

*Nicola Thompson Fraser*  
**Sustainable Forest Management Plan**

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**Annual Monitoring Report**

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*January 1, 2016 to December 31, 2016*

Released April 2017

Cover Photo: Camouflaged Wood Frog

Photo by Mike Francis, Lower North Thompson Community Forest Society (LNTCFS)

**PARTICIPATING LICENSEES :**

- Aspen Planers Ltd.
- BC Timber Sales
- Canadian Forest Products Ltd.
- Gilbert Smith Forest Products Ltd.
- Tolko Industries 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://thompsonokanaganustainableforestry.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 2016 period was completed by five major licensees, four of whom have Replaceable Forest Licences, 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. Licensees with more than one licence combine their reporting into one company report. 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.

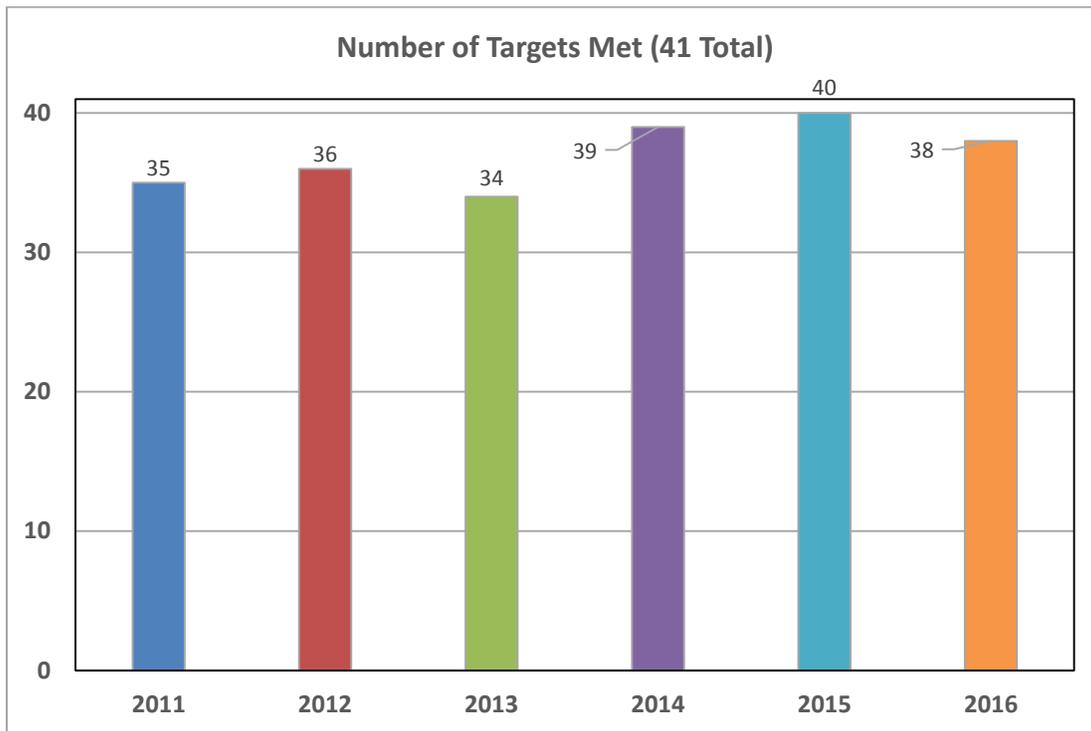
Interfor, Adams Lake Lumber, is not a participating licensee and does not subscribe to the CSA standard, but has reported in previous years. This may influence historical report performance.

The Small Scale Salvage program is managed by the BC Ministry of Forests, Lands and Natural Resource Operations (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 (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 2016

The following summarizes highlights from the Nicola Thompson Fraser Sustainable Forest Management Plan 2016 monitoring period:

- Across the plan area, licensees with timber processing facilities reported 1,992,500 man hours worked (2,047,000 in 2015) and 997 full or part time manufacturing employees on payroll (1,064 in 2015). Direct and indirect employment is estimated at 12,637 jobs.
- 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 12,838ha of harvest, which is 0.6% of the long term THLB.
- Across the Plan area, there was an increase of 59.98ha in OGMA area.
- There were 247 cutblocks harvested that had Riparian Management Area (RMA) or Lakeshore Management Area (LMA) within or adjacent to them, with no non-conformances
- Wildlife tree patches/individual wildlife trees/stubs were retained in 100 percent of the cutblocks greater than 10 hectares in size.
- In the Plan area, 99.4 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 174 local business initiatives and partnerships.
- There were 111 working relationships with First Nations in the Nicola Thompson Fraser SFM Plan area in 2016, compared to 96 in 2015.
- Ninety-nine percent of forest contractors had both environmental and safety training. One hundred percent were SAFE Company registered or certified. One hundred percent of BCTS awarded contracts were to SAFE Company registered and/or certified entities.
- In the Kamloops TSA, 28% of the committed volume was allocated to First Nations, in the Lillooet TSA – 38%, and in the Merritt TSA – 14%. The total volume allocated to First Nations was 1,055,700m<sup>3</sup>.



## 5.0 Performance 2016

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

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

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

A summary of the performance results for the Targets relating to each of the CSA criterion is provided as follows. Specific details on all performance Targets are provided in Section 5.1. Targets not met are shown in **bold** in the table below. Overall, 38 out of 41 targets (92.7%) were achieved. In 2015, 40 out of 41 targets (97.6%) were achieved. Note that there is no Target 26.

Criterion	Related Target	Percent Achieved
1. Conservation of Biological Diversity	1, 2, 3, 4, 5, <b>6</b> , 7, 8, 9, 10, 11, 12, 13, 14, 15	93%
2. Maintenance and Enhancement of Forest Ecosystem Condition and Productivity	16, 17, 18, 19, 20	100%
3. Conservation of Soil and Water Resources	11, 18, 20, 21, 22, 23, 24, <b>25</b>	88%
4. Forest Ecosystem Contribution to Global Ecological Cycles	3, 16, 17, 18	100%
5. Multiple Benefits to Society	19, 27, 28, 29, <b>30</b> , 31, 32, 33, 34, 35	90%
6. Accepting Society's Responsibility for Sustainable Development	14, 27, 28, 29, 31, 35, 36, 37, 38, 39, 40, 41, 42	100%



## 5.1 2016 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 (“✗”) and how the targets fit into the SFM framework.

ELEMENT	<b>1.1 Ecosystem Diversity</b>	
VALUE	Healthy, functioning ecosystems that support natural processes	
OBJECTIVE	Healthy, connected ecosystems with a representation of natural attributes	
INDICATOR	TARGET	2016
1.1.1 Ecosystem area by type	<b>1.</b> Maintain the presence of Biogeoclimatic Zones to the subzone level within the Plan area.	✓
1.1.2 Forest area by type or species composition	<b>2.</b> 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	<b>3.</b> Progress towards a stable forest age class distribution on the timber harvesting land base	✓
	<b>4.</b> Maintain the existing old growth management area (no net loss).	✓
1.1.4 Degree of within-stand structural retention or age class	<b>5.</b> 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.	✓

<b>ELEMENT</b>	<b>1.2 Species Diversity</b>	
<b>VALUE</b>	Abundance and distribution of habitat to conserve populations of native flora and fauna	
<b>OBJECTIVE</b>	Maintain a variety of habitats for naturally occurring species. Use practices to reduce the spread of invasive plant populations within forested ecosystems	
<b>INDICATOR</b>	<b>TARGET</b>	<b>2016</b>
1.2.1 Degree of habitat protection for selected focal species, including species at risk.	<b>6.</b> Identification and protection of wildlife (mammals, birds, reptiles, fish and amphibians) at risk <b>7.</b> Affected licencees adhere to the current management strategies for mountain caribou. <b>8.</b> Affected licencees adhere to the current management strategies for northern spotted owl.	 x ✓ ✓
1.2.2 Degree of suitable habitat in the long term for selected focal species, including species at risk	<b>7.</b> Affected licencees adhere to the current management strategies for mountain caribou. <b>8.</b> Affected licencees adhere to the current management strategies for northern spotted owl. <b>9.</b> 100% conservation of habitat for select focal species	 ✓ ✓ ✓
1.2.3 Proportion of regeneration comprised of native species	<b>10.</b> 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)	<b>11.</b> Road cuts and fill slopes will be grass seeded within 12 months.	✓

<b>ELEMENT</b>	<b>1.3 Genetic diversity</b>	
<b>VALUE</b>	Genetic diversity within all native tree species	
<b>OBJECTIVE</b>	Maintain genetic diversity of all tree species native to the Defined Forest Area (DFA)	
<b>INDICATOR</b>	<b>TARGET</b>	<b>2016</b>
1.1.2 Forest area by type or species composition	<b>2.</b> 70% of harvested cutblocks having three or more tree species (non-ESSF) or two or more species (ESSF) identified in the free growing inventory.	✓
1.2.3 Proportion of regeneration comprised of native species	<b>10.</b> 100% of trees planted will conform to plan commitments related to the species requirements within approved stocking standard (requires reforestation with commercially valuable and ecologically suitable tree species).	✓
1.1.3 Forest area by seral stage or age class	<b>3.</b> Progress towards a stable forest age class distribution on the timber harvesting land base. <b>4.</b> Maintain the existing old growth management area (no net loss).	 ✓ ✓

<b>ELEMENT</b>	<b>1.4 Protected Areas and Sites of Special Biological and Cultural Significance</b>	
<b>VALUE</b>	Appropriate management of protected areas and sites of special geological, biological, and/or cultural significance.	
<b>OBJECTIVE</b>	Protected areas and sites of special significance are identified and appropriately managed.	
<b>INDICATOR</b>	<b>TARGET</b>	<b>2016</b>
1.4.1 Proportion of identified sites with implemented management strategies	<u>Kamloops</u> <b>12.</b> Prioritized Red-listed ecological communities will be protected by retaining existing forest.  <u>Lillooet</u> <b>13.</b> 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> <b>6.</b> Identification and protection of wildlife (mammals, birds, reptiles, fish and amphibians) at risk	 ✓  ✓  x
1.4.2 Protection of identified sacred and culturally important sites	<b>14.</b> 100% protection of culturally important, sacred and spiritual sites that have been identified and mapped <u>and</u> 100% conformance to all plan commitments specifically designed to manage for culturally important, sacred, and spiritual sites that have been identified and mapped.	 ✓ ✓
1.4.3 Management and or protection of special geological features (non-core indicator).	<b>15.</b> Report the special geological features that were identified and managed. Additionally, Licences will report the management activities that they undertook for each special geological feature.	✓

<b>ELEMENT</b>	<b>2.1 Forest Ecosystem Resilience</b>	
<b>VALUE</b>	Sustainable forest ecosystems	
<b>OBJECTIVE</b>	Forest management does not compromise forest ecosystem resilience	
<b>INDICATOR</b>	<b>TARGET</b>	<b>2016</b>
2.1.1 Reforestation success	<b>16.</b> 90% of area prescribed for planting is completed within the third growing season from start date of harvest. <b>17.</b> All cutblocks will reach free growing requirements on or before the latest date.	 ✓ ✓

<b>ELEMENT</b>	<b>2.2 Forest Ecosystem Productivity</b>	
<b>VALUE</b>	Productive, well functioning forest ecosystems	
<b>OBJECTIVE</b>	Well functioning connected ecosystems that are managed for timber and non timber forest values	
<b>INDICATOR</b>	<b>TARGET</b>	<b>2016</b>
2.2.1 Additions and deletions to the forest area	<b>18.</b> Less than 6%, (7% within the Lillooet TSA), on average, of harvested areas will be in permanent roads and landings.	✓
2.2.2 Proportion of the calculated long-term sustainable harvest level that is actually harvested	<b>19.</b> Harvest the cut allocation for the year consistent with the cut control regulation and policy.	✓
2.2.3 Riparian conformance (non-core indicator)	<b>20.</b> 100% conformance to riparian and lakeshore commitments made within plans.	✓

<b>ELEMENT</b>	<b>3.1 Soil Quality and Quantity</b>	
<b>VALUE</b>	Conservation of soil quality and quantity	
<b>OBJECTIVE</b>	Maintain productive capacity of forest soils. Minimize compaction and detrimental disturbance	
<b>INDICATOR</b>	<b>TARGET</b>	<b>2016</b>
3.1.1 Level of soil disturbance	<b>18.</b> Less than 6%, (7% within the Lillooet TSA), on average, of harvested areas will be in permanent roads and landings.	✓
	<b>21.</b> 100% conformance to soil conservation measures contained with operational plans.	✓
	<b>22.</b> No operationally caused slides resulting from a failure to perform a terrain stability field assessment or from a failure to follow the recommendations within a completed assessment.	✓
3.1.2 Level of downed woody debris	<b>23.</b> 100 percent of cutblocks will manage coarse woody debris (CWD) consistent with commitments in operational plans (5% variance).	✓

<b>ELEMENT</b>	<b>3.2 Water Quality and Quantity</b>	
<b>VALUE</b>	Conservation of water quality and quantity	
<b>OBJECTIVE</b>	Water quality and quantity that maintains pre-existing conditions and supports communities (human and ecological) and aquatic life	
<b>INDICATOR</b>	<b>TARGET</b>	<b>2016</b>
3.2.1 Proportion of watershed or water management areas with recent stand-replacing disturbance	<u>Kamloops reporting only</u> <b>24.</b> 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> <b>24.</b> Equivalent clear cut area (ECA) not to exceed 35% (at the sub-basin level) without doing further hydrological assessments prior to harvesting.	 ✓  ✓
3.2.2 Managing water quality through road inspections (non-core indicator).	<b>25.</b> 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).	<b>11.</b> All planned road cut and fill slope seeding application carried out using certified seed and within 12 months of completed road construction on suitable sites.	✓
2.2.3 Respect for riparian areas (non-core indicator).	<b>20.</b> 100% conformance to riparian and lakeshore commitments made within plans.	✓

<b>ELEMENT</b>	<b>4.1 Carbon Uptake and Storage</b>	
<b>VALUE</b>	Healthy, functioning ecosystems that support natural processes	
<b>OBJECTIVE</b>	Conduct forest activities to maintain ecological processes that facilitate carbon uptake and storage: actively growing, healthy forests, maintain natural sources of nutrient cycling	
<b>INDICATOR</b>	<b>TARGET</b>	<b>2016</b>
4.1.1 Net carbon uptake	<b>3.</b> Progress towards a stable forest age class distribution on the timber harvesting land base . <b>18.</b> 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.	<b>16.</b> 90% of area prescribed for planting is completed within the third growing season from start date of harvest. <b>17.</b> All cutblocks will reach free growing requirements on or before the latest date.	 ✓ ✓

<b>ELEMENT</b>	<b>4.2 Forest Land Conversion</b>	
<b>VALUE</b>	Maintenance of the forest land-base	
<b>OBJECTIVE</b>	Minimal loss of forest land within the DFA	
<b>INDICATOR</b>	<b>TARGET</b>	<b>2016</b>
2.2.1 Additions and deletions to the forest area	<b>18.</b> Less than 6%, (7% within the Lillooet TSA), on average, of harvested areas will be in permanent roads and landings.	✓

<b>ELEMENT</b>	<b>5.1 Timber and Non-Timber Benefits</b>	
<b>VALUE</b>	A sustainable flow of timber and non-timber benefits that contribute to quality of life	
<b>OBJECTIVE</b>	Conserve or enhance non-timber values while managing forests for timber values and prosperous forest-based industries	
<b>INDICATOR</b>	<b>TARGET</b>	<b>2016</b>
5.1.1 Quantity and quality of timber and non-timber benefits, products, and services produced in the DFA	<b>19.</b> Harvest the cut allocation for the year consistent with the cut control regulation and policy.	✓
	<b>27.</b> 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.	✓
	<b>28.</b> 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.	✓
	<b>29.</b> 100% conformance to strategies in plans designed to achieve preservation and partial retention visual quality objectives.	✓
	<b>30.</b> 100% of known pre-existing recreational trails retained for continued recreational use on areas harvested in the reporting period.	x
<b>31.</b> Report business initiatives and partnerships.	✓	

<b>ELEMENT</b>	<b>5.2 Communities and Sustainability</b>	
<b>VALUE</b>	Sustained social and economic stability and vitality of all local communities	
<b>OBJECTIVE</b>	A productive forest resource that maintains a continual and balanced flow of benefits	
<b>INDICATOR</b>	<b>TARGET</b>	<b>2016</b>
5.2.1 Level of investment in initiatives that contribute to community sustainability	<p><b>19.</b> Harvest the cut allocation for the year consistent with the cut control regulation and policy.</p> <p><b>31.</b> Report business initiatives and partnerships.</p> <p><b>32.</b> Report the board feet and chip volume produced by sawmills within the TSA.</p> <p><b>33.</b> 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 investment in training and skills development	<p><b>34.</b> 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><b>19.</b> Harvest the cut allocation for the year consistent with the cut control regulation and policy.</p> <p><b>32.</b> Report the board feet and chip volume produced by sawmills within the TSA.</p> <p><b>33.</b> Report number of timber processing facility operating days, the total number of man hours worked and the number of mill employees on payroll. Report separately for each TSA.</p>	<p>✓</p> <p>✓</p> <p>✓</p>
5.2.4 Level of Aboriginal participation in the forest economy	<p><b>35.</b> Maintain and/or increase the number of working relationships (partnerships, joint ventures, co-operative agreements, business contracts) with First Nations.</p>	<p>✓</p>

<b>ELEMENT</b>	<b>6.1 Aboriginal and Treaty Rights</b>	
<b>VALUE</b>	Aboriginal title and rights and treaty rights	
<b>OBJECTIVE</b>	Recognition of Aboriginal title and rights and treaty rights as related to forest management	
<b>INDICATOR</b>	<b>TARGET</b>	<b>2016</b>
6.1.1 Evidence of a good understanding of the nature of Aboriginal title and rights	<p><b>27.</b> Open communication with local First Nations will include an understanding of traditional territories and other aboriginal rights including cultural and spiritual values</p> <p>Participating Licencees respond to all written requests for communication/information from First Nations.</p>	<p>✓</p> <p>✓</p>
6.1.2 Evidence of best efforts to obtain acceptance of management plans based on Aboriginal communities having a clear understanding of the plans	<p><b>27.</b> Open communication with local First Nations will include an understanding of traditional territories and other aboriginal rights including cultural and spiritual values</p> <p>Participating Licencees respond to all written requests for communication/information from First Nations.</p>	<p>✓</p> <p>✓</p>
6.1.3 Level of management and/or protection of areas where culturally important practices and activities (hunting, fishing, gathering) occur	<p><b>27.</b> 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><b>14.</b> 100% protection of culturally important, sacred and spiritual sites that have been identified and mapped <u>and</u></p> <p>100% conformance to all plan commitments specifically designed to manage for culturally important, sacred, and spiritual sites that have been identified and mapped.</p>	<p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p>

<b>ELEMENT</b>	<b>6.2 Respect for Aboriginal Forest Values, Knowledge, and Uses</b>	
<b>VALUE</b>	Aboriginal title and rights, treaty rights and traditional knowledge are respected	
<b>OBJECTIVE</b>	<p>Manage and/or protect important archaeological sites (as interpreted by First Nations)</p> <ul style="list-style-type: none"> <li>• Cultural, archaeological, and heritage sites and values, including spiritual.</li> <li>• Use of traditional knowledge.</li> <li>• Meaningful and informed participation of First Nations</li> </ul>	
<b>INDICATOR</b>	<b>TARGET</b>	<b>2016</b>
6.2.1 Evidence of understanding and use of Aboriginal knowledge through the engagement of willing Aboriginal communities, using a process that identifies and manages culturally important resources and values	<p><b>27.</b> 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><b>14.</b> 100% protection of culturally important, sacred and spiritual sites that have been identified and mapped <u>and</u></p> <p>100% conformance to all plan commitments specifically designed to manage for culturally important, sacred, and spiritual sites that have been identified and mapped.</p>	<p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p>

<b>ELEMENT</b>	<b>6.3 Forest Community well-being and resilience</b>	
<b>VALUE</b>	Economic benefits to society	
<b>OBJECTIVE</b>	A prosperous forest based economy with a sustainable supply of forest resources	
<b>INDICATOR</b>	<b>TARGET</b>	<b>2016</b>
6.3.1 Evidence that the organization has co-operated with other forest-dependent businesses, forest users, and the local community to strengthen and diversify the local economy	<p><b>36.</b> 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><b>37.</b> Communication of forest operations to occur with trappers 100% of the time in advance of operations.</p> <p><b>29.</b> 100% conformance to strategies in plans designed to achieve preservation and partial retention visual quality objectives.</p> <p><b>31.</b> Report business initiatives and partnerships.</p> <p><b>28.</b> Licencees will demonstrate efforts by participating in public multi-stakeholder meetings at both the strategic and at the local level. Licencees will report on the number of community meetings held or attended. Licencees will also report on the number of communications with concerned and engaged recreational users.</p>	<p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p>
6.3.2 Evidence of co-operation with DFA-related workers and their unions to improve and enhance safety standards, procedures, and outcomes in all DFA-related workplaces and affected communities	<p><b>38.</b> A minimum of 80% of contractors conducting on-the-ground work are SAFE Company, or equivalent, registered and/or certified. And for BCTS, that a minimum of 80% of the Licences or contracts awarded were SAFE Company, or equivalent, registered and/or certified.</p>	<p>✓</p>
6.3.3 Evidence that a worker safety program has been implemented and is periodically reviewed and improved	<p><b>39.</b> All forest companies/organizations subscribing to the SFM Plan are SAFE Company, or equivalent, certified.</p>	<p>✓</p>

<b>ELEMENT</b>	<b>6.4 Fair and effective decision making</b>	
<b>VALUE</b>	Recognition of advisory group values, shared knowledge, and informed decisions	
<b>OBJECTIVE</b>	Engaged, dynamic public participation process	
<b>INDICATOR</b>	<b>TARGET</b>	<b>2016</b>
6.4.1 Level of participant satisfaction with the public participation process	<p><b>40.</b> 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.</p>	<p>✓</p> <p>✓</p>
6.4.2 Evidence of efforts to promote capacity development and meaningful participation in general	<p><b>41.</b> 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.</p> <p><b>28.</b> Licencees will demonstrate efforts by participating in public multi-stakeholder meetings at both the strategic and at the local level. Licencees will report on the number of community meetings held or attended. Licencees will also report on the number of communications with concerned and engaged recreational users.</p>	<p>✓</p> <p>✓</p>
6.4.3 Evidence of efforts to promote capacity development and meaningful participation for Aboriginal communities	<p><b>41.</b> 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.</p> <p><b>27.</b> Open communication with local First Nations will include an understanding of traditional territories and other aboriginal rights including cultural and spiritual values Participating Licencees respond to all written requests for communication/information from First Nations.</p> <p><b>35.</b> Maintain and/or increase the number of working relationships with First Nations.</p>	<p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p>

<b>ELEMENT</b>	<b>6.5 Information for Decision-Making</b>	
<b>VALUE</b>	Opportunities to increase knowledge and understanding	
<b>OBJECTIVE</b>	A wide range of public educational opportunities. Adaptive forest management is responsive to research, experience and public input	
<b>INDICATOR</b>	<b>TARGET</b>	<b>2016</b>
6.5.1 Number of people reached through educational outreach	<b>41.</b> 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.	✓
6.5.2 Availability of summary information on issues of concern to the public	<b>42.</b> Licencees will keep members of the public informed of TSA strategies being developed, and planning occurring by: Maintaining a website. Circulating the SFM plan and other information to the public at least annually (news release/leaflet/open house/Local Resource Use Plan, etc.).	✓  ✓



## Appendix I: Detailed Reporting of SFM Targets



**Target (1): Ecosystem Area by Type**

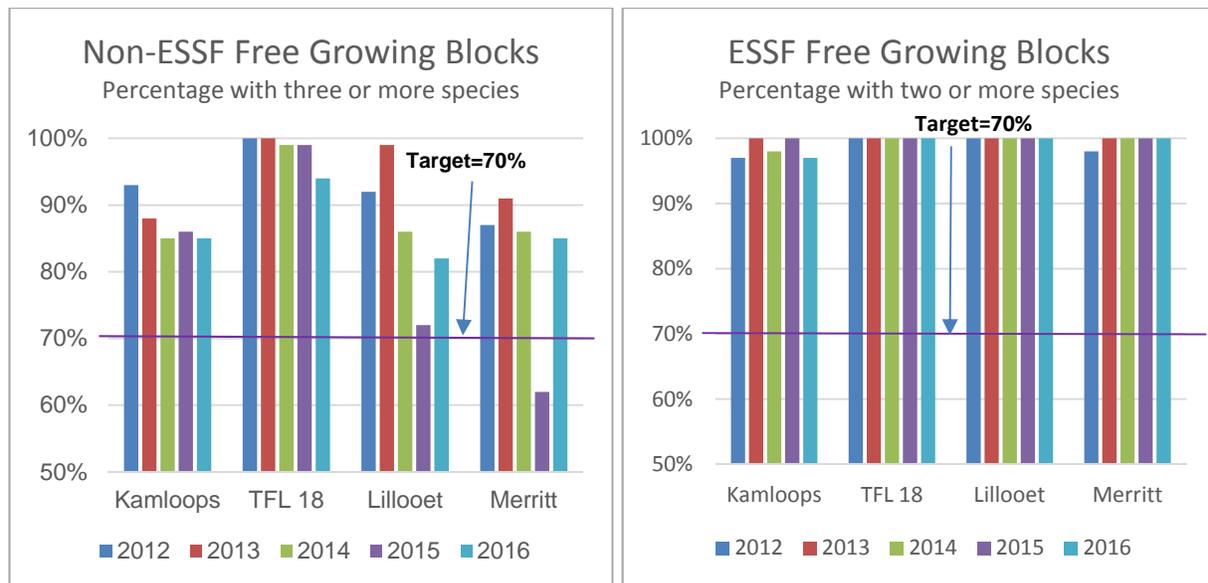
**Target:** Maintain the presence and representative area of Biogeoclimatic Zones to the subzone level within the plan area. Target met for the Plan area.

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

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

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

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



**Assessment Results:** In the Kamloops TSA, in non-ESSF BGC zones, the average of the 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> leading tree species was 54%, 22% and 12%, respectively. On the free growing blocks that were artificially regenerated, species originally planted were Subalpine Fir (BI), 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 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> leading tree species was 59%, 23% and 17%, respectively.

In the Lillooet TSA, in non-ESSF BGC zones, the average of the 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> leading tree species was 63%, 25% and 6%, respectively. On the free growing blocks that were artificially regenerated, species originally planted were Fdi, Pli, Sx, Lw and Py

In the Merritt TSA, in non-ESSF BGC zones, the average of the 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> leading tree species was 78%, 13% and 6%, respectively. On the free growing blocks that were artificially regenerated, species originally planted were Fdi, Pli, Sx, Lw 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.

**Assessment Results:** Overall, there was a net gain of 59.98 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 1.31 ha. TFL 18 reported no change.

Licensees in the Lillooet TSA reported a net gain of 2.94 ha.

Licensees in the Merritt TSA reported a net gain of 58.35 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: One hundred percent (343 out of 343) 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, 90% (308 out of 343) had dispersed individual trees, stubs or small patches retained.

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

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

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

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

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

Assessment Results: In the Kamloops TSA, there were 15 cutblocks harvested, where there was a documented critical habitat feature for a Red-listed or Blue-listed species (Western Rattlesnake, Flammulated Owl, Badger, and Caribou). There was 100% consistency with SP measures achieved. With respect to the Western Rattlesnake, measures included road building and site prep timing restrictions, preserving large CWD, avoiding rock disturbance, and no pesticide use. There was a suspected Flammulated Owl in a cavity in a Fdi veteran adjacent to an in-block road; SP measures included select harvest, winter harvest only restriction and avoiding operations during courtship and hatching season. No operations between March 31 and June 1. A 0.5 ha WTRA was established over a Badger den area. With respect to Caribou, measures included retention of non-target species and retention clumps. Measures followed were contained in the (Land and Resource Management Plan (LRMP).

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

In the Lillooet TSA there were two blocks with an occurrence of a critical habitat feature (Grizzly Bear). There was 100% consistency with SP measures achieved: no operations (except tree planting) during breeding season, and newly constructed roads are to be rehabbed or barricaded upon completion of Silviculture activities. Measures followed were contained in the Forest Stewardship Plan (FSP).

In the Merritt TSA there were 12 cutblocks with an occurrence of a critical habitat feature (Whitebark Pine, Mountain Beaver, Grizzly Bear, Coastal Tailed Frog). There was 100% consistency with SP measures achieved. In blocks with Whitebark pine, there was a “no mistletoe slashing’ clause in the SP. With respect to the Mountain Beaver, denning sites were protected with Machine Free Zone (MFZ) and No Harvest Zone (NHZ) and all Non-Classified Drainages (NCD) within the block were flagged with MFZ to protect potential Mountain Beaver habitat. With respect to Grizzly Bear, there is management to increase forage and CWD, as well as access management. Measures followed were part of the Government Action Regulations (GAR) orders.

Target 6c: Based on the potential level of impact to any of the 3 TSAs, participate in the consultation process led by the Ministry of Environment and the Ministry of Forests, Lands and Natural Resource Operations, in the identification of Ungulate Winter Range and Wildlife Habitat Areas (WHA's) and the development of General Wildlife Measures. Target met for the Plan area.

Assessment Results: In the Kamloops TSA, licensees participated in meetings with respect to Draft Fisheries Sensitive Watersheds GAR Order implementation, and Draft Critical Deer Winter Range GAR Order Implementation.

In the Lillooet TSA, licensees participated in meetings with respect to the draft Grizzly Bear GAR order.

In the Merritt TSA, licensees participated in meetings with respect to Williamson Sapsucker and Draft Critical Deer Winter Range GAR Order Implementation.

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 not met for the Plan area.

Assessment Results: In the Kamloops TSA there were 35 blocks harvested within UWR and 34 of these followed commitments to manage for UWR. One licensee reported that their current Forest Stewardship Plan does not allow for blocks greater than 5 ha in Critical Mule Deer Winter Range and they did harvest one block greater than 5 ha.

There were one block in TFL 18 harvested within and managed for UWR.

In the Lillooet TSA, 23 blocks were harvested within UWR and all followed the commitments.

In the Merritt TSA, licensees reported 41 cutblocks where harvesting occurred within designated UWR and 41 where commitments to manage for the species were adhered to.

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

**Target (7): Level of FPC (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 342 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 one location where the presence or occurrence site of flammulated owl was identified, and one of badger, and the habitat was conserved or managed. In the Lillooet TSA, there were ten locations where the presence or occurrence sites of grizzly bear were identified, and the habitat was managed or conserved. In the Merritt TSA there were three locations where the presence or occurrence site of grizzly bear was identified, one location of spotted bat, 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](http://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):

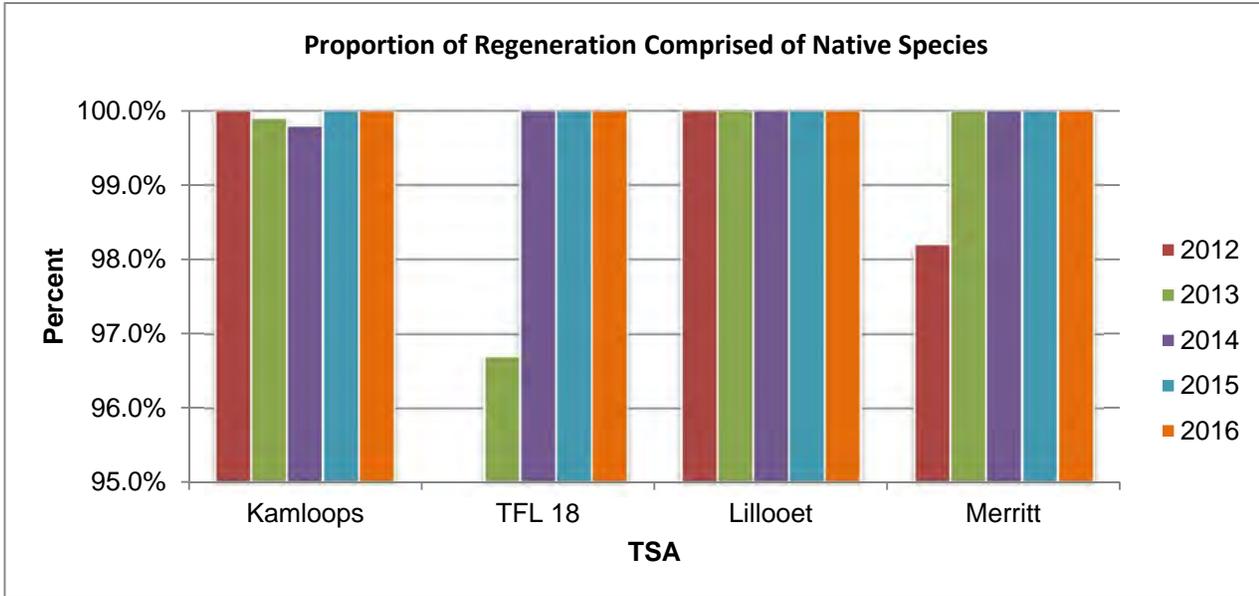
	Flammulated Owl	Western Screech Owl	Spotted Owl	Spotted Bat	Grizzly Bear Merritt TSA	Grizzly Bear Lillooet TSA	Coastal Tailed Frog	Great Basin Gopher Snake
Desired Area (ha)	4050	44	5000	16	5211	8000	2793	4000
Area in WHA		429.2	20161	9.4	3182	1322	384.6	
Area objective met (Y/N)	N	Y	Y	N	N	N	N	N

*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 – 4,745.9ha, Lillooet TSA – 672.2ha, Merritt TSA – 5,923.1ha and TFL 18 – 1,880.8.

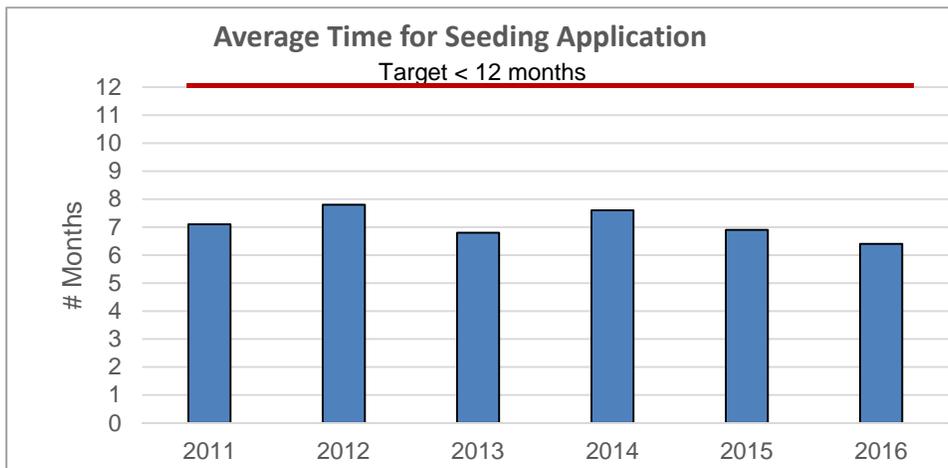


Target (10) addresses the objective of conserving the diversity and abundance of native species and their habitats.

**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 6.4 months of disturbance, compared to 6.9 months in 2015. 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: There was no harvesting completed in the Lillooet TSA in 2016 in any of the identified rare landscape unit /BEC zone variants.

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

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

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

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

Assessment Results: There were 63 sites identified and mapped in the plan area, and all were managed or protected in accordance with forest plans.

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

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

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

**Assessment Results:** There were no special geological features identified.

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

**Target (16): Prompt reforestation following harvest.**

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

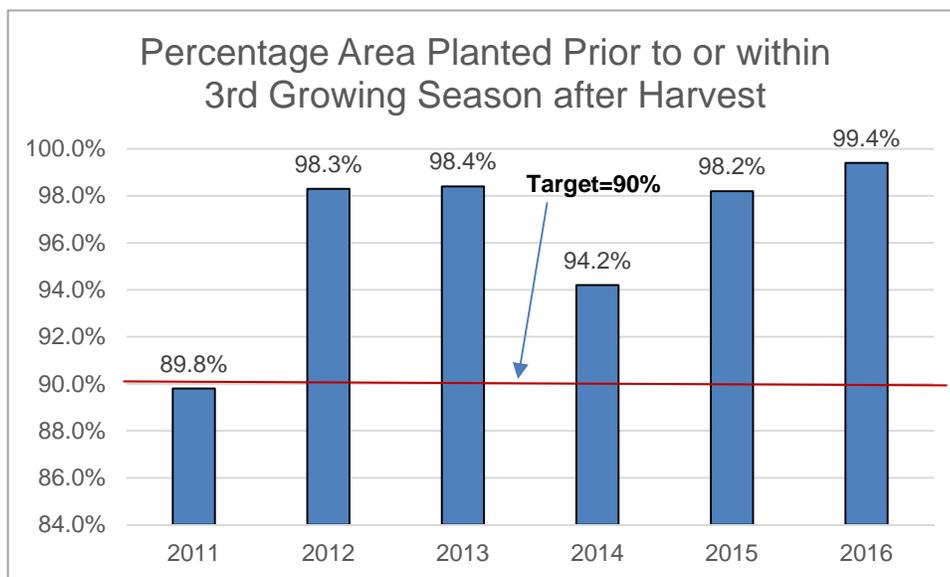
**Assessment Results:** Overall, 99.4% of areas were planted within the 3<sup>rd</sup> growing season from harvest, for the collective NTF Plan area.

In the Kamloops TSA, licensees reported that 98.9% (4,447.2 of 4,498.6ha) of area prescribed for planting was completed within the third growing season.

In TFL 18, 100% (1,868.2ha) of area prescribed for planting was completed within three growing seasons.

In the Lillooet TSA, licensees reported 100% (602.4ha) of area prescribed for planting was completed within three growing seasons.

In the Merritt TSA, licensees reported that 99.5% (4,948.6 of 4,971.8ha) of area prescribed for planting was completed within the third growing season.



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

**Target (17): Achievement of free growing date**

**Target:** All cutblocks 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 2016 had met the free growing requirements on or before the latest date.

In the Kamloops TSA, licensees reported 5,300.6ha achieved free growing status; these cut blocks outperformed their late free growing date by an average of 4.9 years.

In the TFL 18, the licensee reported 282.7ha achieved free growing status; these cut blocks outperformed their late free growing date by an average of 3.2 years.

In the Lillooet TSA, licensees reported 1,307.0ha achieved free growing status; these cut blocks outperformed their late free growing date by an average of 5.0 years.

In the Merritt TSA, licensees reported 2,851.2ha achieved free growing status; these cut blocks outperformed their late free growing date by an average of 4.3 years.

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

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

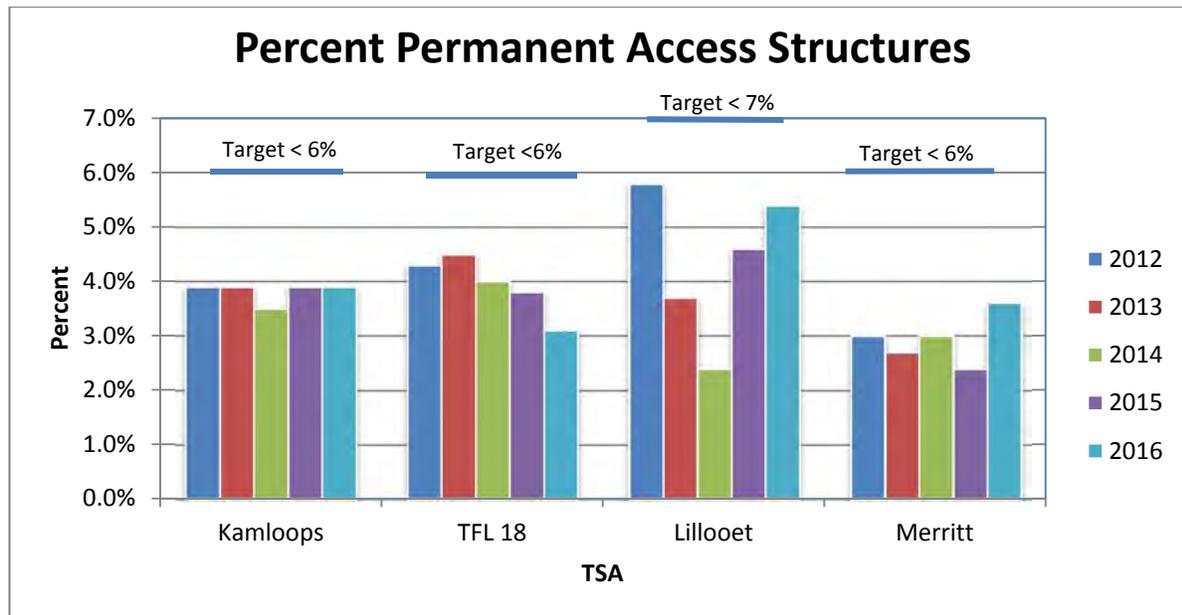
**Target:** Less than 6 percent (7% for the Lillooet TSA), on average, of harvested areas will be in permanent roads and landings. Target met for the Plan area.

**Assessment Results:** In the Kamloops TSA, the percentage of permanent roads and landings within the total harvested area averaged 3.9%. A total gross area of 5,116.3ha was harvested in 2016. New permanent roads and landings occupied 201.2ha.

In TFL 18, the total gross block area harvested was 1,365.7ha with 42.0ha in permanent roads and landings. This equates to 3.1%.

In the Lillooet TSA, the percentage of permanent roads and landings within the total harvested area averaged 5.4%. A total of 1,004.0ha (gross area) was harvested in 2016. New permanent roads and landings occupied 54.2 ha.

In the Merritt TSA, the total gross block area harvested was 5,352.3ha with 193.7ha in permanent roads and landings. This equates to 3.6%, 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.

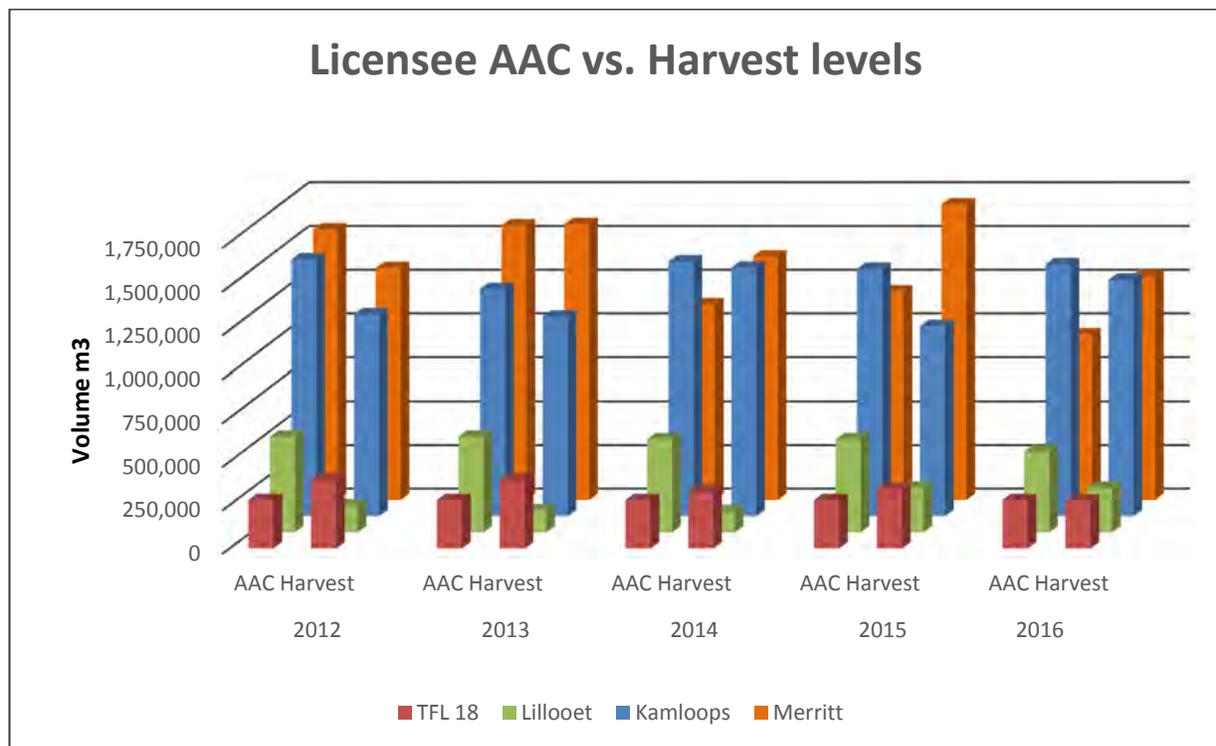
**Assessment Results:** The annual allowable cut (AAC) for the Kamloops TSA is 4,000,000m<sup>3</sup>; licensees reported 1,350,797m<sup>3</sup> harvested against a reported AAC of 1,439,708m<sup>3</sup>.

The AAC for TFL 18 is 279,500m<sup>3</sup>, with 275,665m<sup>3</sup> reported harvested.

The AAC for the Lillooet TSA is 570,000m<sup>3</sup>; the two licensees reported 256,198m<sup>3</sup> harvested against a reported AAC of 464,933m<sup>3</sup>.

The AAC for the Merritt TSA is 2,400,000m<sup>3</sup>; licensees reported 1,276,716m<sup>3</sup> harvested against a reported AAC of 946,095m<sup>3</sup>.

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



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

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

Target: 100 percent conformance to riparian and lakeshore commitments made within plans. Target met for the Plan area.

Assessment Results: There were 247 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 11,140.7 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 533 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 7 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 26 blocks harvested where the watershed ECA exceeded 35%; further hydrological assessments were completed on all of these.

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

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

**Target:** All permanent status roads and associated structures will have inspections and related maintenance completed as scheduled. Target not met for the Plan area.

**Assessment Results:** Licensees reported 4,673.5km of permanent status roads scheduled for inspection, with a total of 4,872.0km, or 104.2%, inspections completed, compared to 111.1% in 2015.

134 of 262, or 51.1%, of maintenance items identified were completed, compared to 97.9% in 2015. As a result of a staffing change, the lag time between current staff moving on, the vacancy being filled, and the new employee getting familiar with his role, a number of maintenance items were not completed.

All outstanding inspections and maintenance items were re-scheduled to 2017.



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

*Photo credit: Dennis Farquharson, GRO TRZ Consulting Inc.*

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

**Target (26) is absent from the plan.**

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

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

Assessment Results: There were 1050 meetings and meaningful communications with local First Nations, compared to 1002 in 2015. Licensees had 160 written requests for communication, compared to 123 in 2015, and responded to all.

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

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

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

Assessment Results: Licensees indicated that their interests were represented at strategic and local area meetings with other stakeholders and the broader public. There were 69 community meetings attended and 222 communications with recreation users. There were 133 written requests from the public and all were responded to, in a weighted average of eight days.

Examples of issues / topics communicated are: road use, timing of operations, landscape visuals, block location, harvesting plans in the Upper Clearwater Valley, access control, riding trails, snowmobile club, resorts, camps & adventure company concerns, and hydrology.

*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 141 blocks harvested with preservation, retention or partial retention visual quality objectives (VQO). All blocks achieved the visual intent. A total of 31 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 not met for the Plan area.

**Assessment Results:** 47 of 48 recreation trails within or influenced by harvest areas were successfully managed and retained. One known trail was disturbed during site preparation activities. Actions were taken to repair the trail.

*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 113 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 46 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 264.0 million fbm or foot, board measure (board feet) of lumber output and 291,946 bdt or bone dry tones of chip output. Lumber output increased by 7.7 million fbm and chip output increased by 113,326 bdt in 2016. As well, there were 267.0 million fbm of veneer produced compared to 348.8 million fbm in 2015.

Licensees in the Lillooet TSA reported 2.1 million fbm of lumber output and 31,461 bdt of chip output. There was 129.3 million fbm of veneer reported, compared to 115.7 million fbm in 2015.

Licensees with sawmills in the Merritt TSA reported 392.9 million fbm of lumber output and 175,440 bdt of chip output. Lumber output decreased by 113.2 million fbm and chip output decreased by 66,712 bdt in 2016. 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: 2015 numbers are in brackets:  
Kamloops TSA: 1,060 days (1,015); 1,234,241 man hours worked (1,154,247); 606 employees (623); 6,506 estimated direct and indirect jobs.  
Lillooet TSA: 199 days (228); 104,337 man hours worked (98,207); 60 employees (56); 1,025 estimated direct and indirect jobs.  
Merritt TSA: 933 days (1,128); 653,955 man hours worked (794,758); 331 employees (384); 5,107 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: 161 of 163 (98.8%) DFA forest contractors had both environmental and safety training. BCTS reported 114 out of 114 (100%) awarded contracts and licenses were SAFE Company registered and/or certified. There were a total of 111 forestland employees reported and they all received training in accordance with their training plan.

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

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

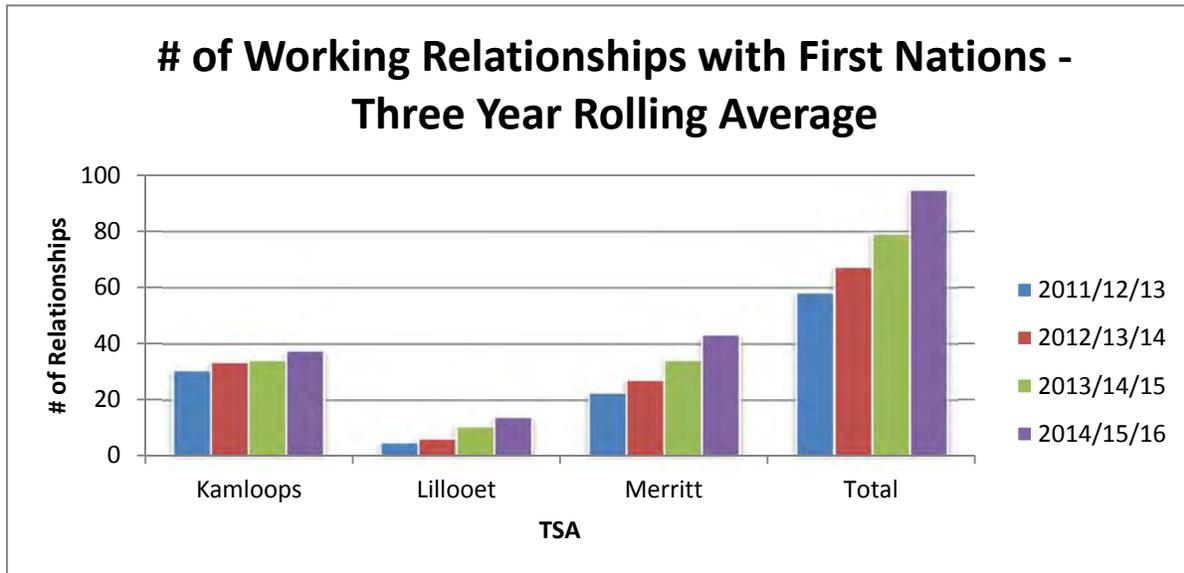
Target: Maintain and/or increase the number of working relationships (partnerships, joint ventures, cooperative agreements, memorandum of understanding, or business contracts) with First Nations. Additionally, report annually the percent of the three TSAs' AAC that has been allocated to first Nations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

**Assessment Results:**

Licensees in the Kamloops TSA reported a 2014/2015/2016 rolling average of 37.7 working relationships with First Nations. This is a slight increase from 34.3 for 2013/2014/2015. Note that Interfor data was excluded from previous years. Examples of relationships included direct employment in manufacturing facilities, referrals, log purchase agreements, joint ventures, hauling contracts, service agreements for archaeological and cultural heritage work and preliminary field reconnaissance, NRFL partnerships, burning, logging, mechanical site preparation, GPS services, and Memorandum of Understanding. Approximately 28% of the TSA committed volume was allocated to First Nations (674,793m<sup>3</sup>).

Licensees in the Lillooet TSA reported a 2014/2015/2016 rolling average of 14.0 working relationships with First Nations. This is an increase from 10.7 for 2013/2014/2015. Examples of relationships included logging, road construction, road maintenance, burning, planting, cultural and archaeological management, GIS work, layout work, management of forest licenses, and development of a Business to Business partnership. Approximately 38% of the TSA committed volume was allocated to First Nations (228,448m<sup>3</sup>).

Licensees in the Merritt TSA reported a 2014/2015/2016 rolling average of 43.3 working relationships with First Nations. This is an increase from 34.3 for 2013/2014/2015. Examples of relationships included GPS work, mistletoe control, planting, stocking surveys, PFR (Preliminary Field Reconnaissance) and CHA (Cultural Heritage Assessment) surveys, cruising, harvesting, trucking, burning, planning & timber development, road building, maintenance and rehabilitation, milling (Coldwater post & rail), log purchases and forest management. Approximately 14% of the TSA committed volume was allocated to First Nations (152,450m<sup>3</sup>).



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 (198) 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: Fifty-six trappers indicated that they wished to be communicated with; licensees reported that they communicated with 176 trappers. There were five instances where plans changed possibly impacting trappers and in all instances, efforts were made to discuss the changes.

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

**Target (38): Forestry Contractor safety**

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

Assessment Results: Ninety-nine percent (269 of 271) of on the ground contractors were SAFE Company registered and/or certified. One hundred percent (all 114) 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 4.1 out of 5, compared to 3.9 in 2015. Ninety-seven percent of responses to survey questions ranked “3” or better. There were eight respondents to the survey.
- b) Results of the feedback form were compiled and are reported as part of the annual monitoring program in [Appendix IV](#) of this report.

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

**Target (41): Number of people reached through educational outreach.**

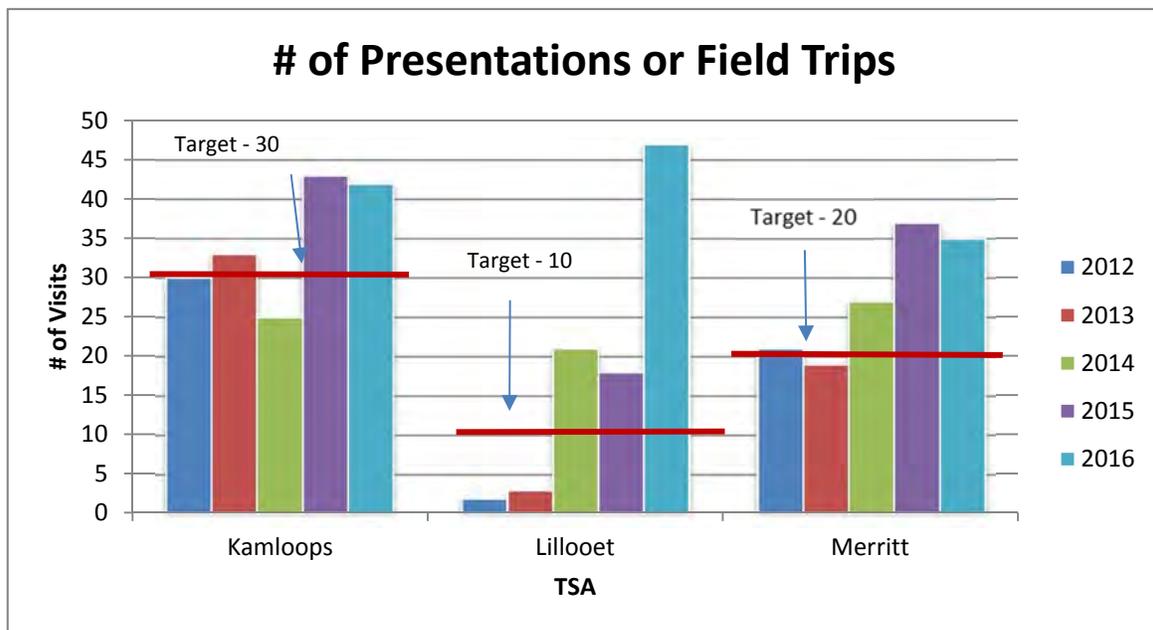
- Target: Participating licensees will maintain educational support that leads to a balanced and broad-based understanding of forestry. Educational actions would include visits to schools, presentations to resource clubs, community meetings, public tours of operations and other similar events. Target 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 42 educational actions (43 in 2015), with none provided specifically to First Nations. The actions included:
- Arbor day in Kamloops (since the 1950s Grade One students in SD73 have received a seedling to plant around their homes);
  - SD73 High School fall forestry camp;
  - Review of tree seedling specifications;
  - Tree planting demonstration;
  - Community Open House;
  - Mill tours to students;
  - Participation in a public silviculture field tour of the Wells Gray Community Forest;
  - Hosted Public Advisory Group field tour;
  - Meeting with Bonaparte Indian Band and Simpcw First Nation;
  - Community Forest sponsored 2016 Job Creation Program with Ministry of Social Development, providing participants with training and educational workshops for forestry jobs;
  - Community meetings hosted by Lower North Thompson Community Forest Society

Lillooet TSA licensees conducted 47 field trips and presentations (18 in 2015), 27 targeted specifically to First Nations. These included:

- Numerous Community Meetings,
- Lillooet - Seton Corridor Stakeholder Committee Meeting
- First Nation Presentations
- Presentation to Chilcotin Holidays

Merritt TSA licensees participated in 35 field trips, presentations and educational support (37 in 2015). Twenty-three of those were targeted specifically to First Nations. Participation included:

- Poster contest – public and band schools
- Open house at Lower Nicola and Upper Nicola Bands;
- National Forest Week (NFW) golf tournament (networking)
- NFW presentations;
- School presentations;
- Arbor Day presentations;
- Merritt local job fair
- Upper Nicola band job fair
- Logger Sports weekend
- Tree planting with students
- 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 1,683 (Canada – 681, United Kingdom – 345, USA – 166, Russia – 145, , Italy – 40, Germany – 32, China – 19, Austria – 18, Brazil – 13 and various other countries – 224). There were 1,278 unique visitors.

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

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





## **Appendix III: CSA Registered Licensee Summary Reports**



## 2016 SFM MONITORING SUMMARY



### Aspen Planers Ltd.

More information can be obtained by contacting

Brent Turmel  
at

#### Aspen Planers Ltd.,

Phone:  
250 378-9266

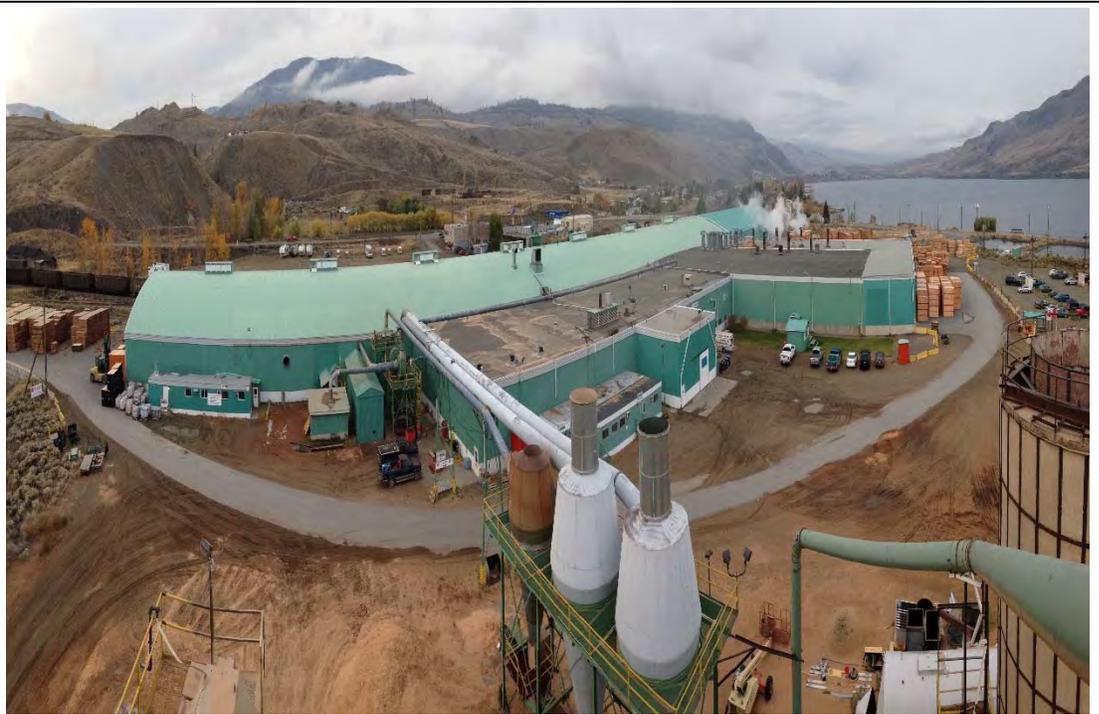
E-Mail:

[brentturmel@apgroup.ca](mailto:brentturmel@apgroup.ca)

Mail or In-person:  
Box 160,  
1375 Houston Street,  
Merritt

British Columbia  
V1K 1B8

**Photo:** Savona Specialty  
Plywood



### 2016 SFM Performance Highlights

SFM Plan performance targets were achieved on all but one (1) reportable target in the Nicola Thompson Fraser SFM Plan.

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

#### Criterion 1 – Biological Diversity

- All targets were met except Target #2: “70 percent of area (hectares) submitted as free growing will have three or more tree species, including conifer and deciduous comprising one percent or more in the free growing survey results (all biogeoclimatic Zones except ESSF and Zones with the “xh” variant).” For Lillooet TSA, met 69.4% - Rationale: Target not met as Free to Grow survey data was not collected down to the 1 % level for the 2016 Lillooet Free Growing Surveys. This data will be collected for 2017 surveys. Based on known attributes associated with measuring down to the 1% level, this target will have been met should the survey data been collected.

#### Opportunities For Improvement

- Free to Grow survey data collection for Lillooet will be implemented for all Survey contractors as currently implemented for Merritt survey contractors.
- A new Road Management Tracking system using Phoenix will be implemented for 2017 and will improve road inspection and maintenance tracking

#### Specific Highlights of our Plan Report

- The Employment numbers in Savona have increased over the past year from 161 to 174 as a result of strong demand for the specialty plywood product the Savona plant produces where as both the Lillooet and Merritt plants have seen slight decreases in employment numbers.



## 2016 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](mailto:Lorne.Wood@gov.bc.ca)

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



Photo of Dangle Head Processor, TSL A92784 Block NE8AY – Kamloops

Photo submitted by Cory Argue

### BC Timber Sales 2016 SFM Performance Highlights:

SFM Plan performance requirements were achieved for 39 of 41 indicators relating to the sustainability criteria in the Nicola Thompson Fraser SFM Plan being reported on. The following highlights BC Timber Sales contribution to the NTF 2016 Sustainable Forest Management Plan Report:

- All Contractors and Licensees active on BCTS operations were SAFE Certified.
- 100% of areas prescribed for planting were completed within the third season from the harvest start date.
- BCTS achieved targets for planting species within approved stocking standards.
- 89.5% of blocks submitted as free growing (non ESSF) has 3 or more species in the survey results. 100% of areas submitted as free growing (ESSF) had 2 or more species in the survey results.
- 100% of cutblocks greater than 10 hectares had Wildlife Tree Retention Areas established within the cutblocks. 94.8% of those cutblocks had individual dispersed wildlife trees and stubs retained.
- BCTS achieved 100% conformance to riparian and lakeshore commitments made within plans.
- Where BCTS operations occurred within range units, 100% of Range Tenure holders were communicated with prior to operations.
- BCTS achieved 100% conformance to Visual Quality Objectives made within plans.
- On average, 3.2% of areas harvested by BCTS are in permanent access and landings.
- 100% of blocks harvested met coarse woody debris requirements prescribed in the Site Plans.

SFM Plan performance targets were not achieved for 2 of 41 indicators relating to the sustainability criteria in the NTF SFM Plan. The targets that were not achieved are as follows:

Target 30: BCTS (Kamloops) did not achieve the target of 100% preservation of known recreation trails; a known trail was disturbed during site preparation. Actions were taken to repair the trail.

Target 25: BCTS (Merritt & Lillooet) did not complete the planned maintenance action items pertaining to water management. As a result the maintenance action items have been rescheduled to 2017.

**This report can be located at:**

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



## 2016 SFM MONITORING SUMMARY



Vavenby

More Information on how Canfor - Vavenby performed against all indicator targets reported on in 2016 can be obtained by contacting Stefan Borge at Canfor's office in Vavenby.

Ph: (250) 676-1136  
[Stefan.Borge@Canfor.com](mailto:Stefan.Borge@Canfor.com)

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



Figure 1

Dispersed Retention

FLA18688

Photo by J. Biagioni

### Canadian Forest Products Ltd. - Vavenby 2016 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 2016.

40 out of 41 targets were met in 2016. SFM Highlights for the year included:

- **Target 2:** Over 90% of all areas declared as free growing by Canfor in 2016 were planted with three or more species.
- **Target 5:** Canfor retained WTRA's and dispersed individual trees in all 44 blocks that were harvested in 2016.
- **Target 11:** Average time for road cut and fill slope seeding applications in the TFL 18 was 10 months and in FL A18688 was 7 months.

- **Target 28:** Canfor participated in numerous meetings with significant Stakeholder groups as well as hosting a community open house to share harvest plans with the public.
- **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 two working relationships with First Nations.

Target Not Met in 2016:

- **Target 6:** 10 out of 11 blocks harvested within UWR followed plan commitments. One block did not meet FSP commitment in critical deer winter range as identified in the KLRMP.

**The monitoring report can be located at:**

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

## 2016 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. 2016 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 41 targets were met in 2016. The following highlights Gilbert Smith's contribution to the 2016 Sustainable Forest Management Plan Report.

- Gilbert Smith Forest Products Ltd. successfully maintained registration to the CAN / CSA Z809:2008
- The amount of area in permanent roads and landings (PAS) in areas harvested during the year is 4.9%.
- Regeneration of harvested blocks occurred within 9.2 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 1.4 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 2016. The three year average ending in 2016 is 8.3. The three year average ending in 2015 was 8
- 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 49 local business relationships/partnerships and dealings.
- 100% of Gilbert Smith's contractors received environmental training and all are SAFE Company Certified.
- No Major or Minor Non-conformances were identified during the external CSA Audit.

On September 14, 2016 Gilbert Smith also hosted a field tour for the Public Advisory Group and First Nations. We visited some recently harvested sites and reviewed silviculture practices, leave trees, utilization, and visuals. The tour was well received and Gilbert Smith would like to thank the dedicated people who attended.

[Pictured above: PAG Field Tour Attendees. Photo: G.Foss ]

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

## 2016 SFM MONITORING SUMMARY



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

Phone: 250 578-2177  
[jamie.skinner@tolko.com](mailto:jamie.skinner@tolko.com)

[www.tolko.com](http://www.tolko.com)



Murray Lake (Merritt TSA) Fire Salvage Block in winter

Photo Taken by Andrew Vanden Dool, Thompson Nicola Woodlands

### Tolko Industries Ltd.'s 2016 SFM Performance Summary

Tolko Industries Ltd. Thompson-Nicola maintained certification to CAN/CSA Z809-2008 Sustainable Forest Management System and ISO 14001-2004 Environmental Management System. Thompson-Nicola Woodlands participated in an external audit performed by SAI Global.

SFM Plan performance targets were achieved for all indicators and objectives relating to the sustainability criteria in the SFM Plan for our Forest Licenses and NRFLs in 2016. The following is a performance for each of the CSA criteria:

**Criterion 1 – Biological Diversity**

- All targets were met

**Criterion 2 – Ecosystem Condition and Productivity**

- All targets were met

**Criterion 3 – Soil and Water**

- All targets were met

**Criterion 4 – Role in Global Ecological Cycles**

- All targets were met

**Criterion 5 – Economic and Social Benefits**

- All targets were met

**Criterion 6 – Society's Responsibilities**

- All targets were met



## 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.	3.9
2	My suggestions related to Sustainable Forest Management values and objectives are being adequately listened to at the Advisory Group Meetings.	4.3
3	Efforts have been made to incorporate my concerns related to SFM values and objectives into the SFM Plan.	3.8
4	My suggestions related to SFM indicators and targets are being adequately listened to at the Advisory Group Meetings.	4.0
5	Efforts have been made to incorporate my concerns related to SFM indicators and targets into the SFM Plan.	3.6
6	I have been given the opportunity to review licensee's audit results and annual reports.	4.4
7	The meeting agenda allows for discussion of any related sustainable forestry issues of concern to advisory group members.	4.3
8	Information provided in advance of meetings is adequate and organized to allow for me to effectively contribute.	4.4
9	Advisory Group Meetings are run efficiently and effectively.	4.9
10	The meeting minutes capture important aspects of the meeting.	4.5
11	Communication with Advisory Group members between meetings is adequate.	4.0
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.	3.4
14	Licensees have made an effort to recruit new members (if there was a desire to do so)?	3.1
15	Licensee's and or the facilitator are proactive about providing new information to the PAG members regarding impacts to environment, sustainability, forestry, etc.?	4.3
	<b>Total Average Rating</b>	<b>4.1</b>

A few questions were skipped by some of the respondents.

### Comments received:

- It seems we are slowly developing a broader representation at the meetings. Potential participants should have a basic understanding of forestry issues in order to contribute effectively on agenda items.
- I know it's hard but sometimes the general group seems to think the meetings are a whining session and focus on things not related to the SFM plan. Perhaps an advisory member review would be good.

## 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

<b>Acronym</b>	<b>Meaning</b>	<b>Acronym</b>	<b>Meaning</b>
AAC	Allowable Annual Cut	MoFLNRO	Ministry of Forests, Lands and Natural Resource Operations
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

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