SUSTAINABLE FOREST MANAGEMENT PLAN
2009/10 ANNUAL REPORT

Vanderhoof Defined Forest Area
Licensee Team

Compiled by:

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List of Acronyms

AAC	Allowable Annual Cut
AMP	Access Management Plan
BCTS	British Columbia Timber Sales
COSEWIC	Committee on the Status of Endangered Wildlife in Canada
CSA	Canadian Standards Association
CWD	Coarse Woody Debris
DLMP	Draft Lakeshore Management Plan
EMS	Environmental Management System
DFA	Defined Forest Area
FIA	Forest Investment Account
FPC	Forest Practices Code
FRPA	Forest and Range Practices Act
FSP	Forest Stewardship Plan
GSA	Grouped Site Associations
ILMB	Integrated Land Management Bureau
LOWG	Landscape Objectives Working Group
LLOWG	Licensee Landscape Objectives Working Group
LRDW	Land and Resource Data Warehouse
LT	Licensee Team
MOFR	Ministry of Forests and Range
MPB	Mountain Pine Beetle (*Dendroctonus ponderosae* Hopk.)
Mm3	Million cubic meters
NDU	Natural Disturbance Unit
NHLB	Non Harvesting Land Base
NIVMA	Northern Interior Vegetation Management Association
SAR	Species at Risk
SP	Site Plan or Silviculture Prescription
SU	Standard Unit
S6	Stream classification designation (average channel width ≤ 3m)
THLB	Timber Harvesting Land Base
TOR	Terms of Reference
TSA	Timber Supply Area
TSL	Timber Supply License
TSR	Timber Supply Review
UBC	University of British Columbia
VRI	Vegetation Resource Inventory

1.0 INTRODUCTION

This is the fifth annual report of the Vanderhoof Sustainable Forest Management Plan (SFMP) and covers the reporting period of April 1, 2009 to March 31, 2010.

Canadian Forest Products Ltd. (Vanderhoof) and the Stuart-Nechako Business Area of BC Timber Sales have achieved SFM certification under the CSA Z809-02 standard. This annual report, for the period April 1/09 to March 31/10, contains the performance results relative to the Vanderhoof SFMP, its associated DFA and the forest operations of Canfor and BC Timber Sales. SFMP version 3.0 represents a complete revision of the SFMP framework (original Slocan framework revised to CSA (value, objective, indicator, target). It incorporates a complete update of all revisions to the SFM plan since version 2.0 (including indicator modification, deletion, implementation strategies, current practice, status, continual improvement and target revisions).

The SFMP is an outline of how the Licensee Team conducts operations in order to meet the CSA standard. One requirement of the standard is public involvement in the plan. The primary public participation method proposed in the CSA SFM standard is a Public Advisory Group (PAG), which allows continual local input from a broad range of interested parties. The Vanderhoof SFMP PAG originally assisted in identifying quantifiable local level indicators and objectives. This annual report summarizes the status of the 43 indicators that were identified through the PAG process and established under the SFMP. For clarification of the intent of the indicators, objectives or the management practices employed, refer to the Vanderhoof Sustainable Forest Management Plan document available for public viewing online at three locations (see indicator 38, pg. 13).

The SFMP is not intended to be a static document, but rather in a state of continual improvement, adapting to changes in the environment, forest management practices, research findings and public values. The Vanderhoof SFMP is continuously evolving as data sources are refined and the intent of indicators are further researched and adjusted according to DFA landscape conditions. Given the severe impact Mountain Pine Beetle has had within the DFA, some indicators initially established in a green forest condition, may be rendered ineffective as an indicator of sustainability.

Current landscape conditions, evolving science, underestimation of project scope and complex data collection methodologies have left some indicators still in the development stage. These indicators are listed in Table 1 as “in progress”.

Of the 43 total indicators currently in the SFMP, 2 indicators are in progress and 38 indicators (39/41 = 95%) met their objectives during this reporting period. The following table summarizes the results of the current reporting period.

Table 1: Indicator Summary Status April 1, 2009 to March 31, 2010

Indicator	Target Achieved		
	Yes	No	In Progress
Distinct Habitat Types			X
Minimum Proportion of Late Seral Forest	X		
Young Forest Patch Size		X	
Average Stand Level Retention for Harvested Blocks	X		
Coniferous Seeds and Seedlings Planted as per FRPA	X		
Management Strategies for Species at Risk	X		
Regeneration Delay Date	X		
Free Growing Date	X		
Management Strategies for Damaging Agents	X		
Site Index	X		
Soil Conservation	X		
Average Amount of Coarse Woody Debris per Ha	X		
Riparian Reserves	X		
Conservation of Riparian Values	X		
Stream Crossing Density	X		
Stream Crossing Installations	X		
Stream Mitigation Measures	X		
Utilization of Residual Wood	X		
Amount of Permanent Access within the DFA	X		
Annual Volume Harvested by Licensee Team	X		
Conservation of Range Resources	X		
Conservation of Visual Quality	X		
Conformance with the Access Management Plan	X		
Monitoring Access Management			X
Accidental Forest Industry Related Fires	X		
North Central Interior Economic Contribution to Forestry in DFA	X		
Forest Road Maintained for Public Use	X		
Consistency With Smoke Management Guidelines	X		
Support Opportunities in the DFA		X	
Local Business Relationships and Available Opportunities	X		
Business Opportunities with First Nations	X		
Number of Different Forest Products Produced within the DFA	X		
First Nation Involvement in the Planning Process	X		
Conservation of Cultural Features	X		
Number of Public Advisory Group Meetings per Year	X		
The Level of Satisfaction of the Public Advisory Group	X		
Maintenance and Review of the PAG Terms of Reference	X		
Public Review of SFM Plan	X		
SFM Extension Activities	X		
Public Involvement in Planning Processes	X		
Research and Development Projects or Partnerships	X		
Timely Responses to Documented Concerns	X		
SFM Public Opinion Survey	X		
Total	**39**	**2**	**2**

Indicator 1 - Distinct Habitat Types

Statement of Measure	Management Objective
The percent area of distinct habitat types in the DFA	To be determined Report every 5 yrs.

Was the Indicator and Target Met?	In progress

Maintaining a representation of a full range of ecosystem types is a widely accepted strategy in conserving biodiversity. Ecosystem representation is a coarse filter approach intended to ensure proportions of ecologically distinct ecosystem types are maintained across the land base. While maintenance of ecosystems in the NHLB involves an inventory analysis of pre-defined areas, maintenance of ecosystems in the Timber Harvesting Land Base (THLB) can primarily be accomplished through retention of areas of mature forest across the land base. Assurance of ecosystem representation in the NHLB and a distribution of unmanaged reserves, at a variety of scales (small and large), throughout the THLB will help to ensure that a variety of distinct habitat types are maintained within the DFA. There is no control over the abundance of ecosystems, but ecosystem representation can be increased in the NHLB by: establishing reserves in high-risk ecosystems; and prioritizing high-risk ecosystems when allocating stand and landscape level retention.

Previous Ecosystem Representation Analysis (ERA) projects have been completed for the Vanderhoof Forest District - Vanderhoof ERA Report (Forest Ecosystem Solutions 2004 and 2006). The most recent ERA project completed for the Prince George Timber Supply Area (TSA) and TFL30 updated this work so that the analysis was consistent across the entire TSA, and matched the ecosystem groups to those within the Quesnel and Mackenzie TSA's (FES 2009). As with the previous two projects, new site series aggregations were established that recognized the uniqueness of individual sites while providing logical ecosystem units for coarse filter management. Ralph Wells (Centre for Applied Conservation Research) created groups of site series for this analysis using statistical methods and expert review was provided by Craig DeLong (MoFR Regional Ecologist).

The DFA is located within the west region of the study area, which is represented by 60 ecosystem groupings. Since both the DFA itself and the ecosystem groupings have changed substantially in the last several years, no meaningful comparisons to the original 2004 ERA baseline target data can be made. Recommendations within the recent Prince George TSA ERA analysis (FES 2009) indicated that coarse filter management is designed to address poorly understood systems, so ecologically meaningful thresholds for ecosystem representation are inherently difficult to determine. Rather than establishing thresholds for all ecosystem groups, forest planners could manage for ecosystem representation in a process of continual improvement, where highest-risk ecosystems are managed first, based on a prioritization system.

Appropriate targets will be determined for the revised DFA once new baseline data has been calculated. Initially a new dataset must be produced for Ecosystem Representation Analysis within the DFA. The Non-Forested, Non-Harvestable and Timber Harvesting Land Bases must be defined spatially in detail. Ecosystem Representation Analysis examines the proportion of each ecosystem unit that is reserved from harvest for one reason or another.

Continual improvement efforts will examine the relevance of this indicator, given the severe level of pine mortality within the DFA (NHLB & THLB) and the caution that meaningful ecological thresholds are difficult to determine. Comparable data capture to assess trending may be difficult to obtain. Ecosystem classification units are somewhat arbitrary surrogates for ecological diversity, which varies across the landscape. Refinement of ecosystem mapping through field verification will be likely and changes to the NHLB (especially economic operability) should be anticipated as beetle-killed stands deteriorate. Rather than meeting thresholds, this ERA is more suited to prioritizing retention areas at the stand and landscape level. This indicator will likely be moved to the continual improvement matrix, until it can be fully developed.

Indicator 2 - Late Seral Forest

Statement of Indicator	**Target**
The minimum proportion of late seral forest (%) by NDU.	Annually sustain proportions of late seral forest (%) by NDU in accordance with Table 5 in the SFMP (variance 0%).

Was the Indicator and Target Met?	Yes

This indicator portrays the percentage of forested land that contains older age classes (late seral: >120 years) within & adjacent to the DFA. A landscape with different seral and structural stages over space and time is recognized as being vital to biodiversity.

The Landscape Objective Working Group (LOWG), which has representation from the Integrated Land Management Bureau (ILMB), the Ministry of Forests and Range (MOFR), Timber Licensees and BC Timber Sales, has developed landscape biodiversity objectives and old forest retention requirements for the Prince George Timber Supply Area, which includes the Vanderhoof DFA. The Licensee LOWG (LLOWG) analyses disturbance data over the PG TSA Crown Forested Landbase (CFLB) and reports the late seral landscape condition at the district level. Table 2 shows the current status for each Natural Disturbance Unit and the related target.

Table 2: Late Seral Forest in the Vanderhoof Forest District & Associated Targets: April 1, 2009 to March 31, 2010

Natural Disturbance Unit	Merged Biogeoclimatic Units	Current Status March 31/10	Target (%)
D1 Moist Interior Mountain	ESSF mv1, ESSF mvp1, ESSF xv1	42 %	>29%
D2 Moist Interior Plateau	SPBS mc	51 %	>17%
D3 Moist Interior Plateau	SBS dk	33 %	>17%

D4 Moist Interior Plateau	SBS dw2	30 %	>12%
D5 Moist Interior Plateau	SBS dw3	33 %	>17%
D6 Moist Interior Plateau	SBS mc2, MS xv	38 %	>12%
D7 Moist Interior Plateau	SBS mc3	35 %	>12%

*The current status is from the LOWG Analysis Project

Indicator 3 – Young Forest Patch Size

Statement of Indicator	Target
The percent area of young forest by patch size class by NDU.	Achieve and sustain young forest patch size targets by NDU, in accordance with Table 6 in the SFMP. Measured periodically every five (5) years.

Was the Indicator and Target Met?	No

A young forest is defined as forested areas between 0 and 20 years old. A patch (for the purpose of this indicator) is defined as a young forest unit categorized according to its discrete area size. The natural variability of patch size is largely due to the influence of fire on the landscape and provides the diversity necessary for a variety of habitat requirements.

The analysis methodology for calculating young forest patch size is described within the implementation policy of the *Order Establishing Landscape Biodiversity Objectives for the Prince George Timber Supply Area* (2004). The Licensee LOWG (LLOWG) analyses disturbance data over the PG TSA Crown Forested Landbase (CFLB) and reports the young forest patch size condition down to the district level. Young Forest Patch size will be reported out every 5 years by the LLOWG, and the next expected report on patch size is scheduled for 2014/15.

Table 3 shows the current status for each Young Forest Patch Size category by Natural Disturbance Unit and the related target.

Table 3: Young Forest Patch Size Classes by NDU in the Vanderhoof Forest District

Natural Disturbance Unit	Patch Size Category	Initial Status March 31/04*	Current Status March 31/10*	Target (%)	Variance (%)
D1 Moist Interior Mountain	>1000 ha	26.9 %	51.9 %	40%	+/- 5 %
	101-1000 ha	23.5 %	15.5 %	30%	+/- 5 %
	51-100 ha	35.1%	20.2 %	10%	+/- 2.5 %
	≤ 50 ha	14.5 %	12.4 %	20%	+/- 2.5 %
D2 Moist Interior Plateau	>1000 ha	46.2 %	72.4 %	70%	+/- 10 %
	101-1000 ha	22.7 %	13.6 %	20%	+/- 5 %
	51-100 ha	18.0 %	6.0 %	5%	+/- 2.5 %
	≤ 50 ha	13.1 %	8.1 %	5%	+/- 2.5 %

*The current status is from the LOWG Analysis Project (2009-2010)

As currently written in the SFMP, the objective pertaining to young forest patch size was not achieved (only two patch sizes are within the target variances). However, consistent with the *Order Establishing Landscape Biodiversity Objectives for the Prince George Timber Supply Area* (2004) the true objective is to trend toward the natural range of patch size variability depicted in the target. When we compare the initial landscape condition in 2004 with that of 2009, we see a clear trend toward the natural range of variability. It should be noted that given the dynamic nature of disturbance within the DFA, the target for each patch size category will never be achieved and given the beetle epidemic; the current status is likely the best approximation to be expected. Continual improvement will focus on the relevance of this indicator given that the current patch size has been dictated by MPB mortality and salvage efforts are being undertaken to reduce non-recoverable losses. Current patch size targets are based generally on historic fire events, not catastrophic beetle mortality.

Indicator 4 – Stand Level Retention

Statement of Indicator	Target
The average stand level percent retention for all LT harvested blocks by NDU.	Achieve and sustain >10% retention at the stand level by NDU (variance 0%).

Was the Indicator and Target Met?	Yes

Stand level retention consists primarily of Wildlife Tree Retention Areas (WTRA's) which are defined as forested areas of timber within, or immediately adjacent to, a harvested cutblock. Residual patches of timber are generally retained for their value in providing a source of habitat for wildlife, to sustain local genetic diversity, or to protect archaeological, riparian, or habitat features, such as mineral licks and raptor nesting sites. WTRA's in managed stands also contribute to a landscape level, natural disturbance pattern, which mimics wildfires.

Sources for calculating and monitoring this indicator include Site Plans, EMS harvest inspection forms, and various licensee information tracking systems such as Genus Resources. The Vanderhoof DFA is comprised of the Moist Interior NDU, which contains the mountain sub unit and the plateau sub unit. A review of LT data demonstrates that retention at the stand level for the Moist Interior NDU is 14.4% for this reporting period, which meets the management objective.

Indicator 5 – Seed Use

Statement of Indicator	Target
The percentage of seed for coniferous species collected and seedlings planted in accordance with the Forest and Range Practices Act.	Annually, ensure 100 % of seed for coniferous species collected and seedlings planted are in accordance with the Forest and Range Practices Act (variance – 5%).

Was the Indicator and Target Met?	Yes

Sustainability of genetic diversity is an important forest management consideration because harvesting and regeneration activities can interrupt the natural patterns of plant reproduction. Assurance of genetically diverse seedlings for reforestation in

the Vanderhoof DFA is delivered through the requirements of legislation that regulate the forest industry's use of tree seed and planted seedlings. This measure relates to seed and seedlings used under the guidance of the Forest and Range Practices Act (FRPA). Between April 1, 2009 and March 31, 2010, 98.1% of the seedlings and seeds planted under FRPA were planted in accordance with the Chief Forester's Standards for Seed Use.

Indicator 6 – Management Strategies for Species at Risk

Statement of Indicator	Target
Species at Risk "Management Strategies" being implemented as prescribed.	Annually, ensure 100% of species at risk management strategies are being implemented as prescribed (variance – 5%).

Was the Indicator and Target Met?	Yes

This indicator will ensure that specific, management strategies are implemented in order to conserve and manage specific habitat needs for identified Species at Risk. LT members use databases such as BC Species and Ecosystems Explorer (http://a100.gov.bc.ca/pub/eswp/) to identify: (1) The Red and Blue-listed plants and animals and ecological communities found within the DFA, (2) Pertinent information regarding status, legal designation, distribution, life histories, conservation needs and recovery plans, (3) The relevant publications to aid in identification of the applicable red and blue listed species and ecological communities. Alpha Wildlife Research & Management Ltd. and Timberline Natural Resource Group Ltd. completed a report titled, *Management Guidelines for Species and Plant Communities at Risk: PG TSA – 2007*. LT members are utilizing this report and/or other developed planning processes to implement SAR strategies in their planning processes. Performance over the reporting period April 1/09 to March 31/10 indicated that 100% of the SAR strategies were implemented where SAR were identified.

Indicator 7 – Regeneration Delay

Statement of Indicator	Target
The percent of harvested standard units meeting the regeneration delay date.	Annually, sustain 100% of harvested standard units meeting the regeneration delay date (variance – 5%).

Was the Indicator and Target Met?	Yes

The Forest Stewardship Plan (FSP) is a landscape level plan providing the forest management planning framework within a LT members operating area. All relevant stocking standards that relate to site level planning (i.e. Site Plans) are prescribed within this document (including regeneration delay). Regeneration delay is defined in the SFMP as the time allowed between the start of harvesting in an area and the date the associated FSP stocking standard (depicted in the Site Plan) requires a minimum number of acceptable, well spaced trees per hectare to be growing in that area. Licensee Team members have reviewed all the harvested standard units (SU's) which have regeneration delay due dates within this reporting period (Table 4). The percentage of harvested SUs within the DFA meeting the regeneration delay date is 99.8 %, which is within the variance limit.

Table 4: Regeneration Delay Date Achievement: April 1, 2009 to March 31, 2010

Total Harvested SUs With Regeneration Delay Due This Period	415
Total Harvested SUs Meeting Regeneration Delay This Period	414
% Harvest Standard Units Meeting Regeneration Delay Target	**99.8%**

Indicator 8 – Free Growing Obligation

Statement of Indicator	Target
The percent of harvested standard units meeting free growing requirements on, or before, the late free growing date.	Annually, 100% of harvested standard units are declared free growing on, or before, the late free growing date (variance – 5%).

Was the Indicator and Target Met?	Yes

A free growing stand is defined in the SFMP as a stand of healthy trees of a commercially valuable species, the growth of which is not impeded by competition from plants, shrubs or other trees. Once harvested areas reach the free to grow standard, the area reverts back to Crown land and the tenure holders obligations are considered complete. Achieving free to grow status demonstrates the LT's efforts to sustain the productive capability of forest ecosystems. Table 5 summarizes all harvested standard units within the DFA that had a free growing due date between April 1, 2009 and March 31, 2010. In total, 100% of harvested standard units achieved free to grow status within the specified timeline, which meets the management objective for this measure.

Table 5: Harvested Areas Meeting Free Growing Status Assessment Date: April 1, 2009 to March 31, 2010

Number of SUs with Free Growing Due Dates This Period	100
Number of SUs Achieving Free Growing Status This Period	100
Total Overall Percentage in DFA	**100 %**

Indicator 9 – Damaging Agents

Statement of Indicator	Target
Management strategies are implemented to reduce the impact of damaging events or agents (i.e. target harvest toward beetle salvage).	Implement (annually) 100% of applicable management strategies developed to reduce the impact of Mountain Pine Beetle (variance 0%).

Was the Indicator and Target Met?	Yes

Damaging agents can be considered as biotic (i.e. insects, diseases, animals etc.), or abiotic factors (i.e. fire, wind, ice etc.) that reduce the commercial value of stands of timber. Damaging agent strategies within the DFA focus on reducing the impact

of Mountain Pine Beetle (MPB), since catastrophic lodgepole pine mortality, far outweighs the impact associated with other current and historic damaging agents. Concentrating LT harvest efforts on beetle-killed trees within the DFA also serves to reduce the carbon emissions associated with dead and decaying timber and provides for the establishment of live trees, important to carbon absorption.

It is not expected that the LT will implement all management strategies, but rather assess those that are applicable based on operating area, stage or incidence of infestation on the landscape, business practices, etc. Thus, reporting on this measure reflects the percentage of applicable management strategies implemented by the LT, which for the current reporting period is 100%.

Indicator 10 – Site Index

Statement of Indicator	Target
Site index for LT managed stands within the DFA is sustained at the subzone level.	Sustain site index for LT managed stands within the DFA at the subzone level as outlined in Table 7 in the SFMP (measured periodically every 5 yrs).

Was the Indicator and Target Met?	Yes

Site index is used in timber supply planning to predict future stand volume and to predict site productivity in silviculture planning. Ensuring the continued productivity of trees on the land base is important to the process of carbon uptake and storage and the forests ability to act as a carbon sink to help reduce green house gases. Site index is defined in this SFMP as the height of a tree at 50 years of age. In managed forest stands (young second growth plantations), site index may be predicted for the site using biogeoclimatic ecosystem classification (BEC) site index tables, derived from BEC averaged site index data, or by direct height and age measurements of selected stems and plotting such relative to Site Index Curves (Growth Intercept method). The Licensee Team collects site index data for all Free Growing stands, by means of systematic Free Growing surveys (refer to Indicator 8). This data is entered and archived in a database (GENUS) and can be reported and summarized by standard unit, species, BEC subzone and for a particular unit of time (i.e. every 5 yrs). Only those standard units sampled by the growth intercept method (direct measure) are included in the landscape sample population. Given that four of the six targets have been met or exceeded, the LT considers the objective achieved. A larger sample population would serve to reduce the impact of site specific anomalies.

Table 6: Site Index in the DFA by Broad BEC Zone Assessment Date: January 1/05 to October March 31, 2010

Broad BEC Zones	Species	Current Status March 31/10* (m)	Target (m)	Variance (m)
Dry SBS (SBS dk, dw2 & dw3)	Interior spruce	20.1	> 21.4	> 20.3
	Lodgepole pine	20.5	> 20.0	>19.0
Moist SBS (SBS mc2 and mc3)	Interior spruce	18.0	> 19.9	> 18.9
	Lodgepole pine	19.5	> 18.9	> 18.0
ESSF (mv1)	Interior spruce	19.7	> 19.1	> 18.1
	Lodgepole pine	18.5	> 16.8	> 16.0

Indicator 11 – Soil Conservation

Statement of Indicator	Target
The percentage of blocks meeting soil conservation targets after harvesting and silviculture activities.	Annually, 100% of blocks will meet soil conservation targets after harvesting and silviculture activities (variance -5%).

Was the Indicator and Target Met?	Yes

Some degree of soil disturbance is expected during forestry activities. However, site level soil hazard assessment and establishment of soil disturbance limits in the FSP ensure that soil disturbance is minimized. Ongoing inspections occur throughout harvesting activities which assess (and report) conformance to the targets. Soil conservation training is also periodically undertaken to increase soil conservation awareness among harvesting and silviculture contractors. Data for this indicator was collected from Site Plans and post harvest inspection forms. During the reporting period there was 97% (post-harvest) and 100% (post-site prep) conformance to soil disturbance limits, which is within the acceptable variance level (See Table 7).

Table 7: Soil Disturbance Targets Met After Forestry Activities: April 1, 2009 to March 31, 2010

Activity	Total Number	Achieved Soil Disturbance Limits	% in DFA
Harvested Blocks	**89**	**87**	**97.8 %**
Site Preparation Blocks	**37**	**37**	**100%**
Total	**126**	**124**	**98.4 %**

Indicator 12 – Coarse Woody Debris

Statement of Indicator	Target
The amount of coarse woody debris retained on prescribed areas.	Annually sustain CWD levels ≥ 4 logs per hectare after harvesting.

Was the Indicator and Target Met?	Yes

Coarse woody debris (CWD) is defined in the SFMP as sound or rotting logs and branches greater than 7.5cm in diameter at one end, either resting on the forest floor, or at an angle to the ground of 45 degrees or less. CWD provides habitat for plants, animals and insects and can also provide vertical and horizontal structure utilized by wildlife for perching and as runways above the forest floor. It is a source of nutrients for soil development and helps to promote higher biodiversity levels in managed areas.

Both LT and Forest and Range Evaluation Program (FREP) CWD surveys indicate that the volume of CWD left after harvesting is acceptable. FREP monitoring indicated that there is a deficit of large diameter longer piece sizes (i.e. the density of logs 10 meters or longer, is less than what is found in unharvested areas). Given

the extent of beetle-killed timber in the DFA and current salvage efforts, this trend will likely prevail at least in the short-term as decay and breakage increases in pine stands with the increased time since death. Ocular estimates of CWD retention levels for the period April 1/09 to March 31/10 indicate that a minimum of four (4) logs per hectare are retained on LT harvested areas. Continual improvement will involve establishing DFA specific baseline targets and viable data collection methodologies given the current landscape condition.

Indicator 13 – Riparian Reserves

Statement of Indicator	Target
The percent of forest management operations consistent with Riparian Reserve Zone strategies identified in the Site Plan (including the Vanderhoof Draft Lakeshore Management Plan).	Annually, 100% conformance with Riparian Reserve Zone strategies identified in the Site Plan (variance – 5%).

Was the Indicator and Target Met?	Yes

Riparian areas occur next to the banks of streams, lakes and wetlands and include both the area with continuous high moisture content, and the adjacent upland vegetation. Riparian areas play an important role in the biodiversity of flora and fauna and provide critical habitat, home ranges and travel corridors for wildlife. All streams, wetlands and lakes in or immediately adjacent to a planned harvest area are classified during site level plan preparation, based on approved Forest Stewardship Plans. Riparian management objectives established in the FSP and described within the Site Plan or road design for the proposed harvest area.

The LT has also agreed to provide their performance relative to the number of blocks harvested where Riparian Reserve Zone strategies are consistent with the Vanderhoof Draft Lakeshore Management Plan (DLMP) RRZ strategy. Where Canfor or BCTS are not consistent with the DLMP RRZ strategy, a rationale has been provided in order to address how values such as recreation opportunity, wildlife, visual quality, and biodiversity have been considered. It should be noted that a tenure holder's legal framework relative to Lakeshore Reserve Zones is contained within their approved FSP and may not be consistent with a policy document such as the Vanderhoof Draft Lakeshore Management Plan.

A review of all Site Plans and post harvest inspections completed for LT blocks harvested within the DFA between April 1, 2009 and March 31, 2010 reported 100% conformance with riparian reserve zone strategies (See Table 8).

Table 8: Riparian Reserve Zone (RRZ) Conformance: April 1, 2009 to March 31, 2010

Harvested Blocks with RRZ Strategies	63
Harvested Blocks in Conformance with RRZ Strategies	63
% Conformance in DFA	**100%**

Table 9: Riparian Reserve Zone (RRZ) Conformance to the Draft Lakeshore Classification Plan: April 1, 2009 to March 31, 2010

Harvested Blocks within the DLMP RRZ	BCTS – 7 Canfor - 7
Harvested Blocks consistent with DLMP RRZ Strategies	BCTS – 7 Canfor –4
% Conformance in DFA	**78.6%**

Rationale: Blocks harvested where the RRZ strategy is not consistent with the DLMP RRZ Strategy
Canfor A40873 CP 72C Block 72C001: Graveyard Lake (DLMP ID#688 – L1-B = 50m RRZ + 50 m RMZ = 100 m RMA); Min RRZ = 26m; Max RRZ = 55m; Avg RRZ = 35m. 3.9 ha total harvested within the DLMP 50m RMZ of Graveyard Lake; 1.3 ha within the DLMP 50m RRZ. The Visual Quality Objective is Partial Retention and the visually altered landscape meets this definition. Species composition of the riparian management area associated with Eulatazella Lake is heavy to pine. The majority of this pine is in a grey attacked state as a result of the Mountain Pine Beetle infestation. Stand level retention for this block is 9.6%. The harvest boundary is located whereby minimizing the high wind throw hazard that is present in the beetle-killed pine.
Canfor A18157 CP 20A Block 20A003: Un-named lake (DLMP Lake ID#207 – L1-C = 30 m RRZ + 70 m RMZ = 100 m RMA); Min RRZ = 16m; Max RRZ = 82m; Avg RRZ = 49m. 0.05 ha harvested within DLMP 30m RRZ and 1.7 ha harvested within the DLMP 70m RMZ. The block and its surrounding area are not located within a visually sensitive polygon. Species composition of the riparian management area associated with the unnamed L1C lake is heavy to pine. The majority of this pine is in a grey attacked state (Mountain Pine Beetle Infestation). Stand level retention for this block is 10.4%. The harvest boundary is located whereby minimizing the high wind throw hazard that is present in the beetle-killed pine.
Canfor A18157 CP 35B Block 35B004: Un-named lake (DLMP Lake ID#237 – L1-C = 30 m RRZ + 70 m RMZ = 100 m RMA); Min RRZ = 18m; Max RRZ = 35m; Avg RRZ = 30m. 0.09 ha harvested within the 30m DLMP RRZ; 5.9 ha harvested within the DLMP's 70m RMZ. The block and its surrounding area are not located within a visually sensitive polygon. Species composition of the riparian management area associated with the unnamed L1C lake is heavy to pine. The majority of this pine is in a grey attacked state (Mountain Pine Beetle Infestation). Stand level retention for this block is 13.4%. The harvest boundary is located whereby minimizing the high wind throw hazard that is present in the beetle killed pine.

Indicator 14 – Riparian Management Zones

Statement of Indicator	Target
The percent of forest management operations consistent with Riparian Management Zone strategies identified in the Site Plan.	Annually, 100% conformance with Riparian Management Zone strategies identified in the Site Plan (variance – 5%).

Was the Indicator and Target Met?	Yes

The Riparian Management Zone (RMZ) provides critical wildlife cover, fish food organisms, stream nutrients, large organic debris, and stream bank stability. RMZ objectives are established in an FSP, and a Site Plan describes how these objectives will be achieved on a site specific basis. Riparian features are classified through riparian assessments conducted in either the planning or layout phases. Site specific strategies to achieve legal RMZ objectives in the FSP are documented in the associated Site Plan. Post-harvest EMS inspections assess and document conformance with the RMZ strategies contained within the Site Plan.

A review of all Site Plans and post harvest inspections completed for LT blocks harvested within the DFA between April 1, 2009 and March 31, 2010 reported 100% conformance with riparian management zone strategies (See Table 10).

Table 10: Riparian Management Zone (RMZ) Conformance: April 1, 2009 to March 31, 2010

Harvested Blocks with RMZ Strategies	80
Harvested Blocks in Conformance with RMZ Strategies	79
% Conformance in DFA	**98.8 %**

Indicator 15 – Stream Crossing Density in the DFA

Statement of Indicator	Target
Stream crossings density in the DFA.	Sustain ≤ 0.28 stream crossings per kilometer of road within the DFA. Report every 5 years (variance + 10%).

Was the Indicator and Target Met?	Yes

This indicator was designed to monitor the number of stream crossings in the DFA. As the number of stream crossings are increased, so increases the risk of a reduction in water quality. Emphasis has been placed on limiting the number of stream crossings within the DFA and on improving the state of existing crossings in order to lessen the effects on water quality over time. Water quality and conservation of aquatic habitat is fundamental to sustaining biological richness.

The LT developed a DFA stream crossing density coverage to monitor and report on this indicator. The original target of $\leq$0.462 (+10% variance) stream crossings per kilometer of road within the THLB of the Vanderhoof Forest District (former DFA) has been updated to ≤ 0.28 stream crossings per kilometer of road to reflect the redefined DFA in the current SFMP (new baseline targets). The five year periodic reporting frequency remains the same and since the current status pertains to 2007 – 2008, there is no report for this annual report. It is anticipated that stream crossing density in the DFA will be reported out in 2012 - 2013.

Indicator 16 & 17 – Stream Crossings and & Stream Crossing Mitigation Measures

Statement of Indicator 16	Target
The percentage of stream crossings planned and installed to design/standard.	Annually, 100% of planned stream crossings will be installed as per design or prescribed standard (variance -10%).
Statement of Indicator 17	**Target**
The percentage of stream crossing inspections and resultant mitigation measures completed according to schedule.	Annually, 100% of mitigation measures resulting from stream crossing inspections will be completed according to schedule (variance +10%).

Was the Indicator and Target Met?	Yes
Was the Indicator and Target Met?	Yes

Forestry roads can have a large impact on water quality and quantity when they intersect with streams, including increasing sedimentation into water channels. Indicator 16 is designed to ensure stream crossings (S6 or greater) within the DFA are installed according to design or prescription standards. Indicator 17 tracks the implementation of mitigation measures to address identified stream crossing deficiencies. Both indicators are implemented and monitored to ensure issues such as sedimentation are identified and related mitigation measures are promptly initiated. Both indicators rely on inspections during installation, upon completion of the installation and during the life of the crossing (maintenance inspections which are completed at a predetermined frequencies, based on the overall risk of the road and the associated structure). During this reporting period, a 93% and 95.4% conformance were respectively achieved for both criteria (refer to Table 11).

Table 11: Quality of Stream Crossings in Vanderhoof DFA: April 1, 2009 to March 31, 2010

Total Crossings Installed	**28**	***Total Crossing with Mitigation Measures***	**22**
Total Installed to Design/ Standard	**26**	**Total Mitigation Completed on Schedule**	**21**
% for DFA	**93 %**	**% for DFA**	**95.4%**

Indicator 18 – Residual Fibre

Statement of Indicator	Target
The percentage of blocks where a portion of the residual wood is utilized or left on the block to contribute to other values.	≥ 5% of blocks where a portion of the residual wood is utilized or left on-block (variance – 5%).

Was the Indicator and Target Met?	Yes

This indicator is designed to promote the utilization of post-harvest wood fiber that is currently disposed of through pile burning (hazard abatement). Coarse woody Debris is retained on all harvest areas and thus is not considered in this indicator. Currently within some harvest areas, Wildlife Debris Piles (WDP's) are left on-site for small mammal habitat, or other forest products (i.e. chips, posts, pellet biomass) are obtained from sawlog waste piles. The potential utilization of this wood fiber is an emerging industry within the DFA with low margins, sporadic markets and a dependency on the highway corridors. The establishment of WDP's (small mammal habitat) within harvest areas is directed through Site Plans. Post-harvest inspections ensure creation and placement of these wildlife piles. An annual query of the harvested blocks containing constructed WDP's allows monitoring of this indicator. Utilization of logging debris is captured through annual logging agreements and related tenure issuance. During the April 1, 2009 to March 31, 2010 reporting period, 19 % of the total blocks harvested had a portion of the residual wood utilized or left on site to contribute to other values (See Table 12).

Table 12: Proportion of Blocks Harvested with Residual Wood Utilized: April 1, 2009 to March 31, 2010

Number of Blocks Harvested	89
Number of Harvested Blocks where waste utilized for other products, or retained for other values	17
Total Overall Percent in DFA	**19 %**

Indicator 19 – Forest Land Conversion

Statement of Indicator	Target
The percentage of area within the THLB in permanent access.	Sustain < 4.2% of area within the THLB in permanent access, as measured every 5 years (+ 1%).

Was the Indicator and Target Met?	Yes

As defined in the SFMP, permanent access structures include roads, bridges, landings, gravel pits, or other similar structures that provide access for timber harvesting. Without rehabilitation work, these structures can remove area from the productive forest land base and may negatively affect water quality and quantity. The reporting for this indicator is undertaken through an updated roads and landings coverage pertaining to the Timber Harvesting Land Base (THLB) of the Vanderhoof Forest District. A FIA project was completed in 2007, which updated the original 2003 roads and landings coverage utilizing 2006 data with an associated ortho-photography support layer. Applying the calculated non-productive area for roads, trails and landings to the THLB resulted in a current net down of 3.67%. Estimates of future roads, trails and landings were calculated to be 2.68%. There is no new data to report for this reporting period. It is anticipated that it will be reported out in 2012/13.

Indicator 20 – Annual Harvest

Statement of Indicator	Target
Annually, total volume (m3/ha) of timber harvested in the DFA (Actual).	Sustain a DFA harvest level of two (2) million cubic meters per year (variance +/- 0.5 million).

Was the Indicator and Target Met?	Yes

To be considered sustainable, harvesting a renewable resource cannot deteriorate the resource on an ecological, economic or social basis. In the summer of 2004 the Chief Forester completed an expedited Timber Supply Review (TSR) to re-determine the Allowable Annual Cut (AAC) for the Prince George TSA, which includes the Vanderhoof Forest District. This review was initiated in order to address the severe mountain pine beetle infestation that currently exists. The actual recorded cut for the Vanderhoof DFA during the current reporting period is 2,278,515 m3, which meets the management objective for this measure. This assumes that the harvest volume pertaining to tenures overlapping the DFA has all been harvested from within the DFA.

The total stumpage paid within the Vanderhoof Forest district in this reporting period is $4,482,881, including all tenure types (MOFR report).

Indicator 21 – Range Resources

Statement of Indicator	Target
The percent of forest management operations consistent with the conservation of range resources identified in Site Plans.	Annually, sustain 100% consistency between forest management operations and the measures to conserve range resources, identified in Site Plans (variance – 5%).

Was the Indicator and Target Met?	Yes

Range resources can include grazing or hay cutting tenures within the timber harvesting landbase. Thus range and forest managers must work cooperatively in order to sustain both timber and range values. FSP's contain the legal measures a forest manager will utilize, when planning forest development activities, to mitigate the removal of natural ranger barriers. These measures are then implemented through site level planning under the Site Plan or related contractual agreements in the case of proposed fencing projects. Maintenance of natural range barriers is an important aspect of range management and the overall economic viability of the range tenure. During the reporting period of April 1, 2009 to March 31, 2010, 100% of forest management operations were consistent with the conservation of range resources identified in Site Plans.

Indicator 22 – Visual Quality Values

Statement of Indicator	Target
The percent of forest management operations consistent with the conservation of Visual Quality Objectives	Annually, sustain 100% consistency between forest management operations and the strategies identified in the Site Plan to conserve Visual Quality Objectives (variance – 5%).

Was the Indicator and Target Met?	Yes

A Visual Quality Objective (VQO) is an objective established by the district manager for a specific legally designated scenic area polygon. This indicator is designed to ensure that where harvest operations are undertaken within designated scenic areas, the cutblock designs and/or strategies identified within Site Plans, to achieve the desired VQO, are implemented on the ground.

A review of LT performance for the period April 1, 2009 to March 31, 2010 indicates 100% of the strategies prescribed in applicable Site Plans were implemented to achieve desired Visual Quality Objectives.

Indicator 23 – Access Management Plan

Statement of Indicator	Target
The percent of LT conformance with the Vanderhoof Access Management Plan for Forest Recreation.	Annually, achieve 100% LT conformance with the Access Management Plan for Forest Recreation (variance – 10%).

Was the Indicator and Target Met?	Yes

A new Access Management Plan was released by ILMB in March of 2008. Subsequent meetings were held between the MOFR, Licensees and BCTS over the 2008/09-year to formulate an implementation strategy. The outcome of this process was the establishment of Access Management Plan Implementation Principles. The implementation strategies contained within present an operationally feasible approach at access management. The strategies are essentially focused around communication with stakeholders as operations impact specific AMP polygons. Attention has focused on the non-motorized and functionally non- roaded polygons, as well as on access control points. Table 13 identifies 100% conformance to the Access Management Plan polygons where Licensees and BCTS have been actively operating.

Table 13: Access Management Plan Conformance: April 1, 2009 to March 31, 2010

Access Management polygons where active operations occurred	2
Total Conformance to these Access Mgmt Polygon areas	2
Access Control Points removed and replaced	0
Percentage Access Areas in Conformance in DFA	**100%**

Note: Only reporting on Semi-Primitive Non-Motorized & Functionally Non-Roaded Access Management Polygons

Of the 52 blocks that Canfor harvested this year, 9 blocks landed within 2 access management polygons identified within the new AMP (8 blocks in Nulki Hills C polygon & 1 block Mount Hobson C polygon). Of the Access Control Points (11) within the Vanderhoof Forest District, no points were opened by Canfor during this period.

BCTS conducted harvest operations (11 blocks) within three Semi Primitive Motorized polygons (Lavoie Lk, Finger-Tatuk and Finger North) all consistent with the AMP. No control points were opened by BCTS this reporting period.

Indicator 24 – Effectiveness Monitoring for Access Points

Statement of Indicator	Target
Effectiveness Monitoring Plans are developed and implemented for selected AMP polygons to continually improve implementation strategies.	Establish a timeline once initial MOFR monitoring results are known and a PAG task team is formed to identify the selected AMP polygons.

Was the Indicator and Target Met?	In Progress

Licensees, BCTS and Government staff have developed interim access management implementation strategies (Access Management Plan Implementation Principles). Discussions continue to focus on obtaining AMP objective clarity, assignment of responsibility and the development of an effectiveness monitoring plan. MoFR stewardship staff have agreed to monitor the implementation of the AMP, thus enabling initial baseline conformance data to be gathered. This baseline data is essentially documented input from stakeholders, the general public and forest industry regarding implementation (or lack thereof) of the Vanderhoof Access Management Plan for Forest Recreation. Once sufficient baseline data has been obtained to determine whether implementation strategies are effective (anticipate March 31/10), some conclusion can be drawn on which AMP values are at risk and which AMP areas should be chosen for the development of effectiveness monitoring plans. It is anticipated that a task team consisting of several members of the PAG, LT planning staff and MoFR representatives will comprise this group. The task team findings and recommendations will be presented to the PAG and this indicator updated accordingly.

Indicator 25 – Accidental Industrial Fires

Statement of Indicator	Target
The number of hectares of accidental fires caused within the DFA by forest industry operations.	Annually, <100 cumulative hectares of accidental fires are caused by forest industry operations in the DFA (variance + 10 hectares).

Was the Indicator and Target Met?	Yes

This indicator is critical to the sustainability of the forest resource within the DFA by reducing the losses attributable to accidentally caused industrial forest fires. The LT do not have control over fires ignited by natural causes, but they do have the opportunity to reduce industrial related fires caused by slash pile burning, machinery sparks, lack of training and suppression equipment, cigarette smoking or other human induced errors. In most situations, industrial fires are brought under control quickly due to staff fire suppression training (S-100), availability of firefighting equipment and documented emergency response plans. The Licensee Team has discussed the tracking of this DFA measure with the Ministry of Forests and Range Protection Branch in Vanderhoof. Currently, forest protection maintains a database that tracks all fires within the DFA in detail. It was decided that this dataset offers the most consistent method of reporting industrial caused fires within the DFA. For the reporting period of April 1, 2009 to March 31, 2010, there were 0.17 hectares of accidental forest industry related fires.

Indicator 26 – Money Spent in the DFA

Statement of Indicator	Target
The percent of money spent on DFA forest management activities, provided from the north central interior suppliers (stumpage not included).	Annually, ≥ 80% of the expenditures on forest operations and management in the DFA are attributable to north central interior suppliers (variance – 5%).

Was the Indicator and Target Met?	Yes

The north central interior is defined in the SFMP as the land base that includes communities from 100 Mile House to Fort St. John (south to north) and Terrace to Valemount (west to east). The total dollar value of goods and services considered to be local will be calculated relative to the total dollar value of all goods and services purchased for forest management activities within the DFA. A query of the financial data stored within the LT's individual accounting system provides the basis for this indicator reporting. Individual LT percentages are collated by volume harvested within the same timeframe and a DFA average is determined. A review of LT performance for the period April 1, 2009 to March 31, 2010, indicated that 99.4 % of the annual dollars spent on forest management within the DFA was attributable to purchases from north central interior suppliers.

Indicator 27 – Forest Roads

Statement of Indicator	Target
The number of kilometers of forest road maintained annually for public use.	Maintain ≥ 300 km of forest road annually for public use (variance – 30km).

Was the Indicator and Target Met?	Yes

This indicator generally reflects maintenance of the mainline Forest Service Roads, regularly utilized by the general public and other non-timber tenure holders. A balance must be met between the value of access to the forest resource, the social cost or benefit, and the ecological cost or benefit. Road maintenance programs are currently tracked through each LT's internal database systems (i.e. Genus). The number of roads currently being maintained in the DFA can be identified through these systems. A summary indicates that 335 km of mainline forest service road was maintained during the reporting period, which achieves the stated target for this indicator.

Indicator 28 – Smoke Management

Statement of Indicator	Target
The percent of prescribed burns that follow the smoke management guidelines.	Annually, 100% of prescribed burns follow the smoke management guidelines (variance – 10%).

Was the Indicator and Target Met?	Yes

Members of the Vanderhoof PAG identified smoke management as a public concern and a potential area of improvement for members of the Licensee Team. The Ministry of Forests & Range (MOFR) is mandated through the Wildfire Act and Wildfire Regulation to regulate the fire activities (open burning) of the forest industry within 1 kilometre of forest lands. The Ministry of Environment has the mandate to regulate smoke emissions from open burning under the *Environmental Management Act* and the *Open Burning Smoke Control Regulation* (OBSCR). The MOFR and MOE collectively issue an approved Burn Plan for Smoke Management within the Vanderhoof Forest District. Each Licensee Team member reported the results for adherence to the smoke management guidelines. Results show that 98% of the prescribed burns that occurred between April 1, 2009 and March 31, 2010 adhered to the smoke management guidelines.

Indicator 29 – Support Opportunities in the DFA

Statement of Indicator	Target
Annually, the number of support opportunities provided in the DFA.	Annually, sustain ≥ 100 support opportunities in the DFA (variance -25).

Was the Indicator and Target Met?	No

This indicator details the economic and social benefits the LT provide to community's tributary the DFA. In addition to wages, taxes and stumpage fees, the LT contribute to the social well-being of communities local to the DFA. These support opportunities vary from providing facility use, staff participation in local initiatives, equipment donations, scholarships, funding raising events, and support of community events. This indicator is an important component of a community's economic and social stability, but it is difficult to quantify, as support opportunities often go unrecorded. Support opportunities for this reporting period were tracked by each Licensee Team member and are recorded in Table 14. A total of 26 support opportunities were provided, which is well below the target for this measure.

Table 14: The Number of Support Opportunities Provided in the DFA: April 1, 2009 to March 31, 2010

Support Opportunity	Number of Opportunities
Cash Donations	1
Product Donations	2
Resource and Worker Donations	13
Community Events	10
TOTAL	**26**

What Happened? Market conditions and product deterioration (MPB mortality) have led to reduced budgets for both Canfor and BCTS. Staff workloads have increased as more development activities are undertaken internally and thus in-kind contributions have decreased. Financial contributions have decreased likewise given the above
Root Cause: Depressed Lumber markets & product deterioration.
Action Plan: Given there are only two signatories, the LT believes the target is set too high and will recommend a reduced target to the PAG.

Indicator 30 – Local Business Relationships

Statement of Indicator	Target
The number of annual LT business relationships or opportunities with businesses within those community's tributary to the DFA.	Sustain ≥ 100 business relationships or opportunities annually within community's tributary to the DFA (variance – 25).

Was the Indicator and Target Met?	Yes

In managing the forest resources of the DFA, the LT provide a variety of business relationships and opportunities to local tributary communities. These local businesses then provide social, economic and cultural benefits important to community stability. A business relationship, in the context of this indicator, is defined as a financial arrangement between a local business, or a person from a local community tributary to the DFA and a member of the Licensee Team. An opportunity is defined as a reasonable chance to form a business relationship. The data relative to this indicator is derived from LT contract and accounting databases. The number of local business relationships established, or opportunities provided by the LT for the period April 1, 2009 and March 31, 2010 are indicated in Table 15 below are within the target variance for this indicator.

Table 15: The Number of Local Business Relationships Established or Opportunities Provided: April 1, 2009 to March 31, 2010

Type of Business or Opportunity	Number of Relationships	Number of Opportunities	Total for Measure
Forestry Management	19	2	21
Silviculture	6	8	14
Harvesting/ Road Construction	27	26	53
Total	**52**	**36**	**88**

Indicator 31 – First Nations Business Relationships and Opportunities

Statement of Indicator	Target
The number of annual LT business relationships or opportunities made available to local First Nations.	Sustain ≥ 20 local First Nation business relationships or opportunities annually (variance -10).

Was the Indicator and Target Met?	Yes

Providing business relationships or opportunities to local First Nations, provides social, cultural and economic benefits. The majority of the LT's suppliers, contractors and employees are retained from local community's tributary to the DFA and the interior of northern British Columbia. First Nation communities are not well represented within this distribution, but they are often geographically and economically the most connected to local forest operations. A business relationship, in the context of this indicator, is defined as a financial arrangement between a member of a local First Nation community and a member of the Licensee Team. It can also be a financial arrangement between a local First Nation member and a third party undertaking a project financially sponsored by a member of the LT. A business opportunity is defined as an opportunity provided by the LT to a local First Nation member to enter into a business relationship. A total of 6 business relationships and 4 business opportunities with local First Nations were recorded during April 1, 2009 to March 31, 2010. This is consistent with the objective for this indicator (See Table 16).

Table 16: The Number of Business Relationships Established or Opportunities Provide to First Nations: April 1, 2009 to March 31, 2010

Business Type	Number of Business Relationships	Number of Business Opportunities	Total
Forest Management	0	2	
Silviculture	1	1	
Harvesting	5	1	
Total	**6**	**4**	**10**

Indicator 32 – Diversity of Forest Products

Statement of Indicator	Target
The number of different forest products produced by milling facilities tributary to the DFA.	Annually, sustain the production of ≥ 15 different forest products produced by milling facilities tributary to the DFA (variance -2).

Was the Indicator and Target Met?	Yes

Diversification of forest products improves any local economy through increased employment and decreased dependence on a single market. The ability of a value added manufacturer to sustain operations is often dependent upon the availability of raw material from dimensional lumber mills. Licensee Team members provide dimensional lumber products and help to supply value-added manufacturers with raw materials for production. These provisions maintain stability and sustainability of socio-economic factors within the DFA. Licensee Team members have reported the production of 16 different products from April 1, 2009 to March 31, 2010. There is no change from the previous reporting period.

Indicator 33 – First Nations Involvement in the Planning Process

Statement of Indicator	Target
The number of opportunities provided to Aboriginal people to be involved in the planning process and/or provide Cultural Heritage Resource input.	Annually, sustain ≥ 50 opportunities for Aboriginal people to be involved in the planning process and/or provide CHR input (variance -5).

Was the Indicator and Target Met?	Yes

This indicator contributes to respecting the social, cultural and spiritual needs of those First Nation's whose traditional territory overlap the DFA. It reports the opportunities provided to Aboriginal people to be involved in the forest management planning processes and/or provide Cultural Heritage Resource input relative to proposed LT development activities. Forest Stewardship Plans depicting the results and strategies to be utilized to guide forest management operations are provided to First Nation's for review and input. In addition, the LT provide site level information sharing opportunities to those First Nations whose traditional territory may potentially be impacted by proposed development activities. All First Nation communities have had the opportunity for participation and input in the SFM planning process. Table 17 lists the opportunities provided by the members of the Licensee Team during the current reporting period.

Table 17: Opportunities for Aboriginal People to be Involved in the Planning Process and/or Provide CHR Input on Proposed Development Activities: April 1, 2009 to March 31, 2010

Opportunity Type	Number of Opportunities
Open House	0
Letters	81
Newspaper Advertisements	0
Pest Management Prescriptions	1
Individual Meetings	2
Other (E-mails)	32
Total	**116**

Indicator 34 – Conservation of Cultural Heritage Resource Features

Statement of Indicator	Target
The percent of forest management operations consistent with the conservation of identified unique or significant CHR features.	Annually, 100% conformance between forest management operations and the strategies identified in the Site Plan to conserve unique or significant CHR features (variance -5%).

Was the Indicator and Target Met?	Yes

The conservation of unique or significant CHR features is especially important to those First Nations whose traditional territories overlap the DFA. A Cultural Heritage Resource feature is a unique or significant place or feature of social, cultural or spiritual importance, such as an archaeological site, cultural heritage site or trail, historic site or a protected area. The protection and maintenance of culturally unique or significant CHR features gives assurance that these values will be identified, assessed and archived for future generations. Site Plans identify unique or significant CHR features within the development area and prescribe conservation strategies for these features. EMS inspections assess post-harvest consistency with applicable site level plans (in this case whether CHR strategies were implemented as prescribed). Incident tracking systems record any identified non-conformances. A review of past LT performance for the period April 1/09 to March 31/10 indicates that where unique or significant CHR features were identified, 100% of the conservation strategies within the applicable Site Plans were implemented during the development phase.

Indicator 35 – Public Advisory Group Meetings

Statement of Indicator	Target
The number of Public Advisory Group meetings per year.	Annually, sustain ≥ 2 PAG meetings per year (variance 0).

Was the Indicator and Target Met?	Yes

PAG members represent a diverse spectrum of forest resource interests within the DFA. The PAG initially served to provide valuable input on the SFM values, indicators and targets developed for this SFMP. The PAG continues to provide guidance, input and evaluation of LT performance relative to implementing the SFMP and achieving the desired targets. PAG members act as a subset of the general public, to identify local forest management issues and values applicable to the DFA, thus assisting in the prioritization of continual improvement efforts. This indicator provides one means of assessing the active status of the PAG by tallying the annual meeting opportunities provided by the LT and demonstrating achievement of public participation requirements. The PAG met 2 times during the reporting period, which meets the identified target (See Table 18).

Table 18: Vanderhoof Sustainable Forest Management Plan Public Advisory Group Meetings: April 1, 2009 to March 31, 2010

Date	Location
December 10, 2009	Village Inn
February 4, 2010	Village Inn
Total Number of Meetings	**2**

Indicator 36 – PAG Satisfaction

Statement of Indicator	Target
Measure the level of satisfaction of the PAG members with the SFM process annually.	Annually, sustain a satisfaction index level ≥ 4 (-0.5 variance).

Was the Indicator and Target Met?	Yes

The PAG is one of the key elements of public involvement in the SFM process. The PAG provides guidance, input and evaluation of LT performance relative to the SFMP and is instrumental in providing continual improvement input through links to local values and forest resource users within the DFA. Therefore, it is important that the LT have a positive and meaningful working relationship with the PAG. This indicator involves collating PAG satisfaction surveys (distributed during PAG meetings) to determine the level of PAG satisfaction with LT implementation of the SFMP. This information provides the LT with an analysis tool to gauge how well the public participation process is working. On December 10, 2009 a satisfaction survey was distributed and completed by the PAG. The average level of satisfaction was 4.1, which meets the target for this indicator.

Indicator 37 – PAG Terms of Reference

Statement of Indicator	Target
Maintain and review the SFMP PAG TOR, every two years to ensure a credible and transparent process.	The PAG TOR will be reviewed every two (2) years to ensure a credible and transparent process (variance 0%).

Was the Indicator and Target Met?	Yes

This indicator is designed to ensure the PAG has a guiding document to outline the roles and responsibilities of its members, thus enhancing the effectiveness and functionality of the group. Members of the PAG must be able to have effective and respectful interaction/communication with one another and the LT, to ensure all identified values receive adequate consideration. The Terms of Reference document is intended to provide the necessary framework and proper protocol to ensure effective input from all PAG members. The PAG TOR will be reviewed every two (2) years or as otherwise desired by PAG consensus. The PAG Terms of Reference was last reviewed and approved by the Public Advisory Group and the Licensee Team on December 10, 2009.

Indicator 38 – Public Review of the SFM Plan

Statement of Indicator	Target
The number of times the SFM plan and associated annual reports will be communicated to the public for review and comment annually.	Annually, the SFMP and associated annual reports will be communicated to the public ≥ 3 times (variance 0).

Was the Indicator and Target Met?	Yes

This indicator is one of a group that helps to increase the overall understanding and awareness of SFM. The SFMP and resulting annual reports will be communicated to the public at least three times throughout the year, either through a public open house or by a posting the documents on the Internet. The SFMP is currently posted throughout the year on certification websites maintained by the LT for public access and awareness. For the period April 1/09 to March 31/10, the current SFMP was available for the public to view at Canfor's website (www.canfor.com), the BCTS certification website (www.for.gov.bc.ca/bcts/areas/TSN_certification.htm) and the Sustainable Forest Management website for the Prince George Timber Supply Area (www.sfmpgtsa.com).

Indicator 39 – SFM Extension Activities

Statement of Indicator	Target
The number of opportunities provided for SFM extension activities annually.	Annually, sustain ≥ 4 SFM extension opportunities (variance -1).

Was the Indicator and Target Met?	Yes

This indicator is designed to ensure that the collective understanding of SFM by the forest industry and the public is increased. This indicator describes the number and type of extension opportunity provided to communities tributary to the DFA and opportunities provided to industry employees for SFM awareness training. SFM extension activities that occurred during the reporting period included: Advertising (newspaper & website) related to participating on the PAG, The BCTS-TSN Certification website (soil conservation training etc), Canfor external website and

annual staff & contractor training, MOFR office - SFM BCTS EMS Field Manuals, Booklets & Staff Guides. These 4 sustainable forest management extension activities promote SFM awareness, consistent with the target.

Indicator 40 – Public & Resource Users Involvement in Planning Processes

Statement of Indicator	Target
The number and variety of effective opportunities given to the residents and stakeholders to be proactively involved in planning processes and provide input on proposed development.	Annually, sustain ≥ 100 opportunities for residents and stakeholders to be proactively involved in planning processes and provide input on proposed development (variance -10).

Was the Indicator and Target Met?	Yes

This indicator was designed to assess the LT's performance relative to providing stakeholders, effective opportunities to be proactively involved in the planning process and provide input on proposed development activities. This ensures that when forestry activities are planned, information is exchanged in an effective and timely manner, so as to resolve potential land use conflicts before they occur. This process will help to identify public/stakeholder interests and non-timber values that require consideration within the LT's planning framework. Resulting stakeholder input could include the identification of interest areas, detail as to the nature of the interest on the land base and site level detail regarding potential impacts resulting from proposed development activities. The LT solicits public and stakeholder input on a landscape basis through a review and comment process associated with Forest Stewardship Plan approval. Public and stakeholder input is sought on the results and strategies that guide forest management operations. Once an FSP is approved, an information sharing process is utilized to share proposed site level planning and seek public and stakeholder input on such. These review and comment/ information-sharing opportunities are provided through a variety of methods. A review of current LT performance is documented in Table 19 below.

Table 19: Effective Opportunities Given to the Public to Express Forest Management Input: April 1, 2009 to March 31, 2010

Description of Opportunity	Opportunities (Responses)
Open Houses	0
Individual Meetings	11
Letters	99
Newspaper Advertisements	0
Other (E-mail / phone)	36
Total	**146**

Indicator 41 – Research and Development Projects

Statement of Indicator	Target
The number of research and development projects and/or partnerships completed within the DFA.	Annually, sustain ≥ 3 research and development opportunities within the DFA (variance -1).

Was the Indicator and Target Met?	Yes

SFM system requirements are based on adaptive management and continual improvement, which can both be guided by the results of research and development projects, or partnerships undertaken within the DFA. Research and development initiatives can also provide direct economic benefits to the community's tributary to the DFA through local job creation and the purchase of goods and services. Research projects and other DFA partnerships also serve to enhance ecological, economic and social benefits through technological advancement (i.e. increased utilization of beetle-killed fibre). The proximity of the DFA to the University of Northern British Columbia combined with the unprecedented Mountain Pine Beetle impact on the DFA pine forests provides enhanced research opportunities. The target for this measure was achieved for the collaborative Licensee Team during this reporting period (See Table 20).

Table 20: The Number of Research and Development Projects and/or Partnerships within the DFA: April 1, 2009 to March 31, 2010

Research and Development Projects	Total Number
Biodiversity Projects	2
Silviculture Projects	0
Forest Product Research and Development	0
Inventory Related Projects	3
Other	3
Total Number	**8**

Indicator 42 – Percent Timely Responses

Statement of Indicator	Target
The percent of LT timely responses to documented Forest Management Planning concerns.	Annually, achieve a 100% timely response rate to documented public concerns regarding LT Forest Management Planning and related practices (variance -10%).

Was the Indicator and Target Met?	Yes

Members of the LT solicit feedback on strategic plans (i.e. FSP results & strategies) and site specific operational activities (i.e. proposed cutblocks & roads) through related information sharing processes. Public involvement is an important aspect of SFM, so it is necessary to provide meaningful and effective opportunities to incorporate public input into forest management planning. Equally important is LT feedback relative to public, or stakeholder concerns expressed regarding forest management planning. Timely response to documented concerns often serves to clarify proposed activities, or allows input to be incorporated into subsequent site planning. A review of concerns received relative to Forest Management Planning and timely LT responses was analyzed for the reporting period and 100% of responses were completed in a timely fashion (i.e. within 30 days).

Indicator 43 – SFM Public Opinion Survey

Statement of Indicator	Target
Periodically conduct and report out on a DFA wide SFM Public Opinion Survey	Conduct and report on the survey a minimum of every 5 years (variance 0).

Was the Indicator and Target Met?	Yes

Periodically conducting an "SFM Public Opinion Survey" (minimum of every 5 years) serves to assist the LT and PAG in assigning continual improvement priorities. It also provides an opportunity to identify public opinion trends & comparisons relative to forest management within the DFA (significant value given the current landscape condition). It can also be utilized to assess SFM awareness and the effectiveness of LT efforts to increase the level of SFM awareness (Indicator 39). The LT envisions periodically undertaking this survey (UBC – SFM Public Opinion Survey) as a means of assisting the PAG to focus and prioritize continual improvement within the DFA and this SFM plan. The formal nature of this survey, its analysis and rollout will provide the LT and PAG a broader cross section of public opinion relative to Sustainable Forest Management. The LT last conducted this survey in conjunction with UBC in January 2009 (FIA project) and will report out the outcome to the PAG in conjunction with the 2009 – 2010 annual report. The outcome of this survey will be utilized to provide guidance to the LT and PAG, as to where continual improvement efforts should be focused in coming years (i.e. Annual Prioritization for CI Matrix initiatives).