches; at least 50 percent of the time these blocks will have dispersed individual trees, stubs or small (<0.25 ha) patches retained.	✓ ✓

ELEMENT	1.2 Species Diversity	
VALUE	Abundance and distribution of habitat to conserve populations of native flora and fauna	
OBJECTIVE	Maintain a variety of habitats for naturally occurring species. Use practices to reduce the spread of invasive plant populations within forested ecosystems	
INDICATOR	TARGET	2011
1.2.1 Degree of habitat protection for selected focal species, including species at risk.	6. Identification and protection of wildlife (mammals, birds, reptiles, fish and amphibians) at risk 7. Affected licencees adhere to the current management strategies for mountain caribou. 8. Affected licencees adhere to the current management strategies for northern spotted owl.	✓ ✓ ✓
1.2.2 Degree of suitable habitat in the long term for selected focal species, including species at risk	2. 70% of harvested cutblocks having three or more tree species (non-ESSF) or two or more species (ESSF) identified in the free growing inventory. 9. 100% conservation of habitat for select focal species	✓ ✓
1.2.3 Proportion of regeneration comprised of native species	3. Progress towards a stable forest age class distribution on the timber harvesting land base 4. Maintain the existing old growth management area (no net loss).	✓ ✓
1.2.4 Timing of grass seed application (non-core indicator)	5. 80 percent of cutblocks greater than 10 hectares will have individual wildlife trees/stubs and/or wildlife tree patches within the block. At least 50 percent of the time the above blocks will have dispersed individual trees, stubs or small (<0.25 ha) patches retained. 11. Road cuts and fill slopes will be grass seeded within 12 months.	✓ ✓ ✓

ELEMENT	1.3 Genetic diversity	
VALUE	Genetic diversity within all native tree species	
OBJECTIVE	Maintain genetic diversity of all tree species native to the DFA	
INDICATOR	TARGET	2011
1.1.2 Forest area by type or species composition	2. 70% of harvested cutblocks having three or more tree species (non-ESSF) or two or more species (ESSF) identified in the free growing inventory.	✓
1.2.3 Proportion of regeneration comprised of native species	10. 100% of trees planted will conform to plan commitments related to the species requirements within approved stocking standard (requires reforestation with commercially valuable and ecologically suitable tree species).	✓
1.1.3 Forest area by seral stage or age class	3. Progress towards a stable forest age class distribution on the timber harvesting land base. 4. Maintain the existing old growth management area (no net loss).	✓ x

ELEMENT	1.4 Protected Areas and Sites of Special Biological and Cultural Significance	
VALUE	Appropriate management of protected areas and sites of special geological, biological, and/or cultural significance.	
OBJECTIVE	Protected areas and sites of special significance are identified and appropriately managed.	
INDICATOR	TARGET	2011
1.4.1 Proportion of identified sites with implemented management strategies	<u>Kamloops</u> 12. Prioritized Red-listed ecological communities will be protected by retaining existing forest. <u>Lillooet</u> 13. Harvesting not to exceed greater than 50% of the total of each identified rare landscape unit / BEC zone variants. <u>Merritt</u> 6. Identification and protection of wildlife (mammals, birds, reptiles, fish and amphibians) at risk	✓ ✓ ✓
1.4.2 Protection of identified sacred and culturally important sites	14. 100% protection of culturally important, sacred and spiritual sites that have been identified and mapped <u>and</u> 100% conformance to all plan commitments specifically designed to manage for culturally important, sacred, and spiritual sites that have been identified and mapped.	✓ ✓
1.4.3 Management and or protection of special geological features (non-core indicator).	15. Report the special geological features that were identified and managed. Additionally, Licencees will report the management activities that they undertook for each special geological feature.	✓

ELEMENT	2.1) Forest Ecosystem Resilience	
VALUE	Sustainable forest ecosystems	
OBJECTIVE	Forest management does not compromise forest ecosystem resilience	
INDICATOR	TARGET	2011
2.1.1 Reforestation success	<p>16. 90% of area prescribed for planting is completed within the third growing season from start date of harvest.</p> <p>17. All cutblocks will reach free growing requirements on or before the latest date.</p>	<p>✓</p> <p>✓</p>

ELEMENT	2.2) Forest Ecosystem Productivity	
VALUE	Productive, well functioning forest ecosystems	
OBJECTIVE	Well functioning connected ecosystems that are managed for timber and non timber forest values	
INDICATOR	TARGET	2011
2.2.1 Additions and deletions to the forest area	18. Less than 6%, (7% within the Lillooet TSA), on average, of harvested areas will be in permanent roads and landings.	✓
2.2.2 Proportion of the calculated long-term sustainable harvest level that is actually harvested	19. Harvest the cut allocation for the year consistent with the cut control regulation and policy.	✓
2.2.3 Riparian conformance (non-core indicator)	20. 100% conformance to riparian and lakeshore commitments made within plans.	✓

ELEMENT	3.1) Soil Quality and Quantity	
VALUE	Conservation of soil quality and quantity	
OBJECTIVE	Maintain productive capacity of forest soils. Minimize compaction and detrimental disturbance	
INDICATOR	TARGET	2011
3.1.1 Level of soil disturbance	<p>18. Less than 6%, (7% within the Lillooet TSA), on average, of harvested areas will be in permanent roads and landings.</p> <p>21. 100% conformance to soil conservation measures contained with operational plans.</p> <p>22. No operationally caused slides resulting from a failure to perform a terrain stability field assessment or from a failure to follow the recommendations within a completed assessment.</p>	<p>✓</p> <p>✓</p> <p>✓</p>
3.1.2 Level of downed woody debris	23. Percent of cutblocks where management of coarse woody debris (CWD) is consistent with operational plans.	x

ELEMENT	3.2 Water Quality and Quantity	
VALUE	Conservation of water quality and quantity	
OBJECTIVE	Water quality and quantity that maintains pre-existing conditions and supports communities (human and ecological) and aquatic life	
INDICATOR	TARGET	2011
3.2.1 Proportion of watershed or water management areas with recent stand-replacing disturbance	<p><u>Kamloops reporting only</u></p> <p>24. Equivalent clear cut area (ECA) not to exceed 35% without doing further hydrological assessments prior to harvesting. Target applies to the highest risk rated watersheds (post MPB) as identified in SFM Plan Appendix.</p> <p><u>Lillooet and Merritt reporting only</u></p> <p>24. Equivalent clear cut area (ECA) not to exceed 35% (at the sub-basin level) without doing further hydrological assessments prior to harvesting.</p>	<p>x</p> <p>x</p>
3.2.2 Managing water quality through road inspections (non-core indicator).	25. All permanent status roads and associated structures will have inspections and related maintenance completed as scheduled.	x
1.2.4 Grass seeding application on newly constructed roads (non-core indicator).	11. All planned road cut and fill slope seeding application carried out using certified seed and within 12 months of completed road construction on suitable sites.	✓
2.2.3 Respect for riparian areas (non-core indicator).	20. 100% conformance to riparian and lakeshore commitments made within plans.	✓

ELEMENT	4.1 Carbon Uptake and Storage	
VALUE	Healthy, functioning ecosystems that support natural processes	
OBJECTIVE	Conduct forest activities to maintain ecological processes that facilitate carbon uptake and storage: actively growing, healthy forests, maintain natural sources of nutrient cycling	
INDICATOR	TARGET	2011
4.1.1 Net carbon uptake	<p>3. Progress towards a stable forest age class distribution on the timber harvesting land base .</p> <p>18. Less than 6%, (7% within the Lillooet TSA), on average, of harvested areas will be in permanent roads and landings.</p>	<p>✓</p> <p>✓</p>
2.1.1 Reforestation success.	<p>16. 90% of area prescribed for planting is completed within the third growing season from start date of harvest.</p> <p>17. All cutblocks will reach free growing requirements on or before the latest date.</p>	<p>✓</p> <p>✓</p>

ELEMENT	4.2 Forest Land Conversion	
VALUE	Maintenance of the forest land-base	
OBJECTIVE	Minimal loss of forest land within the DFA	
INDICATOR	TARGET	2011
2.2.1 Additions and deletions to the forest area	<p>18. Less than 6%, (7% within the Lillooet TSA), on average, of harvested areas will be in permanent roads and landings.</p>	<p>✓</p>

ELEMENT	5.1 Timber and Non-Timber Benefits	
VALUE	A sustainable flow of timber and non-timber benefits that contribute to quality of life	
OBJECTIVE	Conserve or enhance non-timber values while managing forests for timber values and prosperous forest-based industries	
INDICATOR	TARGET	2011
5.1.1 Quantity and quality of timber and non-timber benefits, products, and services produced in the DFA	19. Harvest the cut allocation for the year consistent with the cut control regulation and policy.	✓
	27. Open communication with local First Nations will include an understanding of traditional territories and other aboriginal rights including cultural and spiritual values Participating Licencees respond to all written requests for communication/information from First Nations.	✓
	28. Licencees will demonstrate efforts by participating in public multi-stakeholder meetings at both the strategic and at the local level. Licencees will report on the number of community meetings held or attended. Licencees will also report on the number of communications with concerned and engaged recreational users. Participating licencees respond to all written requests from the public for communication within 30 days of their receipt.	✓
	29. 100% conformance to strategies in plans designed to achieve preservation and partial retention visual quality objectives.	✓
	30. 100% of known pre-existing recreational trails retained for continued recreational use on areas harvested in the reporting period.	✓
	31. Report business initiatives and partnerships.	✓

ELEMENT	5.2 Communities and Sustainability	
VALUE	Sustained social and economic stability and vitality of all local communities	
OBJECTIVE	A productive forest resource that maintains a continual and balanced flow of benefits	
INDICATOR	TARGET	2011
5.2.1 Level of investment in initiatives that contribute to community sustainability	<p>19. Harvest the cut allocation for the year consistent with the cut control regulation and policy.</p> <p>32. Report the board feet and chip volume produced by sawmills within the TSA.</p> <p>33. Report number of timber processing facility operating days, the total number of man hours worked and the number of mill employees on payroll. Report separately for each TSA.</p> <p>31. Report business initiatives and partnerships.</p>	<p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p>
5.2.2 Level of investment in training and skills development	<p>34. 100% of DFA forest contractors will have both environmental and safety training (10% variance).</p> <p>100% of woodlands employees are trained in accordance with training plans (10% variance)</p>	<p>✓</p> <p>✓</p>
5.2.3 Level of direct and indirect employment	<p>19. Harvest the cut allocation for the year consistent with the cut control regulation and policy.</p> <p>32. Report the board feet and chip volume produced by sawmills within the TSA.</p> <p>33. Report number of timber processing facility operating days, the total number of man hours worked and the number of mill employees on payroll. Report separately for each TSA.</p>	<p>✓</p> <p>✓</p> <p>✓</p>
5.2.4 Level of Aboriginal participation in the forest economy	35. Maintain and/or increase the number of working relationships (partnerships, joint ventures, co-operative agreements, business contracts) with First Nations.	✓

ELEMENT	6.1 Aboriginal and Treaty Rights	
VALUE	Aboriginal title and rights and treaty rights	
OBJECTIVE	Recognition of Aboriginal title and rights and treaty rights as related to forest management	
INDICATOR	TARGET	2011
6.1.1 Evidence of a good understanding of the nature of Aboriginal title and rights	<p>27. Open communication with local First Nations will include an understanding of traditional territories and other aboriginal rights including cultural and spiritual values</p> <p>Participating Licencees respond to all written requests for communication/information from First Nations.</p>	<p>✓</p> <p>✓</p>
6.1.2 Evidence of best efforts to obtain acceptance of management plans based on Aboriginal communities having a clear understanding of the plans	<p>27. Open communication with local First Nations will include an understanding of traditional territories and other aboriginal rights including cultural and spiritual values</p> <p>Participating Licencees respond to all written requests for communication/information from First Nations.</p>	<p>✓</p> <p>✓</p>
6.1.3 Level of management and/or protection of areas where culturally important practices and activities (hunting, fishing, gathering) occur	<p>27. Open communication with local First Nations will include an understanding of traditional territories and other aboriginal rights including cultural and spiritual values</p> <p>Participating Licencees respond to all written requests for communication/information from First Nations.</p> <p>14. 100% protection of culturally important, sacred and spiritual sites that have been identified and mapped <u>and</u></p> <p>100% conformance to all plan commitments specifically designed to manage for culturally important, sacred, and spiritual sites that have been identified and mapped.</p>	<p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p>

ELEMENT	6.2 Respect for Aboriginal Forest Values, Knowledge, and Uses	
VALUE	Aboriginal title and rights, treaty rights and traditional knowledge are respected	
OBJECTIVE	Manage and/or protect important archaeological sites (as interpreted by First Nations) <ul style="list-style-type: none"> • Cultural, archaeological, and heritage sites and values, including spiritual. • Use of traditional knowledge. • Meaningful and informed participation of First Nations 	
INDICATOR	TARGET	2011
6.2.1 Evidence of understanding and use of Aboriginal knowledge through the engagement of willing Aboriginal communities, using a process that identifies and manages culturally important resources and values	27. Open communication with local First Nations will include an understanding of traditional territories and other aboriginal rights including cultural and spiritual values	✓
	Participating Licencees respond to all written requests for communication/information from First Nations.	✓
	14. 100% protection of culturally important, sacred and spiritual sites that have been identified and mapped <u>and</u>	✓
	100% conformance to all plan commitments specifically designed to manage for culturally important, sacred, and spiritual sites that have been identified and mapped.	✓

ELEMENT	6.3 Forest Community well-being and resilience	
VALUE	Economic benefits to society	
OBJECTIVE	A prosperous forest based economy with a sustainable supply of forest resources	
INDICATOR	TARGET	2011
6.3.1 Evidence that the organization has co-operated with other forest-dependent businesses, forest users, and the local community to strengthen and diversify the local economy	<p>36. Where forest operations are planned within range units, the forest Licencee will communicate with the rancher in advance of those operations to minimize impact to affected ranchers.</p> <p>37. Communication of forest operations to occur with trappers 100% of the time in advance of operations.</p> <p>29. 100% conformance to strategies in plans designed to achieve preservation and partial retention visual quality objectives.</p> <p>31. Report business initiatives and partnerships.</p> <p>28. Licencees will demonstrate efforts by participating in public multi-stakeholder meetings at both the strategic and at the local level. Licencees will report on the number of community meetings held or attended. Licencees will also report on the number of communications with concerned and engaged recreational users.</p>	<p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p>
6.3.2 Evidence of co-operation with DFA-related workers and their unions to improve and enhance safety standards, procedures, and outcomes in all DFA-related workplaces and affected communities	<p>38. A minimum of 80% of contractors conducting on-the-ground work are SAFE Company, or equivalent, registered and/or certified. And for BCTS, that a minimum of 80% of the Licences or contracts awarded were SAFE Company, or equivalent, registered and/or certified.</p>	<p>✓</p>
6.3.3 Evidence that a worker safety program has been implemented and is periodically reviewed and improved	<p>39. All forest companies/organizations subscribing to the SFM Plan are SAFE Company, or equivalent, certified.</p>	<p>x</p>

ELEMENT	6.4 Fair and effective decision making	
VALUE	Recognition of advisory group values, shared knowledge, and informed decisions	
OBJECTIVE	Engaged, dynamic public participation process	
INDICATOR	TARGET	2011
6.4.1 Level of participant satisfaction with the public participation process	<p>40. Completion of annual PAG survey: 80% of survey responses “3” or better. All written comments are reviewed and considered, and all line responses averaging less than 3 become action items.</p> <p>41. Participating licencees will maintain educational support that leads to a balanced and broad-based understanding of forestry. One focus is forestry programs at the elementary, secondary, and post-secondary levels. Target 40 action per year in each of the Merritt and Kamloops TSAs, and 10 actions per year in Lillooet TSA.</p>	<p>✓</p> <p>✓</p> <p>x</p>
6.4.2 Evidence of efforts to promote capacity development and meaningful participation in general	<p>41. Participating licencees will maintain educational support that leads to a balanced and broad-based understanding of forestry. One focus is forestry programs at the elementary, secondary, and post-secondary levels. Target 40 action per year in each of the Merritt and Kamloops TSAs, and 10 actions per year in Lillooet TSA.</p>	x
6.4.3 Evidence of efforts to promote capacity development and meaningful participation for Aboriginal communities	<p>41. Participating licencees will maintain educational support that leads to a balanced and broad-based understanding of forestry. One focus is forestry programs at the elementary, secondary, and post-secondary levels. Target 40 action per year in each of the Merritt and Kamloops TSAs, and 10 actions per year in Lillooet TSA.</p> <p>27. Open communication with local First Nations will include an understanding of traditional territories and other aboriginal rights including cultural and spiritual values Participating Licencees respond to all written requests for communication/information from First Nations.</p> <p>35. Maintain and/or increase the number of working relationships with First Nations.</p>	<p>x</p> <p>✓</p> <p>✓</p>

ELEMENT	6.5 Information for Decision-Making	
VALUE	Opportunities to increase knowledge and understanding	
OBJECTIVE	A wide range of public educational opportunities. Adaptive forest management is responsive to research, experience and public input	
INDICATOR	TARGET	2011
6.5.1 Number of people reached through educational outreach	41. Participating licencees will maintain educational support that leads to a balanced and broad-based understanding of forestry. One focus is forestry programs at the elementary, secondary, and post-secondary levels. Target 40 action per year in each of the Merritt and Kamloops TSAs, and 10 actions per year in Lillooet TSA.	x
6.5.2 Availability of summary information on issues of concern to the public	42. Licencees will keep members of the public informed of TSA strategies being developed, and planning occurring by: Maintaining a website. Circulating the SFM plan and other information to the public at least annually (news release/leaflet/open house/Local Resource Use Plan, etc.).	✓

Appendix I: Detailed Reporting of SFM Targets

Target (1): Ecosystem Area by Type

Target: Maintain the presence and representative area of Biogeoclimatic Zones to the subzone level within the plan area.

Assessment Results: Detail specific to each TSA and TFL 18 provided in a separate appendix.

Target (1) Ecosystem conservation represents a coarse-filter approach to biodiversity conservation. It assumes that by maintaining the structure and diversity of ecosystems, the habitat needs of various species will be provided. For many species, if the habitat is suitable, populations will be maintained.

Target (2): Percent of harvested area having three or more tree species (non-ESSF) or two or more species (ESSF) identified in the free growing inventory.

Target: 70 percent of cutblocks harvested will have three or more tree species (includes conifer and deciduous comprising one percent or more of total trees) in the free growing survey, and two or more tree species within the ESSF Biogeoclimatic (BGC) Zone.

Assessment Results: In the Kamloops TSA, 80% of the cutblocks declared free growing during the reporting year had three or more tree species in non-ESSF BGC zones, and 100% had two or more species in ESSF BGC zones. The average of the 1st, 2nd, and 3rd leading tree species was 50%, 24% and 14%, respectively.

In the Lillooet TSA, 92% of the cutblocks declared free growing during the reporting year had three or more tree species in non-ESSF BGC zones, and 96.5% had two or more species in ESSF BGC zones. The average of the 1st, 2nd, and 3rd leading tree species was 60%, 24% and 11%, respectively.

In the Merritt TSA, 74% of the cutblocks declared free growing during the reporting year had three or more tree species in non-ESSF BGC zones, and 77% had two or more species in ESSF BGC zones. The average of the 1st, 2nd, and 3rd leading tree species was 73%, 17% and 6%, respectively.

Target (2): Tree species composition, stand age, and stand structure are important variables that affect the biological diversity of a forest ecosystem - providing structure and habitat for other organisms. Ensuring a diversity of tree species is maintained improves ecosystem resilience and productivity and positively influences forest health.

Target (3): Forest Age Class Distribution

Target: Progress towards a stable forest age class distribution on the timber harvesting land base, where each age class to 100 years old [1 (1 to 20), 2 (21-40), 3 (41-60), and 4 (61 to 80) occupies at least 8.5% of the timber harvesting land base in each of the three TSAs (Kamloops, Lillooet, Merritt).

Assessment Results: Results remain as reported in the SFM Plan - All age classes except age class 1 have less than 8.5% area representation in each TSA. Age classes 2 to 4 will approach the 8.5% target over time (current TSR data).

Target (3) A balanced age class distribution provides ongoing habitat opportunities for all forest dwellers and allows for an even flow of timber values and benefits as well as a reduction in forest health risks. Forecasted forest age class distribution over time provides an indication of sustainability. Balanced age class will result in a larger proportion of hectares in younger faster growing stands with a net carbon intake.

Target (4): Protected Ecosystems

Target: Licensee operations will maintain the existing old growth management area (no net loss).

Assessment Results: Overall, there was a net loss of 9.57 hectares of old growth management area, thus the target was not achieved for the collective NTF Plan area.

Licensees in the Kamloops TSA reported a net loss of 10.21 ha. Reasons for the reduction include very minor incursions into OGMA's on a number of harvested blocks, and one 4.3 ha removal of OGMA area due to Forest Health concerns. All changes made were consistent with the MoFLNRO's OGMA implementation policy and procedure.

Licensees in the Lillooet TSA reported no change.

Licensees in the Merritt TSA reported a net gain of 0.64ha, due to replacement areas being slightly larger than deletions & minor incursions combined.

Target (4) Future maintenance of biodiversity, including genetic diversity, is in part dependent upon the maintenance and connectivity of representative habitats and seral stages at the landscape and watershed level. Retention of Old Growth Management Areas (OGMA's) throughout the DFA will assist in providing a supply of late seral habitat.

Target (5): Stand level retention -- individual wildlife trees/stubs and/or wildlife tree patches

Target 5a: 80 percent of cutblocks greater than 10 hectares will have individual wildlife trees/stubs and/or wildlife tree patches within the block.

Assessment Results: Ninety-seven percent (367 out of 379) of harvested cutblocks greater than 10 hectares in size have Wildlife Tree Patches (WTP's) and/or individual leave trees (WT)/stubs identified in operational plans.

Target 5b: Of the blocks that have individual wildlife trees/stubs and/or wildlife tree patches; at least 50 percent of the time these blocks will have dispersed individual trees, stubs or small (<0.25 ha) patches retained.

Reporting against target "b" is limited to blocks harvested during the reporting year that had the original SP signed after January 1st, 2011

Assessment Results: Of blocks with dispersed WTPs, etc. and with their original SPs signed after January 1st, 2011, 100% (342 out of 342) had dispersed individual trees, stubs or small patches retained.

Target (5) focuses on management for biodiversity at the stand level. Note that wildlife tree patches may be located outside of cutblocks, along their edge, and still be consistent with provincial policy on wildlife tree retention.

Target (6): Identification and protection of wildlife (mammals, birds, reptiles, fish and amphibians) at risk

Target 6a: On an annual basis, obtain from the Conservation Data Centre (CDC), the location of known Red-listed and Blue-listed species within the TSA.

Assessment Results: All licensees in the three TSAs indicated that they obtained the location of known Red-listed and Blue-listed species.

Target 6b: Where there is a documented, mapped and field verified occurrence of a critical habitat feature for a Red-listed or Blue-listed species, operations achieve 100% consistency with SP measures.

Assessment Results: In the Kamloops TSA, there were four cutblocks harvested, where there was a documented critical habitat feature for a Red-listed or Blue-listed species (Badger). With all four, 100% consistency with SP measures was achieved. No signs of Badger activity were noted during field development.

In the Lillooet TSA there were no blocks with an occurrence of a critical habitat feature.

In the Merritt TSA there were two cutblocks harvested where there were mapped occurrence sites of mountain beaver. The harvest plan (and pre-work) contained a description of their habitat and special care was taken to avoid soil disturbance in riparian areas in addition to the image shown on the SP maps.

Target 6c: Based on the potential level of impact to any of the 3 TSAs, participate in the consultation process led by the Ministry of Environment and the Ministry of

Forests, Lands and Natural Resource Operations, in the identification of Ungulate Winter Range and Wildlife Habitat Areas and the development of General Wildlife Measures.

Assessment Results: In the Kamloops TSA, licensees participated in the Ungulate Winter Range (UWR) meeting with MoE staff and as well as caribou mitigation consultation process. They also participated in the consultation process for proposed order that would make Kamloops TSA spatial OGMA locations legal.

In the Lillooet TSA, licensees participated in the following consultation processes: UWR, goat proposed Government Action Regulation (GAR) order and proposed Screech Owl and Spotted Owl Wildlife Habitat Areas (WHA).

In the Merritt TSA, licensees participated in the Williamson's sapsucker draft WHA process.

Target (6) The intent of this indicator is to ensure that not only all measures required by law are addressed, but also, reasonable voluntary actions that are deemed necessary by licensees, are implemented during forest planning and practices for the protection of biodiversity and species at risk.

Target (7): Level of FPC compliance with Mountain Caribou strategies.

Target: Affected licensees (Kamloops TSA only) adhere to the current management strategies for the mountain caribou.

Assessment Results: In the Kamloops TSA, two licensees harvested a total of 44.3ha within the Mountain Caribou Strategy Area, and the operations were consistent with the Caribou Management Strategies.

Target (7) Mountain Caribou is a provincially Red-listed species as well as is one of the species identified in the provincial Identified Wildlife Management Strategy (IWMS) and strategic direction for management of caribou habitat is provided in the Kamloops LRMP. Operations are not precluded within designated Mountain Caribou corridors and their boundaries can be adjusted.

Target (8): Level of compliance with Northern Spotted Owl strategies.

Target: Affected licensees (Lillooet TSA only) adhere to the current management strategies for the northern spotted owl.

Assessment Results: In the Lillooet TSA there was no harvesting within designated Northern Spotted Owl habitat area.

Target (8) Licensees' forest planning and practices promote a diversity of healthy ecosystems while maintaining "rare" attributes as well as a diversity and abundance of naturally occurring wildlife and their habitats. Through proposed protected areas and management guidelines for modified harvest zones, critical habitat for Northern Spotted Owl will receive a higher level of preservation.

Target (9): Degree of suitable habitat in the long term for selected focal species, including species at risk.

Target: Conserve or manage within the Kamloops TSA and in the Cascades Forest District habitat for selected focal species by retaining 100% of the amount of habitat (provided for in government's FPPR Section 7 notice) in a condition suitable for the survival of the species; Kamloops TSA: Flammulated Owl – 3300 ha, Interior Western Screech Owl – 60 ha, Lewis's Woodpecker – 650 ha, Spotted Bat – 120 ha, Badger – 35 ha; Cascades Forest District: Coastal Tailed Frog – 2793 ha, Great Basin Gopher Snake – 4000 ha, Flammulated Owl – 4050 ha, Interior Western Screech Owl – 44 ha, Spotted Owl – 5000 ha within Lillooet TSA, Spotted Bat – 16 ha, Grizzly Bear – 5211 ha (5211ha impact to timber harvesting land base) in the Merritt TSA, unspecified large area having a THLB impact of 8000 ha in the Lillooet TSA.

Variance: As provided for within the legal framework.

Assessment Results: For areas harvested, there were no reported locations of an identified presence of a focal species or an occurrence site.

Target (9) For most species, forest managers can influence habitat only, not species populations. To account for the degree of habitat protection for selected focal species, including species at risk, this indicator looks at more long term habitat needs, particularly for critical and core habitats.

Target (10): Proportion of regeneration comprised of native species.

Target: 100% of trees planted will conform to plan commitments related to the species requirements within approved stocking standards (requires reforestation with commercially valuable and ecologically suitable tree species).

Assessment Results: In the three TSAs, Licensees reported that areas were all planted with species appropriate to the site and within the stocking standards. The total area planted is as follows: Kamloops TSA – 6,288.2ha, Lillooet TSA – 665.2ha and Merritt TSA – 6,851.8ha.

Target (10) addresses the objective of conserving the diversity and abundance of native species and their habitats.

Target (11): Number of months for road cut and fill slope seeding application.

Target: All planned road cut and fill slope seeding application carried out using certified seed and within 12 months of completed road construction on disturbed sites suitable for germination.

Assessment Results: Road cuts and fill slopes were seeded or planted on average within 7.1 months of disturbance, compared to a target of 12 months. All seed was certified.

Target (11) Prompt revegetation of road cuts and fill slopes will minimize potential for soil movement and sedimentation. This will contribute to maintenance of water quality and long-term productivity of the land and help to control the spread of invasive plants

Target (12): Management strategies for rare ecosystems

Target: Prioritized Red-listed ecological communities will be protected with retained existing forest.

a. Where the ecological community is “documented, mapped (GPS/UTM) and field verified” for the cutting permit or TSL area where operations are being planned and:

I. the ecological community represents less than 10% of the cutting permit or TSL area, then the majority of the identified occurrence is protected.

II. the ecological community is greater than 10% of the gross area of either tenure noted above, then WTP placement will be weighted towards those communities.

b. Where the ecological community is not well documented, the prioritized list of Red-listed ecological communities is used as a support tool to weight WTP placement, or other reserves, to the applicable site series in the block

Reporting against the targets is limited to blocks harvested during the reporting year that had the original SP signed after January 1st, 2007.

Assessment Results: In the Kamloops TSA, there were no cutblocks where documented Red-listed communities occurred. As well, there were no cutblocks where non-documented ecosystems identified as “prioritized Red-listed ecological communities” occurred.

Target (12) Management strategies will be applied at the stand level through identification of rare sites in the SP process and through the application of retention.

Target (13): Annual harvesting in rare Landscape Unit / Biogeoclimatic Zones

Target: Harvesting not to exceed greater than 50% of the total of each identified rare landscape unit /BEC zone variants.

Assessment Results: There was no harvesting completed in the Lillooet TSA in 2011.

Target (13) The provincial Protected Areas Strategy will be applied at the stand level through identification of rare sites or rare habitat in the SP process and through the application of retention. Site plans will be written to help ensure that operational activities do not impact the potential contribution that these rare sites provide.

Target (14): Protection of identified sacred and culturally important sites

Target: 100 % protection of culturally important, sacred and spiritual sites that have been identified and mapped and

100% conformance to all plan commitments specifically designed to manage for culturally important, sacred and spiritual sites that have been identified and mapped.

Assessment Results: There were 45 sites identified and mapped in the plan area, and 100% were managed or protected in accordance with forest plans.

Target (14) recognizes the importance of managing and protecting culturally important, sacred and spiritual sites, during forestry operations.

Target (15): Management and or protection of special geological features

Target: Report the special geological features that were identified and managed. Additionally, Licensees will report the management activities that they undertook for each special geological feature.

Assessment Results: During the development phase of a block in the Cicero area (NW of Kamloops) a Karst cave feature was identified. The feature was removed from the block, and buffered as per the Karst Feature Management Guidebook for BC. The area was set as a WTP to add further protection.

Target (15) recognizes the importance of identifying and managing for special geological features that are discovered in the course of fieldwork.

Target (16): Prompt reforestation following harvest.

Target: Ninety percent of area prescribed for planting is completed within the third growing season from start date of harvest.

Assessment Results: Overall, 89.8% of areas were planted within the 3rd growing season from harvest, thus the target was within the 10% variance for the collective NTF Plan area.

In the Kamloops TSA, licensees reported that 95% (6,022.8 of 6,324.9ha) of area prescribed for planting was completed within the third growing season.

In the Lillooet TSA, licensees reported just 13% (54.9 of 431.5ha) of area prescribed for planting was completed within three growing seasons. The area (376.6 ha) not planted within the target timeframe can be attributed to the Lytton Lumber purchase by Aspen Planers Ltd in late 2008. Many of those blocks were not planted at the time of purchase. Aspen Planers Ltd. walked these blocks in 2009 and trees were sown for planting in 2011.

In the Merritt TSA, licensees reported that 89.7% (6,061.7 of 6,760.8ha) of area prescribed for planting was completed within the third growing season.

Target (16) Prompt reforestation ensures that the productive capacity of forest land base to grow trees is maintained. Promptness also aids in providing young trees a head start against competing vegetation, helping to reduce the need for manual or chemical brushing treatments

Target (17): Achievement of free growing date

Target: All cutblocks will reach free growing requirements on or before the latest date. Also report area on those cutblocks that outperformed late free growing requirements and average time by which requirements were exceeded.

Assessment Results: In each of the TSA's and TFL 18, all areas that had a late free growing date of 2011 had met the free growing requirements.

In the Kamloops TSA, licensees reported 6,103.1ha achieved free growing status; these cut blocks outperformed their late free growing date by an average of 3.7 years.

In the Lillooet TSA, licensees reported 1,900.4ha achieved free growing status; these cut blocks outperformed their late free growing date by an average of 4.7 years.

In the Merritt TSA, licensees reported 3379.0ha achieved free growing status; these cut blocks outperformed their late free growing date by an average of 4.3 years.

Target (17) Achievement of the earliest free growing date will help ensure that the productive capacity of the forest land base to grow trees is maintained.

Target (18): Annual percent of harvested areas in permanent access structures (e.g. roads and landings).

Target: Less than 6 percent (7% for the Lillooet TSA), on average, of harvested areas will be in permanent roads and landings.

Assessment Results: In the Kamloops TSA, the percentage of permanent roads and landings within the total harvested area averaged 3.5 %. A total of 9,920.4 ha (gross area) was harvested in 2011. New permanent roads and landings occupied 350.7 ha.

There was no harvesting, or road or landing construction that was completed in 2011 in the Lillooet TSA.

In the Merritt TSA, the total gross block area harvested was 6,161.4 ha with 146.7ha in permanent roads and landings. This equates to 2.4%, which is well below the target of 6%.

Target (18) Access structures such as roads and landings compact soil, making regeneration difficult, and disrupt the natural connectivity within forest stands. The percent target refers specifically to loss of the timber harvesting land base due to access structures within harvested areas.

Target (19): Annual harvest level relative to annual allocation.

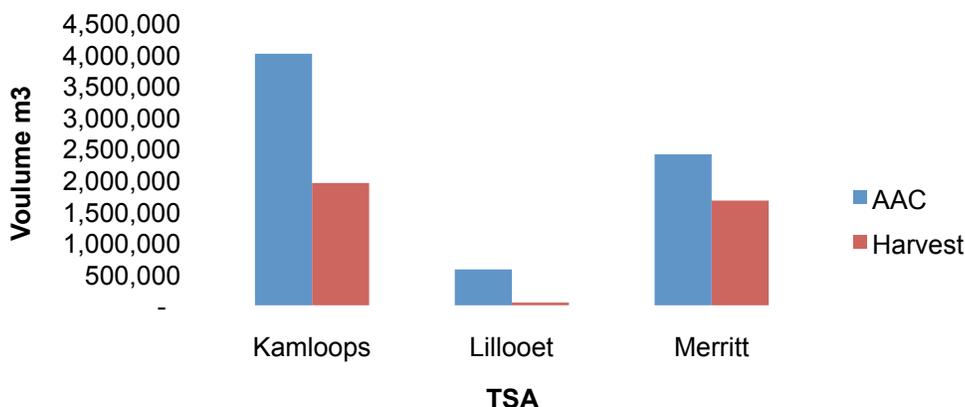
Target: Harvest the annual cut allocation for the year consistent with the Cut Control Regulation and Policy.

Assessment Results: The annual allowable cut for the Kamloops TSA is 4,000,000m³; licensees reported 1,943,961m³ harvested. Note that NRFL and Small Scale Salvage do not report on this Target.

The annual allowable cut for the Lillooet TSA is 570,000m³; the two licensees reported 42,438m³ harvested.

The annual allowable cut for the Merritt TSA is 2,400,000m³; licensees reported 1,665,003m³ harvested. Note that NRFL and Small Scale Salvage do not report on this Target.

AAC vs. Harvest Levels



Target (19) The Chief Forester determines the sustainable harvest level for the TSA after considering social, economic and biological criteria. Licensees contribute to the sustainable harvest level by adhering to their apportioned harvest volume within the TSA. Cut control regulations dictate the short-term harvest flexibility.

Target (20): Level of conformance to riparian management area and lakeshore commitments contained within plans

Target: 100 percent conformance to riparian and lakeshore commitments made within plans.

Assessment Results: There were 330 cutblocks harvested that had Riparian Management Area (RMA) or Lakeshore Management Area (LMA) within or adjacent to them, with two non-conformances. In one location, the operator crossed a non-fish creek in correct location, but did not secure approval prior to crossing. In another location, a block had 5m no machine ribbon line established along creek (not a legal requirement). The buncher crossed the ribbon line to cut snags; these should have been hand felled. This was during winter harvest and as a result there was no damage to vegetation.

There was 99.4% conformance overall; the target was achieved within the variance.

Target (20) forms part of the overall strategy to manage for biodiversity at the landscape and stand levels. Riparian management areas provide connectivity of forested cover along waterways, which are generally areas with high value for wildlife habitat and movement.

Target (21): Level of conformance to soil conservation commitments contained within plans.

Target: 100 percent conformance to soil conservation measures contained within plans.

Assessment Results: Soil disturbance objectives were met on 14,438.6 of 14,438.7 hectares (total NAR) harvested, essentially 100%. One SSS licensee felt 0.1ha of his block did not meet site degradation guidelines but the block was still well with the acceptable limits as per the SP.

Target (21) addresses the impacts of forestry operations on soil productivity. Soil compaction, displacement and erosion are components of potentially detrimental soil disturbance.

Target (22): Prevention of landslides

Target: No operationally caused slides resulting from a failure to perform a terrain stability field assessment or from a failure to follow the recommendations within a completed assessment.

Assessment Results: There were no slides in the NTF Plan area.

Target (22) Prevention of man caused landslides will help to avoid sediment delivery to streams, possible damage to fish and invertebrate habitat, loss of forest site productivity, unsightly scars and damage to roads, culverts and bridges.

Target (23): Stand level retention - coarse woody debris

Target: One hundred percent of cutblocks will manage coarse woody debris (CWD) consistent with commitments in operational plans.

Assessment Results: A total of 956 cutblocks were harvested during the reporting period. 941 cutblocks or 98.4 percent of the harvested cutblocks were consistent with the commitments in the operational plans. Licensees reported that eight blocks had Site Plans completed prior to the change in the indicator; one block was salvage of a fire; and another was for Douglas-fir beetle in a fir type. On the remaining blocks, the site plan contained ambitious targets for CWD that were not met.

Target (23) This Indicator addresses the need to maintain structural features of forest ecosystems at the stand level.

Target (24): Proportion of watershed or water management areas with recent stand-replacing disturbance

Target: Equivalent clear cut area (ECA) not to exceed 35% (at the sub-basin level) without doing further hydrological assessments prior to harvesting. For Kamloops, the target applies only to the highest risk rated watersheds (post MPB) as identified in Appendix 8 of the SFM Plan

Assessment Results: In the Kamloops TSA, there were six blocks harvested where the watershed ECA exceeded 35%; further hydrological assessments were completed on five of these. The sixth one occurred in the Bonaparte River OA. Only a portion of a block (<10ha) fell into this watershed. The cost of watershed analysis not justified for small number of hectares.

In the Lillooet TSA, there were no blocks harvested.

In the Merritt TSA, there were 10 blocks harvested where the watershed ECA exceeded 35%; further hydrological assessments were completed on seven of these. The three blocks without further assessment were in SIMLWSD000053, and were purchased from another licensee in order to help salvage timber from a Sx beetle epidemic. There was a quick turnaround on sale due to degradation of wood in the summer months.

Target (24) focuses on planning and assessment in watersheds that have been identified as high risk and with a significant disturbance history, prior to implementing additional operations. Water quality, quantity and timing are influenced to varying degrees by road construction and harvesting. As the level of recent disturbance (measured as ECA) increases, the more likely there is to be a negative influence.

Target (25): Percent of permanent status roads that have maintenance completed as per programs.

Target: All permanent status roads and associated structures will have inspections and related maintenance completed as scheduled.

Assessment Results: Licensees reported 6,075.7 km of permanent status roads scheduled for inspection, with a total of 5,593.6km (92%) with completed inspections. One licensee indicated they had begun implementing a new computer module to track scheduling and inspections; however, there were issues with the implementation, staff training, and data entry. These will be rectified for the next reporting year.



Quad trail and Cross Ditch

Photo by Laura-Ann Andrews

715 of 725, or 98.6%, of maintenance items identified were completed. This is within the allowable 5% variance.

Target (25) recognizes the potential impact of roaded access on forests and waterways.

Target (26) is absent from the plan.

Target (27): Incorporation of traditional knowledge, non-timber resources, and cultural and spiritual values in forest planning, where available.

Target:

- a. Open communications (track meetings and other meaningful communication) with local First Nations will include an understanding of traditional territories and other aboriginal rights including cultural and spiritual values.
- b. Participating Licensees respond to all written requests for communication/information from First Nations

Assessment Results: There were 232 meetings and meaningful communications with local First nations. Licensees had 53 written requests for communication and responded to all.

Target (27) recognizes the importance of managing for non-timber resources, including cultural/heritage resources and values, during forestry operations.

Target (28): Number of opportunities/avenues for public participation in decision-making processes.

- Target:
- Licensees will demonstrate efforts by participating in public multi-stakeholder meetings at both the strategic and at the local level. Licensees will report on the number of community meetings held or attended. Licensees will also report on the number of communications with concerned and engaged recreational users.
 - Participating Licensees respond to all written requests from the public for communication within 30 days of their receipt.

Assessment Results: Licensees indicated that their interests were represented at strategic and local area meetings with other stakeholders and the broader public. There were 24 community meetings attended and 30 communications with recreation users. There were 12 written requests from the public and all were responded to, in an average of less than eight days.

Target (28) recognizes the importance of providing opportunities for members of the public, as well as First Nations, to provide input into forestry planning. Open lines of communication allow forest licensees to maintain an awareness of social values and concerns and to respond accordingly

Target (29): Level of conformance to strategies in plans designed to achieve preservation, retention and partial retention of visual quality objectives.

Target: 100% conformance to strategies in plans designed to achieve preservation, retention and partial retention visual quality objectives.

Assessment Results: There were 170 blocks harvested with preservation, retention or partial retention visual quality objectives (VQO). All blocks achieved the visual intent. A total of 53 blocks met the visual intent by way of exemption.

Target (29): Visual quality objectives define the amount of visual alteration acceptable from a given viewpoint. The choice of scenic areas and significant viewpoints is based on social preferences.

Target (30): Level of management of recreational trails

Target: 100% of known pre-existing recreational trails retained for continued recreational use on areas harvested in the reporting period.

Assessment Results: All 31 recreation trails within or influenced by harvest area were successfully managed and retained.

Target (30): Managing existing recreational trails helps to ensure the interests and/or values of other forest users and stakeholders are attained.

Target (31): Number of business initiatives and partnerships

Target: Report business initiatives and partnerships.

Assessment Results: In the Kamloops TSA, licensees reported 106 local business initiatives and partnerships. These included pulp and pole sales, by-product (such as chips, shavings, hog, sawdust) sales and trades, furniture pine logs, fir sales, job creation program, and service agreements.

In the Lillooet TSA, there were six initiatives and partnerships, including land leases, provision of firewood, and service agreements.

In the Merritt TSA, there were 28 initiatives and partnerships, including post and rail sales, trim block sales, pulp logs, round wood sales, remanufacturing, grinding waste piles, and service agreements.

Target (31): Reporting on business initiatives and partnerships provides an indication of licensees' contribution towards the diversification and sustainability of local economies.

Target (32): Total output of forest products (lumber and chips) from sawmills in the three TSAs

Target: Report the board feet and chip volume produced by sawmills.

Assessment Results: Licensees with sawmills in the Kamloops TSA reported 369,651 mbf or thousand board feet of lumber output and 24,332 bdt or bone dry tones of chip output.

Neither major licensee in the Lillooet TSA operates sawmills, so there was no lumber output to report; however there was 5,877 bdt of chip output.

Licensees with sawmills in the Merritt TSA reported 583,219 mbf of lumber output and 362,122 bdt of chip output.

Target (32): Local manufacturing helps the community sustain a prosperous forest-based economy.

Target (33): Operating level of timber processing facilities

Target: Report number of timber processing facility operating days, the total number of man hours worked and the number of mill employees on payroll.

Assessment Results: Kamloops TSA: 1,081 days; 682,563 man hours worked; 405 employees
Lillooet TSA: 125 days; 34,377 man hours worked; 28 employees
Merritt TSA: 783 days; 762,991 man hours worked; 433 employees

Note that not all licensees provided data for all three items, therefore days, man hours and employees should not be compared.

Target (33): Reporting on the operating levels of the timber manufacturing facilities provides insight into community benefits.

Target (34): Level of investment in training and skills development.

Target: a. 100% of DFA forest contractors will have both environmental and safety training.
b. 100% of woodlands employees are trained in accordance with training plans.

Assessment Results: 100% (413 of 413) of DFA forest contractors had both environmental and safety training. BCTS reported all 201 awarded contracts and licenses were SAFE Company registered and/or certified. There were a total of 204 forestland employees reported and they all received training in accordance with their training plan.

Target (34): Sustainable forest management provides training and awareness opportunities for forest workers as organizations seek continual improvement in their practices. Investments in training and skill development generally pay dividends to forest organizations by way of a safer and more environmentally conscious work environment.

Target (35): The number of working relationships with applicable First Nations.

Target: Maintain and/or increase the number of working relationships (partnerships, joint ventures, cooperative agreements, memorandum of understanding, or business contracts) with First Nations. Additionally, report annually the percent of the three TSAs' AAC that has been allocated to first Nations ventures.

Assessment Results: Licensees in the Kamloops TSA reported 29 working relationships with First Nations. Examples of relationships included referrals, harvesting, development, fisheries, service agreements for archaeological and cultural heritage work, communications agreements, log purchases, NRFL partnerships, hauling contracts, Memorandum of Understanding, brushing contracts and tree planting contracts. Approximately 12% of the TSA AAC was allocated to First Nations.

Licensees in the Lillooet TSA reported five working relationships with First Nations. Examples of relationships included road construction, harvesting, hauling, referrals, training, education and tree planting. Approximately 45% of the TSA AAC was allocated to First Nations.

Licensees in the Merritt TSA reported 23 working relationships with First Nations. Examples of relationships included slashing and brushing contracts, archaeological contracts to do field work; PFR's, cruising, harvesting, planning, development, milling (coldwater post & rail), cone collections, mistletoe, stocking, tree planting, log purchase and forest management. Approximately 36% of the TSA AAC was allocated to First Nations.

Target (35) recognizes the licensee's efforts to build capacity within First Nations on matters related to the forest industry.

Target (36): Percent of affected ranchers with whom forest planning is discussed.

Target: Where forest operations are planned within range units, the forest licensee will meet communicate with the rancher in advance of those operations to minimize impacts to affected ranchers.

Assessment Results: All 270 ranchers possibly affected by planned operations were communicated with during the reporting period; however, there is a lack of documentation for 21 of the 270. The target is met within the 10% variance.



Photo by Reuben Irvine, MOFLNRO

Target (36): Forestry operations often overlap range tenures and the outcome of operational activities can potentially have a significant effect on range use.

Target (37): Percent of affected trappers with whom forest planning is discussed.

Target: Communication of forest operations to occur with trappers 100% of the time in advance of operations

Assessment Results: Thirty trappers indicated that they wished to be communicated with; licensees reported that they communicated with 50 trappers. There was one instance where a trapper had a concern and the SP was subsequently amended to address his concerns (addition of debris piles for wildlife).

Target (37): Effective communication with affected trappers will minimize the impact of harvest operations on fur bearing animals.

Target (38): Forestry Contractor safety

Target: A minimum of 80% of contractors conducting on the ground work that are SAFE Company or equivalent registered and/or certified. And for BCTS, that a minimum of 80% of licences or contracts awarded were SAFE Company or equivalent registered and/or certified.

Assessment Results: Ninety-three percent (380 of 408) of on the ground contractors were SAFE Company registered and/or certified. Ninety-six percent (193 of 201) of BCTS contracts and licenses awarded had SAFE Company certification or equivalent.

Target (38) SAFE Companies is the flagship program of the BC Forest Safety Council, certifying B.C. forestry operations that show a commitment to safety and demonstrate, through audits, that their safety programs meet industry standards.

Target (39): Licensee Worker Safety

Target: All forest companies/organizations subscribing to the SFM Plan are SAFE Company or equivalent registered and/or certified.

Assessment Results: One forest company reported they are not SAFE Company or equivalent certified and/or registered because of the small size of their organization.

Target (39) Licensees that subscribe to the SAFE Company program demonstrate a commitment to forest workers that they go home safely to their families at the end of each work day.

Target (40): Participant Satisfaction Survey

Target: a) 80% of responses to the Participation Satisfaction Survey are a “3” or better
b) All written comments are reviewed and considered, and all line responses averaging less than 3 become action items

Assessment Results: a) Survey response was an average of 4.0 out of 5. Over 93 percent of responses to survey questions ranked “3” or better. There were nine respondents to the survey.

b) Results of the feedback form were compiled and are reported as part of the annual monitoring program in [Appendix IV](#) of this report. There was one item that had a response average of less than 3.0: question #13 (broad representation) and its average was 2.9.

Target (40) Ensuring the continuing interest and participation of this important SFM Advisory Group is a Licensee priority. The SFM Plan is an evolving document that will be reviewed and revised on an annual basis with the SFM Advisory Group to address changes in forest condition and local community values.

Target (41): Number of presentation or field trips to schools, public groups and individuals.

Target: Participating licensees will maintain educational support that leads to a balanced and broad-based understanding of forestry. One focus is forestry programs at the elementary, secondary, and post-secondary levels. Target 40 actions per year in each of the Merritt and Kamloops TSAs, and 10 actions per year in Lillooet TSA.

Assessment Results: Kamloops TSA licensees conducted 42 field trips and presentations (target is 40). These included a community meeting at Logan Lake, tree planting and presentations to the Kamloops Regional Corrections Center and numerous school classes, an ecosystem talk with Girl Guides, forest tours to Isobel Lake, and a mill tour. There were no presentations that were specific to First Nations.

Lillooet TSA licensees conducted six field trips and presentations (target is 10), of which three were targeted specifically to First Nations. These included Seton River Corridor Restoration Committee meetings, a forest tour with local First Nation, rancher and government representatives, and participation in Xaxli'p (Fountain) Community Forest Open House.

Merritt TSA licensees participated in 30 field trips, presentations and educational support (target is 40). Ten of those were targeted specifically to First Nations. Participation included tree planting exercises with schools, presentations at local meetings or open houses, school presentations, helping organize events such as baseball tourney and golf tourney as awareness builders / fundraisers; the committee also sponsors events such as the poster contest with great prizes for elementary students, a scholarship for post-secondary students, and presentations to college students (NVIT and BCIT).

Target (41) recognizes the importance of an educated and informed public with a broad based understanding of forestry that can provide local input into forest planning and operations. Licensees will be involved with educational support to ensure the importance of resource management is conveyed.

Target (42) Public Awareness of the SFMP

Target: Licensees will keep members of the public informed of DFA strategies being developed, and planning occurring by:

a) Maintaining a website

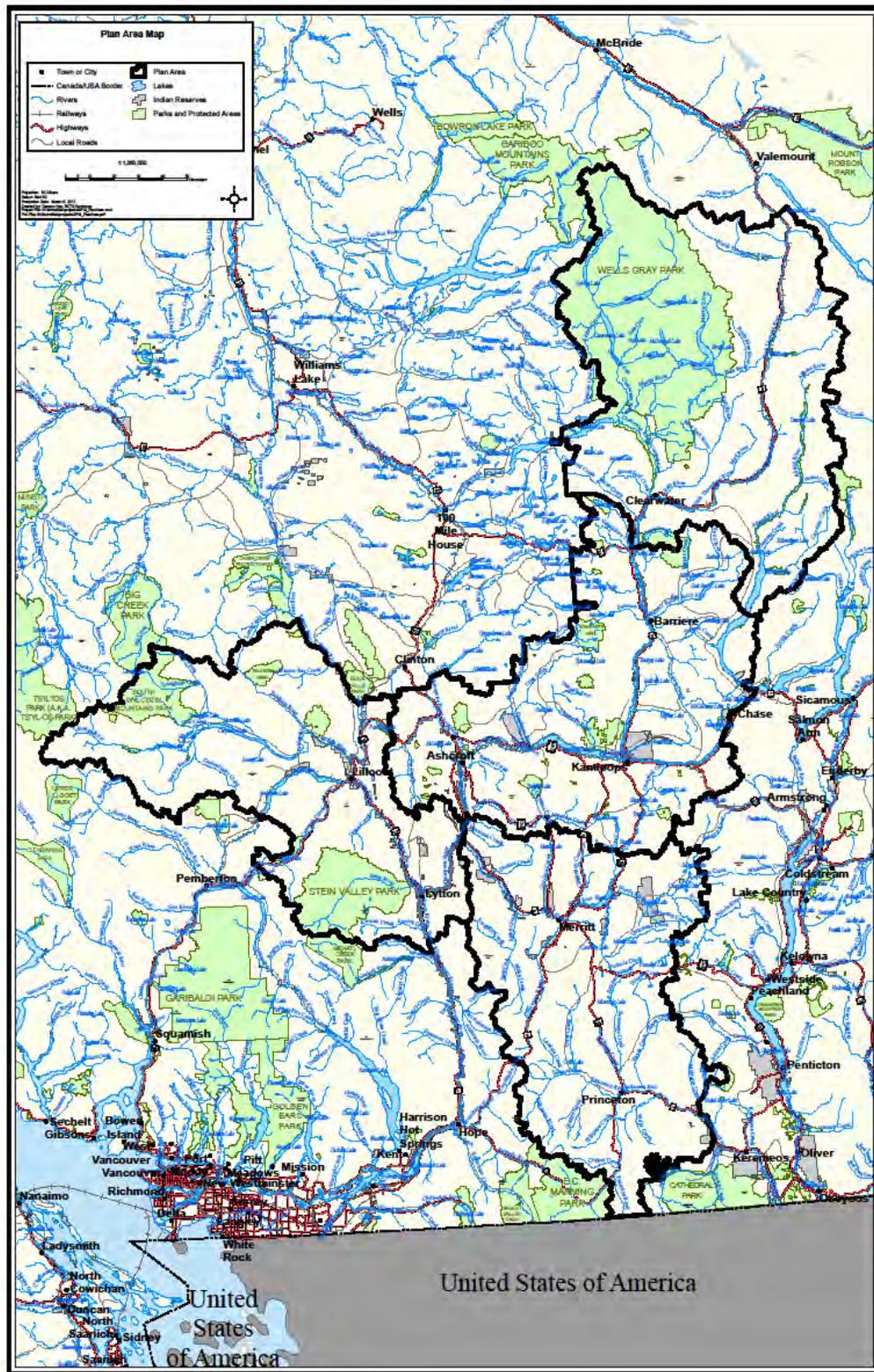
b) Circulating SFM Plan and other information to the public at least annually (advertisements/news release/leaflet/open house/Local Resource Use Planning etc.)

Assessment Results: Licensees report that the web site is being maintained and the SFM Plan and other related information was made publicly available in the last year. The total number of visits combined for the Kamloops and Okanagan website was 1187 (Canada-1073, Brazil – 29, USA-23, India -15, and various other countries - 47). There were 689 unique visitors from 32 countries.

Licensees also reported that company-maintained websites have an open invitation to the public to get involved with the PAG and a link to the SFM website, as well as company audit information. In addition, during regular meetings with First Nations or the public, licensees educate and invite people to participate in the PAG. The PAG brochure developed by the CSA User group was posted to the NTF website and shared at public meetings.

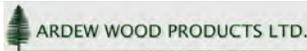
Target (42) recognizes the importance of keeping members of the public informed of forestry strategies being developed and planning occurring in their area. Open lines of communication facilitate public awareness and understanding of the SFM Plan and other current forestry topics, and provide an open opportunity for the public to respond.

Appendix II: Detailed Map of NTF SFM Plan Area



Appendix III: CSA Registered Licensee Summary Reports

2011 NTF SFMP MONITORING SUMMARY



*ArdeW Wood Products
Ltd.
FL A18039*

*Nicola Pacific Forest
Products Ltd.
FL A55524*

*Applied Timber
Management Ltd.
FL A65442*

To obtain more information on how ArdeW performed against any of the 38 Targets which we specifically report on, please contact ArdeW Wood Products' Woodlands Manager, Corey Kuromi

Phone: 250 378 6161

ckuromi@ardeW.com

1195 Houston St.
Box 280 Merritt B.C
V1K 1B8



ArdeW's Woodlands Manager, Corey Kuromi, looking at and discussing with customers from Japan the attributes of a Wildlife tree stub.

2011's Reporting Summary

ArdeW met 37 of the 38 Merritt TSA licensee specific performance sustainability criteria for the Nicola Thompson Fraser SFM Plan. Target 39 was not met as ArdeW's small, three person, woodlands division is not a registered or certified SAFE Company; though 100 % of ArdeW's woodlands personnel and contractors received safety and environmental training (Target 34) and 100% of ArdeW's "on the ground" contractors are SAFE Company certified or registered (Target 38).

Summarized below are ArdeW's external audit results and a number of performance highlights for 2011's NTF SFMP Reporting period, as follows:

- In October 2011 a CSA Z809 Surveillance and ISO 14001 Re-Registration audit was conducted on ArdeW's operations. There were No Major non-conformities, 3 Minor non-conformities (2 still open from the previous year's audit) and 5 Opportunities for Improvement.
- The harvested area occupied by permanent roads and landings was less than 1%, compared to the target of 6% (Target 18).
- Three culturally important sites were identified; all were managed for through operational plans, meeting the target of 100% conformance (Target 14).
- 100% conformance to riparian, lakeshore and soil conservation commitments within plans (Target 20 & 21, respectively)
- Twenty-two openings were harvested in 2011, all of which met their CWD commitments in the operational plans. Of those 22 openings, 14 were greater than 10ha in size. All 14 openings had internal WTP's associated and had either dispersed reserve stems, stubs or small (<0.25ha) reserve patches associated (Targets 23 and 5, respectively).
- A total of 108.2ha were planted with 100% conformance to stocking standards and 100% of the area prescribed for planting and planted was completed within or before the third growing season (Targets 10 & 16, respectively).
- A total of 427.8ha or 15 standard units achieved Free Growing status in 2011, 100% of the areas were declared before their Late Free Growing Date, out performing the late dates on average by 3.8 years (Target 17).

2011 SFM Monitoring Summary



Aspen Planers Ltd.

More information can be obtained by contacting

Jerry C. Canuel
or
Aline Lachapelle
at

Aspen Planers Ltd.,

Phone:
250 378-9266

E-Mail:

jerrycanuel@apgroup.ca

alinelachapelle@apgroup.ca

Mail or In-person:
Box 160,
1375 Houston Street,
Merritt
British Columbia
V1K 1B8



2011 SFM Performance Highlights

SFM Plan performance targets were achieved on 39 of 41 targets in the Nicola Thompson Fraser SFM Plan. The following is a performance summary for each of the CSA Criteria:

Criterion 1 – Biological Diversity

- One hundred percent (100%) of the Targets were met.

Criterion 2 – Ecosystem Condition and Productivity

- All targets were met except one – Target #16: “90% of area prescribed for planting is completed within the third growing season from start date of harvest”.

Criterion 3 – Soil and Water

- All targets were met except one – Target #25: “All permanent status roads and associated structures will have inspections and related maintenance completed as scheduled”.

Criterion 4 – Role in Global Ecological Cycles

- One hundred percent (100%) of the Targets were met.

Criterion 5 – Economic and Social Benefits

- One hundred percent (100%) of the Targets were met.

Criterion 6 – Society’s Responsibility

- One hundred percent (100%) of the Targets were met.

2011 SFM Reporting Summary (continued)

Targets Not Met

Target #16 – in the Lillooet TSA, only 16.1 hectares of the 392.7 hectares that had been prescribed for planting were planted within 3 years of harvest commencement. In the Merritt TSA, 2842.2 hectares of the 3505.6 hectares prescribed for planting were planted within three years (this is 81%, which meets the target within the variance). The reason for not meeting in the target in Lillooet was the catching-up on reforestation activities required for the blocks harvested by Lytton Lumber before Aspen took over their operations.

Target #25 – in the Lillooet TSA, a total of 922.7km of roads were planned for inspection (including both temporary and permanent), but only 664.7km had inspections properly recorded in our new Roads Module. Similarly, a total of 1187.6 km of roads were planned for inspection in the Merritt TSA (including both temporary and permanent), but only 886.3 km had inspections properly recorded in our new Roads Module. The remainder of the roads were field inspected, but were not documented properly in the new database and so were considered “missed” for reporting purposes, resulting in Aspen not meeting the target of having all planned inspections on permanent roads completed within the reporting period. Also, only 23 of 27 scheduled maintenance items were completed, and they have been rescheduled for completion in 2012 (were moderate risk items to be completed at some point during the year as opposed to high risk items which would require immediate completion).

Specific Highlights

- A total of 870.4 hectares in Merritt and 1125.7 hectares in Lillooet achieved free growing status on or prior to the late free growing date, and 100% met the 3 or more species in non-ESSF and 2 or more species in the ESSF zone target.
- Of the 18 cutblocks in the Merritt TSA and 6 cutblocks in the Kamloops TSA where culturally important, sacred or spiritual sites had been identified and mapped, all were managed or protected in accordance with forest plans.
- Of the 38 cutblocks in the Merritt TSA and 12 cutblocks in the Kamloops TSA having Riparian Management Areas within or adjacent to the block, there were none with non-conformances to plans.
- The Aspen Planers sawmill in Merritt produced 320,000 mbf of lumber and 156,800bdt of chips. It had 185 employees on payroll, with a total of 342,250 man-hours worked in the 351 days in operation in 2011. The Savona Specialty Plywood plant was operational for 207 days in 2011, with a total of 70 employees on payroll totaling 122,976 man-hours worked. The Lillooet Veneer plant was operational for 125 days in 2011 with a total of 34,377 man-hours worked.

2011 SFM MONITORING SUMMARY



More Information on how BC Timber Sales performed against all 39 indicators can be obtained by contacting Richard Cooper at the Kamloops Business Area office.

Ph: (250) 371-6500

richard.cooper@gov.bc.ca

**BC Timber Sales
1265 Dalhousie Dr.
Kamloops, B.C.
V2C 5Z5**



Photo Courtesy of Bob Zryd, RFT. Road maintenance on Moose Meadows FSR.

BC Timber Sales 2011 SFM Performance Highlights:

SFM Plan performance requirements were achieved for 34 of 39 indicators relating to the sustainability criteria in the Nicola Thompson Fraser SFM Plan being reported on. The following highlights BC Timber Sales contribution to the NTF 2011 Sustainable Forest Management Plan Report.

- Permanent access structures occupied only 2.4% of the harvested area.
- 95% of cutblocks had individual wildlife trees/stubs and/or wildlife tree patches within the block.
- 100% of the ranchers and trappers affected by BCTS operations were talked to about forest operations and development.
- 100% of all required road inspections were completed, and 100% of all identified road maintenance action items were completed.
- 100% of trees planted were appropriate for the site.
- 98.6% of trees planted were planted prior to or within the third growing season of harvest start.
- 100% of culturally important, sacred, or spiritual sites were managed or protected in accordance with forest plans.
- 100% of hectares logged met soil disturbance commitments.



BC Timber Sales 2011 SFM Performance (continued)

SFM Plan performance targets were not achieved for 5 of 39 indicators relating to the sustainability criteria in the NTF SFM Plan. The targets were not achieved for;

Indicator 2: The indicator requires that 70% of area submitted as free growing will have 3 or more tree species. BCTS had 3 species on 54% of areas submitted as free growing. This may be due to a focus on pine beetle salvage and the issues with survival when using other species extensively on pine dominated ecological sites. BCTS is investigating.

Indicator 4: BCTS had 2 small incursions, totaling 0.69ha, into existing OGMA areas without providing replacement areas. These 2 incursions did not require replacement, and were allowed under OGMA implementation policy and procedure.

Indicator 20: 1 riparian non-conformance. Licensee crossed non-fish creek in correct location, but did not secure approval prior to crossing. No damage was done to the creek or riparian area.

Indicator 23: 8 blocks did not have Coarse Woody Debris levels consistent with commitments in operations plans. The SP's for these blocks had unreasonable CWD targets that were unattainable. These SP's were completed prior to creation of this indicator.

Indicator 24: 4 blocks that required a hydrological assessment did not have one completed. 3 were because of a short window to salvage potential losses and manage the spread of spruce beetle, and 1 was because a corner of one block (<10ha) was in a large watershed that was in a different licensee's operating area.

This report can be located at:

<http://thompsonokanaganustainableforestry.ca/kamloops/default.htm?RD=1>

2011 SFM MONITORING SUMMARY



Vavenby

More Information on how Canfor - Vavenby performed against all indicator targets reported on in 2011 can be obtained by contacting Dave Dobi at Canfor's office in Vavenby.

Ph: (250) 676-9518
Dave.Dobi@Canfor.com

Canadian Forest
Products Ltd.
Box 39
Vavenby, B.C.
V0E 3A0



Headwaters of Spahats Creek and West Raft River

Photo by D. Dobi

Canadian Forest Products Ltd. - Vavenby 2011 SFM Performance Highlights:

Canadian Forest Products Ltd. - Vavenby maintained certification to CAN / CSA Z809 registered in 2005, ISO 14001:04 registered since 2001 and was registered to PEFC chain of custody in 2007.

SFM Highlights for the year included:

- As announced in the spring of 2011, Canfor – Vavenby re-started operations in the latter part of 2011 and was running two sawmill shifts by year end. Twenty-six contractors were back working for Canfor – Vavenby woodlands by the end of 2011.
- Free growing status was achieved on 1,396.4 hectares in 2011; on average Free Growing status was achieved 3 years earlier than the late free growing date.
- Target #16, that 90% of area prescribed for planting is completed within the third growing season from start date of harvest was not met. Planting was being deferred on partially logged blocks until they were fully logged. As shutdown extended, a decision was made to plant logged areas regardless of whether the remaining block was logged.
- The total existing Old Growth area identified in Canfor's FSP was maintained through 2011.

The monitoring report can be located at:

<http://www.canfor.com/responsibility/environmental/plans>

2011 SFM MONITORING SUMMARY



More Information on how Gilbert Smith performed against all of the indicators can be obtained by contacting Glenn Foss, RFT at Gilbert Smith's office in Barriere.

Ph: (250) 672-9435
glenn_foss@telus.net

**Gilbert Smith Forest
 Products Ltd.
 Box 689
 Barriere, B.C.
 V0E 1E0**



Gilbert Smith Forest Products Ltd. 2011 SFM Performance Highlights:

SFM Plan performance requirements were achieved for all of the indicators relating to the sustainability criteria in the Nicola Thompson Fraser SFM Plan being reported on. The following highlights Gilbert Smith's contribution to the 2011 Sustainable Forest Management Plan Report.

- Gilbert Smith Forest Products Ltd. successfully maintained our registration to the CAN / CSA Z809:2008
- The amount of area in permanent roads and landings (PAS) in areas harvested during the year is 5.8%, less than the target of 6%.
- Regeneration of harvested blocks occurred within 12.4 months on average from the time of harvesting compared to a target of 36 months.
- 93% of the identified Free Growing blocks had 3 or more species in the survey data collected.
- Road cuts and fill slopes were seeded with certified seed, on average within 2.4 months of completion of construction, compared to a target of 12 months.
- Gilbert Smith Forest Products Ltd. reported a total of 6 working relationships with First Nations in 2011.
- 100% of blocks harvested >10ha have a Wildlife Tree Patch associated with them.
- 100% conformance related to plans addressing harvesting within or adjacent to Riparian Management Areas.
- 100% conformance with Soil Conservation measures contained within plans.
- Gilbert Smith Forest Products had 20 local business relationships/partnerships.
- Gilbert Smith's mill employed 50 people and operated 235 days in 2011.
- 100% of Gilbert Smith's contractors received environmental training and all are SAFE Company Certified.
- Gilbert Smith staff participated in 8 educational schools visits/mill tours and attended 2 public meetings.

[Pictured above: View from CP Q Heli Block in Upper Adams / CP 999 Paxton Plantation.]

This report can be located at: <http://thompsonokanaganustainableforestry.ca>

2011 SFM MONITORING SUMMARY



More information on how Tolko performed against all 41 sustainability targets can be obtained by contacting Michael Bragg, RPF, Woodlands Manager - Forestry

Tolko Industries Ltd.,
Thompson Nicola Woodlands,
Heffley Creek

Phone: 250 578 2181
michael.bragg@tolko.com

6275 Old Yellowhead Hwy.
Kamloops
British Columbia
V2H 1T8

www.tolko.com



Tolko Industries Ltd.'s 2011 SFM Performance Highlights

SFM Plan performance requirements were achieved for 36 of 41 targets relating to the sustainability criteria in the Nicola Thompson Fraser SFM Plan. The results are reported in the Nicola Thompson Fraser Forest Management Plan Monitoring Report.¹ The following highlights Tolko's contribution to the report.

- The weighted average percentage area in permanent roads and landings in areas harvested during the year was 4.8 percent (131.6 ha), which is below the 6 percent target.
- All 23 recreational trails within or influenced by harvest areas were successfully managed.
- 100 percent conformance to soil conservation measures was achieved.
- There were 75 meetings & meaningful communications with a number of local First Nations communities where our Forest Management activities overlap their areas of interest. All 12 written requests for communication were responded to.
- All 2,056.4 ha planted were with appropriate species, and 99.3% of the area prescribed for planting was completed within the third growing season from start date of harvest.
- On average, blocks achieving free growing in 2011 outperformed their late free growing date by 4.05 years.
- Road cut and fill slopes were seeded with certified seed, within six months on average.
- All forest contractors had safety & environmental training; all contractors conducting on the ground work were SAFE Company registered and/or certified; all forestland employees received training in accordance with their training plan.

¹This report can be located at <http://thompsonokanaganustainableforestry.ca> or at www.tolko.com



Tolko Industries Ltd.'s 2011 SFM Performance (continued)

SFM Plan performance targets were not achieved for five targets. These are listed below with a brief explanation as to why the target was not met:

- Target #2: Percentage of non-ESSF area submitted as free growing with at least three species present – 68% vs. target of 70%. One of the survey programs used rounds the inventory percentage to the nearest 10% and therefore can eliminate the third species.
- Target #4: There was a net reduction 8.64ha of OGMA area. This was due to some very minor incursions into OGMA's on seven of the harvested blocks, and one 4.3 ha removal of OGMA area due to Forest Health concerns. All changes made were consistent with the OGMA trade rules.
- Target #23: 79 of 84 cut blocks harvested blocks or 94% (vs. target of 100%) achieved coarse woody debris (CWD) commitments. A few blocks had ambitious CWD requirements that were not achieved.
- Target #25: 1160.7 km of road required inspections and 1305.9km had inspections completed (more than what was required). However, only 74% or 17 of 23 maintenance action items identified were completed. Two of these were due to seasonal constraints and are scheduled to be completed at more appropriate times. All were minor events such as: plugged culverts, slumps into ditches, stream culvert erosion, and minor water on road surfaces.
- Target #36: Although all ranchers were referred to, there was a lack of documentation on some cutting permits. Communication documentation is available for 54 of 73 (74%) of ranchers affected by planned operations during the reporting period.

Appendix IV: Advisory Group Evaluation Summary

Below are the questions and the average response of the Public Advisory Group. The following table describes the ratings from 1 to 5.

1	2	3	4	5
Poor		Satisfactory		Very Good

#	Question	Average Rating
1	I have a good understanding of the purpose of the Advisory Group and my role as part of that group.	4.2
2	My suggestions related to Sustainable Forest Management values and objectives are being adequately listened to at the Advisory Group Meetings.	4.1
3	Efforts have been made to incorporate my concerns related to SFM values and objectives into the SFM Plan.	4.1
4	My suggestions related to SFM indicators and targets are being adequately listened to at the Advisory Group Meetings.	3.9
5	Efforts have been made to incorporate my concerns related to SFM indicators and targets into the SFM Plan.	3.7
6	I have been given the opportunity to review licensee's audit results and annual reports.	4.3
7	The meeting agenda allows for discussion of any related sustainable forestry issues of concern to advisory group members.	4.4
8	Information provided in advance of meetings is adequate and organized to allow for me to effectively contribute.	4.6
9	Advisory Group Meetings are run efficiently and effectively.	4.4
10	The meeting minutes capture important aspects of the meeting.	4.1
11	Communication with Advisory Group members between meetings is adequate.	3.7
12	Scheduling of meetings held during the year is an adequate balance between meeting continuous improvement objectives of the SFM Plan and use of my time.	4.0
13	A broad cross-section of the community is represented at Advisory Group Meetings.	2.9
14	Licensees have made an effort to recruit new members (if there was a desire to do so)?	3.0
15	Licensee's and or the facilitator are proactive about providing new information to the PAG members regarding impacts to environment, sustainability, forestry, etc?	4.0
Total Average Rating		4.0

Comments received:

Q14, Licensees only should answer this question.

Q15, I cannot be certain about #15. Perhaps it is satisfactory. Pat is doing an excellent job with organizing and running meetings. Pre meeting communication is excellent.

Would be good to have new public blood in the group, and representation of a wider variety of opinions.

Appendix V: Target 1

Biogeoclimatic Zones to the subzone level by TSA/TFL

Kamloops TSA

ZONE-subzone	Area (Hectares)
BGxh	63,206
BGxw	24,806
ESSFdc	91,508
ESSFmm	2,834
ESSFvc	7,049
ESSFwc	682,108
ESSFwk	17,737
ESSFxc	31,105
ICHdk	426
ICHdw	138,464
ICHmk	64,717
ICHmm	1,224
ICHmw	202,058
ICHvk	79,455
ICHwk	167,823
IDFdk	268,429
IDFmw	134,828
IDFvh	227,697
IDFvw	5,151
IMAun	106,403
MSdm	96,043
MSxk	151,349
PPxh	76,028
SBPSmk	12,414
SBSdh	436
SBSdw	6,355
SBSmm	35,465

Merritt TSA

ZONE-subzone	Area (Hectares)
BGxh	2,688
BGxw	43,595
CWHms	2,934
ESSFdc	78,895
ESSFmw	94,043
ESSFxc	27,578
IDFdk	347,143
IDFvh	191,589
IMAun	471
IMAunp	727
MHmm	174
MSdm	120,778
MSmw	13,338
MSxk	178,892
PPxh	28,324

Lillooet TSA

ZONE-subzone	Area (Hectares)
BAFAun	4,944
BGxh	12,330
BGxw	2,953
CWHms	2,209
ESSFdc	10,266
ESSFdv	305,771
ESSFmw	108,126
ESSFxc2	50,041
ESSFvx	39,607
IDFdc	74,537
IDFdk	81,396
IDFvw	18,458
IDFxc	59,007
IDFvh	50,485
IDFvw	7,622
IMAun	111,238
IMAunp	4
MSdc	57,594
MSdm	14,255
MSmw	22,846
MSxk	45,197
MSxv	7,843
PPxh	38,294

TFL 18

ZONE-subzone	Area (Hectares)
ESSFdc	11,232
ESSFwc	26,626
ICHdw	361
ICHmk	6,852
ICHmw	5,340
IDFmw	30
SBSmm	23,856

