

Appendix 1a

Values, Objectives, Indicators & Targets Summary Tables

Honeymoon Bay portion of the Defined Forest Area

October 2008



The **Teal-Jones Group**



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 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
Variety and pattern of ecosystems and ecosystem processes at landscape level	Maintain representative ecosystems across the landscape	Old Growth Representation	H1-1	Meet Old growth Management Area representation by Landscape Unit as defined in the Landscape Unit Plan for Caycuse, Gordon, Nitinat, San Juan, and Walbran LUs and for the Cowichan LU	Zero	Landscape Unit Plan	Forest Practices Code Act Forest and Range Practices Act	Landscape Unit Plan	OGMA Inventory, Post harvest assessments, inspections by government agencies
		Stand level retention for each cutblock as a percent of the harvest area (Wildlife Tree Patch)	H1-2	Single cutblock 3.5% Group of cutblocks 7%	Zero	Forest Planning & Practices Regulation Forest Stewardship Plan	Forest and Range Practices Act	Landscape Unit Plan, Operational Planning	Post harvest assessments, Phoenix database, inspections by government agencies
Species at risk	Maintain/enhance habitat needs for threatened or endangered species	Compliance with Wildlife Habitat Area (WHA) orders and objectives	H1-3	Full Compliance with Wildlife Habitat Area (WHA) orders and objectives	Zero	Integrated Wildlife Management Strategies	Forest Practices Code Act, Forest and Range Practices Act, Species at Risk Act	Operational Planning	Post harvest assessments, File review, inspections by government agencies
	Manage activities to support survival and success of species at risk	Compliance with Integrated Wildlife Management Strategies	H1-4	Full compliance with Integrated Wildlife Management Strategies	Zero	Integrated Wildlife Management Strategies	Forest Practices Code Act, Forest and Range Practices Act, Species at Risk Act	Operational Planning	Post harvest assessments, File review, inspections by government agencies
Critical habitat features for special interest species	Maintain Roosevelt Elk and Black Tailed Deer critical habitat	Area within TFL 46 managed for Roosevelt Elk and Black Tailed Deer winter range	H1-5	Minimum of 1215.3ha of the Timber Harvest Land Base managed as Ungulate Winter Range	Zero	Ungulate Winter Range #U-1-002 Order	Forest Practices Code Act Forest and Range Practices Act	Operational Planning	Post harvest assessments, File review, 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.									
Value	Objective	Indicator	#	Target	Acceptable Variance	Basis for the target	Legal Requirements	Means of Achieving Objective and Target	Monitoring and Measurement
Critical habitat features for special interest species	Maintain existing and potential bear dens	Number of bear dens found during field work that are protected	H1-6	Retain 100% 'high value' and 80% 'moderate value' bear dens as rated on the Bear Den Protection Key	10% per 5 year rolling average	District direction	N/A	Operational Planning	Bear Den Protection Key, file review
Cedar/ Cypress	Maintain Cedar/ Cypress population within TFL 46 for cultural, ecological and economic purposes	Total Cedar/ Cypress trees planted by species	H1-7	Average Cedar/ Cypress planted is minimum 20% of total trees planted over a 5 year rolling average	Zero	Stocking Standards	N/A	Operational Planning, planting programs	Phoenix database
Wildlife	Minimize risk to wildlife	Public Access	H1-8	Public has full access to TFL (open gate policy)	Public access is restricted where safety, vandalism or wildlife poaching are concerns. Wilderness Watch volunteers or other conservation groups may be given keys to closed gates as requested, on a case by case basis	District direction	N/A	Operational Planning	Contact Wilderness Watch, file review
Native flora and fauna	Maintain natural diversity of native flora and fauna	Percent site occupation of invasive plant species at time of free growing	H1-9	0% for broom, Gorse, Knotweed 10% for thistle, tansy, daisy, St. John's Wort	5%	Forest Stewardship Plan	Forest and Range Practices Act	Operational Planning	Forest Stewardship Plan, inspections by government agencies
Maintain natural diversity of native flora and fauna	Retain a component of hardwoods within the stands	Number of hardwood stems per hectare (sph)	H 1-10	Average number of hardwood sph is minimum of 25, measured on 5 year average	1.25 sph (5%)	Forest Stewardship Plan	Forest and Range Practices Act	Operational Planning	Forest Stewardship Plan, inspections by government agencies



CSA SFM Element 1.3: Genetic Diversity									
Conserve genetic diversity by maintaining the variation of genes within species									
Value	Objective	Indicator	#	Target	Acceptable Variance	Basis for the target	Legal Requirements	Means of Achieving Objective and Target	Monitoring and Measurement
Genetically diverse species	Maintain genetic diversity of native species	Percent of seed used for reforestation registered according to the Chief Forester's Standards for Seed Use	H 1-11	100%	Zero	Chief Forester's Standards for Seed Use	Forest and Range Practices Act	Operational Planning	Phoenix database, SPAR database, inspections by government agencies

CSA SFM Element 1.4: Protected Areas and Sites of Special Biological Significance									
Respect protected areas identified through government processes. Identify sites of special biological significance within the DFA and implement management strategies appropriate to their long-term maintenance.									
Value	Objective	Indicator	#	Target	Acceptable Variance	Basis for the target	Legal Requirements	Means of Achieving Objective and Target	Monitoring and Measurement
Rare or unique biological features such as, karst topography, caves, mineral licks, etc.	Manage rare or unique sites of ecological, geological, historical or cultural importance in a manner that recognizes their special qualities	Number of special biological sites	H 1-12	Spatially track all special sites identified (outside of OGMA, WHA, etc)	Zero	Forest Stewardship Plan	Forest and Range Practices Act	Operational Planning	Forest Stewardship Plan, inspections by government agencies



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 forest ecosystem productivity and productive capacity by maintaining ecosystem conditions that are capable of supporting naturally occurring species.

Value	Objective	Indicator	#	Target	Acceptable Variance	Basis for the target	Legal Requirements	Means of Achieving Objective and Target	Monitoring and Measurement
Ecosystem recovery from disturbance & stress	Forest management activities do not compromise the ability of the ecosystem to recover from disturbance and stress	Successful regeneration (average time required to reforest a cutblock)	H2-1	Full compliance with regeneration delay requirements in approved stocking standards	Zero	Stocking standards	Forest Practices Code Act Forest and Range Practices Act	Site preparation, planting	Regeneration surveys, phoenix database, inspections by government agencies
		Successful establishment of stands (cutblocks meet free growing criteria)	H2-2	Full compliance with free growing requirements in approved stocking standards	Zero	Stocking standards	Forest Practices Code Act Forest and Range Practices Act	Site preparation, planting, brushing	Free Growing surveys, phoenix database, inspections by government agencies
Healthy Forests	Minimize stress associated with Harvesting activities	Number of industrial caused fires	H2-3	Zero accidental industrial caused fires	2 per year	Emergency Preparedness & Response Plan - Wildfire	Forest Practices Code Act, Forest and Range Practices Act, Wildfire Act	Emergency Preparedness & Response Plan - Wildfire	Fire Reports, inspections by government agencies
	Minimize impacts due to windthrow	Number of Catastrophic Windthrow Events within Riparian Reserve Zones as a result of harvesting activities	H2-4	Zero	Two	Riparian Management Areas	Forest Practices Code Act, Forest and Range Practices Act, Fisheries Act	Windthrow Hazard Assessment, Operational Plans	Incident Investigation Reports, inspections by government agencies
		Percentage of required windthrow treatments that are completed in a timely manner	H2-5	100%	Zero	Riparian Management Areas	Forest Practices Code Act Forest and Range Practices Act	Windthrow Hazard Assessment, Terrain Stability Assessments, Operational Plans	Incident Investigation Reports, inspections by government agencies



CSA SFM Element 2.2: Forest Ecosystem Productivity									
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
Productive forest ecosystem	Conserve productivity of forests by minimizing disturbance due to harvesting activities	Compliance with soil conservation limits (permanent access structures and soil disturbance)	H2-6	100%	Zero	Legislation	Forest Practices Code Act Forest and Range Practices Act	Operational Planning	Post Harvest Assessments, Incident Investigation Forms, Phoenix database, inspections by government agencies



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.

Value	Objective	Indicator	#	Target	Acceptable Variance	Basis for the target	Legal Requirements	Means of Achieving Objective and Target	Monitoring and Measurement
Soil	Protection of forest soils	Compliance with soil conservation limits (permanent access structures and soil disturbance)	H3-1	100%	Zero	<i>See indicator H2-6 for details</i>			
		Number of landslides in recently built roads	H3-2	Zero	Two	Forest Practice Board definition of landslide	Forest Practices Code Act Forest and Range Practices Act	Windthrow Hazard Assessment, Terrain Stability Assessments, Operational Plans	Road Inspections, Post Harvest Assessments, Incident Investigation Reports, inspections by government agencies
		Number of landslides in recently harvested blocks	H3-3	Zero	Two	Forest Practice Board definition of landslide	Forest Practices Code Act Forest and Range Practices Act	Windthrow Hazard Assessment, Terrain Stability Assessments, Operational Plans	Post Harvest Assessments, Incident Investigation Reports, inspections by government agencies
		Activities related to restoration of significant erosion hazards resulting from roads	H3-4	Mitigate high erosion hazards on a priority basis	Activities completed as funding is available	Forest Investment Account – Watershed Restoration	Forest Practices Code Act Forest and Range Practices Act	Forest Investment Account funding	Erosion Hazard Risk Ranking, Inspections
		Number of reportable spills of hazardous materials to land	H3-5	Zero	1 spill per year	Emergency Preparedness & Response Plan – Spill Contingency Plan	Forest Practices Code Act, Forest and Range Practices Act, Environmental Management Act	Emergency Preparedness & Response Plan – Spill Contingency Plan	Spill Reports, inspections by government agencies



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	Protection of water resource	Number of Coastal Watershed Assessments adhered to in operational planning	H3-6	3 (Gordon, Harris/Hemmingsen & Hatton)	Zero	Coastal Watershed Assessment Procedures	Forest Practices Code Act	Operational Planning	Post Harvest Assessments, inspections by government agencies
		Number of reportable spills of hazardous materials to water	H3-7	Zero	1 spill per year	Emergency Preparedness & Response Plan – Spill Contingency Plan	Forest Practices Code Act, Forest and Range Practices Act, Environmental Management Act	Emergency Preparedness & Response Plan – Spill Contingency Plan	Spill Reports, inspections by government agencies
		Bridge & Major Culvert repairs	H 3-12	All structures with a high risk of damage to the environment or safety are repaired within the next weather (fisheries) window	Zero	Riparian Management Areas	Forest & Range Practices Act	Operational Planning	Structure Inspections
Fisheries	Protection of fisheries resources	Retention of Riparian Reserve Zones	H3-8	Full retention of Riparian Reserve Zones adjacent to fish bearing streams	Zero	Riparian Management Areas	Forest Practices Code Act , Forest and Range Practices Act, Fisheries Act	Windthrow Hazard Assessment, Operational Plans	Post Harvest Assessments, inspections by government agencies
		Retention of Riparian Management Zones	H3-9	25-100% basal area retention within the RMZ of all streams class S1-S4	Zero	Riparian Management Areas	Forest Practices Code Act , Forest and Range Practices Act, Fisheries Act	Windthrow Hazard Assessment, Operational Plans	Post Harvest Assessments, inspections by government agencies
		Management of Fisheries Sensitive Features	H 3-10	Minimum of 20% of the annual FIA budget for TFL 46 to be spent on fisheries related projects	-10% (no restrictions on upper limit)	Forest Investment Account – Watershed Restoration	Forest Practices Code Act , Forest and Range Practices Act, Fisheries Act	Forest Investment Account funding	External communications file



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
Fisheries	Protection of fisheries resources	Number of fish barriers resulting from old road building methods (e.g., steep culverts) addressed as referrals received from outside sources	H 3-11	Fish barriers are addressed where operationally feasible	Zero	Forest Investment Account – Watershed Restoration	Forest Practices Code Act Forest and Range Practices Act	Forest Investment Account funding	External communications file

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 (cont.)									
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
Natural ecological cycles	Accelerate forest growth to maximize carbon absorption	Successful regeneration (average time required to reforest a cutblock)	H4-1	Full compliance with regeneration delay requirements in approved stocking standards	Zero	<i>See Indicator H2-1 for details</i>			
	Minimize negative impacts of harvesting on natural global ecological cycles	Percent of volume harvested converted to long term products (e.g., solid wood) versus short term products (e.g., pulp)	H4-2	80% per year	10%	Public concern	N/A	Modern and dynamic wood processing facilities	Log sales and manufacturing, accounting records
		Coarse Woody Debris Program	H4-5	Report on status of Coarse Woody Debris Program a minimum of once per year	Zero	Public concern	N/A	Management Environmental Review Committee	MERC minutes



CSA SFM Element 4.2 Forest Land Conversion									
Protect forestlands from deforestation or conversion to non-forests.									
Value	Objective	Indicator	#	Target	Acceptable Variance	Basis for the target	Legal Requirements	Means of Achieving Objective and Target	Monitoring and Measurement
Forest Land	Minimize conversion of forests to other uses	Review and respond to proposals for conversion of forested lands to non-forest uses	H4-3	Evaluate and respond to 100% of all formal proposals	Zero	Internal policy	Forest Act, Forest Land Reserve Act	On-going communication	External communication files
	Access structures are built and maintained for long term uses to support forest maintenance/ silviculture, fire protection, recreation while also protecting the soil resource	Compliance with soil conservation limits (permanent access structures and soil disturbance)	H4-4	100%	Zero	<i>See indicator H2-6 for details</i>			



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 both timber and non-timber benefits.

Value	Objective	Indicator	#	Target	Acceptable Variance	Basis for the target	Legal Requirements	Means of Achieving Objective and Target	Monitoring and Measurement
Timber	Sustainable harvest levels	Annual harvest levels relative to the volume of harvesting determined to be sustainable in the Allowable Annual Cut Determination	H5-1	100% compliance with Allowable Annual Cut over Cut Control Period	Harvest levels may exceed AAC by 10% per Cut Control Period, however the excess amount is subtracted from the following Cut Control Period. Where harvest levels are below AAC in a Cut Control Period, unharvested portions may be assigned to other licensees	Timber Supply Review	Forest Act	Operational Planning	Scaling records, waste & residue surveys, MOF electronic submissions, inspections by government agencies
Minor Forest Products	Improve utilization of forest through Minor Forest Products harvesting	Annual volume (cubic metres) of Managed Minor Forest Products harvested (Douglas fir and cedar salvage)	H5-2	Provide opportunities for Minor Forest Products as requested and as available	Zero	Internal policy	Forest Practices Code Act Forest and Range Practices Act	Operational Planning	Scaling records, MOF electronic submissions, inspections by government agencies
		Opportunities for Unmanaged Minor Forest Products harvesting initiatives	H5-3	Provide support for unmanaged Minor Forest Products harvesting initiatives as requested and as available	Local ecology, wildlife habitat, biodiversity, etc. are considerations with any harvesting proposal	Public concern	N/A	On-going communication	External communication files
Recreation & Tourism	Visual Quality	Compliance with Visual Quality Objectives in visually sensitive areas	H5-4	100% (zero non-compliances)	1 non-compliance	Visually Sensitive Areas	Forest Practices Code Act Forest and Range Practices Act	Operational Planning	Phoenix database, inspections by government agencies



CSA SFM Element 5.1: Timber and Non-Timber Benefits (continued)

Manage the forest sustainably to produce an acceptable and feasible mix of both timber and non-timber benefits.

Value	Objective	Indicator	#	Target	Acceptable Variance	Basis for the target	Legal Requirements	Means of Achieving Objective and Target	Monitoring and Measurement
Special sites	Manage rare or unique sites of ecological, geological, historical or cultural importance in a manner that recognizes their special qualities	Number of special biological sites	H5-5	Spatially track all special sites identified (outside of OGMA, WHA, etc)	Zero			<i>See indicator H1-12 for more details</i>	
Hunting & Fishing	Provide access to hunting and fishing grounds	Public Access	H5-6	Public has full access to TFL (open gate policy)	Public access is restricted where safety, vandalism or wildlife poaching are concerns. Wilderness Watch volunteers or other conservation groups may be given keys to closed gates as requested, on a case by case basis				<i>See indicator H1-8 for more details</i>



CSA SFM Element 5.2: Communities and Sustainability

Contribute to the sustainability of communities by providing diverse opportunities to derive benefits from forests and to participate in their use and management.

Value	Objective	Indicator	#	Target	Acceptable Variance	Basis for the target	Legal Requirements	Means of Achieving Objective and Target	Monitoring and Measurement
Employment	Stable, full time jobs provided from TFL 46	Number of full time direct jobs (employees and full phase contractors)	H5-7	110	The intent of this indicator is to provide a general idea of the number of people employed by harvesting within the TFL, results will fluctuate over time	Public concern	N/A	Develop tracking system	Contractor & Employee records, Scaling records, waste & residue surveys

CSA SFM Element 5.3 Fair Distribution of Benefits and Costs

Promote the fair distribution of timber and non-timber benefits and costs.

Value	Objective	Indicator	#	Target	Acceptable Variance	Basis for the target	Legal Requirements	Means of Achieving Objective and Target	Monitoring and Measurement
Contributions to society (including local communities)	Employment opportunities for local communities	Number of new employees hired from local communities	H 5-10	Prioritize hiring from local communities	Experience, education, and references are also considered in choosing candidates for employment	Public concern	N/A	Local advertisements	Employment records
Investment in TFL Workers	Opportunities for workforce training and skill development	Conformance with internal mandatory training requirements	H 5-12	Full conformance	+/-10%	Corporate Management System	N/A	Training Needs Assessments	INTRAC database
Contributions to society (including local communities)	Assess the monetary benefits to the local community as a result of harvesting in TFL	Total dollars contributed to the local economy	H 5-13	Report on total dollars contributed to the local economy	The intent of this indicator is to provide a general idea of the dollars contributed to the local economy by harvesting within the TFL, results will fluctuate over time	Public concern	N/A	Develop tracking system	Employment records



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									
Value	Objective	Indicator	#	Target	Acceptable Variance	Basis for the target	Legal Requirements	Means of Achieving Objective and Target	Monitoring and Measurement
Aboriginal and Treaty Rights	Coordinate and manage activities to maintain a good working relationship with local First Nations	Number of invitations extended to local First Nations and participation in SIPAG	H6-1	Minimum of one per meeting, per First Nation member; increase participation	Zero	Positive working relationships	N/A	On-going communication	SIPAG meeting minutes
	Provide opportunities for input into planning	Documented opportunities provided to local First Nations for review of operational plans	H6-2	SFMP is provided annually, 100% of landscape level plans are accessible for review by local First Nations, site level plans are provided as requested	Zero	Positive working relationships	Forest Practices Code Act Forest and Range Practices Act	Landscape Level Plan review meetings	Correspondence files
	Provide opportunities for input into planning	Number of responses to plan referrals received from local First Nations	H6-3	60%	-10%	Positive working relationships	Forest Practices Code Act Forest and Range Practices Act	Landscape Level Plan review meetings	Correspondence files



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.

Value	Objective	Indicator	#	Target	Acceptable Variance	Basis for the target	Legal Requirements	Means of Achieving Objective and Target	Monitoring and Measurement
Aboriginal values	Actively investigate and plan for the management of cultural heritage resources	Management of cultural heritage resources , as they are located	H6-4	In consultation with First Nations, identify and manage cultural heritage resources	Exceptions are permissible, in consultation with First Nations, where worker safety or operability are management factors	Forest Stewardship Plan	Forest Practices Code Act Forest and Range Practices Act	Archaeological Assessments, Traditional Use Studies, Operational Planning	Forest Stewardship Plan, correspondence files, inspections by government agencies
Cultural Cedar	Work with First Nations to identify a current/and or future supply of Cedar and Cypress suitable for traditional use and not cause, as a result of forest activities, the supply to become unavailable	Number of First Nation requests that are responded to for establishing a protocol for identifying a current and/or future supply of Cedar and Cypress trees suitable for traditional use within TFL 46, consistent with the extent of historical use	H6-5	100%	Zero	Forest Stewardship Plan	Forest Practices Code Act Forest and Range Practices Act	On-going communication	Correspondence files



CSA SFM Element 6.3: Public Participation

Demonstrate that the SFM public participation process is designed and functioning to the satisfaction of the participants.

Value	Objective	Indicator	#	Target	Acceptable Variance	Basis for the target	Legal Requirements	Means of Achieving Objective and Target	Monitoring and Measurement
Informed, fair, inclusive and timely decision making	Public values are incorporated into forest management planning	Number of SIPAG meetings per year to review the Sustainable Forest Management Plan and any issues relevant to forest management within TFL 46	H6-6	Minimum 2 meetings per year	Zero	SIPAG Terms of Reference	N/A	Scheduled meetings	SIPAG meeting minutes
		Responses to Correspondence received from general public	H6-7	Respond to all public inquiries/ comments where contact information is provided	Zero	Internal policy	N/A	On-going communication	External communication file

CSA SFM Element 6.4: Information for Decision Making

Provide relevant information 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
Investment in TFL Workers	Opportunities for workforce training and skill development	Percent conformance with internal mandatory training requirements	H6-8	100%	+/-10%	<i>See indicator H5-12 for more details</i>			