

Nicola Thompson Fraser
Sustainable Forest Management Plan



Annual Monitoring Report

January 1, 2014 to December 31, 2014

Released April 2015

Cover Photo: High lead harvest system in Shinnish Creek area

Photo by Don Parno, Cascades District - MFLNRO

PARTICIPATING Forest Licensees (FL & NRFL holders) :

Aldco Wood Products Ltd. ▪ Ashcroft Indian Band ▪ Aspen Planers Ltd. ▪ British Columbia Timber Sales ▪ Canadian Forest Products Ltd. ▪ Coldwater Indian Band ▪ Cook's Ferry Indian Band ▪ Gilbert Smith Forest Products Ltd. ▪ Interfor, Adams Lake Lumber ▪ Logan Lake Community Forest ▪ Lower Nicola Indian Band ▪ Lower North Thompson Community Forest Society ▪ Neskonlith Indian Band ▪ Nicomen First Nation ▪ Nooaitch Indian Band ▪ Siska Indian Band ▪ Tolko Industries Ltd. ▪ Tk'emlupsemc Forestry Development ▪ Upper Nicola First Nation

PARTICIPATING Small Scale Salvage Program:

Ministry of Forests, Lands and Natural Resource Operations - Cascades & Thompson Rivers 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 (TSA) 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 Groups represented a cross section of local interests including recreation, ranching, forestry, conservation, water, community, and First Nations. In 2011, the Nicola Thompson Fraser SFM Plan brought 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 standard, one of the primary forest certification systems currently being used in British Columbia. The CSA standard sets performance goals and targets over a defined forest area to reflect local and regional interests. The standard requires 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.

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



2.0 Continual improvement

The SFM Plan contains indicators for sustainable forest management. Targets for these indicators are monitored annually using information provided by each licensee. Annual monitoring reports indicate performance against the indicators and targets.

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 information concerning new or changing public values that can be incorporated into future SFM Plan updates. 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 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 Forest Licensees whose logos are listed on the website.

4.0 Licensee Reporting

Sustainable Forest Management Plan reporting for the 2014 period was completed by five 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 three Timber Supply Areas. Some licensees have more than one licence and, consequently, have combined their reporting for each licence into one company report. Interfor, Adams Lake Lumber, is not a participating licensee and does not subscribe to the CSA standard, however they reported on Targets 2, 5-7, 9-12, 14-18, 20-23, 25, 27-30, 34-39, and 41-42. Reporting for TFL 18, except where noted, 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 targets have not been reported; generally they are beyond the scope of their licence.

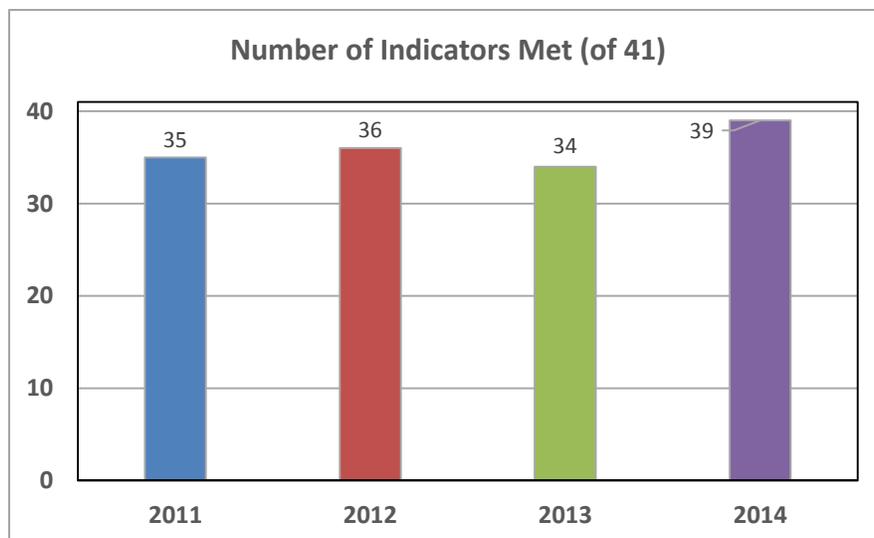
b) Small Scale Salvage Program Reporting

The small scale salvage program is managed by the BC Ministry of Forests, Lands and Natural Resource Operations (MoFLNRO) and addresses a need to salvage trees killed by the Mountain Pine Beetle. The Forests for Tomorrow program is involved in the reforestation of forests destroyed by natural agents such as the Mountain Pine Beetle. The Ministry of Forests, Lands and Natural Resource Operations (MoFLNRO) is 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 have reported against the following Targets: 2, 5, 6, 12, 14, 16, 18, 20-21, 23, 27, 30 and 36.

4.1 Highlights 2014

The following summarizes highlights from the Nicola Thompson Fraser Sustainable Forest Management Plan 2014 monitoring period:

- Across the plan area, licensees with timber processing facilities reported 2,091,000 man hours worked (1,736,000 in 2013) and 1,074 full or part time manufacturing employees on payroll (872 in 2013). Direct and indirect employment is estimated at 12,712 jobs.
- Provision for wildlife tree patches/individual wildlife trees/stubs in 92 percent of the cutblocks greater than 10 hectares in size.
- In the Plan area, 94.2 percent of the total area planted was done so within the third growing season since start of harvest. Licensees reported a total of 15,186.9ha planted in 2014, compared to 15,897.8ha in 2013.
- There were 88 working relationships with First Nations in the Nicola Thompson Fraser SFM Plan area in 2014, compared to 70 in 2013.
- There were 151 local business initiatives and partnerships.
- Ninety-seven percent of forest contractors had both environmental and safety training. Eighty-nine 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, 33% of the committed volume was allocated to First Nations, in the Lillooet TSA – 42%, and in the Merritt TSA – 35%. The total volume allocated to First Nations was 1,772,000m³



5.0 Performance 2014

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.

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, 39 out of 41 targets (95.1%) were achieved. In 2013, 34 out of 41 targets (82.9%) were achieved. Note that there is no Target 26.

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	100%
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	92%

5.1 2014 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 tables that follow indicate 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	2014
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).	✓
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	2014
1.2.1 Degree of habitat protection for selected focal species, including species at risk.	<p>6. Identification and protection of wildlife (mammals, birds, reptiles, fish and amphibians) at risk</p> <p>7. Affected licencees adhere to the current management strategies for mountain caribou.</p> <p>8. Affected licencees adhere to the current management strategies for northern spotted owl.</p>	<p>✓</p> <p>✓</p> <p>✓</p>
1.2.2 Degree of suitable habitat in the long term for selected focal species, including species at risk	<p>7. Affected licencees adhere to the current management strategies for mountain caribou.</p> <p>8. Affected licencees adhere to the current management strategies for northern spotted owl.</p> <p>9. 100% conservation of habitat for select focal species</p>	<p>✓</p> <p>✓</p> <p>✓</p>
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).	X
1.2.4 Timing of grass seed application (non-core indicator)	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	2014
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).	X
1.1.3 Forest area by seral stage or age class	<p>3. Progress towards a stable forest age class distribution on the timber harvesting land base.</p> <p>4. Maintain the existing old growth management area (no net loss).</p>	<p>✓</p> <p>✓</p>

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	2014
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	2014
2.1.1 Reforestation success	16. 90% of area prescribed for planting is completed within the third growing season from start date of harvest. 17. All cutblocks will reach free growing requirements on or before the latest date.	 ✓ ✓

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	2014
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	2014
3.1.1 Level of soil disturbance	18. Less than 6%, (7% within the Lillooet TSA), on average, of harvested areas will be in permanent roads and landings.	✓
	21. 100% conformance to soil conservation measures contained with operational plans.	✓
	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.	✓
3.1.2 Level of downed woody debris	23. 100 percent of cutblocks will manage coarse woody debris (CWD) consistent with commitments in operational plans (5% variance).	✓

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	2014
3.2.1 Proportion of watershed or water management areas with recent stand-replacing disturbance	<u>Kamloops reporting only</u> 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. <u>Lillooet and Merritt reporting only</u> 24. Equivalent clear cut area (ECA) not to exceed 35% (at the sub-basin level) without doing further hydrological assessments prior to harvesting.	 ✓ ✓
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.	✓
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	2014
4.1.1 Net carbon uptake	3. Progress towards a stable forest age class distribution on the timber harvesting land base . 18. Less than 6%, (7% within the Lillooet TSA), on average, of harvested areas will be in permanent roads and landings.	 ✓ ✓
2.1.1 Reforestation success.	16. 90% of area prescribed for planting is completed within the third growing season from start date of harvest. 17. All cutblocks will reach free growing requirements on or before the latest date.	 ✓ ✓

ELEMENT	4.2 Forest Land Conversion	
VALUE	Maintenance of the forest land-base	
OBJECTIVE	Minimal loss of forest land within the DFA	
INDICATOR	TARGET	2014
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.	✓

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	2014
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	2014
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	<p>35. Maintain and/or increase the number of working relationships (partnerships, joint ventures, co-operative agreements, business contracts) with First Nations.</p>	<p>✓</p>

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	2014
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	<p>Manage and/or protect important archaeological sites (as interpreted by First Nations)</p> <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	2014
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	<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	6.3 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	2014
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>✓</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	2014
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</p> <p>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> <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	2014
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. Target met for the Plan area.

Assessment Results: Detail specific to each TSA and TFL 18 provided in Appendix V.

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.

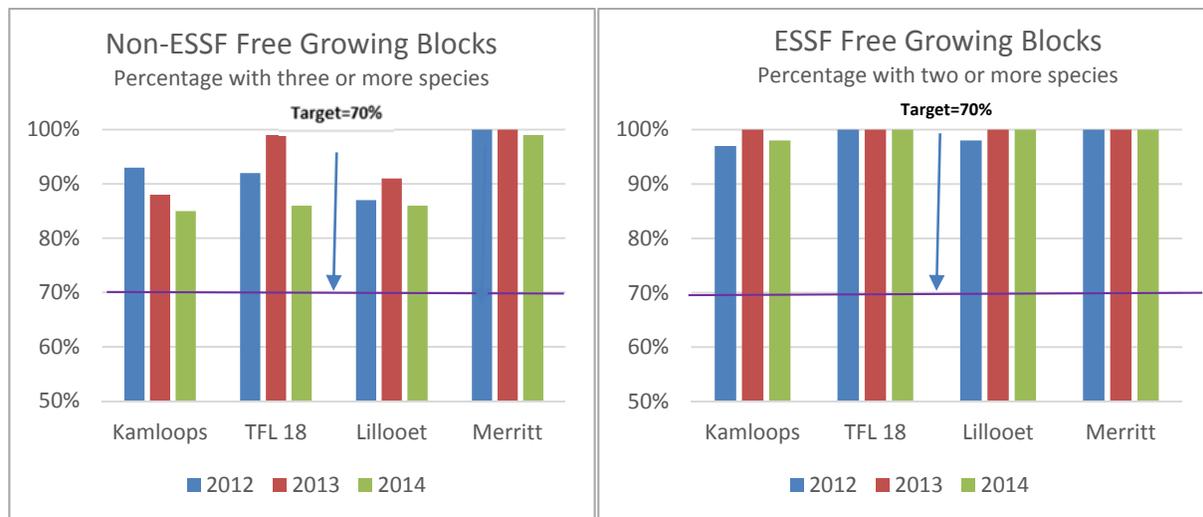
Target: 70 percent of cutblocks harvested will have three or more tree species (includes conifer and deciduous comprising one percent or more of total trees) in the free growing survey, and two or more tree species within the ESSF Biogeoclimatic (BGC) Zone. Target met for the Plan area.

Assessment Results: In the Kamloops TSA, in non-ESSF BGC zones, the average of the 1st, 2nd, and 3rd leading tree species was 51%, 25% and 14%, respectively.

In TFL 18, in non-ESSF BGC zones, the average of the 1st, 2nd, and 3rd leading tree species was 43%, 28% and 16%, respectively.

In the Lillooet TSA, in non-ESSF BGC zones, the average of the 1st, 2nd, and 3rd leading tree species was 60%, 28% and 11%, respectively.

In the Merritt TSA, in non-ESSF BGC zones, the average of the 1st, 2nd, and 3rd leading tree species was 71%, 19% and 7%, 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 80 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). Target met for the Plan area.

Assessment Results: Results remain as reported in the SFM Plan - Age classes 2 and 3 have less than 8.5% area representation in each TSA as well as Age 4 in the Lillooet TSA. These 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). Target met for the Plan area.

Assessment Results: Overall, there was a net gain of 0.54 hectares of old growth management area. Within the NTF Plan area there are 389,573 hectares of spatially located OGMA's.

Licensees in the Kamloops TSA, as well as TFL 18, reported no change.

Licensees in the Lillooet TSA reported a net gain of 0.73 ha.

Licensees in the Merritt TSA reported a net loss of 0.19 ha (an addition of 0.41ha and incursions totaling 0.6ha)

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.



CWD, stubbed trees, individual tree reserve, WTP

Photo by Reuben Irvine, BCTS

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. Target met for the Plan area.

Assessment Results: Ninety-two percent (382 out of 413) 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. Target met for the Plan area.

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 WTP's, etc. and with their original Site Prescription's signed after January 1st, 2011, 93.7% (358 out of 382) 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. Target met for the Plan area.

Assessment Results: All licensees in the three TSAs and TFL 18 indicated that they confirmed the location of known Red-listed and Blue-listed species through CDC.

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. Target met for the Plan area.

Assessment Results: In the Kamloops TSA, there was one cutblock harvested, where there was a documented critical habitat feature for a Red-listed or Blue-listed species (Western Toad). There was 100% consistency with SP measures achieved.

In the TFL 18 and in Lillooet TSA there were no blocks with an occurrence of a critical habitat feature.

In the Merritt TSA there were six cutblocks with an occurrence of a critical habitat feature (Whitebark pine and Mountain beaver). There was 100% consistency with SP measures achieved.

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 (WHA's) and the development of General Wildlife Measures. Target met for the Plan area.

Assessment Results: In the Kamloops TSA, licensees reviewed and provided comments to government on Mule Deer and Moose draft GAR Orders. They consulted on a watershed pilot project and participated in a Forest Practices Board special investigation on Mountain Caribou

In the Lillooet TSA, licensees participated in meetings with respect to Ungulate Winter Range and Western Screech Owl.

In the Merritt TSA, licensees participated in meetings where proposed UWR and proposed Williamson's Sapsucker WHA's have been discussed, as well as Western Screech Owl.

Target 6d: Harvesting operations in areas designated as Ungulate Winter Range (UWR) will be consistent with Plan commitments to manage for the specific ungulate species. Target met for the Plan area.

Assessment Results: In the Kamloops TSA there were 21 blocks harvested within UWR and all of these followed commitments to manage for UWR.

There were no blocks in TFL 18 harvested within and managed for UWR.

In the Lillooet TSA, 11 blocks were harvested within UWR and all followed the commitments.

In the Merritt TSA, licensees reported 47 cutblocks where harvesting occurred within designated UWR and 47 where commitments to manage for the species were adhered to.

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 – Kamloops TSA.

Target: Affected licensees adhere to the current management strategies for the mountain caribou. Target met for the Plan area.

Assessment Results: In the Kamloops TSA, four licensees harvested a total of 241.9ha 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 – Lillooet TSA.

Target: Affected licensees adhere to the current management strategies for the northern spotted owl. Target met for the Plan area.

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 (521ha impact to timber harvesting land base) in the Merritt TSA, unspecified large area having a THLB impact of 8000 ha in the Lillooet TSA. Target met for the Plan area.

Variance: As provided for within the legal framework.

Assessment Results: In the Kamloops and Lillooet TSAs, there were no locations where the presence or occurrence sites of selected focal species were identified. In the Merritt TSA there was one location where the presence or occurrence site of grizzly bear was identified, and the habitat was conserved or managed.

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). Target not met.

Assessment Results: In the Lillooet and Merritt TSAs and TFL 18, 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: Lillooet TSA – 280.2ha, Merritt TSA – 4,678.5ha and TFL 18 – 1,266.4. In the Kamloops TSA 8,572.2ha of 8,591.4ha (99.8%) was planted with species appropriate for the site. On one block, less than 5% Spruce was planted in the species mix, where it was not a preferred or acceptable species. However, the cruise compilation identified Spruce and it was part of the volume removed from the site.

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. Target met for the Plan area.

Assessment Results: Road cuts and fill slopes were seeded on average within 7.6 months of disturbance, compared to 6.8 months in 2013. 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 – Kamloops TSA

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. Target met for the Plan area.

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 two cutblocks where documented Red-listed ecological communities occurred (SBSmm04) and in both cases the Wildlife Tree Retention Area (WTRA) placement was weighted towards those communities. 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 – Lillooet TSA

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

Assessment Results: There was no harvesting completed in the Lillooet TSA in 2014 in any of the identified rare landscape unit /BEC zone variants.

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. Target met for the Plan area.

Assessment Results: There were 44 sites identified and mapped in the plan area, and all 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. Target met for the Plan area.

Assessment Results: There were no special geological features identified.

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. Target met for the Plan area.

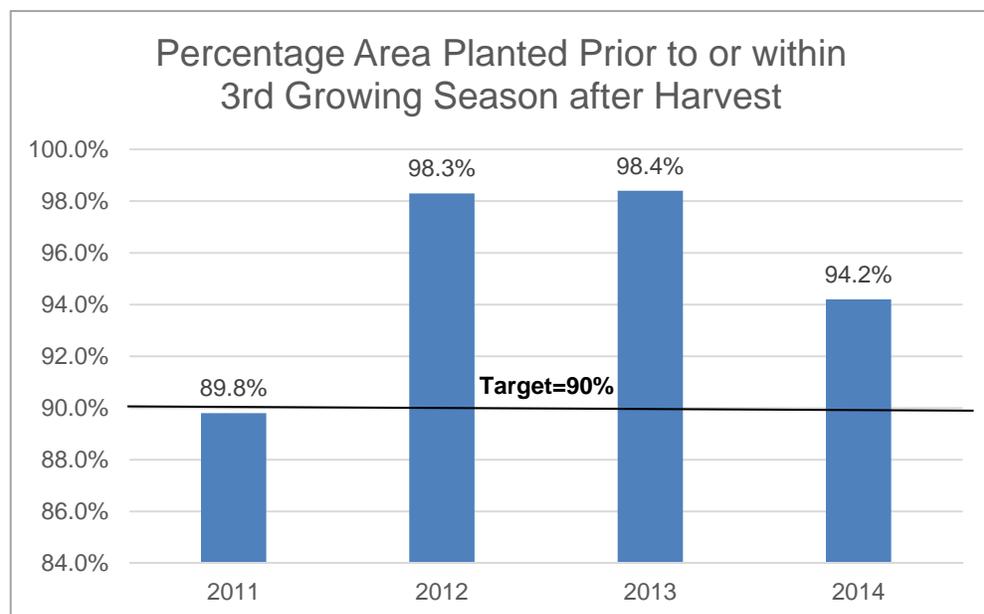
Assessment Results: Overall, 94.2% of areas were planted within the 3rd growing season from harvest, for the collective NTF Plan area.

In the Kamloops TSA, licensees reported that 91.2% (8,317.8 of 9,121.8ha) of area prescribed for planting was completed within the third growing season.

In TFL 18, there was 93.9% (1,134.9 of 1,208.4ha) of area prescribed for planting was completed within three growing seasons.

In the Lillooet TSA, licensees reported 100% (263.7ha) of area prescribed for planting was completed within three growing seasons.

In the Merritt TSA, licensees reported that 100% (4,593ha) 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 declared free growing in the reporting period 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. Target met for the Plan area.

Assessment Results: In each of the TSA's and TFL 18, all areas that were declared free growing in 2014 had met the free growing requirements on or before the latest date.

In the Kamloops TSA, licensees reported 7,026.2ha achieved free growing status; these cut blocks outperformed their late free growing date by an average of 4.8 years.

In the TFL 18, the licensee reported 1,168.0ha achieved free growing status; these cut blocks outperformed their late free growing date by an average of 3.3 years.

In the Lillooet TSA, licensees reported 2,406.3ha achieved free growing status; these cut blocks outperformed their late free growing date by an average of 2.5 years.

In the Merritt TSA, licensees reported 3,783.8ha achieved free growing status; these cut blocks outperformed their late free growing date by an average of 3.9 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).

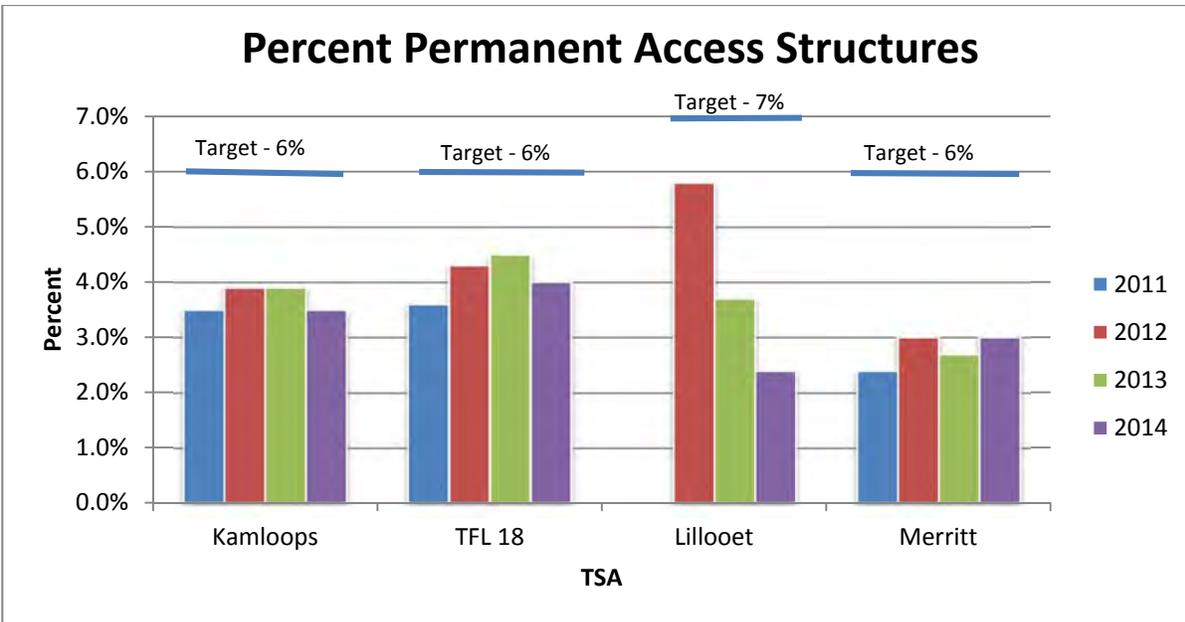
Target: Less than 6 percent (7% for the Lillooet TSA), on average, of harvested areas will be in permanent roads and landings. Target met for the Plan area.

Assessment Results: In the Kamloops TSA, the percentage of permanent roads and landings within the total harvested area averaged 3.5%. A total gross area of 8,155.9 ha was harvested in 2014. New permanent roads and landings occupied 284.4 ha.

In TFL 18, the total gross block area harvested was 1,834.3ha with 74.2ha in permanent roads and landings. This equates to 4.0%.

In the Lillooet TSA, the percentage of permanent roads and landings within the total harvested area averaged 2.4%. A total of 613.4ha (gross area) was harvested in 2014. New permanent roads and landings occupied 14.8 ha.

In the Merritt TSA, the total gross block area harvested was 5,140ha with 155.8ha in permanent roads and landings. This equates to 3.0%, 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. Target met for the Plan area.

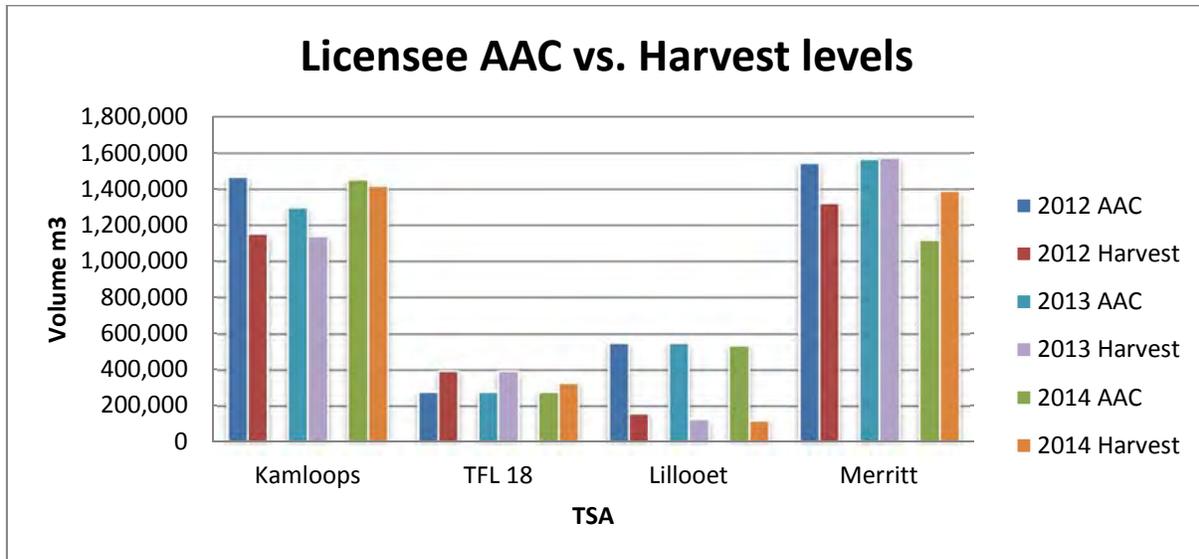
Assessment Results: The annual allowable cut (AAC) for the Kamloops TSA is 4,000,000m³; licensees reported 1,419,723m³ harvested against a reported AAC of 1,454,977m³.

The AAC for TFL 18 is 279,500m³, with 329,148m³ reported harvested.

The AAC for the Lillooet TSA is 570,000m³; the two licensees reported 120,374m³ harvested against a reported AAC of 534,933m³.

The AAC for the Merritt TSA is 2,400,000m³; licensees reported 1,390,263m³ harvested against a reported AAC of 1,117,771m³.

Note that NRFL's not held or managed by the participating licensees, as well as Small Scale Salvage, do not report on this Target.



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. Target met for the Plan area when 5% variance applied.

Assessment Results: There were 343 cutblocks harvested that had Riparian Management Area (RMA) or Lakeshore Management Area (LMA) within or adjacent to them, with one non-conformance, in the Kamloops TSA. An S4 reserve zone was partially harvested which was not part of the plan. There was no negative impact to the stream.

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. Target met for the Plan area.

Assessment Results: Soil disturbance objectives were met on all 15,308.9 hectares (total NAR) harvested.

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 (TSFA) or from a failure to follow the recommendations within a completed assessment. Target met for the Plan area.

Assessment Results: There were four slides in the NTF Plan area: one in the Kamloops TSA and three in the Merritt TSA. The slides were not as a result of a failure to perform or follow a TSFA.

- In the Kamloops TSA, a 0.22ha slide occurred where spring runoff water flowed in tire tracks and then entered tension cracks, causing an over-steepened fill slope to fail. This road has a history of slope failures after being constructed in the 1940's.
- In the Merritt TSA, a 0.3 ha slide occurred where water drained from bench to bench and finally to an area of 65-75% slopes where there was evidence of a previous slide. Heavy rain events may have contributed to extra subsurface flow.
- A second slide occurred on an older road with over-steepened (70%+) fill slope. Material was deposited next to an unclassified stream but not in it.
- The third slide in the Merritt TSA was the result of a culvert freezing entirely, causing water to run down the road and exit on deep road fill. Some muddy water flowed into Cook Creek, but most material deposited on a flat area, destroying 0.1ha of a plantation.

In all cases mitigation and maintenance work was done.

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. Target met for the Plan area when 5% variance applied.

Assessment Results: A total of 663 cutblocks were harvested during the reporting period. Of these, 654, or 98.6%, of the harvested cutblocks were consistent with the commitments in the operational plans. Several stands did not have good CWD opportunity (small diameter Douglas-fir stands, high quality sound timber or cable blocks where no standing CWD retained for safety reasons). All blocks not meeting the target had high CWD requirement of 20m³/ha which is an outdated target (now specifying #logs/ha).

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. Target met for the Plan area.

Assessment Results: In the Kamloops TSA, there were 22 blocks harvested where the watershed ECA exceeded 35%, of which 20 had further hydrological assessments. Two blocks were located at the headwaters of the Bonaparte watershed and hydrological assessments were not completed prior to harvest. Pine salvage was a priority within the watershed. GIS analysis is being completed to determine actual ECA calculations.

In TFL 18 there were no blocks harvested where the ECA exceeded 35%.

In the Lillooet TSA there was one block harvested where the ECA exceeded 35% and a further hydrological assessment was completed.

In the Merritt TSA, there were 23 blocks harvested where the watershed ECA exceeded 35%; further hydrological assessments were completed on all of these.

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. Target met for the Plan area when 5% variance applied.

Assessment Results: Licensees reported 6,264.7km of permanent status roads scheduled for inspection, with a total of 6,196.5km, or 98.9%, with completed inspections, compared to 92.5% in 2013.

332 of 333, or 99.7%, of maintenance items identified were completed, compared to 94.6% in 2013.

All outstanding inspections and maintenance items were re-scheduled to 2015, due to low risk, limited time and resources.



Erosion management – fine textured soils, photo upstream of culvert installation

Photo credit: Dennis Farquharson, GRO TRZ Consulting Inc.

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. Target met for the Plan area.

b. Participating Licensees respond to all written requests for communication/information from First Nations. Target met for the Plan area.

Assessment Results: There were 457 meetings and meaningful communications with local First Nations, compared to 608 in 2013. Licensees had 249 written requests for communication, compared to 298 in 2013, 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. Target met for the Plan area.

Assessment Results: Licensees indicated that their interests were represented at strategic and local area meetings with other stakeholders and the broader public. There were 66 community meetings attended and 143 communications with recreation users. There were 53 written requests from the public and all were responded to, in a weighted average of seven days.

Examples of issues / topics communicated are: road maintenance, access control, burning, range management, trails, snowmobile club, resorts, camps & adventure company concerns, hydrology, fences, and traplines.

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. Target met for the Plan area.

Assessment Results: There were 164 blocks harvested with preservation, retention or partial retention visual quality objectives (VQO). All blocks achieved the visual intent. A total of 41 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. Target met for the Plan area.

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. Target met for the Plan area.

Assessment Results: In the Kamloops TSA, licensees reported 104 local business initiatives and partnerships. These included wood purchases and sales, partnerships and service agreements with First Nations and Community Forests, LIDAR projects, a job creation program, and contracts with local companies.

In the Lillooet TSA, there were eight initiatives and partnerships, including contracts and timber sales to local companies and partnerships with First Nations.

In the Merritt TSA, there were 39 initiatives and partnerships, including post and rail sales, hog & sawdust sales, round wood sales, joint ventures and service agreements with First Nations, and contracts to local companies.

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. Target met for the Plan area.

Assessment Results: Licensees with sawmills in the Kamloops TSA reported 236,753 mbf or thousand board feet of lumber output and 157,435 bdt or bone dry tones of chip output. Lumber output decreased by 3,019 mbf and chip output

decreased by 3,855 bdt in 2014. As well, there were 285,314 mbfm of veneer produced compared to 294,599 mbfm in 2013.

Licensees in the Lillooet TSA reported 1,700 mbf of lumber output and 22,120 bdt of chip output. There was 105,594 mbfm of veneer reported, compared to 76,000 in 2013.

Licensees with sawmills in the Merritt TSA reported 545,118 mbf of lumber output and 286,344 bdt of chip output. Lumber output decreased by 16,808 mbf and chip output decreased by 4,400 bdt in 2014. There was no veneer output reported.

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. Target met for the Plan area.

Assessment Results: 2013 numbers are in brackets:
Kamloops TSA: 1,114 days (937); 1,079,150 man hours worked (939,524); 587 employees (429); 8,570 estimated direct and indirect jobs.
Lillooet TSA: 235 days (200); 89,347 man hours worked (64,750); 52 employees (35); 590 estimated direct and indirect jobs.
Merritt TSA: 1,242 days (999); 922,462 man hours worked (731,797); 436 employees (408); 6,812 estimated direct and indirect jobs.

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. Target met for the Plan area when 10% variance applied.
b. 100% of woodlands employees are trained in accordance with training plans. Target met for the Plan area.

Assessment Results: 547 of 566 (96.6%) DFA forest contractors had both environmental and safety training. BCTS reported 107 out of 111 (96.4%) awarded contracts and licenses were SAFE Company registered and/or certified. There were a total of 131 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.

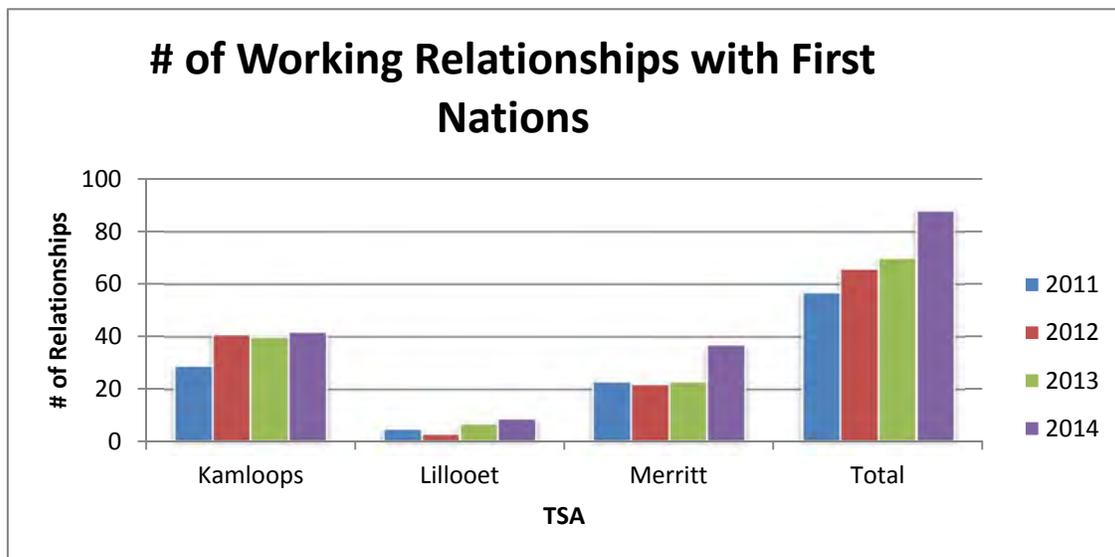
Target (35): The number of working relationships with applicable First Nations.

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. Target met for the Plan area.

Assessment Results: Licensees in the Kamloops TSA reported 42 working relationships with First Nations. This is a slight increase from 40 in 2013. Examples of relationships included direct employment in manufacturing facilities, referrals, log purchase agreements, hauling contracts, service agreements for archaeological and cultural heritage work and preliminary field reconnaissance, NRFL partnerships, timber development, burning, brushing contracts, mechanical site preparation, and Memorandum of Understanding. Approximately 33% of the TSA committed volume was allocated to First Nations (835,198m³).

Licensees in the Lillooet TSA reported nine working relationships with First Nations. This is an increase from seven in 2013. Examples of relationships included logging, road construction, road maintenance, burning, and development opportunities. Approximately 42% of the TSA committed volume was allocated to First Nations (278,480m³).

Licensees in the Merritt TSA reported 37 working relationships with First Nations. This is an increase from 23 in 2013. Examples of relationships included GPS work, mistletoe control, planting, PFR and CHR surveys, cruising, harvesting, trucking, burning, planning & timber development, road building, maintenance and rehabilitation, milling (Coldwater post & rail), log purchases and forest management. Approximately 35% of the TSA committed volume was allocated to First Nations (658,359m³).



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. Target met for the Plan area.

Assessment Results: All ranchers (235) possibly affected by planned operations were communicated with during the reporting period.

Range rider – Lundborn Commonage, near Merritt, BC



Photo credit: Don Parno, MFLNRO

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. Target met for the Plan area.

Assessment Results: Thirty-three trappers indicated that they wished to be communicated with; licensees reported that they communicated with 105 trappers. There were 17 instances where plans changed possibly impacting trappers and in all instances, efforts were made to discuss the changes.

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. Target met for the Plan area.

Assessment Results: Eighty-nine percent (232 of 261) of on the ground contractors were SAFE Company registered and/or certified. Ninety-six percent (107 of 111) 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 certified or have a worker safety program that has been implemented and is periodically reviewed and improved. Target met for the Plan area.

Assessment Results: All forest companies/organizations subscribing to the SFM Plan reported that they are SAFE Company certified or otherwise have a worker safety program.

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: Active, engaged public advisory group (PAG).
a) 80% of responses to the Participation Satisfaction Survey are a “3” or better. Target met for the Plan area
b) All written comments are reviewed and considered, and all line responses averaging less than 3 become action items. Target met for the Plan area.

Assessment Results: a) Survey response was an average of 4.2 out of 5, compared to 3.9 in 2013. Ninety-eight percent of responses to survey questions ranked “3” or better. There were eight 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.

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. Target not met.

Assessment Results: Kamloops TSA licensees conducted 25 field trips and presentations (33 in 2013; target is 40), with five provided specifically to First Nations. The presentations included:
• Arbor day in Kamloops (since the 1950s Grade One students in SD73 have received a seedling to plant around their homes);
• Skeetchestn field tour at Coal Creek
• SD73 High School fall forestry camp;
• School visits to the salmon run at Roderick Haig-Brown Park
• Field trip with PRT to review stock trials

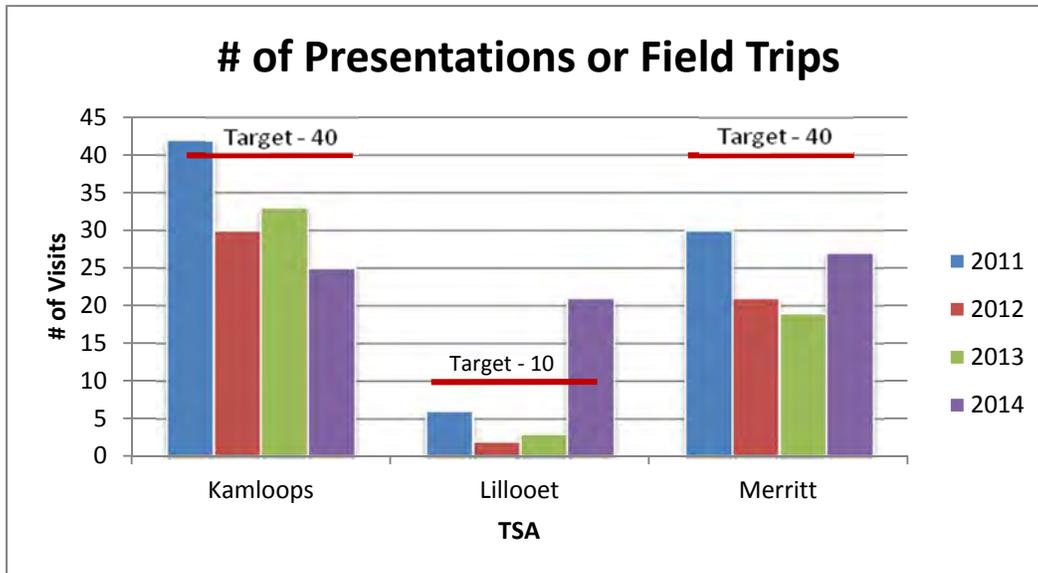
- In-class presentations regarding education paths to becoming Forest Professionals
- Community Forest sponsored 2014 Job Creation Program with Ministry of Social Development, providing participants with training and educational workshops for forestry jobs;
- Community meetings hosted by Lower North Thompson Community Forest Society
- Participation in Simpcw FN Career Fair.
- Kamloops Stock Association meetings

Lillooet TSA licensees conducted 21 field trips and presentations (three in 2013; target is 10), 20 targeted specifically to First Nations. These included:

- Yalakom and Bralorne Community Meetings,
- Seton Corridor Stakeholder Committee Meeting
- Bridge River Band information meetings,
- Business to Business opportunities with respect to Section 61 transfers
- Noxious Weeds Annual General Meeting.

Merritt TSA licensees participated in 27 field trips, presentations and educational support (19 in 2013; target is 40). Six of those were targeted specifically to First Nations. Participation included:

- Meetings with Ranchers
- FREP First Nations values field trip
- PAG field trip
- Field tour of BNS harvesting operation;
- Coarse woody debris workshop
- Fisher management
- Open house at Lower Nicola Band;
- National Forest Week golf tournament;
- National Forest Week tree planting and other presentations;
- High school presentations;
- NVIT mill tour presentation



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:

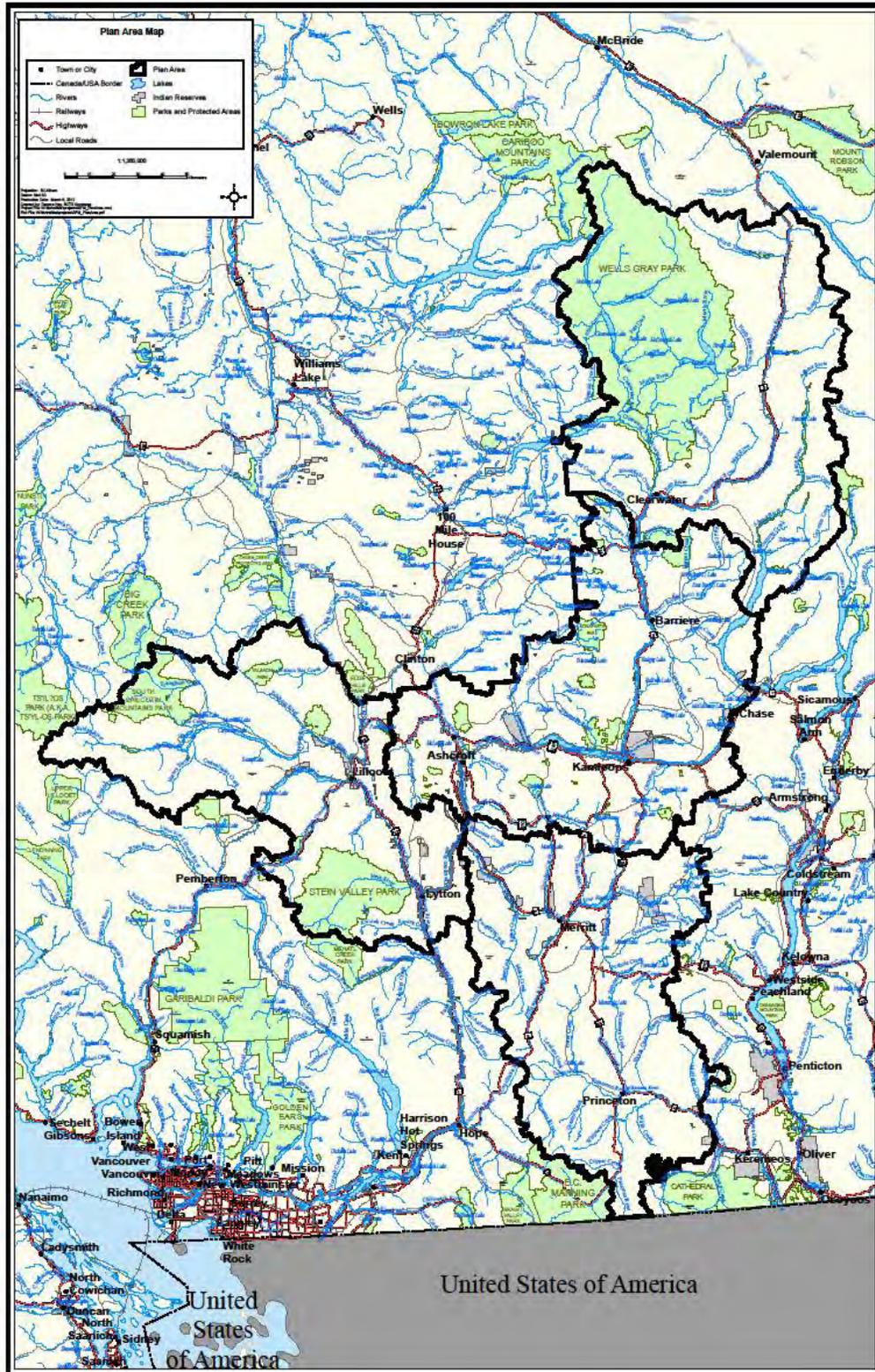
- a) Maintaining a website. Target met for the Plan area.
- b) Circulating SFM Plan and other information to the public at least annually (advertisements / news release / leaflet / open house / Local Resource Use Planning etc.). Target met for the Plan area.

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 1,368 (Canada – 801, Brazil – 310, Italy – 42, USA – 22, Argentina – 16, Portugal – 15, Mexico – 14, Spain – 11, Philippines – 11, Ecuador – 9, and various other countries – 117). There were 980 unique visitors.

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. Direct invitations have been given to First Nations and local school teachers to become involved. 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

2014 SFM Reporting Summary



Aspen Planers Ltd.

More information can be obtained by contacting

Brent Turmel
at

Aspen Planers Ltd.,

Phone:
250 378-9266

E-Mail:

brentturmel@apgroup.ca

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



2014 SFM Performance Highlights

SFM Plan performance targets were achieved on 37 of 38 reportable targets in the Nicola Thompson Fraser SFM Plan.

The following is a performance summary for a selection of the CSA Criteria and the rationale for the Criteria not met.

Criterion 1 – Biological Diversity

- All targets were met. (Targets reported on 2, 4-15)

Criterion 2 – Ecosystem Condition and Productivity

- All targets were met (Target #'s 16-20).

Criterion 3 – Soil and Water

- All targets were met (Targets reported on 11, 18, 21-25)

Criterion 4 – Role in Global Ecological Cycles

- All targets were met. (Targets reported on 16-18)

Criterion 5 – Economic and Social Benefits

- All Targets were met. (Targets reported on 19, 27-35)

Criterion 6 – Society's Responsibility

- All targets were met except Target #38 – A minimum of 80% of contractors are "SAFE" certified or certified to an equivalent standard. Smaller road maintenance/transportation and forest planning/silviculture contractors are not registered. The work that these contractors are engaged in is relatively lower risk. Efforts shall be made to encourage this registration in the future.

Opportunities For Improvement

In the 2013 reporting summary, it was made very clear that effective communication was not of an acceptable standard in our operations. Documentation regarding obligations, commitment tracking and completion dates were not clearly presented in many areas. Procedures were amended which resulted in a significant change in our communication, tracking and recording of obligations and responsibilities. New systems were developed and responsibilities amended which resulted in this success.

Specific Highlights or our Plan Report

- Target 16 – 100% of the Lillooet, Merritt and Kamloops TSAs' areas prescribed for planting were planted within the third growing season.
- The Employment numbers in Lillooet and Savona increased in all areas. This stability is a significant economic stimulus to the communities of Lillooet and Savona. The Savona Specialty Plywood plant in the Kamloops TSA was operational for 362 days in 2013, with a total of 170 employees on payroll totaling 270,757 man-hrs worked. The Lillooet Veneer plant was operational for 235 days with a total of 52 employees on payroll and a total of 89,347 man-hours worked.
- The Coldwater Plant and The Trim Block Plant both experienced increases in days of operation and man hrs. worked over the previous year.

2014 SFM MONITORING SUMMARY



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

Ph: (250) 371-6500

Lorne.Wood@gov.bc.ca

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



Photo of Helmcken Falls, Wells Gray Provincial Park

BC Timber Sales 2014 SFM Performance Highlights:

SFM Plan performance requirements were achieved for 38 of 41 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 2014 Sustainable Forest Management Plan Report:

- 100% of hectares logged met soil disturbance commitments.
- 99% of cutblocks greater than 10 hectares had wildlife trees or wildlife tree patches retained within them.
- 100% of the ranchers and trappers affected by BCTS operations were communicated with about forest operations and development.
- 99.6% of trees planted were planted prior to or within the third growing season of harvest start.
- 100% of hectares logged were in conformance with riparian and lakeshore requirements.
- 100% of cutblocks were managed with operational plans regarding coarse woody debris retention.
- Permanent access structures occupied only 3.1% of the harvested area.
- 100% of areas where free growing was due met free growing requirements.
- 100% of culturally important, sacred, or spiritual sites were managed or protected in accordance with forest plans.
- 100% of all road maintenance items that were scheduled were completed.
- 100% of known recreational trails were retained for continual use on harvested areas.

SFM Plan performance targets were not achieved for 3 of 41 indicators relating to the sustainability criteria in the NTF SFM Plan. The targets that were not achieved, three are noted as very minor, are as follows:

Indicator 4: A 0.6 hectare incursion has occurred within an OGMA. It is considered minor and BCTS will find replacement area in an annual review completed BCTS in 2015.

Indicator 10: 99.3% of trees planted conformed to plans relating to species requirements within approved stocking standards. (Kamloops TSA).

Indicator 24: BCTS did not complete a hydrological assessment of the Bonaparte Watershed prior to harvesting; pine salvage was the priority within the watershed. BCTS is completing further GIS analysis works to determine actual ECA calculations. (Kamloops TSA)

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

2014 SFM MONITORING SUMMARY



Vavenby

More Information on how Canfor - Vavenby performed against all indicator targets reported on in 2014 can be obtained by contacting Dave Poole at Canfor's office in Vavenby.

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

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



Figure 1

Bone Creek Forest License A18688

Photo by D. Poole

Canadian Forest Products Ltd. - Vavenby 2014 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. Canfor – Vavenby participated in Canfor's multi-site surveillance audit in 2014.

40 out of 41 targets were met in 2014. SFM Highlights for the year included:

- **Target 4:** The total existing Old Growth area identified in Canfor's FSP was maintained through 2014.
- **Target 11:** Grass seeding of all road cut and fill slopes occurred within 10 months of construction.
- **Target 20:** Canfor harvested 62 block having riparian or lakeshore management commitments. All harvesting conformed to plans.

- **Target 23:** 100% of 67 blocks harvested in 2014 met with CWD objectives identified in operational plans.
- **Target 25:** 808 km of roads were inspected in 2014, 100% of all roads scheduled for inspection
- **Target 31:** Canfor had 37 local business initiatives and partnerships during the reporting year

Target Not Met in 2014:

- **Target 25:** 33 out of 37 identified maintenance items were completed during the reporting year. Items not completed were low risk and rescheduled to 2015

The monitoring report can be located at:

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

2014 SFM MONITORING SUMMARY



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

Ph: (250) 672-9435
chewlett@gspfcedar.com

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



Gilbert Smith Forest Products Ltd. 2014 SFM Performance Highlights:

SFM Plan performance requirements were achieved for 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 2014 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 4.9%.
- Regeneration of harvested blocks occurred within 12.1 months on average from the time of the harvest start date, compared to a target of 36 months.
- 96% of the identified Free Growing blocks had 3 or more species greater than 1% of the survey data collected.
- Road cuts and fill slopes were seeded with certified seed, on average within 5.2 months of completion of construction, compared to a target of 12 months.
- Gilbert Smith Forest Products Ltd. reported a total of 8 working relationships with First Nations in 2014.
- 100% of blocks harvested >10ha have a Wildlife Tree Patch, Wildlife Trees, Stubs 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 35 local business relationships/partnerships.
- 100% of Gilbert Smith's contractors received environmental training and all are SAFE Company Certified.
- Gilbert Smith has invested in LIDAR technology covering much of their operating area.

[Pictured above: Dispersed retention in CP 704 Block 2, North Barriere Lakes. C.Hewlett]

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

2014 SFM MONITORING SUMMARY



More information on how Tolko performed against all sustainability indicators can be obtained by contacting Jamie Skinner RPF, Area Supervisor- Planning:

Phone: 250 578-2177
jamie.skinner@tolko.com

www.tolko.com



Photo Taken by Jamie Skinner, Thompson Nicola Woodlands.

Tolko Industries Ltd.'s 2014 SFM Performance Highlights

SFM Plan performance targets were achieved for 35 of 38 indicators and objectives relating to the sustainability criteria in the SFM Plan for our Forest Licenses and NRFLs in 2014. The following summary highlights Tolko's contribution to the Nicola Thompson Fraser Sustainable Forest Management report:

- 97% of non-ESSF free growing blocks had 3 or more species and 100% of ESSF free growing blocks had 2 or more species as compared to the target of 70%.
- 100% of cutblocks greater than 10 ha had associated Wildlife Tree Retention as compared to the target of 90%.
- 100% conformance to plans for managing red and blue-listed species, mountain caribou, red and blue-listed ecological communities, culturally important, sacred and spiritual sites, and geological features.
- 99.9% of the areas prescribed for planting were planted within 3 years of harvest, compared to a target of 90%.
- The harvested area occupied by permanent roads and landings was 4%, compared to the target of 6%.
- 100% conformance to riparian and lakeshore commitments (100 blocks with RMA's).
- All Free Growing blocks due in 2014 (4761 ha) achieved Free Growing and outperformed late free growing with an average of 4 years.

SFM Plan performance targets were not achieved for 3 targets. These targets are listed below along with a brief explanation as to why the target was not met.

- Target #11: Licensees will report the use of certified seed and the average time for road cut and fill slope seeding application on areas of new road construction during the reporting year. Target is that all planned road cut and fill slope seeding application will be carried out using certified seed and within 12 months of completed road construction on disturbed sites suitable for germination.
 - *Target of 12 months not achieved. Lack of appropriate information in the reporting system lead to the grass seeding program running behind and delayed seeding in the Merritt reporting unit. Winter built roads which were missed in the spring were not seeded until snow free period to avoid seeding during hot dry summer periods.*
 - *Improvements made partway through 2014 to improve reporting system for scheduling of seeding in a more timely fashion going forward and an additional contractor has been identified to carry out this work including seeding winter built road in the spring. Expect to be back on target in 2015.*
- Target #23: Licensees will report operational plan conformance to the target (cutblocks harvested where planned targets met compared to all cutblocks harvested). Reporting may also utilize supplemental information collected as part of post harvest waste assessments including ocular estimates. 100 percent of cutblocks will manage coarse woody debris (CWD) consistent with commitments in operational plans.
 - 102 of 109 cutblocks harvested where planned CWD commitments were achieved
 - Several stands did not have good CWD opportunity (small diameter Douglas-fir stands, high quality sound timber or cable blocks where no standing CWD retained for safety reasons). All blocks not meeting had high CWD requirement of 20m³/ha which is an outdated target (now specifying #logs/ha)
- Target #34: Licensees will report the total number of forest contractors and identify the number that had received both environmental and safety training.
 - Out of 63 contractors, 47 contractors were trained. 8 of the contractors were low risk and worked less than 5 days therefore Contractor Orientation (EMS/CSA training) was not required. 10 of the remaining contractors did not have any record (several were completed on tablets but did not load properly into the system and 1 contractor was not completed for sure (forgot).
 - Tolko updated Safety tracking and EMS system in 2015, expected to improve reporting.

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.	4.4
2	My suggestions related to Sustainable Forest Management values and objectives are being adequately listened to at the Advisory Group Meetings.	4.3
3	Efforts have been made to incorporate my concerns related to SFM values and objectives into the SFM Plan.	4.3
4	My suggestions related to SFM indicators and targets are being adequately listened to at the Advisory Group Meetings.	4.0
5	Efforts have been made to incorporate my concerns related to SFM indicators and targets into the SFM Plan.	4.1
6	I have been given the opportunity to review licensee's audit results and annual reports.	4.4
7	The meeting agenda allows for discussion of any related sustainable forestry issues of concern to advisory group members.	4.6
8	Information provided in advance of meetings is adequate and organized to allow for me to effectively contribute.	4.5
9	Advisory Group Meetings are run efficiently and effectively.	4.5
10	The meeting minutes capture important aspects of the meeting.	4.4
11	Communication with Advisory Group members between meetings is adequate.	4.3
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.	4.1
13	A broad cross-section of the community is represented at Advisory Group Meetings.	3.4
14	Licensees have made an effort to recruit new members (if there was a desire to do so)?	4.0
15	Licensee's and or the facilitator are proactive about providing new information to the PAG members regarding impacts to environment, sustainability, forestry, etc?	3.9
	Total Average Rating	4.2

A few questions were skipped by some of the respondents.

Comments received:

- Great facilitation.
- I enjoy being part of the PAG group. The meetings are well run and informative. The addition of a guest speaker has further helped my understanding of the various issues.
- There seems to be a lot of foot dragging re ungulate winter range determinations. Could we request an audience with John Surgenor re the difficulties encountered?
- Last year's spring field trip was outstanding (Aspen Planers was host). I learned lots!

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

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
IDFvc	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

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
DFvh	191,589
IMAun	471
IMAunp	727
MHmm	174
MSdm	120,778
MSmw	13,338
MSxk	178,892
PPxh	28,324

TFL 18

ZONE-subzone	Area (Hectares)
ESSFdc2	3,465
ESSFvv	2,667
ESSFwc2	32,183
ICHmk2	6,262
ICHmw3	5,100
SBSdw1	1,674
SBSmm	23,194

Appendix VI: Glossary of Acronyms

Acronym	Meaning	Acronym	Meaning
AAC	Allowable Annual Cut	NAR	Net Area to Reforest
BCTS	British Columbia Timber Sales	NRFL	Non-Replaceable Forest License
BEC	Biogeoclimatic Ecosystem Classification	NTF	Nicola Thompson Fraser
BGC	Biogeoclimatic (Zone)	OGMA	Old Growth Management Area
CDC	Conservation Data Centre	PAG	Public Advisory Group
CSA	Canadian Standards Association	SFM(P)	Sustainable Forest Management (Plan)
CWD	Coarse Woody Debris	SP	Site Plan
DFA	Defined Forest Area	SSS	Small Scale Salvage
ECA	Equivalent Clearcut Area	TFL	Tree Farm Licence
EMS	Environmental Management System	THLB	Timber Harvesting Land Base
ESSF	Engelmann Spruce - Subalpine Fir BGC Zone	TSA	Timber Supply Area
FL	Forest Licence	TSFA	Terrain Stability Field Assessment
FPC	Forest Practices Code of BC Act	TSL	Timber Sale Licence
FPPR	Forest Planning and Practices Regulation	TSR	Timber Supply Review
FRPA	Forest and Range Practices Act	UWR	Ungulate Winter Range
GAR	Government Actions Regulation	VQO	Visual Quality Objective
IWMS	Identified Wildlife Management Strategy	WHA	Wildlife Habitat Area
LRMP	Land and Resource Management Plan	WT	Wildlife Tree
MoFLNRO	Ministry of Forests, Lands and Natural Resource Operations	WTP	Wildlife Tree Patch