

Weyerhaeuser/Tolko/Gorman/BCTS
Okanagan Operations
Sustainable Forest Management Plan



Annual Monitoring Report
January 1, 2008 to December 31, 2008

Released March, 2009

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1.0 Background

Between May 2000 and March 2001, Weyerhaeuser, in the Okanagan and Boundary Timber Supply Areas (TSA's), worked with a dedicated group of public stakeholders to develop a Sustainable Forest Management (SFM) Plan. Members of the SFM Advisory Group reflected a cross-section of local interests including recreation, ranching, forestry, conservation, water, and community.

In late 2003 Tolko Industries committed to meeting the Plan on its operating area. The licensees and the SFM Advisory Group started implementing this new approach at the December, 2003 meeting. In January 2004 Tolko was an active participant and together with Weyerhaeuser embarked on a reallocation of harvest volumes and operating areas between the two companies. In the 2004 Monitoring Report the combined performance of Weyerhaeuser and Tolko was summarized on their revised operating areas within the Defined Forest Area (DFA). Further change occurred in 2006 with the addition of the Riverside Forest Products (now Tolko) legacy operating areas.

Gorman Bros. joined the Okanagan SFM process during the latter part of 2006, while British Columbia Timber Sales (BCTS- Okanagan/Columbia Business Area), became a full participant in the SFM process in 2008. It is important to note that some of the collective results achieved against performance measures cannot be meaningfully compared between one year and another because of the significant changes to DFA size and volumes harvested.

The SFM Plan serves as a “roadmap” to current and long-term management in portions of the Okanagan, Boundary and Arrow TSA's; setting performance objectives and management strategies that reflect the ecological and social values of the DFA. It is consistent with the Okanagan-Shuswap Land and Resource Management Plan (LRMP) and the Kootenay Boundary Land Use Plan (LUP).

2.0 Continual Improvement

The SFM Plan contains 36 indicators for sustainable forest management. Targets for these indicators are monitored annually by each participating licensee. Annual monitoring reports, prepared each spring, indicate whether performance measures for each of the indicators have been met. These reports are made available to the public via the Okanagan SFM Website www.thompsonokanagansustainableforestry.ca or via the specific licensee web sites:

- Weyerhaeuser <http://www.weyerhaeuser.com/Businesses/SustainableForestry/BCPlans>
- Tolko <http://www.tolko.com/sustainability/sfm/regional/okanagan.php>
- Gorman Bros. <http://www.gormanbros.com>.
- BCTS (OK/Col unit) <http://www.for.gov.bc.ca/bcts/>

The effectiveness of the SFM Plan is continually improved by reviewing the annual monitoring results. This review provides both licensees and the public with an opportunity to bring forward new information and to provide input concerning new or changing public values that can be considered for incorporation into future updates of the SFM Plan. Performance measures (indicators and targets) may also change as additional information becomes available.

3.0 Opportunities for Involvement

More information about Weyerhaeuser, Tolko, Gorman Bros. and BCTS's sustainable forest management practices in the Okanagan, Boundary and Arrow TSA's (including a copy of the SFM Plan) is available to the public. If you would like more information, wish to be further involved, or desire to know more about the annual performance results, please contact any of the following:

- Weyerhaeuser Brian Drobe, RPF (250) 497-1224
- Tolko Rob Kennett, RPF or Paul Ross, RPF (250) 547-2111
- Gorman Bros. Kerry Rouck, RPF or Randy Hardy, RPF (250) 768-5131
- BCTS (OK/Col. BA) Dave Gill, RPF (250) 558-1700

Additionally, a Sustainable Forest Management Website for the Okanagan Plan was established in 2008. This new website contains considerable supplemental information about the CSA-SFM process as well as downloadable versions of current and historic plans and reports. The site can be located at the following address: www.thompsonokanagansustainableforestry.ca

4.0 Performance 2008

Environmental, social and economic performance is assessed according to the six criteria in the Canadian Standards Association (CSA) Sustainable Forest Management (SFM) standard the six criteria, which define the broad parameters of sustainable forest management, are:

1	Biological Diversity	4	Contributions to Global Ecological Cycles,
2	Forest Ecosystem Condition and Productivity	5	Benefits to Society
3	Soil and Water Resources	6	Society's Responsibility for Sustainable Development

Annual performance related to the implementation of the SFM plan is assessed by determining 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 objectives identified for each of the criteria in the SFM plan. Since objectives have been established for each criteria, and indicators and targets have been set for each objective, an assessment of progress towards sustainable forest management can be made by review of the collective achievement of the indicator results for each of the criteria.

A summary of the performance results for the objectives relating to each of the CSA criteria is provided in the tables which follow, specific details on all performance indicators and objectives is provided in Section 4.1. In addition to Weyerhaeuser, Tolko, Gorman Bros, and BC Timber Sales (Okanagan – Columbia Business Unit) are the results of operations conducted under the following tenures:

Non-Replaceable Forest Licences (NRFL's) *

Licence Number	Held By (harvest Volumes detailed in Indicator 25 table)
A79840	Pristine Log and Timber Ltd.
A80589	Gudeit Bros. Contracting Ltd.
A81098	Managed by Skul'qalt Forestry Ltd.(a Lower Similkameen I.B. owned company)
A61108	Monte Lake Forest Products Inc.
A75423	L.A. Stein Forestry Consulting Inc.
A80628	Yucwmenlocwu
A84051	Managed by Gorman Bros. on behalf of Osoyoos Indian Band (tenure holder)
A83016	Skulqalt Forestry Ltd. (a Lower Similkameen Indian Band owned company)
FL A80260	Managed by Tolko on behalf of West Bank First Nation (tenure holder)
FL A80627	Managed by Tolko on behalf of Upper Nicola Indian Band (tenure holder)
* The above tenures have not committed to achieving SFM targets (other than A80260, A80627, A84051), and report for information purposes only.	

Summary of Performance Results (shading indicates where targets not met)

SFM Criterion	Criterion Targets	Criterion Targets Met (%)
1. Conservation of Biological Diversity	1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 20, 36	83%
2. Maintenance of Forest Ecosystem Condition and Productivity	1, 2, 3, 8, 15, 16, 17, 18, 19	78%
3. Conservation of Soil and Water Resources	4, 11, 12, 13, 14, 19, 21, 22, 23, 24	30%
4. Forest Ecosystem Contribution to Global Ecological Cycles	8, 12, 16, 17, 21, 22, 25	57%
5. Multiple Benefits to Society	11, 25, 26, 27, 28, 30, 31, 32, 35	89%
6. Accepting Society's Responsibility for Sustainable Development	28, 29, 30, 32, 33, 34, 35	100%

Results by Indicator Where Target Not Met

No.	Performance Level	Target (% or #)	Achieved (% or #)
4	There were 8 non-conformances to plan commitments that impacted riparian values.	0 Incidents	8 Incidents
11	Most of roads which were not re-vegetated within the specified timeframes were the result of system issues relating to tracking of grass seeding obligations on Tolko's tenure areas	100%	48% Non-Winter 62% Winter
14	Three landslides occurred	0 Incidents	3 Incidents
17	7,090.2 of 7,303 ha of surveyed areas met the late free growing deadline.	100%	97.1
18	Access management commitments were not met in 3 areas	0 Incidents	3 Incidents
21	Some minor shortfalls compared to planned road inspections.	100%	98.5
22	Shortfall of inspections of Temporary Status roads	100%	76.0
23	126 contractors and employees of a reported total of 136 were trained for Spill Preparedness and Response.	100%	93%
24	Two spills requiring legal reporting to BC Government (PEP) were reported by licencees in 2008,	0 Incidents	2 Incidents

In an SFM Plan it is the Indicators and Targets that provide the performance measures that are to be met through on-the-ground forest management activities. Full compliance is required for many targets i.e., there is no variance. Where full compliance may not be achievable, an acceptable level of variance is indicated for the target. Only Indicators where the results exceed the allowed variance are reported in the table above.

4.1 2008 Monitoring Results for Each Indicator

Indicator: 1 Representation of Seral Stage Distribution by Natural Disturbance Type

Target: Report annually on early, mature and old seral stage distribution by Natural Disturbance Type (NDT). Licencee operations will maintain the retention of existing or replacement draft old growth management areas..

Assessment Results: Overall, in 2008, there was a net increase of 30.0ha in the amount of OGMA lands within the DFA. The total area now stands at 119,395ha.

The majority of seral stage objectives are being met. However, the current age distribution of the forest indicates the old seral age class is below target for NDT 4. There has been a two percent increase in the amount of “Old” in NDT4 since last year. This is in part due to the addition of the BCTS operating areas into the SFM landbase in 2008. The BCTS landbase contained a relatively high percentage of older age-classes. In NDT 4 the combined Mature and Old hectares are significantly above targets. Over time it is expected sufficient area from the Mature seral stage will move into the Old such that Old targets are met. Licensees are managing for the OGMA's during the planning process.

	Early		Sum Mature & Old		Old* Seral			Total
	ha	%	ha	%	ha	%	Target	
NDT1	34,895	20%	108,516	63%	62,413	36%	20%	171,592
NDT2	42,303	22%	117,162	60%	24,397	12%	9%	195,496
NDT3	178,061	30%	282,902	47%	143,404	24%	14%	600,912
NDT4	54,056	17%	179,536	58%	29,632	10%	13%	309,147
Total	309,315	24%	688,116	54%	259,846	20%		1,277,147

* Old Seral defined: NDT 1, 2, 4 -- 200+ years; NDT 3 -- 140 years as per biodiversity guidebook.

Indicator: 2

- **Incidents of harvesting in rare ecosystems**
- **Non-compliance with the Identified Wildlife Management Strategy (IWMS)**
- **Non-compliance with OSLRMP/KBLUP strategies for identified wildlife.**

Target: No harvesting in “known” rare ecosystems contained within the Old Growth Management areas.

Assessment Results: There were no rare ecosystems made “known” in 2008, thus there were zero incidents of harvesting in them.

Target: Adhere to the IWMS and management strategies for rare species in the OSLRMP and KBLUP.

Assessment Results There were 146 cutblocks or roads (duplicates removed) influenced by Okanagan Shuswap LRMP/ Kootenay Boundary Land use Plan (LUP) strategies and identified wildlife species. Strategies were followed in all cases.

Management strategies are based on the Okanagan Shuswap LRMP and on District Manager direction provided regarding the Kootenay Boundary LUP.

In addition there was a total of 148 cutblocks or roads (duplicates removed) influenced by the Identified Wildlife Management Strategies (IWMS) general wildlife measures in Wildlife Habitat Areas (WHA's).

There were no instances of non-compliance with either the IWMS or the OSLRMP/KBLUP strategies

Species who's presence and/or habitat presence influenced the design of cutblocks or roads are as follows:

Under the IWMS GWM's Measures

IWMS Direction	Number of Conforming SP's signed in 2008	Number of conforming RP's approved in 2008
GAR Mountain Caribou	0	0
GAR Mountain Goat	0	0
GAR Grizzly Bear	36	11
GAR Moose	72	17
GAR Mule Deer (OK)	6	5
Section 7	1 Sapsucker	0

Under the OSLRMP/ KBLUP Strategies for Identified Wildlife Species (Red/Blue listed species)

OSLRMP/KBLUP Direction	Number of Conforming SP's signed in 2008	Number of conforming RP's approved in 2008
OSLRMP Red and Blue species	0	0
LUO Big Horn Sheep	3	1
LUO Fisher	26	7
LUO Marten	85	24
LUO Williamson's Sapsucker	0	0
KBLUP Grizzly Bear	0	0

Indicator: 3 Report On Total Area Of Clearcuts By Size Categories.

Target: Report annually on the areas of cutblocks by size categories and silviculture systems that were Site Plan approved/signed in the reporting period

Assessment Results:

Block Size Ha	Silviculture System			Total
	Even-Aged	Even – Aged with Reserves	Uneven Aged	
1 – 5	16.3	75.8	0	92.1
6 – 40	1,814.5	3,308.6	129.6	5,252.7
41 - 100	476.3	3,386.4	68.4	3,931.1
101 - 250	231.7	1,958.5	119.2	2,309.4
>250	0	0	0	0
Total	2,538.8	8,729.3	317.2	11,585.3

Indicator: 4 Riparian Management Areas (As Per The FPC, FRPA And The Approved OSLRMP/KBLUP) For Wetlands, Lakes And Streams.

Target: Zero non-conformance of plan commitments impacting values in riparian management areas.

Assessment Results: There were 8 non-conformances to plan commitments that impacted riparian values. Six of the environmental incident reports relate to sediment entering streams at road crossings. In all cases, the amount of sediment was small with minimal damage to riparian values.

- One incident was in a block harvested during 2008, and occurred shortly after harvesting was completed.
- One incident was in a block harvested during 2007, and occurred after a significant rain event
- Four incidents involved bridges on existing haul roads outside cutblocks.
- Two Incidents related to contravention of NRFL FSP vegetation retention requirements along S4 Creeks.

Indicator: 5

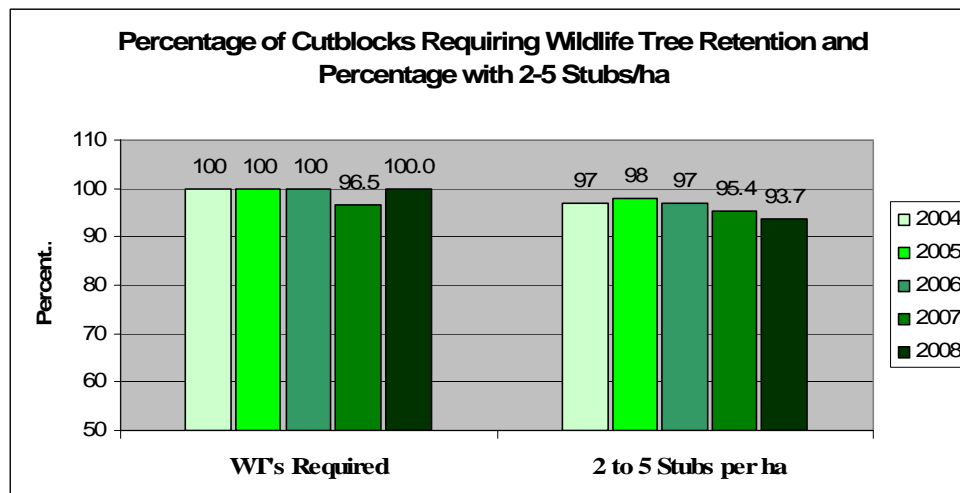
- **Percent Of Cutblocks Requiring A Site Plan With Associated Wildlife Tree Retention (Patches And/Or Individual Trees)**
- **Percent Of Harvested Cutblocks That Contain An Average Of 2-5 Stubs Or Standing Trees Per Hectare, Giving Consideration To Spatial Distribution**

Target: 100% of harvested cutblocks requiring a site plan will have associated wildlife tree retention.

Assessment Results: 100% (332 of 332) of the blocks harvested had associated wildlife tree retention.

Target: 80% of harvested cutblocks have in block stubs and/or wildlife trees with consideration given to spatial distribution.

Assessment Results: The standard was met as 93.7% (311 Of 332) of harvested cutblocks contain at least an average of 2-5 stubs or standing trees per hectare with consideration given to spatial distribution.



Indicator: 6

Percent Of Cutblocks Where Management Of Coarse Woody Debris (CWD) Is Consistent With Plans.

Target: 100% of cutblocks will be consistent with the CWD requirements identified in plans.

Assessment Results: All 332 cutblocks had CWD requirements included in operational plans, and 100% of these requirements were achieved.

Indicator: 7 Percent Of Harvested Cutblocks Having Three Or More Tree Species Identified In The Free Growing Inventory.

Target: 70% of cutblocks harvested will have three or more tree species (includes conifer and deciduous comprising 1% or more of total trees) in the free growing survey

Assessment Results: 5,514.5 of the 6,428.7 hectares surveyed and found to be “Free-Growing” (86%) had 3 or more tree species comprising 1% or more of total trees.

Of the Tolko, Gorman, Weyerhaeuser, and BCTS areas having 3 or more tree species, the weighted average distribution of species was as follows:

- Primary species -----60.5% of all trees
- Secondary species-----22.6% of all trees
- Tertiary species-----16.2% of all trees.

By inference, 14% of the trees on the landbase are species less common in the landscape than the three described above.

Indicator: 8 Forest Age Class Distribution

Target: Progress towards a stable forest age class distribution on the timber harvesting land base where each age class to 100 years old [1 (1 to 20), 2 (21-40), 3 (41-60), 4 (61 to 80) and 5 (81 to 100)] occupies at least 10% of the timber harvesting land base. Three age classes meet this target within 50 years.

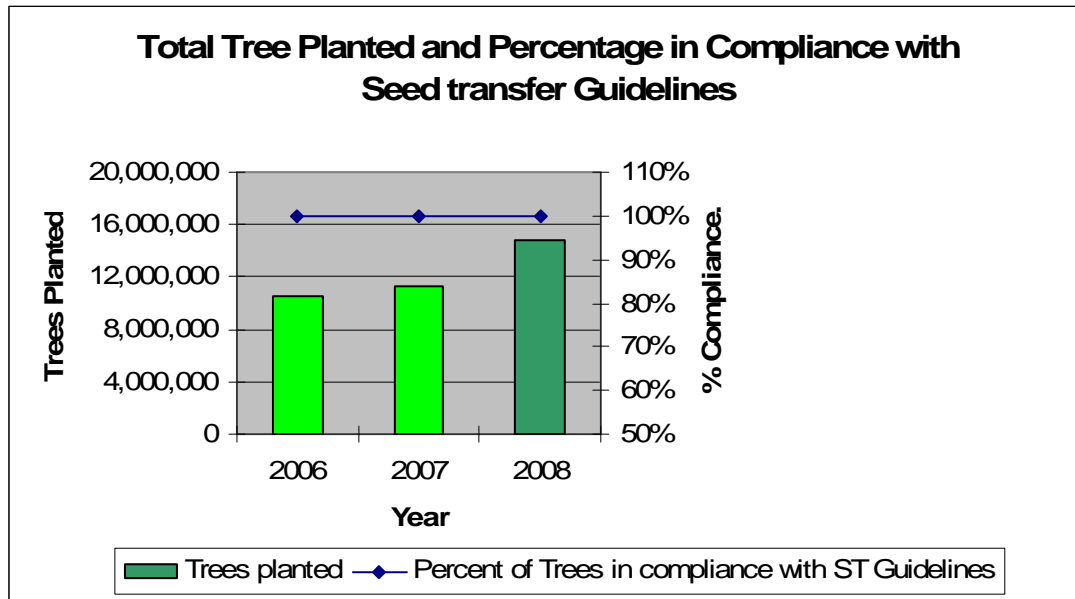
Assessment Results: With only 3 years between TSR II and TSR III it is too early to determine trends - TSR III is scheduled for completion in Spring 2010. The supplied Age Class breakdown for the SFM DFA area indicates similar values to TSR III in age classes 1, 3, 4 & 5. As a percentage, age class 2 is approximately double on the DFA in comparison to the TSA as a whole.

Overall DFA Summary - 2008				Percentage of THLB		
Age Class	Gross DFA Ha.	THLB Ha.	% of Gross DFA	THLB 2008	TSR III (2003)	TSR II (2000)
1 (1-20)	203,716	155,083	16.2%	16.2%	13.8%	13.2%
2 (21-40)	133,501	120,747	10.6%	12.6%	6.4%	4.2%
3 (41-60)	39,983	32,709	3.2%	3.4%	4.1%	4.9%
4 (61-80)	115,366	83,332	9.2%	8.7%	10.5%	10.1%
5 (81-100)	87,042	70,383	6.9%	7.3%	7.8%	8.4%
6 (101-120)	136,791	116,037	10.9%	12.1%	n/a	n/a
7 (121-140)	147,212	120,551	11.7%	12.6%	n/a	n/a
8 (141-250)	324,327	224,912	25.9%	23.4%	n/a	n/a
9 (251+)	65,768	35,883	5.2%	3.7%	n/a	n/a
TOTAL	1,253,706	959,635	100%	100%	n/a	n/a

Indicator: 9 **Percent Of Planted Area For The Current Planting Year Regenerated In Accordance With Seed Transfer Guidelines.**

Target: 100 % of planted area will be regenerated in accordance with the seed Transfer guidelines

Assessment Results: 14,795,356 of 14,795,986 (99.99%) trees were planted in accordance with the Seed Transfer Guidelines



Indicator: 10 **Protected Ecosystems**

Target: 8 percent protected areas in the TSA

Assessment Results: There is currently 14.3 percent of the TSA in protected areas. Included are Goal 1 and 2 Protected Areas, Parks, Ecological Reserves and OGMAS. No change from the previous year (2007)

In 2008 some protected areas were moved to park status, but no changes to gross area protected

Indicator: 11 Amount Of Time For Road Cut And Fill Slope Re-Vegetation Application (Control Of Noxious Weed)

Target A : Permanent road cut and fill slope re-vegetation application carried out within the current growing season of road completion under normal conditions; and for roads completed during winter, re-vegetation application will be completed before or during favorable germinating conditions the following spring.

Assessment Results: 84.2km of 174.9 km (48%) of non-winter constructed permanent road was re-vegetated.

- 1) Roads built during winter conditions in late 2008 and planned for seeding in 2009 are not reported . These will be included in the 2009 monitoring report.
- 2) Roads built during winter conditions in 2007 or droughty conditions in 2007 and planned for seeding in 2008 are included in this report for 2008.

48.0km of the 77.9km (62%) of the Winter-built roads were revegetated (grass-seeded).

Most of roads which were not re-vegetated within the specified timeframes were the result of system issues relating to tracking of grass seeding obligations in Tolko's tenure areas

Target B: 100 % of R/W re-vegetated for noxious weeds and erosion control with Canada #1 or equivalent grass seed.

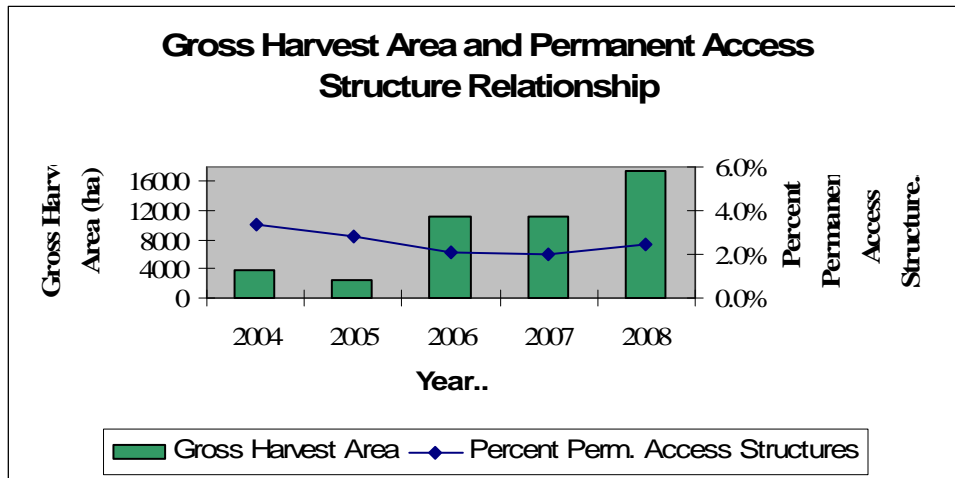
Assessment Results: 100% of seeded R/W was re-vegetated using 6,760 kg of Canada #1 equivalent seed.

Indicator: 12 Annual Percent Of Opening Areas In Permanent Access Structures.

Target: Less than 6 % of cutblock areas in permanent access structures

Assessment Results:

- 292 ha of permanent access structures
- 12,727 ha of total gross block area
- 2.3% of cutblock area in permanent access structures.



Indicator: 13 Managing Water Quality

Target:

1. 100% of newly constructed or reconstructed permanent road stream crossings in Community Watersheds have a water quality effectiveness evaluation incorporated into the planning, construction, and maintenance and monitoring phases.
1. Licensees will bench mark and report on the number of crossings rated as High, Medium and Low.
2. No “High” ratings

Assessment Results: Tolko, BCTS and Gorman’s report a total of 11 new or reconstructed permanent road stream crossings, all 11 of which were subject to effectiveness evaluations during the above noted “phases”.

Gorman’s reports 1 “medium” risk crossing. The other 10 instances (BCTS(2) & Tolko(8)) were considered as “Low” risk. Gorman indicates that all reasonable mitigation measures were taken in the case of the medium risk crossing

Indicator: 14 **Number Of Induced Slides Resulting From Forest Management Activities (>.1 Ha) Originating In Or Adjacent To Harvested Areas Or Inspected Permanent Roads**

Target: Zero slides induced from forest management activities

- Assessment Results:**
- Three Slides – all within Tolko’s operations.
 - 12,206 ha harvested.
 - 4,475 km of permanent road inspected

Note: Only 1 of the slides was on a recently constructed/used road that Tolko had responsibility for. Slide details are:

Greenbush Slump – A 0.2 hectare fill slope slump caused damage to advanced regeneration below the slump. It is believed that underground water flows saturated the fill slope. This was a road built in the 1980’s without groundwater issues being fully considered. Mitigation activities included hauling in rock and armouring the fill slope to allow ground water to escape without future fill slope saturation

Dirt Road Slump - A 0.6 hectare slump occurred on the upslope of a road used during the previous season. Very fine soils combined with significant snow and rain in the previous month. Impact was minimal, impacting only the road and the upslope block. There was no sediment delivery to a stream

Tsuius Mountain Landslide – A 1.5 hectare debris torrent down a gully on the east side of Tsuius Mountain crossed the Sugar Lake Forest Service road and deposited material into the Shuswap River. The initiation point was on an old, existing Forest Service Road that Tolko does not have maintenance responsibility for. No firm cause was established but it is believed that it may have been the result of inadequate culverts. Mitigation activities included removing debris off Sugar Lake FSR and opening the box culvert to prevent further erosion into the Shuswap River.

Indicator: 15 **Percent Of Harvest Priorities Related To Forest Health Completed By Date Set Out In Strategies**

Target: Meet with government agencies (and other licensees and public where appropriate) on an ongoing basis to review forest health programs (e.g., pests, fires and windthrow) and complete 100% of harvest priorities by completion date set out in strategy.

Assessment Results: The licensees were involved, with the Ministry of Forests and Range as part of a beetle management committee, in developing strategies to address the mountain pine beetle. In total 10,751 ha. of harvest priorities were completed against a planned area of 9,471.2 ha. (i.e. the actual harvested area exceeded the amount initially planned by 14%). Note that TSA harvest priorities are based on a commitment that 70% of total harvest be in forest health priorities.

Strategies and activities employed other than priority harvest during 2008:

- Guidance for addressing forest health priorities outlined in BCTS guidance document.
- Retention planning completed in 8 operating areas. Plans to complete remaining 2 operating areas in 2009.
- Participation in the District MPB Management Committee.
- Development of TSL's in low volume/small diameter MPB-affected stands.
- Spruce Bark Beetle "Trap Trees" felled prior to flight, then removed.
- Trap area within significant recreational zone.
- On-going involvement with the MOFR in the bark beetle management committee
- Reconnaissance of operating area and data information sharing with the MOFR for district roll-up.
- Identification of areas that could not be addressed in a timely manner so that they could be actioned by other licensees or through non replaceable forest licenses issued by the MOFR.
- Completion or initiation of retention planning in areas with high proportions of MPB susceptible stands.
- Ongoing meetings with water purveyors and other stakeholders.
- Aerial Monitoring / Reconnaissance of Operating area in July
- Meeting with Okanagan Shuswap Forest District forest health staff to discuss / coordinate strategies
- Participation in the Okanagan Shuswap Beetle Committee
- Retention Planning at the watershed unit (50,000 hectares) level
- Identification to OSFD staff and other licensees of areas of high MPB activity that cannot be addressed by Gorman Bros. (eg, OSFD NRFL Program, Weyerhaeuser, Monte Lake Forest Products, Lower Similkameen Indian Band, OSFD Small Scale Salvage Program)
- Ongoing communication and research / monitoring
- **Section 18 AAC Transfers were used to increase the rate of harvest of forest health priority timber harvesting by approximately 40,000m3.**

Indicator: 16

- **Percent Of Cutblock Area Planned For Planting Is Completed Before Or During The Second Complete Growing Season**
- **Percent Of Naturally Regenerated Cutblock Area Not Meeting The Natural Regeneration Delay**

Target:

- 70% of area planned for planting is completed within 2 growing seasons
- 100% of natural regeneration cutblock area meeting natural regeneration delay.

Assessment Results:

- 11,233ha of 12,189ha (92%) of harvest areas planned for planting were successfully planted within the second complete growing season
- 1,417 ha of 1,431 (99%) of harvest areas planned to meet natural regeneration delays were regenerated within the committed timelines.

Indicator: 17 **Percentage Of Cutblock Area That Meets Free Growing Requirements On Or Before The Latest Date.**

Target: All cutblocks will reach free growing requirements on or before the latest date.

Assessment Results: 7,090.2 of 7,303 ha (97.1%) of surveyed areas met the late free growing deadline.

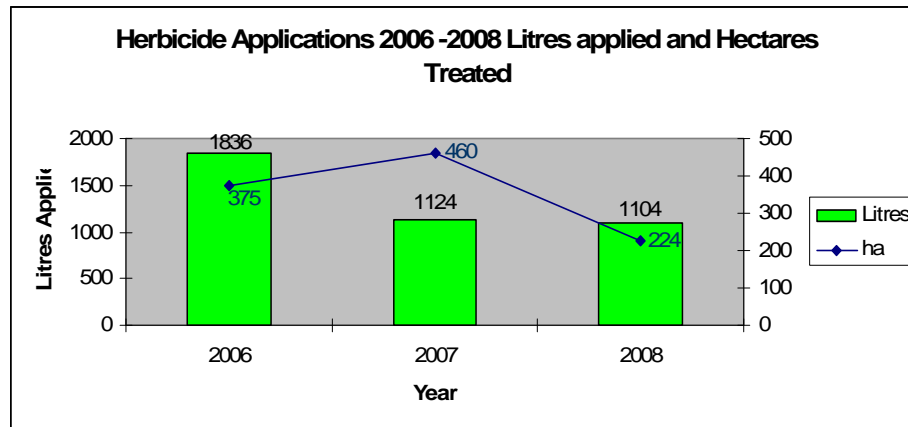
BCTS reported 210 of 1,647 ha as having not met the Late free-growing date, due mainly from an old form of tenure (TSL - Major), which is no longer issued, and where BCTS remains responsible for silviculture obligations. Basic silviculture on these blocks was often postponed for several years to accommodate delays in harvest."

Tolko reported 3 of 3,422ha as not having met Late Free-growing. This area, confined to a single, block was surveyed and shown to be free growing in the year where late free growing was due. However, since the survey was completed after the end of the late free growing window it is being reported as an outage on this indicator.

The weighted average amount of time by which free-growing status was met in advance of the late Free-growing date was 4.5 years.

Year	Late FG Due (ha)	Late FG Met (ha)	Percent	Avg. # years FG met in advance of late date
2008	7,303.1	7,090.2	97.1	4.5
2007	8154.5	8154.5	100	4.0
2006	4765.0	4698.0	98.5	4.2
2005	1880 (est.)	1823	97	3.8
2004	1133.0	1133.0	100	3.2

Pesticides applied during the reporting period:



In 2008 a total of 1104 litres of herbicides were applied over 224ha of forest to control competitive brush species. The herbicides utilized were “Release” and “Vantage”. The treated area represents 0.17% of the 132,048 Ha under active free growing obligations management within the DFA.

Indicator: 18 Report On Access Management Commitments Contained In Forest Development Plans (FDP’s)/Forest Stewardship Plans (FSP’s).

Target: 100% of annual access management commitments contained within the FDP will be implemented during the reporting period.

Assessment Results: Access commitments were not met in the following locations:

- **Walk-in Lakes Rouse Lake (Rainbow Road)** – Lock blocks to be installed in 2009 following completion of planting program in blocks 207-1; 208-4.
- **Easygoing Road** – installation of lock-blocks planned for 2009 or 2010 following completion of access management consultation for the Border Fire area – to be coordinated with machine availability and LSIB /Keremeos Community Forest planners.
- **Duruisseau Road** – installation of lockblocks will be coordinated with completion of site prep/planting and with LSIB/ Keremeos Community Forest planners.

Access commitments were met in the following locations:

- As per BCTS FSP Major Amendment incorporating access management commitments with respect to wildlife (i.e Grizzly Bear, Moose, Mountain Goat, and Deer Winter Range habitat) and recreation (walk-in lakes) that fall within BCTS operating areas.
- Gates in place at the various critical access points in the **Penticton Creek** watershed. One gate not locked due to persistent vandalism issues but still effective in reducing public use of the area.
- Key blockages in place on the **Arawana** road system

- Gates in place at the various critical access points in the **Rendell Creek** and **Edge/Whitefoot Creek** areas to manage for Grizzly Bear
- Access restricted in the **Onion Road** area
- **CP 760 (Hupple / West of Mabel Lake)**. A commitment was made in the FLA18667 FDP concerning CP 760 to “install a locked gate to protect ungulates from poaching within this critical winter range area. The gate is to be locked upon cessation of operations.”
- **Blackwell Lake (Walk In)**. A commitment was made in TFL FDP Amendment 00-AB-012 for “access structures will be rehabilitated following harvest to maintain Walk In status on Blackwell Lake.
- **Baker Road (east of Armstrong Mill)**. Internal commitment made to the private land owner to maintain a locked gate following commencement of operations in the area.
- **Ramsey Road (east of Armstrong Mill)**. Internal commitment made to the private land owner to maintain a locked gate following commencement of operations in the area.
- **Pointz Road (Cedar Hills)**. Internal commitment made to the private land owner to maintain 2 locked gates (one on either side of the property) following the commencement of operations in the area.
- **King Eddy Main (15km)**. Internal commitment made to Lake Country to install and maintain a locked gate that restricts the public from accessing the east side of Oyama Lake. Gate to be locked once operations have ceased.
- **King Eddy Main (22.5 km)**. Internal commitment made to Lake Country to install and maintain a locked gate that restricts the public from accessing the east side of Oyama Lake. Gate to be locked once operations have ceased.
- **Brunette Main (Aberdeen Plateau)**. Internal commitment made to **Postill Lake** lodge to install and maintain a locked gate that restricts the public from accessing the Cross Country Ski Trails that are maintained by Postill Lake Lodge. Gate to be locked once operations have ceased.
- Deactivation of temporary roads with the seven cutblocks in the **Duteau/Grizzly** Swamp area to restrict access to be consistent with the watershed assessment.
- Rehabilitation of roads to maintain walk-in status of KA1020 at **Loch Drinkie** was completed in 2008.
- **Moose Mgt. Units** – Temporary Roads rehabbed within the Scorpion / Rouse Lake area
- **Walk-in Lakes** – Temporary Roads rehabbed within the Scorpion / Rouse Lake area
- **Ashnola Road**: hauling commenced no earlier than 6:00am through the Ashnola Village area.
- **Telemark X-Country Ski Area**: Harvesting activities were completed and equipment was moved out of the Jack Creek Road prior to X-C Ski trail preparation.
- **Princeton Avenue**: 2008 activities were consistent with the local area noise control bylaw – exemptions were granted by Peachland Public Works dept/ Mayor and Council during the time that Hwy 97 was closed near Summerland.
- **Smethurst**: no activity in 2008
- **Chute Lake/KVR**: no activity in 2008

Elk mgmt. rd. closures on L.A.Stein NRFL to be done when rd. surf.. not frozen.

Indicator: 19 Percent Of Cutblocks Harvested In Which Soil Disturbance Exceeds Level Specified In Plan

Target: Zero percent of cutblocks harvested in which soil disturbance exceeds specified level of disturbance

Assessment Results: All 332 cutblocks met soil disturbance levels specified in plans.

Indicator: 20 Incidents Of Non-Conformance With Government Direction On Recovery Plans For Regionally Significant Species

Target: Follow government direction set out in recovery plans for regionally significant species

Assessment Results: The Target for this Indicator was met, there were no instances of non-compliance

Tolko

- The Species at Risk Coordination Office (SARCO) worked with stakeholder groups during 2008 to create a recovery – implementation plan for Mountain Caribou. This plan is being formalized under the Government Action Regulation as a GAR Order for Caribou. The plan identified numerous planning units of which two overlap Tolko’s portion of the Defined Forest Area. The SARCO implementation plan has targeted areas of habitat within specific planning units to be set aside for caribou. None of Tolko’s cutblocks with signed Site Plans overlap with these set aside areas. The SARCO team is still refining these areas (target completion in 2009).
- Tolko has voluntarily deferred harvesting and construction within the Revelstoke – Shuswap planning unit until the habitat set aside areas have been finalized. Tolko does not have cutblocks or roads with signed Site Plans in this area.

Gorman

- None of the cutblocks with SP’s signed were within the landbase influenced by recovery plans.
- Potential recovery plans that may come into effect include:
 - mountain caribou
 - white-headed woodpecker
 - grizzly bear

BCTS

- Williamson Sapsucker Area of Occupancy overlaps a portion of BCTS's Skaha chart. Recovery Plan is being prepared. No blocks planned within area.
- Mountain Caribou overlaps several small BCTS operating areas at the north end of Shuswap Lake. BCTS blocks within the SARCO linework have been voluntarily deferred.

Indicator: 21 Percent Of Permanent Status Roads That Have Had Inspections Completed As Per Plans.

Target: 100% of permanent status roads will have risk assessments and plans developed based on assessments

Assessment Results:

- 2,021 km of permanent status road with inspections completed.
- 2,051 total km of permanent status road had inspections planned.

Overall 98.5% (weighted average) of planned road inspections were completed. There were some minor shortfalls compared to planned inspections on Tolko's area and two of the Reporting NRFL's

Indicator: 22 Percent Of Temporary Status Roads Inspected At Least Once Per Year Until Road Has Been Rehabilitated.

Target: Inspect all temporary status roads at least once per year until rehabilitated.

Assessment Results:

- 225.6 km of temporary roads with inspections completed.
- 296.6 km of temporary roads had inspections planned.
- 76% (weighted average) of roads requiring inspections were inspected.

Note: BCTS reported only those temp roads in existence for more than 1 year.

Indicator: 23 Percent Of The Licences' Forest Operations Employees And Primary Contractors Trained In Spill Preparedness And Response Procedures.

Target: 100% of the licences' forest operations employees and primary contractors trained each year in procedures for Spill Preparedness and Response (fueling, maintenance, pesticides)

Assessment Results: Overall, the target was not met as only 126 contractors and employees of a reported total of 136 (93%) were trained for Spill Preparedness and Response.

Indicator: 24 Number Of Legally Reportable Spills.**Target:** Zero spills**Assessment Results:** Two spills requiring legal reporting to BC Government (PEP) were reported by licencees in 2008, specifically:**BCTS**

- 5-6 litre Anti-freeze spill

Gorman

- 120 litre Hydraulic Oil spill

Indicator: 25 Harvest Level.**Target:** Harvest the allowable annual cut over the five-year cut control period**Assessment Results:** The following 2008 harvest volumes (m³) were within the allowable limits:

	WeyCan (m3)	Gorman (m3)	Tolko (m3)	BCTS (m3)	Other NRFL's (m3)	Total (m3)
2008 Harvest	209,539	336,494	1,850,026	1,040,818	168,605	3,605,482
2008 AAC	298,188	262,891	1,737,531	657,243	164,132	3,119,985

Total harvest for 2008 was 3,605,482m³ with a total AAC of 3,119,985m³. This represents a harvest ratio of 116%. In addition, there was 46,288 m³ of harvesting on Old Temporary Tenure (OTT) T0816 for which there is no “official” AAC (nominally 25,000m³/year).

Indicator: 26 Report Annual Initiatives/Partnerships.**Target:** Maintain active involvement with value-added and business initiatives/partnerships**Assessment Results:** In 2008, the licensees maintained the following value – added and business initiatives/partnerships.**Weyerhaeuser**

- Okanagan Wood Fibre (log homes)
- Bell Pole (log trades)
- Paragon (specialty cedar products)
- Monte Lake (post and rail)
- Valiant Log Sort (log sales)

- P &E Enterprises (house timbers)
- Pristine Log Homes (log homes)
- Naver (dry wood sales)
- Silver Creek Premium Products (specialty cedar products)

Gorman Bros.

Partial list of business partnerships (forestry only) includes:

- TL Timber (Log Homes)
- Inkameep Special Forest Products (Post and Rail)
- Shoreline Pile Driving (Pilings)
- Stella Jones (Cedar Poles)
- North Enderby Timber (specialty cedar products)
- Tolko (veneer logs / sawlogs / utility poles)
- Weyerhaeuser (sawlogs)
- Monte Lake Forest Products (post and rail)
- Paragon (specialty cedar products)
- Downie Timber (specialty cedar products)
- T Lewis Contracting (landscape mulch)
- Westwood Fibre (Shavings)
- Federated coop (Sawlogs)
- Celgar (pulp logs)
- Naver Log Sort (pulp logs / dry logs)

Tolko

- In 2008, Tolko sold 135,000 m³ to 67 different value added customers. These customers included log house builders, timber frame house builders, transmission pole companies, custom cut sawmills, cedar lumber manufacturers, post and rail manufacturers, and guitar makers.
- In addition, Tolko sold 285,000 m³ of pulp logs to one customer.

BCTS

BCTS registrants active on BCTS Okanagan operating areas in 2008:

- Mike Closs Logging Ltd.
- North Enderby Timber Ltd.
- TyPay Resources Ltd.
- David Lusted
- Bruce Martin
- DLB Logging Ltd
- Nadina logging Ltd.
- Shelley Gudeit
- Eric Buff

- Horovatin Enterprises Ltd.
- Interior Softwood Recoveries Ltd.
- Thomas Lusted
- Schapol Logging Ltd.
- Thompson Okanagan Log and Lumber
- David Callas
- Swan Lake Log Sort Ltd.
- Cridland Logging Ltd.

Indicator: 27 Level Of Compliance With Preservation, Retention And Partial Retention Of Visual Quality Objectives In Licensee Plans.

Target: Full compliance with preservation, retention and partial retention of visual quality objectives.

Assessment Results: The number of cutblocks harvested with VQO's of preservation, retention, and partial retention is 80, all 80 blocks met the desired objective.

Tolko

- The 49 blocks include 6 blocks harvested in 2006, and 18 blocks harvested in 2007 that had photos completed in 2008.
- There is an additional 10 blocks harvested in 2008 where photos are scheduled to be taken in 2009 as a result of operational considerations (e.g. late season harvest, access issues, snow covered blocks, and or poor or limited viewing opportunities). These blocks will be reported in 2009.

Gorman Bros.

- Of the 11 blocks harvested, only 9 resulted in visible alterations.
- CP 192-6 and CP 313-1 contained “slivers” of visual quality zones, and were found to be non-visible from the selected viewpoints at completion of harvest.

BCTS

3blocks where harvest was completed in 2008 have not had photos taken, although VIA's were done prior to harvest. A post-harvest assessment of these blocks will be assessed during snow-free conditions in 2009.

Indicator: 28**Report on:**

- **OSLRMP committee involvement**
- **Number of Forest Development Plan/Forest Stewardship Plan meetings attended**
- **Number of stakeholder meetings attended**

Target:

Participate in the following public process:

- OSLRMP committee meetings
- Forest Stewardship Plan meetings
- Stakeholder meetings (e.g. TFL Advisory Group, Vaseaux Sheep Recovery Group, etc.)

Assessment Results:

- Licensees maintained OSLRMP involvement
- Forest Stewardship Plan meetings attended: 28
- Attended 127 Stakeholder meetings
 - Sample Stakeholder sessions include:
 - Water Highway BC
 - MOE / Water Survey Canada
 - Okanagan Basin Water Board – Water Stewardship Council
 - MOE – Mountain Pine Beetle Outreach Team
 - South Okanagan Invasive Plant Society
 - OSLRMP Committees
 - Range Tenure Holder Meetings
 - FORREX Advisory Committee
 - Ecosystem Restoration Steering Committee
 - District Of Peachland
 - Apex Homeowner’s Association

Indicator: 29**Incorporation Of Traditional Knowledge, Non-Timber Resources, And Cultural And Spiritual Values In Forest Planning, Where Available.****Target 12a**

Open communications with local First Nations during Operational Plan reviews will—include consideration of and will manage for, where appropriate, traditional knowledge, non-timber resources, and cultural and spiritual values.

Assessment Results:

A total of 160 meetings and meaningful communications were held with First Nations.

Target 12b:

The licensees respond to all written requests for communication from First Nations

Assessment Results:

The licensees responded to 14 of 22 written requests for communication from First Nations. All request not responded to relate to Non-Replaceable Licence Holders.

Target 12c:

Incorporation of traditional knowledge, non-timber resources, and cultural and spiritual values in forest planning, where available.

Assessment Results: Three requests for specific actions were received by licencees, in all cases the specified actions were taken

Gorman

- Much of the development pursued in 2008 had been subject to consultation
- No specific written (or verbal) requests for information from First Nations.
- Attended ONA's FFT Silv Strat Type II meeting in Vernon (January)
- Attended 2 FN Communications Forum (MOFR lead).

Indicator: 30 Report Educational And Research Initiatives.

Target: Maintain involvement and sponsorship in research and educational initiatives (e.g., summer students, post graduate research projects, volunteer sites for studies, association support – FERIC, Forest Products Association of Canada, OSLRMP Wildlife subcommittee, Vaseaux Sheep Study, etc.).

Assessment Results: Involvement in educational and research initiatives includes:

Weyerhaeuser

- Upper Penticton Creek Watershed study
- Elk Inventory (Penticton – Kelowna)

Gorman Bros.

- Partnered with UBC Forestry Faculty on David Jack's Pine Fertilization Study to mitigate MPB damage
- Assisted UBCO Professors Kavanaugh and Scott with hydrophobic soil study in Border Fire area
- Interviewed with UBC (Angeline Gough) re: CSA Indicators
- Supported "Earth Scope" seismic installation in the Border Lake area
- In-kind support for Silver Lake Camp (transport and a Director on the Board)
- Provided job shadow experience to Rutland High School Forestry Students
- Continued support of Dr. Thomas Sullivan's research on small mammals, old growth, mule deer, etc. in Trout Cr.
- Member of FP Innovations (FERIC/FORINTEK)
- Provided funding and volunteer time for the ILA Forest Education Program
- Donated materials to the Constable Neil Bruce Middle School

Tolko

IFPA Projects:

- Marten habitat and management issues in the OS LRMP
- Caribou issues (habitat, access, retention requirements, etc.) mentioned in the OS LRMP
- Mule deer winter range issues in the OS LRMP. What levels of

retention are required for the winter survival of this species?

Other FIA Projects:

- Ongoing monitoring of Whiteman and Lambly Creek watersheds
- Monitoring of Chase and Charcoal creeks
- Meteorological Station – Chase Creek
- Blue Heron Inventory
- Species at Risk database
- “Tweeds Willow” inventory

Support for Other Projects

- Provided assistance finding suitable test sites for a study evaluating the effectiveness of Verbenone II for Western Pine Beetle and Mountain Pine Beetle

Letters of Support

- Assessing Hydrologic Resilience to Forest Disturbances at Large Scale Watersheds in the BC Interior

FERIC

- Ongoing membership in this research organization.
- Sorting on Steep Slopes project

Forest Products Association of Canada.

- Working with Government and linking with research/educational initiatives.

Forintek

- various projects

National Council for Air and Stream Improvement Inc. (NCASI).

Membership in this group that supports/undertakes various research initiatives.

OSLRMP Implementation and Monitoring Committee:

- Active participant and presenter.

BCTS

- FERIC – BCTS became a member in 2008.
- 8 month University Co-op employment term
- Co-op Internship Program – 18 month term available to previous Co-op students to help secure permanent employment after graduation.
- Forest Education Liaison Event –field trip with Rutland Secondary School.
- Forest Education Liaison Event – National Forest Week School presentations
- COFI AGM booth
- Contributed to funding for FIA research projects through the IFPA

- Pleasant Valley Secondary School Forestry Class Field Trips to Coldstream operating Area (spring and fall)
- Pleasant Valley Forestry Class Secondary School presentations (spring and fall).
- White Pine Conference – tour guide and bus driver
- Oyama Creek Field Trip for Lake country Mayor and Council
- Kamloops Education Woodlot Society – one BCTS staff on Board of Directors.

Indicator: 31 Percent Response To Written Communications Received.

Target: Respond to all written public communications related to forest operations within 30 days of receipt.

Assessment Results:

- 38 of 38 inquiries requiring/requesting response related to the Forest Stewardship Plan (development plans or forest operations) were responded to (100%).
- Of the 38 responses, the weighted avg. response period was 10.0 days

It should be noted that not all communications received necessitated a written response.

Indicator: 32 Report Annually On The Number Of First Nation Partnerships.

Target: Support partnership opportunities with First Nations through mutually beneficial involvement in forest management.

Assessment Results: Partnerships with First Nations include:

Weyerhaeuser

- Cooperative Working Agreement with OIB

Gorman Bros.

Log purchase agreements with:

- Lower Similkameen Indian Band (Skuqalt)
- Merrit TSA First Nations (Stuix)
- Westbank First Nation (Heartland)

Forest Development Contracts with:

- Penticton Indian Band (Kruger Forestry Services)
- Upper Nicola Indian Band (Culture/Heritage/Arch)

Forest Management Agreement with:

- Osoyoos Indian Band

Fibre Supply Arrangements:

- Inkameep Special Forest Products

Forest Harvesting Contracts with:

- Penticton Indian Band member
- Lower Similkameen Indian Band member

Forest Management Partnership with:

- Okanagan Nation Alliance – OIFS
- Shuswap Nation Tribal Council – OIFS

Tolko

- Working Protocol Agreement with the Okanagan Indian Band (OKIB)
- Document to guide forest management activities within the Kela7scen circle (Adams Lake/Neskonlith)
- Service agreement with Upper Nicola Band (UNB)
- Forest management agreements with three FN groups for NRFL management
- Grass seeding, tree planting, logging, hauling projects with OKIB
- Road use agreement with OKIB
- Field review project with Westbank First Nation

BCTS

- Upper Nicola Band Service Agreement
- Survey Program Contract with OKIB
- Identified MPB harvest opportunity to Neskonlith and Adams Lake Bands within the Kela7scen circle

Other

- Splatsin First Nation

Indicator: 33 An Effective Public Advisory Group

Target: Participant Satisfaction Survey
33a. 80% of responses “3” or better
33b. All written comments are reviewed and considered, and all line responses averaging less than 3 become action items

Assessment Results: Eight members of the Public Advisory Group completed the survey. Individual responses ranged from 2 to 5 out of 5. The average response to each question ranged from 3.1 to 4.2 with an overall average response of 3.8 (a slight decrease in the average response of 4.0 in 2007) detailed results of the survey can be found in Appendix 1 of this report.

Indicator: 34 Educational Forums

Target: Conduct educational classroom visits in public schools, promote public participation in forestry tours and conduct public presentations to increase public knowledge and understanding about sustainable forest management.

Assessment Results: A total of 1,657 students participated in 45 educational classroom visits by BCTS, Weyerhaeuser, Tolko and Gorman employees. In addition, 16 tours were held with 285 people attending, and 7 public presentations were made to a combined audience of 446 people. (Note: numbers do not include BCTS involvement in the April 14-18th, 2008 Forestry week presentations).

In addition, Tolko, Gorman Bros., Weyerhaeuser, and the MoF along with other licensees, continued to support the “Learn Forestry” program in 2008. In excess of 9,000 students and teachers within the Okanagan/Columbia area received presentations as a result of this program.

Indicator: 35 Public Awareness Of The SFMP

Target: Licensees will keep members of the public informed of TSA strategies being developed, and planning occurring, by maintaining websites.

Assessment Results: Licensees achieved the target by maintaining web sites and by making information available to the Public Advisory Group through document distribution, and meetings in the office and field. The website provides the SFM Plan and annual monitoring results. A new Okanagan SFMP website was also established in 2008, and provides the SFM Plan, annual monitoring results, and additional information related to sustainable forest management and certification.

Indicator: 36 Percentage Of Cutblocks Where Coarse Woody Debris Piling Is Necessary To Achieve Silviculture Activities That A Proportion Was Then Retained In Loose Piles Or Windrows Within 50 Meters Of Timber Edge Or Riparian Management Areas.

Target: 100% of cutblocks that require debris accumulation to meet reforestation objectives have a proportion of loose piles or windrows retained

Assessment Results: 115 out of 126 cutblocks (91.3%) had debris piles retained. This result is within the allowed 10% variance for the target. 8 of the 12 blocks where debris piles should have been retained occurred on one NRFL.

Appendix 1

Advisory Group Satisfaction Survey

Advisory Group Survey – 2008

Scale Used:

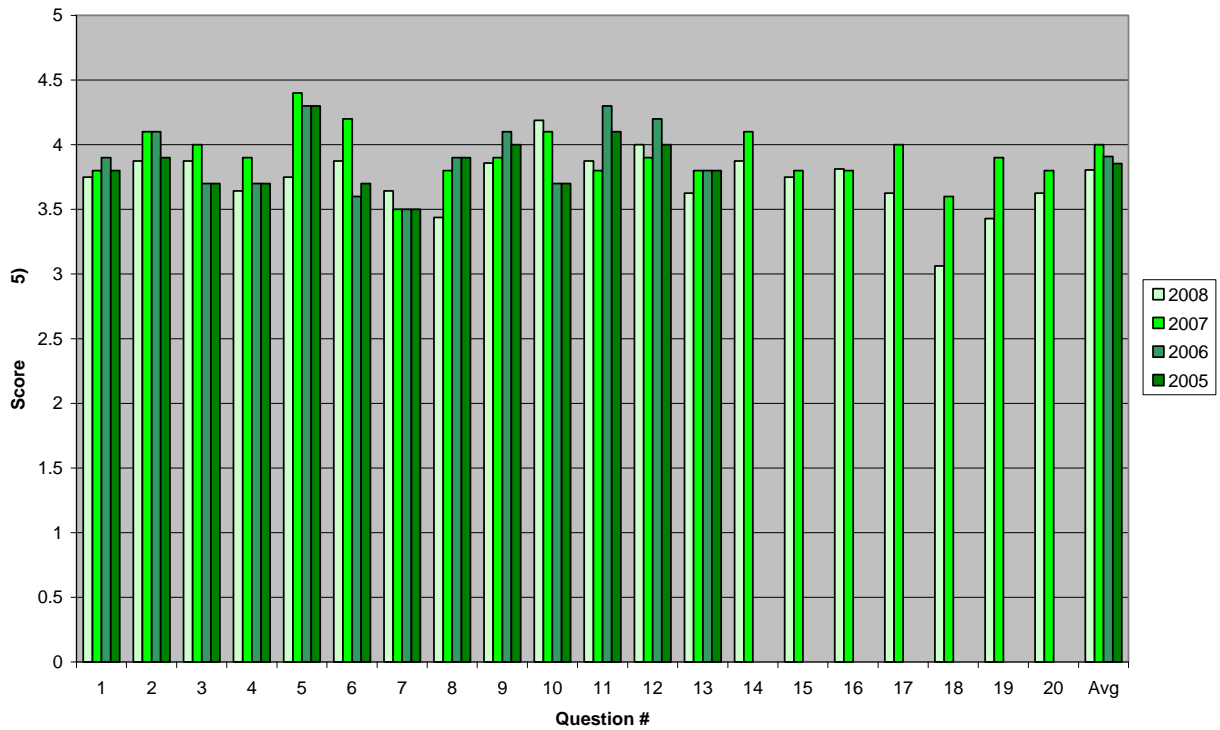
1	2	3	4	5
Poor		Satisfactory		Well done

Questions asked:

1. I feel that the Terms of Reference provide clear direction to the Public Advisory Group and I am in general agreement with their contents.
2. I have a good understanding of the purpose of the Advisory Group and my role as part of that group.
3. My input related to the SFM values and objectives are being adequately listened to at the Advisory Group meetings and efforts have been made to incorporate my input into the SFM Plan.
4. My input related to the SFM indicators, targets, strategies and monitoring programs are being adequately listened to at the Advisory Group meetings and efforts have been made to incorporate my input into the SFM Plan.
5. I am supplied with the annual monitoring reports and audit summaries and have been given the opportunity to evaluate and discuss the results.
6. I am encouraged to make suggestions towards continuous improvement and feel that my suggestions are adopted whenever practical.
7. Issues relevant to SFM in the DFA are discussed and resolved to my satisfaction.
8. Adequate and relevant information has been provided to me and supports my involvement in the Advisory Group process.
9. Additional information I ask for is provided to me.
10. My involvement in the Advisory Group and the information that I receive has resulted in a better understanding of the interrelationships between Tolko and Weyerhaeuser and other resource users.
11. Advisory Group meetings are run efficiently and effectively and provide a good forum for discussion between Advisory Group members.
12. The Advisory Group meeting minutes capture important aspects of the meeting.
13. Overall, the Advisory Group process is designed and functioning to my satisfaction.
14. Advisory Group Meetings are run efficiently and effectively.
15. The meeting agenda allows for discussion of any related sustainable forestry issues of concern to advisory group members.
16. The meeting minutes capture important aspects of the meeting.
17. Additional information I ask for is provided to me.
18. Communication with advisory group members between meetings is adequate.

19. The outputs generated through discussion with the advisory group (SFM Plan and annual monitoring reports) are clear and concise.
20. 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.

Okanagan SFM PAG Questionnaire Resposes 2008



Appendix 2

**Weyerhaeuser /Tolko/Gorman
Bros./BCTS**

2008

Performance Summaries

2008 SFM MONITORING SUMMARY



Weyerhaeuser

More information on how Weyerhaeuser performed against all 36 sustainability indicators, can be obtained by contacting Brian Drobe, Planning Forester, Weyerhaeuser

**Weyerhaeuser
Okanagan-Boundary**

Phone: 250 497 1224

Brian.Drobe@weyerhaeuser.com

Box 39 Okanagan Falls
British Columbia
V0H 1R0

www.weyerhaeuser.com



Weyerhaeuser's Okanagan/Boundary SFM Performance Highlights: 2008

Sustainable Forest Management (SFM) Plan performance targets were achieved for 35 of the 36 indicators relating to the sustainability criteria in the Plan. Highlights of the 2008 SFM report follow:

- 99.8% of areas planned for planting were planted within 2 years of harvest as compared to the target of 70%.
- Soil disturbance levels were at or below the committed plan level for all areas harvested.
- Free growing criteria were met on all 1629.0 hectares required, on average 4.9 years before the late free growing date.
- Coarse woody debris strategies were met in all cases on the 18 cutblocks harvested in 2008.
- The harvested area occupied by permanent roads and landings was 1 percent of the total harvest area compared to the target of 6 percent. (2007 – 2.0%, 2006 – 2.5%)
- All 714 kilometres of permanent status roads had inspections completed as planned.
- 82% of cutblocks surveyed for free growing contained 3 or more tree species compared to the target of 70%.

Performance requirements were not met for one indicator

The majority of seral stage objectives are being met. However, the current age distribution of the forest indicates the old seral age class is slightly below target for NDT 4. Over time, it is expected sufficient area from the mature seral age class will move into the old age class such that old targets are achieved.

2008 SFM MONITORING SUMMARY



More information on how Tolko performed against all 35 sustainability indicators, can be obtained by contacting Rob Kennett or Paul Ross, Tolko

Tolko Okanagan Regional Woodlands

Phone: 250 547 2111
Robert.Kennett@tolko.com
Paul.Ross@tolko.com

4280 Highway 6, Lumby
 British Columbia
 V0E 2G7

www.tolko.com



Tolko's Okanagan Regional Woodlands SFM Performance Highlights: 2008

Sustainable Forest Management (SFM) Plan performance targets were achieved for 28 of the 36 indicators relating to the sustainability criteria in the Plan. Highlights of the 2007 SFM report follow:

- There were 145 cutblocks or roads influenced by Okanagan Shuswap LRMP/ Kootenay Boundary Land use Plan (LUP) strategies and identified wildlife species. Strategies were followed in all cases.
- Soil disturbance levels for all cutblocks harvested (165) were within target.
- 90.6% of areas planned for planting were planted within 2 years of harvest as compared to the target of 70%.
- 99.9% of free growing obligations were met, and the average time that cutblocks outperformed the date was 4.26 years.
- Tolko continued to manage within the Kela7scen circle as per an understanding with the Adams Lake and Neskonlith Indian Bands.
- The harvested area occupied by permanent roads and landings was 2.4% percent of the total harvest area compared to the target of 6 percent.
- Tolko made a commitment that 70% of its harvest would be directed at forest health priorities. 88% was achieved.
- All 49 of the areas harvested within sensitive scenic zones that were assessed met the planned visual quality objectives for the scenic zone.

Performance requirements were not achieved for 9 Indicators:

Tolko is committed to improving performance against these indicators. The shortfall from targets for the indicators are:

Ind. #	Performance
1	<p>Old seral age class targets achieved for 3 of 4 (75%) NDTs. Target: 100%. Achieving this target for NDT4 will require time as existing trees must age naturally to meet definition of old. The existing condition is a function of the current inventory. Tolko is avoiding harvest in old NDT4 stands. Net area of Old Growth Management Areas increased by 24.5 hectares during the year.</p> <p>3 Year Trend: No change</p>
4	<p>Six non-conformances to FPC, FRPA, and plan commitments impacting values in riparian management areas. Target: Zero non-conformances. All six non-conformances relate to sediment entering streams at road crossings. In all cases, the amount of sediment was small with minimal damage to riparian values. One incident was in a block harvested during 2008, and occurred shortly after harvesting was completed. One incident was in a block harvested during 2007, and occurred after a significant rain event. Four incidents involved bridges on older, existing haul roads outside cutblocks.</p> <p>3 Year Trend: 2006 – no incidents, 2007 – 2 incidents, 2008 – 6 incidents</p>
11	<p>59.3 % of permanent road was revegetated within the specified period. Target: 100%</p> <p>3 Year Trend: 2006 – 98.7%, 2007 – 86.2%, 2008 – 59.3 %</p>
14	<p>Three Slides. Target: 0 slides.</p> <p>A 0.2 hectare fill slope slump caused damage to advanced regeneration below the slump. It is believed that underground water flows saturated the fill slope. This was a road built in the 1980's without groundwater issues being fully considered. Mitigation activities included hauling in rock and armouring the fill slope to allow ground water to escape without future fill slope saturation</p> <p>A 0.6 hectare slump occurred on the upslope of a road used during the previous season. Very fine soils combined with significant snow and rain in the previous month. Impact was minimal, impacting only the road and the upslope block. There was no sediment delivery to a stream</p> <p>A 1.5 hectare debris torrent down a gulley crossed the Sugar Lake Forest Service Road and deposited material into the Shuswap River. The initiation point was on an old, existing Forest Service Road that Tolko does not have maintenance responsibility for. No firm cause was established but it is believed that it may have been the result of inadequate culverts. Mitigation activities included removing debris off Sugar Lake FSR and opening the box culvert to prevent further erosion into the Shuswap River.</p> <p>3 Year Trend: 2006 – 4 slides, 2007 – 1 Slide, 2008 – 3 slides</p>
16	<p>98.3 % of naturally regenerated cutblocks met regen delay. Target 100%</p> <p>90.6 % of cutblock area planned for planting completed within 2 years. Target 70% (target was met for planted blocks).</p> <p>The 13 hectares of natural regeneration that did not meet regeneration delay will be planted in 2009. The regeneration survey showed 480 stems per hectare versus 500 required stems per hectare.</p> <p>3 Year Trend: 2006 – 100%, 2007 – 100%, 2008 – 98.3%</p>
17	<p>99.9% of cutblocks achieved free growing status prior to or at late free growing. Target 100%.</p> <p>The 3 hectares that did not meet the free growing date were surveyed after the late free growing date, but within the late free growing year. They were found to be free growing within the late free growing year (i.e. a technical non-conformance).</p> <p>3 Year Trend: 2006 – 98.1%, 2007 – 100%, 2008 = 99.9%</p>
21	<p>48.6% of required permanent status road inspections were completed. Target: 100%.</p> <p>Note: An additional 1943.3 km of roads were inspected that were not scheduled for inspection in 2008.</p> <p>3 Year Trend: 2006 – 83.4%, 2007 – 95.6%, 2008 – 48.6%”</p>
22	<p>71.4% of temporary road inspections were completed. Target: 100%.</p> <p>3 Year Trend: 2006 – 84.4%, 2007 – 88.6%, 2008 – 71.4%</p>
23	<p>86% of operations forest employees and primary contractors were trained in spill preparedness and response procedures. Target 100%. 3 year Trend: 2006 – 100%, 2007 – 81%, 2008 – 86%</p>

2008 SFM MONITORING SUMMARY



BCTS
BC Timber Sales
Okanagan-Columbia

More information on how BCTS performed against all 36 sustainability indicators can be obtained by contacting Dave Gill at:

BCTS – Okanagan-Columbia

Phone: 250 558 1717
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Vernon, British Columbia
V1T 8Z1

[B.C. Timber Sales Okanagan-Columbia](#)



BCTS Okanagan SFM Performance Highlights: 2008

Sustainable Forest Management (SFM) Plan performance targets were achieved for 32 of the 36 indicators relating to the sustainability criteria in the Plan. Highlights of the 2008 SFM report follow:

- There were 31 cutblocks or roads influenced by Okanagan Shuswap LRMP strategies and identified wildlife species. Strategies were followed in all cases.
- 89.6% of areas planned for planting were planted within 2 years of harvest as compared to the target of 70%.
- All trees planted (3,050,311) were in accordance with the seed transfer guidelines.
- The harvested area occupied by permanent roads and landings for all blocks harvested in 2008 was 2.3% percent of the total harvest area compared to the target of 6 percent.
- BCTS made a commitment that 70% of its harvest would be directed at forest health priorities. 94% was achieved.
- Required Wildlife Tree Retention Areas were maintained on 100% of the blocks harvested. Stubs were retained on 97% of the blocks harvested.
- All 837 kilometers of permanent status roads had inspections completed as planned.
- Coarse Woody Debris strategies were met on 100% of the blocks harvested in 2008.

- 84.3% of cutblocks surveyed for free growing contained 3 or more species.

Performance requirements were not achieved for 4 Indicators:

- INDICATOR #1. Old seral age class targets are being met on 3 of 4 (75%, Target = 100%) NDT's. The current age class distribution of the forest in NDT1 is presently 6% below target within the BCTS DFA. NDT1 makes up 11.6% of the BCTS DFA. Given the present inventory, a significant number of stands will roll into old seral from mature within the next 20 years. Net area of OGMA increased by 7.5 ha's in 2008.
- INDICATOR #17. 1,437 hectares of 1,647 hectares (87.3%, Target = 100%) achieved free-growing prior to the late free growing date in 2008. This shortfall was due, in part, to an old form of tenure which is no longer issued (TSL - Major). These are tenures where basic silviculture was often postponed for several years to accommodate delays in harvest. These are also tenures where BCTS is responsible for silviculture obligations. As no new tenures of this sort have been issued for several years, we expect this backlog to be addressed within the next 3 or 4 years. In addition, surveys on several small blocks scheduled for 2008 were missed due to snow.
- INDICATOR #24. BCTS had one legally reportable spill in 2008 (Target = 0). Between 5 and 6 litres of antifreeze spilled on a road surface in the North Boulder area. PEP was notified of the spill. The spill was cleaned up and no further action taken.
- INDICATOR #31. Though the BCTS average for responding to written communications was within the 30 day target, we had two instances where the response significantly exceeded 30 days. In both cases this was because our response was an undocumented phone call. These calls were made to arrange a meeting at a mutually convenient time to discuss the written communication. A response letter was not sent out. The meeting date, in both cases, is considered our response. BCTS has since strengthened it's procedures to respond to such communications in writing when requesting a meeting.

2008 SFM MONITORING SUMMARY



More information on how Gorman Bros. performed against all 36 sustainability indicators, can be obtained by contacting Gorman Bros. Lumber

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CP 304 Block 3 – Bull Creek (Trout Creek)

Gorman Bros. Okanagan SFM Performance Highlights: 2008

Sustainable Forest Management (SFM) performance targets were achieved for 33 of the 36 indicators relating to the sustainability criteria in the Plan. Highlights of the 2007 SFM report follow:

- (5) The required Wildlife tree retention areas were maintained on 100% of the blocks harvested. Stubs were retained on 95% of the overall harvest area.
- (17) Free growing criteria were met on 933 hectares, on average 5.56 years before the late free growing date.
- (15) Gorman Bros. committed to harvesting at least 70% of the 2008 harvest in forest health priority stands. Overall, 81% of harvesting addressed stands affected by, or at high risk of, mountain pine beetle or spruce beetle infestations.
- (5) Coarse woody debris strategies were met in all cases on 45 cutblocks.
- (21) All 444 kilometers of permanent roads had inspections completed as planned.
- (7) 92% of cutblocks declared free growing contained 3 or more tree species.
- (16) 1,609 (98%) hectares were planted prior to the second growing season.
- (9) Almost 1.6 million trees were planted consistent with the seed transfer guidelines.
- (2) 28 cutblocks and/or were roads influenced by, and managed consistent with, the Okanagan Shuswap LRMP and/or the Identified Wildlife Management Strategy – species include grizzly bear, moose, and marten.
- (11) 300 kg of Canada No. 1 grass seed were applied to road right of

	<p>way area concurrently with operations to help manage water quality and invasive plants.</p> <ul style="list-style-type: none"> • (19) Soil disturbance levels were at or below the committed plan level for all areas harvested (45 blocks). • (32) Gorman Bros. conducted business and maintained working relationships with 6 Bands and 2 Nation-level organizations. • (12) The harvested area occupied by permanent roads and landings was 2.1 percent of the total harvest area compared to the target of 6 percent. <p><u>Performance Requirements were not met for the following indicators:</u></p> <ul style="list-style-type: none"> • INDICATOR #1. Only 1 of the 4 seral stage targets are being met within Gorman Bros. DFA. The current age distribution of the forest indicates the old seral age class is slightly below target in all NDT's. The targets are not being met due to the fire history in the operating area, combined with harvest targeted at mountain pine beetle infested stands – many of which were in the “old” seral stage. There is, however, an abundance of “mature” area which, over time, will move into the old age class such that old targets are achieved. • INDICATOR #18. Access management commitments have not been met in 3 instances. In two (2) instances, the necessity for ongoing access control measures is being reviewed by the stakeholders in the local area. In the other instance, access controls will be installed following completion of silviculture activities (planting).
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Appendix 3

Defined Forest Area Map

Appendix 3: Weyerhaeuser/Tolko/Gorman/BCTS SFMP Defined Forest Area 2008

