

Nicola Thompson Fraser
Sustainable Forest Management Plan



Annual Monitoring Report

January 1, 2017 to December 31, 2017

Released March 2018

Cover Photo: Forest Enhancement Society of British Columbia (FESBC) funded forest fertilization project on the Lower North Thompson Community Forest, east of Barriere

Photo by Dennis Farquharson, GRO TRZ Consulting Inc.

PARTICIPATING LICENSEES:

- Aspen Planers Ltd.
- BC Timber Sales
- Canadian Forest Products Ltd.
- Gilbert Smith Forest Products Ltd.

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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 SFM 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 local area 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 located on the above website. Alternatively, you are welcome to contact one of the Licensees that participate in the SFM Plan process (listed on the back of this report’s cover page).

4.0 Licensee Reporting

Sustainable Forest Management Plan reporting for the 2017 period was completed by four major licensees, three of whom have Replaceable Forest Licenses, and BC Timber Sales (BSTS), which plans, develops and sells through auction, a portion of the province’s annual available timber volume. Reporting was also done by the holders of Non-replaceable Forest Licences (NRFL) managed by those licensees. These licences are located throughout the three Timber Supply Areas. Reporting for Tree Farm License (TFL) 18, except where noted, has been rolled up into the Kamloops TSA reporting results. For further information on the scope of the licensees’ reporting, see Section 2.2 of the Nicola Thompson Fraser SFM Plan.

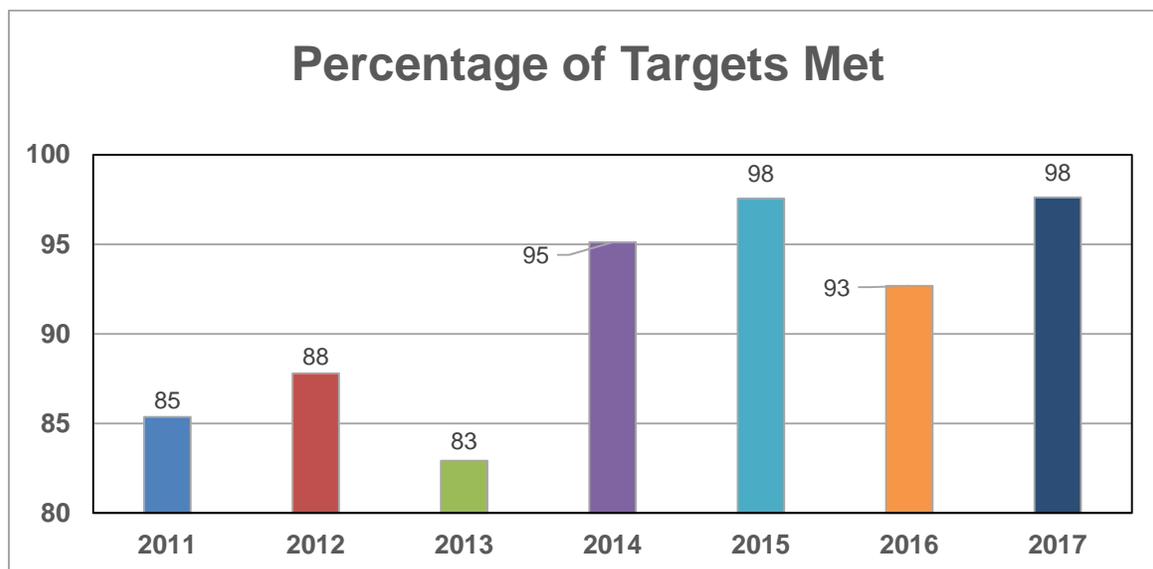
Tolko Industries Ltd. is no longer a participating licensee (as of 2017), but reported in previous years. This may influence historical report performance.

The Small Scale Salvage program is managed by the BC Ministry of Forests, Lands and Natural Resource Operations and Rural Development (MoFLNRO) and addresses a need to salvage trees killed by insects or fire. 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 and Rural Development (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 2017

The following summarizes highlights from the Nicola Thompson Fraser Sustainable Forest Management Plan 2017 monitoring period:

- The total area covered by the Plan is 5,100,115ha; 736,841ha (14.4%) of this is protected by parks, reserves, Old Growth Management Areas (OGMA), etc. The long term Timber Harvesting Land Base (THLB) is 1,988,969ha, or 39% of the total plan area. Licensees reported 8,735ha of harvest, which is 0.4% of the long term THLB.
- Across the plan area, licensees with timber processing facilities reported 1,143,146 man hours worked and 660 full or part time manufacturing employees on payroll. Direct and indirect employment is estimated at 7,239 jobs.
- There were 182 cutblocks harvested that had Riparian Management Area (RMA) or Lakeshore Management Area (LMA) within or adjacent to them, with no non-conformances.
- In the Plan area, 95.8 percent of the area planted was done so within the third growing season since start of harvest. All areas were planted with species appropriate to the site.
- There were 81 working relationships with First Nations in the Nicola Thompson Fraser SFM Plan area in 2017. There were 596 meetings and other meaningful communications with local First Nations.
- In the Kamloops TSA, 25% of the committed volume was allocated to First Nations, in the Lillooet TSA – 32%, and in the Merritt TSA – 13%. The total volume allocated to First Nations was 923,205m³.
- A new target (#26) was added to the 2017 Plan, regarding management of rare ecosystems in the Merritt TSA.



5.0 Performance 2017

Environmental, social and economic performance was assessed according to the seven 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 seven 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, society's responsibility for sustainable development, and Aboriginal relations).

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, 41 out of 42 targets (97.6%) were achieved. In 2016, 38 out of 41 targets (92.7%) were achieved.

Criterion	Related Target	Percent Achieved
1. Conservation of Biological Diversity	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 26	100%
2. Maintenance and Enhancement of Forest Ecosystem Condition and Productivity	10, 16, 17, 18, 19, 20	100%
3. Conservation of Soil and Water Resources	11, 18, 20, 21, 22, 23, 24, 25	88%
4. Forest Ecosystem Contribution to Global Ecological Cycles	3, 16, 17, 18	100%
5. Multiple Benefits to Society	19, 28, 29, 30, 31, 32, 33, 34, 36, 37	100%
6. Accepting Society's Responsibility for Sustainable Development	28, 29, 31, 36, 37, 38, 39, 40, 41, 42	100%
7. Recognition and Respect of Rights and Values of Aboriginal Peoples	14, 27, 35, 41	100%

5.1 2017 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 conformance is required for many Indicators i.e., there is no variance. Where full conformance 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	2017
1.1.1 Ecosystem area by type	<p>1. Maintain the presence of Biogeoclimatic Zones to the subzone level within the Plan area. <u>Kamloops</u></p> <p>12. Prioritized Red-listed ecological communities will be protected by retaining existing forest. <u>Lillooet</u></p> <p>13. Harvesting not to exceed greater than 50% of the total of each identified rare landscape unit / BEC (Biogeoclimatic Ecosystem Classification) zone variants. <u>Merritt</u></p> <p>26. Where operations are planned in areas that have been field verified as a rare ecosystem, the accompanying recommendations will be adhered to.</p>	<p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p>
1.1.2 Forest area by type or species composition	2. 70% of harvested cutblocks having three or more tree species (non-ESSF) (Engelmann Spruce - Subalpine Fir BGC Zone) or two or more species (ESSF) identified in the free growing inventory.	✓
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>
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.	<p>✓</p> <p>✓</p>

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	2017
1.2.1 Degree of habitat protection for selected focal species, including species at risk.	6. Identification and protection of wildlife (mammals, birds, reptiles, fish and amphibians) at risk 7. Affected licencees adhere to the current management strategies for mountain caribou. 8. Affected licencees adhere to the current management strategies for northern spotted owl.	 ✓ ✓ ✓
1.2.2 Degree of suitable habitat in the long term for selected focal species, including species at risk	7. Affected licencees adhere to the current management strategies for mountain caribou. 8. Affected licencees adhere to the current management strategies for northern spotted owl. 9. 100% conservation of habitat for select focal species	 ✓ ✓ ✓
1.2.3 Proportion of regeneration comprised of native species	10. 100% of trees planted will conform to plan commitments related to the species requirements within approved stocking standard (requires reforestation with commercially valuable and ecologically suitable tree species).	✓
1.2.4 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 Defined Forest Area (DFA)	
INDICATOR	TARGET	2017
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).	 ✓ ✓
1.2.3 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).	✓

ELEMENT	1.4 Protected Areas and Sites of Special Biological, Geographical or 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	2017
1.4.1 Protection of sites of special significance.	<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>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.</p>	<p>✓</p> <p>✓</p> <p>✓</p>
1.4.2 Proportion of identified sites with implemented management strategies	<p><u>Kamloops</u></p> <p>12. Prioritized Red-listed ecological communities will be protected by retaining existing forest.</p> <p><u>Lillooet</u></p> <p>13. Harvesting not to exceed greater than 50% of the total of each identified rare landscape unit / BEC (Biogeoclimatic Ecosystem Classification) zone variants.</p> <p><u>Merritt</u></p> <p>26. Where operations are planned in areas that have been field verified as a rare ecosystem, the accompanying recommendations will be adhered to.</p>	<p>✓</p> <p>✓</p> <p>✓</p>

ELEMENT	2.1 Forest Ecosystem Condition and Productivity	
VALUE	Productive, well functioning forest ecosystems	
OBJECTIVE	Well functioning connected ecosystems that are managed for timber and non timber forest values	
INDICATOR	TARGET	2017
2.1.1 Reforestation success	<p>16. 90% of area prescribed for planting is completed within the third growing season from start date of harvest.</p> <p>17. All cutblocks will reach free growing requirements on or before the latest date.</p>	<p>✓</p> <p>✓</p>
2.1.2 (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).	✓
2.1.3 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.	✓
2.1.4 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.	✓
3.2.2 Proportion of forest management activities, consistent with prescriptions to protect identified water features.	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	2017
3.1.1 Level of soil disturbance	<p>18. Less than 6%, (7% within the Lillooet TSA), on average, of harvested areas will be in permanent roads and landings.</p> <p>21. 100% conformance to soil conservation measures contained with operational plans.</p> <p>22. No operationally caused slides resulting from a failure to perform a terrain stability field assessment or from a failure to follow the recommendations within a completed assessment.</p>	<p>✓</p> <p>✓</p> <p>✓</p>
3.1.2 Level of downed woody debris	23. 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	2017
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) (Mountain Pine Beetle) 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 Proportion of forest management activities, consistent with prescriptions to protect identified water features.	20. 100% conformance to riparian and lakeshore commitments made within plans.	✓
3.2.3 Managing water quality through road inspections (non-core indicator).	25. All permanent status roads and associated structures will have inspections and related maintenance completed as scheduled.	x
1.2.4 Grass seeding application on newly constructed roads (non-core indicator).	11. All planned road cut and fill slope seeding application carried out using certified seed and within 12 months of completed road construction on suitable sites.	✓

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	2017
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	2017
2.1.3 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	2017
5.1.1 Documentation of the diversity of timber and non-timber resources, including products and services produced in the DFA	19. Harvest the cut allocation for the year consistent with the cut control regulation and policy.	✓
	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.	✓
	Indicate efforts made to resolve any disagreement with local communities.	✓
	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.	✓
5.1.2 Evidence of open and respectful communications with forest dependant businesses, forest users and local communities to integrate non-timber resources into forest management planning. When significant disagreement occurs, efforts towards conflict resolution are documented	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.	✓
	31. Report business initiatives and partnerships.	✓
	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.	✓
	37. Communication of forest operations to occur with trappers 100% of the time in advance of operations.	✓

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	2017
5.2.1 Level of participation and support 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>31. Report business initiatives and partnerships.</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> <p>✓</p>
5.2.2 Level of participation and support 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>

ELEMENT	6.1 Fair and effective decision making	
VALUE	Recognition of advisory group values, shared knowledge, and informed decisions	
OBJECTIVE	Engaged, dynamic public participation process	
INDICATOR	TARGET	2017
6.1.1 Level of participant satisfaction with the public participation process	40. Completion of annual PAG (Public Advisory Group) 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.	✓ ✓
6.1.2 Evidence of efforts to promote capacity development and meaningful participation in general	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 30 actions per year in the Kamloops TSA, 20 actions per year in the Merritt TSA, and 10 actions per year in Lillooet TSA. 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.	✓ ✓
6.1.3 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.).	✓ ✓

ELEMENT	6.2 Safety	
VALUE	Safe working conditions	
OBJECTIVE	Employer and contractor safety records meet current acceptable standards and demonstrate continual improvement.	
INDICATOR	TARGET	2017
6.2.1 Evidence of co-operation with DFA-related workers to improve and enhance safety standards, procedures, and outcomes in all DFA-related workplaces and affected communities	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.	✓
6.2.2 Evidence that a worker safety program has been implemented and is periodically reviewed and improved	39. 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..	✓

ELEMENT	6.3 Forest Community well-being and resilience (Z809-08)	
VALUE	Economic benefits to society	
OBJECTIVE	A prosperous forest based economy with a sustainable supply of forest resources	
INDICATOR	TARGET	2017
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 (Z809-08)	<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>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>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>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p>

ELEMENT	6.5 Information for Decision-Making (Z809-08)	
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	2017
6.5.1 Number of people reached through educational outreach (Z809-08)	<p>41. Participating licensees will maintain educational support that leads to a balanced and broad-based understanding of forestry. Educational actions would include visits to schools, presentations to resource clubs, community meetings, public tours of operations and other similar events, Target 30 actions per year in the Kamloops TSA, 20 actions per year in the Merritt TSA, and 10 actions per year in Lillooet TSA.</p>	<p>✓</p>

ELEMENT	7.1 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	2017
7.1.1 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>Indicate efforts made to resolve any disagreement with Aboriginal communities</p>	<p>✓</p> <p>✓</p>
7.1.2 Evidence of ongoing and respectful communications with Aboriginal communities to foster meaningful engagement, and consideration of the information gained about their Aboriginal title and rights through this process. Where there is communicated disagreement regarding the organization's forest management activities, this evidence would include documentation of efforts towards conflict resolution	<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>Indicate efforts made to resolve any disagreement with Aboriginal communities.</p>	<p>✓</p> <p>✓</p>

ELEMENT	7.2 Respect for Aboriginal Forest Values, Knowledge, and Uses		
VALUE	Aboriginal title and rights, treaty rights and traditional knowledge are respected		
OBJECTIVE	Manage and/or protect important archaeological sites (as interpreted by First Nations) <ul style="list-style-type: none"> • Cultural, archaeological, and heritage sites and values, including spiritual. • Use of traditional knowledge. • Meaningful and informed participation of First Nations 		
INDICATOR	TARGET	2017	
7.2.1 Evidence of efforts to promote capacity development and meaningful participation for Aboriginal individuals, communities and forestbased companies.	35. Maintain and/or increase the number of working relationships (partnerships, joint ventures, co-operative agreements, business contracts) with First Nations. Report annually the percent of the TSA's committed volume that has been allocated to first Nations ventures.	✓	
7.2.2 Evidence of understanding and use of Aboriginal knowledge through the engagement of willing Aboriginal communities, using a process that identifies and manages culturally important resources and values	27. Open communication with local First Nations will include an understanding of traditional territories and other aboriginal rights including cultural and spiritual values	✓	
	Participating Licencees respond to all written requests for communication/information from First Nations.	✓	
	Indicate efforts made to resolve any disagreement with Aboriginal communities.	✓	
	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.	✓	
7.2.3 Level of management and/or protection of areas where culturally important practices and activities occur	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.	✓	
	Indicate efforts made to resolve any disagreement with Aboriginal communities.	✓	
	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.	✓	

Appendix I: Detailed Reporting of SFM Targets

Target (1): Ecosystem Area by Type

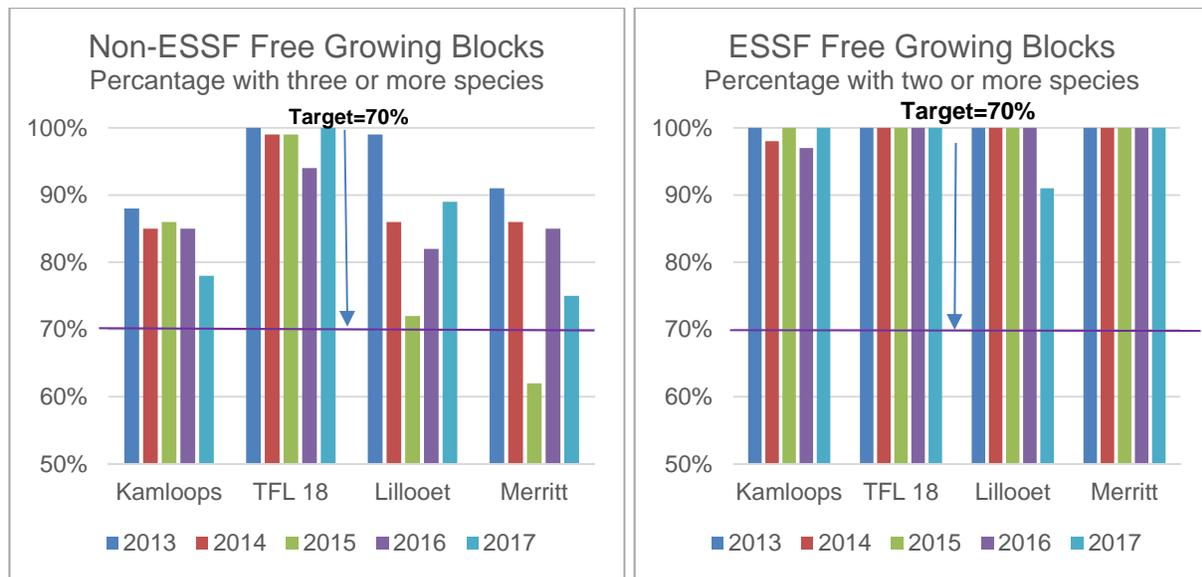
Target: Maintain the presence and representative area of Biogeoclimatic Zones to the subzone level within the plan area. Target met for the Plan area.

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%, 24% and 14%, respectively. On the free growing blocks that were artificially regenerated, species originally planted were Subalpine Fir (Bl), Western Red Cedar (Cw), Interior Douglas-fir (Fdi), Western Hemlock (Hw), Western Larch (Lw), Interior Lodgepole Pine (Pli), Western White Pine (Pw), Hybrid Spruce (Sx), and Ponderosa Pine (Py).

In TFL 18, in non-ESSF BGC zones, the average of the 1st, 2nd, and 3rd leading tree species was 45%, 28% and 17%, respectively.

In the Lillooet TSA, in non-ESSF BGC zones, the average of the 1st, 2nd, and 3rd leading tree species was 50%, 38% and 5%, respectively. On the free growing blocks that were artificially regenerated, species originally planted were Fdi, Pli, Sx and Py

In the Merritt TSA, in non-ESSF BGC zones, the average of the 1st, 2nd, and 3rd leading tree species was 82%, 11% and 6%, respectively. On the free growing blocks that were artificially regenerated, species originally planted were Fdi, Pli, Sx and Py.

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 Class 4 in the Lillooet TSA. TFL 18 has an updated TSR (Timber Supply Review) and has less than 8.5% area representation in Age Classes 3 and 4. 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, within the variance allowed (389.4ha or 0.1%).

Assessment Results: Overall, there was a net loss of 11.45 hectares of old growth management area. Within the NTF (Nicola Thompson Fraser) Plan area there are 389,443 hectares of spatially located OGMA's.

Licensees in the Kamloops TSA reported a net loss of 11.21 ha. TFL 18 reported a net loss of 0.51ha.

Licensees in the Lillooet TSA reported a net gain of 0.07 ha.

Licensees in the Merritt TSA reported a net gain of 0.2 ha

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.



Stubbed tree with cavity
Photo by Dennis Farquharson, GRO TRZ Consulting Inc.

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-eight percent (189 out of 193) 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 Plan (SP) signed after January 1st, 2011, 87% (165 out of 189) 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:	<p>In the Kamloops TSA and in TFL 18 there were no blocks with an occurrence of a critical habitat feature.</p> <p>In the Lillooet TSA there were six blocks with an occurrence of a critical habitat feature (goshawk, red-tailed hawk, grizzly bear). There was 100% consistency with SP measures achieved: goshawk and red-tailed hawk occurrence sites were found during layout and netted out of block as non-harvest or as WTP and/or managed using current Best Management Practices for that species; large coarse woody debris was retained on blocks for grizzly bears. Measures followed were part of the Government Action Regulations (GAR) orders.</p> <p>In the Merritt TSA there was one cutblock with an occurrence of three critical habitat features (mountain beaver, grizzly bear, and coastal tailed frog). There was 100% consistency with SP measures achieved. There was a 50 meter reserve on S3 stream for coastal tailed frog, a Machine Free Zone put around mountain beaver dens and 10 m³ of coarse woody debris was retained on the block and temporary roads were rehabilitated for grizzly bear. Measures followed were part of the Government Action Regulations (GAR) orders.</p>
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 & Climate Change Strategy and the Ministry of Forests, Lands and Natural Resource Operations and Rural Development, 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:	<p>In the Kamloops TSA, licensees participated in meetings with respect to FSPs and focal species and Draft Critical Deer Winter Range GAR Order discussion.</p> <p>In the Lillooet TSA, licensees participated in meetings with respect to the draft Grizzly Bear GAR order.</p> <p>In the Merritt TSA, licensees participated in meetings with respect to the Draft Critical Deer Winter Range GAR Order, as well as two submissions to government for Masked Species that were part of 2017 planned harvesting for two blocks.</p>
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 35 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, 21 blocks were harvested within UWR and all followed the commitments.

In the Merritt TSA, licensees reported 32 cutblocks where harvesting occurred within designated UWR and all followed the commitments.

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 (Forest Practices Code) 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, three licensees harvested a total of 607 ha 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 Forest Planning and Practices Regulation (FPPR) Section 7 notice) in a condition suitable for the survival of the species. Target met for the Plan area.

Variance: As provided for within the legal framework.

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

was conserved or managed.

Current status of Wildlife Habitat Areas (found at www.env.gov.bc.ca/wld/frpa/iwms/wha.html) are indicated in the tables following:

Kamloops TSA (Kamloops and Headwaters Forest Districts):

	Flammulated Owl	Western Screech Owl	Lewis's Woodpecker	Spotted bat	Badger
Desired Area (ha)	3300	60	650	120	35
Area in WHA		109.4	616.9	9.4	42.1
Area objective met (Y/N)	N	Y	N	N	Y

Merritt and Lillooet TSAs (Cascades Forest District):

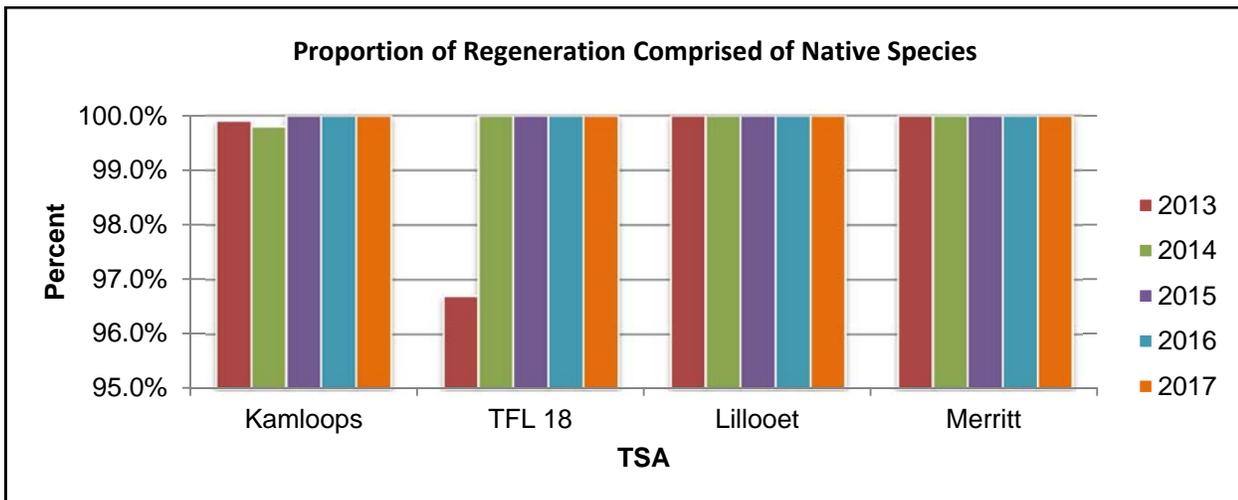
	Flammulated Owl	Western Screech Owl	Spotted Owl	Spotted Bat	Grizzly Bear Merritt TSA	Grizzly Bear Lillooet TSA	Coastal Tailed Frog	Great Basin Gopher Snake
Desired Area (ha)	4050	44	5000	16	5211	8000	2793	4000
Area in WHA		429.2	20161		3182	1322	384.6	
Area objective met (Y/N)	N	Y	Y	N	N	N	N	N

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 met for the Plan area.

Assessment Results: In the three 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: Kamloops TSA – 4,005.2ha, Lillooet TSA – 547.5ha, Merritt TSA – 4,368.7ha and TFL 18 – 1,245.7.

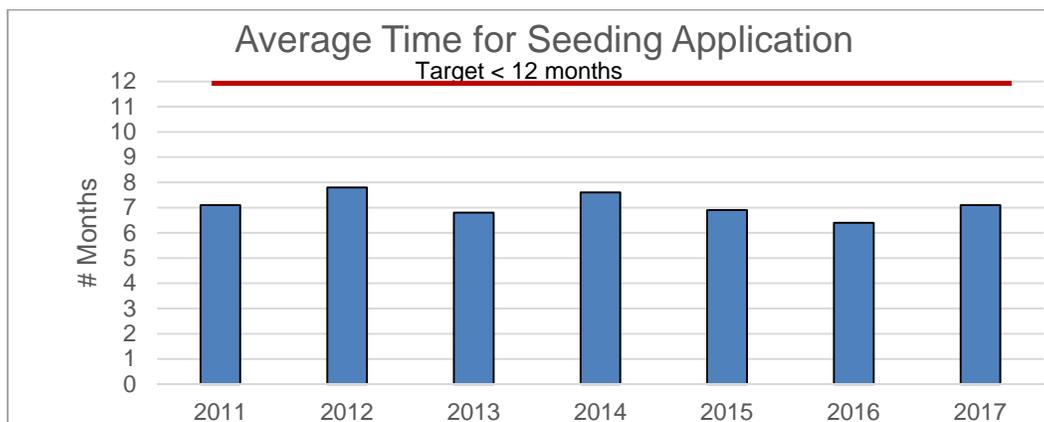


Target (10) addresses the objective of conserving the diversity and abundance of native species and their habitats.

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 7.1 months of disturbance, compared to 6.4 months in 2016. 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 no cutblocks where documented Red-listed communities occurred. As well, there were no cutblocks where non-documented ecosystems identified as “prioritized Red-listed ecological communities” occurred.

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

Target (13): Annual harvesting in rare Landscape Unit / Biogeoclimatic Zones – 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: In the Lillooet TSA in 2017, there was 11.8 ha harvested in the Pavilion / IDFdk3 and 45.6 ha harvested in the Pavilion / MSxk3, representing 8% and 6% respectively.

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 31 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 has been met for the collective plan area, although reported by TSA.

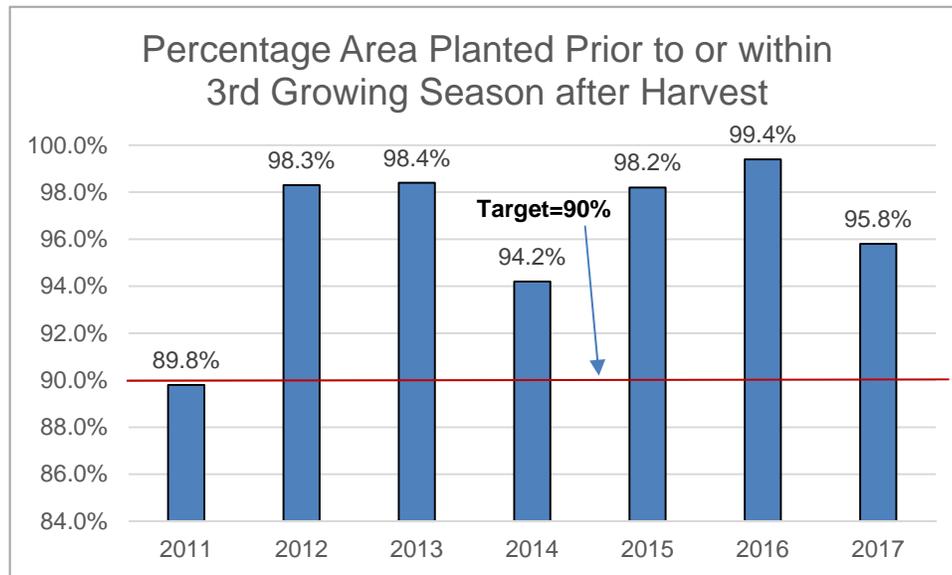
Assessment Results: Overall, 95.8% of areas were planted within the 3rd growing season from harvest, for the collective NTF Plan area.

In the Kamloops TSA, licensees reported that 100% (3,871.7ha) of area prescribed for planting was completed within the third growing season.

In TFL 18, 100% (1,245.7ha) of area prescribed for planting was completed within three growing seasons.

In the Lillooet TSA, licensees reported 99.4% (540.4 of 543.5ha) of area prescribed for planting was completed within three growing seasons.

In the Merritt TSA, licensees reported that 88.4% (2,861.6 of 3,236.0ha) of area prescribed for planting was completed within the third growing season. There were two large blocks were not planted within the third growing season due to nursery mortality issues with stock. Seedlings were made available for 2017 planting 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 2017 had met the free growing requirements on or before the latest date.

In the Kamloops TSA, licensees reported 2,642.1ha achieved free growing status; these cut blocks outperformed their late free growing date by an average of 4.5 years.

In the TFL 18, the licensee reported 178.1ha achieved free growing status; these cut blocks outperformed their late free growing date by an average of 3.9 years.

In the Lillooet TSA, licensees reported 1,051.6ha achieved free growing status; these cut blocks outperformed their late free growing date by an average of 4.5 years.

In the Merritt TSA, licensees reported 2,113.5ha achieved free growing status; these cut blocks outperformed their late free growing date by an average of 4.4 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).

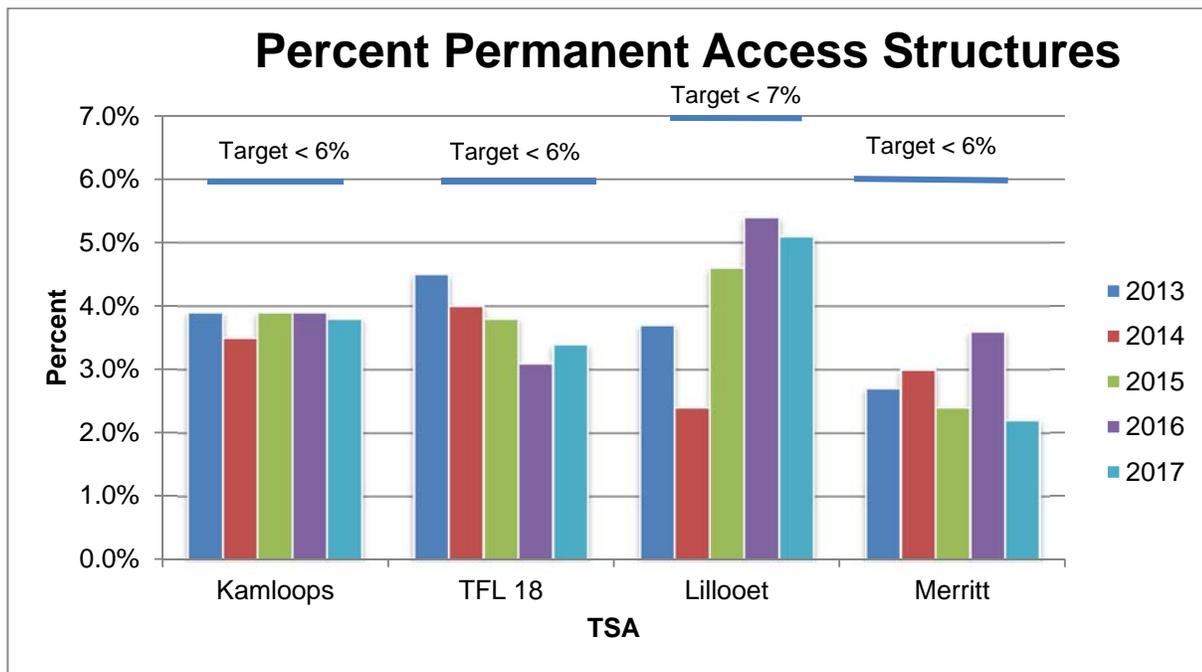
Target: Less than 6 percent (7% for the Lillooet TSA), on average, of harvested areas will be in permanent roads and landings. Target met for the Plan area.

Assessment Results: In the Kamloops TSA, the percentage of permanent roads and landings within the total harvested area averaged 3.8%. A total gross area of 4,327.4ha was harvested in 2017. New permanent roads and landings occupied 164.9ha.

In TFL 18, the total gross block area harvested was 933ha with 32ha in permanent roads and landings. This equates to 3.4%.

In the Lillooet TSA, the percentage of permanent roads and landings within the total harvested area averaged 5.1%. A total of 638.9ha (gross area) was harvested in 2017. New permanent roads and landings occupied 32.3 ha.

In the Merritt TSA, the total gross block area harvested was 2,835.7ha with 63.2ha in permanent roads and landings. This equates to 2.2%, which is well below the maximum 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.

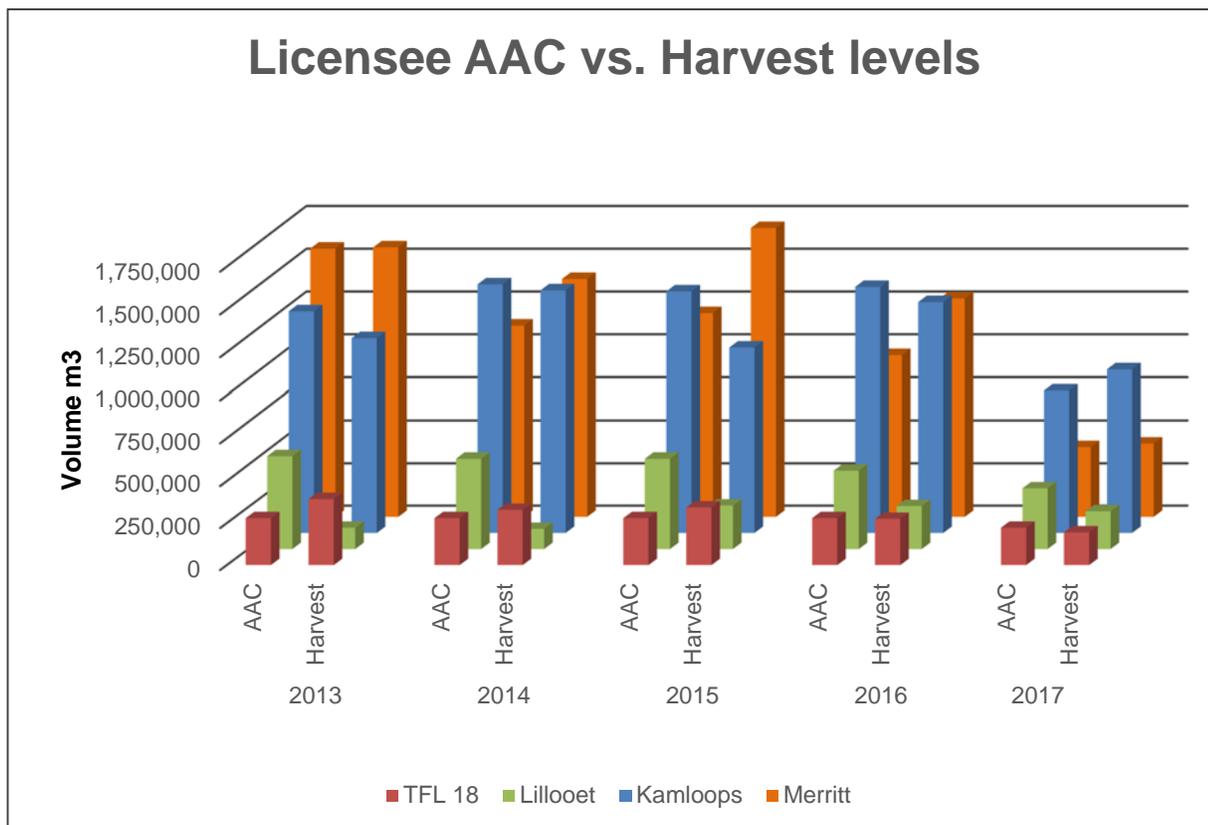
Assessment Results: The annual allowable cut (AAC) for the Kamloops TSA is 2,300,000m³; licensees reported 958,693m³ harvested against a reported AAC of 834,936m³. Note that 2017 does not include Tolko volume.

The AAC for TFL 18 is 222,460m³, with 195,139m³ reported harvested.

The AAC for the Lillooet TSA is 570,000m³; the two licensees reported 224,560m³ harvested against a reported AAC of 361,312m³.

The AAC for the Merritt TSA is 1,500,000m³; licensees reported 431,448m³ harvested against a reported AAC of 411,294m³. Note that 2017 does not include Tolko volume.

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. 2017 reporting excludes Tolko data.

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.

Assessment Results: There were 182 cutblocks harvested that had Riparian Management Area (RMA) or Lakeshore Management Area (LMA) within or adjacent to them, with no non-conformances.

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 7,572.8 hectares (total NAR – Net Area to Reforest) 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 no slides in the NTF Plan area.

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

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

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

Assessment Results: A total of 292 cutblocks were harvested during the reporting period. All of these were consistent with the commitments in the operational plans.

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 11 blocks harvested where the watershed ECA exceeded 35%, all of which had further hydrological assessments

In TFL 18 and in the Lillooet TSA there were no blocks harvested where the ECA exceeded 35%.

In the Merritt TSA, there were 24 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 (5% variance allowed for both inspections and maintenance). Target not met for the Plan area.

Assessment Results: Licensees reported 3,976.4km of permanent status roads scheduled for inspection, with a total of 3,261.9km, or 82%, inspections completed, compared to 104.2% in 2016.

227 of 287, or 79.1%, of maintenance items identified were completed, compared to 51.1% in 2016. Licensees reported that road inspection and maintenance contracts were delayed because of spring flooding, the extreme fire weather season and early snowfall. The fire season in particular resulted in internal staffing shortages, contractor equipment restrictions and availability, As well there were two high value highway roads maintenance action items that were started in 2017 and will be completed in 2018. All outstanding inspections and maintenance items were re-scheduled to 2018.



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): Management strategies for rare ecosystems – Merritt TSA

Target: Where operations are planned in areas field verified as a rare ecosystem (refer to Appendix 7 of the SFM Plan), the accompanying recommendations will be adhered to. Target met for the Plan area.

Assessment Results: In the Merritt TSA, there were no operations conducted within rare ecosystems.

Target (26) Rare ecosystems have been identified by a local biologist at the site series level. Each forested rare ecosystem includes management recommendations for operations (from no harvest to partial harvest). The target is centered on managing the key attributes within these identified rare ecosystems by following suggested recommendations. This target is new to the SFM Plan (introduced in 2017).

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.

c. Indicate efforts made to resolve any disagreements with Aboriginal communities.

Assessment Results: There were 596 meetings and meaningful communications with local First Nations, compared to 1050 in 2016. Licensees had 122 written requests for communication, compared to 160 in 2016, and responded to all. Note that Tolko did not report in 2017.

Efforts made to resolve concerns (disagreements) included meetings, emails and phone calls regarding culturally sensitive areas, cultural heritage values, tenure management / partnership agreements, goshawk nest sites, fisheries sensitive watersheds, harvesting in traditional territories, co-operative agreements, completing AOAs in a timely manner, submission of PFRs (Preliminary Field Reconnaissance), disagreements with contracts, and the referral / consultation process. Licensees and First Nations also cooperated in capacity building within bands, training programs, direct employment, access management agreements, tenure management and partnership agreements.

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.
 - Indicate efforts made to resolve any disagreements with local communities.

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 76 community meetings attended and 361 communications with recreation users. There were 160 written requests from the public and all were responded to, in a weighted average of three days.

Efforts made to resolve concerns (disagreements) with local communities included leaving additional reserves and locating them as requested by the stakeholder; provided information regarding a road not in the licensee's control; with respect to a snowmobile user group: installed signage, notification of operations, winged back snowbank to allow sled access to snowmobile area without the need for snowmobiles on ploughed roads; responded to questions from a Regional District and a Forest Society; added retention for visual softening; Lillooet FSP replacement; protected trails; donated funds for trail reclamation; removed area from harvest; increased stream protection; dust control on roads; adjusted timing of harvest; provided firewood; developed road safety plan; implemented forest health management; and maintained publicly used features.

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 65 blocks harvested with preservation, retention or partial retention visual quality objectives (VQO). All blocks achieved the visual intent. A total of 13 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 was met for the Plan area.

Assessment Results: All 36 recreation trails within or influenced by harvest areas 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 134 local business initiatives and partnerships. These included wood purchases and sales, partnerships and service agreements with First Nations and Community Forests, a job creation program, and contracts with local companies.

In the Lillooet TSA, there were 15 initiatives and partnerships, including contracts and timber sales to local companies and partnerships with First Nations.

In the Merritt TSA, there were 35 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 249.5 million fbm or foot, board measure (board feet) of lumber output and 119,960 bdt or bone dry tones of chip output. As well, there were 127.5 million fbm of veneer produced.

Licensees in the Lillooet TSA reported no lumber output and 31,109 bdt of chip output. There was 132.0 million fbm of veneer reported.

Licensees with sawmills in the Merritt TSA reported 148.1 million fbm of lumber output and 73,004 bdt of chip output. 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: 2016 numbers are in brackets, Tolko (Kamloops & Merritt TSAs) did not report in 2017:

Kamloops TSA: 802 days (1,060); 763,657 man hours worked (1,234,241); 416 employees (606); 4,615 estimated direct and indirect jobs.

Lillooet TSA: 205 days (199); 107,485 man hours worked (104,337); 60 employees (60); 898 estimated direct and indirect jobs.

Merritt TSA: 650 days (933); 272,004 man hours worked (653,955); 184 employees (331); 1726 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: All 126 DFA forest contractors had both environmental and safety training. BCTS reported 96 out of 99 (97%) awarded contracts and licenses were SAFE Company registered and/or certified. There were a total of 101 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.

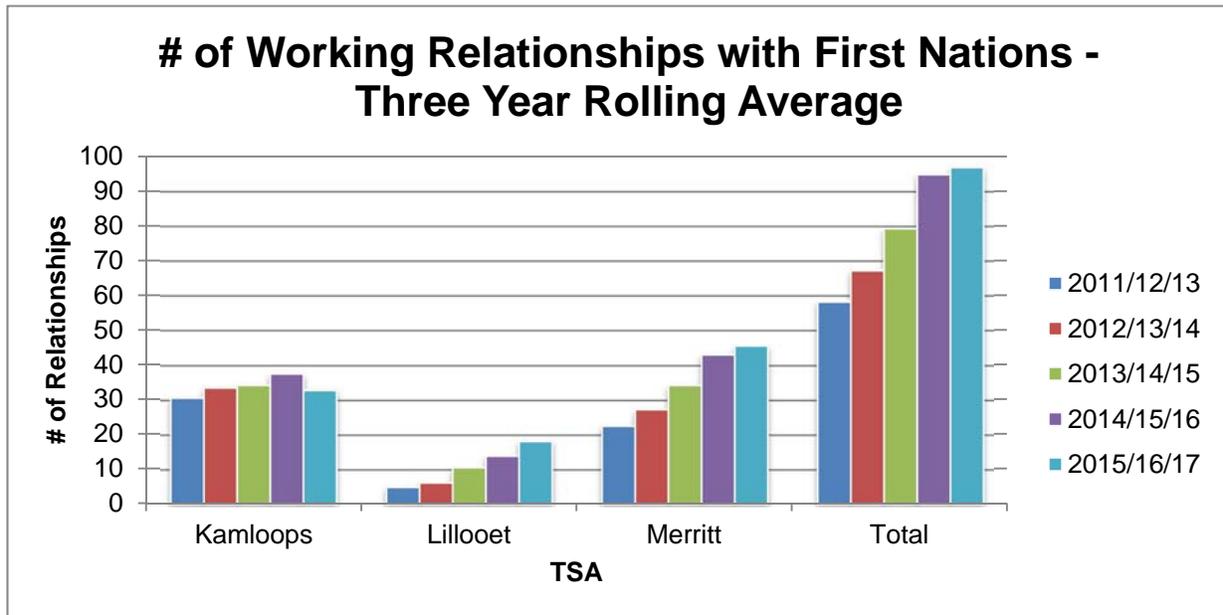
Target: Maintain and/or increase the number of working relationships (partnerships, joint ventures, cooperative agreements, memorandum of understanding, or business contracts) with First Nations. Additionally, report annually the percent of the three TSAs' AAC that has been allocated to first Nations ventures. Note that Tolko did not report in 2017 (Kamloops & Merritt TSAs). Although Kamloops TSA showed a decrease, the rolling average number of working relationships has increased overall. Target met for the Plan area.

Assessment Results:

Licensees in the Kamloops TSA reported a 2015/2016/2017 rolling average of 33 working relationships with First Nations. This is a decrease from 38 for 2014/2015/2016. Examples of relationships included direct employment in manufacturing facilities, log purchase agreements, planning and timber development, hauling contracts, service agreements for archaeological and cultural heritage work, NRFL partnerships, logging, mechanical site preparation, grading, and Memorandum of Understanding. Approximately 25% of the TSA committed volume was allocated to First Nations (591,459m³).

Licensees in the Lillooet TSA reported a 2015/2016/2017 rolling average of 18 working relationships with First Nations. This is an increase from 14 for 2014/2015/2017. Examples of relationships included logging, road construction, road maintenance, burning, planting, cultural and archaeological management, multi-phase development, GIS work, layout work, and management of forest licenses. Approximately 32% of the TSA committed volume was allocated to First Nations (185,359m³).

Licensees in the Merritt TSA reported a 2015/2016/2017 rolling average of 46 working relationships with First Nations. This is an increase from 43 for 2014/2015/2016, although Tolko did not report in 2017. Examples of relationships included GPS work, mistletoe control, planting, brushing, stocking surveys, PFR (Preliminary Field Reconnaissance) and CHA (Cultural Heritage Assessment) surveys, cruising, harvesting, trucking, burning, planning & timber development, road building, maintenance and rehabilitation, disposition agreements, milling (Coldwater post & rail), log purchases and forest management. Approximately 13% of the TSA committed volume was allocated to First Nations (146,387m³).



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 (174) possibly affected by planned operations were communicated with during the reporting period.

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: Nineteen trappers indicated that they wished to be communicated with; licensees reported that they communicated with 143 trappers. There was one instance where plans changed possibly impacting trappers and 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: Ninety-seven percent (201 of 207) of on the ground contractors were SAFE Company registered and/or certified. Ninety-seven percent (96 of 99) of BCTS contracts 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 3.9 out of 5, compared to 4.1 in 2016. Ninety-eight percent of responses to survey questions ranked “3” or better. There were six 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 people reached through educational outreach.

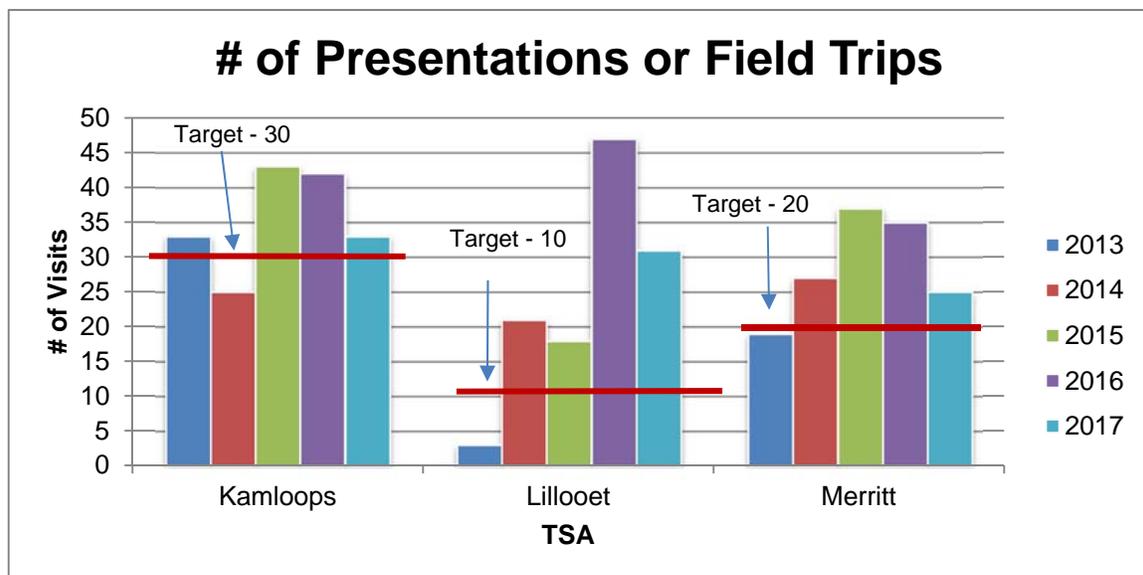
Target:	Participating licensees will maintain educational support that leads to a balanced and broad-based understanding of forestry. Educational actions would include visits to schools, presentations to resource clubs, community meetings, public tours of operations and other similar events. Target 30 actions per year in Kamloops TSA, 20 actions in the Merritt TSA, and 10 actions per year in Lillooet TSA. Target met for the Plan area.
Assessment Results:	Kamloops TSA licensees conducted 33 educational actions (42 in 2016), with two provided specifically to First Nations. The actions included: <ul style="list-style-type: none">• Arbor day in Kamloops (since the 1950s Grade One students in SD73 have received a seedling to plant around their homes);• BC Institute of Technology Field Tour – Dry belt fir management - Opax Mountain;• Raft River school program;• Barriere Big Block party;• Canada 150 – Barriere;• Career fair;• Community Open House;• Mill tours to students & public;• Hosted Public Advisory Group field tour;• Community Forest sponsored 2017 Job Creation Program with Ministry of Social Development and Poverty Reduction, providing participants with training and educational workshops for forestry jobs;• Community meetings hosted by Lower North Thompson Community Forest Society;• May Day Parade;• North American Safety Occupational Safety and Health Week

Lillooet TSA licensees conducted 31 field trips and presentations (47 in 2016), 29 targeted specifically to First Nations. These included:

- Numerous Community Meetings,
- Lillooet - Seton Corridor Stakeholder Committee Meeting
- First Nation Presentations
- FSP Open House

Merritt TSA licensees participated in 25 field trips, presentations and educational support (35 in 2016). Twenty-one of those were targeted specifically to First Nations. Participation included:

- Forestry presentation at Xplore Sportz Snow Camp Day;
- Open house at Lower Nicola and Upper Nicola Bands;
- National Forest Week (NFW) golf tournament (networking);
- FSP Open House;
- Lillooet Ratepayers Meetings;
- First Nations presentations;
- Nicola Valley Institute of Technology Natural Resource Technology Board 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 968 (Canada – 771, USA – 76, Brazil – 36, Ukraine – 15, China – 12, Germany – 10, Philippines – 10, United Kingdom – 4, and various other countries – 34). There were 673 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. 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

2017 SFM MONITORING SUMMARY



Aspen Planers Ltd.

More information can be
obtained by contacting

Brent Turmel
at

Aspen Planers Ltd.,

Phone:
250 378-9266

E-Mail:

brenturmel@apgroup.ca

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

Photo: Aspen Planers
Harvest Operations in Sunday
Summit –Merritt TSA



2017 SFM Performance Highlights

SFM Plan performance targets were achieved on all but two reportable targets in the Nicola Thompson Fraser SFM Plan.

The following is a short summary for a selection of the CSA Criteria.

Criterion 1 – Biological Diversity

- All targets were met. (Target #'s 1-15 & 26).

Criterion 2 – Ecosystem Condition and Productivity

- All targets were met except target #16 for the Merritt TSA. (Target #'s 10, 16-20).

Merritt – Two large blocks were not planted within the the 3rd growing season due to nursery mortality issues with stock. Seedlings were made available for the 2017 planting season.

Criterion 3 – Soil and Water

- All targets were met except target 25 road inspections for Lillooet and Merritt (Targets reported on 11, 18, 20-25).

Outstanding road inspections for Lillooet were not completed due to early snowfall in the surrounding area in early October and will be completed in Spring/Summer 2018.

Merritt TSA: Two maintenance action items started in 2017 and completed in 2018 as they were high value highways roads that required Highways Related Approval and Funding due to spring flooding.

Criterion 4 – Role in Global Ecological Cycles

- All targets were met. (Targets reported on 3, 16-18)

Criterion 5 – Economic & Social Benefits

- All targets were met (Target reported on 19, 28-34, 36-37)

Criterion 6 – Society's Responsibility

- All targets were met (Target reported on 28, 29, 31, 36-42)

Criterion 7– Aboriginal Relations

- All targets were met (Target reported on 14, 27, 35, 41)

Specific Highlights of our Plan Report

- The Employment numbers in Savona have increased in 2017 from 174 to 186 as a result of strong demand for the specialty plywood product. The Lillooet Veneer Plant has seen a minor increase from 59 to 60 employment, whereas the Merritt Sawmill operation has declined from 117 to 95 due to reduction in the number of shifts from three to two.

2017 SFM MONITORING SUMMARY



More Information on how BC Timber Sales performed against all indicators can be obtained by contacting Lorne Wood 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 Dangle Head Processor, TSL A91912 Block SB8OM – Clearwater

Photo submitted by Kyler Miller

BC Timber Sales 2017 SFM Performance Highlights:

SFM Plan performance requirements were achieved for 40 of 42 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 2017 NTF Sustainable Forest Management Plan Report:

- 100% of the trees planted in the BCTS planting program related to the species requirements within approved stocking standards.
- 100% of cutblocks harvested within BCTS operations reported that area allocated to road and landings was below Nicola Thompson Fraser SFM plan targets.
- 100% of the areas harvested in BCTS operations were managed for coarse woody debris.
- 100% of the known pre-existing trails identified in BCTS operations were successfully managed and retained.
- 100% of the identified culturally important sites within BCTS operation were managed or protected in accordance with forest plans.

SFM Plan performance targets were not achieved for 2 of 42 indicators relating to the sustainability criteria in the NTF SFM Plan. The target that was not achieved is as follows:

Target 2: BCTS (Kamloops) did not achieve the target for 70% of the non – ESSF areas having 3 or more species established. Free growing reports apply to blocks that were reforested 15 or more years ago, planting objectives at that time did not correspond to objectives of this target.

Target 25: BCTS (Merritt & Lillooet) did not achieve the target for completing scheduled road inspections and completing scheduled maintenance activities. The road inspection and maintenance contracts where delayed this year because of the extreme fire weather and resulting internal staffing shortages, contractor equipment restrictions and availability. By the time some of the contracts got underway we were already faced with snow level restrictions.

This report can be located at:

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

2017 SFM MONITORING SUMMARY



Vavenby

More Information on how Canfor - Vavenby performed against all indicator targets reported on in 2017 can be obtained by contacting Daniel Arcand at Canfor's office in Vavenby.

Ph: (250) 676-1173
Daniel.Arcand@Canfor.com

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



Figure 1 Lynx TFL18 Photo by K. Cooke

Canadian Forest Products Ltd. - Vavenby 2017 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 2017.

41 out of 42 targets were met in 2017. SFM Highlights for the year included:

- **Target 2:** Over 99% of all areas declared as free growing by Canfor in 2017 were planted with three or more species.
- **Target 6:** Canfor followed plan commitments for 100% of blocks that fell within UWR GAR order.
- **Target 11:** Average time for road cut and fill slope seeding applications in the TFL 18 was 9 months and in FL A18688 was 7 months.
- **Target 27:** Canfor participated had 150 meetings and other meaningful communications with local First Nation groups.
- **Target 30:** Canfor harvested blocks where 8 recreation trails were within them or were influenced by harvest activities. All Recreation trails were successfully managed for.
- **Target 35:** Canfor has three working relationships with First Nations.

Target Not Met in 2017:

- **Target 25:** 12 out of 13 maintenance actions were completed. 1 action was not completed as the maintenance supervisor was not notified of a maintenance action added to the database. The maintenance action has been added to the 2018 schedule.

The monitoring report can be located at:

<http://www.canfor.com/responsibility/forest-managment/plans>

2017 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. 2017 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. 41 of 42 targets were met in 2017. The following highlights Gilbert Smith's contribution to the 2017 Sustainable Forest Management Plan Report.

- Gilbert Smith Forest Products Ltd. successfully maintained registration to the CAN / CSA Z809:2008
- Regeneration of harvested blocks occurred within 12.2 months on average from the time of the harvest start date, compared to a target of 36 months.
- 100% 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 9.1 months of completion of construction, compared to a target of 12 months.
- Gilbert Smith Forest Products Ltd. reported a total of 9 working relationships with First Nations in 2017. The three year average ending in 2017 is 8.7. The three year average ending in 2016 was 9
- 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 47 local business relationships/partnerships and dealings.
- 100% of Gilbert Smith's on-the-ground contractors received environmental training and all are SAFE Company Certified.
- No Major or Minor Non-conformances were identified during the external CSA Audit.
- In addition to SFM highlights, Gilbert Smith has made some use of new technology within its operations.
 - The services of a cable logging contractor (Brunner Tower Logging) who has come

	<p>from Switzerland bringing with it a modern, remote-operated yarding tower and other technology were acquired. Efficient, long, multi-span yarding will help reduce the amount of road required and ground disturbance. Remote operation reduces exposure hours of loggers which should result in a safer harvest opportunity.</p> <ul style="list-style-type: none"> ▪ A drone company from Kamloops (Apex Drones) was commissioned to provide high resolution, georeferenced images of Gilbert Smith’s mill yard. The project was a success and plans are in the works for expanding service into forestry and environmental areas of the business. <p>Target not met at the company level but met on the Plan level:</p> <ul style="list-style-type: none"> • Target 18. The amount of area in permanent roads and landings (PAS) in areas harvested during the year is 7.7%. <ul style="list-style-type: none"> ▪ Rationale: There are three main reasons this target is a challenge to meet in some years. Firstly, Gilbert Smith frequently harvests small blocks along already constructed roads. These roads get included into the permanent access calculations and contribute to a high percentage due to small block gross area. ▪ Secondly, Gilbert Smith operates predominantly in steep, challenging terrain which often requires additional road building to facilitate safe engineering. ▪ Lastly, roads in steep terrain have been left permanent for silviculture access, safety, and total chance planning. <p>[Pictured above: Log Bridge Construction-Storm Creek. Photo: C.Hewlett]</p>
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The Full report can be located at: <http://thompsonokanaganustainableforestry.ca>

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.	3.8
2	My suggestions related to Sustainable Forest Management values and objectives are being adequately listened to at the Advisory Group Meetings.	4.0
3	Efforts have been made to incorporate my concerns related to SFM values and objectives into the SFM Plan.	3.5
4	My suggestions related to SFM indicators and targets are being adequately listened to at the Advisory Group Meetings.	4.2
5	Efforts have been made to incorporate my concerns related to SFM indicators and targets into the SFM Plan.	3.7
6	I have been given the opportunity to review licensee's audit results and annual reports.	3.8
7	The meeting agenda allows for discussion of any related sustainable forestry issues of concern to advisory group members.	4.0
8	Information provided in advance of meetings is adequate and organized to allow for me to effectively contribute.	4.2
9	Advisory Group Meetings are run efficiently and effectively.	4.3
10	The meeting minutes capture important aspects of the meeting.	4.3
11	Communication with Advisory Group members between meetings is adequate.	4.2
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.	4.3
13	A broad cross-section of the community is represented at Advisory Group Meetings.	3.8
14	Licensees have made an effort to recruit new members (if there was a desire to do so)?	3.0
15	Licensee's and or the facilitator are proactive about providing new information to the PAG members regarding impacts to environment, sustainability, forestry, etc.?	3.5
	Total Average Rating	3.9

A few questions were skipped by some of the respondents.

Comments received:

- Sorry to see Tolko and BCTS downgrade their certification. Their reasoning sounded more like an excuse than sound socioeconomic facts.

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
IDFhx	227,697
IDFwx	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
IDFww	18,458
IDFxc	59,007
IDFhx	50,485
IDFwx	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
DFhx	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	MoFLNRO	Ministry of Forests, Lands and Natural Resource Operations and Rural Development
BCTS	British Columbia Timber Sales	MPB	Mountain Pine Beetle
BEC	Biogeoclimatic Ecosystem Classification	NAR	Net Area to Reforest
BGC	Biogeoclimatic (Zone)	NCD	Non-Classified Drainages
CDC	Conservation Data Centre	NHZ	No Harvest Zone
CHA	Cultural Heritage Assessment	NRFL	Non-Replaceable Forest License
CSA	Canadian Standards Association	NTF	Nicola Thompson Fraser
CWD	Coarse Woody Debris	NTU	Non Treatment Area
DFA	Defined Forest Area	OGMA	Old Growth Management Area
ECA	Equivalent Clearcut Area	PAG	Public Advisory Group
ESSF	Engelmann Spruce - Subalpine Fir BGC Zone	PFR	Preliminary Field Reconnaissance
FL	Forest Licence	RMA	Riparian Management Area
FPC	Forest Practices Code of BC Act	SFM(P)	Sustainable Forest Management (Plan)
FPPR	Forest Planning and Practices Regulation	SP	Site Plan
FRPA	Forest and Range Practices Act	SSS	Small Scale Salvage
FSP	Forest Stewardship Plan	TFL	Tree Farm Licence
GAR	Government Action Regulation	THLB	Timber Harvesting Land Base
IWMS	Identified Wildlife Management Strategy	TSA	Timber Supply Area
LMA	Lakeshore Management Area	TSFA	Terrain Stability Field Assessment
LRMP	Land and Resource Management Plan	TSL	Timber Sale Licence
MFZ	Machine Free Zone	TSR	Timber Supply Review

Acronym	Meaning	Acronym	Meaning
UWR	Ungulate Winter Range	WT	Wildlife Tree
VQO	Visual Quality Objective	WTP	Wildlife Tree Patch
WHA	Wildlife Habitat Area		