

Comparison between Z809-08 SFM Standard and Current HLLD SFM Indicators for each CCFM Criteria/Element – May 2011

Z809-08 CCFM Criterion	Z809-08 CCFM Element	Z809-08 Required Core Indicators	Current indicators for Indicated Elements
<p>1.0 Conservation of Biological Diversity Conserve biological diversity by maintaining integrity, function, and diversity of living organisms and the complexes of which they are part.</p>	<p>1.1 Ecosystem Diversity Conserve ecosystem diversity at the landscape level by maintaining the variety of communities and ecosystems that naturally occur in the DFA.</p>	Ecosystem area by type	#2: Proportion of cover types (C, CD, DC, & D)
		Forest area by type or species composition	#3: Area (ha) removed from the productive landbase to incorporate areas of ecological significance.
		Forest area by Seral stage or age class	#4: Percentage of the forested landbase represented in older age classes.
	<p>Element 1.2 Species Diversity Conserve species diversity by ensuring that habitats for the native species found in the DFA are maintained through time, including habitats for known occurrences of species at risk.</p>	Degree of habitat protection for selected focal species including species at risk	#5: Habitat availability (ha) for representative and unique species.
		Degree of suitable habitat in the long term for selected focal species including species at risk	#6: Amount of vertical and horizontal diversity retained in cutblocks.
		Proportion of regeneration comprised of native species	#7: Amount of Coarse Woody Debris retained in cutblocks following operations. #8: ASRD approved operational plans in critical wildlife zones.
	<p>Element 1.3 Genetic Diversity Conserve genetic diversity by maintaining the variation of genes within species.</p>	[No CORE Indicators]	#9: The amount of area (ha) planted with seedlings from orchard stock. #10: Native seed used in operational reforestation will be best suited to the area being reforested.
	<p>Element 1.4 Protected Areas and Sites of Special Biological and Cultural Significance Respect protected areas identified through government processes. Cooperate in broader landscape management related to protected</p>	Proportion of identified sites with implemented management strategies	#11: Annual Operating Plans (AOP's) which identify protection mechanisms for areas of biological significance. #12: Annual Operating Plans which outline

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	areas and sites of special biological significance and cultural significance. Identify sites of special biological and cultural significance within the DFA and implement management strategies appropriate to their long-term maintenance.	Understanding and use of Aboriginal knowledge, with the involvement of willing Aboriginal communities, to identify and manage culturally important resources and values (6.2)	operational strategies to mitigate impacts to the Watt Mountain Natural Area. #25, part 1: Compliance with the Historical Resources Act.
CCFM Criterion 2 — Maintenance and enhancement of forest ecosystem condition and productivity Conserve forest ecosystem condition and productivity by maintaining the health, vitality, and rates of biological production.	Element 2.1 Forest Ecosystem Resilience Conserve ecosystem resilience by maintaining both ecosystem processes and ecosystem conditions.	Proportion of naturally disturbed area that is not salvage harvested.	#13: Annual harvest (m3) from areas identified as being infested by spruce budworm or other insects or disease. #14: Productive landbase that is harvested and reforested (ha) following natural disturbance. #21: Reforestation activities. #22: Area(s) identified as being Satisfactorily Restocked (SR).
		Reforestation success (Also listed under SFM Element 4.1)	
	Element 2.2 Forest Ecosystem Productivity Conserve forest ecosystem productivity and productive capacity by maintaining ecosystem conditions that are capable of supporting naturally occurring species.	Mean annual increment	#5, part 2: Habitat availability (ha) for representative and unique species.
		Additions and deletions to the forest area by cause	#24: Volume harvested during the 5-Year cut control period.
Sustainable harvest levels Proportion of the calculated long-term sustainable harvest that is actually harvested.		#23: Amount of non-forested area (ha) on the DFA.	
CCFM Criterion 3 — Conservation of soil and water resources	Element 3.1 Soil Quality and Quantity Conserve soil resources by maintaining soil	Level of soil disturbance	#15: Road Disturbance.

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Conserve soil and water resources by maintaining their quantity and quality in forest ecosystems.	quality and quantity.	Level of downed woody debris	#16: Rutting Disturbance #17: Soil Productivity.
	Element 3.2 Water Quality and Quantity Conserve water resources by maintaining water quality and quantity.	Proportion of watershed area with recent stand-replacing disturbance	#18: Adherence to the PFMS. #19: Amount of area (ha) and forest cover in riparian buffer zones along watercourses. #20: Satisfactory installation & removal of watercourse crossings.
CCFM Criterion 4 — Forest ecosystem contributions to global ecological cycles Maintain forest conditions and management activities that contribute to the health of global ecological cycles.	Element 4.1 Carbon Uptake and Storage Maintain the processes that take carbon from the atmosphere and store it in forest ecosystems.	Net carbon uptake/balance.	#21: Reforestation activities.
		Reforestation success (Also listed under SFM Element 2.1)	#22: Area(s) identified as being Satisfactorily Restocked (SR).
	Element 4.2 Forest Land Conversion Protect forestlands from deforestation or conversion to non-forests.	Additions and deletions to the forest area by cause.	#23: Amount of non-forested area (ha) on the DFA.
CCFM Criterion 5 — Multiple benefits to society Sustain flows of forest benefits for current and future generations by providing multiple goods and services.	Element 5.1 Timber and Non-Timber Benefits Manage the forest sustainably to produce an acceptable and feasible mix of both timber and non-timber benefits. Evaluate timber and non-timber forest products and forest-based services.	Quantity and quality of timber and non-timber benefits, products, and services produced in the DFA.	#24: Volume harvested during the 5-Year cut control period. #25, part 1: Compliance with the Historical Resources Act. #26: Area (ha) removed from productive landbase to incorporate aesthetics. #27: Forest Management Plans (FMP's) and operational plans which have incorporated the needs of other stakeholders.

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	<p>Element 5.2 Communities and Sustainability Contribute to the sustainability of communities by providing diverse opportunities to derive benefits from forests and supporting local community economies.</p> <p>[Note: Element 5.3 Fair Distribution of Benefits and Costs included in the Z809- 02 Standard has been removed in the new standard, includes old indicators #29 and #31, part 1.]</p>	<p>Level of investments in plant and equipment, training and skills development, infrastructure, and the community and its facilities</p> <p>Direct and indirect employment</p> <p>Levels of Aboriginal participation in the forest economy</p>	<p>#28: The number (%) of business and employment opportunities given to local employers and/or citizens.</p> <p>#29: The number of Business and Wood Supply Agreements with local tenure holders and processing facilities.</p> <p>#31, part 1: Forest Management Plans (FMP’s) and operational plans which have incorporated the needs of other stakeholders.</p>
<p>CCFM Criterion 6 — Accepting society’s responsibility for sustainable development Society’s responsibility for sustainable forest management requires that fair, equitable, and effective forest management decisions are made.</p>	<p>Element 6.1 Aboriginal and Treaty Rights Recognize and respect Aboriginal title and rights, and treaty rights. Understand and comply with current legal requirements related to Aboriginal title and rights, and treaty rights.</p>	<p>Protection or management of culturally important sites and values</p> <p>Protection of sacred sites.</p>	<p>#30: Percentage of Aboriginal communities that are consulted annually regarding operations.</p>
	<p>Element 6.2 Respect for Aboriginal Forest Values, Knowledge, and Uses Respect traditional Aboriginal forest values and uses identified through the Aboriginal input process.</p>	<p>Understanding and use of Aboriginal knowledge, with the involvement of willing Aboriginal communities, to identify and manage culturally important resources and values (1.4)</p>	<p>#25, part 2: Compliance with the Historical Resources Act.</p>
	<p>Element 6.3 Forest Community Well-being and Resilience Encourage, cooperate with, or help to provide opportunities for economic diversity within the community.</p>	<p>Evidence that the organization has cooperated with other forest-dependent businesses, forest users and the local community to strengthen and diversify the local economy.</p> <p>Evidence of cooperation with DFA-related workers and their unions to improve and enhance safety standards, procedures, and outcomes in all DFA-related workplaces and affected communities.</p>	<p>NEW Element, no existing indicators.</p>

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		Evidence that a worker safety program is implemented and periodically reviewed and improved.	
	Element 6.4 Fair and Effective Decision-Making Demonstrate that the SFM public participation process is designed and functioning to the satisfaction of the participants and that there is general public awareness of the process and its progress.	Level of participant satisfaction with the public participation process	#31, part 2: The number of public comments received regarding plans, the level of response by management, and whether the public comments are used to adjust plan development.
		Promotion of capacity development and meaningful participation of Aboriginal communities.	
	Element 6.5 Information for Decision-Making Provide relevant information and educational opportunities to interested parties to support their involvement in the public participation process, and increase knowledge of ecosystem processes and human interactions with forest ecosystems.	Number of people reached through educational outreach	#32: The number events related to forestry awareness conducted by Tolko, HLLD.
		Availability of summary information on issues of concern to the public	#31, part 3: Access to relevant information, including the CSA standard.

Purpose of document:

- Comparison of CORE Indicators and existing Indicators to identify any GAPS.
- Need to determine what level of alignment there is between CORE indicators and current indicators (eg, tight alignment through to no alignment at all).
 - Determine what indicators will be used along with the CORE indicators (some existing indicators may be redundant)
 - Are there new indicators that need to be considered?