

CCFM Criteria	CSA-SFM Elements	Value	Objective	Indicator	Target	Timeframe	Basis for the Target	Legal Requirements	Means of Achieving Objective & Target	Monitoring & Measurement	Acceptable Variance	Forecasts	Current status of indicator	Public participation process	Link (Strategy)
1.0 Conservation of Biological Diversity	1.1 Ecosystem Diversity	Biodiversity	To maintain Forest biodiversity and wildlife habitat over time and space.	- number of PSP's established on AC limits	To establish & maintain permanent sample plots (PSP's) on Nfld. Woodlands Timber Limits, to evaluate & ID various bird & animal species and growth of tree species.	Yearly	- Determine growth & yield curves. - ID species on AC Limits	Contract signed with DFRA	AC monetary contribution to the Forest Inventory Project on an annual basis	- annual inventory camps, to conduct field exercises.	Provide financial resources as needed	Sample plots maintained & re-measured overtime with accurate growth & yield curves developed. As well, a list of expected animal, bird, & plant species found on AC limits. Future forest mgmt plans to consider results of inventory.	Plot data expanded to include Temporary Sample Plots (TSP's). In 2002, 252 PSP's Located on AC Limits	Yes	FEMS Ch. 11
		Representative Landscape	Have adequate representation of the various forest successional stages	% & extent of area (ha) of each forest type across the DFA	Maintain a minimum of 15% representation of each forest age class across the DFA, for age classes (0-20),(21-40),(41-60),(61-80),(81+)	5-yr. Periods AAC Calculations	Desire to have long-term sustainability of the resource by both ACCC & Govt.	Govt. Requirement to maintain representative age classes.	Follow Harvest Strategies	Past annual reports and GIS exercise at the landscape level	0% (has to be 15% or above)	Over time maintain a min. of 15% representation across the DFA through Woodstock outputs.	New AAC levels for 2001-2005 period (part&base)	Yes	Ch. 9.1
	1.2 Species Diversity	Biodiversity	To maintain Forest biodiversity and wildlife habitat over time and space.	- Participation with identified groups, through financial support, &/or resource support, and workable models developed.	Work with the WNMf, Provincial and Federal Governments on Pine Marten research for habitat management.(refine a model), & also a BAP model	Ongoing	Pine Marten is an endangered species on the Island	Endangered Species Legislation (federal & provincial)	AC monetary contribution to the research & training initiative. Participate on P.Marten Recovery Team	Through regular meetings with Pine Marten working groups & regular BAP working groups.	No variance	Continued support until an effective model is developed	Model has been developed. Late 2002 and 2003 model being re-defined.	Yes	FEMS Ch. 10.4
		Healthy Forests	To manage our forests in a manner that helps protect, maintain, & enhance forest health & productivity.	- % of planting stock derived from local seed source.	To maintain &/or enhance the genetic pool throughout our timber limits, by targeting 100 % planting stock from local seed source	Yearly	Best management practice	No legal requirement to plant 100% local seed source.	Supv. of Silviculture & Environment to maintain close relationship with Provincial Tree Nursery (ie. monitoring of yearly seed crops) and follow silviculture strategies.	Through discussion with tree nursery personnel and site visits	No variance	Over time all trees planted coming from local seed sources	100% of stock planted has been through local seed source by obtained by local tree nursery	Yes	FEMS Ch. 9.3
1.4 Protected Areas	Special Places	Protect & Maintain a portion of ecoregions, represented on the DFA.	- Number of areas recommended for protection on DFA.	Identify representative ecoregions on DFA, with Provincial planning team.	Ongoing	A need for ecoregion protection on the Defined Forest Area	No legal requirement	Work with Nature Conservancy of Canada and WERAC to id % presently protected and identify gaps on the DFA	Measure process against respective time frames.	100% of ecoregions on the DFA identified & protected	Over time ecoregions on the DFA identified and portion of each protected and/or maintained	Reserve areas are established. New Grand Lake currently identified (ecoregion IIB)	Yes	Ch. 10.7	
2.0 Maintenance & Enhancement of Forest Ecosystem Condition & Productivity (Healthy Forests)	2.1 Forest Disturbance & Stress	Forest Protection	To protect the Defined Forest Area from catastrophic fibre losses, resulting from insects, disease, or fire outbreaks	- area (ha) of insect attack on DFA	To protect the forest on the DFA from fibre losses as a result of insect outbreaks. Target is to spray the required hectares of infected forest as determined by DFRA	When required	Limited fiber supply on the Island Harvest rules stipulated in schedule 1 of the Certificate of Managed Lands	In selecting timber stands for harvesting ... priority shall be given first to merchantable stands damaged by insect, disease, wind, fire or other natural causes...	Contribute approp. \$ for spray program. Review yearly map projection with DFRA for potential outbreaks	Participate / contribute to aerial surveys. Computer Models	No variance	Over time continued participation with Federal and Provincial Agencies	spray program conducted in 2002, covering approx. 32,000 hectares in Districts 11, 12 & 13	Yes	Ch. 10.8
				- area (ha) of fire damage on DFA.	To actively conduct fire identification & prevention activities to quickly stop the spread of fire. Target is to have zero hectares of productive forest lost as a result of wildfire.	Yearly -During Forest Fire Season	Limited fiber supply on the Island	Fire Suppression equipment required on operation & on machinery	Specific Fire fighting training for employees. Interaction with Govt. Fire Patrols activities	Fire Wardens & operations foremen to conduct regular inspections on fire equipment.	No variance	Over time continued participation with Federal and Provincial Agencies	Regular field inspections conducted by fire wardens. Only 1 fire reported from on Company Limit Operations in 2002, which was approx. 9.3 hectares in size.	Yes	Ch. 10.8
	2.2 Forest Ecosystem Productivity	Natural Processes	Support the ecosystem's ability to maintain natural processes over time.	- % of area planted in relation to the 10 % area deemed understocked.	Undertake planting activities in the 10% understocked areas within Nfld. Woodlands Timber Limits.	Yearly	Legal requirements under AAC calculation Best management practice	# of ha's required for Silvicultural activities each year. Provincial Silvicultural Stocking Standards.	Follow silviculture strategies & participate in model development (LANDIS)	Silviculture Technicians to assess areas each year to determine status for treatments. Yearly review of areas planted to determine status.	5% on a yearly basis	Over time all understocked areas on the DFA planted	348 hectares was planted on AC limits in 2002.	Yes	FEMS Ch. 15.4
3.0 Conservation of Soil and Water Resources	3.1 Soil Quality & Quantity	Soil	To undertake effective mgmt. Techniques within our operation to minimize negative impacts to the environment.	- % of ground disturbance, relating to forwarding activities	Forwarding activity not to exceed 4 % ground disturbance in operating areas.	Ongoing to be assessed yearly	Legal Requirement	10%	Follow Forwarding / Harvest Strategies	Utilization Monitoring Program	2%	Over time ground disturbance not to exceed 4% on operating areas	Program just starting in 2003	Yes	FEMS
				3.2 Water Quality & Quantity	Water Quality	To undertake effective mgmt. Techniques within our operations to minimize negative impacts to the environment.	- Number of infractions / fines.	Downstream water quality will be the same as upstream water quality during harvest operations. The target is to have zero infractions or fines	Ongoing	Best management practice Legal requirements	Buffers must be established on Waterways & no activity to occur in buffers without proper approval.	Follow harvest strategies and operating procedures	Monthly inspections by Supervisors & Superintendents on water quality (silt, debris in stream, etc.) are conducted.	No variance	Over time no infractions or fines related to water quality on the DFA
4.0 Forest Ecosystem Contributions to Global Ecological Cycles	4.1 Carbon Uptake & Storage	Research & Development	Participate in research that advances understanding of forest science and best management practices (BMP's)	- Number of plots established	To participate in a plot-based National Forest Inventory Design for Canada, to contribute to the first national summary, based on this design by 2005.	Ongoing	Contribution to the Inventory agreement program.	3 year contract signed.	Financial contributions & human resources provided (technicians to help in data gathering on Limits, mgmt support).	1.Actual field plots established according to plot criterion. 2.Regular reports on status of the program.	No Variance	Over time, determine the impacts of our forest activity as it relates to carbon uptake & storage.	No plots established by year-end 2002	Yes	FEMS Ch. 11
				4.2 Forest Land Conversion	Forest Land Conversion	To minimize productive forest area that is permanently removed from the DFA, due to roadbuilding.	- % of area each year of road-building activities on DFA.	Monitor harvest activities & report annually on the percentage of productive area permanently removed from the DFA, due to roadbuilding. Target not to exceed 5%	Ongoing to be assessed yearly	Past Annual Report	10%	Annual Aerial Photos / Satellite Imagery & Global Positioning Systems (GPS) Harvest Strategies	Analysis of all road construction at the end of year to determine productive area (ha) removed	3%	Over time ground disturbance not to exceed 5% on operating areas

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5.0 Multiple Benefits	5.1 Timber & Non-Timber Benefits	Commercial Timber	Maximize utilization of wood fibre.	- Utilization Surveys conducted by Government or company. (ie: # of surveys conducted)	Volume of wood left on cutover not to exceed 6 m ³ / ha.	Operating blocks - 2 year rule	Govt. inspection program, which conducts random utilization surveys. Limited Fibre Supply	6 m ³ / ha or less.	Close interaction with inventory working groups (Govt & Company) Harvest Strategies	Regular Meetings of working groups, and Random Utilization Surveys by Govt. & Company	+ 10%	Over time, Company utilization figures not to exceed 6 m ³ / ha within each harvest block after the 2-year rule has expired.	As per the 2001-2005 AAC Analysis In 2002, there were 220 plots completed.	Yes	FEMS Ch. 14.2	
		Recreation (non-timber)	Where appropriate, provide access for recreational forest based activities: fishing, canoeing, etc...	- Buffers around sport fishing recreational areas (lakes, ponds, rivers) - Km of Road Closures / Yr.	Preserve and protect known recreational areas located on the DFA. - Have 0 Km's of Road Closures per year.	Ongoing	Recreational areas identified through the public participation process in 5-year plan development	Yes- specific buffer widths in various areas. (usually identified under EA process).	Actual "on-the-ground" identification by forest technicians.	Government inspections Company inspections.	No variance	Over time, forest activity conducted to have minimal or no negative impacts to respective forest based recreational activity.	Buffers established on ponds, brooks, lakes, etc.	Yes	Ch.10.6	
			Where appropriate, provide opportunity for cabin development areas on the DFA.	- Number of cabin development areas located on DFA	To reduce the number of remote cabins / cottages on the DFA, through the establishment of proper Cabin Development Areas.	Ongoing	Public Demand for the establishment of cottage areas	No	Upon public demand determine cabin development areas on the DFA	Yearly Review with SFM Planning team to determine the number of cabin development areas on DFA	No variance	Over time, illegal remote cabins to be eliminated by having proper cabin development areas.	In 2002, there were 9 Cabin Development Areas located on the DFA	Yes	Ch. 10.7	
	5.2 Communities & Sustainability	Employment		To allow opportunities for employment of timber & non-timber values through: a) Nfld. Woodlands Operations	- (a) Collective Agreement - Employment Trends	a) Effective communications with local unions to produce and maintain collective agreements.	As per collective agreement	collective agreement established.	Yes.	Union - Company meetings, Seminars Public Service Announcements, & Negotiations.	Grievance process, if company actions not acceptable to the union.	No variance	Successful negotiations & implementation of new collective agreements after current ones expire.	CEP Local 579 (Jan1/00 - Dec31/05) CEP Local 60N (Jan1/99-Dec31/03) CEP Local 60N (Jan1/99-Dec31/03)(Silviculture) CEP Local 63 (158)(May1/98-April30/04)	Yes	Ch. 10.3
				b) Commercial Operators	- (b) Commercial areas established (ie: # of operators on AC Limits).	b) Establish areas in 5-year operating plans for commercial operators.	Every 5-years during the development of 5-year operating plans	Areas established through public process as a result of general demand.	Yes, of approved plans through EA process.	Respond to request by commercial operators	Company inspections Government Inspections	No Variance	Over time, endeavour to meet the demands of commercial operations on AC limits.	In 2002, there are approx. 15 commercial operators on AC limits	Yes	Ch. 10.3
				c) Local Outfitters	- (c) Number of local outfitters on district planning teams.	c) Provide an opportunity for local outfitters to have input in the development of operating plans.		Concern by local outfitters to know when & where the company will conduct forest activity.	Yes, of approved plans through EA process.	PPP meetings, personal invitations, informative conservations, GIS database	Actual # of outfitters attending planning meetings &/or represented at meetings.	No Variance	Interested outfitters concerns identified & resolved during PPP, before plans going to EA.	8 outfitters represented during last 5-yr plan for Dist. 10, 11 & 12	Yes	Ch. 10.3
				d) Agriculture Development	- (d) Amount of land (Hectares), made available to agriculture.	d) Where practical, utilize available agriculture zones.		Demand for other uses of the land.	Yes, of approved plans through EA process.	When requested through PPP or crown determine available landbase.	GIS database, Aerial Photography, Satellite Imagery	No Variance	Local opportunities for Agriculture development id'ed through PPP	Approx. 250 Hectares of land used for Agricultural Development in the DFA.	Yes	Ch. 10.3
	5.3 Fair Distribution of Benefits & Costs	Integrated Resources		Participate in the sale of sawlogs for pulpwood to local integrated sawmills.	- Volume (M3) of sawlogs made available to local sawmills.	Separate pulpwood from sawlogs "at the stump" on mechanical harvesting operations.	Ongoing	Limited Fibre Supply - Help local sawmill industry	Required to meet any contractual commitments.	Harvest Strategies	Monthly Newfoundland Woodlands Scale Reports.	No variance	Over time, help to maintain a viable local sawmill industry.	124,599 m3 of sawlogs produced in 2002.	Yes	Ch. 10.3
	6.0 Accepting Society's Responsibility	6.3 Public Participation	Public Participation	Open dialogue through representative public advisory groups to participate in the development of the sustainable forest management (SFM) plan & the five-year operating plans.	- # of Forest plans developed & implemented across the DFA	Newfoundland Woodlands to produce & implement a 20 yr SFM plan, covering all its forest management districts. As well, development & EA registration of five-year operating plans	Update every 5 years	PPP Legal Requirement	No legal requirement to develop a SFM plan for all our jurisdiction. Legal requirement for 5-year operating plans.	Dedicated budget / resources, Invitations to public and other organizations.	Yearly review of Past Annual Report with SFM Planning Team.	No variance	All interested Stakeholders id'ed through the PPP, where specific values and interest are identified and potential areas of conflict are resolved before forest plans go to EA registration.	SFM Plan developed in 2001 & Amended in 2003 Districts 5,6,9,13,14 & 16 operating plans (2002-2006) Districts 10,11, & 12 operating plan (2003-2007)	Yes	FEMS
Education			Inform the general public & the various planning committees of Newfoundland Woodlands forestry activities, to increase awareness and understanding, allowing for constructive input.	# of Presentations given in both the SFM plan & five-year operating plans development stages.	Conduct SFM presentations at Public Participation meetings, & allow committee members to present their organization's views and concerns.	Ongoing	Have meetings dedicated to information sessions, where presentations can be given, & answers to questions are provided. Educate stakeholders	No legal requirement	1.) Invite planning team members to give presentations. 2.) Invite expert people to provide presentations on areas of concern. 3.) develop web page	Record # of presentations given. Record # of hits on web page	No variance	Interested stakeholders, other government agencies, and general public aware of Nfld. Woodlands Forest Activity and its commitment to Sustainable Forest Management	13 presentations in development of SFM Plan 14 presentations in development of last five-year plan (10,11&12)	Yes	Ch. 2	
6.4 Informed Decision Making				- # of presentations / tours given to local agencies. - # of presentations / tours given to Government Agencies.	Conduct SFM Presentations to local organizations and Government Agencies. Target to have 12 Presentations / Tours (combined) per year on Sustainable Forest Management	Ongoing	Educate stakeholders	No legal requirement	Mgmt. Staff providing tours and presentations upon request by local agencies, schools, etc.	Record the number of presentations & tours given.	No variance		In 2002, a field tour was provided to local high school & CONA in C. Brook. As well, to CIF members (NL section)	Yes	Ch. 2 Ch. 10.9	