

Appendix 1b

Values, Objectives, Indicators & Targets Summary Tables

Fraser Valley Portion of the Defined Forest Area

June 2011





The following Indicators are applicable to the Fraser portion of the DFA only (see Appendix 1c for indicators that are applicable to the entire DFA; or Appendix 1a for indicators applicable to the Honeymoon Bay portion of the DFA only).

CCFM Criterion 1: Conservation of Biological Diversity

Conserve biological diversity by maintaining integrity, function, and diversity of living organisms and the complexes of which they are part.

CSA SFM Element 1.1: Ecosystem Diversity									
Conserve ecosystem diversity at the stand and landscape level by maintaining the variety of communities and ecosystems that naturally occur in the DFA.									
Value	Objective	Indicator	#	Target	Acceptable Variance	Basis for the target	Legal Requirements	Means of Achieving Objective and Target	Monitoring and Measurement
Ecosystem Biodiversity	Conserve Ecosystem diversity at the stand and landscape levels by maintaining the variety of communities and ecosystems that naturally occur in the DFA	Forest Area by type	CF 1.1.2	Maintain current forest area by type	Zero	Core Indicator CSA Z809-08 standard	N/A	Operational Planning	GIS
CSA SFM 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.									
Value	Objective	Indicator	#	Target	Acceptable Variance	Basis for the target	Legal Requirements	Means of Achieving Objective and Target	Monitoring and Measurement
Spotted Owl habitat (Species at Risk)	Maintain habitat in Special Resource Management Zones established by government	Degree of Habitat Protection for Selected Focal Species , Including Species at Risk	CF 1.2.1	100% Compliance with the Spotted Owl result and strategy in the approved Fraser Valley Operation Forest Stewardship Plan (FSP) section 7.2.2.2	Zero	Core Indicator CSA Z809-08 standard	Forest Stewardship Plan, Forest and Range Practices Act	Operational Planning, Standard Operating Procedures	Harvest Inspections, inspections by government agencies
Mountain Beaver	Maintain and protect critical Mountain Beaver habitat	Percentage of critical Mountain Beaver habitat that is identified and managed as per the strategy	F1-8	100%	Zero	Public concern (FPAG) , internal policy, Ministry of Environment Input	N/A	Operational planning	Fraser PAG meeting minutes, Forest Stewardship Plan, inspections by government agencies



CSA SFM 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.

Value	Objective	Indicator	#	Target	Acceptable Variance	Basis for the target	Legal Requirements	Means of Achieving Objective and Target	Monitoring and Measurement
Eagles and other Raptors	Maintain healthy populations of eagles and other raptors by protecting established nests	Percent of identified raptor nests that are protected	F 1-13	100%	Zero	Public concern (FPAG)	Wildlife Act	Forest Stewardship Standard, Operational planning	Post harvest assessments, MOE raptor inventories/database, Phoenix database, inspections by government agencies

CSA SFM Element 1.3: Genetic Diversity

Conserve genetic diversity by maintaining the variation of genes within species and ensuring that reforestation programs are free of genetically modified organisms

Value	Objective	Indicator	#	Target	Acceptable Variance	Basis for the target	Legal Requirements	Means of Achieving Objective and Target	Monitoring and Measurement
There are currently no indicators that are applicable only to the Fraser portion of the DFA, see Appendix 1c for indicators applicable to the DFA									

CSA SFM Element 1.4: Protected Areas and Sites of Special Biological and Cultural Significance

Respect protected areas identified through government processes. Co-operate in broader landscape management related to protected areas and sites of special biological and cultural significance. Identify sites of special geological, biological, or cultural significance within the DFA, and implement management strategies appropriate to their long-term maintenance.

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CCFM Criterion 2: Ecosystem Condition and Productivity

Conserve forest ecosystem condition and productivity by maintaining the health, vitality, and rates of biological production.

CSA SFM Element 2.1: Forest Ecosystem Resilience									
Conserve ecosystem resilience by maintaining both ecosystem processes and ecosystem conditions.									
Value	Objective	Indicator	#	Target	Acceptable Variance	Basis for the target	Legal Requirements	Means of Achieving Objective and Target	Monitoring and Measurement
Protection of biodiversity from invasive species	Protection of natural ecosystem resilience to disturbance from invasive species	Compliance with the Invasive Plants measures in the approved Forest Stewardship Plan (FSP)	F2-1	100% Compliance with FSP Measures in FSP section 8.1	Zero	Forest Stewardship Plan, public concern (FPAG)	Forest and Range Practices Act	Forest Stewardship Standard, Operational planning	Forest Stewardship Plan, silviculture surveys, road inspections, inspections by government agencies
Maintain healthy, productive forests; harvesting the profile – not just taking the good and healthy	Maintaining Healthy Forests across landscape	Salvage of economically accessible damaged/ diseased or threatened merchantable timber as a percent of the total amount identified	F2-2	Salvage 100% of economically accessible damaged or threatened timber within two years of identification	Salvage 100% of economically accessible damaged or threatened timber within 3 years of identification	Provincial strategies, internal Policy	Forest Act Forest and Range Practices Act	Operational planning	Forest Stewardship Plan, Phoenix database, post harvest inspections, communications files, inspections by government agencies
CSA SFM 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. Reforest promptly and use tree species ecologically suited to the site.									
Value	Objective	Indicator	#	Target	Acceptable Variance	Basis for the target	Legal Requirements	Means of Achieving Objective and Target	Monitoring and Measurement
There are currently no indicators that are applicable only to the Fraser portion of the DFA, see Appendix 1c for indicators applicable to the DFA									



CCFM Criterion 3: Conservation of Soil and Water Resources

Conserve soil and water resources by maintaining their quantity and quality in forest ecosystems.

CSA SFM Element 3.1: Soil Quality and Quantity

Conserve soil resources by maintaining their quantity and quality in forest ecosystems.

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There are currently no indicators that are applicable only to the Fraser portion of the DFA, see Appendix 1c for indicators applicable to the DFA									

CSA SFM Element 3.2: Water Quality and Quantity

Conserve water resources by maintaining water quantity and quality.

Value	Objective	Indicator	#	Target	Acceptable Variance	Basis for the target	Legal Requirements	Means of Achieving Objective and Target	Monitoring and Measurement
Water Quality	Protect water resources from pesticides	Compliance with approved Pest Management Plan Pesticide Free Zones	F3-8	Zero non-compliances	Zero	Pest Management Plan, public concern (FPAG)	Integrated Pest Management Act Forest and Range Practices Act	Operational planning	Post treatment inspections, inspections by government agencies
	Limit or eliminate negative impacts on water quality due to roads	Number of non-compliances on roads under permit which indicate an impact has occurred on water quantity or quality	F 3-10	Zero non-compliances from a designated official citing infractions causing water quality or quantity impacts	Zero	Legislative requirement, public concern (FPAG)	Forest Practices Code Act Forest and Range Practices Act	Road inspections, Operational planning, Emergency Preparedness & Response Plan	Forest Stewardship Plan, Road Inspections, inspections by government agencies
Quality and quantity of potable water	Maintain the quality and quantity of potable water after logging	Number of licensed water intakes , wells and streams where the comparison of available and comparable information from pre and post harvesting indicates negative impacts to water quality and quantity	F 3-12	Number of negative impacts to licensed water intakes and wells as a result of harvesting is zero	Zero	Public concern (FPAG)	Water Act Forest and Range Practices Act	Water license databases, Water licensee test records, completed water test results, Windthrow Hazard Assessments, Terrain Stability Assessments, Hydrological Assessments, Operational Plans	Water licensee test records, Road Inspections, Post Harvest Assessments, Incident Investigation Reports, inspections by government agencies, External Communications



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.

CSA SFM Element 4.1: Carbon Uptake and Storage									
Maintain the processes that take carbon from the atmosphere and store it in forest ecosystems.									
Value	Objective	Indicator	#	Target	Acceptable Variance	Basis for the target	Legal Requirements	Means of Achieving Objective and Target	Monitoring and Measurement
Minimize the duration of un-forested condition of harvested areas	Prompt reforestation of harvested areas	Time to reforestation after harvest completion of the cutblock	F4-2	Reforest 70% of harvested areas within one year	Zero	Public concern (FPAG), Legislative requirement, stocking standards	Forest Practices Code Act Forest and Range Practices Act	Site preparation, planting, operational planning	Planting Reports, Regeneration Surveys, Phoenix database, RESULTS database, inspections by government agencies
Productivity of forest land base	Maintain or improve productivity of the forest land base	Percentage of identified fertilizable stands (hectares) treated over a 5 year period, where funding is available	F4-4	Average over a 5 year period of 15% of identified fertilizable stands treated per year	Minimum average of 10% of identified fertilizable stands treated per year	Forest Investment Account - Fraser Timber Supply Area Fertilization Planning	Forest Practices Code Act Forest and Range Practices Act	Forest Investment Account (FIA) funding, other external funding	FIA project reports, Pricewaterhouse-Coopers, external communications file, inspections by government agencies

CSA SFM Element 4.2 Forest Land Conversion									
Protect forest lands from deforestation or conversion to non-forests, where ecologically appropriate.									
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CFM Criterion 5: Economical and Social Benefits

Sustain flows of forest benefits for current and future generations by providing multiple goods and services.

CSA SFM Element 5.1: Timber and Non-Timber Benefits									
Manage the forest sustainably to produce an acceptable and feasible mix of timber and non-timber benefits. Evaluate timber and non-timber forest products and forest-based services.									
Value	Objective	Indicator	#	Target	Acceptable Variance	Basis for the target	Legal Requirements	Means of Achieving Objective and Target	Monitoring and Measurement
Maintain the flow of benefits to society derived from forest management	Investment in the forest land base	Percent of allocated Forest Investment Account funds re-invested into the land base	F5-3	100%	Zero	Public concern (FPAG), Forest Investment Account	N/A	Operational planning	FIA project reports, Pricewaterhouse-Coopers, external communications file, inspections by government agencies

CSA SFM Element 5.2: Communities and Sustainability									
Contribute to the sustainability of communities by providing diverse opportunities to derive benefits from forests and by supporting local community economies.									
Value	Objective	Indicator	#	Target	Acceptable Variance	Basis for the target	Legal Requirements	Means of Achieving Objective and Target	Monitoring and Measurement
Economic benefits to local communities; maximize efficient use of timber	Community access to wood fiber; opportunities for the efficient use of timber which Teal can't economically market	Progress towards signed protocol agreements for Community Log Retrieval with interested individuals or groups from Communities	F5-4	Report annually on the status of individual protocol agreements for Community Log Retrieval	Zero	Public concern (FPAG), internal policy	Forest Act Forest Practices Code Act Forest and Range Practices Act	On-going communication	External communication file, signed protocol agreements
Economic benefits to local communities	Generate employment opportunities in communities associated with the DFA	The progress (Memorandum of Understanding – MoU) made by the community representatives and Teal representatives towards creation of economic activity and employment in the central Fraser Canyon	F5-5	Report annually on the progress of MoUs	Zero	Public Concern (FPAG)	N/A	On-going communication	External communication files



CSA SFM Element 5.2: Communities and Sustainability

Contribute to the sustainability of communities by providing diverse opportunities to derive benefits from forests and by supporting local community economies.

Value	Objective	Indicator	#	Target	Acceptable Variance	Basis for the target	Legal Requirements	Means of Achieving Objective and Target	Monitoring and Measurement
Community safety	Report stream or terrain related threats to public safety to the applicable Regional District	Percentage of identified stream or terrain related threats reported to the applicable Regional District	F5-6	100%	Zero	Public concern (FPAG)	N/A	Operational Planning External Communication	External Communication File
Human safety, infrastructure and private & community property	Protect human safety, infrastructure, private and community property from any impacts resulting from slides, debris torrents, or flooding that can be attributed to harvesting or roads	Completion and conformance with site specific hydrological and/or terrain stability assessment reports from qualified professionals (selected with input from the potentially affected community) where human safety, infrastructure, private or community property is at risk due to slides, debris torrents or flooding that can be attributed to harvesting or roads	F5-7	100% conformance with recommendations from qualified professional reports	Zero	Public concern (FPAG)	Forest Practices Code Act Forest and Range Practices Act	Forest Stewardship Standard, Windthrow Hazard Assessment, Terrain Stability Assessments, Hydrological Assessments, Operational Plans	Road Inspections, Post Harvest Assessments, Incident Investigation Reports, inspections by government agencies
Protection of forest values from public abuse	Limit damage caused by members of the public to forest values	Provision of reasonable support , where requested, to volunteer groups to facilitate observing and reporting of criminal behavior in the DFA	F 5-12	Provide all reasonable support where requested	Zero	Public concern (FPAG)	Forest and Range Practices Act	Corporate Donations Ongoing communication Operational planning	External communication file



CFM Criterion 6: Society's Responsibilities

Society's responsibility for sustainable forest management requires that fair, equitable, and effective forest management decisions are made.

CSA SFM Element 6.1: Aboriginal and Treaty Rights									
Recognize and respect Aboriginal and Treaty Rights. Understand and comply with current legal requirements related to Aboriginal title and rights, and treaty rights									
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CSA SFM Element 6.2: Respect for Aboriginal Forest Values, Knowledge, and Uses									
Respect traditional Aboriginal forest values and uses identified through the Aboriginal input process.									
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CSA SFM Element 6.3: Forest Community Well Being and resilience									
Encourage, co-operate with, or help to provide opportunities for economic diversity within the community.									
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CSA SFM 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.

Value	Objective	Indicator	#	Target	Acceptable Variance	Basis for the target	Legal Requirements	Means of Achieving Objective and Target	Monitoring and Measurement
Sites of Special Significance (SSS); Community trust	General stakeholder confidence that forest management plans and assessments adequately address specific, identified issues and values within SSS; To build local communities' trust in Teal's forest management through public meetings	The percentage of public meetings held according to the SSS Community Communications Plan	F 6-10	100%	Meetings may be postponed where forest planning is curtailed for operational reasons	Positive working relationships with communities (FPAG)	N/A	Public open house meetings	Community Communications Plan
		Percent of requested field reviews within SSS from stakeholders completed with stakeholder(s) during forest management planning	F6-11	Complete 100% of reasonable requested field reviews with stakeholders	Zero	Public Concern (FPAG)	N/A	Operational Planning, Community Meetings, On-going communication, On-site field reviews	External communication file, Community meeting minutes
		Percent of specific, identified stakeholder issues and values within SSS addressed in forest management planning and assessments	F6-12	100 %	Zero	Public Concern (FPAG)	N/A	Operational Planning, Community Meetings, On-going communication, On-site field reviews	External communication file, Community meeting minutes
		General agreement at open SSS community meetings among stakeholders who have the potential to be directly impacted, held during forest management planning, that professional plans and assessments address stakeholders' specific, identified issues and values associated with SSS	F6-13	Seek general consensus (100%)	- 25 % (i.e. 75% in agreement)	Public Concern (FPAG)	N/A	Operational Planning, Community Meetings, On-going communication, On-site field reviews	External communication file, Community meeting minutes



CSA SFM 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.

Value	Objective	Indicator	#	Target	Acceptable Variance	Basis for the target	Legal Requirements	Means of Achieving Objective and Target	Monitoring and Measurement
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