Appendix I: Project comparative matrix

Principle	Criterion	Indicator	\	FSC-BC	SW-FSC	ISO	CSA	SFI
Principle 1: Complaince with Laws and FSC Principles								
	1.1 Forest management shall respect all national and local laws and administrative requirements.			√	√	√	√	
		1.1.1 The manager has a compliance management system.		√		√	√	√
		1.1.2 Personnel who plan and implement management activities demonstrate knowledge of legal, regulatory and administrative requirements.		√		√		
		1.1.3 Forest management planning and operations comply with applicable law.		√	√	√		√
		1.1.4 The manager demonstrates that corrective actions are taken in relation to any occurrences of non-compliance.		√			√	
		1.1.5 Copies of laws and relevant regulations are available to field staff and contractors.			√			
	1.2 All applicable and legally prescribed fees, royalties, taxes and other charges shall be paid.			√	√			
		1.2.1 The manager pays stumpage for the full scaled volume of all logs and maintains a scale and billing database.		√	√: **more spec-ific**			
		1.2.2 Interviews with local officials indicate that appropriate payments are made on a timely basis.			√			
	1.3 In signatory countries, the provisions of all binding international agreements such as CITES, ILO Conventions, ITTA, and Convention on Biological Diversity, shall be respected.			√	√			
		1.3.1 The manager demonstrates respect for the spirit and intent of binding international		√	√			
		1.3.2 The forest management operation is aware of applicable international conventions and provides guidance so that field operations meet the intent of such conventions including CITES, Convention on Biological Diversity and ILO 87 & 98. (Local standard will identify international agreements to which the country is a signatory, or SmartWood headquarters will provide a list of applicable international agreements).			√			
	1.4 Conflicts between laws, regulations and the FSC Principles and Criteria shall be evaluated for the purposes of certification, on a case by case basis, by the certifiers and the involved or affected parties.			√	√			

Principle	Criterion	Indicator	\	FSC-BC	SW-FSC	ISO	CSA	SFI
		1.4.1 Situations where the manager's compliance with the law would preclude compliance with the FSC-BC Regional Standards, or vice versa, are documented.		√	√			
		1.4.2 Conflicts between FSC requirements and laws are resolved through consultation between FSC national contact person (if available), the FSC certifier, or forest management operation, as needed.			√			
		1.4.3 Where a conflict is found to exist, appropriate steps are taken, and documented, to ensure that the FSC-BC Regional Standards are met in the present and can be met in the long		√				
	1.5 Forest management areas should be protected from illegal harvesting, settlement and other unauthorized activities.			√	√			√
		1.5.1 The manager has measures in place to protect the management unit from illegal/unauthorized activities (e.g., a monitoring		√	√			√
		1.5.2 The manager has procedures for reporting illegal harvesting, settlement or other unauthorized activities to appropriate authorities		√	√			
		1.5.3 Through appropriate documentation, the manager makes personnel and/or contractors aware of agreements regarding First Nations harvesting (areas, amounts) and settlements (e.g., temporary hunting shelters) agreed to in protocols or plans under Principle 3, that might otherwise be considered unauthorized activities.		√				
	*1.6 Forest managers shall demonstrate a long-term commitment to adhere to the FSC Principles and Criteria.			√	√	√: **less spec-ific**	√: **Re CSA**	√: **Re SFI**
		1.6.1 The manager has made a publicly available, written commitment to adhere to the FSC-BC Regional Standards over the long term.		√	√			√: **Re SFI**
		1.6.2 Full disclosure is made of all forest areas over which the manager has some management responsibility.		√				
		1.6.3 There is no indication that First Nations or stakeholders are dissatisfied that the manager's activities demonstrates long-term commitment to the FSC-BC Regional Standards.		√				
		1.6.4 Within two years after achieving certification, the manager has in place a timetable for achieving certification of all the manager's lands in BC.		√	√: **less spec-ific**			

Principle	Criterion	Indicator	\	FSC-BC	SW-FSC	ISO	CSA	SFI
Principle 2: Tenure and Use Rights and Responsibilities								
	2.1 Clear long-term tenure and forest use rights to the land shall be clearly demonstrated.			√	√			
		*2.1.1 The manager has the legal right to manage the lands and to utilize the forest resources for which certification is sought.		√	√	√: **less spec-ific**	√	
		2.1.2 Where the manager has a non-replaceable licence, the Province, either alone or jointly with the manager, applies for certification of the management unit.		√				
		2.1.3 A legally documented description of the lands over which the manager has rights, and for which certification is sought, including a properly annotated map, is included in the management		√	√			
		2.1.4 Where the manager does not have title, the owner/Province does not impose constraints that prevent the implementation of the FSC-BC Regional Standards or the management plan in the management unit.		√	√: **Re SW-FSC**			
		2.1.5 Where tenure and forest use rights in the management unit are not held by a single manager, the management activities of other legal tenure holders do not undermine the achievement of management plan objectives.		√	√			
	2.2 Local communities with legal or customary tenure or use rights shall maintain control, to the extent necessary to protect their rights or resources, over forest operations unless they delegate control with free and informed consent to other agencies.			√	√			
		2.2.1 In proactive consultation with local people, the manager identifies, documents and, where appropriate, maps any legal or customary tenure or use rights in the management unit held by one or more people who reside within or adjacent to it.		√	√		√: **less spec-ific**	
		2.2.2 The manager obtains free and informed consent from local rights holders to any portion of the management plan that affects their rights and resources.		√	√			
		2.2.3 Written documentation and interviews indicate that uses of the forest (by local people or the wider public) are sustained on public land except in cases where such use is environmentally damaging and/or poses a threat to the safety of the public and/or forest workers. Public use and access is given due consideration			√			
Principle	**Criterion**	**Indicator**	****	**FSC-BC**	**SW-FSC**	**ISO**	**CSA**	**SFI**
	2.3 Appropriate mechanisms shall be employed to resolve disputes over tenure claims and use rights.			√	√			
		2.3.1 The manager and the disputant(s) develop and implement a mutually agreed-to process to address disputes related to tenure claims and use		√	√			
		2.3.2 The manager maintains a record of disputes and the status of their resolution, including evidence related to the dispute, and documentation of steps taken to resolve the		√	√			
		*2.3.3 The manager is not involved in outstanding disputes of substantial magnitude involving a significant number of interests in relation to the management unit.		√	√			

Principle	Criterion	Indicator	\	FSC-BC	SW-FSC	ISO	CSA	SFI
Principle 3: Indigenous Peoples'								
	3.1 Indigenous peoples shall control forest management on their lands and territories unless they delegate control with free and informed consent to other			√	√			
		*3.1.1 The manager recognizes and respects the legal and customary rights of the First Nation(s) over their lands, territories and resources.		√			√	
		3.1.2 First Nations who hold customary or legal title or who claim aboriginal title to land and resources are documented.			√			
		*3.1.3 The Manager has negotiated a protocol agreement(s) with relevant First Nation(s) that provides for the nature of the relationship between the parties.		√			√	
		3.1.4 Where a dispute arises an effective and fair resolution process is available to address the dispute.		√	√			
		3.1.5 The manager has obtained free and informed consent, normally in writing, for the management plan from the appropriate First		√	√			
		3.1.6 Conditions under which consent has been given and under which it might be withdrawn, if any, are recorded in the management plan.		√				
		3.1.7 Where a Treaty or Interim Measures Agreement sets forth a structure and process for the participation of a First Nation in forestry management, those provisions are followed.			√			
		3.1.8 Where more than one First Nation is affected by the area being proposed for forestry activities, consent from each is ordinarily required.		√				
	3.2 Forest management shall not threaten or diminish, either directly or indirectly, the resources or tenure rights of indigenous peoples.			√	√			
		3.2.1 First Nations with ancestral claims to the forest management area have been given adequate opportunity to participate in planning, research, monitoring and inventories for forest			√			
		3.2.2 First Nations with aboriginal claim to the forest area have been provided opportunities to build capacity through training, employment, and joint venture initiatives.			√			
		3.2.3 Forest management activities within the management unit are planned and implemented in such a way as to maintain the resources and tenure rights of the First Nation(s).		√	√			

Principle	Criterion	Indicator	\	FSC-BC	SW-FSC	ISO	CSA	SFI
	3.3 Sites of special cultural, ecological, economic or religious significance to indigenous peoples shall be clearly identified in cooperation with such peoples, and recognised and protected by forest managers.			√	√			
		3.3.1 Before the completion of forest planning, the First Nations within whose traditional territories the planning is undertaken have been given the opportunity to identify, locate and evaluate sites of aboriginal interests to First Nations. Where definitive identification is difficult, diligent efforts are being made by the forest management operation to identify special sites.			√			
		3.3.2 Forest management activities within the management unit are planned and implemented in such a way as to protect sites of special cultural, ecological, economic, or religious significance to the First Nation(s).		√	√			
		3.3.3 Where permitted by the affected First Nations, there are maps indicating the First Nations sites to be protected.			√			
	3.4 Indigenous peoples shall be compensated for the application of their traditional knowledge regarding the use of forest species or management systems in forest operations.			√	√			
		3.4.1 Where mutually agreed, the First Nation(s) traditional knowledge is incorporated into the management plan and supporting operational plans and practices.		√	√		√: less spec-ific	
		3.4.2 Such compensation shall include an equitable return on any goods or services produced as a result of the First Nations' contribution of traditional ecological knowledge or any other intellectual property rights.			√			
		3.4.2 The First Nation(s) maintain control of their traditional knowledge.		√				

Principle	Criterion	Indicator	\	FSC-BC	SW-FSC	ISO	CSA	SFI
Principle 4: Community Relations and Worker's Rights								
	4.1 The communities within, or adjacent to, the forest management area should be given the opportunity for employment, training and other services.			√	√	√	√	
		4.1.1 Using best available information, the manager's performance on the management unit, either directly or through contractors is tracked and made publicly available.		√			√	√
		4.1.2 The manager demonstrates best practices and improvement over and is implementing policies/measures related to hiring/contracting, training and advancement to improve.		√			√	√
		4.1.3 Program Participants shall encourage landowners to utilize the services of qualified resource professionals and qualified logging professionals in applying principles of sustainable forest management on their lands.						√
		4.1.4 The organization shall establish and maintain procedures for internal communication between its various levels and functions.				√	√	√
		4.1.5 The manager encourages employees to raise concerns without fear of reprisal.		√				
		*4.1.6 The manager treats employees in a fair and equitable manner by adhering to labour/employment standards and human rights standards that demonstrate best practices in British Columbia.		√				
		4.1.7 The manager ensures that contractors contractually agree to adhere to portions of the FSCBC Regional Standards relevant to their activities on the management unit.		√			√: **Re CSA**	
		4.1.8 The manager provides training opportunities, including collaboration with local training providers and institutions where necessary.		√	√			√: **less spec-ific**
		4.1.9 Training opportunities provided by the manager are consistent with training needs identified through consultations with workers, bargaining agents, contractors, First Nations and local community members.		√	√	√	√	
		4.1.10 The manager assists displaced employees to make the transition to new work.		√				

Principle	Criterion	Indicator	\	FSC-BC	SW-FSC	ISO	CSA	SFI
		4.1.11 The manager uses local goods and services when sources are available locally, and takes steps to increase the amount of goods and services purchased locally over time.		√	√	√		
		4.1.12 On an annual basis the manager documents and makes publicly available information regarding the percentage of total value of goods and services purchased locally.		√				
	4.2 Forest management should meet or exceed all applicable laws and/or regulations covering health and safety of employees and their families.			√	√	√	√	
		4.2.1 The manager develops and implements a safety program to meet or exceed occupational health and safety regulations.		√	√	√	√	
		4.2.2 The manager's operations have a consistently low accident frequency rate.		√	√			
		4.2.3 Employees, including contract employees, indicate satisfaction with the manager's safety program and the manager's respect for workers own rights.		√				
		4.2.4 The manager contractually requires contractors/subcontractors to meet legal health and safety regulations and requirements.		√			√	
		4.2.5 The organization shall review and revise, where necessary, its emergency preparedness and response procedures, in particular, after the occurrence of accidents or emergencies; and where practicable, periodically test procedures.			**√: less spec-ific**	√	√	
		4.2.6 Managers will provide appropriate safety equipment for all workers; and equipment is periodically tested and maintained to ensure safe operation.			√			
	4.3 The rights of workers to organize and voluntarily negotiate with their employers shall be guaranteed as outlined in conventions '87 and '98 of the International Labour Organization.			√	√			
		*4.3.1 The manager's actions demonstrate support for the rights of employees to organize and voluntarily negotiate collective agreements.		√	√			
		4.3.2 Official complaints by workers' organisations are adequately addressed.			√			

Principle	Criterion	Indicator	\	FSC-BC	SW-FSC	ISO	CSA	SFI
	4.4 Management planning and operations shall incorporate the results of evaluations of social impact. Consultations shall be maintained with people and groups directly affected by management operations.			√	√	**√: less spec-ific**	√	
		4.4.1 The manager develops and implements a plan for ongoing public participation that accommodates the needs and preferences of directly affected persons regarding the scope and design of the public participation process.		√			√	√
		4.4.2 Directly affected persons are provided with information used in making management decisions in a manner that allows them to understand potential impacts on their rights or		√	√		√	
		4.4.3 In the public participation process, interested parties shall have opportunities to work with the organization and interact to i) identify and select values, objectives, indicators, and targets, based on the CSA SFM elements and any other elements of relevance to the DFA; ii) develop alternative strategies to be assessed; iii) assess alternative strategies and select the preferred one; iv) review the SFM plan; v) design monitoring programs, evaluate results, and recommend improvements; and vi) discuss and resolve any issues relevant to SFM on the DFA; and The organization and the public participation process shall ensure that the values, objectives, indicators, and targets are consistent with relevant government legislation, regulations, and policies.			**√: Re SW-FSC**		√	**√: less spec-ific**
		*4.4.4 Steps sufficient to protect the rights or interests of directly affected persons are developed and agreed to through the public participation process, and implemented by the manager, to the extent these rights or interests are consistent with the FSC-BC Regional		√			**√: Re CSA**	**√: Re SFI**
		4.4.5 Demonstrate that the SFM public participation process is designed and functioning to the satisfaction of the participants.					√	
		4.4.6 Where the manager and directly affected persons fail to reach agreement through the public participation process, a mutually agreed-to dispute resolution process is used.		√	√			√

Principle	Criterion	Indicator	\	FSC-BC	SW-FSC	ISO	CSA	SFI
		4.4.7 When it is evident from the public participation process that further evaluation of social impacts is needed, the manager works with directly affected persons to further evaluate the impacts and ways to address them.		√				
		4.4.8 Forest management plans will reflect community goals for natural resource use and protection as identified in local and regional planning processes, such as LRMPs, LRUPs, LUPs and Official Community Plans.			√			
		4.4.9 Establish and maintain a list of interested parties, including those that chose to participate, those that decided not to participate, and those that were unable to participate. The list shall contain names and contact information, as well as any links to the organization.					√	
		4.4.10 Full or part-time expertise allocated to research in forest health or productivity. Participation in research activities by: a) Membership or direct involvement in cooperative research related to sustainable forestry. b) Active working relationships with natural resource graduate schools, private researchers or USDA research stations. c) Sponsorship of student scholarships and other research opportunities. d) Service on research advisory boards, peer review panels and professional research societies. e) Participation in state or national association research committees (e.g., AF&PA Forest Science & Technology Committee, Institute of Paper Science and Technology Forest Biology Initiative, National Council for Air and Stream Improvement Forest Environmental Studies Task Group). f) Participation in collaborative industry research programs (e.g., AF&PA Agenda 2020).						√

Principle	Criterion	Indicator	\	FSC-BC	SW-FSC	ISO	CSA	SFI
		4.4.11 Program Participants shall provide recreation and education opportunities for the public where they are consistent with their forest management objectives. a) Written policy describing public recreation and education efforts, consistent with forest management objectives. b) Recreation or education expertise on staff or available to develop appropriate programs for the public. c) Participation in state and local efforts to educate the public about sustainable forest management. d) Identification and development of recreation areas where the public can visit sustainable forest management operations. e) Presentations to local groups and clubs about Program Participants' sustainable forestry						√
	4.5 Appropriate mechanisms shall be employed for resolving grievances and for providing fair compensation in the case of loss or damage affecting the legal or customary rights, property, resources, or livelihoods of local			√	√			**√: less spec-ific**
		4.5.1 Local people and institutions generally perceive the forest management operation as fair and effective in avoiding losses and damages affecting local peoples, and in resolving grievances related to legal rights, damage compensation and negative impacts, if any.			√			
		4.5.2 Where written procedures exist for resolving grievances and determining compensation for loss or damage (especially encouraged for large operations), these procedures are followed.			√			
		4.5.3 At a level appropriate to the scale of the forest operation, staff members are appointed responsibility for liaison with local communities and resolution of grievances.			√			
		4.5.4 Where a local person or people have provided the manager with a grievance notice, the manager refrains from carrying out the forestry activity(ies) until the grievance is resolved.		√				
		4.5.5 Where agreement cannot be reached through consultation, negotiation or mediation an independent arbitrator(s) acceptable to both parties determines these matters according to the FSC-BC Regional Standards.		√	**√: Re SW-FSC**			

Principle	Criterion	Indicator	\	FSC-BC	SW-FSC	ISO	CSA	SFI
		4.5.6 The manager documents steps taken to resolve grievances, including evidence related to proof of loss or damage and amount of compensation.		√				
		4.5.7 Where a grievance results in arbitration, the costs of arbitration payable by the parties are determined by mutual agreement or, failing agreement, by the arbitrator(s).		√				
		4.5.8 Where it is determined, either by agreement or arbitration, that the manager is responsible for loss or damage to a grievor(s)' rights, property, resources or livelihood, the manager has measures in place to protect the grievor(s) from future loss or damage due to the manager's		√				
		4.5.9 Program Participants shall support and promote efforts by consulting foresters, state and federal agencies, state or local groups and programs like the American Tree Farm System®, to educate and assist forest landowners, and to encourage them to apply principles of sustainable forest management.						√

Principle	Criterion	Indicator	\	FSC-BC	SW-FSC	ISO	CSA	SFI
Principle 5: Benefits from the Forest								
	5.1 Forest management should strive toward economic viability, while taking into account the full environmental, social, and operational costs of production, and ensuring the investments necessary to maintain the ecological productivity of the forest.			√	√			√
		5.1.1 In implementing the management plan the manager strives towards economic viability within social and ecological limits.		√	√			√
		5.1.2 The management plan and supporting operational plans describe activities in sufficient detail to enable costs of implementation to be credibly estimated.		√				
		5.1.3 The manager's ability to implement the management plan, including investments necessary to maintain the ecological productivity of the forest and provisions to manage for other forest values, is confirmed by business plans and other relevant documents.		√	√			√
		5.1.4 If monitoring, public consultation or research indicates that matters that are specifically addressed by the Standards are nevertheless generating social and environmental costs, then the manager assesses such costs and implements measures to minimize them.		√				√
		5.1.5 When making investment and operational decisions, the manager sets benchmarks for reducing social and environmental costs over time and meets these benchmarks.		√				
		5.1.6 Promote the fair distribution of timber and non-timber benefits and costs.					√	
	5.2 Forest management and marketing operations should encourage the optimal use and local processing of the forest's diversity of products.			√	√			
		5.2.1 Logs and lumber are handled to minimise waste and/or potential loss in value.			√			√
		5.2.2 The manager makes available for purchase a diversity of forest products from the management unit, in a manner appropriate to respond to the needs of local processors, at prevailing market rates, or at prices that cover the		√	√			
		5.2.3 The manager invests in or cooperates with the development of new or additional local processing capacity.		√	√			

Principle	Criterion	Indicator	\	FSC-BC	SW-FSC	ISO	CSA	SFI
		5.2.4 Local processors indicate their business is enhanced by opportunities the manager provides them.		√				
		5.2.5 Without high grading, the manager captures the optimal value of forest products throughout the production cycle.		√	√			
		5.2.6 The manager evaluates different options for enhancing the optimal use of forest products from the management unit and takes appropriate		√	√			
	5.3 Forest management should minimize waste associated with harvesting and on-site processing operations and avoid damage to other forest resources.			√	√			
		5.3.1 Consistent with the requirements for coarse woody debris and snags, waste that is generated through harvesting and on-site processing operations and that does not contribute to site productivity or ecosystem functioning is		√	√			
		5.3.2 The manager ensures felling, skidding/yarding, bucking, sorting and handling are carried out in a way that minimizes breakage and damage while optimizing log utilization, grade		√	√			
		5.3.3 The manager ensures harvesting is carried out in a way that minimizes damage to the residual stand, other ecosystem components, and special features.		√				
		5.3.4 The manager ensures that relevant personnel receive appropriate instruction, training and/or incentives to minimize damage to the residual stand, other ecosystem components, and		√			√	
		5.3.5 Post-harvest waste assessments are routinely conducted and the results are fed back to management planning.			√			
		5.3.6 Options shall be explored to use wood waste to maintain or improve ecosystem health by maintaining on-site organic matter capital or exploring markets to utilise the waste. Wood waste which cannot be recycled or converted into a marketable product is disposed of in a manner which has the least environmental impact, and utilises the best available technology.			√			
	5.4 Forest management should strive to strengthen and diversify the local economy, avoiding dependence on a single forest product.			√	√			
		5.4.1 Forest management strengthens and diversifies the local economy by managing the forest to produce a range of timber products.		√	√		√	

Principle	Criterion	Indicator	\	FSC-BC	SW-FSC	ISO	CSA	SFI
		5.4.2 The management plan forecasts a diversity of timber products compatible with site conditions and local economic objectives for strengthening and diversifying the local economy over time.		√				
		5.4.3 In response to interest from the local community, the manager evaluates existing and potential production of non-timber forest products within the management unit, and identifies and implements forest management practices that produce a diversity of nontimber forest products compatible with site conditions and local objectives for strengthening and diversifying the local economy over time.		√			√	√
		5.4.4 The manager cooperates with forest-dependent businesses and the local community to evaluate the management unit's current and potential contribution to the local economy through environmental amenities, fish and wildlife.		√	√		√	
		5.4.5 The manager identifies and implements forest management practices that are consistent with strengthening and diversifying the management unit's contribution to the local economy from environmental amenities, fish and		√	√			√
		5.4.6 Program Participants shall have policies to manage the impact of harvesting on visual quality.						√
		5.4.7 Users are satisfied the forest management practices are consistent with strengthening and diversifying the management unit's contribution to the local economy from environmental amenities, fish and wildlife.		√				
	5.5 Forest management operations shall recognize, maintain, and, where appropriate, enhance the value of forest services and resources such as watersheds and fisheries.			√	√			
		5.5.1 The manager maintains the range of ecosystem services provided by the management unit.		√	√			
		5.5.2 The manager identifies ecosystem services provided by the management unit, drawing on existing information and public consultation as applicable.		√	√			
		5.5.3 The manager assesses and describes existing and potential impacts of forest management activities on ecosystem services.		√				
		5.5.4 The manager identifies and implements measures required to maintain or enhance ecosystem services.		√				

Principle	Criterion	Indicator	\	FSC-BC	SW-FSC	ISO	CSA	SFI
		5.5.5 Direct local beneficiaries are satisfied the relevant ecosystem services have been adequately maintained.		√	√			
		5.5.6 Field observations indicate normal, natural levels of siltation and sedimentation in or near watercourses.			√			
	5.6 The rate of harvest of forest products shall not exceed levels which can be permanently sustained.			√	√		√: **less spec-ific**	√
		*5.6.1 The rate of timber harvest for the management unit is based on a documented and comprehensive analysis, incorporating the full range of forest resources and restoration.		√	√: **more spec-ific**			√
		5.6.2 The rate of timber harvest is determined in a manner that adequately reflects reliability and uncertainty associated with inventory data, management assumptions, growth-and-yield projections, and analysis methodologies.		√	√: **more spec-ific**			
		5.6.3 AAC or other harvest calculations are being followed in the forest.			√			
		5.6.4 Silvicultural prescriptions (pre-, during-, and post- harvest) are being adhered to.			√			√
		5.6.5 Where the manager harvests or has the ability to control the harvest of non-timber forest products, the manager assures that the rate of harvest reflects the best available inventory and productivity data, provides for sustainable production, and is adjusted when monitoring		√			√: **less spec-ific**	
		*5.6.6 The manager demonstrates that the average of the present and projected annual timber harvests over the next decade, and averages of projected timber harvests over all subsequent decades, do not exceed the projected long-term harvest rate, while meeting the FSC-BC Regional Standards over the long term.		√	√: **Re SW-FSC**			√: **less spec-ific**
		5.6.7 After ten years of FSC certification, the manager demonstrates that the decadal averages of actual timber harvests in decades subsequent to FSC certification have not exceeded the projected long-term harvest rate.		√				
		5.6.8 Actual rate of timber harvest in any given year is no more than 25% above the projected longterm harvest rate.		√				

Principle	Criterion	Indicator	\	FSC-BC	SW-FSC	ISO	CSA	SFI
Principle 6: Environmental								
	6.1 Assessment of environmental impacts shall be completed and adequately integrated into management systems. Assessments shall include landscape level considerations as well as the impacts of on-site processing facilities. Environmental impacts shall be assessed prior to commencement of site-disturbing operations.			√	√			√
		6.1.1 Based on the best available information, the manager assembles relevant inventory data to establish the regional and landscape level context for environmental impact assessment, including at a minimum: a) biogeoclimatic ecosystem classification (BEC) mapping to the variant level for all ecosections which occur within the management unit; b) percentage of Protected Areas by BEC variant and ecosection for the BEC units and ecosections that occur within the management unit (to a level below BEC variant where available, and appropriate to the scale and intensity of management and sensitivity of environmental values); and, c) extent and intensity of land use in surrounding portions of relevant BEC variants and ecosections; specifically including estimated percentage areas of natural forest converted to non-forest uses; landscape level habitat indicators (e.g., fragmentation, seral stage distribution); the scale and degree of detail is appropriate to the		√	√: **more spec-ific**			√: **less spec-ific**

Principle	Criterion	Indicator	\	FSC-BC	SW-FSC	ISO	CSA	SFI
		6.1.2 The manager collects and/or assembles reconnaissance level inventory information appropriate for landscape level planning and completion of a management plan for the management unit as a whole, including at a minimum: a) natural disturbance regime description (including information on frequency, size, distribution and degree of heterogeneity of natural disturbances at the landscape, ecosystem and stand levels); b) list of potentially occurring native species (including at a minimum indicator plants, vertebrates, and other species of concern); and, c) mapping of forest cover, BEC units to the variant level (or site series level PEM/TEM where required for habitat assessments or other assessments), hydrologic features, terrain stability mapping (terrain survey intensity level D or E),		√	√			**√: less spec-ific**
		*6.1.3 As part of the operational management planning process for landscapes and/or watersheds in which road-building or timber harvesting is proposed over the next five years, inventories, assessments and/or appropriate information databases of ecosystem characteristics, resources and environmental values are completed and/or assembled, including at a minimum: a) terrain mapping (at terrain survey intensity level B or C), terrain interpretations (e.g. terrain stability, risk of sediment delivery) and interpretations for other soil conservation hazards, appropriate to the scale and intensity of operations, sensitivity of the terrain, and sensitivity of environmental values; b) forest cover, including at a minimum, species composition, height class, age class, stocking and crown closure; c) ecological classification to a level below the BEC variant (e.g., site series PEM/TEM), where appropriate to the scale and intensity of management and sensitivity of environmental values; d) distribution of seral stages and patch sizes, including non-forest types; e) watershed condition, including hydrologic featur f) in watersheds or sub-basins with significant leve g) biodiversity information including species list of h) where access-sensitive species or their habitats		√	√			**√: less spec-ific**

Principle	Criterion	Indicator	\	FSC-BC	SW-FSC	ISO	CSA	SFI
		6.1.4 In areas proposed for road construction, timber harvesting, and/or other treatments that will likely affect water quality or stream channel integrity (e.g., fertilization), detailed maps of hydrologic features, including riparian classification, are completed in advance of initiating management activities. The maps include identification of fish-bearing streams and		√	√			**√: less spec-ific**
		6.1.5 Where road construction or timber harvesting is proposed: for areas rated with a moderate or high likelihood of landslides, areas rated as high or very high erosion potential, areas upslope of such hazardous areas (i.e. "gentle over steep"), or recharge areas for springs with domestic or irrigation water users; detailed terrain assessments and/or detailed hydrologic assessments are completed to assess the risks to the environment and provide recommendations on mitigation or other measures to reduce risk.		√	**√: less spec-ific**			**√: less spec-ific**
		6.1.6 In areas proposed for timber harvesting, prior to preparing stand level prescriptions and selecting harvesting methods, inventories at the cutblock or stand level are completed, including at a minimum: a) stand structure, including stand age, tree age ranges, tree species composition by height and layer (i.e., stand and stocking tables); b) frequency and sizes of live wildlife trees and snags, and relative amounts of coarse woody debris ; c) presence of aquatic habitats, rare ecosystem features and/or other critical habitats identified at the site level; and, d) basic soil information (e.g. fine fraction texture, coarse fragments, LFH, depth to impermeable		√				
		*6.1.7 Based on the best available information, the manager prepares a written description of the estimated range of natural variability including reference to ecosystem conditions and ecosystem functioning. This description serves as an environmental base case (i.e. benchmark or reference ecosystem conditions) against which to measure potential environmental changes or impacts resulting from proposed management activities. 6.1.7(i) The methodology, assumptions and information used to define the range of natural variability are documented. 6.1.7(ii) The manager updates the range of natural variability description as new information becomes available.		√				**√: less spec-ific**

Principle	Criterion	Indicator	\	FSC-BC	SW-FSC	ISO	CSA	SFI
		6.1.8 As part of the management planning process, an environmental risk assessment is completed, by comparing present and projected ecosystem conditions on the management unit to the range of natural variability.		√	√: **more spec-ific**			
		*6.1.9 Inventory information and the results of terrain stability mapping, soil conservation hazard assessments, hydrologic assessments, habitat assessments and access-sensitive species assessments guide management planning and operational implementation.		√				√
		6.1.10 Where an assessment completed under Indicator 6.1.8 indicates that environmental impacts of proposed management activities pose significant risk to biodiversity or other environmental values, then management activities do not occur or the risk is reduced to levels comparable to that under RONV.		√			√: **less spec-ific**	
	6.2 Safeguards shall exist which protect rare, threatened and endangered species and their habitats (e.g. nesting and feeding areas). Conservation zones and protection areas shall be established, and inappropriate hunting, fishing, trapping and collecting shall be			√	√			√
		6.2.1 Habitats of red- and blue-listed species and plant communities (as defined by the BC Conservation Data Centre) and threatened species and endangered species, and species of special concern (as defined by the Committee on the Status of Endangered Wildlife in Canada) within a management unit are identified by field surveys or other means, and delineated on maps.		√	√			√: **less spec-ific**

Principle	Criterion	Indicator	\	FSC-BC	SW-FSC	ISO	CSA	SFI
		*6.2.2 Where there are existing or potential habitats of red-listed, blue-listed, endangered or threatened species, or species of special concern, or red- or blue- listed plant communities present on the management unit, consistent effort is evident on the part of the manager to take actions on the management unit to minimize risk to the long-term persistence of those species and/or plant communities, by: a) protecting those habitats and/or plant communities by including them in the protected reserve network; b) avoiding habitat alteration that may result in increased risk to those species' and/or plant communities' long-term persistence; and/or, c) where necessary, restoring those habitats and/or plant communities to a suitable condition. 6.2.2(i) Where population information is available, it demonstrates that the population levels of applicable species have not decreased or failed to increase, due to the manager's activities within the management unit. 6.2.2(ii) Where habitat modeling for applicable species has been undertaken, it shows that		√	√: **less spec-ific**			√: **less spec-ific**
		6.2.3 Where a government recovery plan or species management plan has been prepared for a red- or blue-listed, threatened or endangered species, species of special concern or red- or blue listed plant community whose habitat occurs within a management unit, the manager is implementing the recovery or species management plan in a manner appropriate for the management unit. While recovery or species management plans are under development, the manager takes steps that are within his or her control to facilitate survival and recovery of the		√				√: **less spec-ific**

Principle	Criterion	Indicator	\	FSC-BC	SW-FSC	ISO	CSA	SFI
		6.2.4 Relevant employees and contractors are able to recognize red- and blue-listed, threatened and endangered species, and species of special concern, and their habitats that occur within the management unit. When these are recognized, prompt notification is made to personnel who are capable of implementing prescriptions and practices designed to protect and promote the survival and recovery of the species, and these practices are implemented. 6.2.4 (i) Training programs, standard operating procedures and/or protocols specify measures for dealing with unexpected encounters with red- and blue-listed, threatened and endangered species, and species of special concern, or their habitats		√			**√: less spec-ific**	**√: less spec-ific**
		6.2.5 The manager cooperates with the government authorities to prevent the harming, harassing, capturing or taking of red- or blue-listed species, threatened or endangered species, or species of special concern within the		√				
	6.3 Ecological functions and values shall be maintained intact, enhanced, or restored, including: a) Forest regeneration and succession. b) Genetic, species, and ecosystem diversity. c) Natural cycles that affect the productivity of the forest ecosystem.			√	√		√	√
		*6.3.1 Portions of the management unit where previous management activities have resulted in conditions where ecosystem components or functions have not been maintained as required under Principles 6 and/or 9 (i.e. areas of poorly managed natural forests or former plantations) have been designated restoration areas, and it is evident that activities are planned and being implemented to restore those areas to conditions that are consistent with FSC-BC requirements in a timeframe consistent with the sensitivity of affected ecosystems.		√				
		*6.3.2 The present and projected application of silvicultural systems, including regeneration methods, results in present and projected landscape patterns and stand structures that are either maintained within or restored to the range of natural variability.		√	**√: more spec-ific**			**√: less spec-ific**

Principle	Criterion	Indicator	\	FSC-BC	SW-FSC	ISO	CSA	SFI
		6.3.3 When site preparation is utilized, the selection of methods balances the effectiveness of achieving management objectives and minimization of negative environmental impacts (including soil degradation).		√	√		√	√
		6.3.4 At the landscape and stand levels, the spatial extent, temporal longevity and structural characteristics of non-tree-dominated early seral stages (i.e., herb and shrub stages), are compatible with natural disturbance regimes and meet the needs of early-seral-dependent species and cultural uses. 6.3.4(i) Where habitat modeling results are available, they confirm that habitat requirements for non-tree-dominated early seral stage habitats are not compromised by stand management activities such as weeding or brushing.		√	√: **less spec-ific**			
		6.3.5 Regeneration methods maintain or enhance the structural and genetic diversity of forest stands by showing a preference for natural regeneration and/or using artificial regeneration methods (e.g., planting), with seed or stock produced from local provenances.		√	√		√	√
		6.3.6 Seed trees, advanced regeneration or other sources of natural or artificial regeneration are selected to maintain species and genetic diversity.		√	√			√
		6.3.7 Silvicultural treatments, including regeneration, maintain a diversity of tree species and stand types compatible with the range of natural variability at the landscape level.		√	√			√
		6.3.8 Silviculture and stand management prescriptions for areas with stand-replacement, gap-replacement and fire-maintained ecosystem management regimes include objectives and measures for the maintenance and/or restoration of stand structure to conditions compatible with the range of natural variability at the stand and landscape levels (e.g., canopy complexity, live wildlife trees, snags, coarse woody debris). 6.3.8 (i) Where species habitat modeling or assessments are available, they indicate that stand level habitat supply is consistent with the long-term persistence of naturally occurring species dependent on those habitats (appropriate to the size and location of the management unit).		√				√

Principle	Criterion	Indicator	\	FSC-BC	SW-FSC	ISO	CSA	SFI
		6.3.9 Within each cutblock area (>200 m wide), the retention of dominant and co-dominant green trees and snags is consistent with meeting objectives in Indicator 6.3.8, as patches and/or single trees, and exceeds the following minimum levels (stems/ha, of which a minimum of 25% are snags where present): NDT 1 (ESSF = 12; Other = 8), NDT 2 (Essf = 15; Other = 10), NDT 3 (ESSF = 12, Other = 8), NDT		√				
		6.3.10 Average stand level retention within cutblock areas in stand-replacement management regimes (including retention of dominant and co-dominant trees referred to in Indicator 6.3.9): a) exceeds the following minimum levels of basal area (m2/ha): NDT 1 (ESSF = 15; Other = 24), NDT 2 (ESSF = 8; Other = 12), NDT 3 (ESSF = 4; Other = 5), NDT 4 (PP = 1; Other = 3); or, b) is consistent with average and min/max ranges established through an assessment of the range of natural variability at the stand level and landscape level.		√				
		6.3.11 Stand level retention within cutblock areas in gap-replacement management regimes (including retention of dominant and co-dominant trees referred to in 6.3.9), exceeds the following minimum levels of retention (% of average basal area for natural mature and old stands on similar ecosystems): NDT 1 (ESSF = 70; Other = 75), NDT 2 (ESSF = 65; Other = 70), NDT 3 (ESSF = 60; Other = 65), NDT 4 (Not Applicable)		√				
		6.3.12 Trees in clearcut harvest areas are at least three years old or five feet high at the desired level of stocking before adjacent areas are clearcut, or a more comprehensive method to reach the performance measure exists.						√
		6.3.13 Forest harvesting and other silvicultural treatments maintain or restore coarse woody debris in quantities and distribution that is compatible with the range of natural variability at the stand and landscape levels.		√	√			√
		6.3.14 Non-forested habitats, such as rock outcrops, alpine, snow avalanche tracks, wetlands and riparian fringes, along with forested margins surrounding these areas are managed to ensure that the ecosystem functions of these special habitats are maintained.			√			√

Principle	Criterion	Indicator	\	FSC-BC	SW-FSC	ISO	CSA	SFI
		6.3.15 Diversity and relative abundance of individual tree species are maintained, including deciduous and non-commercial species. Tree species diversity should be maintained within historic ranges at both the stand and landscape			√			
		*6.3.16 Forest management maintains or restores a distribution of seral stages, patch sizes and interior habitat that are compatible with the range of natural variability. 6.3.16 (i) Comparisons, by BEC variant, between projected levels of old and mature forest, and natural levels calculated from estimated stand-replacing disturbance return intervals indicate that projected levels are compatible with the range of natural variability. 6.3.16 (ii) Where habitat modeling for patch size distribution or species assessments are available for interior-habitat-dependent species, they indicate that the projected patch size distribution and/or supply of suitable habitat is compatible with the range of natural variability and/or the long-term persistence of those species.		√	√: **less spec-ific**			
		6.3.17 Program Participants shall develop and adopt appropriate policies for managing the size, shape and placement of clearcut harvests. a) Average size of clearcut harvest areas does not exceed 120 acres, except when necessary to respond to forest health emergencies or other natural catastrophes.						√
		6.3.18 The manager has wildlife and/or landscape level objectives for landscape connectivity, consistent with the long-term persistence of naturally occurring species, and is implementing management strategies that include connectivity corridor mapping and maintenance of mature and old forest landscape connectivity between various landscape components, stand types and key habitats.		√	√		√	√
		6.3.19 The manager has objectives and strategies to manage access where required to meet nontimber objectives (e.g., to minimize displacement of access-sensitive species such as grizzly bears, to prevent human contamination of domestic watersheds, to protect cultural sites).		√				√
		6.3.20 Access management measures are consistent with the recommendations from assessments for access-sensitive species (See 6.1.3 h) and other recommendations by qualified specialists (e.g., wildlife biologists, health		√				

Principle	Criterion	Indicator	\	FSC-BC	SW-FSC	ISO	CSA	SFI
		6.3.21 Where they occur on a management unit, unique ecosystems (e.g., antique forests, rare site series), unique ecosystem features (e.g., caves, mistletoe platforms, mineral licks) and nonforest ecosystems (e.g., wetlands, grasslands, rock outcrops) are maintained or restored to a level that ensures their ecological functions are		√			√	√
		6.3.22 Forest management maintains soil fertility and natural soil processes by: a) limiting detrimental soil disturbance to less than 7% of the timber harvesting landbase, or b) limiting detrimental soil disturbance to less than 10% of the timber harvesting landbase, where there are off-setting environmental, cultural or other non-economic benefits for the increases over 7%, and the benefits are explained in a written rationale. 6.3.22 (i) Soil disturbance survey results are consistent with meeting Indicator 6.3.18. 6.3.22 (ii) Assumptions regarding roads, landings and other detrimental soil disturbance in timber supply analyses are consistent with meeting Criterion 6.3.21 (See also Criterion 5.6). 6.3.22 (iii) A consistent effort to minimize detrimental soil disturbance is evident in planning, construction and implementation of road construction, timber harvesting and silviculture		√	√: **less spec-ific**		√: **less spec-ific**	√: **less spec-ific**
		6.3.23 Temporary access structures and unplanned detrimental soil disturbance are promptly rehabilitated.		√				
		6.3.24 Where detrimental soil disturbance exceeds levels in Indicator 6.3.18, a plan is being implemented to rehabilitate sufficient area to meet the standard in a timely manner (<5 years).		√				
		6.3.25 Where fertilizers or other soil amendments (e.g., pulp sludge, manure) are used, preference is given to non-chemical alternatives that are of equivalent effectiveness, and the manager verifies that the chemical composition of the fertilizers or soil amendments (including inert ingredients) are not in contravention of FSC requirements.		√				√: **less spec-ific**
		6.3.26 Where fertilizers or other soil amendments are used, baseline soil analyses are completed, or relevant data assembled, to determine the potential benefits and risks of detrimental changes to soil physical and chemical properties and to establish a baseline for monitoring long-term		√				

Principle	Criterion	Indicator	\	FSC-BC	SW-FSC	ISO	CSA	SFI
		6.3.27 When fertilizers or soil amendments are used, effective measures are employed to avoid contamination of surface and ground waters, protect non-timber forest values and maintain long term soil health (e.g., maintenance of soil organic matter, pH balance).		√				**√: less spec-ific**
		6.3.28 Consistent effort is evident to minimize road right-of-way clearing widths to maintain the productive forest harvesting land base and minimize road impacts on forest habitats, and a) average road right-of-way clearing width does not extend more than 3 m beyond either outside edge of the road disturbance width, or b) where average road right-of-way clearing widths exceed 3 m beyond the road disturbance width, there is a rationale provided by a qualified specialist that justifies the excess width for reasons of slope stability, snow clearing, slash disposal, yarding or loading access, road		√				**√: less spec-ific**
		6.3.29 Maintain the processes that take carbon from the atmosphere and store it in forest					√	√
	6.4 Representative samples of existing ecosystems within the landscape shall be protected in their natural state and recorded on maps.			√	√		√	**√: less spec-ific**

Principle	Criterion	Indicator	\	FSC-BC	SW-FSC	ISO	CSA	SFI
		*6.4.1 A network of protected reserves is established and managed within the management unit. The manager first identifies this network of protected reserves at multiple spatial scales, before planning for human uses or carrying out forest practices. The reserve network: a) is delineated on maps, and where applicable, includes mapping of dynamic reserves and dynamic reserve replacement areas, b) has written objectives for each reserve area related to that area's contribution to maintaining or restoring ecological integrity (some areas may have compatible overlapping objectives, e.g., riparian protection, unstable terrain and visual management), c) has an overall design that is consistent with the principles of conservation biology, and d) meets the applicable minimum percentage area for ecosystem representation by BEC variant within the management unit, as determined by Table P6 - 1 (only the portions of the dynamic reserves that have reached an age of at least		√	√: **less spec-ific**			√: **less spec-ific**
		6.4.2 The design and management of the reserve network contributes to the maintenance and/or restoration of ecological integrity by including at a minimum, areas whose size and distribution are sufficient to meet the following objectives: a) includes representation of ecosystem variation within the management unit at a level more detailed than the BEC variant, using characteristics appropriate to the management unit (e.g., site series groups, enduring features, landforms, forest type, productivity class), with consideration of the context of ecosystem representation in Protected Areas outside the management unit, b) habitat requirements for naturally occurring species that are not provided for in a suitable condition in other parts of the management unit (e.g., critical habitats for red- and blue-listed or access-sensitive species, riparian feeding areas for grizzly bears, calving areas) consistent with applicable assessment results (See also Indicators 6.1.3, 6.2.1, 6.2.3, 6.5.11 and 9.1.1),		√	√: **less spec-ific**		√: **less spec-ific**	√: **less spec-ific**

Principle	Criterion	Indicator	\	FSC-BC	SW-FSC	ISO	CSA	SFI
		6.4.3 All protected reserves within Natural Disturbance Types 1 and 2, and at least 50% of the area of protected reserves in NDTs 3 and 4 are permanent designations with fixed locations. Where the manager has identified ecological benefits for management treatments that mimic natural disturbances in NDTs 3 or 4, up to a maximum of 50% of the area of protected reserves in those NDTs are managed as dynamic		√				
		6.4.4 Management treatments in dynamic reserves that are intended to mimic stand-replacing natural disturbances: a) are employed on a frequency (i.e. rotation age) that is at least 1.2 times the estimated average return interval for those disturbances; b) include stand level retention significantly above the estimated average natural retention levels for those disturbances; c) use natural regeneration; and d) allow for natural stand development.		√				
		6.4.5 Management activities within protected reserves are limited to low impact activities compatible with the protected reserve objectives, except under the following circumstances: a) harvesting activities only where they are necessary to restore or create habitat to meet the objectives of the protected reserve, or to mitigate conditions that interfere with achieving the reserve objectives, or b) road-building only where it is documented that it will contribute to the minimization of the overall environmental impacts within the management unit and will not jeopardize the purpose for which the reserve was designated.		√	√			
	6.5 Written guidelines shall be prepared and implemented to: control erosion; minimize forest damage during harvesting, road construction, and all other mechanical disturbances; and protect water resources.			√	√		√: less spec-ific	√
		6.5.1 Environmental damage resulting from landslides, snow avalanching, erosion and sedimentation is not significantly increased beyond the range of natural variability due to road construction or forest harvesting.		√				
		6.5.2 Road construction and forest harvesting do not occur on areas with a high likelihood of landslide initiation.		√	√			

Principle	Criterion	Indicator	\	FSC-BC	SW-FSC	ISO	CSA	SFI
		6.5.3 Road construction and forest harvesting do not occur on the following high risk areas, unless measures are implemented such that risk of landslide initiation is not increased: a) areas of moderate likelihood of landslide initiation and high or very high landslideinduced stream sedimentation hazard; or, b) areas of moderate likelihood of landslide initiation and a high to very high likelihood of the landslide reaching areas of human habitation.		√	√			
		6.5.4 Harvesting within or adjacent to areas with a high or moderate likelihood of landslide initiation does not significantly increase windthrow hazards in those areas.		√	√			
		6.5.5 Road construction and harvesting do not occur in areas of high or very high road/ditch/surface erosion hazard and high or very high sediment delivery unless mitigative measures are taken that prevent erosion and sedimentation (e.g., minimizing soil disturbance.		√	√			
		6.5.6 In areas with a very high potential for snow avalanche initiation, forest harvesting does not occur. In areas with high potential for snow avalanche initiation, harvesting is limited to partial cutting consistent with the prevention of snow avalanche initiation.		√	√			
		6.5.7 Consistent effort to maintain the ecological integrity of aquatic ecosystems is evident, including at a minimum: a) planning of road locations to minimize stream crossings and construction of roads within riparian management areas, b) stream crossing construction measures to minimize disturbance to riparian areas, stream banks and stream channels, c) timing of stream crossing construction to avoid fisheries sensitive seasons (e.g. spawning), d) locating and constructing landings in ways that avoid riparian management areas and detrimental impacts on hydrologic features, e) locating and constructing roads, landings, backspar trails and skidroads in ways that minimize disruption of natural drainage patterns (e.g., drainage systems are planned and constructed to avoid diversion of surface waters; road widths are minimized to limit the interception of subsurface water), f) employing yarding techniques that do not disturb stream channels, and g) where channel assessments indicate decreasing stability, halting road construction and		√	√		√: **less spec-ific**	√: **less spec-ific**

Principle	Criterion	Indicator	\	FSC-BC	SW-FSC	ISO	CSA	SFI
		6.5.8 Machine-free zones are established on all streams, lakes, wetlands and marine shorelines. The machine-free zones are: a) at least 7 m in width; b) not entered by machinery, except where required for construction of crossings or restoration of riparian or stream channel functions, and only if it can be demonstrated that no significant environmental damage will result; and c) areas within which, if harvesting occurs, non-commercial trees and understory vegetation are retained for protection of riparian functions.		√				
		6.5.9 Active roads and other potential sediment sources are identified and monitored for sediment production on a regular basis. Deactivation, rehabilitation and/or restoration plans are prepared and implemented to control all significant human-induced sediment sources.		√	√			√: **less spec-ific**
		6.5.10 Consistent effort is evident to minimize increases in peak flow resulting from management activities, including in snowmelt-dominated watersheds, maintaining weighted equivalent clearcut area (ECA) to less than 25%, unless recommended otherwise by peer-reviewed hydrologic assessment.		√	√			
		*6.5.11 The manager maintains and/or restores riparian functions along rivers, streams, wetlands, lakeshores and marine shores by: a) implementing riparian management regimes within the management unit that meet or exceed the measures for Stream and Wetland Riparian Reserve and Management Zones and Lakeshore and Marine Shore Reserve and Management Zones as specified in Table 1 in Annex P6a, Requirements for Riparian Management, or b) completing an integrated riparian assessment for the management unit, or each Riparian assessment unit within the management unit, consistent with the framework in Annex P6a, Requirements for Riparian Management, and implementing a riparian management regime that is consistent with the results of the assessment and meets or exceeds the budgets for Reserve Zones and Management Zones specified in Table 4 in Annex P6a, Requirements for Riparian Management.		√	√			√: **less spec-ific**

Principle	Criterion	Indicator	\	FSC-BC	SW-FSC	ISO	CSA	SFI
		6.5.12 Written guidelines for harvest practices include: a) A pre-harvest inventory and sale area reconnaissance is implemented. b) An operating/harvesting plan is written, available, and used in the field that includes silvicultural objectives, volume and basal area targets, residual species composition, and transportation and access issues. c) The rationale behind tree selection on any proposed harvest area is transferred to the logger either through clearly marking the stand prior to harvest or through adequate training and supervision. d) Skid trail layout and yarding systems minimise the potential for soil erosion and compaction and damage to the residual stand or other forest resources. e) Timber harvesting does not occur in high-risk areas such as on highly erosive or permanently saturated soils, in critical riparian zones, etc. unless justified by ecological restoration purposes. f) Areas that are not to be disturbed by logging are clearly identified and shown to the logger. g) Directional felling techniques are being employed so as to minimise damage to the surrou h) Skid trail distances and landing sizes are minim i) Yarding and skidding routes are designed and lo j) Ground based skidding operations are limited to k) Skid trails and landings are treated after harvest l) Operations do not occur when wet ground or soi m) Full suspension aerial yarding systems are use n) Cable yarding corridors are kept small and logs o) Log landing areas are as small as possible, dete p) If non-timber forest products will be commercial q) Unutilized material, including branches and tree r) Logging slash is treated to reduce fire hazard ar			√			√
		6.5.13 Program Participants shall manage so as to protect forests from damaging agents such as wildfire, pests and diseases to maintain and improve long-term forest health, productivity and economic viability. a) Written policy to protect forests from damaging agents. b) Forests managed in a healthy and productive condition to minimize susceptibility to damaging agents. c) Participation in, and support of, fire and pest prevention and control programs. d) Fuel hazards reduced in fire prone areas and adjacent to structures to minimize the possibility of wildfire. e) An initial fire attack capability maintained or available to keep wildfires small. f) Prescribed burning used where appropriate to reduce fuel hazards. g) Forest pest and disease outbreaks monitored and mapped to allow preventative action.			√			√

Principle	Criterion	Indicator	\	FSC-BC	SW-FSC	ISO	CSA	SFI
	6.6 Management systems shall promote the development and adoption of environmentally friendly non-chemical methods of pest management and strive to avoid the use of chemical pesticides. World Health Organization Type 1A and 1B and chlorinated hydrocarbon pesticides; pesticides that are persistent, toxic or whose derivatives remain biologically active and accumulate in the food chain beyond their intended use; as well as any pesticides banned by international agreement, shall be prohibited. If chemicals are used, proper equipment and training shall be provided to minimize health and environmental risks.			√	√			**√: less spec-ific**
		*6.6.1 Where chemical pesticides are used on the management unit, plans are in place to phase out their use over a period of no more than 2 years following the date of FSC certification (except for emergency use in nursery seedlings).		√				
		6.6.2 Where chemical pesticides are used on the management unit during the phase out period, there is evidence of consistent effort to meet plans for their phase out, including the use of integrated pest management, with emphasis on prevention strategies.		√	**√: less spec-ific**			
		6.6.3 Where tree seedlings or other materials for use on the management unit are purchased from outside suppliers, managers take actions to source materials that are consistent with eliminating the use of chemical pesticides.		√				
		6.6.4 Where emergency situations require use of seedlings on which chemical pesticides have been used, the manager has written rationale from the nursery and notifies workers handling those seedlings prior to exposure to the		√				
		6.6.5 Chemicals prohibited by Criterion 6.6 are not used (See Glossary for a list of prohibited chemicals).		√	√			
	6.6.6 Employees are trained in the proper handling, storage and disposal of chemicals, apply chemicals according to manufacturer direction, and use protective equipment when appropriate.				√			√

Principle	Criterion	Indicator	\	FSC-BC	SW-FSC	ISO	CSA	SFI
	6.7 Chemicals, containers, liquid and solid non-organic wastes including fuel and oil shall be disposed of in an environmentally appropriate manner at			√	√			
		6.7.1 The manager prevents the unintended release of chemicals, petroleum products, containers and non-organic wastes, and minimizes health and environmental risks due to their disposal. 6.7.1(i) Documentation identifies and categorizes non-organic wastes generated on and/or chemicals and petroleum products stored or used		√				**√: less spec-ific**
		6.7.2 There are standard operating procedures and/or emergency plans and procedures in place for prevention of and cleanup following spills or other accidents with non-organic wastes, chemicals and petroleum products.		√				
		6.7.3 Waste disposal practices and facilities owned or operated by the manager are monitored, and corrective actions taken where deficiencies are identified.		√	**√: less spec-ific**			√
	6.8 Use of biological control agents shall be documented, minimized, monitored and strictly controlled in accordance with national laws and internationally accepted scientific protocols. Use of genetically modified organisms shall be			√	√			
		6.8.1 Exotic biological control agents are used only as part of a pest management strategy for the control of exotic species of plants, pathogens, insects or other animals when other nonchemical pest control methods are, or can reasonably be expected to be, ineffective. Such use is contingent on peer-reviewed scientific evidence that the agents in question are noninvasive and are safe		√				
		6.8.2 Where biological control agents are used, there is compliance with relevant provincial laws, national laws and internationally accepted scientific protocols, including, in 2002, the provincial Pesticide Control Act and Plant Protection Act, and the federal Pest Control Products Act, Plant Protection Act and Canadian		√	√			
		6.8.3 Use of biological control agents is documented and monitored.		√	√			
		6.8.4 No genetically modified organisms are used.		√	√			

Principle	Criterion	Indicator	\	FSC-BC	SW-FSC	ISO	CSA	SFI
		6.8.5 Program Participants that utilize genetically improved seedlings, including those derived through biotechnology, shall use sound scientific methods and follow all appropriate federal and state regulations and other internationally applicable protocols.						√
	6.9 The use of exotic species shall be carefully controlled and actively monitored to avoid adverse ecological			√	√			√
		6.9.1 Exotic plant or animal species (other than exotic trees addressed under Criterion 10.4) are only introduced after thorough evaluation that determines that they are not invasive and will bring environmental benefits without entailing significant adverse ecological impacts.		√	√			
	6.10 Forest conversion to plantations or non-forest land shall not occur, except in circumstances where conversion: a) entails a very limited portion of the Forest Management Unit; and *b) does not occur on High Conservation Value Forest areas; and c) will enable clear, substantial, additional, secure, long term conservation benefits across the Forest			√	√		√: less spec-ific	
		6.10.1 Primary, degraded primary and mature secondary forests are not cleared by current forest managers to create tree plantations.			√			
		6.10.2 Plantations do not replace ecologically classified wetlands.			√			
		6.10.3 If plantations are established in early successional forest areas or natural grasslands, clear verbal, written or visual guidelines are given to field staff for identifying acceptable areas.			√			
		6.10.4 The forest management operation takes aggressive measures to restore, conserve or manage natural forest or grasslands in surrounding or adjoining areas equal to or exceeding the area disturbed; and support for such actions exists amongst environmental			√			

Principle	Criterion	Indicator	\	FSC-BC	SW-FSC	ISO	CSA	SFI
		*6.10.5 Areas of new conversions to plantations: a) do not exceed 5% of the timber harvesting landbase of the management unit; b) are located in previously harvested poorly-managed forest, or if that forest type is not available, in previously harvested well-managed natural forest, or if that forest type is not available, in unharvested non old growth forest, and only if none of the previous areas are available, in old growth forest; c) do not directly result in the area of old growth forest falling below the estimated mean area of old growth forest determined by the description of the range of natural variability completed under Indicator 6.1.7; and		√				
		6.10.6 Conservation benefits enabled by conversion, and the impacts of the conversion, are evaluated by qualified specialists. The evaluation process includes: a) evaluation of the conservation benefits enabled by the conversion; b) evaluation of the environmental impacts of the conversion itself, taking into account impacts both at the management unit level and at the landscape level; c) the social impacts and benefits entailed by the conversion; d) review of and input on the conversion area and the offsetting conservation benefits from qualified specialists, affected parties and relevant interests (e.g., First Nations, agencies, local communities, conservation organizations); e) conclusions regarding whether the offsetting benefits meet Criterion 6.10; and f) if the conversion evaluation report concludes the proposed conversion meets Criterion 6.10, specific recommendations on how the offsetting benefits for conversions should be secured in a manner that ensures the benefits will be		√				
		*6.10.7 Management objectives and measures identified in the final evaluation report are incorporated into the management plan and other relevant documents, and are implemented.		√				**√: less spec-ific**

Principle	Criterion	Indicator	\	FSC-BC	SW-FSC	ISO	CSA	SFI
Principle 7: Management Plan								
	7.1 The management plan and supporting documents shall provide: a) Management objectives. b) Description of the forest resources to be managed, environmental limitations, land use and ownership status, socio-economic conditions, and profile of adjacent lands. c) Description of silvicultural and/or other management system, based upon the ecology of the forest in question and information gathered through resource inventories. d) Rationale for rate of annual harvest and species selection. e) Provisions for monitoring of forest growth and dynamics. f) Environmental safeguards based on environmental assessments. g) Plans for the identification and protection of rare, threatened and endangered species. h) Maps describing the forest resource base including protected areas, planned management activities and land ownership. i) Description and justification of harvesting techniques and equipment to be used.			√	√	**√: less spec-ific**	√	√

Principle	Criterion	Indicator	\	FSC-BC	SW-FSC	ISO	CSA	SFI
		7.1.1 A long-term management plan that confirms the manager's commitment to the FSC-BC Regional Standards by describing long-term objectives, management strategies and operational approaches that comply with the Standards, is maintained and updated at least every five years. The management plan includes: a) measurable management objectives and management indicator(s) by which their achievement can be assessed; b) management objectives that address short- and long-term time frames as applicable, and which are sufficiently specific to provide a basis for developing operational strategies and practices; c) depiction of the specific geographic area to which management objectives apply (e.g., management unit, specific reserve, local community); d) a rationale, including underlying assumptions, for each management objective; and, e) incorporates objectives derived from ongoing public participation and objectives identified		√	√	√: **less spec-ific**	√	√: **less spec-ific**
		7.1.2 The management plan describes terrestrial and aquatic species and habitats and timber, nontimber, water, recreation, cultural and visual resources located within the management unit, with reference to applicable inventories.		√	√			
		7.1.3 The management plan describes the range of natural variability.		√				
		7.1.4 The management plan describes environmental limitations and risk identified through inventory and assessments.		√	√: **more spec-ific**	√: **less spec-ific**		
		7.1.5 The management plan describes High Conservation Value Forest attributes and associated conservation attributes identified through assessments.		√	√: **less spec-ific**			
		7.1.6 The management plan describes historical land uses, socio-economic conditions, management regimes and conditions on lands within and adjacent to the management unit.		√	√			
		7.1.7 The descriptions, inventories and maps required for developing management objectives, strategies and practices are included or referenced in the management plan.		√	√			√
		7.1.8 Management approaches to be used in operational planning and implementation that will fulfill management objectives are described in the management plan.		√		√		

Principle	Criterion	Indicator	\	FSC-BC	SW-FSC	ISO	CSA	SFI
		*7.1.9 Operational plans are prepared to guide management activities at both the landscape and site level to implement the management objectives, strategies and approaches identified in the management plan.		√	√	√: less spec-ific		√
		7.1.10 A rationale for the rate of annual harvest is included in the management plan and is supported by an analysis as set out under		√	√			
		7.1.11 Program Participants shall promote state-level reporting of the overall rates of reforestation success and afforestation.						√
		7.1.12 The management plan provides direction, for the purpose of operational planning, on the selection of tree species used in reforestation.		√	√			
		7.1.13 The management plan contains provisions for monitoring forest growth and dynamics.		√	√			
		7.1.14 The management plan includes management strategies to minimize environmental impacts, consistent with the results of environmental assessments, including risk		√		√		
		7.1.15 The management plan contains provisions for rare, threatened and endangered species.		√				
		7.1.16 A map and legal description showing the location and tenure status of the management unit is included in the management plan.		√			√: less spec-ific	
		7.1.17 Legal or customary tenure or use rights of others within the management unit are identified, described and, where appropriate, mapped and are included in the management plan.		√			√: less spec-ific	
		7.1.18 Maps of appropriate scale for management plan reporting are included in the management plan, and larger scale maps appropriate to operational planning are referenced to provide detail where necessary. Management plans include or reference accessible maps describing land use and management designations and other maps as necessary to describe the current status and, where appropriate, projected future conditions of forest and forest land characteristics related to management objectives.		√	√			
		7.1.19 Maps necessary for management plan reporting on management objectives flowing from Principles 3, 6, 9 and 10 are included in the management plan.		√	√		√: less spec-ific	

Principle	Criterion	Indicator	\	FSC-BC	SW-FSC	ISO	CSA	SFI
	7.2 The management plan shall be periodically revised to incorporate the results of monitoring or new scientific and technical information, as well as to respond to changing environmental, social and economic circumstances.			√	√	√	√	
		7.2.1 Revisions to the management plan and supporting operational plans are made when required to respond to: a) the results of monitoring. b) new technical or scientific information garnered through assessments, land use planning or other sources relevant to the management unit. c) new social and economic information garnered through public participation process and consultation.		√	√	√	√	
		7.2.2 A technically sound and financially realistic timeframe exists for revision/adjustment of the management plan.			√	√		
	7.3 Forest workers shall receive adequate training and supervision to ensure proper implementation of the			√	√	√	√	√
		7.3.1 The forest management plan is implemented in the field as written. The objectives stated in the management plan are being met.			√			
		7.3.2 Forest workers have received adequate training and supervision to ensure proper implementation of the management plan. For large operations, a formal training plan should			√	√		**√: more specific**
	7.4 While respecting the confidentiality of information, forest managers shall make publicly available a summary of the primary elements of the management plan, including those listed			√	√	√	√	**√: less spec-ific**
		*7.4.1 With the exception of sensitive or confidential commercial, cultural or ecological information, the management plan, supporting operational plans and assessments are made available to the public in a reasonable manner.		√	**√: less spec-ific**	**√: less spec-ific**	√	**√: less spec-ific**
		7.4.2 Input from interested parties, is solicited during public review of the draft management plan. Actions to address this input and accompanying rationales are documented in the management plan as appropriate.		√		√	√	
		7.4.3 The organization shall establish and maintain procedures for the identification, maintenance, and disposition of SFM requirement records. These records shall include training records and the results of audits and reviews.				**√: Re ISO**	√	
Principle	**Criterion**	**Indicator**	****	**FSC-BC**	**SW-FSC**	**ISO**	**CSA**	**SFI**
		7.4.4 The organization shall establish and maintain procedures for annual internal audits to ensure that it conforms to the SFM requirements set out in this Standard; and provide information on the results of these internal audits to top management.			**√: via moni-toring**		√	
		7.4.5 The organization's top management shall, at least annually, review the SFM requirements to ensure that progress towards SFM continues to be suitable, adequate, and effective. The management review process shall ensure that the information necessary to allow top management to carry out this evaluation is collected. This review shall be documented. In order to be adaptive, the management review shall address the possible need for changes to policy, targets, and other SFM requirements, in light of audit results, changing circumstances, and the commitment to continual improvement.				**√: Re ISO**	√	**√: Re SFI**

Principle	Criterion	Indicator	\	FSC-BC	SW-FSC	ISO	CSA	SFI
Principle 8: Monitoring and Assessment								
	8.1 The frequency and intensity of monitoring should be determined by the scale and intensity of forest management operations as well as the relative complexity and fragility of the affected environment. Monitoring procedures should be consistent and repeatable over time to allow comparison of results and assessment			√	√	√	√	
		8.1.1 A documented monitoring program is in		√		√	√	√
		8.1.2 Persons responsible for implementing and maintaining monitoring programs are identified.		√		√		
		8.1.3 In a manner determined through consultation, First Nations and directly affected persons participate in the design, implementation and evaluation of monitoring programs.		√				
		8.1.4 The monitoring program includes a monitoring plan maintained by the manager. The monitoring plan describes: a) elements to be monitored including HCVFs as set out under Criterion 9.4; b) monitoring Indicator(s) for each element; c) rationale for the selection of each element and monitoring Indicator(s); d) consistent and replicable monitoring procedures; e) the frequency and intensity of monitoring, consistent with the nature of the monitoring Indicator(s), management activities, environmental sensitivity of the site, assessed risks, stakeholder concerns, performance history, and changing environmental conditions; and,		√	**√: less spec-ific**	**√: less spec-ific**	√	
		8.1.5 The monitoring plan is periodically updated and available to those doing the monitoring or working with monitoring data, and a clear link between the monitoring plan and management plan is established.		√		√		
		8.1.6 Any change in monitoring procedure is documented, including details of any overlapping calibration when old and new procedures are run simultaneously.		√				
		8.1.7 Monitoring records are compiled in a secure, accessible monitoring database(s).		√		√		
		8.1.8 An adequate mechanism is implemented for quality assurance and quality control of the monitoring program.		√		√		

Principle	Criterion	Indicator	\	FSC-BC	SW-FSC	ISO	CSA	SFI
		*8.1.9 According to a schedule set out in the monitoring plan, the results of monitoring programs are regularly analyzed, summarized, documented and acted upon.		√	√		√	
		8.1.10 Monitoring reports indicate how management prescriptions should be changed, based on new ecological, silvicultural, or market			√			
	8.2 Forest management should include the research and data collection needed to monitor, at a minimum, the following Indicators: a) yield of all forest products harvested; b) growth rates, regeneration and condition of the forest; c) composition and observed changes in the flora and fauna; d) environmental and social impacts of harvesting and other operations; e) costs, productivity, and efficiency of forest management.			√	√			√: less spec-ific
		8.2.1 Data regarding the yield of timber harvested from the management unit (e.g., volume, species and grade) sufficient to assess performance with respect to management objectives, are collected and maintained in the monitoring database.		√	√			
		8.2.2 Where the manager controls the harvest of non-timber forest products within the management unit, data regarding their yield, sufficient to assess performance with respect to management objectives, are collected and maintained in the monitoring database.		√	√			
		8.2.3 Data are collected and maintained in the monitoring database concerning growth rates, regeneration, forest health, productivity, condition of the forest, and disturbances resulting from forest operations or other causes.		√	√			√
		8.2.4 Data are collected and maintained in the monitoring database related to composition and observed changes in the flora and fauna as a result of forest operations and other disturbances, including sensitive species and their habitats.		√	√			√
		8.2.5 The condition of habitat identified under Indicator 6.2.1 is monitored, consistent with recovery and/or species management plans as set out under Indicator 6.2.3.		√	√			

Principle	Criterion	Indicator	\	FSC-BC	SW-FSC	ISO	CSA	SFI
		8.2.6 Data are collected and maintained in the monitoring database related to the condition of selected watersheds (e.g., sensitive or consumptive watersheds) including, as applicable, sediment sources, Equivalent clearcut area (ECA), channel stability and riparian condition.		√	√			√: less spec-ific
		8.2.7 Program Participants shall, individually, through cooperative efforts, or through AF&PA, provide funding for water quality research.						√
		8.2.8 Monitoring addresses social impacts resulting from management activities, focusing on elements identified through consultation with First Nations and directly affected persons.		√	√			
		8.2.9 Costs and production associated with harvesting, including stumpage payments, are documented to enable evaluation of forest management efficiency.		√	√			
	8.3 Documentation shall be provided by the forest manager to enable monitoring and certifying organizations to trace each forest product from its origin, a process known as “chain of custody”.			√	√			√: less spec-ific
		8.3.1 A procedure is in place to identify FSC-certified products, including documentation regarding the date, cutting permit/cutblock of origin, quantity, and FSC certificate registration code of products leaving the management unit; for large operations this includes marking logs before transportation such that the cutting permit and cutblock of origin can be identified.		√	√			√: Re SFI
	8.4 The results of monitoring shall be incorporated into the implementation and revision of the management plan.			√	√	√		
		8.4.1 Findings from monitoring are regularly summarized, analyzed and documented to identify discrepancies between outcomes (e.g., yields, growth, ecological changes) and expectations (e.g., plans, forecasts, anticipated		√	√	√	√	√
		8.4.2 The results of monitoring are incorporated into periodic revisions of the management plan, policies and procedures.		√	√	√		
		8.4.3 Unanticipated impacts identified through monitoring are acted upon.		√			√	
	8.5 While respecting the confidentiality of information, forest managers shall make publicly available a summary of the results of monitoring Indicators, including those listed in Criterion 8.2.			√	√			
Principle	**Criterion**	**Indicator**	****	**FSC-BC**	**SW-FSC**	**ISO**	**CSA**	**SFI**
		8.5.1 A regular summary is compiled of the results of monitoring. The summary is made available to interested parties.		√	√	√: less spec-ific		

Principle	Criterion	Indicator	\	FSC-BC	SW-FSC	ISO	CSA	SFI
Principle 9: Maintenance of High Conservation Value Forests								
	9.1 Assessment to determine the presence of the attributes consistent with High Conservation Value Forests will be completed, appropriate to scale and intensity of forest management.			√	√			
		9.1.1 The manager has completed an assessment to determine the presence of High Conservation Value Forests (HCVF) and associated conservation attributes within or pertaining to the management unit. The assessment is carried out by qualified specialists, including consultation with directly affected persons and relevant interests (e.g., First Nations, regulatory agencies, local communities, conservation organizations).		√	√			
		9.1.2 The HCVF assessment: a. is based on the best available information including scientific, traditional and local knowledge; b. is conducted using a hierarchical approach that includes consideration and identification of HCVFs and HCVF attributes at global, regional, landscape and site levels; c. considers appropriate temporal scales, compatible with the range of natural variability; d. identifies conservation attributes associated with each HCVF present, the significance of each conservation attribute, and measurable thresholds for their maintenance; e. includes documentation of underlying assumptions, uncertainties in data and knowledge and how they have been dealt with, and the rationale behind management recommendations; and,		√	√			
		9.1.3 The assessment considers the condition of adjacent lands and the ecosystem(s) within which the management unit is located consistent with the requirements of Indicators 6.1.1-6.1.7 as well as tenure distribution, community adjacency and social, economic and cultural factors pertaining to forest habitats and uses of the forest relevant to the HCVF being assessed.		√	√			

Principle	Criterion	Indicator	\	FSC-BC	SW-FSC	ISO	CSA	SFI
		9.1.4 When identified during the assessment, HCVF(s) and, where they can be represented spatially, associated conservation attributes are delineated on maps appropriate to the scale related to the designation (e.g., global, national, regional) and in a manner that clearly demonstrates the location of the HCVF(s) in relation to the management unit. The maps are included in the HCVF assessment report, management plans and relevant operational plans. Where there is a need to maintain confidentiality regarding the location of a sensitive site, the exact location of the HCVF or conservation attribute is not mapped or the		√				
		9.1.5 The assessment recommends management strategies and practices that will maintain or restore identified HCVF conservation attributes consistent with the precautionary approach including: a. specific management measures to maintain or restore the conservation attributes (e.g., reserves, silvicultural practices, access management); b. development and application of a risk assessment methodology appropriate to the conservation attribute to be maintained or restored [and consistent with that described in Indicators 6.1.4, 6.1.5, and 6.1.6]; c. development and application of a monitoring program; and, d. development and application of an adaptive management strategy appropriate to the		√	√			
		9.1.6 Consultation with local indigenous peoples, other local communities, scientists, conservation groups and/or appropriate government agencies to determine the significance of the forest management unit or portions thereof, with respect to: a) cultural and/or spiritual values; b) subsistence or other critical community-based forest uses; c) conservation priorities d) water issues (e.g. human consumption, irrigation, flooding, channel stability, etc.); and e) other critical local or downstream regional issues that may be significantly impacted by management practices on the management unit.			√			

Principle	Criterion	Indicator	\	FSC-BC	SW-FSC	ISO	CSA	SFI
		9.1.7 The assessment report is updated every five years or more frequently depending on the sensitivity of the conservation attributes. The update includes new information garnered through consultation, monitoring and adaptive		√				
	9.2 The consultative portion of the certification process must place emphasis on the identified conservation attributes, and options for the			√	√			
		9.2.1 The assessment report has been made available for review by qualified specialists, directly affected persons and relevant interests (e.g., First Nations, regulatory agencies, local communities, conservation organizations).		√	√			
		9.2.2 The manager's proposed strategies and measures for the maintenance of HCVFs and conservation attributes, with accompanying rationale, are made available for review by qualified specialists, directly affected persons and relevant interests.		√	√			
		9.2.3 The advice and comments received through the reviews referred to in Indicators 9.2.1 and 9.2.2, and the response to them, are documented and maintained by the manager, and are made publicly available.		√				
		9.2.4 Where the results of the assessment are contested by qualified specialists, directly affected persons and/or relevant interests, the onus is on the manager to prove that HCVFs and their associated conservation attributes have been adequately identified and assessed.		√				
	9.3 The management plan shall include and implement specific measures that ensure the maintenance and/or enhancement of the applicable conservation attributes consistent with the precautionary approach. These measures shall be specifically included in the publicly available management plan summary.			√	√			
		9.3.1 The conservation attributes necessary to maintain and/or enhance HCVFs found within the management unit are identified.		√				
		9.3.2 The manager documents in the management plan and supporting operational plans the measures necessary to maintain or restore each identified HCVF or conservation		√				

Principle	Criterion	Indicator	\	FSC-BC	SW-FSC	ISO	CSA	SFI
		*9.3.3 The management strategies and measures selected to maintain or restore conservation attribute(s) are consistent with a precautionary approach, and with respect to each HCVF or conservation attribute, the manager shows that the measures: a) will create conditions with a very high probability of securing the long-term maintenance or the restoration the HCVF or conservation attribute; b) are being implemented; and, c) are proving effective or are adapted as required		√	√			
		*9.3.4 Where proposed management strategies and measures to maintain or restore conservation attributes are contested by affected persons or qualified specialists the onus is on the manager to provide clear, independent evidence that the proposed actions will maintain the conservation attributes.		√				
	9.4 Annual monitoring shall be conducted to assess the effectiveness of the measures employed to maintain or enhance the applicable conservation attributes.			√	√			
		9.4.1 The manager sets up and implements a program to monitor the status of HCVFs and conservation attributes including the effectiveness of the measures employed for their maintenance or restoration. The monitoring program is designed and implemented consistent with the requirements of Principle 8.		√	√			
		9.4.2 The monitoring program is capable of alerting the manager to changes in the status of an HCVF or conservation attribute, and determining if the conservation measures are effective in maintaining or restoring the HCVF or attribute. The results of monitoring are assessed consistent with the monitoring requirements of		√	√: **less spec-ific**			
		9.4.3 When monitoring results indicate increasing risk to a specific conservation attribute, the manager re-evaluates the measures taken to maintain or enhance that attribute, and adjusts the management measures to reverse the trend.		√				

Principle	Criterion	Indicator	\	FSC-BC	SW-FSC	ISO	CSA	SFI
Principle 10: Plantations								
	10.1 The management objectives of the plantation, including natural forest conservation and restoration objectives, shall be explicitly stated in the management plan, and clearly demonstrated in the implementation of the plan.			√	√			√
		10.1.1 Where plantation management regimes are employed in a management unit, natural forest conservation or restoration objectives associated with those plantations are achieved in a timeframe consistent with the objective.		√	√			√
		10.1.2 Where plantation management regimes are employed in a management unit, social and economic objectives associated with those plantations are achieved in a timeframe consistent with the objective.		√	√			
		10.1.3 Where there are portions of the management unit that have stand characteristics and past or present management practices that are consistent with plantation management regimes (i.e. former or present plantations) that require restoration to meet the requirements of Criteria 10.2 or 10.5, these areas are designated as restoration areas and their mapped locations and restoration objectives are included in the management plan or supporting documents.		√				
	10.2 The design and layout of plantations should promote the protection, restoration and conservation of natural forests, and not increase pressures on natural forests. Wildlife corridors, streamside zones and a mosaic of stands of different ages and rotation periods, shall be used in the layout of the plantation, consistent with the scale of the operation. The scale and layout of plantation blocks shall be consistent with the patterns of forest			√	√			**√: less spec-ific**
		*10.2.1 The location, management and extent of plantation areas are consistent with landscape level biodiversity objectives, strategies and measures, including seral stage distribution, old-growth representation, patch size distribution, forest interior habitat, landscape connectivity, tree species diversity and the conservation of rare and critical habitats.		√	√			

Principle	Criterion	Indicator	\	FSC-BC	SW-FSC	ISO	CSA	SFI
		10.2.2 Reforestation supplements natural regeneration, establishes or protects corridors and buffer zones, fills gaps, and contributes to natural forest restoration and/or conservation.			√			√
		10.2.3 Wherever possible, plantation management mimics the scale and intensity of natural patterns of disturbance in planting and			√			
	10.3 Diversity in the composition of plantations is preferred, so as to enhance economic, ecological and social stability. Such diversity may include the size and spatial distribution of management units within the landscape, number and genetic composition of species, age classes and			√	√			
		10.3.1 Selection of species and genotypes for areas under plantation management regimes is compatible with local environmental conditions, forest health considerations and biodiversity		√	√			
		10.3.2 Plantation management enhances landscape diversity by varying block size and configuration, species, genetic diversity, age class			√			
		10.3.3 Design and layout, selection of species and genotypes, and planning of harvesting cycles for areas under plantation management regimes enhance the management unit's overall contribution to the local economy (e.g., local processing, the non-timber economic benefits generated by forests, timber supply, local		√				
		10.3.4 Stand level management in areas under plantation management regimes incorporates biodiversity considerations wherever this can be done while meeting the economic and social objectives.		√				

Principle	Criterion	Indicator	\	FSC-BC	SW-FSC	ISO	CSA	SFI
	10.4 The selection of species for planting shall be based on their overall suitability for the site and their appropriateness to the management objectives. In order to enhance the conservation of biological diversity, native species are preferred over exotic species in the establishment of plantations and the restoration of degraded ecosystems. Exotic species, which shall be used only when their performance is greater than that of native species, shall be carefully monitored to detect unusual mortality.			√	√			√
		10.4.1 Preference is given to planting native species from local provenances.		√	√			√
		10.4.2 Exotic tree species are only utilized where it has been demonstrated that they pose no significant risks to the environment (e.g., become invasive, introduce pests of diseases), on or off the management unit.		√	√			
	10.5 A proportion of the overall forest management area, appropriate to the scale of the plantation and to be determined in regional standards, shall be managed so as to restore the site to a natural forest cover.			√	√			
		*10.5.1 The extent of area under plantation management regimes does not exceed 10% of timber harvesting landbase.		√	√			
		10.5.2 The extent of area under plantation management regimes does not exceed 30% of the timber harvesting landbase of any single BEC variant within the management unit, unless environmental impacts are decreased by further concentrating the location of areas under plantation management regimes.		√				

Principle	Criterion	Indicator	\	FSC-BC	SW-FSC	ISO	CSA	SFI
		10.5.3 Where the extent of area within the management unit that has stand characteristics and past or present management practices that are consistent with plantation management regimes (i.e. former or present plantations) exceeds the maximum requirement under Indicator 10.5.1: a) sufficient areas have been identified for restoration to natural forests to meet the requirement within a timeframe less than the average rotation age of the plantations, b) the restoration areas are identified on maps,		√				
		10.5.4 Conservation zones are demarcated on maps and in the field.			√			
	10.6 Measures shall be taken to maintain or improve soil structure, fertility, and biological activity. The techniques and rate of harvesting, road and trail construction and maintenance, and the choice of species shall not result in long term soil degradation or adverse impacts on water quality, quantity or substantial deviation from stream course			√	√			√
		10.6.1 Management practices in plantation areas are consistent with soil and water conservation measures specified under Criteria 6.3 and 6.5.		√	√			**√: less spec-ific**
	10.7 Measures shall be taken to prevent and minimize outbreaks of pests, diseases, fire and invasive plant introductions. Integrated pest management shall form an essential part of the management plan, with primary reliance on prevention and biological control methods rather than chemical pesticides and fertilizers. Plantation management should make every effort to move away from chemical pesticides and fertilizers, including their			√	√			
		10.7.1 Management regimes in plantation areas are designed to minimize forest damage from fire, pests, diseases, wind and other factors.		√	√			
		10.7.2 Where plantations are shown to significantly increase the level of pest infestations or disease within the plantations or in adjacent stands, plantation management is adjusted to avoid such problems or those plantations are phased out in a timely manner.		√	√			

Principle	Criterion	Indicator	\	FSC-BC	SW-FSC	ISO	CSA	SFI
		10.7.3 Chemical use in plantation areas is consistent with Criteria 6.3, 6.6 and 6.7.		√				
	10.8 Monitoring of plantations shall include regular assessment of potential on-site and offsite ecological and social impacts (e.g. natural regeneration, effects on water resources and soil fertility, and impacts on local welfare and social well-being), in addition to those elements addressed in Principles 8, 6 and 4. No species should be planted on a large scale until local trials and/or experience have shown that they are ecologically well-adapted to the site, are not invasive, and do not have significant negative ecological impacts on other ecosystems. Special attention will be paid to social issues of land acquisition for plantations, especially the protection			√	√			
		10.8.1 Monitoring incorporates ecological and social impacts of plantation activities, where significant (according to assessor judgement and stakeholder observations).			√			
		10.8.2 Use of exotic tree species, on an operational basis, only occurs following intensive, long-term research trials. Exploratory exotic tree species research trials are: a) limited to a maximum of 10 ha in aggregate; b) scientifically rigorous; c) of sufficient duration to determine potential long-term impacts (e.g., a full harvest rotation); and, d) designed and assessed by qualified specialists, including a forester, conservation biologist and agrologist.		√	**√: less spec-ific**			
		10.8.3 The manager provides public notice at least 120 days before a decision is taken to proceed with the use of exotic tree species on an operational basis, and comments from the public		√				
	10.9 Plantations established in areas converted from natural forests after November 1994 normally shall not qualify for certification. Certification may be allowed in circumstances where sufficient evidence is submitted to the certification body that the manager/owner is not responsible directly or indirectly for such conversion.			√	√			
Principle	**Criterion**	**Indicator**	****	**FSC-BC**	**SW-FSC**	**ISO**	**CSA**	**SFI**
		10.9.1 Areas under plantation management regimes established before November 1994, or that were established since November 1994 and the manager or owner is not responsible directly or indirectly for the conversion, and do not meet Criteria 10.2 or 10.5 (e.g., exceed the requirements of 10.5.1), are designated		√				
		10.9.2 Where areas under plantation management regimes have been established after November 1994, other than where the manager or owner is not responsible directly or indirectly for the conversion, they are established in accordance with Criterion 6.10.		√				
		10.9.3 Primary, degraded primary and mature secondary forests are not cleared by current forest managers to create tree plantations.			√			