



Draft 1: Scale, Intensity and Risk Indicators

TABLE OF CONTENTS

INTRODUCTION TO DRAFT 1: SIR INDICATORS3

PROPOSED DEFINITIONS AND KEY CONCEPTS6

OVERVIEW OF INAPPLICABLE NATIONAL STANDARD INDICATORS8

PRINCIPLE* 1: COMPLIANCE WITH LAWS.....9

PRINCIPLE* 2: WORKERS’* RIGHTS AND EMPLOYMENT CONDITIONS 13

PRINCIPLE* 3: INDIGENOUS PEOPLES’* RIGHTS 18

PRINCIPLE* 4: COMMUNITY RELATIONS25

PRINCIPLE* 5: BENEFITS FROM THE FOREST*35

PRINCIPLE* 6: ENVIRONMENTAL VALUES* AND IMPACTS.....42

PRINCIPLE* 7: MANAGEMENT PLANNING 74

PRINCIPLE* 8: MONITORING AND ASSESSMENT81

PRINCIPLE* 9: HIGH CONSERVATION VALUES*89

PRINCIPLE* 10: IMPLEMENTATION OF MANAGEMENT ACTIVITIES*96

ANNEXES106

 Annex A: Minimum list of applicable laws, regulations and nationally *ratified** international treaties, conventions and agreements..... 106

 Annex B: Worker’s Safety Program 107

 Annex C: Training Requirements for Workers..... 108

 Annex D: Claims for Ecosystem Services 109

 Annex E: Conceptual Framework for Planning and Monitoring..... 114

 Annex F: HCV Framework..... 117

 Annex G: Dispute Resolution Process 118

 Annex H: Determining Local Community Customary Rights..... 120

 Annex I: Culturally Appropriate Engagement..... 122

 Annex J: Caribou in the Standard..... 124

 Annex K: Rationale for the treatment of Criterion 5.2 related to sustainable harvesting and annual allowable cut calculation in Canada 130

 Annex L: List of Contributors 135

GLOSSARY (From Draft 1 of the National Forest Management Standard) 136

PRELIMINARY REFERENCE LIST 160

 Documents Cited 160

 Relevant FSC Documents..... 161





Forest Stewardship Council®
FSC® Canada



INTRODUCTION TO DRAFT 1: SIR INDICATORS

This draft contains indicators for *community* forests**, *small-scale* forests**, and *low-intensity* forests**. The indicators have been informed by FSC International's (FSC IC) *Guideline for addressing risk of unacceptable activities in regard to scale and intensity* (FSC-GUI-60-002 V1-0 D1-3), the FSC Canada Scale, Intensity and Risk (SIR) Technical Expert Panel, and FSC Canada staff and consultants. The indicators within this draft have not been reviewed or approved by FSC Canada's Standard Development Group.

The Principles & Criteria (P&C) laid out by FSC IC, that form the basis of all FSC forest management standards, are generally independent of scale and intensity and all certified forests must be in conformance with all P&C. This means that not all FSC requirements are adjustable. For example, compliance with laws is always obligatory as well as respecting the rights of Indigenous Peoples.

At the same time, FSC IC guidance recognizes that a continuum of risk is present depending on the scale, intensity and context of *forest* management activities**. For *community forests**, *small-scale* forests**, and *low-intensity* forests**, risk is considered to be lower at times. However, the context of *management activities** should also always be considered when evaluating risk. At times, *management activities** in these *forests** may carry higher risk (e.g. when they occur in a densely populated area with a high number of species at risk present or in a forest with steep slopes that are critical to a community's water supply). When a Criterion states, '*proportionate to scale, intensity and risk*', this means that the higher the levels of potential and actual negative impacts of *management activities**, the greater the need there is for prevention, mitigation and repair. If there is a probability of negative impact from *management activities** then this impact must be addressed, regardless of the scale or intensity of the *Organization**.

In Canada, the resources and capacity of *community forests**, *small-scale* forests**, and *low-intensity* forests** is generally lower than larger forest companies. Given this reduced capacity, three requirement areas have been adapted within the Canadian National Forest Management Standard.

1. Reduced Engagement Requirements

As the FSC IC guidance (FSC-GUI-60-002) states:

Activities with low potential unacceptable negative impact mean that the Organization can reduce requirements for stakeholder engagement to demonstrate conformance. This means that they should generally be required to understand the interests and concerns of neighbours and adjacent landowners without the need for extensive consultation. This may be extended to potentially affected stakeholders that are not adjacent neighbours, for example in MUs [management units] located upstream from water users.¹

The requirement for extensive proactive *engagement** has been dropped in many instances for these *Organizations** although in some cases it has been kept for *community forests** as their mandate is to engage and understand the community around them. This does not mean that *engagement** requirements are absent. Communication and input from stakeholders and Indigenous communities remains important.

¹ All FSC IC text provided here is used as examples of guidance and should not be taken as instructions for how to conform to the Canadian NS. Actual requirements related to these topics are found in indicators and accompanying guidance within the NS.



Given these modifications, it is important for stakeholders interested in *engaging** with these *Organizations** to know that they should actively express their ideas or concerns. When this dialogue has begun, the *Organization** is obliged to respond and a relationship can begin to be built.

2. Reduced Requirements related to Policies, Procedures and Assessments

As the FSC IC guidance (FSC-GUI-60-002) states:

Activities with low potential unacceptable negative impact mean that the Organization has reduced requirements to demonstrate conformance and may verbally communicate policies and procedures. Likewise, some assessments may be completed using experience, observations and local experts. Group Managers may also have an important role to play in developing procedures and policies and for conducting certain assessments.

An emphasis on the collection and creation of original data specific to the *forest** and reliance on outside *technical experts** has been lessened for these *Organizations**. Likewise, requirements related to processes have also been adapted. In general, the goal has been to make indicators more performance-based rather than process intensive.

3. Reduced Landscape Level Requirements

Given our vast and globally unique forested regions, the Canadian National Forest Management Standard has a high level of requirements related to the ecological aspects of forest management on a landscape-scale. These requirements were written with large *Organizations** in mind and can be, at times, too onerous or inappropriate for smaller *Organizations**.

To address this, one method taken has been to drop the landscape-level indicator and instead adopt original indicator from the IGI (International Generic Indicators) approved by FSC IC. Therefore, landscape-level requirements still remain, but are often lessened and still conform to FSC IC requirements. For example, *community forests**, *small-scale** forests, and *low-intensity** forests do not have to meet requirements related to Range of Natural Variation, but do have to take into account native ecosystem features (see Criterion 6.6).

On Reading the Standard

The scope of these adaptations has not been finalized and this draft serves to open the door to stakeholders and Aboriginal communities for their input to ensure all indicators are SMART (Specific, Measurable, Achievable, Relevant, and Timebound).

FSC IC's Transfer Procedure (FSC-PRO-60-006), facilitates the development of national indicators by guiding the assessment of FSC's international generic indicators (IGI) and the evaluation of whether or not an indicator is regionally and/or nationally appropriate.

Standards developers are allowed to:

- 1. Adopt:** The IGI is copied into the Standard.
- 2. Adapt:** The IGI is revised in order to address terminology, scope, or effectiveness.
- 3. Drop:** The IGI is omitted from the Standard where it is determined to be inapplicable or otherwise non-contributing in measuring conformance to a criterion.
- 4. Add:** A new indicator is added in order to better establish conformance to a criterion as appropriate to the Canadian context.



Principles and Criteria (in bold text) are common to all FSC standards around the world and cannot be modified. Since every element of each Criterion must be addressed in all standards, they provide a good reference to determine whether the indicators are adequate to meet the requirements of all FSC standards.

Eventually a more interactive version of this Standard may be developed in order to reduce its length. At this point, it should be read with these notes in mind:

- All indicators and guidance related to SIR can be found in green boxes below NS indicators.
- NS indicators which are inapplicable to *community* forests**, *small-scale* forests**, and/or *low-intensity* forests** are coloured in grey.
- “Forthcoming in Draft 2” refers to Draft 2 of Canada’s National Forest Management Standard which is set to also include Draft 2 of the SIR indicators.
- The current NS indicators are in the process of undergoing revision based on the comments received during the Draft 1 consultation period. Therefore, they also should be considered to be in draft form.
- «L» before SIR indicators stands for ‘low’ and comes from FSC IC guidance.



PROPOSED DEFINITIONS AND KEY CONCEPTS

The following are the proposed definitions related to SIR in this draft. Reviewers are encouraged to comment on all definitions and concepts. These definitions will be added to the Glossary or Draft 2 of the National Forest Management Standard.

DEFINITIONS

Community Forest: Any forestry operation managed by a local government, community group, First Nation or community-held corporation for the benefit of the entire community, in which profits are cycled back into the community, and has a total area equal to or under 80,000 hectares.

Industrial licensed forests (SFL, CAAF) or forest partnerships in which control does not rest with the communities are not community forests.

Employee: Anyone who is on the payroll of a specific business, in a full-time, part-time or seasonal capacity, for whom the *resource manager** withholds and remits taxes in accordance with federal and provincial laws. (Adapted from GLSL)

Low intensity forest: *Forests** with a harvesting rate of less than 20% of the mean annual growth in timber, and either an annual harvest or an annual average harvest of less than 5,000 m³ (averaged over the certificate lifetime).

*Native forests** used solely for harvesting *non-timber forest products** also qualify as low intensity forests regardless of size or intensity.

Plantations of *non-timber forest products** shall not be considered low intensity forest management units within the meaning of this standard.

Private land forest: Any *forest** owned by a private individual, *Organization**, or Indigenous community.

Small-scale forest: *Forests** managed for timber that are less than or equal to 1000 ha in size.

Group entity: The group entity is the entity representing the forest properties that constitute a group for the purpose of FSC forest management certification. The group entity applies for group certification and finally holds the forest management certificate. The group entity is responsible to the certification body for ensuring that the requirements of the FSC Principles and Criteria for Forest Stewardship are met in all forest properties participating in the group. The group entity may be an individual (e.g. a 'resource manager'), a cooperative body, an owner association, or other similar legal entity. (FSC 30-005)

Group member: forest owner or forest manager who participates in a group scheme for the purpose of FSC forest management certification. Group members are responsible for implementing any requirements of group membership. Group members do not hold individual FSC certificates, but as long as they comply with all the requirements of group membership, their forest properties are covered by the forest management certificate issued to the group entity. (FSC 30-005)



Resource Manager: a person or *Organization** that has been given the responsibilities by forest owners for the utilization of their forest resources, including operational planning and harvesting operations. In a group scheme, resource manager and group entity may be the same person / organization (this is often referred to as 'resource manager type of group' or 'Type II Group'). (FSC 30-005)

The *management unit** is referred to as the *resource management unit** in SIR Indicators and the manager is referred to as a *resource manager**

Resource Management Unit (RMU): Set of FMUs managed by the same managerial body (e.g. the same resource manager). In the case of small operations, RMUs may be used as the basis for sampling. (FSC 30-005)

Types of forest management groups:

Type I group: group with shared responsibilities between the group entity and the group members. These may vary from administrative tasks to planning, silviculture, harvesting, and monitoring with shared responsibilities between the group entity and the group members. (FSC 30-005)

Type II group: 'Resource manager' type of group in which the group entity has basically taken all operational responsibilities including administration, forest management and harvesting activities on behalf of the group members. (FSC 30-005)

Group certification is meant to provide access to certification for small enterprises by centralizing the collective responsibilities of certification. Therefore, group managers will be primarily responsible these cases to organize and meet certain requirements that individual members can not be expected to meet.

Shared Document: In the case of group certification, this refers to the document that the *resource manager** holds and distributes to all members of the group and which is read and agreed upon by all *group members** in order for them to become a *group member** of the *group entity**.

Workers: All employed persons including public employees as well as 'self-employed' persons. This includes part-time and seasonal employees, of all ranks and categories, including laborers, administrators, supervisors, executives, contractor employees as well as self-employed contractors and sub-contractors. (from Canadian National Standard).



OVERVIEW OF INAPPLICABLE NATIONAL STANDARD INDICATORS

These indicators are either inapplicable or have alternative SIR Indicators provided in the Standard.

Principle 1	Principle 6	Principle 8
1.6.1	6.1.1	8.1.1
1.7.1	6.1.2	8.2.1
Principle 2	6.1.3	Principle 9
2.2.1	6.1.4	9.1.1
2.2.5 ^a	6.1.5	9.1.2
2.3.2	6.2.1 ^b	9.1.4
2.3.3	6.3.1	9.1.6
2.3.4	6.3.2	9.2.1
2.5.2	6.4.3 ^b	9.2.2
2.6.1	6.5.1	9.2.3
Principle 3	6.5.2	9.3.1
3.1.2	6.5.3	9.4.2
3.2.1	6.5.4	Principle 10
3.2.2	6.5.5	10.9.1
3.5.1	6.5.6	10.12.1
3.5.2	6.5.7	
Principle 4	6.5.8	
4.1.2 ^a	6.5.9	
4.2.1	6.5.10	
4.3.1	6.5.11	
4.4.1	6.6.1	
4.5.1 ^a	6.6.2	
4.5.2 ^a	6.6.3	
4.6.1	6.6.4	
4.7.1 ^a	6.6.5	
4.7.2 ^a	6.6.6	
4.7.3	6.8.1	
Principle 5	6.8.2	
5.1.2	6.8.3 ^b	
5.2.1 #9-11	Principle 7	
5.2.2	7.1.3 ^b	
5.2.3	7.2.2 H	
5.2.4	7.6.1	
5.3.1	7.6.4	
5.3.2	7.6.5	
5.4.2		

^a applicable for community forests

^b potentially applicable for community forests



PRINCIPLE* 1: COMPLIANCE WITH LAWS

The Organization shall* comply with all applicable laws*, regulations and nationally-ratified* international treaties, conventions and agreements. (P1 V4)*

1.1 The Organization* shall* be a legally defined entity with clear, documented and unchallenged legal registration*, with written authorization from the legally competent* authority for specific activities. (New)

1.1.1 *Legal registration* to carry out all activities within the scope of the certificate is documented and unchallenged. (Adopt)*

1.1.2 IGI (Drop)

1.2 The Organization* shall* demonstrate that the legal status* of the Management Unit*, including tenure* and use rights*, and its boundaries, are clearly defined. (C2.1 P&C V4)

1.2.1 *Legal* tenure* to manage and use resources within the scope of the certificate is documented. (Adopt)*

1.2.2 IGI (Drop)

1.2.2 The boundaries of all *Management Units** within the scope of the certificate are clearly marked or documented and clearly shown on maps. **(Adopt was 1.2.3)**

1.3 The Organization* shall* have legal* rights to operate in the Management Unit*, which fit the legal status* of The Organization* and of the Management Unit*, and shall* comply with the associated legal* obligations in applicable national and local laws* and regulations and administrative requirements. The legal* rights shall* provide for harvest of products and/or supply of ecosystem services* from within the Management Unit*. The Organization* shall* pay the legally prescribed charges associated with such rights and obligations. (C1.1, 1.2, 1.3 V4)

Annex A of all *applicable laws*, obligatory codes of practice* and legal* and customary rights** at the national and sub-national level will be developed after Draft 2.

At the time of editing this Standard, no *customary rights** have been formally identified for *local communities** in Canada.

The absence of identified rights does not mean that rights do not exist, and FSC cannot assume *customary rights** will not be recognized in the future. A *local community** may assert *customary rights**, and identify these to *the Organization**. Annex H describes the process suggested for demonstrating *customary rights**.

Aboriginal and Treaty Rights are confirmed in the Canadian Constitution. FSC Canada will provide further guidance in Draft 2 of this Standard for describing a process related to the assertion of *customary rights** by *Indigenous Peoples**.

- 1.3.1 All activities undertaken in the *Management Unit** are carried out in compliance with:
1. *Applicable laws** and regulations;
 2. Administrative requirements; and
 3. *Legal** and *customary rights**. **(Adapt)**

- 1.3.2 Payment is made in a *timely manner** of all applicable legally prescribed charges connected with forest management. **(Adopt)**

- 1.3.1 IGI (Drop)

- 1.4 ***The Organization** shall* develop and implement measures, and/or shall* engage* with regulatory agencies, to systematically protect the *Management Unit** from unauthorized or illegal resource use, settlement and other illegal activities. (C1.5 V4)**

It is not always possible for *The Organization** to enforce protective measures when *The Organization** is not the landowner and/or does not have the *legal** rights of control. In Canada, regulatory bodies have the legal responsibility for controlling illegal activities.

Measures to protect the *Management Unit** from unauthorized or illegal resource use, settlement and other illegal activities emphasize prevention rather than control 'after the event' and may include:

- *Forest roads** have gates and/or have controlled access to areas of high *risk**;
- *Temporary roads** are physically closed off after harvesting;
- *Forest roads** are patrolled to detect and prevent illegal access to the *forest**; and
- Personnel and resources have been assigned to detect and control illegal activities promptly, within their *legal** rights.

- 1.4.1 Where appropriate, measures are implemented to provide *protection** from identified unauthorized or illegal harvesting, hunting, fishing, trapping, collecting, settlement and other unauthorized activities. **(Adapt)**

- 1.4.2 Identified illegal harvesting, hunting, fishing, trapping, collecting, settlement and other unauthorized or illegal activities are documented and reported to the appropriate authorities. **(Add)**

- 1.4.3 Full cooperation is provided to regulatory bodies to identify, report, control and discourage unauthorized or illegal activities. **(Adapt was 1.4.2)**

- 1.4.3 IGI (Drop)

- 1.5 ***The Organization** shall* comply with the applicable *national laws**, *local law**, *ratified** international conventions and *obligatory codes of practice**, relating to the transportation and trade of forest products within and from the *Management Unit**, and/or up to the point of first sale. (C1.1, 1.3 V4)**

- 1.5.1 Compliance with relevant *national laws**, *local laws** and *ratified** international conventions relating to the transportation and trade of forest products up to the point of first sale, the *Convention on International Trade in Endangered Species of Wild Fauna and Flora* (CITES) and the *Wild Animal and Plant Protection and Regulation of International and Interprovincial Trade Act* (WAPPRIITA) is demonstrated, including through possession of certificates for harvest and trade. **(Adapt)**



1.5.2 IGI (Drop)

1.6 *The Organization* shall* identify, prevent and resolve disputes* over issues of statutory or customary law*, which can be settled out of court in a timely manner*, through engagement* with affected stakeholders*. (C2.3 V4)*

Annex G gives more details about how *disputes** are addressed throughout the Standard.

1.6.1 One or more *publicly available* dispute* resolution processes* are in place. All *dispute* resolution processes* are agreed upon through *culturally appropriate* engagement* with Indigenous Peoples* and affected stakeholders**. **(Adapt)**

Small Scale/Low Intensity/Community Forests

SIR INDICATOR

L1.6.1: One or more *publicly available* dispute* resolution processes* are in place and provided to *Indigenous Peoples* and affected stakeholders**.

1.6.2 *Disputes* related to issues of applicable laws* or customary law* that can be settled out of court* are responded to in a *timely manner**, and are either resolved or are in the *dispute* resolution process*. **(Adopt)**

1.6.3 Up-to-date records of *disputes** related to issues of *applicable laws* or customary law**, are held, including:

1. Steps taken to resolve *disputes**;
2. Outcomes of all *dispute* resolution processes*; and
3. Unresolved *disputes**, the reasons they are not resolved, and how they will be resolved.

(Adopt)

1.6.4 Operations cease in areas directly related to where the *dispute** exists:

1. *Of substantial magnitude**; or
2. *Involving a significant number of interests.*

(Adapt)

SIR GUIDANCE

Forthcoming in Draft 2:

Additional Guidance around *disputes* of substantial magnitude**.

1.7 *The Organization* shall* publicize a commitment not to offer or receive bribes in money or any other form of corruption, and shall* comply with anti-corruption legislation where this exists. In the absence of anticorruption legislation, The Organization* shall* implement other anticorruption*





measures proportionate to the *scale** and *intensity** of management activities and the *risk** of corruption. (New)

1.7.1 A policy is implemented that:

1. Includes a commitment not to offer or receive bribes of any description,
2. Meets or exceeds related legislation, and
3. Is *publicly available** at no cost.

(Adopt)

Small Scale/Low Intensity/Community Forests

SIR INDICATOR

L1.7.1: The *management plan** includes a policy not to offer or receive bribes of any description.

1.7.2 IGI (Drop)

1.7.3 IGI (Drop)

1.7.4 IGI (Drop)

1.7.2 Corrective measures are implemented if corruption does occur. (Adopt was 1.7.5)

1.8 The Organization* shall* demonstrate a long-term* commitment to adhere to the FSC Principles* and Criteria* in the Management Unit*, and to related FSC Policies and Standards. A statement of this commitment shall* be contained in a publicly available* document made freely available. (C1.6 V4)

1.8.1 A written policy, available at no cost, is endorsed by an individual with authority to implement the policy, includes a long-term commitment to *forest** management practices consistent with FSC *Principles** and *Criteria** and related Policies and Standards. (Adapt)

1.8.2 IGI (Drop)

PRINCIPLE* 2: *WORKERS*’* RIGHTS AND EMPLOYMENT CONDITIONS

The Organization shall* maintain or enhance the social and economic wellbeing of workers*.*
(new)

2.1 *The Organization* shall* uphold* the principles and rights at work as defined in the ILO Declaration on Fundamental Principles and Rights at Work (1998) based on the eight ILO Core Labour Conventions. (C4.3 P&C V4)*

2.1.1 Employment practices and conditions for *workers** demonstrate conformity with Federal and Provincial Labour Laws and with the principles and rights of workers addressed in the ILO Core Labour Conventions. **(Adapt)**

2.1.2 *Workers** are able to establish or join labour organizations of their own choosing subject only to the rules of the labour organization concerned. **(Adopt)**

2.1.3 Where collective bargaining takes place, agreements are implemented with workers’ associations. **(Adapt)**

2.2 *The Organization* shall* promote gender equality* in employment practices, training opportunities, awarding of contracts, processes of engagement* and management activities. (new)*

2.2.1 Systems are implemented that promote *gender equality** and prevent gender discrimination in employment practices, training opportunities, awarding of contracts, processes of *engagement** and management activities. **(Adopt)**

Small Scale/Low Intensity/Community Forests

SIR INDICATOR

L 2.2.1: Measures are implemented that promote *gender equality** and prevent gender discrimination in employment practices, training opportunities, awarding of contracts, processes of *engagement** and *management activities**.

SIR GUIDANCE

Examples of such measures include:

- Establishing clear criteria for hiring decisions;
- Educating staff about gender discrimination in the workplace; and/or
- Facilitating family leave or child-care arrangements.

2.2.2 Job opportunities are open to both women and men under the same conditions.
(Adapt)



- 2.2.3 IGI (Drop)
- 2.2.3 With consideration for worker experience, performance, and working conditions, women and men are paid the same wage when they do the same work. **(Adapt was 2.2.4)**
- 2.2.5 IGI (Drop)
- 2.2.6 IGI (Drop)
- 2.2.7 IGI (Drop)
- 2.2.4 Women are encouraged to actively participate in all levels of employment and decision-making. **(Adapt was 2.2.8)**
- 2.2.5 Confidential and effective mechanisms exist for reporting and eliminating cases of sexual harassment and discrimination based on gender, marital status, parenthood or sexual orientation. **(Adopt was 2.2.9)**

Small Scale/Low Intensity Forests

SIR INDICATOR

L2.2.5: If cases of sexual harassment or discrimination based on gender, marital status, parenthood or sexual orientation arise, they are handled through an existing *dispute** resolution processes.

SIR GUIDANCE

The structure of the *dispute** resolution process from indicators 1.6.1 and 4.6.1 may be utilized for this purpose. However, if a *small-scale** and/or *low intensity** *Organization** does have the organizational capacity available to establish confidential and effective mechanisms, this should be completed.

Examples of confidential and effective mechanisms include:

- The appointment of an independent confidential person to whom complaints can be directed;
- The establishment of a review and response process for the complaint; and/or
- The establishment of a policy around sexual harassment and gender equality that is communicated to all *employees**.

Community Forests Note

These *Organizations** must conform to NS 2.2.5 as they have the organizational capacity to appoint a confidential person (e.g. a board member) to whom complaints related to cases of sexual harassment and discrimination based on gender, marital status, parenthood or sexual orientation can be directed.



- 2.3 **The Organization* shall* implement health and safety practices to protect workers* from occupational safety and health hazards. These practices shall*, proportionate to scale, intensity and risk* of management activities, meet or exceed the recommendations of the ILO Code of Practice on Safety and Health in Forestry Work. (C4.2 P&C V4)**
- 2.3.1 Compliance with relevant provincial occupational health and safety requirements is demonstrated. **(Adapt)**
- 2.3.2 A worker safety program is developed, implemented and reviewed periodically. **(Adapt)**

Small Scale/Low Intensity/Community Forests

SIR INDICATORS

L2.3.2: Workers* have personal protective equipment appropriate to their assigned tasks.

L2.3.3: Use of personal protective equipment is enforced.

SIR GUIDANCE

The use of personal protection equipment should be enforced during *management activities** that involve *employees** or *workers** by the *resource manager**.

See Annex B: Workers Safety Program

- 2.3.3 IGI (Drop)
- 2.3.3. Records are kept on health and safety practices including accident rates, a description of the accidents and their causes, and lost time due to accidents. **(Adapt was 2.3.4)**

Small Scale/Low Intensity/Community Forests

SIR INDICATOR

L2.3.4: Records are kept on health and safety practices including a description of the accidents and their causes.

- 2.3.4 The average frequency and severity of accidents over time are comparable to, or lower than, national forest industry averages. **(Adapt was 2.3.5)**
- 2.3.6 IGI (Drop)
- 2.4 **The Organization* shall* pay wages that meet or exceed minimum forest* industry standards or other recognized forest* industry wage agreements or living wages*, where these are higher than the legal* minimum wages. When none of these exist, The Organization* shall***



through *engagement** with *workers** develop mechanisms for determining *living wages**.
(new)

2.4.1 IGI (Drop)

2.4.1 Remuneration, including wages and benefits (such as health and retirement provisions), for forest *workers** is equal to or exceeds prevailing regional standards in the industry.
(Adapt was 2.4.2)

Small Scale/Low Intensity/Community Forests

SIR GUIDANCE

In the case of *small scale**, *low intensity** and/or *community forests**, remuneration can be equal to or exceed the prevailing regional standards in similar businesses.

2.4.3 IGI (Drop)

2.4.2 Wages, salaries and contracts are paid on time. (Adopt was 2.4.4)

2.4.5 IGI (Drop)

2.5 *The Organization shall* demonstrate that *workers** have job-specific training and supervision to safely and effectively implement the *Management Plan** and all *management activities**. (C7.3 P&C V4)**

2.5.1 Relevant *workers** have job-specific training consistent with Annex C to safely and effectively contribute to the implementation of the *management plan** and all *management activities**. (Adopt)

Small Scale/Low Intensity/Community Forests

SIR GUIDANCE

When indicator 2.5.1 is applied to *small scale**, *low intensity** and/or *community forests**, the *resource manager** is not required to provide training as described in Annex C to all *workers**, but shall ensure, at minimum, that all *employees** carrying out activities in the *resource management unit** have the job-specific training necessary to safely and effectively contribute to the implementation of the *management plan** and all *management activities**.

NS Annex C may serve as a guideline for the type of training advised for *employees**.

In cases where the *resource manager** suspects other *workers** lack the job-specific training necessary, *best efforts** should be made to make this training either available or required.



2.5.2 Up-to-date training records are kept for all relevant *workers**. **(Adopt)**

Small Scale/Low Intensity/Community Forests

SIR INDICATOR

L2.5.2: Up-to-date training records are kept for all *employees**.

2.6 The Organization*, through *engagement** with *workers**, *shall** have mechanisms for resolving grievances and for providing *fair compensation** to *workers** for loss or damage to property, *occupational diseases**, or *occupational injuries** sustained while working for *The Organization**. (new)

2.6.1 A *dispute** resolution process is in place, developed through *culturally appropriate* engagement** with *workers**. **(Adopt)**

Small Scale/Low Intensity/Community Forests

SIR INDICATOR

L 2.6.1: A process is in place for fairly resolving *disputes** with *employees** pertaining to occupational health and safety.

2.6.2 *Workers'** grievances are identified and responded to, and are either resolved or are in the *dispute** resolution process. **(Adopt)**

2.6.3 Up-to-date records of *workers** grievances related to *workers'** loss or damage of property, *occupational diseases** or *occupational injuries** are maintained including:

1. Steps taken to resolve grievances;
2. The outcome of *disputes**, including *fair compensation**; and
3. Unresolved *disputes**, how they will be resolved and if they have not been resolved, the reasons why. **(Adapt)**

2.6.4 *Workers** are covered by safety insurance, in accordance with provincial laws and regulations. **(Adapt)**



PRINCIPLE* 3: INDIGENOUS PEOPLES'* RIGHTS

The Organization* shall* identify and uphold indigenous peoples'* legal* and customary rights* of ownership, use and management of land, territories and resources affected by management activities*. (P3 P&C V4)

The term "Indigenous Peoples" in this Standard means "Aboriginal Peoples," as defined in the Canadian Constitution Act, 1982, to include "Indians, Inuit and Métis." Aboriginal rights are collectively-held rights, therefore most of the language referring to Indigenous rights in this Standard refers to "Aboriginal Peoples," or communities as a whole, rather than to individuals. Indigenous community is used in this Standard to mean "Aboriginal community," which refers to any First Nation, Inuit or Métis community (status or non-status) with a demonstrated traditional connection to the *Forest Management Unit** (FMU).

The Standard directs the Certifying Body (CB) to assess the relationship between *The Organization** and the affected *Indigenous Peoples**. This relationship forms the basis for addressing *Criterion** 3.2 relating to *free, prior and informed consent** (FPIC). The relationship should clearly demonstrate whether *The Organization** recognizes and upholds, without diminishment, the *legal** and *customary rights** of *Indigenous Peoples** over their lands, territories and resources. The process of determining where Aboriginal Rights and Title apply is a matter of negotiation between the Crown and *Indigenous Peoples** and the outcome of litigation. However, *The Organization** assumes certain obligations when it is issued a licence to access timber on Crown lands.

The Standard defines the relationship between *The Organization** and affected *Indigenous Peoples** in terms of the recognition of *legal** and *customary rights** and the right to free, prior and informed consent as it relates to management planning and operations on the forest *Management Unit**. A mutually-developed understanding of the right to *FPIC** is demonstrated in *Criterion** 3.2; however, not all matters of *culturally appropriate* engagement** or best practices are addressed in Principle 3. Engagement between *The Organization** and *Indigenous Peoples** may also be addressed through other soft policy instruments (e.g. voluntary capacity agreements or contribution agreements) described under Principle 4 and/or Principle 5 for example. FSC Canada acknowledges that the interests and knowledge of *Indigenous Peoples** go beyond the rights-based criteria of Principle 3.

The application of the Standard is without prejudice to treaties, land claim settlements, or agreements Indigenous peoples may reach with the Crown. The Standard shall not be construed as an acceptance of Provincial Crown title or extinguishment of Aboriginal title. The Standard does not derogate from the rights of Indigenous peoples. FSC Canada intends to develop further guidance on the application of *FPIC**, including a discussion about best practices for the participation of *Indigenous Peoples** and forest management processes related to the assertion of *customary rights** by *Indigenous Peoples**.

3.1 *The Organization* shall* identify the indigenous peoples* that exist within the Management Unit* or those that are affected by management activities*. The Organization* shall* then, through engagement* with these indigenous peoples*, identify their rights of tenure*, their rights of access to and use of forest* resources and ecosystem services*, their customary rights* and legal* rights and obligations, that apply within the Management Unit*. The Organization* shall* also identify areas where these rights are contested. (new)*

3.1.1 *Indigenous Peoples** that may be affected by *management activities** are identified.
(Adopt)



3.1.2 Through *culturally appropriate* engagement** with the *Indigenous Peoples** identified in 3.1.1, the following are documented and/or mapped:

- 1 Their *legal* and customary rights* of tenure**;
- 2 Their *legal* and customary* access to, and use rights* of, the forest* resources and ecosystem services**;
- 3 Their *legal* and customary rights** and responsibilities that apply;
- 4 The evidence supporting these rights and responsibilities;
- 5 Areas where rights are contested between *Indigenous peoples**, governments and/or others;
- 6 The expressed aspirations and goals of *Indigenous peoples** related to *management activities**;
- 7 The impact of management activity as it relates to their *legal* and customary rights**

(Adapt)

Small Scale/Low Intensity/Community Forests

SIR INDICATOR

L3.1.2: The following are identified with *best efforts** by the manager through *culturally appropriate engagement** with *Indigenous Peoples**:

- 1) *Indigenous peoples* legal* and customary rights* of tenure**;
- 2) *Indigenous peoples* legal* and customary* access to, and use rights* of, the forest* resources and ecosystem services**;
- 3) *Indigenous peoples* legal* and customary rights** and responsibilities that apply;
- 4) Areas where rights are contested between *Indigenous peoples**, governments and/or others; and
- 5) The impact of *management activity** as it relates to their *legal* and customary rights**

SIR GUIDANCE

In the case of a *group entity**, the *resource manager** is expected to undertake these tasks. This indicator has relevance not only for individual forests, but also for the cumulative forest area of the certificate as a whole.

To lessen the administrative burden, evidence supporting these rights and responsibilities and the aspirations and goals of *Indigenous Peoples** is not required. However, where possible, when speaking to Indigenous Peoples or government, at any phase during management, evidence supporting these rights and responsibilities, and information regarding aspirations and goals, should be gathered and kept for both the *resource manager(s)** and/or the *group member(s)** knowledge. These facts are in the *resource manager's** best interest to know for future decision-making processes. If possible, landowners should also be encouraged to contribute information regarding these topics as well as those that are required by L3.1.2.

Forthcoming in Draft 2



Further guidance related to *culturally appropriate* engagement**. This concept will be explained in more detail (beyond what is present in Annex I in the National Standard) in a forthcoming document regarding Principle 3.

Further guidance related to how to make *best efforts** and the documentation of those efforts.

3.2 The Organization* shall* recognize and uphold the legal* and customary rights* of indigenous peoples* to maintain control over management activities* within or related to the Management Unit* to the extent necessary to protect their rights, resources and lands and territories. Delegation by indigenous peoples* of control over management activities* to third parties requires Free, Prior and Informed Consent*. (C3.1 and 3.2 P&C V4)

*Free, prior and Informed Consent (FPIC)**

The right to *FPIC** can be described as the right to participate in decision-making and to give, modify, withhold or withdraw consent to an activity affecting the holder of this right.

Consent must be freely given, obtained prior to implementation of activities affecting rights and be founded upon an understanding of the full range of issues implicated by the activity or decision in question (FSC IC Technical Series No. 2012-2: 11)

- Consent is not the same as consultation. Consultation processes based on the right to *FPIC** explicitly establish consent as the objective of consultations.
- Consent is sought and granted according to the unique formal or informal political and administrative institutions of each community.
- Consent may be given or withheld in phases, over specific periods of time for distinct stages or phases of the forest management operation.
- Consent is not a one-time decision. It is part of an iterative process that requires continual monitoring, maintenance and reaffirmation.
- Decisions to withhold consent are not necessarily forever binding. These decisions can be revisited by rights holders as situations changes or become more favourable (e.g. capacity is developed or government negotiations are concluded).
- Consent cannot be arbitrarily withdrawn. The *FPIC** Agreement is binding on both parties and if the conditions upon which the original consent was based are being met, consent is implied.

Consent offers the most certainty for development projects on Aboriginal title lands and those under claim. Where consent cannot be obtained, an evolving Canadian legal framework, most recently informed by the *Tsilhqot'in* decision¹, sets out legal thresholds for justifying infringement.

FSC acknowledges that there are a vast array of differences in regional forest tenure allocation processes, Aboriginal rights and claims and resource development pressures that will affect the implementation of *FPIC* processes. FSC Canada will be developing further guidance and supplementary materials on the right to *FPIC* and its application in the Canadian context, and as understanding increases will update normative indicator 3.2.4.

¹ *Tsilhqot'in Nation v British Columbia*, 2014 SCC 44, [2014] 3 CNLR 362 [*Tsilhqot'in Nation*]



- 3.2.1 Prior to *management activities** and through a mutually agreed on *culturally appropriate* engagement** process, it is determined how *Indigenous Peoples** can participate in management planning, both strategic and/or operational to the extent necessary to protect their rights, resources, lands and territories. **(Adapt)**

Small Scale/Low Intensity/Community Forests

SIR INDICATOR

L3.2.1: Prior to *management activities**, the *resource manager** determines in consultation with *Indigenous Peoples** how they can participate in management planning, both strategic and/or operational, to the extent necessary to protect their rights, resources, lands and territories as directed by local and *national laws**.

- 3.2.2 Provision of mutually-agreed upon, *culturally appropriate** support for Indigenous communities to participate in management planning. **(Add)**
- 3.2.3 The *legal** and *customary rights** of Indigenous Peoples* are not violated by *The Organization**. **(Adopt)**
- 3.2.4 *Free, prior and informed consent** is granted by *Indigenous Peoples** prior to *management activities** that affect their identified rights through a process that includes:
1. Informing the *Indigenous Peoples** of the current and future planned forest *management activities**;
 2. Ensuring *Indigenous Peoples** know their rights and responsibilities regarding the resource;
 3. Informing the *Indigenous Peoples** of the economic, social and environmental value of the forest management resource;
 4. Informing the *Indigenous Peoples** of their right to withhold consent to the proposed management activities to the extent necessary to protect rights, resources, lands and territories; and
 5. Ensuring that *Indigenous Peoples** are free to provide or withhold consent without coercion.
 6. A mutually-agreed upon dispute resolution process for the purpose of managing the consent agreement is developed.

(Adapt and Add)

Small Scale/Low Intensity/Community Forests

SIR GUIDANCE

Respecting the rights of local communities and *Indigenous Peoples** is not dependent on SIR. All certificate holders must comply with local and *national laws** regardless of the scale or intensity of *management activities** (see Criterion 1.3).



Forthcoming in D2:

Further guidance related to FPIC and the relationship between private land and Indigenous communities. At this point in time, the Standard Development Group at FSC Canada and the P3 Technical Expert Panel are discussing the legal framework regarding these issues.

The ability of smaller *Organizations** to meet the process requirements related to FPIC found in indicator 3.2.4 will also be considered.

- 3.3 In the event of delegation of control over *management activities**, a *binding agreement** between *The Organization** and the *indigenous peoples** shall* be concluded through *Free, Prior and Informed Consent**. The agreement shall* define its duration, provisions for renegotiation, renewal, termination, economic conditions and other terms and conditions. The agreement shall* make provision for monitoring by *indigenous peoples** of *The Organization**'s compliance with its terms and conditions. (new)**

- 3.3.1 A *binding agreement** contains the terms and conditions in which *Free, Prior and Informed Consent** is reached based on *culturally appropriate* engagement**. **(Adapt)**

SIR GUIDANCE

Forthcoming in D2:

Further guidance related to *FPIC** and how a *binding agreement** is to be achieved.

- 3.3.2 Records of *binding agreements** are maintained. **(Adopt)**
- 3.3.3 A *binding agreement** defines the duration, provisions for renegotiation, renewal, termination, economic conditions and provisions for monitoring. **(Adapt)**
- 3.4 *The Organization** shall* recognize and uphold the rights, customs and culture of *indigenous peoples** as defined in the United Nations Declaration on the Rights of Indigenous Peoples (2007) and ILO Convention 169 (1989). (C3.2 P&C V4, revised to comply with FSC-POL-30-401, ILO 169 and UNDRIP).**

FSC Canada has reviewed that United Nations Declaration on the Rights of Indigenous Peoples (2007) and ILO Convention 169 (1989) to ensure that requirements are included in national Standards.

- 3.4.1 IGI **(Drop)**

- 3.4.1 Where evidence that the rights, customs and culture of *Indigenous Peoples**, as defined



in UNDRIP and ILO Convention 169, have been violated by *The Organization**, the situation is documented including steps to *restore** these rights, customs and culture of *Indigenous Peoples** to the satisfaction of the rights holders. **(Adapt was 3.4.2)**

- 3.5 The Organization*, through engagement* with indigenous peoples*, shall* identify sites which are of special cultural, ecological, economic, religious or spiritual significance and for which these indigenous peoples* hold legal* or customary rights*. These sites shall* be recognized by The Organization* and their management, and/or protection* shall* be agreed through engagement* with these indigenous peoples*. (C3.3 P&C V4, revised to POL 30-401)**
- 3.5.1 Measures to protect such sites, including access agreements, are agreed upon, documented and implemented through *culturally appropriate* engagement** with *Indigenous Peoples**. When *Indigenous Peoples** determine that physical identification of sites in documentation or on maps would threaten the value or protection of the sites, then other means will be used. **(Adapt)**

Small Scale/Low Intensity/Community Forests

SIR INDICATORS

L 3.5.1: *Best efforts** are made to *engage** with *Indigenous Peoples** to identify sites which are of special cultural, ecological, economic, religious or spiritual significance and for which these *Indigenous peoples** hold *legal** or customary rights* as directed by local and *national laws**.

L 3.5.2: Measures to protect such sites, including access agreements, are agreed upon, and documented. When *Indigenous Peoples** determine that physical identification of sites in documentation or on maps would threaten the value or protection of the sites, then other means will be used.

- 3.5.2 Wherever sites of special cultural, ecological, economic, religious or spiritual significance are newly observed or discovered, management activities in the vicinity cease immediately until protective measures have been agreed to with the *Indigenous Peoples**, and as directed by *local* and *national laws**. **(Adapt)**

Small Scale/Low Intensity/Community Forests

SIR INDICATOR

L3.5.3: When an Indigenous community indicates that *management activities** on particular blocks or sites are creating a threat of serious environmental, economic, or cultural impact, the *resource manager** suspends or relocates *management activities** until protective measures have been agreed to with the *Indigenous Peoples** and as directed by local and *national laws**.



SIR GUIDANCE

Examples of serious threats could include:

- Destruction of burial sites, spiritual sites, spawning areas, medicinal areas;
- Severe disruption of livelihood;
- Damage to community water supply; or,
- Severe disruption of food chain to the community.

- 3.6 ***The Organization* shall* uphold the right of indigenous peoples* to protect and utilize their traditional knowledge* and shall* compensate local communities* for the utilization of such knowledge and their intellectual property*. A binding agreement* as per Criterion* 3.3 shall* be concluded between The Organization* and the indigenous peoples* for such utilization through Free, Prior and Informed Consent* before utilization takes place, and shall* be consistent with the protection of intellectual property* rights. (C3.4 P&C V4)***
- 3.6.1 *Traditional knowledge* and intellectual property* is protected and is only used when the acknowledged owners of that traditional knowledge* and intellectual property* have provided their Free, Prior and Informed Consent* formalized through a binding agreement*. (Adopt)*
- 3.6.2 *Indigenous Peoples* are compensated according to the binding agreement* reached through Free, Prior and Informed Consent* for the use of traditional knowledge* and intellectual property*. (Adopt)*

SIR GUIDANCE

Forthcoming in D2:

Further guidance related to the use of *traditional knowledge**, *intellectual property**, and private land forests.

PRINCIPLE* 4: COMMUNITY RELATIONS

The Organization shall* contribute to maintaining or enhancing the social and economic wellbeing of local communities*. (P4 P&C V4)*

- 4.1 *The Organization* shall* identify the local communities* that exist within the Management Unit* and those that are affected by management activities*. The Organization* shall* then, through engagement* with these local communities*, identify their rights of tenure*, their rights of access to and use of forest* resources and ecosystem services*, their customary rights* and legal* rights and obligations, that apply within the Management Unit*. (new)*

A local community:*

1. Is located in, or adjacent to, the *Management Unit**; or
2. Is close enough to have a significant impact on the economy or the *environmental values** of the *Management Unit** or to have their economies, rights or environment significantly affected by forest *management activities** or the biophysical aspects of the *Management Unit**; and
3. Is a group of non-indigenous (2 or more people), including more than one family unit; and
4. Has identified a formal representative for the group.

If any of the above are not met, the entity will be considered a *stakeholder**. Examples of *stakeholders** include:

1. Individuals;
2. Entities with no formal representative;
3. Entities located outside and not adjacent to the *Management Unit** (unless they have a significant impact, as defined in item 2, above).

The “community of interest” concept is recognized when the entity fits the requirements for *local community**, as described here.

In this Standard, a *local community** refers to a non-indigenous group of people. A *local community** and an Indigenous community may occupy overlapping area within an FMU.

*Local communities** do not automatically have *legal** standing in Canada. Although the term municipality may be most associated with the concept of a *local community**, there may be cases in which *local communities** are not classified as a municipality, but still meet the definition of the term.

A *local community** that has *legal** rights or can demonstrate existing *customary rights** related to the *Management Unit** must be considered through a *Free, Prior and Informed Consent** process. While the identification of *legal** rights may be straightforward, *customary rights** (none of which have yet been identified for *local communities** in Canada) require further consideration (see Annex H). In regard to rights and their demonstration, the following applies:

1. All *local communities** have rights under the FSC Standard as outlined in Criteria 4.1, 4.3, 4.4, 4.5, 4.6 and 4.7.
2. Some communities with *legal** or *customary rights**, or that have *traditional knowledge**



that is being used by *The Organization**, have additional rights under the FSC Standard (see Criteria 4.2 and 4.8.)

3. The *legal** or *customary right** that has been, or may be, diminished or impacted by *forest management activities** on the *Management Unit**, must be demonstrated by the *local community**.

4.1.1 *Local communities** that may be affected by *forest management activities** are identified. **(Adapt)**

4.1.2 Through *culturally appropriate* engagement** with the *local communities** identified in Indicator 4.1.1, the following are documented and/or mapped:

1. *Legal* and customary rights* of tenure**;
2. *Legal* and customary* access to, and use rights* of the forest* resources and ecosystem services**;
3. Other *legal* and customary rights** and obligations they have and that apply within, and/or adjacent to, the *Management Unit** that are, or may be, affected by *forest management activities**;
4. Evidence supporting these rights and obligations;
5. Areas where rights are contested by *local communities**, governments, Indigenous communities and/or others;
6. Summary of the means by which the *legal* and customary rights**, and contested rights are addressed by *The Organization**; and
7. The aspirations and goals of *local communities** related to *forest* management activities* in the *Management Unit**.

(Adapt)

Culturally appropriate engagement** is described in Annex I.

Small Scale/Low Intensity Forests

SIR INDICATOR

L4.1.2: The following are known by the *Organization** or *group manager** through *culturally appropriate engagement** with *local communities** identified in Indicator 4.1.1 or otherwise:

1. *Legal* and customary rights* of tenure**;
2. *Legal* and customary* access to, and use rights* of the forest* resources and ecosystem services**;
3. Other *legal* and customary rights** and obligations they have and that apply within, and/or adjacent to, the *Management Unit** that are, or may be, affected by *forest management activities**;
4. Areas where rights are contested by *local communities**, governments, Indigenous communities and/or others; and
5. Summary of the means by which the *legal* and customary rights**, and contested rights are addressed by *The Organization**.



Community Forests Note

Must conform to NS 4.1.2.

Private land forests Note

This indicator is also relevant for private land forests. For instance, a private land forest may have customary trail that is used to access a traditional fishing area or carry an easement on its Title that allows public access on a portion of the land.

SIR GUIDANCE

To lessen the administrative burden, evidence supporting these rights and responsibilities and the aspirations and goals of local communities is not required. However, where possible, when speaking to local community members, at any phase during management, evidence supporting these rights and responsibilities, and information regarding aspirations and goals, should be gathered and kept for both the *resource manager** and/or the *group member's** knowledge. These facts are in the *resource manager's** best interest to know as future decision-making processes can be better informed by them. If possible, landowners should also be encouraged to contribute information regarding these topics.

- 4.2 ***The Organization* shall* recognize and uphold* the legal* and customary rights* of local communities* to maintain control over management activities within or related to the Management Unit* to the extent necessary to protect their rights, resources, lands and territories. Delegation by local communities* of control over management activities* to third parties requires Free, Prior and Informed Consent*. (C2.2 P&C V4)***

A process for identifying *local communities** with *customary rights** is described in Annex H.

- 4.2.1 *Free, prior and informed consent** is granted by *local communities** prior to forest *management activities** that affect their identified rights through a *culturally appropriate* engagement** process. These rights include:
1. Ensuring *local communities** know their rights and obligations regarding the resource;
 2. Informing *local communities** of the value in economic, social and environmental terms of the resource over which they are considering delegation of control;
 3. Informing *local communities** of their right to withhold or modify consent to the proposed *management activities** to the extent necessary to protect their rights and resources;
 4. Informing *local communities** of the current and future planned forest *management activities**; and



5. Informing *local communities** of when, where and how they can comment on and request modification to *management activities** to the extent necessary to protect their rights. **(Adapt / Merge 4.2.1 AND 4.2.4)**

Small Scale/Low Intensity/Community Forests

SIR GUIDANCE

Forthcoming in Draft 2:

Further guidance on implementing FPIC for local communities.

FSC Canada is currently further exploring Criterion 4.2 to better understand its intention. Therefore, unless specified at a later date, NS 4.2.1 is not applicable.

- 4.2.2 The legal and *customary rights** of *local communities** are not violated by *The Organization**. **(Adapt)**
- 4.2.3 Where evidence exists that legal and *customary rights** of *local communities** related to forest *management activities** have been violated, the situation is corrected, if necessary, through *culturally appropriate* engagement** and/or through the *dispute* resolution process* in Criterion 1.6 or 4.6. **(Adapt)**
- 4.2.4 IGI **(Drop / Merge 4.2.1 and 4.2.4)**
- 4.3 *The Organization* shall* provide reasonable* opportunities for employment, training and other services to local communities*, contractors and suppliers proportionate to scale* and intensity* of its management activities. (C4.1 P&C V4)***
- 4.3.1 *Reasonable** opportunities directly or indirectly linked to *The Organization's* management activities** and proportionate to the scale and intensity of the *management activities** affecting the community are communicated and provided to *local communities**, Indigenous communities, *local workers**, local contractors and local suppliers, either directly or through collaboration for:
1. Employment;
 2. Training; and/or
 3. Other services, as needed.

(Adapt)

Small Scale/Low Intensity/Community Forests

SIR INDICATOR

L4.3.1: The *Organization** or *resource manager** gives preference to local people and services, or, in the case of a *group entity**, to group members.



SIR GUIDANCE

In the absence of a local workforce, and if an *Organization** needs to regularly employ/contract workers, then it may be worthwhile to provide training opportunities in order to develop a local workforce.

4.4 ***The Organization* shall* implement additional activities, through engagement* with local communities*, that contribute to their social and economic development, proportionate to the scale*, intensity* and socio-economic impact of its management activities*. (C4.4 P&C V4)***

4.4.1 In proportion to the scale and intensity of forest *management activities** affecting the community, opportunities for local social and economic development are identified through *culturally appropriate* engagement* with local communities** and other relevant organizations identified by the *local community**. **(Adapt)**

Small Scale/Low Intensity/Community Forests

SIR INDICATOR

L4.4.1: Opportunities for local social and economic development are identified.

4.4.2 Projects and additional activities that contribute to local social and economic benefit and are proportionate to the socio-economic impact of forest *management activities** are implemented and/or supported. **(Adapt)**

Small Scale/Low Intensity/Community Forests

SIR GUIDANCE

Examples of how these *Organizations** can contribute socio-economically could include:

- supporting local environmental education and/or cultural events;
- using local markets for their products and services; and/or
- participating in community events regarding economic development in the region.

4.5 ***The Organization*, through engagement* with local communities*, shall* take action to identify, avoid and mitigate significant negative social, environmental and economic impacts of its management activities* on affected communities. The action taken shall* be proportionate to the scale, intensity and risk* of those activities and negative impacts. (C4.4 P&C V4)***



- 4.5.1 Through *culturally appropriate* engagement* with local communities**, significant negative social, environmental and economic impacts of forest *management activities** are identified. **(Adapt / Split – was 4.4.1)**

Small Scale/Low Intensity Forests

SIR INDICATOR

L4.5.1: Measures are identified and implemented to avoid and mitigate negative social, environmental and economic impacts of forest *management activities**.

Community Forests Note

Must conform to the NS Indicator 4.5.1.

SIR GUIDANCE

The degree to which the *Organization** has the responsibility to mitigate negative social, environmental and economic impacts depends on scale, intensity, and risk of operations. Therefore, before *management activities** commence, the risk involved as a result of the scale, intensity, and context of operations should be determined.

Scale, in this case, means both the size or extent of the *management unit** as well as the parts of the *management unit** over which operational activities take place such as road building, harvesting or the application of pesticides. An activity with a small or low spatial scale affects only a small proportion of the *management unit** each year.

Intensity, in this case, refers to the level of harvest within the *management unit** as well as the force, severity or strength of the impact that a *management activity** is predicted to have on environmental, social or economic values.

If *management activities** are predicted have high impacts, then comparable measures should be implemented by the *resource manager** that can effectively avoid and mitigate these possible impacts.

- 4.5.2 Through *culturally appropriate* engagement* with local communities**, measures to avoid and/or mitigate significant negative impacts identified in Indicator 4.5.1 are determined and implemented. **(Adapt / New – was 4.4.1)**

Small Scale/Low Intensity Forests

SIR INDICATOR

L4.5.2: Upon request, measures identified in L4.5.1 are communicated to *local communities**.

Community Forests Note



Must conform to the NS Indicator 4.5.2.

4.6 **The Organization***, through **engagement*** with **local communities***, shall* have mechanisms for resolving **grievances*** and providing **fair compensation*** to **local communities*** and individuals with regard to the impacts of management activities of **The Organization***. (C4.5 P&CV4)

*Disputes** related to *legal** tenure are addressed in Criterion 1.6. *Disputes** related to the impacts of *management activities** are addressed in Criterion 4.1. Annex G describes how *disputes** are addressed throughout the Standard.

4.6.1 One or more *publicly available** *dispute** resolution processes are in place. All *dispute** resolution processes are agreed upon through *culturally appropriate** *engagement** with *local communities** and Indigenous communities. **(Adapt)**

Small Scale/Low Intensity Forests/Community Forests

SIR INDICATOR

L4.6.1: One or more *publicly available** *dispute** resolution processes are in place and provided to *local communities** and Indigenous communities through *culturally appropriate** *engagement**.

SIR GUIDANCE

Examples of how to provide the *dispute** resolution process to communities could include:

- Posting the dispute resolution process on the Organization's and/or relevant municipality's website;
- Providing a copy of the dispute resolution process to the local municipal councillor(s) and/or provincial members of parliament; and/or
- Contacting the Indigenous community to share the dispute resolution process using a *culturally appropriate** approach (see Annex I for more on this approach).

4.6.2 *Disputes** related to the impacts of forest *management activities** involving *local communities** or Indigenous communities are responded to in a *timely manner**, and are either resolved or are in the *dispute** resolution process. **(Adapt)**

4.6.3 An up-to-date record of *disputes** related to the impacts of forest *management activities** is kept, including:

1. Steps taken to resolve *disputes**;
2. Outcomes of all *dispute** resolution processes including *fair compensation** to *local communities**; and



3. Unresolved *disputes**, the reasons they are not resolved, and how they will be resolved. **(Adapt)**

4.6.4 Operations cease in areas directly related to where the *dispute** exists:

1. Of *substantial magnitude** or
2. Involving a significant number of interests.

(Adapt)

At the time of release of Draft 1 of the Standard, there was agreement that Indicator 4.6.4 should apply to operations and associated specific values directly related to the dispute. This indicator, including guidance for its application, will be further developed for Draft 2 of the Standard.

SIR GUIDANCE

Forthcoming in Draft 2:

Additional guidance around *disputes of substantial magnitude**.

4.7 *The Organization**, through *engagement** with *local communities**, shall identify sites which are of special cultural, ecological, economic, religious or spiritual significance, and for which these *local communities** hold *legal** or *customary rights**. These sites shall be recognized by *The Organization**, and their management and/or *protection** shall be agreed through *engagement** with these *local communities**. (new)

4.7.1 Sites of special cultural, ecological, economic, religious or spiritual significance are identified through *culturally appropriate** *engagement** and are recognized by *The Organization**. **(Adapt)**

Small Scale/Low Intensity Forests

SIR INDICATOR

L4.7.1: Sites of special cultural, ecological, economic, religious or spiritual significance are identified and recognized by *the Organization**.

SIR GUIDANCE

The *resource manager** should make *best efforts** gather and document all available information about such sites that has been provided by relevant authorities or that has been identified during the public consultation processes.

Possible indicators for such sites of importance include:

- Names for landscape features;
- Stories about the forest;
- Sacred or religious sites;





- Historical associations; and/or
- amenity or aesthetic value.

Community Forests Note

Must conform to the NS Indicator 4.7.1 as their mandate is directly related to local communities.

- 4.7.2 Measures to protect such sites are agreed, documented and implemented through *culturally appropriate* engagement* with local communities**. When *local communities** determine that physical identification of sites in documentation or on maps would threaten the value or protection of the sites, then other means will be used. **(Adopt)**

Small Scale/Low Intensity Forests

SIR INDICATOR

L4.7.2: Measures to protect such sites are documented and implemented. When *local communities** determine that physical identification of sites in documentation or on maps would threaten the value or protection of the sites, then other means will be used.

Community Forests Note

Must conform to the NS Indicator 4.7.2.

- 4.7.3 Whenever sites of special cultural, ecological, economic, religious or spiritual significance are newly observed or discovered, *management activities** in the vicinity will cease immediately until protective measures have been agreed to with the *local communities**, and as directed by local and *national laws**. **(Adopt)**



Small Scale/Low Intensity/Community Forests

SIR INDICATOR

L4.7.3: When a *local community** indicates that forestry operations on particular blocks or sites are creating a threat of serious environmental, economic, or cultural impact, the *resource manager** suspends or relocates forestry operations until protective measures have been agreed to with the *local communities** and as directed by local and *national laws**.

SIR GUIDANCE

Examples of serious threats could include:

- Destruction of burial sites, spiritual sites, spawning areas, medicinal areas;
- Severe disruption of livelihood;
- Damage to community water supply; or,
- Severe disruption of food chain to the community.

4.8 **The Organization* shall* uphold the right of local communities* to protect and utilize their traditional knowledge* and shall* compensate local communities* for the utilization of such knowledge and their intellectual property*. A binding agreement* as per Criterion* 3.3 shall* be concluded between The Organization* and the local communities* for such utilization through Free, Prior and Informed Consent* before utilization takes place, and shall* be consistent with the protection* of intellectual property* rights. (new)**

4.8.1 *Traditional knowledge* and intellectual property* are protected and are only used when the owners of that traditional knowledge* and intellectual property* have provided their Free, Prior and Informed Consent* formalized through a binding agreement*. (Adopt)*

4.8.2 *Local communities* are compensated according to the binding agreement* reached through Free, Prior and Informed Consent* for the use of traditional knowledge* and intellectual property*. (Adopt)*

SIR GUIDANCE

Forthcoming in Draft 2:

FSC Canada is currently further exploring Criterion 4.8 to better understand its intention. Further guidance on this criterion will come at a later date.



PRINCIPLE* 5: BENEFITS FROM THE FOREST*

The Organization shall* efficiently manage the range of multiple products and services of the Management Unit* to maintain or enhance long term economic viability* and the range of social and environmental benefits.*

- 5.1 *The Organization* shall identify, produce, or enable the production of, diversified benefits and/or products, based on the range of resources and ecosystem services* existing in the Management Unit* in order to strengthen and diversify the local economy proportionate to the scale* and intensity* of management activities*. (C5.2 and 5.4 V4).*
- 5.1.1 *Ecosystem services*, non-timber and timber forest resources and products (with consideration of niche markets) that could strengthen and diversify the local economy are identified. (Adapt)*

Small Scale/Low Intensity/Community Forests

SIR GUIDANCE

For these Organizations, the range of resources and ecosystem services* that could strengthen and diversify the local economy can be identified based on current knowledge without completing additional assessments. The identification of HCV 4 and HCV 5 in Criterion 9.1 could support the identification of important values for communities and help to meet the requirement of this indicator.

- 5.1.2 *Consistent with management objectives* and within the limits of The Organization's* tenure rights, resources, products and services identified in Indicator 5.1.1 are produced and/or made available for others to produce, to strengthen and diversify the local economy. (Adapt)*

Small Scale/Low Intensity/Community Forests

SIR INDICATOR

L5.1.2: *Consistent with management objectives*, and within the limits of tenure rights and organizational capacity, products and services identified in 5.1.1 are considered for production to strengthen and diversify the local economy.*

SIR GUIDANCE

These Organizations* should consider the production of all identified benefits and products to increase economic viability and reduce dependence on a single product, or to make these available for others to produce in order to strengthen and diversify the local economy.



5.1.3 When *The Organization** makes FSC promotional claims regarding the provision of *ecosystem services**, Annex D is followed regarding additional requirements. **(Adopt)**

This Indicator is applicable only if the applicant wants to make claim to *ecosystem services**, otherwise it is optional. FSC Canada and FSC IC are working together to do a gap analysis between the Canadian Standard and the requirement of Annex D. In the meantime, the Indicator and the Annex D will remain as in the IGI.

5.2 ***The Organization* shall* normally harvest products and services from the Management Unit* at or below a level which can be permanently sustained. (C5.6 V4)***

The rationale behind the indicators related to Annual Allowable Cut is described in Annex K.

5.2.1 Analysis and calculation of harvest levels for timber forest products are based upon:

1. *Management objectives** and strategies for the full range of forest resources as set out in the *Management Plan**, including those for *restoration**;
2. Current management practices and past and current levels of performance of *silviculture** practices;
3. A *precautionary approach** that reflects the quality of information and assumptions used;
4. *Best Available Information** on growth and yield, including the success of silvicultural systems;
5. Best available inventory data;
6. Volume and area reductions caused by mortality and decay as well as natural disturbances, such as fire, insects and disease;
7. Volume and area reductions to account for adherence to all other requirements in this Standard;
8. Operational constraints;
9. Forest projection or wood supply model runs with a planning horizon long enough to allow multiple harvest on 80 per cent of the land base under management;
10. Future forest condition objectives as identified in the forest *Management Plan**; and
11. Sensitivity analyses of the factors that apply to harvest level calculations, including the effects of climate change when growth and yield projections are available.

The calculation is completed frequently enough to ensure it remains current with respect to harvest activities, natural disturbances, *management objectives**, and supporting information, such as inventories. **(Adapt)**

Small Scale/Low Intensity/Community forests

SIR GUIDANCE



These *Organizations** are expected to complete an analysis and calculation of harvest levels for timber forest products based on NS Indicator 5.2.1 #1-8. Requirements #9=11 are not applicable.

Forthcoming in Draft 2:

Further changes to this indicator will be made in Draft 2 which may impact SIR requirements.

- 5.2.2 Based on the *timber harvesting level** analysis evaluated as part of Indicator 5.2.1, a maximum allowable annual cut for timber is determined. That maximum allowable annual cut shall not impair the ability of the *Management Unit** to continue yielding those products and services, the *ecosystem functions** and *ecosystem services** of the unit, including the continued existence of viable populations of *native species**. Temporary or *long-term** changes in the yield or standing volumes of any specific forest product arising from *management activities** are permitted provided that they do not impair achieving the mid- and *long-term** objectives described in the approved in the *Management Plan**.

More specifically, the harvesting level may be greater than the mid-term, *long-term** and flat-line forecasted harvest levels, if:

1. The short-term harvest level does not negatively impact the mid- or *long-term** projected harvest levels;
2. Decreases from current harvest levels to the long-term levels are distributed equitably over time; and
3. The harvest forecast indicates the harvest level can be maintained for at least 30 years prior to any decline.

(Adapt)

Small Scale/Low Intensity/Community forests

SIR INDICATOR

L5.2.2: Based on the analysis in 5.2.1, harvest levels for timber forest products in the *Management Unit** shall not exceed the harvest level that can be permanently sustained including by ensuring that harvest rates do not exceed growth.

SIR GUIDANCE

Where appropriate, this may be completed with a *timber harvesting level** analysis that determines the maximum allowable annual cut for timber.



This Indicator applies to normal situations and/or to species not affected by major disturbance. In case of major disturbance affecting the *forest**, part of the *forest** or specific tree species, Indicator 5.2.3 will apply for the *forest**, part of the *forest** or species affected.

5.2.3 In *Management Units** where a major disturbance has taken place, such as pest or disease infestation or a large fire, the level of harvest may be greater than the mid-term, *long-term** and flat-line forecasted harvest levels, if:

1. The level of harvest is elevated to capture mortality resulting from the major disturbance;
2. The level of harvest does not negatively impact mid- or *long-term** projected harvest levels, assuming the disturbance impacts have been included in the model to determine the projected harvest model;
3. The level of harvest of live volume is minimized, and in any event is not to exceed the projected mid-term level;
4. The level of harvest does not include stands that may become economical to harvest in the mid-term.

The areas that are least viable for natural regeneration are selected to harvest first, when harvest of all dead volume prior to its decline in economic value does not take place. **(Add)**

Small Scale/Low Intensity/Community forests

SIR INDICATOR

L5.2.3: In *Management Units** where a major disturbance has taken place, such as pest or disease infestation or a large fire, the level of harvest may be greater than predicted in the Management Plan if:

1. The level of harvest is elevated to capture mortality resulting from the major disturbance;
2. The level of harvest of live volume is minimized; and
3. The *management plan** is amended so that harvest levels for future years are re-adjusted to ensure they continue to be sustainable within ecological limits and regeneration is prioritized.

SIR GUIDANCE

All organizations should provide a rationale if exceeding sustainable cut levels over 10 years.

5.2.4 Actual annual timber harvest is recorded and the averaged level of harvest over a defined period (maximum of 10 years) does not exceed the allowable cut determined in Indicator 5.2.2. Harvesting is not concentrated in the most profitable stands or portions of the *forest**. **(Adapt – was IGI 5.2.3)**

Small Scale/Low Intensity/Community forests



SIR INDICATOR

L5.2.4: Actual harvest rates for timber are recorded.

- 5.2.5 The harvest of commercial *non-timber forest products** under control of *The Organization** does not exceed a level that can be sustained. Sustainable harvest levels for *non-timber forest products** are based on the *Best Available Information**. **(Adapt – was IGI 5.2.4)**
- 5.3 ***The Organization* shall* demonstrate that the positive and negative externalities* of operations are included in the Management Plan**. (C5.1 V4)**
- 5.3.1 The *Management Plan** and/or supporting documents include information that demonstrate how environmental costs and social costs associated with *management activities** have been considered. Environmental costs may be those associated with greenhouse gases, waste disposal and noise pollution, for example. Social costs are those which are identified through local assessments and public consultation. The documentation also includes information about the measures that have been taken to offset, reduce or eliminate the costs. **(Adapt)**

Small Scale/Low Intensity/Community forests

SIR INDICATOR

L5.3.1: Costs related to preventing, mitigating or compensating for negative social and environment impacts of *management activities** as well as the benefits related to the positive social and environment impacts of *management activities** are documented where possible and can be verbally communicated by the *resource manager**.

SIR GUIDANCE

Examples of environmental costs could be those associated with greenhouse gases, waste disposal and/or noise pollution. Examples of social costs could be those which are identified through local assessments and public consultation. Documenting costs could also include information about the measures that have been taken to offset, reduce, or eliminate costs.

The social and environmental costs and benefits of *management activities**, which are often not accounted for, are known as *externalities**. *Externalities** may result in costs because of the need to prevent, mitigate, *restore** or compensate for negative impacts on stakeholders that are not directly involved in those activities, or for negative impacts on a natural resource or the environment. This will therefore require appropriate financial planning and cost accounting by *The Organization** for the *Management Unit**. Positive and negative social impacts *shall** be identified through *engagement** set out in Principles 2, 3 and 4 as well as in *Criterion** 7.6. Positive and negative ecological impacts *shall** be identified in the assessments in *Criterion** 6.1.

Examples of potential negative externalities* (and their associated Criteria, whose implementation should prevent the externalities from occurring), could be, but are not limited to:

- Tree plantations* may substantially decrease the water that is available to neighboring communities and farmers for domestic and agricultural uses, especially where rainfall is low (Criterion* 6.7).
- Disturbance of local populations during harvest, if trucks transport logs out of the Management Unit* during day and night (Criterion* 4.5).
- Damage to rural roads (Criterion* 10.10).
- The hiring of specialized non-local contractors rather than local contractors where these exist, may have a negative effect on local employment (Criterion* 4.3).
- The export of logs and other products, instead of selling them to local processors may depress industries and employment (Criterion* 4.5).
- Contamination of water courses that result in reduced fishing opportunities, changes in diversity of aquatic fauna and flora, etc. (Criterion* 6.7).
- Land degradation, for example from soil erosion or extraction of road building materials, which may result in decreased opportunities for such land for forestry or other uses (Criterion* 10.10).
- Loss of species (Criteria* 6.6 and 9.1).
- Release of stored carbon (Criterion* 9.1).

Examples of potential positive externalities (and Criteria* whose implementation could contribute to achieving them) could be, but are not limited to:

- Direct local employment (Criteria* 4.3).
- Provision of clean water through reduction in nutrient loading by nitrogen and phosphorus (Criterion* 6.7).
- Provision of access to Management Units* for recreational purposes or collection of non-timber forest products (Criterion* 5.1).
- Use of hauling roads by local populations (Criterion* 4.3).
- Use of local processing, local services and value adding (Criterion* 5.4).
- Local entrepreneurs to develop, process and market products and services as provided by the Management Unit (Criterion* 5.1).

- 5.3.2 The *management plan** and/or supporting documents include information (quantitative when available) that demonstrate how environmental, economic and social benefits associated with *management activities** have been considered. **(Adapt)**
- 5.4 **The Organization* shall* use local processing, local services, and local value adding to meet the requirements of The Organization* where these are available, proportionate to scale, intensity and risk*. If these are not locally available, The Organization* shall* make reasonable* attempts to help establish these services. (C5.2 V4)**
- 5.4.1 Where cost, quality and capacity of non-local and local options are at least equivalent, local goods, services, processing and value-added facilities are used. **(Adopt)**
- 5.4.2 *Reasonable** attempts are made to support and/or encourage capacity where local goods, services, processing and value-added facilities are not available. **(Adapt)**
- 5.5 **The Organization* shall* demonstrate through its planning and expenditures proportionate to scale, intensity and risk*, its commitment to long-term* economic viability*. (C5.1 V4)**



5.5.1 IGI (Drop – Merge with 5.5.2)

5.5.1 Sufficient expenditures and investments are made to implement the *Management Plan** in order to meet this Standard and to ensure *long-term* economic viability**. **(Adapt – Was IGI 5.5.2)**

If *The Organization** is a for-profit business, *economic viability** means that *The Organization** may need to be profitable over the business cycle. *The Organization** should generate a return on invested capital that is sufficient to ensure stable operations and investment in the business.

Small Scale/Low Intensity/Community forests

SIR GUIDANCE

These *Organizations** should be able to demonstrate a balance between revenue and expenditures without the need for budgets and financial statements. Receipts for expenditures and sales should be collected when possible.



PRINCIPLE* 6: ENVIRONMENTAL VALUES* AND IMPACTS

The Organization* shall* maintain, conserve* and/or restore* ecosystem services* and environmental values* of the Management Unit*, and shall* avoid, repair or mitigate negative environmental impacts. (P6 P&C V4)

- 6.1 The Organization* shall* assess environmental values* in the Management Unit* and those values outside the Management Unit* potentially affected by management activities*. This assessment shall* be undertaken with a level of detail, scale and frequency that is proportionate to the scale, intensity and risk* of management activities*, and is sufficient for the purpose of deciding the necessary conservation* measures, and for detecting and monitoring possible negative impacts of those activities. (New)

Where maps or mapped information is required by this Principle, evidence of digital files, instead of hard-copy maps, is sufficient.

Small Scale/Low Intensity/Community forests

- NS 6.1.1: **not** applicable
NS 6.1.2: **not** applicable
NS 6.1.3: **not** applicable
NS 6.1.4: **not** applicable
NS 6.1.5: **not** applicable

SIR INDICATORS

L6.1.1: *Best Available Information** is used to identify *environmental values** within, and, where potentially affected by *management activities**, outside of the *resource management unit**.

L6.1.2: Assessments of *environmental values** are conducted with a level of detail and frequency so that:

1. Impacts of management activities on the identified *environmental values** can be assessed as per *Criterion** 6.2;
2. *Risks** to *environmental values** can be identified as per *Criterion** 6.2;
3. Necessary *conservation** measures to protect values can be identified as per *Criterion** 6.3; and,
4. Monitoring of impacts or environmental changes can be conducted as per *Principle** 8.

SIR GUIDANCE

Examples of *Best Available Information** for landscape level and site specific *environmental values** can be found within NS indicators 6.1.1 - 6.1.3. *Best Available Information** for these *Organizations** can also include what the *resource manager** knows and observes, and what s/he learns from neighbours and other local *stakeholders**.

For these *Organizations**, conducting additional assessments of *environmental values** beyond those that are gathered through the collection of *Best Available Information** is not necessary if the resources required to do so are lacking. However, it is often in the best interest of these *Organizations** to recognize the importance of specific local information that will be relevant and can only be gathered through *engagement** with stakeholders and Indigenous communities.

*Best Available Information** related to landscape values should be focussed on those landscape values which *management activities** have, or may have, a foreseeable impact on.

6.1.1 *Best available information** is used to identify and define the state and condition of regional- and *landscape*-scale* environmental values** within, and where potentially affected by *management activities**, outside of the *Management Unit**.

Consistent with the *scale, intensity and risk** of the operation, *Best Available Information** includes:

1. *Ecosystem** classification, and soil types (maps and quantitative summaries);
2. Percent of *protected area** by *ecosystem** classification unit(s);
3. *Forest** cover (maps and quantitative summaries);
4. Age class distribution and patch size distribution of *forest types** (quantitative summaries);
5. *Core forest areas** and *Intact Forest Landscapes** (maps and quantitative summaries);
6. Rare *ecosystems** (maps and quantitative summaries);
7. *Road** networks (maps and quantitative summaries);
8. Road-density by *road** type (quantitative summaries);
9. Extent of disturbed areas by disturbance type (maps and quantitative summaries);
10. Existing carbon stores (quantitative information);
11. *Hydrologic features** (maps, including *recharge areas**);
12. Lake, stream and *wetland** classifications (maps and quantitative summaries);
13. Status of *habitat** (that is, known locations, trends, extent of area) for species at risk that use forest *habitats** (quantitative summaries);
14. Description of management regimes in adjoining *forests**, in particular for the areas or sites abutting the *forest** (qualitative descriptions and maps); and
15. Cultural and spiritual values, as consistent with the requirements of Principles 3 and 4. **(Adapt- from IGI 6.1.1)**



Item 5 in this list includes *intact forest landscapes** (IFLs) and *core forest areas** and this may change as work on *IFLs** proceeds.

Several Indicators require that '*Best Available Information**' be used to provide a baseline for *management activities** or as a basis for analyses in subsequent Indicators. The glossary definition of *Best Available Information** provides general direction on the type of information to be gathered and the extent of effort required to gather the information. To place appropriate limits on what should be involved in gathering *Best Available Information**, the definition notes that it should be constrained by "*reasonable** effort and cost." The intent of the term '*reasonable**' is to emphasize that limits, such as cost and practicality, exist on the expectations of the effort required to gather information.

The glossary defines *Best Available Information** as,
Data, facts, documents, expert opinions, and results of field surveys or consultations with stakeholders that are most credible, accurate, complete, and/or pertinent and that can be obtained through reasonable* effort and cost, subject to the scale* and intensity* of the management activities* and the Precautionary Approach*.*

6.1.2 *Best Available Information** is used to identify and define the state and condition of *stand** and site-scale *environmental values** within the *Management Unit**.

Consistent with the *scale, intensity and risk** of the operation, *Best Available Information** includes:

1. Point-specific wildlife values and wildlife *habitat** values (for example, mineral licks, stick nests, wildlife trees) (mapped information);
2. Locations known to be of use by *species at risk** (for example, den sites, nests, areas of traditional use) (mapped information);
3. Sensitive sites, including steep slopes, shallow soils, moist soils, and soils subject to compaction (for example, structured clay) (mapped information);
4. Rare or locally disjunct *ecosystem** features (for example, vernal pools) (mapped information);
5. Spawning grounds and other important aquatic sites (for example, moose feeding areas) (mapped information);
6. *Indigenous Peoples'** food and medicinal plants; and
7. *Indigenous Peoples'** cultural and spiritual sites. **(Adapt has components of IGI 6.1.1)**

Items 6 and 7 in this list refer to values associated with *Indigenous Peoples**. In recognition of the fact that there may be sensitivities associated with this information, if there is any uncertainty regarding the acceptability of using the information, forest managers should check with relevant *Indigenous Peoples** prior to making efforts to assemble it.

- 6.1.3 Consistent with the *scale, intensity and risk** of the operation, the following information is included in the inventory for *landscapes** and/or watersheds in which road-building, timber harvesting and/or other treatments are planned that have the potential to affect water quality or stream channel integrity over the next five years (or within the *near-term** planning horizon):
1. Watershed condition, including maps of *hydrologic features** present and specific indicators of hydrologic risk (for example, channel assessments, present and projected clear-cut area, extent of human-induced riparian disturbance, *road** density);
 2. Identification and classification of *riparian zones**, including identification of fish-bearing streams; and
 3. Fragile sites. **(Add)**
- 6.1.4 Appropriate to the *scale, intensity and risk** of operations and available information, an analysis of the *Range of Natural Variation** (RONV) of the *forest** is prepared, and includes at a minimum:
1. An assessment of the natural range of the amount of each *forest type**;
 2. An assessment of the natural range of *forest types** by *age class**; and
 3. An assessment of the natural range of disturbance sizes and sizes of post-disturbance remnant patches.

For items 1 and 2 in this list, the analysis characterizes the *RONV** by identifying the upper and lower extremes of the range and measures of variance or dispersion between the extremes (that is, *inter-quartile ranges**) **(Add)**

This indicator requires forest managers to characterize the *Range of Natural Variation** associated with several *forest** characteristics. The *Range of Natural Variation** is then used in subsequent indicators as a reference for desirable/acceptable limits of *landscape** qualities and characteristics. Requirements to take the *Range of Natural Variation** into account are incorporated into Indicator 6.6.1, which addresses *forest** community composition, Indicator 6.8.1, which addresses the aggregation of disturbances, and Indicator 6.8.2, which addresses large *forest** patches.

- 6.1.5 Assessments of the state and condition of *environmental values** identified in Indicators 6.1.1 and 6.1.2 are updated with sufficient frequency to conduct *adaptive management** depending on the *scale, intensity and risk** of *management activities**.

Assessments are provided in a manner such that:

1. Impacts of *management activities** on the identified *environmental values** can be assessed as per Criterion 6.2; and
2. Necessary *conservation** measures to protect values can be identified as per Criterion 6.3. **(Adapt from IGI 6.1.2)**



- 6.2 Prior to the start of site-disturbing activities, the *Organization* shall* identify and assess the scale, intensity and risk* of potential impacts of management activities* on the identified environmental values**. (C6.1 P&C V4new).

Small Scale/Low Intensity/Community forests under 10,000 ha

NS 6.2.1 **not** applicable

NS 6.2.2: applicable

Community forests over 10,000 ha

NS 6.2.1: applicable

NS 6.2.2: applicable

- 6.2.1 Appropriate to the *scale, intensity and risk** of the operation, conditions for key *environmental values* of the forest** at the start of the present forest *Management Plan** are compared to projected future conditions for key *environmental values* of the forest** for the *near** and *long-term**, specifically:

1. Age-class distribution;
2. *Forest type** distribution;
3. Patch-size distribution;
4. *Road** density by road-type; and
5. Spatial distribution of disturbed areas. (**Adapt from IGI 6.2.1**)

For this Indicator, the context for comparison of present and future conditions of *environmental values* of the forest** is that a period of 5 to 10 years is usually used for the *near-term** and 100 years or more is usually used to represent the *long-term**.

- 6.2.2 Impacts on *stand*/site level values* are assessed prior to implementing *management activities**.

Consistent with the *scale, intensity and risk** of the operations, assessments consider impacts on *stand** and site qualities including:

1. Amount of coarse woody debris;
2. Density of standing dead and live trees;
3. Residual patch size and species of residuals;
4. Riparian values;
5. HCVs which occur at a local scale (for example, stands of rare trees, important bird migration sites); and



6. *Environmental values** identified in Indicator 6.1.2. (**Adapt from IGI 6.2.1 and 6.2.2**)

The requirement of this indicator to assess impacts “prior to implementing *management activities**” can be addressed by assessing impacts at the start of the forest management planning period, or at the start of annual planning of operations.

6.3 *The Organization* shall* identify and implement effective actions to prevent negative impacts of management activities* on the environmental values*, and to mitigate and repair those that occur, proportionate to the scale, intensity and risk* of these impacts. (C6.1 P&C V4)*

Small Scale/Low Intensity/Community forests

NS 6.3.1: **not** applicable

NS 6.3.2: **not** applicable

NS 6.3.3: applicable.

SIR INDICATORS

L6.3.1: Forest management operations, *management plans** or associated documents based on *best management practices** identify means to avoid or minimize damage to soils, including rutting, compaction, erosion and nutrient loss.

L6.3.2: The means identified to avoid damaging soils are being implemented.

L6.3.3: Forest management operations, *management plans** or associated documents based on *best management practices** identify means to avoid or minimize loss of productive land.

L6.3.4: The means identified to avoid loss of productive land are being implemented.

6.3.1 Appropriate to the *scale, intensity and risk** of the forest *management activities**, *Management Plans** or associated documents (for example, Ground Rules, Standard Operating Procedures, etc.) based on *best management practices** identify means to avoid or minimize damage to soils related to compaction, rutting, erosion, and nutrient loss.

The means identified to avoid compaction, rutting, erosion and nutrient loss are being implemented.

Where negative impacts on soils related to compaction, rutting and erosion cannot be avoided, acceptable damage thresholds are identified and implemented.

The *best management practices** related to compaction and rutting address:

1. Levels of acceptable rutting and compaction;
2. Prior identification of sites sensitive to compaction and rutting; and
3. Use of alternative harvesting and site preparation equipment and other mitigation measures, such as seasonal timing, temporary suspension of activities to minimize soil rutting and compaction (for example, low ground pressure equipment) and mitigation of impacts to surface and sub-surface drainage caused by *roads**, *road** embankments and skid trails.

The *best management practices** related to erosion control include consideration of construction, use and maintenance of *roads** and water crossings, and harvest operations that address:

1. Identification and avoidance of unstable soils and ground surfaces;
2. Avoiding *roads** and landings on steep slopes;
3. Minimizing the number of crossings;
4. Use of temporary crossings; and
5. Proper culvert installation and inspections and, if required, repair or replacement.

The *best management practices** related to nutrient loss consider:

1. Identification of sites sensitive to nutrient loss;
2. Use of stump de-limbing or slash dispersal;
3. Use of winter harvesting; and
4. Maintenance of diversity of plants and trees on site.

(Adapt - has components of IGI 6.3.1 and 6.3.2)

- 6.3.2 Appropriate to the *scale, intensity, and risk** of the *forest** *management activities**, *Management Plans** or associated documents (for example, Ground Rules, Standard Operating Procedures, etc.) based on *best management practices** identify means to avoid or minimize loss of productive land.

The means identified to avoid loss of productive land are being implemented. Where loss of productive land cannot be avoided, acceptable damage thresholds are identified and implemented.

The *best management practices** related to loss of productive land address:

1. Slash management (for example, burning, piling, re-distribution);
2. Regeneration of *roads**, landings and skid trails;



3. Maximum corridor widths for different classes of roads*; and
4. Minimizing the areal extent of landings. (Adapt – has components of IGI 6.3.1 and 6.3.2)

6.3.3 Where acceptable thresholds have been exceeded, as related to Indicators 6.3.1 and/or 6.3.2, measures are adopted to prevent further damage, and negative impacts are mitigated and/or repaired. (Adapt from IGI 6.3.3)

Small Scale/Low Intensity/Community forests

SIR GUIDANCE

For these Organizations, NS 6.3.3 applies in relation to L6.3.2 and L6.3.4 rather than NS 6.3.1 and NS 6.3.2.

6.4 *The Organization* shall* protect rare species* and threatened species* and their habitats* in the Management Unit* through conservation zones*, protection areas*, connectivity* and/or (where necessary) other direct measures for their survival and viability. These measures shall* be proportionate to the scale, intensity and risk* of management activities* and to the conservation* status and ecological requirements of the rare and threatened species*. The Organization* shall* take into account the geographic range and ecological requirements of rare and threatened species* beyond the boundary of the Management Unit*, when determining the measures to be taken inside the Management Unit*. (C6.2 P&C V4)*

Small Scale/Low Intensity/Community forests

SIR INDICATORS

NS 6.4.1: applicable

NS 6.4.2: applicable

NS 6.4.3: applicable for *community forests** in a caribou range

NS 6.4.4: applicable – see guidance under indicator

NS 6.4.5: applicable – see guidance under indicator

SIR GUIDANCE

The conservation status and ecological requirements of the SAR will influence the level of effort required for their protection and/or survival. This is because the more rare or threatened the species is, the greater is the likelihood that management activities will have a greater consequence.

These *Organizations** can consider scheduling *management activities** to avoid disturbance during known nesting/denning or fruiting seasons. They could also use reduced impact harvesting methods to protect nesting and breeding sites. *Protected areas** and *protection areas** could also have an important role in SAR protection. Mitigation measures should be designed for the needs of the species and habitats in question.

6.4.1 *Best available information** is used to develop a list of *species at risk** known or strongly suspected to exist within and adjacent to the *Management Unit**. The list is presented in the *Management Plan** or associated documents and is updated annually. The list of *species at risk** includes:

1. All species and subspecies and designated populations formally listed in schedules referenced in federal or provincial endangered species/species at risk legislation, or provincial wildlife/biodiversity legislation that have been classified as Endangered, Threatened, Vulnerable, Special Concern or similar designations; and
2. All species that have been assessed as 'at-risk' designation by bodies formally recognized in federal or provincial endangered species legislation (for example, the Committee on the Status of Endangered Wildlife in Canada (COSEWIC), and equivalent provincial bodies). **(Adapt from IGI 6.4.1)**

Official FSC language related to *Criterion** 6.4 requires that it address "rare and threatened species." This is somewhat confusing because these phrases have different meaning in a Canadian context from those identified in FSC reference material. For the purpose of this *Criterion**, the term *species at risk** is used rather than *rare and threatened species** as it is more clearly embodied in Canada's language regarding species whose survival is of concern. The two parts of this Indicator correspond to the differences between those species that have been regulated (or listed) as *species at risk** in federal or provincial legislation (point 1 in this Indicator), and those species that have been assessed as *species at risk** by COSEWIC or a similar provincial assessment body (point 2).

6.4.2 Plans authored by *qualified specialists** are implemented to manage the *habitat** of those *species at risk** identified in Indicator 6.4.1 for which a reasonable weight of evidence exists that indicates that their *habitat** is affected by forest *management activities**.

Plans address protection and *restoration** through the use of *protected areas**, *protection areas**, managing for *habitat* connectivity** and/or other habitat management measures.

Where plans do not exist or are inadequate to address known *risks** to a species, a *precautionary approach** is being used. The *precautionary approach** is applied to management of *forest landscapes**, local *habitat** (for example, known reproductive or feeding areas) and other locations (for example movement corridors, for which a reasonable weight of evidence exists indicating that the *habitat** and/or locations are important to the *species at risk** **(Adapt – from components of 6.4.2 and 6.4.3)**



Plans to address the needs of *species at risk** need not be approved federal or provincial plans, but can be documents written to fill a gap in existing direction from governments and their regulatory agencies. Plans written specifically for a *Management Unit**, however, should not be in conflict with higher-level plans that have regulatory approval. Refer to the glossary for a fuller definition of plans for *species at risk**.

6.4.3 Caribou habitat management is implemented following the requirements of Table 6.4.3.

The following requirements are also addressed:

1. In implementing the requirements of Table 6.4.3, updated measurements of cumulative disturbance are used where available provided that the methodology used in calculating cumulative disturbance is:
 - 1.1. Comparable to that employed by *Environment Canada* (2011) and that definitions of human-induced and natural disturbances are comparable; or
 - 1.2. Based on empirical evidence supported by *expert* * opinion if different from the methodology and definitions used by *Environment Canada* (2011).
2. *Best efforts** are made to keep projected levels of cumulative disturbance on *caribou ranges** below 35% when large natural disturbance occurs and significantly elevate the levels of cumulative disturbance.
3. Approaches to managing caribou habitat other than those required in Table 6.4.3 are used only when supported by independent *expert** input validating that the alternate approaches are based on scientific interpretation and foster stewardship of caribou habitat comparable to, or better than, that provided in this Indicator. Risk-based approaches comparable to that in Table 6.4.3 are used whenever possible. **(Add)**

This Indicator refers to boreal caribou only. Refer to the discussion in Annex J for information regarding mountain caribou.

Community Forests

SIR INDICATOR

L6.4.3: The *Organization** works cooperatively within the scope of its abilities with government resource management agencies, *Indigenous Peoples**, tenure holders and other land managers, and within its *sphere of influence** to implement existing SARA-compliant range plans and/or to keep projected levels of cumulative disturbance on *caribou ranges** below 35%.

SIR GUIDANCE

This indicator applies to *community forests** with caribou present in their *resource management*



Forest Stewardship Council®
FSC® Canada

*unit**. It does not require *community forests** to play a lead role in the management of caribou populations present on their *RMU**, but does require that *Organizations** work cooperatively with other managers to coordinate caribou habitat management on their *RMU** as well as on adjacent lands.



Table 6.4.3. Requirements of Indicator 6.4.3. Shaded cells in the table indicate requirements corresponding to a Risk Classification. All shaded cells that refer to a Risk Classification must be addressed. Shaded cells are numbered for reference in discussions and for use in examples described in Annex J.

Risk Element		Risk Classification							
		Any		Stable or Increasing		Decreasing or Unknown**			
<i>Caribou Range*</i> Population Status→		Low (≤20%)		Moderate (>20-35%)		High (>35%)		Mod. (>20-35%) or High (>35%)	
<i>Caribou Range*</i> Risk Category (per cent cumulative disturbance)→		≤35%	>35%	≤35%	>35%	≤35%	>35%	Any	
<i>Forest Management Unit*</i> Disturbance Category (percent cumulative disturbance in that portion of the FMU that overlaps caribou range)→		≤35%	>35%	≤35%	>35%	≤35%	>35%	Any	
Management Requirements	Carefully planned implementation of forest <i>management activities*</i> is permitted.	1		3					
	Carefully planned implementation of forest <i>management activities*</i> is permitted providing there is strong evidence of the sufficiency of other aspects of overall <i>habitat*</i> quality.		2		4		9	16	
	Carefully planned implementation of forest <i>management activities*</i> is permitted. However, forest management that results in net expansion of cumulative disturbances shall not occur unless it is based on reasons that foster the <i>long-term*</i> recovery of caribou habitat.						10	11	17
	Planning efforts are in progress such that habitat disturbance within the <i>caribou range*</i> will not exceed 35% within the <i>long term*</i> planning horizon and habitat recovery will be implemented.			5	6				
	Habitat recovery and <i>restoration*</i> is in progress and demonstrated in current strategic or operational plans with the objective of lowering the extent of cumulative disturbance in the <i>caribou range*</i>						12	13	18
	<i>The Organization*</i> works within its <i>sphere of influence*</i> to achieve the requirements associated with this <i>caribou range*</i> risk category and <i>forest Management Unit*</i> disturbance category.			7	8		14	15	19

** As described in the explanatory notes below for Indicator 6.4.3, this column also applies in circumstances in which the population is stable or increasing due to extraordinary human intervention.

Explanatory Notes for Indicator 6.4.3

35% Benchmark for Disturbed Area

This indicator uses a disturbance level of 35% as the high risk threshold in Table 6.4.3. The threshold is not intended to serve as a target level of disturbance, but as a level beyond which significant measures are necessary to address the state of habitat on caribou ranges. Canada's *Federal Recovery Strategy* for the boreal population of woodland caribou notes that "This recovery strategy identifies 65% undisturbed habitat in a range as the disturbance management threshold, which provides a measurable probability (60%) for a local population to be self-sustaining. This threshold is considered a minimum threshold because at 65% undisturbed habitat there remains a significant risk (40%) that local populations will not be self-sustaining".

Spatial Aspects

Some forest *Management Units** may include areas both within and outside *caribou ranges**. For this Indicator, the management requirements identified in Table 6.4.1 are to be assessed based only on the area of the forest *Management Unit** within *caribou ranges**.

If a forest *Management Unit** extends into more than one *caribou range**, this Indicator's requirements based on the level of disturbance within the forest *Management Unit** are to be addressed separately for the distinct portions of the forest *Management Unit** in each *caribou range**.

Figures 1 to 3 in Appendix J provide examples of the indicator's requirements in different situations.

The Importance of Population Information

The framework in Table 6.4.3 is based on cumulative disturbance and caribou population status in *caribou ranges**. The preferred means of evaluating caribou population status through data on demographic trends, such as population growth rate, calf recruitment, and female survival. Table 6.4.3 recognizes this by specifically identifying management requirements in *caribou ranges** in which the risk category is moderate or high and the range population status is either decreasing or unknown, and described in the last column in the table.

There may be circumstances in which a caribou population is stable or increasing due to, or with the assistance of, extraordinary human intervention, such as predator control or fencing of large areas. Based on the weight of evidence, if a population is believed to be stable or increasing only because of such measures, the requirements associated with the population status of "decreasing or unknown" should be used as a basis for evaluation of compliance with the requirements of Table 6.4.3.

Terminology

'Habitat recovery,' as used in Table 6.4.3, is the process of returning *habitat** to a condition suitable for use by caribou and/or comparable to its condition prior to disturbance in the context of overall *caribou range** condition. To address the requirements of Table 6.4.3, *independent expert** assessment or existing peer-reviewed literature is required to support an assertion that a disturbed forest has returned to an undisturbed state.

The term 'net expansion of forest management within the range (based on cumulative disturbance)' refers to an increase in cumulative disturbed area. In this context, it is possible to harvest an area of previously undisturbed forest after a comparably-sized area of disturbed forest has returned to an undisturbed state (that is, after it has recovered). Also, harvesting within an existing cumulative disturbance footprint does not result in an expansion in disturbance. In these circumstances, the total area of disturbance would not increase and there would be no net expansion of forest management.

'Best efforts'* are identified in requirement 2 of Indicator 6.4.3. A *best effort** is not the same as an



obligatory requirement, but it requires *The Organization** to make persistent and sincere attempts to address a requirement. See the glossary for a complete definition of *best efforts**.

Strong Evidence of Sufficiency

In natural circumstances disturbance across a *caribou range** is not evenly distributed. The requirements of this indicator recognize this, and allow levels of disturbance within those portions of the forest *Management Unit** that overlap *caribou ranges** to exceed 35%. However, the requirements for permitting that level of disturbance are stringent. Levels of disturbance beyond 35% may only occur where there is strong evidence of the sufficiency of other aspects of *habitat** quality within the portion of the *caribou range** that occurs within the forest *Management Unit**. For this indicator, strong evidence of the sufficiency of other aspects of habitat quality is addressed by ensuring that the requirements of all of the following indicators are met: 6.6.1 (Forest types and age classes), 6.8.2 (Large forest patches), 6.8.3 (Connectivity), 6.8.4 (Access management) and requirements related to intact forest landscapes in Principle 9.

The above paragraph refers to Indicator 6.8.2 and requirements related to *IFLs** in Principle 9. Those parts of the Standard have yet to be finalized.

Cumulative Disturbance

Cumulative disturbance is the proportion of a range with anthropogenic and natural disturbances less than a benchmark age. The 'normal' benchmark is 40 years, however there is uncertainty about the broad applicability of this benchmark given the different disturbance ecologies across boreal forest regions and likely variability in the relationship between the level of cumulative disturbance and caribou productivity. A benchmark of 40 years should be used unless there is a basis for using another benchmark as explained below in the discussion of Requirement 1.

There may be circumstances in which efforts to consolidate disturbances consistent with Indicator 6.8.1 results in a temporary increase of disturbance area beyond the 35% threshold for a range. Such circumstances may be to the long term benefit of caribou habitat and should be considered in light of the direction in Table 6.4.3 that "net expansion of cumulative disturbances shall not occur unless based on reasons that foster the *long-term** recovery of caribou habitat."

Requirements 1, 2, and 3

Requirement 1. This requirement identifies that approaches other than those used by *Environment Canada* may be used in quantifying cumulative disturbance. If used, the alternate approach is to be based on empirical evidence supported by *expert** opinion. Note that it is not required for the *expert** to be independent. Definitions of *expert** and *independent expert** are provided in the glossary.

Requirement 2. In the boreal forests, large natural disturbances, such as fire or windthrow may significantly affect levels of cumulative disturbance on forest *Management Units** and *caribou ranges** and add to overall risk to caribou persistence in a given *caribou range**. Large disturbances outside the forest *Management Unit** may affect the level of cumulative disturbance in the *caribou range** in which the forest *Management Unit** exists. *Organizations** are not expected to cease operations if significant natural disturbances occur within or outside of the forest *Management Unit**. Nonetheless, it may be necessary to adjust *management activities** should large natural disturbances occur, to minimize the cumulative impact of natural and anthropogenic disturbances.

Requirement 3. In recognition that the scientific basis for managing caribou habitat continues to evolve, this requirement provides a means to implement management other than that identified by the other parts of this Indicator. For example, scientific investigations may provide data specific to *caribou ranges** or ecological regions that are more appropriate to use than the calibrated relationship between caribou productivity and level of cumulative disturbance provided in the *Federal Recovery Strategy*. Provided

that those new data and related interpretations have a credible empirical basis, a relationship other than that incorporated into the disturbance levels that are used in Table 6.4.3 could be employed. A risk management approach remains preferred even if new data or interpretations are used.

- 6.4.4 Training is provided to all relevant forest workers in field operations and planning on the identification of *species at risk**, and on appropriate measures to take when a *species at risk** or sign of a *species at risk** is identified during field operations.

When a *species at risk** or sign of a *species at risk** is identified during field operations, relevant information is immediately provided to the appropriate resource management agencies. **(Add)**

Small Scale/Low Intensity/Community forests

SIR GUIDANCE

The formal training of forest workers in relation to SAR it is not the exclusive responsibility of the *resource manager** unless the *worker** is an *employee**. However, *workers** should nonetheless be made aware of all site-specific measures to protect SAR (e.g. machine exclusion zones).

This indicator refers to “sign” of a *species at risk**. Signs can include nests, tracks, dens, or other indications that a species exists in the *forest**.

- 6.4.5 *The Organization** works cooperatively with government resource management agencies, *Indigenous Peoples**, other land managers, and *tenure** holders, and within its *sphere of influence** to address the following:

1. Collection of data on populations and *habitats** of *species at risk**;
2. Management of *habitat** for *species at risk**; and
3. Monitoring of *habitats** and populations of *species at risk**. **(Add)**

Further explanation on this indicator will appear in Draft 2.

Small Scale/Low Intensity/Community forests

SIR GUIDANCE

Although these *Organizations** may not have the capacity to proactively approach these groups when managing SAR, they should respond to all requests to work cooperatively and do so whenever possible.

When collaborating with others is necessary for data collection, the management of SAR habitat and/or monitoring of SAR then government resource management agencies, *Indigenous Peoples**, other land managers, and *tenure** holders, and others within the *Organization*’s* sphere of influence, should be proactively approached.

- 6.5 *The Organization* shall* identify and protect representative sample areas* of native ecosystems* and/or restore* them to more natural conditions*. Where representative sample areas* do not exist or are insufficient, The Organization* shall* restore* a proportion of the Management Unit* to more natural conditions*. The size of the areas and the measures taken for their protection or restoration, including within plantations, shall* be proportionate to the conservation* status and value of the ecosystems* at the landscape* level, and the scale, intensity and risk* of management activities*. (C6.4 and 10.5 P&C V4 and Motion 2014#7)*

Small Scale/Low Intensity/Community forests

NS 6.5.1: **not** applicable
NS 6.5.2: **not** applicable
NS 6.5.3: **not** applicable
NS 6.5.4: **not** applicable
NS 6.5.5: **not** applicable
NS 6.5.61: **not** applicable
NS 6.5.7: **not** applicable
NS 6.5.8: **not** applicable
NS 6.5.9 **not** applicable
NS 6.5.10: **not** applicable
NS 6.5.11: **not** applicable

SIR INDICATORS

L6.5.1: *Best Available Information** is used to identify *Representative Sample Areas** of *native ecosystems** that exist, or would exist under *natural conditions**, within the *resource management unit**.

L6.5.2: The size of the *Representative Sample Areas** and/or *restoration** areas for each *management unit** is proportionate to the *conservation** status and value of the *ecosystems** at the *landscape** level, the size of the *Management Unit** and the *intensity** of forest* management.

L6.5.3: Where *Representative Sample Areas** do not exist, or where existing sample areas inadequately represent *native ecosystems**, or are otherwise insufficient, a proportion of the *Management Unit** is *restored** to more *natural conditions**.

L6.5.4: *Representative Sample Areas** in combination with other components of the *conservation areas network** comprise a minimum 10% area of the *resource management unit**.



L6.5.5: *The Organization** works with *stakeholders** who have identified themselves as interested in the process of land use designation and the identification in *Representative Sample Areas**.

L6.5.6: Forest operations, including harvesting, *silviculture**, and *road** building, are not undertaken by *The Organization** in areas within the *Representative Sample Areas** or other *protection areas** unless operations are needed to restore or maintain *natural conditions**, or the operations are consistent with appropriate measures to achieve conservation objectives for the areas.

SIR GUIDANCE

In this criterion, both the *Management Unit** and the *resource management unit** are referred to. Indicators L6.5.2 and L6.5.3 require that individual *Management Units** be considered while L6.5.1 and L6.5.4 require the *resource management unit** to be the scale of assessment.

These *Organizations** should focus efforts on SAR and small, site-level habitat features and processes. The degree of protection and/or restoration required is determined by the conservation status and value of the ecosystem as well as the scale, intensity and risk of *management activities** in the *resource management unit** as a whole.

The magnitude of the protection and restoration efforts, including the size, design and connectivity of sample areas, should be proportionate to the scale, intensity and risks of *management activities** and impacts. This means that reduced provisions may be appropriate for small management units that are located in *forests** with higher levels of existing protection.



The indicators in this *Criterion** address *protected areas** and other lands that contribute to the *conservation areas network**, generally referred to as *protection areas**. As is evident by the previous sentence, the semantics around this *Criterion* can be confusing as there is overlap in the meaning of the terms within the *Criterion's* description, differences in the types of conservation status addressed by the *Criterion's* indicators, and the legacy of terminology from the Regional Standards from which some of the Indicators in this *Criterion* evolved.

*Protected areas** are lands protected by legislation, regulation, or government land-use policy - provincial parks are an example of these lands. *Protection areas** is a term inherited from FSC International, which refers to areas managed for *conservation** or cultural purposes. The definition of *protection areas** in this Standard is adapted from FSC International (2011), which notes that "The term '*protected area**' is not used for these areas, because this term implies legal or official status.... management of these areas [*protection areas**] may involve *active conservation**, not passive protection."

In the context of this Standard, the term *protection area** is associated with lands managed by *The Organization**, and given a special designation associated with their ecological or cultural values that preclude normal forest *management activities**. Examples of *protection areas** include old growth management areas and cultural heritage reserves.

Refer to the glossary for complete definitions of terms used in the *Criterion*.

Both *protected areas** and *protection areas** can play a role in conserving *representative sample areas**, which is featured in the title and mandate of this *Criterion*. '*Active conservation**' referred to above, is more commonly associated with *protection areas** than *protected areas** and involves carrying out activities such as restoration, or creation of ecologically desirable conditions through *management activities**. However, distinct and often desirable attributes of *protected areas** are the greater assurance of their permanence as they are recognized in legislation, and greater assurance of exclusion of industrial activities.

One of the mechanisms for fostering conservation used in the *Criterion* is identification of candidate *protected areas**. These are areas that are to be put forward by *The Organization** as suitable for *protected area** status. The chart below compares key features of candidate *protected areas** and *protection areas** that are the basis of several indicators in this *Criterion*. The shaded cells in the table indicate designations to which the attribute applies. For example, the objective of moving to legislated status applies only to candidate *protected areas**.

Attributes	Protected Areas	Protection Areas
Objective to move to legislated status		
Intended to remain under company management		
Management emphasizes environmental values		
Forestry activities prohibited	Except where needed or maintain to restore natural conditions	

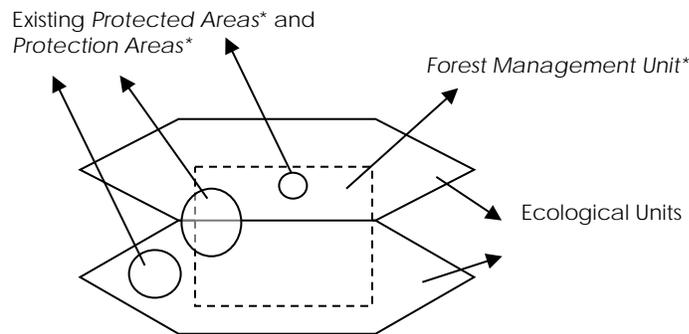
6.5.1 Consultation with self-identified interested and affected *stakeholders** is used as input into the identification of *protection areas** and/or candidate *protected areas**. *Engagement** with *Indigenous Peoples** is implemented based on their desire to participate. **(Add)**

This Indicator requires that consultation be undertaken with self-identified *stakeholders**. To ensure compliance with this requirement, organizations should contact *stakeholders** with a history of interest in *conservation** and inform them of the opportunity to participate. *Stakeholders** who express an interest are 'self-identified' and must be consulted. There is no requirement for *The Organization** to consult or attempt to consult *stakeholders** who do not self-identify.

6.5.2 Using the *Best Available Information**, an analysis is used to identify gaps in the completeness of the *conservation area network** in the *Management Unit**. Elements considered in the gap analysis include representation of *native ecosystems**, *landscape connectivity**, *intact forest landscapes**, Indigenous cultural landscapes and *High Conservation Values** and *High Conservation Value Areas**. The analysis incorporates the entire area encompassed by ecological units (for example, ecodistricts and biogeoclimatic zones) that occur at least partly within the *Management Unit**. **(Adapt from IGI 6.5.1)**

The definition of Indigenous Cultural Landscape is currently under development.

The figure below shows the area which must be considered in the gap analysis for an example *Management Unit**. The analysis must incorporate the entire area encompassed by all the ecological units that occur at least partly within the *Management Unit**.



This Indicator requires that the gap analysis be *peer-reviewed**. The *peer review** must be undertaken by an *independent expert** (see the glossary for definitions of *expert** and *independent expert**). A key part of the *peer review** process is documentation by the forest manager of the manner in which the *peer review** is considered and incorporated into the products being reviewed.



- 6.5.3 A *peer review** of the gap analysis is completed by one or more *independent experts**. **(Add)**
- 6.5.4 Areas that address identified gaps are designated either as *candidate protected areas** or *protection areas** by considering:
1. Input from the *interested and affected stakeholders** and *Indigenous Peoples** as in Indicator 6.5.1;
 2. The relative advantages of different types of protection (for example, legislated vs. company-implemented) and management (for example, hands-off vs. *active conservation**) in fostering conservation goals of the candidate *protected* and *protection areas**, including the greater assurance of *long-term** preservation associated with *protected areas**; and
 3. Socio-economic considerations (for example, implications for wood availability and harvest levels, the interests of recreationalists, etc.).

(Add)

The consideration of the greater assurance for *long-term** preservation associated with protected areas recognizes the greater potential for *long-term** ecological contribution of these areas as normal forest *management activities**, such as *road** building and harvesting are not permitted there. However, as noted by FSC International (2011), there is a role for *active conservation** in a *Conservation Areas Network** too. Examples of *active conservation** include use of prescribed burns or harvesting to *restore** natural open-woodland conditions.

- 6.5.5 Planned *conservation** measures including *active conservation** associated with *protection areas** are implemented. **(Adapt from IGI 6.5.2)**
- 6.5.6 *The Organization** works within its *sphere of influence** to move *candidate protected areas** to fully regulated protection as soon as possible. **(Add)**

What should happen when a candidate *protected area** is actually moved to regulated protection through collaborative efforts with the regional, provincial or federal government? In this circumstance, new candidate areas need not be identified to replace the one which has been granted regulated protection, although the objectives associated with achieving the total area of the *conservation areas network**, as identified in Indicator 6.5.8, would remain in place. The success of moving a candidate area to regulated status should be noted by the assessors/auditors along with the gap that it addressed so that in future gap analyses, assessments and audits *The Organization** will not need to 'replace' the successful candidate *protected area** with a new one.

As identified in Indicator 6.5.11, the gap analysis must be reviewed at least every five years and so the success associated with moving a candidate protected area to regulated protection would be reflected in an updated assessment.

- 6.5.7 Individual *candidate protected areas** and *protection areas** are of sufficient size to ensure the values they are intended to protect are effectively protected. **(Adapt from IGI 6.5.4)**



6.5.8 The total proposed area of the *conservation areas network** in the *Management Unit**, including candidate *protected areas**, existing *protected areas**, and existing and new *protection areas**, is identified by considering:

1. Input from the *interested* and *affected stakeholders** and *Indigenous Peoples** as described in Indicator 6.5.1;
2. Contribution of *protected areas** and *candidate protected areas** to the *conservation areas network** in the *Management Unit** and the entire area encompassed by ecological units that occur at least partly within the *Management Unit**;
3. Contribution of the *conservation areas network** to regional, provincial, and national targets and international agreements (for example, AICHI Biodiversity Targets);
4. Scientific literature and research regarding conservation targets; and
5. Guidance from the FSC Policy and Standards Committee that *conservation areas networks** should achieve a minimum area of 10% of the *Management Unit**². **(Adapt from IGI 6.5.5)**

As described in this indicator, there are many things to consider in identifying an appropriate size for a *conservation area network**, one of which is the guidance of FSC Policy and Standards Committee citing a minimum area of 10% of the *Management Unit**. As it is used here, in conjunction with the other considerations, the 10% benchmark should not be interpreted as a target, or optimum or desired, level. It is characterized as a minimum level and so its use should not override the other considerations identified in the Indicator.

6.5.9 Substantial support from the stakeholders and *Indigenous Peoples** consulted in Indicator 6.5.1 related to the identification of *candidate protected areas** and *protection areas** is demonstrated. **(Add)**

This Indicator requires that *substantial* support be demonstrated. In this context, 'substantial' should represent a balance of interests such that:

1. Unanimous support is not required;
2. Most of the consulted parties or interests are supportive; and
3. *Best efforts** to achieve substantial support are not adequate to meet the indicator's requirements.

Where no self-identified *interested* and/or *affected stakeholders** elect to participate, the obligations of organizations related to the other indicators in this *Criterion** remain in place.

6.5.10 Forest operations, including harvesting, *silviculture**, and *road** building, are not undertaken by *The Organization** in areas within the *candidate protected areas** or *protection areas** unless operations are needed to restore or maintain *natural*

² The minimum threshold, originally identified in 2011 is provided in *FSC Forest Stewardship Standards: structure, content and suggested indicators* FSC-GUI-60-004 (V1-0) EN at *Criterion** 6.2.

*conditions**, or the operations are consistent with appropriate measures to achieve *conservation* objectives** for the areas. **(Add)**

- 6.5.11 The completed gap analysis is reviewed at least every five years, and updated if necessary, based on availability of new information, advances in methodology, or input from *stakeholders** or *Indigenous Peoples**. Updates to areas identified as *candidate protected areas** and *protection areas** occur as required based on updates to the gap analysis. **(Add)**

This indicator requires that the gap analysis be reviewed at least every five years. This does not necessarily mean that the gap analysis will need to be redone at that interval. The analysis will only need to be redone or updated if relevant new information or an improved methodology becomes available, or if new input from *stakeholders** or *Indigenous Peoples** is received. New information, which may necessitate updating the gap analysis could include the creation of new *protected areas** that address some of the previously-identified gaps, or an improved *landscape** classification system that better characterizes the *landscape** and provides an improved basis for identifying gaps. The bar for deciding whether there is a sufficient basis for proceeding with an update should be neither too high nor too low. The update only needs to take place if it is likely that the new analysis will identify meaningfully-different gaps from those identified in the previous analysis.

6.5.3 IGI (Drop)

- 6.6** *The Organization* shall* effectively maintain the continued existence of naturally occurring native species* and genotypes*, and prevent losses of biological diversity*, especially through habitat* management in the Management Unit*. The Organization* shall* demonstrate that effective measures are in place to manage and control hunting, fishing, trapping and collecting. (C6.2 and C6.3 P&C V4)*

Small Scale/Low Intensity/Community forests

NS 6.6.1: **not** applicable.
NS 6.6.2: **not** applicable.
NS 6.6.3: **not** applicable.
NS 6.6.4: **not** applicable.
NS 6.6.5: **not** applicable.
NS 6.6.6: **not** applicable.

SIR INDICATORS

L6.6.1 *Management activities** maintain the plant communities and *habitat features** found within *native ecosystems** in which the *Management Unit** is located.

L6.6.2: Where past management has eliminated plant communities or *habitat features**, *management activities** aimed at re-establishing such *habitats** are implemented.

L 6.6.3: Management maintains, enhances, or *restores* habitat features** associated with *native ecosystems**, to support the diversity of naturally occurring species and their genetic diversity.

L6.6.4: Silvicultural and harvesting practices shall result in canopy closure levels that are consistent with the natural disturbance pattern on the *Management Unit**.

SIR GUIDANCE

Examples of *habitat features** can be found in NS 6.6.5 and the Glossary.

- 6.6.1 Forest management maintains or restores a distribution of *forest types** and age classes of *forest types** consistent with the *Range of Natural Variation**. The *inter-quartile range** of the *Range of Natural Variation** is used as a guide for identifying the appropriate *forest type** and age-class distributions.

Deviation from the *inter-quartile range** of the *Range of Natural Variation** is permitted providing that it is supported by documented consensus-based *community** direction and/or a *peer reviewed** strategy, based on adaptation to climate change or other ecosystem processes. **(Adapt – from components of IGI 6.6.1, 6.6.2, and 6.8.1)**

This indicator addresses the distribution of *forest types** and age classes with the intent of maintaining a natural distribution of both these qualities. Note that in this indicator they are linked, so it is required to:

1. Maintain a natural distribution relative to the *Range of Natural Variation** of forest types; and
2. Maintain a natural distribution relative to the *Range of Natural Variation** of age classes of *forest types**.

The second point means that the age-class distribution of each *forest type** should be maintained (relative to the *Range of Natural Variation**), so it would not be appropriate for a *forest** that was naturally dominated by old conifer to change to a managed *forest** dominated by old hardwood. Although the *forest** may still be dominated by old age classes, the shift from conifer to hardwood would be contrary to this indicator's requirements.

- 6.6.2 For sites managed using the clear-cut system, or similar systems (e.g. seed-tree) and for all sites for which salvage operations (following natural disturbances) are undertaken, harvesting and other stand *management activities** maintain *residual structures** of sufficient quality and in sufficient quantities for them to serve their ecological functions. The various structural components described below are identified in the *Management Plan** as quantitative targets suitable for the forest region where appropriate, and are implemented:

1. *Residual structure** contains a mix of dispersed trees and a range of patch sizes, with a preference for patches;
2. Patches are well-distributed through the harvest area;



3. Where the harvest area is an aggregation of *cutblocks**, residual trees and patches are well distributed within the *cutblocks** as well as between or among them;
4. Residual species composition considers the pre-harvest or pre-disturbance stand, taking into account ecological considerations, such as flammability and wind firmness, and silvicultural regeneration *objectives**;
5. Post-harvest snags and live trees include meaningful numbers of *high value residuals**;
6. All *residual structure** is *long-term**, meaning it will not be harvested until at least the subsequent rotation; and
7. The amount of *residual structure** retained is 10-50% by area per *cutblock** with representation across this range based on five-year operational plans.

For small harvest areas, *residual structure** retained is an average of not less than 5 %. Where operational health and safety concerns exist, stubbing of trees to provide *residual structure** is used.

Deviation from the requirements of this Indicator occurs only when supported by a *peer reviewed** strategy based on adaptation to climate change or for other valid ecological reasons. **(Adapt – from IGI 6.6.1)**

This indicator uses the terms "*cutblock**" and "*harvest area**." The two terms do not have the same meaning. For the purpose of this Standard, a *cutblock** is a contiguous area of *forest** that has been harvested, with the exception of individual trees and patches left for either silvicultural purposes or to provide ecological benefits. A *harvest area** generally consists of more than one *cutblock**. *Cutblocks** within a *harvest area** are usually close enough so that they are planned and implemented as part of the same forestry operation. *Cutblocks** within a *harvest area** are generally separated by patches or linear stretches of contiguous forest so that there is not an uninterrupted cut area between the *cutblocks**.

This indicator requires that *cutblocks** maintain 10-50% *residual structure** with representation across this range based on five-years' operations. This means that it is not acceptable to have most *cutblocks** left with *residual structure** towards the low end of this range.

The exception to the requirement to have 10-50% residual structure for small harvest blocks exists where the blocks are so small that the ecological benefits from residual structure will be derived largely from the *long-term** presence of adjacent forest and reserves established for other purposes. If residual amounts are less than 10% for a harvest area, forest managers should provide evidence to justify that the *harvest area** is small relative to other *harvest areas** and relative to natural disturbance dynamics.

6.6.3 For sites managed using partial cuts (for example, e.g. selection, shelterwood and similar systems) harvesting and other stand *management activities** retain *residual structures** in sufficient quantity and of sufficient quality for them to serve their ecological functions. The various structural components described below are identified in the *Management Plan** as quantitative targets suitable for the forest region where appropriate, and are implemented:

1. *Residual structure** contains a mix of tree sizes and trees of different quality;

2. Residual species composition considers the pre-harvest or pre-disturbance stand;
3. Post-harvest snags and live trees include meaningful numbers of *high value residuals**; and
4. Diversity of vertical and horizontal structure is retained consistent with the characteristics of natural stands;

Deviation from the requirements of this Indicator occurs only when supported by a *peer reviewed** strategy based on adaptation to climate change or for other valid ecological reasons. **(Adapt – from IGI 6.6.1)**

6.6.4 Unique stand- and site-scale ecosystems and important *habitat features** are maintained by *management activities**. Important *habitat features** include:

1. *Ancient forest** patches;
2. Rare sites as defined by ecological classification systems;
3. Vernal pools;
4. Small *wetlands**, ponds, bogs, and fens;
5. Den sites;
6. Nest sites for birds of prey;
7. Ungulate calving sites/areas;
8. Spawning sites for fish;
9. Important bird migration sites;
10. Super-canopy trees
11. Wallows; and
12. Mineral licks. **(Adapt – from IGI 6.6.1)**

6.6.5 When possible, *habitat features** that have been significantly degraded or whose abundance has significantly declined in the forest are being managed so as to increase their quality and quantity. **(Adapt – from IGI 6.6.3)**

6.6.6 Isolated and disjunct populations are not put at risk by forest *management activities**. **(Adapt IGI 6.6.3)**

6.6.4 IGI (Drop)

6.7 *The Organization shall* protect or restore* natural watercourses, water bodies*, riparian zones* and their connectivity*. *The Organization** shall* avoid negative impacts on water quality and quantity and mitigate and remedy those that occur. (C6.5 and 10.2 P&C V4)**

6.7.1 Measures based on *best available information** are in place and being effectively implemented to protect *water bodies**, *riparian zones**, and water quality. At a minimum, the measures address the following:

1. Buffer widths sufficient to protect water quality, aquatic and emergent vegetation and *habitat** for fish, invertebrates, other aquatic species, and

- terrestrial species, and to provide for the input of coarse woody debris as habitat;
2. Machine-free zones that are not entered except where required for construction of crossings or other approved infrastructure or restoration of riparian or stream channel functions;
 3. Measures to restrict in-stream activities to avoid sensitive fisheries seasons;
 4. Measures to prevent negative changes in water quantity and quality including through maintaining stream shading sufficient to protect against deleterious changes in stream temperature;
 5. Maintenance of hydrologic patterns and minimizing disruption of natural drainage patterns, including when locating and constructing *roads**, landings and skidways;
 6. Measures to prevent sedimentation of *water bodies** and soil erosion from harvesting, *roads** construction, maintenance and use;
 7. Measures to protect *intermittent streams** and *ephemeral streams**; and
 8. Measures to prevent impacts from chemicals or fertilizers.

(Adapt – from IGI 6.7.1 and 6.7.2)

- 6.7.2 Where implemented *protection** measures fail to protect *waterbodies**, *riparian zones**, or water quality from impacts of forest *management activities**, and/or where past measures implemented by the present, or previous managers are no longer effective, *restoration** activities are implemented.

Where *management activities** that are not within its direct control (for example, *road** maintenance, right-of-way construction) have the potential to significantly affect *waterbodies** and/or *riparian zones**, *The Organization** works within its *sphere of influence** to attempt to implement protective measures and remedy instances in which past measures are no longer effective. (Adapt – from IGI 6.7.3, 6.7.4, and 6.7.5).

Instances in which previous measures to protect water quality or aquatic systems are not up to contemporary standards, but are being effective nonetheless, the most prudent course of management action is likely to leave the existing measures (for example, box culverts) in place. In some instances, attempts to 'fix' antiquated measures may result in more damage than simply leaving the measure in place. *Organizations** are expected to use best judgement in these circumstances and be able to validate their course of action based on experience and/or *best management practices**.

- 6.7.3 Measures to control increases in peak flow in watersheds with significant downstream values resulting from *management activities**, including in snow-melt dominated watersheds, are incorporated into management plans and implemented. The measures include:
1. Employing analytical approaches to identify and avoid hydrological impacts associated with increased flows caused by forest *management activities**;
 2. Management of *cutblock** and *harvest area** sizes;
 3. Planning and implementing harvesting so as to minimize *road** density;



4. Avoiding harvesting on steep south-facing slopes; and
5. Prompt *road** reclamation and reforestation of logged sites.

Topographic maps or analyses of terrain conditions are used to identify areas with moderate to steep topography. **(Add)**

Potential impacts of forestry on peak flow are greatest in areas with moderate to steep topography. In Canada, such areas occur primarily in British Columbia and western Alberta, but also occur in other parts of the country. This indicator requires that analytical approaches be used to identify and avoid hydrological impacts associated with increased flows, but does not specify which approaches are to be used as regional differences in regulatory, environment, topography, and downstream values may play a role in deciding which approaches are most appropriate.

- 6.8 ***The Organization* shall* manage the landscape* in the Management Unit* to maintain and/or restore* a varying mosaic of species, sizes, ages, spatial scales and regeneration cycles appropriate for the landscape values* in that region, and for enhancing environmental and economic resilience*.*** (C10.2 and 10.3 P&C V4)

Small Scale/Low Intensity/Community forests

NS 6.8.1: **not** applicable

NS 6.8.2: **not** applicable

NS 6.8.3: applicable to *Community forests** in a caribou range

NS 6.8.4: **not** applicable

NS 6.8.5: **not** applicable

SIR INDICATORS

L6.8.1: A varying mosaic of species, sizes, ages, *spatial scales**, and regeneration cycles is maintained appropriate to the *landscape**.

L6.8.2: The mosaic of species, sizes, ages, *spatial scales**, and regeneration cycles is *restored** where it has not been maintained appropriate to the *landscape**.

L6.8.3: Forest fragmentation is minimized and connectivity is maintained or restored between important wildlife habitats and key landscape features such as HCVFs, late seral stage forests and protected areas.

L6.8.4: Road construction and maintenance must be conducted so as to minimize damage to the *forest** and *hydrological features**. This includes, where appropriate:

- deactivation and/or abandonment and maintenance strategies;
- avoiding *road** building in *protected areas** and *protection areas**; and
- managing access development, use, and *road** reclamation in light of the needs of *species at risk** and access-sensitive species.

L6.8.5: On request, *best efforts** are made to work with managers/agencies responsible for managing lands adjoining the forest to coordinate approaches to landscape-level management including where appropriate:

- a) management of *High Conservation Values**;
- b) management to facilitate landscape-scale connectivity; and
- c) access management to minimize cumulative disturbances.

6.8.1 Consistent with the ecology of the ecoregion and *forest types** being managed, forest management disturbances are aggregated in a manner that facilitates the creation of large contiguous blocks of undisturbed areas. The size of contiguous blocks is informed by the assessment of the *Range of Natural Variation** (see Indicator 6.1.4).

In the creation of aggregated disturbances, mature forest patches interspersed with existing harvested areas are harvested before nearby large contiguous blocks to the extent that is ecologically and socially feasible.

The extent of aggregated disturbed areas also considers:

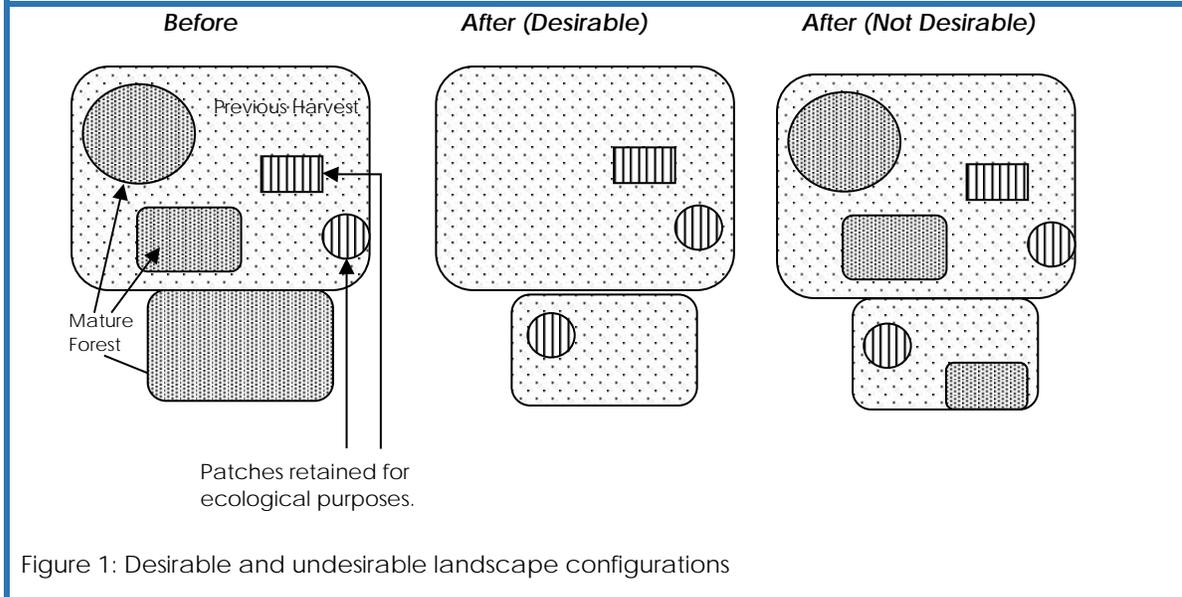
1. The value of contiguous undisturbed areas to *species at risk**;
2. Restrictions on timber *harvest area** imposed by regulatory authorities;
3. stakeholder and *Indigenous Peoples** community concerns;
4. Concerns of *forest** users, such as recreationalists and trappers; and
5. Impacts on water quality and quantity.

Where significant social resistance to creating large disturbed areas exists and where aggregation of disturbances would be beneficial to *species at risk**, *The Organization** works within its *sphere of influence** to move management direction toward the aggregation of disturbances, as a means of avoiding or forestalling the creation of new disturbances. Where there are overlapping tenure holders, *The Organization** works within its *sphere of influence** to aggregate disturbances so as to meet the requirements of this indicator. **(Adapt – from IGI 6.8.1)**

Aggregating disturbances actually decreases the footprint in the affected *landscape** and generally requires fewer kilometres of *road** compared to when a comparable total area of disturbance is dispersed across the *landscape**. The intent of aggregating disturbances is not to create large disturbed areas per se, but to create contiguous areas that are not disturbed at present, preserving tracts of existing *habitat**, and to create contiguous areas of *habitat** in the future once sufficient regeneration has occurred.

Unharvested patches left to fulfill ecological roles (see Indicator 6.6.2) should not be harvested as part of efforts to create contiguous disturbances.

Figure 1 illustrates desirable and undesirable *landscape** configurations that could result when a harvest is carried out in an area that had previously been cut with mature forest patches left.



6.8.2 Consistent with the ecology of the ecoregions, and *forest types** being managed, large areas of *forest** are maintained in contiguous blocks and/or restored to a contiguous state in the *Management Unit**. The size and age-class composition, and proportion of the forest in contiguous blocks is informed by the assessment of the *Range of Natural Variation** (see Indicator 6.1.4)

To the extent feasible, contiguous blocks of forest are maintained that consist of *forest** of natural-disturbance origin.

*Best efforts** are being made to minimize the extent of *roads** and other linear disturbances in contiguous blocks. Where *roads** are included in contiguous blocks, plans for their management, focusing on removal and reclamation, exist and are being implemented.

The planning of future contiguous blocks and management of current contiguous blocks focuses on areas with a high probability of achieving the desired condition (for example, areas likely to be in a contiguous, roadless condition). *The Organization** works within its *sphere of influence** to achieve this condition (for example, through access management, decommissioning *roads**, bridge removal, etc.). (Adapt – from IGI 6.8.1 and 6.8.2)

This indicator is related to the topic of *IFLs** and may evolve depending on how *IFLs** are incorporated into the Standard.



- 6.8.3 In a manner consistent with the ecology of the ecoregion and *forest types** being managed, and considering *best available information** and science, the *forest** is managed so as to show consideration for maintenance and *restoration** of *connectivity** at the *landscape** and *stand** scales to meet the *habitat** and movement needs of fish and wildlife species. Connectivity planning considers the natural mosaic of *forest types** and disturbance patterns, and managing *roads**, linear disturbances, culverts, and other barriers that affect *connectivity**.

*The Organization** works collaboratively with the managers of surrounding lands and within its *sphere of influence** to foster *landscape*-scale* connectivity**.

The following requirement applies to forest within *caribou ranges**:

Through the use of empirical information and/or *Traditional Knowledge**, *The Organization** demonstrates an understanding of the movement needs of caribou on their *Management Unit**, and demonstrates that planned management will maintain or restore *connectivity** to a level sufficient to meet caribou movement needs. In the absence of a demonstrated understanding of movement needs, a *precautionary approach** is used in addressing *landscape* connectivity** concerns related to caribou habitat management. **(Add)**

Community Forests

SIR GUIDANCE

If their *RMU** is within or adjacent to a *caribou range**, *community forests** should take into account connectivity related to caribou habitat management.

- 6.8.4 Appropriate to the *scale intensity and risk** of operations, a comprehensive access *Management Plan** is being implemented for *roads** used for forest management that:
1. Avoids *road** building in candidate *protected areas** and *protection areas** as required by Indicator 6.5.10;
 2. Includes deactivation and/or abandonment and maintenance strategies for all grades of *road** under the management of *The Organization**;
 3. Considers remoteness in areas with sensitive biological values and where remoteness is a key tourism value;
 4. Manages access development, use, and *road** reclamation in light of the needs of *species at risk** and access-sensitive species;
 5. Identifies and attempts to maintain a fair and equitable balance between the ecological value of remoteness and social and economic values associated with maintenance of access; and
 6. Is consistent with approved government/land management plans.

Where access and/or other linear disturbances are being constructed or used by other tenure holders or other land users, *The Organization** works within its *sphere of influence**

to address the components of this Indicator and encourage others to address the components of the indicator. **(Add)**

6.8.5 *The Organization** works within its *sphere of influence** with managers and agencies responsible for managing lands adjoining the *forest** to coordinate approaches to *landscape**-level management, including:

1. Management of *High Conservation Values**;
2. Setting of objectives and strategies for management of *species at risk**;
3. Management of *landscapes** to aggregate disturbances where ecologically appropriate;
4. Management to facilitate *landscape**-scale* *connectivity**;
5. Management of access so as to minimize cumulative disturbances; and
6. Maintenance and/or restoration of large contiguous areas.

Where management is taking place within a *caribou range**, *The Organization** attempts to coordinate *landscape**-level *management activities** with the managers of adjoining resource management areas so that impacts on caribou habitat are minimized. **(Add)**

6.9 **The *Organization** shall* not convert *natural forest** to *plantations**, nor *natural forests** or *plantations** on sites directly converted from *natural forest** to non-forest* land use, except when the conversion:**

- a. Affects a *very limited portion** of the area of the *Management Unit**, and
- b. Will produce clear, substantial, additional, secure long-term *conservation** benefits in the *Management Unit**, and
- c. Does not damage or threaten *High Conservation Values**, nor any sites or resources necessary to maintain or enhance those *High Conservation Values**. (C6.10 P&C V4 and Motion 2014#7)

This criterion applies to current and future or planned conversion. Past conversion is covered by *Criterion** 6.10.

If the *plantation** site was *natural forest** immediately prior to being converted to *plantation**, then it may not be converted to non-forest uses. However, if the *plantation** site was non-forest immediately prior to being converted to a *plantation**, then it may be converted back to non-forest uses.

The construction of forest *roads** and other essential infrastructure for forest management are not considered as a conversion process.

6.9.1 There is no conversion of *natural forest** to *plantations**, nor conversion of *natural forests** to non-forest* land use, nor conversion of *plantations** on sites directly converted from *natural forest** to non-forest* land use, except when the conversion affects a *very limited portion** of the *Management Unit**. Where conversion is undertaken by *The Organization**:



- a. The conversion will produce clear, substantial, additional, secure, *long-term* conservation** benefits in the *Management Unit**; and
- b. Does not damage or threaten *High Conservation Values**, nor any sites or resources necessary to maintain or enhance those *High Conservation Values**.

(Adapt)

6.10 *Management Units containing *plantations** that were established on areas converted from *natural forest** after November 1994 shall* not qualify for certification, except where:**

- a. Clear and sufficient evidence is provided that *The Organization** was not directly or indirectly responsible for the conversion, or
- b. The conversion affected a *very limited portion** of the area of the *Management Unit** and is producing clear, substantial, additional, secure long-term *conservation** benefits in the *Management Unit**. (C10.9 P&C V4)

6.10.1 Based on *Best Available Information**, accurate data related to prior land use and *forest type** present before and after conversion is compiled on all conversions from *natural forest** since 1994. **(Adapt)**

6.10.2 Areas converted from *natural forest** to *plantation** since November, 1994 are not certified, except where:

1. *The Organization** provides clear and sufficient evidence that it was not directly or indirectly responsible for the conversion; or
2. The conversion is producing clear, substantial, additional, secure, *long-term* conservation** benefits in the *Management Unit**; and
3. The total area of *plantation** on sites converted from *natural forest** since November, 1994 is less than 5% of the total area of the *Management Unit**. **(Adopt)**

PRINCIPLE* 7: MANAGEMENT PLANNING

The Organization shall* have a Management Plan* consistent with its policies and objectives* and proportionate to scale, intensity and risks* of its management activities*. The Management Plan* shall* be implemented and kept up-to-date based on monitoring information in order to promote adaptive management*. The associated planning and procedural documentation shall be sufficient to guide staff, inform affected stakeholders* and interested stakeholders* and to justify management decisions. (P7 P&CV4)*

- 7.1 *The Organization* shall*, proportionate to scale, intensity and risk* of its management activities*, set policies (visions and values) and objectives* for management, which are environmentally sound, socially beneficial and economically viable*. Summaries of these policies and objectives* shall* be incorporated into the Management Plan*, and publicized. (C7.1a P&C V4).*
- 7.1.1 Vision, values and strategic objectives* that contribute to meeting the requirements of this Standard are described in the Management Plan*. **(Adapt)**
- 7.1.2 Operational management objectives* that address the requirements of this Standard are described in the Management Plan*. **(Adapt)**

For the purpose of this Criterion*, "values" refer to the long-term values of The Organization* with regard to complying with the FSC Principle*s and Criteria, at a minimum.

- 7.1.3 Summaries of the defined vision, values and strategic objectives* are included in the Management Plan*. **(Adapt)**

Small Scale/Low Intensity/Community forests under 10,000 ha

SIR GUIDANCE

Summaries of of the defined vision, values and strategic objectives* may be communicated verbally or in writing.

Community forests over 10,000 ha

Must conform to NS 7.1.3

- 7.2 *The Organization* shall* have and implement a Management Plan* for the Management Unit* which is fully consistent with the policies and management objectives* as established according to Criterion* 7.1. The Management Plan* shall* describe the natural resources that exist in the Management Unit* and explain how the plan will meet the FSC certification*

requirements. The *Management Plan** shall* cover forest* management planning and social management planning proportionate to *scale, intensity and risk** of the planned activities. (C7.1 P&C V4)

7.2.1 The *Management Plan** includes management actions, procedures, strategies and other measures to achieve the *management objectives**. **(Adopt)**

7.2.2 A) The *Management Plan** addresses the results of assessments, including:

- i. Natural resources and *environmental values**, as identified in Principle 6 and Principle 9;
- ii. Social, economic and cultural resources and condition, as identified in Principle 6, Principle 2, Principle 5 and Principle 9;
- iii. Major social and environmental *risks** in the area, as identified in Principle 6, Principle 2 to Principle 5 and Principle 9 and
- iv. The maintenance and/or enhancement of *ecosystem services** for which promotional claims are made as identified in *Criterion** 5.1 and Annex D.

B) The *Management Plan** addresses the programs and activities regarding:

- i. *Workers**' rights, occupational health and safety, *gender equality**, as identified in Principle 2;
- ii. *Indigenous Peoples**, community relations, local economic and social development, as identified in Principle 3, Principle 4 and Principle 5;
- iii. *Stakeholder** *engagement** and the resolution of *disputes** and *grievances**, as identified in Principle 7 and Principle 9;
- iv. Planned *management activities** and timelines, silvicultural systems used, typical harvesting methods and equipment, as identified in Principle 10; and
- v. The rationale for harvesting levels of timber and other natural resources, as identified in Principle 5.

C) The *Management Plan** addresses measures to conserve and/or restore*:

- i. *Rare** and *threatened species** and *habitats**;
- ii. *Water bodies** and *riparian zones**;
- iii. *Landscape** *connectivity**, including wildlife corridors;
- iv. Declared *ecosystem services** as identified in *Criterion** 5.1, and Annex D;
- v. *Representative Sample Areas**, as identified in Principle 6; and
- vi. *High Conservation Values**, as identified in Principle 9.

D) The *Management Plan** addresses measures to assess, prevent, and mitigate negative impacts of management activities on:

- i. *Environmental values**, as identified in Principle 6 and Principle 9;
- ii. Declared *ecosystem services** as identified in *Criterion** 5.1 and Annex D; and
- iii. Social values, as identified in Principle 2 to Principle 5 and Principle 9.

E) The *Management Plan** addresses the monitoring program, as identified in Principle 8,

including a description of:

- i. Growth and yield, as identified in Principle 5;
- ii. Declared *ecosystem services**, as identified in *Criterion** 5.1 and Annex D;
- iii. *Environmental values**, as identified in Principle 6;
- iv. Operational impacts, as identified in Principle 10;
- v. *High Conservation Values**, as identified in Principle 9;
- vi. Monitoring systems based on *stakeholder* engagement** planned or in place, as identified in Principle 2 to Principle 5 and Principle 9; and
- vii. Maps describing the natural resources and land use zoning on the forest *Management Unit**.

F) The *Management Plan** includes maps that:

- i. Describe the natural resources;
- ii. Show legal or customary tenure or use rights within the *Management Unit**;
- iii. Describe the extent and status of the *road** network; and
- iv. Describe land use, management designations (including *HCVs**) and current status.

G) The *Management Unit** and the adjacent lands, if necessary, are described and mapped in adequate detail to inform management decisions in accord with the other sections of this document.

The information required for adjacent lands refers mainly to shared values, resources, and services. It may not be possible in all circumstances to provide a profile of adjacent lands. The expectation is that this will be provided only in cases where the information is publicly available, in a forest *Management Plan** for Crown lands on a neighbouring *Management Unit**, for example.

H) The *Management Plan** includes global trends of climate scenarios for the region and outlines the probable impacts on forest management.

(Adapt)

Small Scale/Low Intensity/Community forests

SIR GUIDANCE

Must comply with 7.2.2 A to 7.2.2 G

7.2.2 H: **not** applicable

The stated programs, activities, assessments and measures should be addressed in the *Management Plan** as they are required by the SIR indicators throughout the Standard.

For Group Entities*



*Management plans** for individual *forests** that are part of a *group entity** may not include all requirements of 7.2.2, but the *resource manager** must be able to communicate these requirements as they apply to the certificate in its entirety.

7.3 The Management Plan* shall* include verifiable targets* by which progress towards each of the prescribed management objectives* can be assessed. (new)

7.3.1 *Verifiable targets** and the frequency of their assessment are established for monitoring the progress toward each *management objective**, and used as the basis for monitoring, as described in Principle 8. Targets are measurable (where possible), address short-term and *long-term** time frames (as applicable), and each one is supported by a rationale, including underlying assumptions. **(Adapt)**

Small Scale/Low Intensity/Community forests

SIR GUIDANCE

These *Organizations** should concentrate on establishing *verifiable targets** which are achievable. This means selecting targets related to those activities which can be observed or where information can be gathered from existing sources.

Examples of *verifiable targets**:

- Wood supply
- Forest condition (forest community composition, aggregation of disturbances, size of core areas, age class distribution)
- Silvicultural objectives including regeneration
- Composition and observed changes in the flora and fauna
- Wildlife habitats, *biodiversity** and status of *High Conservation Values**
- Protection of the *forest** environment, (for example, soils, water, hydrology)
- Social and economic benefits such as recreation and benefits to *local communities**
- *Stakeholder** satisfaction with *engagement**
- Benefits of management operations provided to *local communities**
- Historical and cultural resources and traditional uses of *Indigenous Peoples** and others
- Number of *occupational accidents**
- Overall *economic viability** of the *Management Unit**

7.4 The Organization* shall* update and revise periodically the management planning and procedural documentation to incorporate the results of monitoring and evaluation, stakeholder* engagement* or new scientific and technical information, as well as to respond to changing environmental, social and economic circumstances. (C7.2 P&C V4)

7.4.1 The *Management Plan** is revised and updated periodically to take into account:

1. Monitoring results, including results of certification audits;
2. Evaluation results;
3. *Stakeholder* engagement** results;
4. New scientific and technical information; and
5. Changing environmental, social, or economic circumstances.

(Adapt)

See Annex E, *Conceptual Framework for Planning and Monitoring*, for further guidance on this Indicator.

- 7.5 ***The Organization* shall* make publicly available* a summary of the Management Plan* free of charge. Excluding confidential information*, other relevant components of the Management Plan* shall* be made available to affected stakeholders* on request, and at cost of reproduction and handling. (C7.4 P&C V4)***

Examples of *confidential information** include data and content:

- Related to investment decisions
- About *intellectual property** rights
- Which is client confidential
- Which is, by law, confidential
- Whose dissemination could put at *risk** the protection of wildlife species and *habitats**
- About sites that are of special cultural, ecological, economic, religious or spiritual significance to *Indigenous Peoples** or *local communities** (see *Criterion* 3.5* and *Criterion* 4.7*) as requested by these groups

- 7.5.1 A summary of the *Management Plan** in a format comprehensible to *stakeholders** including maps and excluding *confidential information** is made *publicly available** at no cost. (Adapt)

At the discretion of *The Organization**, the entire *Management Plan** can be provided if this reduces the administrative burden.

- 7.5.2 Relevant components of the *Management Plan**, excluding *confidential information**, are provided upon reasonable request, at cost for production and handling. (Adapt)

- 7.6 ***The Organization* shall*, proportionate to scale, intensity and risk* of management activities*, proactively and transparently engage* affected stakeholders* in its management planning and monitoring processes, and shall* engage* interested stakeholders* on request. (C4.4 P&C V4)***

Culturally appropriate engagement** is described in Annex I.



- 7.6.1 One or more *publicly available** *dispute** resolution processes are in place. All *dispute** resolution processes are agreed upon through *culturally appropriate** *engagement** with *affected stakeholders**, other than the ones concerned in *Criteria** 1.6, 2.6 and 4.6. (Adapt / New)

Small Scale/Low Intensity/Community forests

SIR INDICATOR

L7.6.1: On request, *affected stakeholders** (other than those referred to in *Criteria** 1.6, 2.6 and 4.6) are involved in the creation of a *publicly available** *dispute** resolution processes.

Annex G gives more detail on how disputes are addressed throughout the Standard.

- 7.6.2 (IGI) (Drop)
- 7.6.2 *Disputes** related to the impacts of *forest management activities** on *affected stakeholders** are responded to in a *timely manner**, and are either resolved or are in the *dispute** resolution process. (Add)
- 7.6.3 An up-to-date record of *disputes** related to the impacts of *forest management activities** is kept. The record includes:
1. Steps taken to resolve *disputes**;
 2. Outcomes of all *dispute** resolution processes including *fair compensation** to *affected stakeholders** and individuals; and
 3. Unresolved *disputes**, the reasons they are not resolved, and how they will be resolved. (Add)
- 7.6.4 *Affected stakeholders** are provided with an opportunity for *culturally appropriate** *engagement** in *management plan monitoring** and planning processes of *management activities** that affect their interests. (Adopt – was IGI 7.6.3)

Small Scale/Low Intensity/Community forests

SIR INDICATOR

L7.6.4: Upon request, *affected stakeholders** and *interested stakeholders** are provided with an opportunity for *culturally appropriate** *engagement** in *management plan** monitoring and planning processes of *management activities** that affect their interests.



SIR GUIDANCE

Requests to be involved in *management plan** monitoring and the planning processes of *management activities** must conform to local and *national laws** and be *reasonable** to ensure that the *resource manager** has the capacity to undertake the request.

- 7.6.5 Upon request, *interested stakeholders** are provided with an opportunity for *engagement** in *management plan monitoring** and planning processes of *management activities** that affect their interests. **(Adopt – was IGI 7.6.4)**



PRINCIPLE* 8: MONITORING AND ASSESSMENT

The Organization* shall* demonstrate that, progress towards achieving the management objectives*, the impacts of management activities* and the condition of the Management Unit*, are monitored and evaluated proportionate to the scale, intensity and risk* of management activities*, in order to implement adaptive management*. (P8 P&C V4)

The main objective of monitoring is to allow *The Organization** to implement *adaptive management**. This objective also determines the intensity, frequency, scheme, schedules and procedures for monitoring. There is flexibility regarding all these factors, as long as the monitoring enables *adaptive management**. Monitoring should be consistent and replicable over time, suitable for quantifying social, economic and environmental changes over time, and suitable for identifying *risks** and unacceptable impacts.

The overall setup of the monitoring system also depends on the *scale, intensity and risk** of *management activities**. Some monitoring variables deal with issues with high levels of *risk**. Examples include variables for which there is a high *risk** of not achieving targets, or *management activities** that could cause negative social, economic or environmental impacts. *Risk** is also high when knowledge of the likelihood of negative impacts is weak. Such variables need to receive priority in monitoring systems.

- *Criterion** 8.1 is the requirement about monitoring the implementation of the *Management Plan**.
- *Criterion** 8.2 is the requirement about monitoring and evaluating the environmental (8.2.1A) and social (8.2.1B) impacts of management activities*, as well as changes in the environmental condition (8.2.2) of the Management Unit*.
- *Criterion** 8.3 deals with the analysis of the results of monitoring and evaluation, for feedback into the periodic revision of the *Management Plan**, as required by *Criterion** 7.4. The objective is to ensure lesson-learning and continuous improvement in the quality of management, consistent with the *adaptive management** approach described in Principle 7. Monitoring results should be used in decision-making at an early stage in the planning process for the next *Management Plan**.

In all provinces, some aspects of forest monitoring are the responsibility of the provincial government. Some of the monitoring responsibilities identified in this Principle may be carried out by provincial governments through existing programs. It is not the intent of this *Principle** that the applicant should duplicate established regulatory monitoring practices. Even though the wording used to articulate the Indicators in *Criterion** 8.2 is directed toward the applicant, the applicant may rely on other agencies where those agencies have responsibility for relevant monitoring. Furthermore, it is recognized that provincial governments and forest *stakeholders** can influence or constrain the applicant's ability to independently meet FSC monitoring requirements. It is intended that there is cooperation between agencies so that the applicant can demonstrate progress in achieving *Management Plan** objectives through sufficient forest monitoring.

Principle 7 requires forest management to adhere to the principles of *adaptive management**. An important component of adaptive management is the monitoring regime. The concept of *adaptive management** is carried forward to this Principle and the monitoring should be designed to explicitly evaluate the effect of management on resources and values.



8.1 **The Organization* shall* monitor the implementation of its Management Plan*, including its policies and management objectives*, its progress with the activities planned, and the achievement of its verifiable targets*. (new)**

8.1.1 A monitoring plan is documented and implemented in order to monitor the implementation of the *Management Plan**, including its policies, *management objectives** and achievement of *verifiable targets**. **(Adapt)**

Small Scale/Low Intensity/Community forests

SIR INDICATOR

L8.1.1 Procedures are documented and executed for monitoring the implementation of the *management plan** including its policies and *management objectives** and achievement of *verifiable targets**.

8.2 **The Organization* shall* monitor and evaluate the environmental and social impacts of the activities carried out in the Management Unit*, and changes in its environmental condition. (C8.2 P&C V4)**

Small Scale/Low Intensity/Community forests

SIR GUIDANCE

For Indicators 8.2.1, 8.2.2, and 8.2.3, these *Organizations** are expected to monitor those *management activities** which can be observed or where information can be gathered from existing sources.

In the case of *group certificates**, monitoring requirements apply at the level of the group rather than individual *forests**.

Forthcoming in D2:

Additional guidance on streamlined monitoring.

8.2.1 Monitoring is sufficient to identify and describe the environmental impacts of *management activities**, including where applicable:

- i. The results of regeneration activities (*Criterion* 10.1*);
- ii. The use of ecologically well-adapted species for regeneration (*Criterion* 10.2*);
- iii. The invasiveness or other adverse impacts associated with any *alien species** inside and outside the *Management Unit** (*Criterion* 10.3*);
- iv. The use of genetically *modified organisms** to confirm that they are not being used (*Criterion* 10.4*);
- v. The results of silvicultural activities (*Criterion* 10.5*);
- vi. The adverse impacts on *environmental values** from *fertilizers** (*Criterion* 10.6*);
- vii. The adverse impacts from *pesticides** (*Criterion* 10.7*);
- viii. The adverse impacts from *biological control agents** (*Criterion* 10.8*);
- ix. The impacts from *natural hazards** (*Criterion* 10.9*);
- x. The impacts of *infrastructural** development, transport activities and silvicultural practices to *rare** and *threatened species**, *habitats**, *ecosystems**, *landscape values** water and soils (*Criterion* 6.3*);
- xi. The effectiveness of access *abandonment** and use strategies (6.8);
- xii. The impacts of harvesting and extraction of timber on *non-timber forest products**, *environmental values**, merchantable wood waste and other products and services (*Criterion* 10.11*); and
- xiii. The environmentally appropriate disposal of *waste materials** (*Criterion* 10.12*).

(Adapt – was IGI Annex G)

Small Scale/Low Intensity/Community forests

SIR INDICATOR

L8.2.1: Monitoring is sufficient to identify and describe the environmental impacts of *management activities**, including where applicable:

- i. The results of regeneration activities (*Criterion** 10.1);
- ii. The use of ecologically well-adapted species for regeneration (*Criterion** 10.2);
- iii. The use of genetically *modified organisms** to confirm that they are not being used (*Criterion** 10.4);
- iv. The results of silvicultural activities (*Criterion** 10.5);
- v. The adverse impacts on *environmental values** from *fertilizers** (*Criterion** 10.6);
- vi. The adverse impacts from *pesticides** (*Criterion** 10.7);
- vii. The adverse impacts from *biological control agents** (*Criterion** 10.8);
- viii. The impacts from *natural hazards** (*Criterion** 10.9);
- ix. The impacts of *infrastructural** development, transport activities and silvicultural practices to *rare** and *threatened species**, *habitats**, *ecosystems**, *landscape values** water and soils (*Criterion** 6.3);
- x. The environmentally appropriate disposal of *waste materials** (*Criterion** 10.12).

8.2.2. Monitoring is sufficient to identify and describe social and economic impacts of *management activities**, including where applicable:

- i. Evidence of illegal or unauthorized activities identified by *The Organization** (*Criterion** 1.4);
- ii. Compliance with *applicable laws**, *local laws**, *ratified** international conventions and *obligatory codes of practice** identified in Indicator 1.5.1 (*Criterion** 1.5);
- iii. Resolution of *disputes** and *grievances** (*Criterion** 1.6, *Criterion** 2.6, *Criterion** 4.6);
- iv. Programs and activities regarding *workers'** rights (*Criterion** 2.1);
- v. *Gender equality**, sexual harassment and gender discrimination (*Criterion** 2.2);
- vi. Programs and activities regarding occupational health and safety (*Criterion** 2.3);
- vii. Payment of wages *The Organization** is responsible for or that is within *The Organization's* sphere of influence** (*Criterion** 2.4);
- viii. *Worker** Training (*Criterion** 2.5);
- ix. Where *pesticides** are used, the health of *workers** exposed to *pesticides** (*Criterion** 2.5 and *Criterion** 10.7);
- x. The identification of *Indigenous Peoples** and *local communities** and their *legal** and *customary rights** (*Criterion** 3.1 and *Criterion** 4.1);
- xi. Full implementation of the terms in *binding agreements** (*Criterion** 3.2 and *Criterion** 4.2);
- xii. *Indigenous Peoples** and community relations (*Criterion** 3.2, *Criterion** 3.3 and *Criterion** 4.2);



- xiii. Protection of sites of special cultural, ecological, economic, religious or spiritual significance to *Indigenous Peoples** and *local communities** (*Criterion** 3.5 and *Criterion** 4.7);
- xiv. The use of *traditional knowledge** and *intellectual property** (*Criterion** 3.6 and *Criterion** 4.8);
- xv. Local economic and social development opportunities offered through *Criterion** 4.3, identified, implemented or supported through engagement in *Criterion** 4.4 and the mitigation of negative impacts determined and implemented in *Criterion** 4.5;
- xvi. The production of diversified benefits and/or products (*Criterion** 5.1);
- xvii. The maintenance and/or enhancement of *ecosystem services** (*Criterion** 5.1);
- xviii. Activities to maintain or enhance *ecosystem services** (*Criterion** 5.1);
- xix. Actual annual harvests compared to projected annual harvests of timber and *non-timber forest products** (*Criterion** 5.2);
- xx. The use of local processing, local services and local value added manufacturing (*Criterion** 5.4);
- xxi. Long term *economic viability** as required by Indicator 5.5.1; and
- xxii. *High Conservation Values** 5 and 6 identified in *Criterion** 9.1.

(Add – was IGI Annex G)

Small Scale/Low Intensity/Community forests

SIR GUIDANCE

Forthcoming in Draft 2:

Further changes to this indicator will be made in Draft 2 which may impact SIR requirements

When the *management activities** listed in 8.2.2 are undertaken, then the results of these actions should be describable and identifiable. Monitoring these activities should align with what is required by SIR indicators throughout the Standard.

If the *Organization** is not undertaking a particular non-mandatory *management activity** (e.g. the production of diversified benefits and/or the enhancement of *ecosystem services**) then identifying the impact of this activity is unnecessary.

*Workers*** in this case refers to the *Organization's* employees**.

8.2.3 Monitoring procedures in 8.2.1 are sufficient to identify and describe changes in environmental conditions, including where applicable:

- i. The maintenance and/or enhancement of *ecosystem services** (*Criterion** 5.2) (when *The Organization** makes FSC promotional claims regarding the provision of *ecosystem services**, or receives payment for the provision of *ecosystem services**)
- ii. *Rare and threatened species**, and the effectiveness of actions implemented to protect them and their *habitats** (*Criterion** 6.4);
- iii. *Representative sample areas** and the effectiveness of actions implemented to *conserve** and/or *restore** them (*Criterion** 6.5);
- iv. Naturally occurring *native species** and *biological diversity** and the effectiveness of actions implemented to *conserve** and/or *restore** them (*Criterion** 6.6);
- v. *Landscape values** and the effectiveness of actions implemented to maintain and/or *restore** them (*Criterion** 6.8);
- vi. Conversion of *natural forest** to *plantations** or conversion to non-forest cover (*Criterion** 6.9);
- vii. The status of *plantations** established after 1994 (*Criterion** 6.10); and
- viii. *High Conservation Values** 1 to 4 identified in *Criterion** 9.1 and the effectiveness of actions implemented to maintain and/or enhance them.

(Adapt – was 8.2.2)

Small Scale/Low Intensity/Community forests

SIR GUIDANCE

These *Organizations** should monitor over time aspects of *management activities** that have been a source of concern in the past or that have been prioritized by the *resource manager** for other reasons.

The context of the *resource management unit** should be considered as well as the strategic *objectives** for management (*Criterion* 7.1). The results of *Criterion* L6.1 may be also used to inform this decision.

- 8.3** *The Organization* shall* analyze the results of monitoring and evaluation and feed the outcomes of this analysis back into the planning process. (C8.4 P&C V4)*
- 8.3.1 The results of monitoring are incorporated into the *Management Plan** through periodic updates. **(Adapt)**
- 8.3.2 If monitoring results show inconsistencies with the FSC Standard then *management objectives**, *verifiable targets** and/or *management activities** are revised. **(Adapt)**
- 8.4** *The Organization* shall* make publicly available* a summary of the results of monitoring free of charge, excluding confidential information*. (C8.5 P&C V4)*



- 8.4.1 Monitoring results covered in Indicator 8.2.1, 8.2.2 and 8.2.3 are made *publicly available** at no cost in a format comprehensible to *stakeholders** and excluding *confidential information**. **(Adapt)**

At the discretion of *The Organization**, the entire results, or a summary, of monitoring can be provided if this reduces the administration burden.

Small Scale/Low Intensity/Community forests

SIR GUIDANCE

For these *Organizations**, the monitoring results referred to here are those covered in L8.2.1, 8.2.2 and 8.2.3.

- 8.5 ***The Organization* shall* have and implement a tracking and tracing system proportionate to scale, intensity and risk* of its management activities*, for demonstrating the source and volume in proportion to projected output for each year, of all products from the Management Unit* that are marketed as FSC certified. (C8.3 P&C V4)***

Forest products must be covered by a valid chain of custody certificate or by a joint forest management/chain of custody certificate, in order to carry the FSC Logo and to enter into further chains of custody. The tracking and tracing system referred to in this *Criterion** is the basis for assessing whether a chain of custody or joint forest management/chain of custody certificate can be issued to *The Organization**. Hence, this *Criterion** only applies to situations where the intent is that products from the *Management Unit** are marketed as FSC-certified.

This *Criterion** requires the demonstration of the source and volume of all products in proportion to projected outputs to ensure that claimed volumes of output do not exceed actual volumes of output. To do so, a tracking and tracing system should be implemented. This is needed as one of the checks against 'greenwashing' of uncertified products including the intrusion of products that have been illegally harvested inside or outside the *Management Unit**.

- 8.5.1 A system is implemented to track and trace all products transported from the *Management Unit** that are marketed as FSC-certified. **(Adapt)**
- 8.5.2 Information about all timber products that leave the *Management Unit** and information about all other products to be sold or delivered by *The Organization** is compiled and documented, including:
1. Common and scientific species name;
 2. Product name and description;
 3. Volume (or quantity) of product;
 4. Information to trace the material to the point of origin;
 5. Logging date;



6. If basic transformation activities take place in the forest, the date and volume produced; and
7. Whether or not the material was sold or delivered as FSC-certified. **(Adapt)**

For the purpose of the *Criterion**, the logging date is the date that the timber was hauled outside the forest gate. Basic transformation activities do not include tree de-limbing or topping.

The "forest gate" is considered to be the point of entry to, or exit from, the forest and is defined in the chain of custody documentation or in the forest *Management Plan**.

8.5.3 Sales invoices or similar documents are kept for a minimum of five years for all products sold or delivered by *The Organization** with an FSC claim, which identify at a minimum, the following information:

1. Name and address of purchaser;
2. The date of sale;
3. Common and scientific species name;
4. Product description;
5. The volume (or quantity) sold;
6. Certificate code; and
7. The FSC Claim "FSC 100%" identifying products sold as FSC-certified.

(Adapt)

PRINCIPLE* 9: HIGH CONSERVATION VALUES*

The Organization shall* maintain and/or enhance the High Conservation Values* in the Management Unit* through applying the precautionary approach*. (P9 P&C V4)*

HCV* assessors, resource managers and auditors should refer to the Common Guidance for the Management and Monitoring of HCV Values (HCV Resource Network, 2013, available on the HCV* page of the FSC Website or updates as appropriate) for advice regarding implementation of the indicators addressed in *Criteria** 9.1, 9.2, 9.3, and 9.4.

Small Scale/Low Intensity/Community Forests

Forthcoming in Draft 2:

Additional guidance around HCV assessments.

- 9.1 *The Organization**, through *engagement** with *affected stakeholders**, *interested stakeholders** and other means and sources, *shall** assess and record the presence, status and likelihood of occurrence of the following *High Conservation Values** in the *Management Unit**, proportionate to the *scale, intensity, and risk** of impacts of *management activities**:

HCV 1 – Species diversity. Concentrations of *biological diversity** that are *significant** at global, national or regional levels, including *endemic species** and *rare**, *threatened** or endangered species.

HCV 2 – Landscape*-level ecosystems* and mosaics. *Intact forest landscapes** and large *landscape*-level ecosystems** and *ecosystem** mosaics that are *significant** at global, national or regional levels, and that contain viable populations of the great majority of the naturally-occurring species in natural patterns of distribution and abundance for that level.

HCV 3 – Ecosystems* and habitats*. *Rare**, *threatened**, or endangered *ecosystems**, *habitats** or *refugia**.

HCV 4 – Critical* ecosystem services*. Basic *ecosystem services** in *critical** situations, including *protection** of water catchments and control of erosion of vulnerable soils and slopes.

HCV 5 – Community needs. Sites and resources fundamental to satisfying the basic necessities—for livelihood, health, nutrition, water, etc.—of *local communities** or



*Indigenous Peoples**, identified through *engagement** with these communities or *Indigenous Peoples**.

HCV 6 – Cultural values. Sites, resources, *habitats** and *landscapes** of global or national cultural, archaeological or historical significance, and/or of *critical** cultural, ecological, economic or religious or sacred importance for the traditional cultures of *local communities** or *Indigenous Peoples**, identified through *engagement** with these *local communities** or *Indigenous Peoples**.

Where maps or mapped information is required by this Principle, evidence of digital files, instead of hard-copy maps, is sufficient.

- 9.1.1 Consistent with the *scale, intensity and risk** of the operation, an assessment of *HCVs** and *HCV Areas** is completed using the *Best Available Information**. The assessment is completed using the National Framework, or another framework that meets the same intent and addresses all HCV Categories, Questions and Components identified in the National Framework. *Threats** to *HCVs** and *HCV Areas** are also identified using *Best Available Information**. (Adapt from IGI 9.1.1 and 9.2.1)

Small Scale/Low Intensity/Community forests

NS 9.1.1: **not** applicable
NS 9.1.2: **not** applicable
NS 9.1.3: applicable
NS 9.1.4: **not** applicable
NS 9.1.5: applicable
NS 9.1.6: **not** applicable

SIR INDICATORS

L9.1.1 An assessment is completed using *Best Available Information** that records the location and status of *High Conservation Value** Categories 1-6, as defined in *Criterion** 9.1; the *High Conservation Value Areas** they rely upon, and their condition.

L9.1.2: The assessment in L9.1.1 uses results from *culturally appropriate* engagement** with those who have expressed interest to the Organization* in *High Conservation Values**.

L9.1.3: The *HCV** assessment is made easily *publicly available** (including in electronic format).

SIR GUIDANCE

For *High Conservation Values** (HCVs), the intensity of assessments should take account the likelihood of identifying *HCVs**. If local expert and stakeholder opinion has clear consensus about which *HCVs** are believed to be present, and especially if the danger of negative impacts of management is minimal, then it should not be necessary to carry out detailed and costly surveys at an early stage. For example, if rare or threatened ecosystems are known to be present, but are assigned to full protection, then detailed biological surveys are not always immediately necessary.

For these *Organizations**, conducting additional assessments of *HCVs** beyond those that are gathered through the collection of *Best Available Information** is not necessary if the resources required to do so are lacking.

The HCV* Assessment is not necessarily a formal report for these *Organizations**, but an assessment which conforms to indicator L9.1.1.

Descriptions of the condition and state of *HCVs** and *HCV Areas** identified in an assessment report should facilitate monitoring of the results of management efforts. In order to implement useful effectiveness monitoring, the initial state of the *HCVs** and *HCV Areas** must be well-articulated and quantitatively defined where possible.

- 9.1.2 The assessment uses results associated with the identification of *HCVs** and *HCV Areas** from *culturally appropriate* engagement** with *affected** and *interested stakeholders** and Indigenous Peoples* with an interest in the management of the *HCVs** and *HCV Areas**. The assessment also uses input from qualified (technical and/or scientific) *specialists**. **(Adapt from IGI 9.1.2)**

For the purpose of this Indicator, qualified technical and scientific *specialists** include individuals with expertise in the topics being addressed, regardless of their employer. They do not need to be *independent experts**.

- 9.1.3 All *HCVs** and *HCV Areas** which are definable based on location are delineated on maps consistent with the *scale** of the designation and the *HCV** or *HCV Area** (e.g., global, national, regional, large home range, isolated occurrence, etc.). Information regarding the location and identity of sensitive sites is not mapped and is held in confidence. **(Adapt from IGI 9.1.1)**
- 9.1.4 A review undertaken by one or more independent *qualified specialists** is completed. Input from the review is addressed in the *HCV** assessment. **(Add)**

For the purpose of this Indicator, independent *qualified specialists** includes individuals who were not involved in the development of the assessment report and those who did not have a role in affecting management of the forest and those who do not normally work directly or indirectly for, or with, *The Organization**.

- 9.1.5 The assessment report is updated at least every five years. Portions of the assessment are updated more frequently in response to changes in the status of *species at risk** or when there are significant changes in the state of other *HCVs** or in the state of *HCV Areas**. **(Add)**
- 9.1.6 The assessment report and external review are made easily *publicly available** (including in electronic format). **(Add)**



- 9.2 *The Organization* shall* develop effective strategies that maintain and/or enhance the identified High Conservation Values*, through engagement* with affected stakeholders*, interested stakeholders* and experts*. (C9.2 P&C V4).*

Small Scale/Low Intensity/Community forests

NS 9.2.1: **not** applicable
NS 9.2.2: **not** applicable
NS 9.2.3: **not** applicable

SIR INDICATORS

L9.2.1: Threats to *High Conservation Values** are identified using *Best Available Information**.

L9.2.2: Management strategies and actions are developed to maintain and/or enhance the identified *High Conservation Values** and to maintain associated *High Conservation Value Areas** prior to implementing potentially harmful *management activities**.

L9.2.3: Upon request, *affected** and *interested stakeholders** and experts are engaged in the development of management strategies and actions to maintain and/or enhance the identified *High Conservation Values**.

L9.2.4: The strategies developed maintain and/or enhance the *High Conservation Values**.

SIR GUIDANCE

*Engagement** in indicator L9.2.3 is `upon request`; however, these *Organizations** should undertake this engagement proactively when a stakeholder has previously indicated a specific interest in *High Conservation Values** (through L9.1.2).

- 9.2.1 Management strategies and actions that use a *precautionary approach** are developed to maintain and/or enhance *HCVs** and to maintain associated *HCV Areas** prior to implementing *management activities**. **(Adapt from IGI 9.2.2)**
- 9.2.2 *Affected and interested stakeholders*, Indigenous Peoples*, and qualified specialists* and/or experts** are engaged in the development of management strategies and actions to maintain and/or enhance the identified *HCVs** and *HCV Areas**. **(Adapt from IGI 9.2.3)**
- 9.2.3 Management strategies are reviewed and updated in conjunction with updates to the assessment report as described in Indicator 9.1.5. **(Add)**
- 9.2.1 IGI (Drop - Incorporated into 9.1.1)
- 9.2.2 IGI (Drop - Incorporated into 9.2.1)

- 9.3 *The Organization* shall* implement strategies and actions that maintain and/or enhance*



the identified *High Conservation Values**. These strategies and actions *shall** implement the *precautionary approach** and be proportionate to the *scale, intensity and risk** of *management activities**. (C9.3 P&C V4)

Small Scale/Low Intensity/Community forests

NS 9.3.1: **not** applicable
NS 9.3.2: applicable
NS 9.3.3: applicable

- 9.3.1 Management strategies and actions developed to address Indicator 9.2.1 are implemented. **(Adapt from IGI 9.3.1)**
- 9.3.2 Activities that have a known potential to harm *HCVs** or *HCV Areas** are not undertaken. Activities underway that harm *HCVs** or *HCV Areas** cease immediately and actions are taken to *restore** and protect the *HCV** or *HCV Areas**. **(Adapt from IGI 9.3.3 and 9.3.4)**
- 9.3.3 Where a specific *HCV** or *HCV Area** abuts or straddles a *management unit** boundary, or is potentially affected by activities outside of the *management unit**, *The Organization** works within its *sphere of influence** to coordinate activities with managers and users of adjacent lands to maintain or enhance the *HCVs** or *HCV Area**. **(Add)**
- 9.3.2 IGI (Drop - incorporated into 9.2.1)
- 9.4 ***The Organization* shall* demonstrate that periodic monitoring is carried out to assess changes in the status of High Conservation Values*, and shall* adapt its management strategies to ensure their effective protection. The monitoring shall* be proportionate to the scale, intensity and risk* of management activities*, and shall* include engagement* with affected stakeholders*, interested stakeholders* and experts*. (C9.4 P&C V4)***
- 9.4.1 A program of periodic monitoring with sufficient scope to detect changes in *HCVs**, that can contribute to the assessment described in 9.1.5, assesses:
1. Implementation of management strategies;
 2. The status of *HCVs** and *HCV Areas** relative to the time of their initial designation; and
 3. The effectiveness of management strategies and actions for the protection and maintenance of *HCVs** and *HCV Areas**.

Monitoring periodicity is based on:

1. The period of time over which there may be a reasonable expectation of change in the status of *HCVs**; and
2. The period of time over which it is possible to detect the effects of management strategies and actions. **(Adapt from IGI 9.4.1 and 9.4.3)**

Small Scale/Low Intensity/Community forests

SIR GUIDANCE

For these *Organizations**, monitoring may need not be organized around a formal program.

The frequency of monitoring depends on the specific situation, for example:

- The nature of the *High Conservation Values** (for example, the ecology and particular attributes);
- Options for the management of the *High Conservation Values**; and
- *Scale, intensity and risk** of impacts.

Given this, monitoring could be regular or sporadic. For these *Organizations**, this could range from monitoring during *management activities** to monitoring that is monthly, annually or less frequent. Ultimately, the totality of all monitoring activities should be sufficient to achieve the requirements of 9.4.1.

Forthcoming in D2:

Additional guidance on monitoring for these *Organizations*.

- 9.4.2 The monitoring program includes *engagement** with *affected** and *interested stakeholders**, *Indigenous Peoples**, and *experts** and/or *qualified specialists**. (Adapt from IGI 9.4.2)

Small Scale/Low Intensity/Community forests

SIR INDICATOR

L9.4.2: Upon request, the HCV* monitoring includes *engagement** with *affected** and *interested stakeholders**, *Indigenous Peoples**, and *experts** and/or *qualified specialists**.

SIR GUIDANCE

See L7.6.4 for guidance related to stakeholder monitoring.

*Affected** and *interested stakeholders**, *Indigenous Peoples**, and *experts** and/or *qualified specialists** should be involved or consulted in the design of the monitoring program. The extent to which they play a role in implementation of monitoring will depend on the technical expertise needed, the capacity required to participate, and the confidentiality of the information being collected. The role of the potential participants in monitoring should be determined based on discussions between the parties and *The Organization**.

- 9.4.3 Management strategies and actions are adapted when monitoring or other new information shows that these strategies and actions are ineffective at ensuring the



maintenance and/or enhancements of *HCVs**. **(Adopt IGI 9.4.4)**

9.4.4 Monitoring needs are reviewed in conjunction with updates to the assessment report as described in Indicator 9.1.5 and the updates to the management strategies as described in Indicator 9.2.3. **(Add)**

9.4.3 IGI (Drop - Incorporated into 9.4.1)

PRINCIPLE* 10: IMPLEMENTATION OF MANAGEMENT ACTIVITIES*

*Management activities** conducted by or for *The Organization** for the *Management Unit** shall be selected and implemented consistent with *The Organization*'s* economic, environmental and social policies and *objectives** and in compliance with the Principles and *Criteria** collectively. (New)

- 10.1 After harvest or in accordance with the *Management Plan**, *The Organization** shall*, by natural or artificial regeneration methods, regenerate vegetation cover in a timely fashion to *pre-harvesting* or more *natural conditions**. (New)

The period required for regeneration is typically shorter for areas to be planted (artificial regeneration) than areas selected for natural regeneration. This *Criterion** does not give preference to planting as a way to shorten the period for regeneration, because in certain cases natural regeneration approaches are more suitable.

- 10.1.1 Harvested sites are regenerated in a *timely manner** that:

1. Protects affected *environmental values**; and
2. Is suitable to recover overall *pre-harvest** or *natural forest** composition and structure.

(Adopt)

- 10.1.2 Regeneration activities are implemented in a manner that:

1. For harvesting of *natural forests**, they regenerate *pre-harvest** or more *natural conditions**;
2. For harvesting of *plantations**, they regenerate the vegetation cover that existed prior to the harvest, or to more *natural conditions**.

(Adapt)

- 10.2 *The Organization** shall* use species for regeneration that are ecologically well-adapted to the site and to the *management objectives**. *The Organization** shall* use *native species** and *local genotypes** for regeneration, unless there is clear and convincing justification for using others. (C10.4 C4).

- 10.2.1 Species chosen for regeneration are ecologically well-adapted to the site, are *native species** and are of local provenance, unless clear and convincing justification is provided for using non-local *genotypes** or non-*native species**. (Adopt)

- 10.2.2 Species chosen for regeneration are consistent with the regeneration *objectives**. (Adopt)

- 10.3 The Organization* shall* only use alien species* when knowledge and/or experience have shown that any invasive impacts can be controlled and effective mitigation measures are in place. (C6.9 and C10.8 V4)**
- 10.3.1 An *alien species** is used only when direct experience and/or the results of scientific research demonstrate that the species is not invasive, that there is no alternative native species and that its introduction does not create significant adverse ecological impact. **(Adapt)**
- 10.3.2 IGI (Drop)
- 10.3.2 A plan to prevent the spread of invasive species introduced by *The Organization** is developed and implemented in a *timely manner**. **(Adapt - was IGI 10.3.3)**
- 10.3.3 *Management activities** to control the spread of *invasive* alien species** that were not introduced by *The Organization** are implemented, where practical and effective, and in cooperation with separate regulatory bodies and/or experts. **(Adapt – was IGI 10.3.4)**
- 10.4 The Organization* shall* not use genetically modified organisms* in the Management Unit*. (C6.8 V4).**
- 10.4.1 *Genetically modified organisms** (GMOs) are not used. **(Adopt)**
- 10.5 The Organization* shall* use silvicultural practices that are ecologically appropriate for the vegetation, species, sites and management objectives*. (New)**
- 10.5.1 Silvicultural practices are implemented that are ecologically appropriate for the vegetation, species, sites and *management objectives**. **(Adopt)**

This Indicator is complementary to Indicators 10.1.1 and 10.1.2 as it applies to all silvicultural practices, such as site preparation, spacing, cleaning and pruning.

- 10.6. The Organization* shall* minimize or avoid the use of fertilizers*. When fertilizers* are used, The Organization* shall* demonstrate that use is equally, or more ecologically and economically beneficial, than use of silvicultural systems that do not require fertilizers*, and prevent, mitigate, and/or repair damage to environmental values*, including soils. (C10.7 P&C V4 and Motion 2014#7)**

- 10.6.1 The use of *fertilizers** is minimized or avoided.

When *fertilizers** are used:

1. Measures are employed to avoid contamination of surface and ground water, protect non-timber forest values and maintain long-term soil health, such as soil organic matter, pH balance, and so on;
2. Buffer zones are used to protect rare plant communities, *riparian zones**, *watercourses** and *water bodies**;



3. Their types, application rates and frequencies, and sites of application are documented;
4. Damage to *environmental values** resulting from *fertilizer** use is mitigated or repaired; and
5. The ecological and economic benefits of using them are equal to or higher than the benefits of silvicultural systems that do not require *fertilizers**. **(Adapt)**

This Indicator applies to the application of *fertilizer** once trees have been planted. *Fertilizer** used in the growing of nursery stock, including remaining residues found on or around the plant, or *fertilizer** added to the growing medium (for example, commercial peat pellets), are not the focus of this indicator.

10.6.2 IGI (Drop)

10.6.3 IGI (Drop)

10.6.4 IGI (Drop)

10.6.5 IGI (Drop)

10.7 *The Organization* shall* use integrated pest management and silviculture* systems which avoid, or aim at eliminating, the use of chemical pesticides*. The Organization* shall* not use any chemical pesticides* prohibited by FSC policy. When pesticides* are used, The Organization* shall* prevent, mitigate, and/or repair damage to environmental values* and human health. (C6. and C10.7 V4)*

The *FSC guide to integrated pest, disease and weed management in FSC certified forests and plantations* (2009) is a non-mandatory generic framework that can assist managers in demonstrating that they have a strategy for reducing, minimising or eliminating the impacts of *pesticide** use. It can also assist managers in preventing and minimizing impacts from pests, diseases, fire and invasive plant introductions with prevention and alternative control methods rather than the use of chemical *pesticides**.

The use of herbicides in Canada

Vegetation management is crucial to meeting *management objectives**. In certain circumstances, the use of chemical *pesticides** may be an acceptable practice. When chemical *pesticides** are used, a rationale needs to be provided, as described in *Indicator** 10.7.2. Pesticides are potentially acceptable when used for:

- A. **Controlling composition:** The use of herbicides could increase artificially regenerated stands reaching free-to-grow status (OMNR, 1986; OMNR, 1988; Armson et al., 2001).
- B. **Controlling alien invasive species:** The control of alien invasive species may include an integrated pest management (IPM) approach involving chemical treatments. (Wikeem & Miller, 2006).
- C. **Increasing forest yield:** While the use of intensive mechanical release combined with early reforestation of tall planting stock may be an asset in the implementation of ecosystem-based management, it could also pose problems where the *objective** is to maximize wood production (Thiffault, 2011). Herbicides in some cases have positive impacts on coniferous growth (Thiffault et al., 2003; Comeau, 2014; Homagain et al., 2011).

10.7.1 Integrated pest management, including selection of silvicultural systems, is used to avoid or reduce the frequency, extent and amount of chemical *pesticide** applications, and result in non-use or overall reduction in applications. **(Adapt)**

10.7.2 The rationale for using chemical *pesticides** includes:

- a) Recording all circumstances where *pesticides** are being considered;
- b) Identifying and documenting potentially effective non-*pesticide** methods of control, including their impacts on various factors such as tree growth, forest composition, *worker's** health and safety, and habitats for species at risk;
- c) A clear preference for non-*pesticide** control methods when their effects meet management objectives and they are not cost prohibitive; and
- d) If *pesticides** are used, and two or more *pesticides** are equally effective, the lesser hazardous *pesticide** is used. **(Add)**

10.7.3 Chemical *pesticides** prohibited by FSC's *Pesticide Policy* are not used or stored by *The Organization** in the *Management Unit** unless FSC has granted derogation. *The Organization** works within its *sphere of influence** to minimize the use and storage by other parties in the *Management Unit**. **(Adapt – was IGI 10.7.2)**

10.7.4 Records of *pesticide** usage including trade name, active ingredient, quantity of active ingredient used, date of use, location of use, and reason for use are maintained for a minimum of 5 years. **(Adapt – was IGI 10.7.3)**

10.7.5 The use of *pesticides** complies with all legal requirements related to the transport, storage, handling, application and emergency procedures for cleanup following accidental spillages of dangerous products. **(Adapt – was IGI 10.7.4)**

10.7.6 When *pesticides** are used:



- a) Objective evidence demonstrates that the *pesticide** is the only effective, practical and cost-effective way to control the pest;
- b) The selected *pesticide**, application method, timing and pattern of use offers the least risk to humans and *environmental values**, and;
- c) While achieving effective results, quantities of *pesticide** used are minimized. **(Adapt – was IGI 10.7.5)**

10.7.7 Damage to *environmental values** from *pesticide** use is prevented and mitigated or repaired where damage occurs Impacts on human health are avoided. **(Adapt – was IGI 10.7.6)**

10.7.7 (IGI) (Drop)

10.8 The Organization* shall* minimize, monitor and strictly control the use of biological control agents* in accordance with internationally accepted scientific protocols. When biological control agents* are used, The Organization* shall* prevent, mitigate, and/or repair damage to environmental values*. (C6.8 V4)

10.8.1 The use of *biological control agents** by *The Organization** is minimized, monitored and controlled. *Biological control agents** (for example, Bt (*B. thuringiensis*)) are used only where alternative pest control methods are:

- a) Not available; or
- b) Ineffective in achieving silvicultural objectives; or
- c) Prohibitively expensive, taking into account environmental and social costs, risks and benefits.

Rationale for the use of *biological control agents** is documented and based on scientific evidence. *The Organization** will work within its *sphere of influence** to minimize the use by other parties in the *management unit**. **(Adapt)**

10.8.2 IGI (Drop)

10.8.2 The use of *biological control agents** by *The Organization** is recorded including type, quantity used, period of use, location of use and reason for use. **(Adopt – was IGI 10.8.3)**

10.8.3 Damage to *environmental values** caused by *The Organization's** use of *biological control agents** is prevented and mitigated or repaired where damage occurs. **(Adopt – was IGI 10.8.4)**

10.9 The Organization* shall* assess risks* and implement activities that reduce potential negative impacts from natural hazards* proportionate to scale, intensity, and risk*. (New)

Small Scale/Low Intensity/Community forests

NS 10.9.1: **not** applicable
NS: 10.9.2: applicable



NS 10.9.3: applicable
NS 10.9.4: applicable
NS 10.9.5: applicable

SIR GUIDANCE

Regarding NS 10.9.2 and 10.9.3

For these *Organizations**, the assessment of potential negative impacts of *natural hazards**, and the identification of *management activities** that can cause an increase in frequency, distribution or severity of *natural hazards**, can be based on what the *resource manager** knows and observes, and what s/he learns from Indigenous communities, neighbours and other local stakeholders, together with existing assessments.

However, the higher the risk of potential negative impacts from *natural hazards**, the more detailed, comprehensive and frequent the activities should be that reduce the potential negative impacts of these hazards.

Regarding NS 10.9.4

If capacity or/and resources do not allow for the necessary mitigation measures, the *Organization** or *resource manager** should communicate with government and/or relevant local *Organizations** about mitigation capacity and solutions.

*The Organization** should provide a list of identified *natural hazards** and their potential negative impacts on *infrastructure**, forest resources and local and Indigenous communities. Examples of *natural hazards** include droughts, floods, fires, landslides, storms, plant diseases, pest insects and invasive weeds.

Recognizing that *natural hazards** also include natural disturbances, such as wind and fire, mitigating *risk** should also focus on managing for *resilience** as opposed to attempting to control or prevent *natural hazard**.

There are two ways damage from *natural hazards** can be reduced: 1) a reduction of the frequency, intensity, distribution or severity of *natural hazards**, and 2) the mitigation of their impacts, for example, by salvaging timber.

This table explains the structure of this *Criterion** and provides examples of possible answers to the indicators:

	10.9.2	10.9.3	10.9.4	10.9.4
Natural Hazard (NH)	Potential negative impacts	Activities that may increase frequency, severity or distribution of NH	Management measures to reduce risks	Mitigate impacts
Fire	<u>Forest resources</u> : Reduces the volume of timber available for harvest	a) Workers causing forest fire b) Objective to increase the proportion of old forests increases the risk of forest fire	a) Training, no work periods. b) Fighting human-caused forest fires. c) Participating in emergency preparedness programs for local and Indigenous communities. d) Providing information on forest inventory that may identify vulnerabilities to fire.	- Salvage burned timber - Fire control
	<u>Human Communities</u> : A risk to buildings, destroys hiking trails			- Involvement in creating buffer zones around human communities - Alert systems for local and Indigenous communities
Storm	<u>Infrastructure</u> : Wash-outs, damage to roads*	N/A (this hazard cannot be influenced by management)	N/A (this hazard cannot be influenced by management)	- Use adequate culvert sizes
	<u>Forest resources</u> : Windthrow			- Adapt shape of <i>cutblocks*</i> to topography to reduce risk - Salvage windthrow sites where economically feasible.
Insects or disease outbreaks	<u>Forest resources</u> : Reduces the volume/quality available for harvest		a) Species are appropriate to sites to reduce stress	- Salvage, where possible, pest-impacted forests in a manner that will promote control, inhibit reinfection, or mitigate impact.
Landslides	Negative impacts on riparian habitat	Intensive harvesting	-No harvesting or use of selective methods	-Larger buffer zones around riparian <i>habitat*</i>

10.9.1 The frequency, distribution and severity of *natural hazards** that occur regionally and nationally are identified. **(Add)**

10.9.2 Potential negative impacts of *natural hazards** on *infrastructure**, forest resources, and local and Indigenous communities are assessed. **(Adapt – was IGI 10.9.1)**

10.9.2 IGI (Drop)

10.9.3 *Management activities** that can cause an increase in frequency, distribution or severity of *natural hazards** are identified for those hazards that may be influenced by management. **(Adapt)**

10.9.4 *Management activities** are modified and/or measures are developed and implemented that reduce the identified risks* and mitigate their impacts when possible. **(Adapt)**

10.9.5 *Road** construction and forest harvesting do not:

1. Occur in areas with high likelihood of landslide initiation, or in areas with very high potential for snow avalanche initiation; and
2. Occur in the following high-risk areas, unless measures are implemented that reduce the risk of landslide or snow avalanche initiation, or prevent erosion and sedimentation:
 - a) Areas of moderate likelihood of landslide initiation and high or very high landslide-induced stream sedimentation hazard;
 - b) Areas of moderate likelihood of landslide initiation and high to very high likelihood of the landslide reaching human habitation;
 - c) Areas with a high potential for snow avalanche initiation; and
 - d) Areas of high or very high *road*/ditch/surface erosion hazard* and high or very high sediment delivery.

(Add)

10.10 *The Organization* shall* manage infrastructural* development, transport activities and silviculture* so that water resources and soils are protected, and disturbance of and damage to rare and threatened species*, habitats*, ecosystems* and landscape values* are prevented, mitigated and/or repaired. (C6.5 V4)*

10.10.1 IGI (Drop)

10.10.2 IGI (Drop)

10.10.3 IGI (Drop)

10.10.4 IGI (Drop)

10.10.5 IGI (Drop)

10.11 *The Organization* shall* manage activities associated with harvesting and extraction of timber and non-timber forest products* so that environmental values* are conserved, merchantable waste is reduced, and damage to other products and services is avoided. (C5.3 and C6.5 V4)*



10.11.1 IGI (Drop)

10.11.1 Harvested merchantable timbers are utilized, unless left on-site to provide structural diversity and wildlife habitat, or for silvicultural or cultural reasons. **(Adapt – was IGI 10.11.2)**

10.11.2 IGI (Drop)

10.11.2 Harvesting and silvicultural operations are conducted in such a way as to minimize damage to residual trees (crown, trunk and root), including non-merchantable/non-marketable trees and trees being left for future harvest. Appropriate consideration for protection of residual trees and maximum acceptable damage thresholds are included in standard operating procedures (SOPs) or other written materials. **(Adapt – was IGI 10.11.4)**

10.11.3 Selection logging shall improve *stand** quality while ensuring that all native tree species are maintained in the *stand**, unless an alternative yet sound rationale is provided. **(Add)**

10.12 The Organization* shall* dispose of waste materials* in an environmentally appropriate manner. (C6.7 V4)

10.12.1 Ground rules or SOPs related to handling of chemicals, liquid and solid non-organic wastes, including fuel, oil, batteries and containers are in place and are implemented. The management standards identified in SOPs are consistent with high levels of performance and best management practices. At a minimum, the SOPs address:

1. Collection, storage, and disposal of waste in an environmentally appropriate manner;
2. Adherence to a waste recycling program, where it exists;
3. Measures to prevent spills;
4. Emergency plans for cleanup and treatment of injuries following spills or other accidents;
5. Refueling constraints, including buffers around riparian areas;
6. Removal of used materials, including machinery and equipment; and
7. Securing abandoned buildings.

(Adapt)

Small Scale/Low Intensity/Community forests

SIR INDICATOR

L10.12.1 Collection, clean up, transportation and disposal of all *waste materials** is done in an environmentally appropriate way that conserves *environmental values** as identified in *Criterion* 6.1*.



Forest Stewardship Council®
FSC® Canada





ANNEXES

Annex A: Minimum list of applicable laws, regulations and nationally *ratified international treaties, conventions and agreements.**

Annex A of all *applicable laws**, *obligatory codes of practice** and *legal** and *customary rights** at the national and sub-national level will be developed after Draft 2.

Small Scale/Low Intensity/Community forests

SIR GUIDANCE

Applicable when completed in D2.



Annex B: Worker's Safety Program

Small Scale/Low Intensity/Community forests

SIR GUIDANCE

Not Applicable.

The content of a Worker's Safety Program includes:

- Identification of safety training needs and the provision of safety training;
- A comprehensive safety policy;
- Compliance and safety monitoring schedules and procedures;
- Regular monitoring of the condition and functionality of safety features on equipment;
- Regular review of work schedules and hours of work;
- The provision of appropriate use of safety equipment by forest *workers** and woodlands staff based on assigned tasks (e.g., hardhats, eye protection, gloves, hearing protection, suitable footwear, etc.);
- A safety procedure for workers working alone;
- A sufficient ratio of trained first aids for the number of workers on site;
- The identification of safety coordinators and description of their responsibilities; and
- the review and revision of health and safety practices after major incidents or accidents.

Annex C: Training Requirements for Workers

Small Scale/Low Intensity/Community forests

SIR GUIDANCE

Applicable for the *Organization's* employees**.

*Relevant workers** have job specific training to safely and effectively contribute to the implementation of the *management plan** and all *management activities**. Where relevant, they are able to:

1. Implement forest activities to comply with applicable *legal** requirements (Criterion* 1.5);
2. Understand the content, meaning and applicability of the eight ILO Core Labour Conventions (Criterion* 2.1);
3. Recognize and report on instances of sexual harassment and gender discrimination (Criterion* 2.2);
4. Safely handle and dispose of hazardous substances to ensure that use does not pose health *risks** (Criterion* 2.3);
5. Carry out their responsibilities for particularly dangerous jobs or jobs entailing a special responsibility (Criterion* 2.5);
6. Exercise their right to refuse work that is believed to be unsafe to the individual or another worker;
7. Identify where *Indigenous Peoples** have *legal** and *customary rights** related to *management activities** (Criterion* 3.2);
8. Identify and implement applicable elements of UNDRIP and ILO Convention 169 (Criterion* 3.4);
9. Identify sites of special cultural, ecological, economic, religious or spiritual significance to *Indigenous Peoples** and implement the necessary measures to protect them before the start of forest *management activities** to avoid negative impacts (Criterion* 3.5 and Criterion* 4.7);
10. Identify where *local communities** have *legal** and *customary rights** related to *management activities** (Criterion* 4.2);
11. Carry out social, economic and *environmental impact assessments** and develop appropriate mitigation measures (Criterion* 4.5);
12. Implement activities related to the maintenance and/or enhancement of declared *ecosystem services** (Criterion* 5.1);
13. Handle, apply and store *pesticides** (Criterion* 10.7); and
14. Implement procedures for cleaning up spills of *waste materials** (Criterion* 10.12).

(Adapt)



Annex D: Claims for Ecosystem Services

Small Scale/Low Intensity/Community forests

SIR GUIDANCE

If relevant, then applicable.

For the certification of *ecosystem services**, all other requirements in this Standard continue to apply. Receiving payment, or making claims, for *ecosystem services** is voluntary. This Annex and accompanying normative and guidance documents describe the requirements and methods for certifying the maintenance of *ecosystem services** as the basis for promotional claims and improved market access to ecosystem service payments.

There is overlap between the management and monitoring activities for environmental values and those for ecosystem services. When *The Organization** makes FSC promotional claims regarding the maintenance and/or of *ecosystem services**, additional management and monitoring requirements shall apply to ensure credibility of claims and demonstration of impacts.

The FSC Guidance for the Maintenance and Enhancement of Ecosystem Services provides guidance for identification of ecosystem services and management strategies and activities for their maintenance and enhancement.

The FSC Procedure for the Maintenance and Enhancement of Ecosystem Services describes requirements for evaluating the outcomes and impacts of activities to maintain and/or enhance the provision of *ecosystem services**. The Procedure also describes how the results of impact evaluation shall be used as the basis for FSC promotional claims that *The Organization** may make for the provision of *ecosystem services**.

I. General Requirements

- 1) A *publicly available** Ecosystem Services Certification Document includes:
 - i. A declaration of the *ecosystem services** for which a promotional claim is being made;
 - ii. The current status of the *ecosystem service**;
 - iii. *Legal* tenure** to manage, use and/or receive payments for declared *ecosystem services**;
 - iv. *Management objectives** related to maintenance and/or enhancement of declared *ecosystem services**;
 - v. *Verifiable targets** related to maintenance and/or enhancement of declared *ecosystem services**;
 - vi. *Management activities** and strategies related to declared *ecosystem services**;
 - vii. Areas within and outside of the *Management Unit** that contribute to the declared *ecosystem services**;



- viii. Threats to the declared *ecosystem services** within and outside of the *Management Unit**;
 - ix. A description of *management activities** to reduce the threats to declared *ecosystem services** within and outside of the *Management Unit**; and
 - x. A description of the methodology used to evaluate the impacts of *management activities** on the declared *ecosystem services** within and outside of the *Management Unit**, based on the FSC Procedure for the Maintenance and Enhancement of Ecosystem Services;
 - xi. A description of monitoring results related to the implementation of *management activities** and strategies related to the maintenance and/or enhancement of declared *ecosystem services**.
 - xii. A description of results of the evaluation of impacts on the declared *ecosystem services**;
 - xiii. A list of communities and other organizations involved in activities related to the declared *ecosystem services**; and
 - xiv. A summary of *culturally appropriate* engagement* with Indigenous peoples* and local communities**, related to the declared *ecosystem services** including *ecosystem service* access and use*, and benefit sharing, consistent with Principle 3 and Principle 4.
- 2) The results of the evaluation of impacts demonstrate that *verifiable targets** for the maintenance and/or enhancement of the declared *ecosystem services**, are met or exceeded; and
 - 3) The results of the evaluation of impacts demonstrate no negative impacts from management activities on the declared *ecosystem services** within or outside of the *Management Unit**.

II. Management Indicators

A. All Services

- 1) Management indicators for all *Ecosystem Services** ensure:
 - i. *Peatlands** are not drained;
 - ii. *Wetlands**, *peatlands**, *savannahs* or natural *grasslands** are not converted to *plantations** or any other land use;
 - iii. Areas converted from *wetlands**, *peatlands**, *savannahs* or natural *grasslands** to *plantation** since November 1994 are not certified, except where:
 - a) *The Organization** provides clear and sufficient evidence that it was not directly or indirectly responsible for the conversion; or
 - b) The conversion is producing clear, substantial, additional, secure, *long-term* conservation** benefits in the *Management Unit**; and



- c) The total area of plantation* on sites converted from natural forest* since November 1994 is less than 5% of the total area of the *Management Unit**; and
- iv. Knowledgeable experts independent of *The Organization** confirm the effectiveness of *management activities** to maintain and/or enhance the identified *High Conservation Value** areas.

B. Carbon Sequestration and Storage

- 1) In addition to requirements to maintain environmental values in Principle 6, and Principle 9 when promotional claims are made regarding carbon sequestration and storage, the following are demonstrated:
 - i. *Management activities** maintain, enhance or *restore** carbon storage in the *forest**; including through reduced impact logging practices for carbon, as described in the FSC Guidance for the Maintenance of and Enhancement of Ecosystem Services.
 - ii. *Management activities** maintain, enhance or *restore** carbon storage in the *forest**; including through *forest** protection and reduced impact logging practices for carbon, as described in the FSC Guidance for Maintaining and Enhancing Ecosystem Services.

C. Biological Diversity* Conservation*

- 1) In addition to provisions to protect *biological diversity** in Principle 6 and Principle 9, when promotional claims are made regarding *biological diversity* conservation**, the following are demonstrated:
 - i. *Management activities** maintain, enhance or *restore**:
 - a) *Rare and threatened species** and their *habitats**, including through the provision of *conservation zones**, *protection areas**, *connectivity**, and other direct means for their survival and viability; and
 - b) Natural landscape-level characteristics, including *forest** diversity, composition and structure.
 - ii. The *conservation area network**, and conservation areas outside the *Management Unit**:
 - a) Represents the full range of *environmental values** in the *Management Unit**;
 - b) Has sufficient size or functional connectivity, to support natural processes;
 - c) Contains the full range of habitats present for *focal species** and *rare and threatened species**; and
 - d) Has sufficient size or functional *connectivity** with other suitable *habitat** to support viable populations of *focal species** including *rare and threatened species** in the region.
 - iii. Knowledgeable experts independent of *The Organization** confirm the sufficiency of the conservation area network*.

D. Watershed Services



- 1) In addition to measures to protect water in Principle 6 and measures to reduce the impact from *natural hazards** in Principle 10, where promotional claims are made regarding watershed services:
 - i. An assessment identifies:
 - a) Hydrological features and connections, including permanent and temporary *water bodies**, *watercourses**, and *aquifers**;
 - b) Domestic water needs for *Indigenous Peoples** and *local communities** within and outside of the *Management Unit** that may be impacted by *management activities**;
 - c) Areas of *water stress** and *water scarcity**; and
 - d) Consumption of water by *The Organization** and other users.
- 2) Measures are implemented to maintain, enhance or restore* permanent and temporary *water bodies**, *watercourses**, and *aquifers**;
- 3) Chemicals, waste and sediment are not discharged into *water bodies**, *watercourses** or *aquifers**; and
- 4) *Management activities** and strategies respect universal access to water, as defined in the UN resolution on the human right to water and sanitation.

E. Soil Conservation

- 1) In addition to measures related to soil in Principle 6 and Principle 10, where promotional claims are made regarding soil conservation, the following are demonstrated:
 - i. Vulnerable or high risk soils are identified, including thin soils, soils with poor drainage and subject to water logging, and soils prone to compaction, erosion, instability and run-off;
 - ii. Measures are implemented to reduce compaction, erosion and landslides;
 - iii. *Management activities** maintain, enhance or restore soil fertility and stability; and
 - iv. Chemicals and waste are not discharged into soil.

F. Recreational Services

- 1) In addition to measures to assess, prevent, and mitigate negative impacts of management activities on social values identified in Principle 2 to Principle 5 and Principle 9, where promotional claims are made regarding recreational services, the following are demonstrated:
 - i. Measures are implemented to maintain, enhance or restore*:
 - a) Areas of importance for recreation and tourism including site attractions, archaeological sites, trails, areas of high visual quality and areas of cultural or historical interest; and
 - b) Populations of species that are a tourist attraction.



- ii. The rights, customs and culture of *Indigenous Peoples** and *local communities** are not violated by tourism activities;
- iii. In addition to health and safety practices in Criterion* 2.3, practices are implemented to protect the health and safety of tourism customers;
- iv. Health and safety plans and accident rates are publicly available in recreational areas and areas of interest to the tourism sector; and
- v. A summary is provided of activities that demonstrate prevention of discrimination based on gender, age, ethnicity, religion, sexual orientation or disability.

(from IGI)

Annex E: Conceptual Framework for Planning and Monitoring

Small Scale/Low Intensity/Community forests

SIR GUIDANCE

The frequency of revision to aspects of the *management plan** depends on the source and significance of the information received from monitoring, evaluation and *engagement** as well as the capacity of the *Organization**.

Suggested periodicity related to monitoring in the following table can be adapted for these *Organizations** depending on the intensity and frequency of their *management activities**. New information from *engagement** with *stakeholders** or Indigenous communities, new scientific and technical information and changing environmental, social, or economic circumstances may stimulate more frequent revisions.

Under the FSC definition, the *Management Plan** is a collection of documents, reports, records and maps that describe, justify and regulate management activities. As such the frequency of revision to these varied documents and maps depends on the source of information as listed in 7.4.1 as well as the type of planning document as summarized in Annex F.

Annex F is provided as an example intended to explain the scope of the planning framework and is not meant to be prescriptive. In general, information received from *stakeholder engagement**, new scientific and technical information and changing environmental, social, or economic circumstances should result in more frequent revisions to the relevant management planning document or map.

*Organizations** should use the following table as a starting point to develop a tool to inform the periodicity for revision of the various management planning and monitoring documents. The frequency of revision will be based on existing planning cycles and the source and significance of the information received from monitoring, evaluation and *engagement**.

Sample Management Plan* Document	Management Plan* Revision Periodicity	Element Being Monitored (Partial List)	Monitoring Periodicity	Who Monitors This Element? (Note: These will vary with SIR and jurisdiction)	FSC Principle/ Criterion*
Site Plan	Annual	Creek crossings	When in the field and annually	Operational staff	P10
		Roads	When in the field and annually	Operational staff	P10



Sample Management Plan* Document	Management Plan* Revision Periodicity	Element Being Monitored (Partial List)	Monitoring Periodicity	Who Monitors This Element? (Note: These will vary with SIR and jurisdiction)	FSC Principle/ Criterion*
		Retention patches	Annually sample	Operational staff	P6, P10
		Rare Threatened and Endangered species	Annually	Consulting Biologist	P6
		Annual harvest levels	Annually	Woodlands Manager	C5.2
		Insect disease outbreaks	Annually, sample	Consulting Biologist / Ministry of Forests	
Budgeting	Annual	Expenditures	Annually	Chief Financial Officer	P5
		Contribution to local economy	Quarterly	General Manager	P5
Engagement* Plan	Annual	Employment statistics	Annually	General Manager	P3, P4
		Social Agreements	Annually, or as agreed in Engagement* Plan	Social Coordinator	P3, P4
		Grievances*	Ongoing	Human Resources Manager	P2, P3, P4
5-Year Management Plan*	5 years	Wildlife populations	To be determined	Ministry of Environment	P6
		Coarse Woody Debris	Annually	Ministry of Forests	P10
		Free growing / regeneration	Annually, sample		
Sustainable Forestry Management Plan*	10 years	Age class distribution Size class distribution	Ten years	Ministry of Environment	P6
		10 year Allowable Annual Cut	Annually, ten years	Ministry of Forests / Woodlands manager	C5.2
Ecosystem Services Certification Document	5 years	Prior to validation and verification	Prior to validation and verification	General Manager	Annex C



Forest Stewardship Council®
FSC® Canada

(from IGI)



Annex F: HCV Framework

This Annex is under development and will be included in Draft 2.

Small Scale/Low Intensity/Community forests

SIR GUIDANCE

Applicability to be assessed when Annex is completed in D2.



Annex G: Dispute Resolution Process

Small Scale/Low Intensity/Community forests

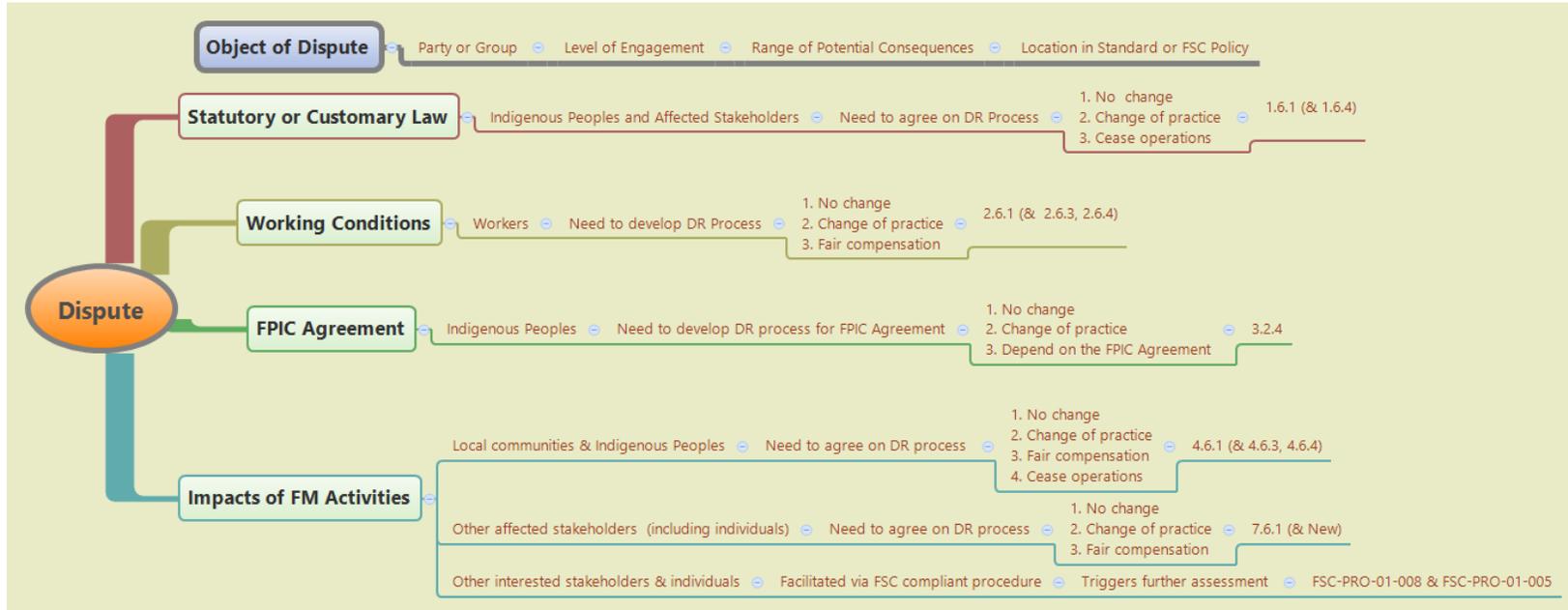
SIR GUIDANCE

Applicable.

Annex H: Determining Local Community Customary Rights

Depending on the group, the level of *engagement** required, and the range of potential output or consequences, the requirements for *dispute** resolution processes are found within different sections of the draft Standard. For example, if a dispute is related to legal *tenure**, the mechanisms to address this would follow requirements found in *Criterion** 1.6 whereas if they *dispute** is related to the impacts of *management activities**, the requirements in *Criterion** 4.6 (for *local communities** and *Indigenous Peoples**) or *Criterion** 7.6 (for other *affected stakeholders**) would be followed.

For *interested stakeholders** and interested individuals, no *dispute** resolution process is required to be put in place. However, it may be necessary to provide opportunities for *engagement** in monitoring and the planning processes of *management activities** upon request. Beside this, the general FSC procedures for processing complaints and appeals (see FSC-PRO-01-005 and FSC-PRO-01-008) are always available to everyone.





Annex H: Determining Local Community Customary Rights

Small Scale/Low Intensity/Community forests

SIR GUIDANCE

Further guidance on engagement with local communities will be forthcoming in D2.

Annex I: Culturally Appropriate Engagement

The steps of this process are inspired by those laid out by the Supreme Court of Canada in *Powley (R. v. Powley)* [1999] 1 C.N.L.R. 153 (Ont. Prov Ct.); *aff'd* [2000] O.J. No. 99 (Ont. S.C.J.); *aff'd* [2001] O.J. No. 607 (Ont. C.A.); *aff'd* (2003) SCC 43). Although the *Powley* decision determines Metis rights, the process to determine those rights can be useful for local communities trying to establish their rights.

At the time of editing this Standard, no *customary rights** had been formally identified for any *local community** in Canada.

Steps 1 to 7 should be used by a local community to demonstrate their potential *customary right*(s)*. Steps 8 to 10 are further steps that may require further research (or settlement through a court decision).

- Step 1 → Characterization of the rights: The right has to be contextual and site-specific. (par. 19)
- Step 2 → Identification of rights-bearing community: In addition to demographic evidence, proof of shared customs, traditions, and a collective identity is required. (par. 23)
- Step 3 → Identification of the rights-bearing community: The right is a communal right (par. 24)
- Step 4 → Verification of the membership in the community: (par. 30)
- 1 Self-identification;
 - 2 Community acceptance
- Step 5 → Identification of the relevant time frame: the specific right was implemented during a period before it came under the effective political and legal control of government. (par. 37)
- Step 6 → Determination of whether the practice is integral to the community distinctive local culture: the practice is an important aspect and a defining feature of the culture of the community. (par. 41)
- Step 7 → Establishment of continuity between the historic practice and the contemporary right asserted.
1. Determination of whether or not the right was extinguished
 2. If there is a right, determination of whether there is an infringement



3. Determination of whether the infringement is justified.

Step 8 → Determination of whether or not the right was extinguished

Step 9 → If there is a right, determination of whether there is an infringement

Step 10 → Determination of whether the infringement is justified.

When a *local community** is able to document steps 1 to 7, a customary right may exist. *The Organization** does not have the liability to determine the legitimacy of this claim, but they must recognize that this right may exist if the steps are well documented. *The Organization** is expected to provide some sort of accommodation if the claim is *reasonable** and if it is within its *sphere of influence**. Otherwise, a *dispute** resolution process may be use.

Annex I: Culturally Appropriate Engagement

Small Scale/Low Intensity/Community forests

SIR GUIDANCE

See National Standard D1. Further guidance related to *culturally appropriate* engagement** for these *Organizations** will be forthcoming in D2.

The *Organization** will develop a methodology to implement *culturally appropriate** approaches for *engagement** in considering:

A) Level of *engagement**

- *Indigenous Peoples** and *Local Community** with *legal* or customary rights** agree on a *culturally appropriate* engagement** process, and this is mutually agreed on and done for each community. The desired level of *engagement** is mutually agreed and can vary in relation to the topic.
- For a *local community** with *legal or customary rights**, the process will be specific to the right.
- Engagement of *workers** and *affected stakeholders** is specific to flagged indicators and/or issues.
- The level of *engagement** is partly defined with the specific requirement of the standard (the verb used in the indicator, such as "inform", "develop", etc.) and the level of impact of the activity on the intended group.
- The different levels of *engagement** include the following:
 - **Inform:** To provide information primarily in one direction, with limited opportunity for dialogue.
 - **Consult:** To obtain feedback on analysis, alternatives and/or decision.
 - **Involve:** To work directly with throughout the process to ensure that intended group issues and concerns are consistently understood and considered.
 - **Collaborate:** To partner with the intended group in each aspect of the decision including the development of alternatives and the identification of the preferred solution.
 - **Empower:** To place final decision-making in the authority of the intended group.

B) *Culturally appropriate** approach:

- The approach can be adapted to the level of *engagement** used/required and adjusted to the intended group, as appropriate.
- A *culturally appropriate** approaches should have a consideration for the below elements but are not restricted to these only ones:
 1. **Cultural difference / Attitude:**

- Some cultural differences are identified and the state of the actual relationship is assessed to determine:
 - a) Preferences for direct or indirect negotiation;
 - b) Attitude toward authority;
 - c) Attitudes toward competition, cooperation and conflicts;
 - d) Level of relationship building and trust;
 - e) Presence of disillusionment on past experience;
 - f) Lack of consultation or consultation fatigue;
 - g) Ways of understanding and interpreting the world.
- 2. **Representation:**
 - Representatives are identified for each activity in which *engagement** is required, including where appropriate local institutions, organizations and authorities.
 - Groups are equally represented and included.
- 3. **Communications:**
 - Meaningful communication includes:
 - a) Mechanisms for how information is exchanged;
 - b) Different methods for cross-cultural communication including how information is presented and the full representation of needed information;
 - c) Sensitivities in the use of jargon;
 - d) Shared level of understanding of the language used to communicate forest management planning and certification processes (written and spoken).
- 4. **Documentation:**
 - Outcomes and agreements are recorded and shared with approval sought on the content and intended use of the records.
- 5. **Timeframe:**
 - Timeframe for the *engagement** is determined and agreed upon.
 - Availability of participants is considered.
- 6. **Capacity:**
 - Consideration is given to the capacity and required resources necessary to facilitate an appropriate level of *engagement** including access to appropriate technology and the level of knowledge of the affected community.
- 7. **Decision making:**
 - Agreement is sought on the approach for making decisions including consideration of direct or indirect negotiation.



Annex J: Caribou in the Standard

Small Scale/Low Intensity/Community forests

SIR GUIDANCE

If relevant, then applicable.

Caribou are recognized as an important species in Canada because of the social significance attached to their continued existence, their status as a hallmark *species at risk** and the fact that their presence in a *forest** can be an indication of ecosystem integrity. For these reasons, special attention has been paid to caribou in this Standard, and one Indicator (Indicator 6.4.3) is devoted entirely to management of *habitat** for boreal woodland caribou.

Caribou Taxonomy

All of Canada's caribou—from woodland caribou in the boreal forest to the vast migratory herds of the tundra—belong to a single species, *Rangifer tarandus*. However, after that basic distinction, the taxonomy and language used to describe subdivisions within the species become complex. This is due in large part to the continuing evolution of our understanding of caribou ecology, and to some extent, the burden of language used over the years to describe caribou. The following terms are (or have been) used to describe subdivisions within the species: *Subspecies*; *migratory patterns*; *ecotypes*; *designatable units*; *population groups*; *populations*; *subpopulations*; *ranges*; *herds*; and probably others. There is common distinction made between mountain and boreal caribou, referred to here as different ecotypes of woodland caribou.

Mountain caribou, which are divided into northern and southern populations, are found in western Canada, and boreal caribou through the northern boreal forests. Forest management occurs in the areas occupied by both of these ecotypes and so it is appropriate that both enter into discussions related to the FSC Standard.

The Indicator has a number of prescriptive elements, but also recognizes that the science and understanding related to boreal caribou in Canada continues to evolve, and so provides for managing caribou in ways other than those detailed in the Indicator, provided that alternate approaches are based on scientific interpretation and stewardship of caribou habitat comparable to the Indicator.

Indicator 6.4.3 involves a relatively simple application of a risk management approach to managing caribou habitat. Much of the indicator is based on the approach put forward in the *Federal Recovery Strategy* for the boreal population of woodland caribou (Environment Canada, 2012) regarding the identification and effective protection of *critical habitat**. The key supporting documents for the *Federal Recovery Strategy* are Environment Canada's scientific review and assessment of *critical habitat** (Environment Canada, 2008; Environment Canada, 2011) that provided empirical evidence of a strong negative correlation between the extent of disturbance within *caribou ranges** and the condition of caribou populations.

There are two overlapping spatial components to Indicator 6.4.3:

- 1) The cumulative level of disturbance within *caribou ranges**, and
- 2) The cumulative level of disturbance within the portions of *forest management units** that overlap *caribou ranges**. The requirements of this Indicator related to these spatial components are described in Table 6.4.3.

Because of the number of ways in which *caribou ranges** and forest *Management Units** may overlap, some complexity may arise in the application of the Indicator in different circumstances. Figures 1-3 below provide examples of the Indicator's requirements in different situations:

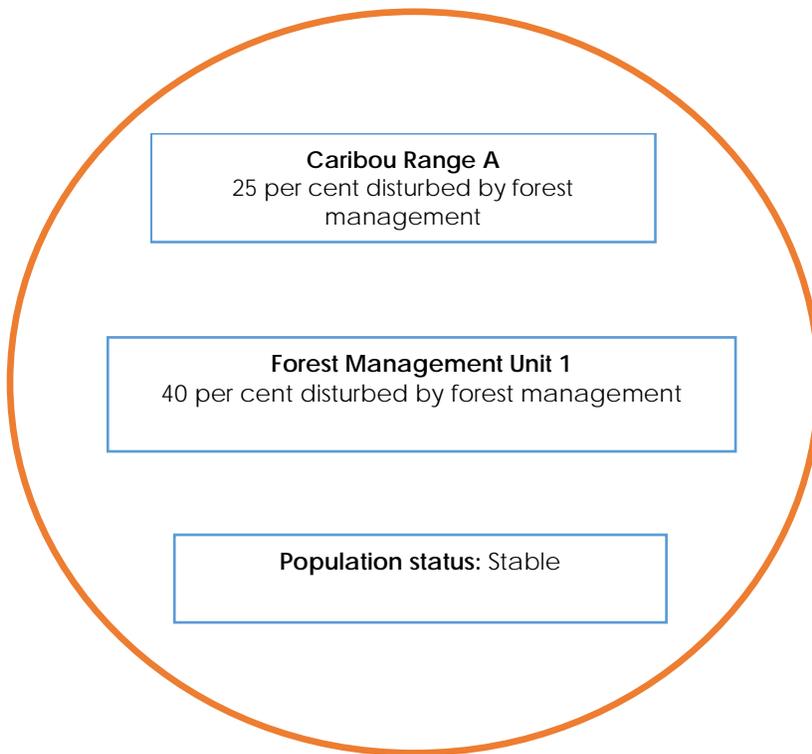
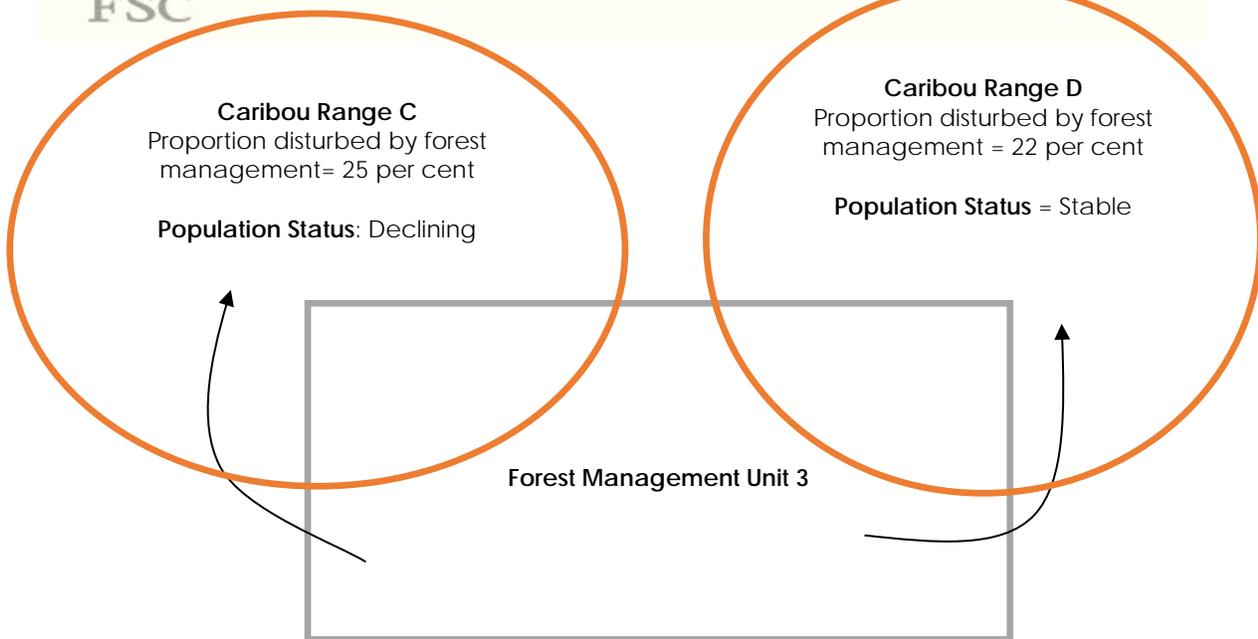


Figure 1: Example of indicator requirements with a stable population

In Figure 1, a single forest *Management Unit** with 40 per cent disturbance is completely enveloped by a caribou population range. The disturbed area in the range is 25 per cent. Given that the caribou population status is stable, the requirements of shaded cells 4, 6, and 8 from Table 6.4.3 apply.



Percent disturbed by forest management = 25 per cent Perfect disturbed by forest management = 28 per cent

Figure 2. Example of indicator requirements in a complex situation: One FMU within two ranges.

Figure 2 presents a situation in which one forest *Management Unit** overlaps with portions of two *caribou ranges**. Because the caribou population in Range C is in decline, and the level of disturbance in the range is moderate, between 20 and 35 per cent, the requirements of shaded cells 16, 17, 18, and 19 from Table 6.4.3 apply to that portion of the FMU that overlaps with Range C.

In Caribou Range D, the proportion of area disturbed is moderate (22 per cent). The proportion of the FMU disturbed in the overlapping area is 28 per cent and the caribou population is stable. Therefore, the requirements of shaded cells 3, 5, and 7 from Table 6.4.3 apply the portion of FMU that overlaps with Range D.

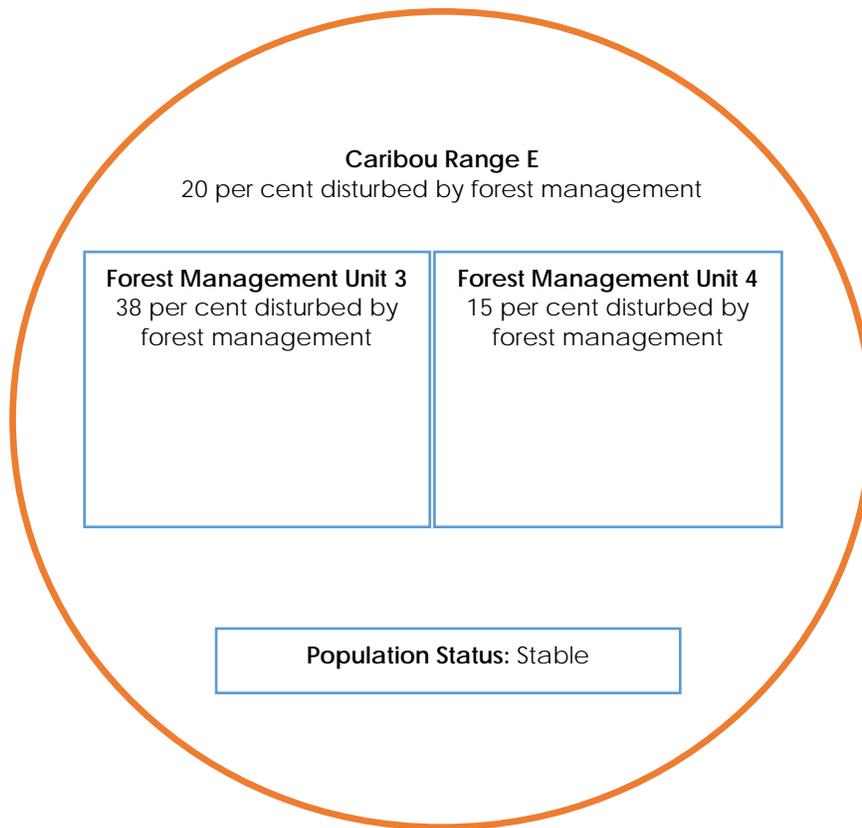


Figure 3: Example of indicator requirements in a complex situation.

In Figure 3, two FMUs exist within a single *caribou range**. The proportion of the range that is disturbed is 20 per cent and the caribou population is stable. With 38 per cent of the FMU disturbed, the requirements for FMU 3 are those identified in shaded cell 2 of Table 6.4.3. With only 15 per cent of the FMU disturbed, the requirements for FMU 4 are those identified in shaded cell 1 of Table 6.4.3.

Caribou and Landscape Management

Important issues in managing caribou habitat, and the *habitat** of other wide-range species are addressed in components of other indicators in the Standard too. Most of these are in *Criterion** 6.8, which deals with landscape management through indicators related to:

- Aggregating forest disturbances (Indicator 6.8.1);
- Management of large forest patches (Indicator 6.8.2);
- Maintenance and restoration of *connectivity** (Indicator 6.8.3);
- Access management (Indicator 6.8.4);
- Coordinating landscape management activities with adjoining lands (Indicator 6.8.5).

Requirements for *Intact Forest Landscapes** will be incorporated into Draft 2.

Some aspects of the Indicators in *Criterion** 6.8 have particular relevance to caribou.

Caribou need expanses of contiguous *habitat** with minimal disturbance, so the combination of Indicators 6.8.1, 6.8.2 and 6.8.3 are intended to result in contiguous areas of *forest** that provide for *habitat* connectivity**. Simple corridors of relatively unbroken *forest** through a disturbed matrix do not suffice in providing *connectivity** because caribou do not consistently travel along the same pathway. Therefore, broad expanses of contiguous *habitat** are needed to provide *connectivity**.

Access management, as addressed in Indicator 6.8.4, is a critical component of managing the quality of *forests** for caribou. Impacts from access result in:

- Fragmentation of forest communities, degrading the *connectivity** of those communities;
- Creation of barriers for movement of caribou and other sensitive wildlife;
- Provision of access corridors for predators, which may increase predation rates;
- Facilitation of intentional or accidental harvest; and
- Creation of additional development, which further degrades *habitat** quality.

Indicator 6.8.4 includes requirements to manage roads through all stages of their life cycle, including development, use and maintenance, abandonment and reclamation.

Caribou and other wide-ranging species use forests at scales that transcend the size of forest *Management Units**. This poses a significant challenge for managers of certified forests as the fate of caribou and other wide-ranging species on their forest lands is affected by activities undertaken and decisions made beyond the boundaries of their *forests**. Indicator 6.8.5 attempts to address this problem by requiring that *Organizations** work within their *spheres of influence** to facilitate landscape-scale management.

What about Mountain Caribou?

Indicator 6.4.3 specifically addresses boreal caribou, and so it is *reasonable** to ask why comparable attention is not provided for the mountain caribou ecotype of woodland caribou. The answer is a combination of the facts that the ecology of mountain caribou is even more complex, with more unknowns, and that a calibrated relationship between the extent of cumulative disturbance and caribou productivity that provides the basis for a 'neat' indicator for boreal caribou does not exist for mountain caribou.

Mountain caribou are divided into two types – northern and southern, with more than 70 ranges or herds of the two types (and 3 population groups of southern mountain caribou). There are substantial differences between the populations groups and herds in their patterns of altitudinal migration, use of high-altitude alpine habitats and low-altitude forest habitat. Matrix habitat, that provides refuge from predation is recognized as a key component of their ecology, particularly for southern mountain caribou, and is recognized in critical habitat in the *Federal Recovery Strategy*. Given this complexity, it was impractical to provide relatively precise



direction for managing mountain caribou in a single indicator, or to add it to the direction for boreal caribou that exists in Indicator 6.4.3. However, this does not mean that protection for mountain caribou is absent from the Standard. There are several indicators that address ecological values and management actions that are important in the stewardship of mountain caribou—and other *species at risk**—including the following:

- Indicator 6.4.3 addresses planning for *species at risk*;
- Indicator 6.6.6 addresses management of isolated and disjunctive populations;
- Indicator 6.8.2 addresses management of large forest patches;
- Indicator 6.8.3 addresses maintenance of *connectivity**;
- Indicator 6.8.4 addresses access management;
- Indicator 6.8.7 addresses *restoration**; and
- Indicator X.XX (to be determined) addresses management and protection of *intact forest landscapes**.

Annex K: Rationale for the treatment of Criterion 5.2 related to sustainable harvesting and annual allowable cut calculation in Canada

Small Scale/Low Intensity/Community forests

SIR GUIDANCE

In D2 of the National Standard, indicator 5.2 will be revised and this Annex will be edited. Guidance related to Annex K, if applicable to these *Organizations**, will therefore be forthcoming in D2.

In Canada, many jurisdictions, including British Columbia, Ontario, New Brunswick, and beginning in 2018, Quebec, recognize that restricting the annual allowable cut (AAC) to an even flow over a perpetual time scale may, in some situations, be a lost economic opportunity. and limit the achievement of certain objectives related to Principles 3, 4, 5, and 6 without providing more *conservation** or protection benefits.

Restraining the level of harvest to an even flow will depend on the age class distribution of the *forest**, as the even flow is limited by the period with the lowest level of available harvest. Age class distribution scenarios can be characterized as follows:

Surplus (mature) forest: For *Management Units** comprised disproportionately of mature forests, the even flow may limit the AAC (see Figure 1). In this scenario, the impact of using the most limiting period to determine the level of harvest is high and may limit the full range of products and services realized. If the even flow strategy is not used, the AAC can initially be at a level greater than the even flow sustainable level, while permitting *objectives** to be achieved (see Figure 2).

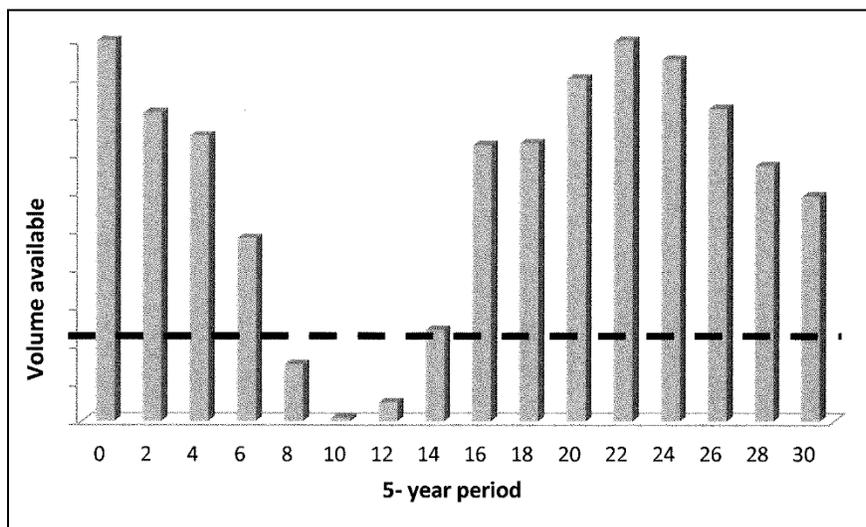


Figure 1: Volume available for harvest in a mature forest (even flow)

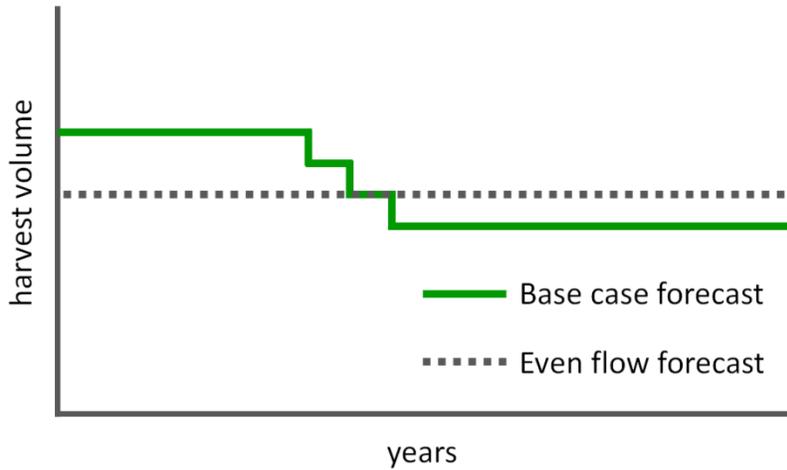


Figure 2: Harvest forecasts for a surplus forest

Deficit (young) forest: For *Management Units** containing a disproportionate area of young stands, the initial harvest level will be below the *long-term** harvest level and will subsequently increase to the long-term harvest level (see Figure 3). The magnitude of the subsequent increases can be changed or delayed to account for changing information and management *objectives**. In this type of *forest**, using the most limiting period to determine the level of harvest does not have an impact on the level of harvest (see Figure 4).

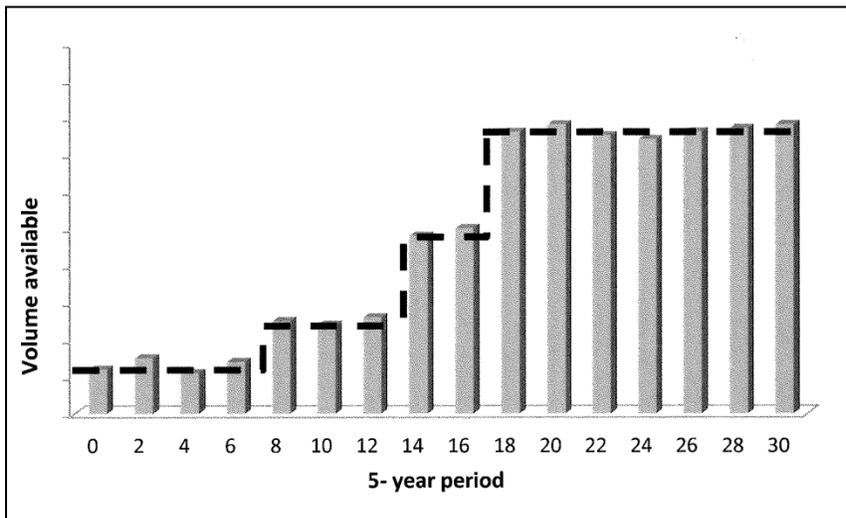


Figure 3: Volume available for harvest in a young forest

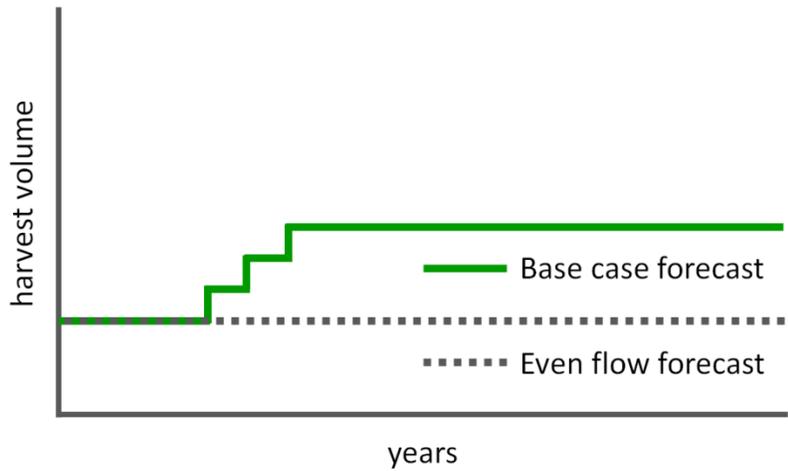


Figure 4: Harvest forecast for a deficit forest

Normalized forest: For *Management Units** containing an equal area in all age-classes, the even flow objective does not have an impact on the levels of harvest (see Figures 5 and 6).

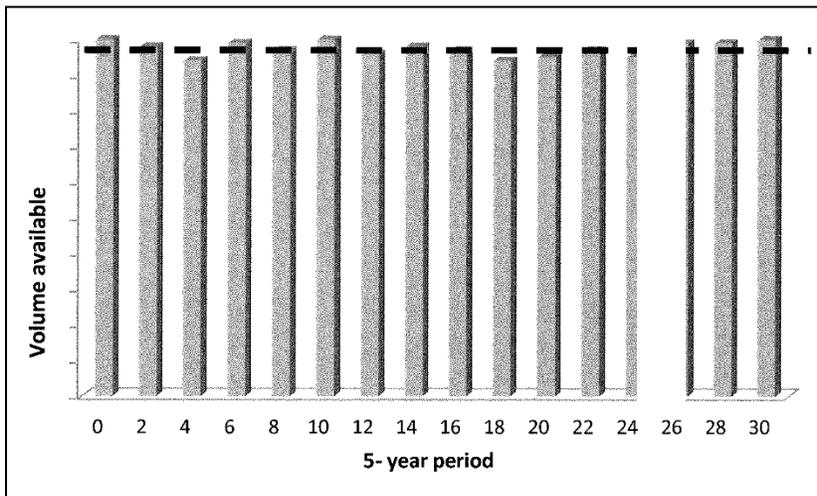


Figure 5: Volume available for harvest in a normalized forest (even flow)

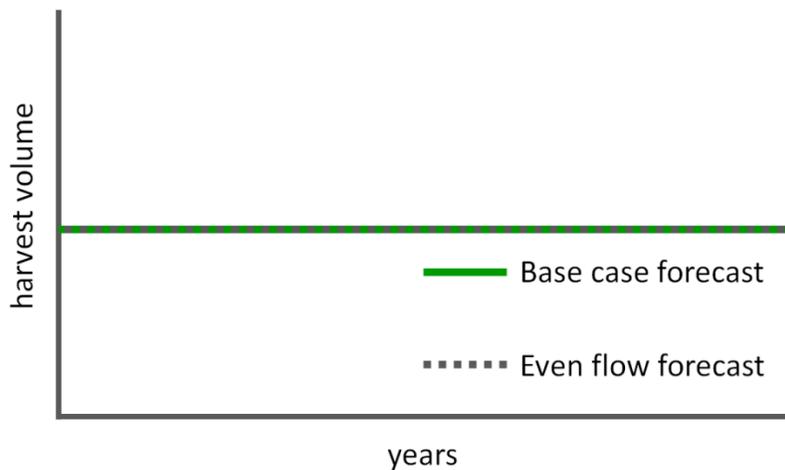


Figure 6: Harvest forecast for a normalized forest

As a reminder, Criterion 5.2 states,

The Organization shall* normally harvest products and services from the Management Unit* at or below a level which can be permanently sustained. (C5.6 V4)*

The indicators within *Criterion** 5.2 address the following aspects:

- Indicator 5.2.1 provides the requirements for the analysis and calculation;
- Indicator 5.2.2 addresses the harvest level determination;
- Indicator 5.2.3 addresses the harvest level determination in a case of major natural disturbance;
- Indicator 5.2.4 addresses respecting the determination;
- Indicator 5.2.5 addresses the sustainability of *non-timber forest products**

*Criterion** 5.2 requires that the *Management Unit** produce its full potential range of products and services. At the same time, it is recognized that it is often appropriate for the first timber harvests in previously unharvested forests (where net long-term volume increment is close to zero) to be larger than the subsequent long-term sustainable yields. Therefore, this *Criterion** allows for harvest levels to be higher than the sustainable yield in some specific situations.

In order to ensure the intent of this Criterion remains intact, a number of requirements have been introduced into the proposed Indicators:

1. Indicator 5.2.1 requires that all the other resources *objectives** such as old growth forests, wildlife habitats and age-class distribution must be considered in the calculation. The level of harvest must allow for all other values to be maintained over the planning horizon. Consequently, the proposed indicator allows for changes in the harvest level if it does not impair achieving the *long-term* objectives** described in the approved *Management Plan**.
2. Indicator 5.2.2 requires:
 - i. That the determined level of harvest shall not impair "the ability of the

- management unit to continue yielding those products and services, the ecosystem functions and ecosystem services* of the unit, including the continued existence of viable populations of native species."*
- ii. That the harvesting level be greater than the mid-term, *long-term** and flat line forecasted harvest levels only if *"the short-term harvest level does not negatively impact the mid- or long-term* projected harvest levels."* This means that harvesting more in the short term will not have an impact on the *long-term** harvest level.
 - iii. That the forecasted level of harvesting decrease equitably over time from current harvest level to the *long-term** level. This measure prevents *Organizations** from postponing reductions to a later date, which would result in a more abrupt reduction and an increased risk.
 - iv. That *"the harvest forecast indicates the AAC can be maintained for at least 30 years prior to any decline."* This measure ensures the AAC will be re-determined at new levels at least three times during this 30-year projected time frame. This introduces a precautionary approach to determining the AAC without being subjective.

While the base case harvest forecast in Figure 7 is acceptable as it meets these criteria, the alternative forecast would not be acceptable as the AAC is not maintained for at least 30 years.

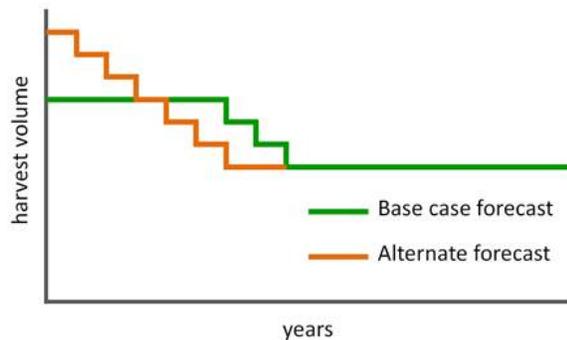


Figure 7: Harvest forecasts for a surplus forest

Thanks to Doug Beckett, RPF, British Columbia, for his permission to use Figures 2, 4, 6 and 7, which he produced.



Annex L: List of Contributors

A complete list of contributors will be forthcoming in D2

GLOSSARY

(From Draft 1 of the National Forest Management Standard)

Active Conservation: *Management activities** undertaken specifically to foster *conservation** goals, often associated with *protection areas**.
(Source: P6P9 TEP addition)

Adaptive management: A systematic process of continually improving management policies and practices by learning from the outcomes of existing measures.
(Source: Based on World Conservation Union (IUCN). Glossary definitions as provided on IUCN website) (IGI Glossary)

Affected stakeholder: Any person, group of persons or entity that is or is likely to be subject to the effects of the activities of a *Management Unit**. Examples include, but are not restricted to (for example in the case of downstream landowners), persons, groups of persons or entities located in the neighborhood of the *Management Unit**. The following are examples of *affected stakeholders**:

- *Local communities**
- *Indigenous Peoples**
- *Workers**
- Forest dwellers
- Neighbors
- Downstream landowners
- Local processors
- Local businesses
- *Tenure** and use rights holders, including landowners
- Organizations authorized or known to act on behalf of *affected stakeholders**, for example social and environmental NGOs, labor unions, etc.

(Source: FSC-STD-01-001 V5-0). (IGI Glossary)

Age-class: A distinct group of trees or portion of the growing stock of a *forest** recognized on the basis of being of similar age or similar successional stage.
(Source: Adapted from FSC Canada National Boreal Standard 2004)

Alien species: A species, subspecies or lower taxon, introduced outside its natural past or present distribution; includes any part, gametes, seeds, eggs, or propagules of such species that might survive and subsequently reproduce.
(Source: Convention on Biological Diversity (CBD), Invasive Alien Species Programme. Glossary of Terms as provided on CBD website) (IGI Glossary)

Ancient Forest: *Forests** which:

- have not undergone any significant industrial activity;
- are naturally regenerated;



- contain trees of size, age and spacing which vary widely;
- contain densities of dead standing trees (snags) and fallen trees that are greater than in younger forests*;
- contain trees that are large for the species and site combination;
- contain canopies with many openings;
- are typically small in size relative to the ecosystems in which they exist; and
- are at the extreme end of the normal natural disturbance cycle.

(Source: From a variety of sources, including Lund 2014, FAO 2002, Grumbine 1993) (CW addition)

Applicable law: Means applicable to *The Organization** as a *legal** person or business enterprise in or for the benefit of the *Management Unit** and those laws which affect the implementation of the FSC Principles and Criteria. This includes any combination of statutory law (Parliamentary approved) and case law (court interpretations), subsidiary regulations, associated administrative procedures, and the national constitution (if present) which invariably takes *legal** precedence over all other *legal** instruments.

(Source: FSC-STD-01-001 V5-0). (IGI Glossary)

Aquifer: A formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs for that unit to have economic value as a source of water in that region.

(Source: Gratzfeld, J. 2003. *Extractive Industries in Arid and Semi-Arid Zones*. World Conservation Union (IUCN)). (IGI Glossary)

Best Available Information: Data, facts, documents, expert opinions, and results of field surveys or consultations with *stakeholders** that are most credible, accurate, complete, and/or pertinent and that can be obtained through *reasonable** effort and cost, subject to the *scale** and *intensity** of the *management activities** and the *Precautionary Approach**.

(IGI Glossary)

Best Efforts: Persistent and sincere attempts by *The Organization** to address a requirement. Best efforts are not always met with success, but to address the indicators' requirements for best efforts, evidence must be presented that continuing efforts by various means have been attempted.

(Source: P6P9 TEP addition)

Best Management Practice: Best Management Practices (BMPs) are methods or techniques based on known science found to be the most effective and practical and that, if followed, should meet the requirements of indicators or achieve *objectives**.

(Source: Adapted from BC Ministry of the Environment and BusinessDictionary.com - addition)

Binding Agreement: A deal or pact, written or not, which is compulsory to its signatories and enforceable by law. Parties involved in the agreement do so freely and accept it voluntarily.

(IGI Glossary)

Biological diversity: The variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are a part; this includes diversity within species, between species and of ecosystems.



(Source: Convention on Biological Diversity 1992, Article 2). (IGI Glossary)

Biological control agents: Organisms used to eliminate or regulate the population of other organisms.

(Source: Based on FSC-STD-01-001 V4-0 and World Conservation Union (IUCN). Glossary definitions as provided on IUCN website) (IGI Glossary)

Caribou Range: The geographic area occupied by a local population of boreal or mountain caribou as identified by the Federal Recovery Strategy or action plans for boreal woodland caribou (Environment Canada, 2012), or the Federal Recovery Strategy for southern mountain caribou (Environment Canada, 2014), or updates to those strategies or revised areas identified by provincial resource management agencies.

(addition; Source: CW)

Confidential information: Private facts, data and content that, if made *publicly available**, might put at risk *The Organization**, its business interests or its relationships with *stakeholders**, clients and competitors.

(Source: FSC 2014; IGI Glossary).

Conflicts between the Principles and Criteria and laws: Situations where it is not possible to comply with the Principles and Criteria and a law at the same time.

(Source: FSC-STD-01-001 V5-0). (IGI Glossary)

Connectivity: The degree to which habitat patches or environments are linked by single or multiple corridors or broad expanses of *habitat**. Connectivity recognizes the need for *habitats** to address several kinds of movements: 1) daily movements among *habitat** patches; 2) migrations/movement between seasonal ranges/use areas; and 3) dispersal movements of young animals. Conditions necessary for *connectivity** and its effectiveness will depend on the specific purpose of the *connectivity** and the requirements of species or ecosystems considered.

(Source: Adapted from FSC BC Standard - addition)

Conservation/Protection: These words are used interchangeably when referring to *management activities** designed to maintain the identified environmental or cultural values in existence longterm.

*Management activities** may range from zero or minimal interventions to a specified range of appropriate interventions and activities designed to maintain, or compatible with maintaining, these identified values.

(Source: FSC-STD-01-001 V5-0) (IGI Glossary)

Conservation Areas Network: Those portions of the *Management Unit** for which *conservation** is the primary and, in some circumstances, exclusive objective. The *conservation areas network** is the sum of *protected areas** and *protection areas**.

(Source: adapted from IGI)

Conservation zones: Defined areas that are designated and managed primarily to safeguard species, *habitats**, ecosystems, natural features or other site-specific values because of their natural environmental or cultural values, or for purposes of monitoring, evaluation or research, not necessarily excluding other *management activities**.



(Adapted IGI Definition – CW)

Conservation zones and protection areas: IGI definition dropped

This definition has been replaced by the definitions of *protected area** and *protection areas*

Core Forest Area: The interior portion of a contiguous *forest** area, not influenced by edge characteristics or properties.

(Source: FSC Canada National Boreal Standard 2004 - addition)

This definition is pending further discussion related to *IFLs**.

Criterion (pl. Criteria): A means of judging whether or not a Principle (of forest stewardship) has been fulfilled.

(Source: FSC-STD-01-001 V4-0) (IGI Glossary)

Critical: The concept of criticality or fundamentality in Principal 9 and *HCVs** relates to irreplaceability and to cases where loss or major damage to this HCV would cause serious prejudice or suffering to *affected stakeholders**. An ecosystem service is considered to be critical (HCV 4) where a disruption of that service is likely to cause, or poses a threat of, severe negative impacts on the welfare, health or survival of *local communities**, on the environment, on *HCVs**, or on the functioning of significant *infrastructure** (roads, dams, buildings etc.). The notion of criticality here refers to the importance and risk for natural resources and environmental and socio-economic values. (Source: FSC-STD-01-001 V5-0). (IGI Glossary)

Critical Habitat: the habitat that is necessary for the survival or recovery of a wildlife species. The term is most commonly used in reference to species which are categorized as '*species at risk**'.

(Adapted from Canadian Species at Risk Act)

Culturally appropriate [mechanisms]: Means/approaches for outreach to target groups that are in harmony with the customs, values, sensitivities, and ways of life of the target audience.

(IGI Glossary)

Customary Law: Interrelated sets of *customary rights** may be recognized as customary law. In some jurisdictions, customary law is equivalent to statutory law, within its defined area of competence and may replace the statutory law for defined ethnic or other social groups. In some jurisdictions customary law complements statutory law and is applied in specified circumstances (Source: Based on N.L. Peluso and P. Vandergeest. 2001. *Genealogies of the political forest and customary rights in Indonesia, Malaysia and Thailand, Journal of Asian Studies* 60(3):761–812). In Canada, they are rights recognized under a clearly established court judgement (jurisprudence) and by the article 35 of the Canadian Constitution. Customary law is applicable only to Indigenous and Metis communities.

(P4 TEP addition)

Customary rights: Rights which result from a long series of habitual or customary actions, constantly repeated, which have, by such repetition and by uninterrupted acquiescence, acquired the force of a law within a geographical or sociological unit (Source: FSC-STD-01-001



V4-0) (IGI Glossary)

Cutblock: A contiguous area of *forest** that has been harvested with the exception of individual trees and patches left either for silvicultural purposes or to provide ecological benefits.
(Source P6P9 TEP addition)

Deactivation/Abandonment: Used in reference to access road management. Deactivation and abandonment are undertaken with the intent of rendering *roads** inaccessible or impassable to motorized vehicles. Deactivation is an active process involving physical manipulation of *road** surfaces or water crossings, whereas abandonment is a passive process involving cessation of maintenance so that the *road** surface eventually falls into disrepair or is naturally revegetated.
(P6/P9 TEP addition)

Dispute/grievance: For the purpose of the IGI, this is an expression of dissatisfaction by any person or organization presented as a complaint to *The Organization**, relating to its *management activities** or its conformity with the FSC Principles and Criteria, where a response is expected.
(Source: based on FSC-PRO-01-005 V3-0 Processing Appeals and P4 TEP addition)

Dispute of substantial magnitude: For the purpose of the International Generic Indicators, a *dispute** of substantial magnitude is a *dispute** that involves one or more of the following:
Infringes on the *legal** or *customary rights** of *Indigenous Peoples** and *local communities**;

- Where the negative impact of *management activities** is of such a scale that it cannot
- be reversed or mitigated;
- Physical violence;
- Destruction of property;
- Presence of military bodies;
- Acts of intimidation against *forest* workers** and *stakeholders**.

(Source: IGI and SDG)

Economic viability: The capability of developing and surviving as a relatively independent social, economic or political unit. Economic viability may require but is not synonymous with profitability.
(Source: Based on the definition provided on the website of the European Environment Agency)
(IGI Glossary)

Ecosystem: A dynamic complex of plant, animal and micro-organism communities and their non-living environment interacting as a functional unit.
(Source: Convention on Biological Diversity 1992, Article 2) (IGI Glossary)

Ecosystem function: An intrinsic *ecosystem** characteristic related to the set of conditions and processes whereby an *ecosystem** maintains its integrity (such as primary productivity, food chain, biogeochemical cycles). Ecosystem functions include such processes as decomposition, production, nutrient cycling, and fluxes of nutrients and energy. For FSC purposes, this definition includes ecological and evolutionary processes such as gene flow and disturbance regimes, regeneration cycles and ecological seral development (succession) stages.
(Source: Based on R. Hassan, R. Scholes and N. Ash. 2005. *Ecosystems and Human Well-being:*

Synthesis. The Millennium Ecosystem Assessment Series. Island Press, Washington DC; and R.F. Noss. 1990. Indicators for monitoring biodiversity: a hierarchical approach. Conservation Biology 4(4):355–364) (IGI Glossary)

Ecosystem services: The benefits people obtain from *ecosystems**. These include:

- provisioning services such as food, forest products and water;
- regulating services such as regulation of floods, drought, land degradation, air quality, climate and disease;
- supporting services such as soil formation and nutrient cycling; and
- cultural services and cultural values such as recreational, spiritual, religious and other non-material benefits.

(Source: Based on R. Hassan, R. Scholes and N. Ash. 2005. Ecosystems and Human Well-being: Synthesis. The Millennium Ecosystem Assessment Series. Island Press, Washington DC). (IGI Glossary)

Endemic: A species or subspecies that is restricted to a defined geographical area. (HCV Sub-committee).

Engaging / Engagement: The process by which *The Organization** communicates, consults and/or provides for the participation of interested and/or affected stakeholders and Indigenous Peoples, ensuring that their concerns, desires, expectations, needs, rights and opportunities are considered in the establishment, implementation and updating of the *Management Plan** (Source: FSC-SDT-01-001 V5-0 and TEP P3 & P4).

Environmental Impact Assessment (EIA): Systematic process used to identify potential environmental and social impacts of proposed projects, to evaluate alternative approaches, and to design and incorporate appropriate prevention, mitigation, management and monitoring measures. The assessment methodologies used must be scientifically sound. The scope of an assessment is typically outlined at the start of the project so that the project has some well-defined boundaries. These may include physical, temporal, political, cultural and financial limits within the project mandate. Aspects of the environment typically included in assessments are site impacts (on soil, and site attributes), community impacts (on local wildlife and ecological communities), and landscape impacts (on the broader forest *ecosystem**). (Source: based on Environmental impact assessment, guidelines for FAO field projects. Food and agriculture organization of the United Nations (FAO). Rome, -STD-01-001 V5-0) (IGI Glossary)

Environmental values: The following set of elements of the biophysical and human environment:

- *ecosystem functions** (including carbon sequestration and storage);
- biological diversity;
- water resources;
- soils;
- atmosphere;
- landscape values (including cultural and spiritual values).

The actual worth attributed to these elements depends on human and societal perceptions. (Source: FSC-STD-01-001 V5-0) (IGI Glossary)

Ephemeral Stream: A stream that flows briefly only in direct response to precipitation in the immediate locality and whose channel is at all times above the water table.



(Source: FSC National Boreal Standard - addition)

Expert: 1. An individual whose knowledge or skill is specialized and profound as the result of much practical or academic experience. 2. A recognized authority on a topic by virtue of the body of relevant material published on the topic, their stature within the professional community, and the broadly-recognized accumulated related experience. 3. An individual who possess a wealth of experience on a topic such as may be accumulated through practical means including the accumulation of traditional knowledge.

(Source: FSC Canada National Boreal Standard 2004 - addition)

Externalities: The positive and negative impacts of activities on stakeholders that are not directly involved in those activities, or on a natural resource or the environment, which do not usually enter standard cost accounting systems, such that the market prices of the products of those activities do not reflect the full costs or benefits.

(Source: FSC-STD-01-001 V5-0). (IGI Glossary)

Fair compensation: Remuneration that is proportionate to the magnitude and type of harm experienced or services rendered by another party to reconcile the harm.

(Source IGI and TEP P4)

Fertilizer: Mineral or organic substances, most commonly N, P₂O₅ and K₂O, which are applied to soil for the purpose of enhancing plant growth.

(IGI Glossary)

Focal species: Species whose requirements for persistence define the attributes that must be present if that landscape is to meet the requirements of the species that occur there.

(Source: Lambeck, R., J. 1997. *Focal Species: A multi-species Umbrella for Nature Conservation*. *Conservation Biology* vol 11 (4): 849-856) (IGI Glossary)

Forest: A tract of land dominated by trees.

(Source: FSC-STD-01-001 V5-0. Derived from FSC Guidelines for Certification Bodies, Scope of Forest Certification, Section 2.1 first published in 1998, and revised as FSC-GUI-20-200 in 2005, and revised again in 2010 as FSC-DIR-20-007 FSC Directive on Forest Management Evaluations, ADVISE-20-007-01). (IGI Glossary)

Forest Management Activities – see Management Activities

Forest Management Unit – see Management Unit

Forest type: Forest type is a group of forest ecosystems* of generally similar composition that can be readily differentiated from other such groups by their tree and under-canopy species composition, productivity and/or crown closure.

(Source: Convention on Biological diversity - addition)

Formal and informal worker's organization: an association or union of workers*, whether recognized by law or by *The Organization** or neither, which have the aim of promoting workers' rights and to represent workers* in dealings with *The Organization** particularly regarding working conditions and compensation.



(IGI Glossary)

Free, Prior, and Informed Consent (FPIC): A *legal** condition whereby a person or community can be said to have given consent to an action prior to its commencement, based upon a clear appreciation and understanding of the facts, implications and future consequences of that action, and the possession of all relevant facts at the time when consent is given. *Free, prior and informed consent* *includes the right to grant, modify, withhold or withdraw approval.

(Source: Based on the Preliminary working paper on the principle of Free, Prior and Informed Consent of Indigenous Peoples (...) (E/CN.4/Sub.2/AC.4/2004/4 8 July 2004) of the 22nd Session of the United Nations Commission on Human Rights, Sub-commission on the Promotion and Protection of Human Rights, Working Group on Indigenous Populations, 19–23 July 2004). (IGI Glossary)

Gender equality: Gender equality or gender equity means that women and men have equal conditions for realizing their full human rights and for contributing to, and benefiting from, economic, social, cultural and political development.

(Source: Adapted from FAO, IFAD and ILO workshop on 'Gaps, trends and current research in gender dimensions of agricultural and rural employment: differentiated pathways out of poverty', Rome, 31 March to 2 April 2009.). (IGI Glossary)

Genetically modified organism: An organism in which the genetic material has been altered in a way that does not occur naturally by mating and/or natural recombination.

(Source: Based on FSC-POL-30-602 FSC Interpretation on GMO (Genetically Modified Organisms)). (IGI Glossary)

Genotype: The genetic constitution of an organism.

(Source: FSC-STD-01-001 V5- 0). (IGI Glossary)

Grassland: Land covered with herbaceous plants with less than 10% tree and shrub cover.

(Source: UNEP, cited in FAO. 2002. **Second Expert Meeting on Harmonizing Forest-Related Definitions for use by various stakeholders**). (IGI Glossary)

Habitat: The place or type of site where an organism or population occurs.

(Source: Based on the Convention on Biological Diversity, Article 2). (IGI Glossary)

Habitat features: *Forest** stand attributes and structures, including but not limited to:

- Old commercial and non-commercial trees whose age noticeably exceeds the average
- age of the main canopy;
- Trees with special ecological value;
- Vertical and horizontal complexity;
- Standing dead trees;
- Dead fallen wood;
- Forest openings attributable to natural disturbances;
- Nesting sites;
- Small wetlands, bogs, fens;
- Ponds;
- Areas for procreation;
- Areas for feeding and shelter, including seasonal cycles of breeding;



- Areas for migration;
- Areas for hibernation.

(IGI Glossary)

Harvest Area – A forest area in which harvesting operations have taken place. A harvest area often consists of more than one *cutblock**. *Cutblocks** within a harvest area are usually close enough so that they are planned and implemented as part of the same forestry operation. *Cutblocks** within a harvest area are generally separated by patches or linear stretches of contiguous forest so that there is not an uninterrupted cut area between the *cutblocks**.

(CW addition)

High Conservation Value (HCV): Any of the following values:

HCV1: Species Diversity. Concentrations of *biological diversity** including *endemic species**, and rare, *threatened or endangered** species, that are *significant** at global, regional or national levels.

HCV 2: Landscape-level ecosystems and mosaics. Intact Forest Landscapes, large landscape level *ecosystems** and ecosystem mosaics that are significant at global, regional or national levels, and that contain viable populations of the great majority of the naturally occurring species in natural patterns of distribution and abundance.

HCV 3: Ecosystems and habitats. Rare, threatened, or endangered ecosystems, *habitats** or *refugia**.

HCV 4: Critical ecosystem services. Basic *ecosystem services** in critical situations, including protection of water catchments and control of erosion of vulnerable soils and slopes.

HCV 5: Community needs. Sites and resources fundamental for satisfying the basic necessities of local communities or *Indigenous Peoples** (for example for livelihoods, health, nutrition, water), identified through engagement with these communities or *Indigenous Peoples**.

HCV 6: Cultural values. Sites, resources, habitats and *landscapes** of global or national cultural, archaeological or historical significance, and/or of critical cultural, ecological, economic or religious/sacred importance for the traditional cultures of local communities or *Indigenous Peoples**, identified through engagement with these local communities or *Indigenous Peoples**.

(Source: based on FSC-STD-01-001 V5-0). (IGI Glossary)

High Conservation Value Areas: Zones and physical spaces which possess and/or are needed for the existence and maintenance of identified *High Conservation Values**.

(IGI Glossary)

High grading: High grading is a tree removal practice in which only the best quality, most valuable timber trees are removed, often without regenerating new tree seedlings or removing the remaining poor quality and suppressed understory trees and, in doing so, degrading the ecological health and commercial value of the forest. High grading stands as a counterpoint to sustainable resource management.

(Source: based on Glossary of Forest Management Terms. North Carolina Division of Forest Resources. March 2009). (IGI Glossary)



High Value Residuals: Post harvest snags and live trees which:

- are as large or larger than the typical tree in the *pre-harvest* stand**;
- are wind-firm relative to the characteristics of the site; and
- contain structures (e.g. cavities, crotches) which provide nesting or roosting sites.

(Source P6P9 TEP - addition)

Hydrologic Features: Water-related features visible at the land surface, such as stream channels, lakes, springs, seepage zones and wetlands.

(Source: FSC BC Standard - addition)

Independent Expert: An expert who is not employed by *The Organization** or government and has no apparent conflict of interest.

(Source P6P9 TEP addition)

Indicator: A quantitative or qualitative variable which can be measured or described, and which provides a means of judging whether a *Management Unit** complies with the requirements of an FSC Criterion. Indicators and the associated thresholds thereby define the requirements for responsible forest management at the level of the *Management Unit** and are the primary basis of forest evaluation.

(Source: FSC-STD-01-002 V1-0 FSC Glossary of Terms (2009) (IGI Glossary)

Indigenous Peoples: People and groups of people that can be identified or characterized as follows:

- The key characteristic or Criterion is self-identification as Indigenous Peoples at the individual level and acceptance by the community as their member;
- Historical continuity with pre-colonial and/or pre-settler societies;
- Strong link to territories and surrounding natural resources;
- Distinct social, economic or political systems;
- Distinct language, culture and beliefs;
- Form non-dominant groups of society;
- Resolve to maintain and reproduce their ancestral environments and systems as distinctive peoples and communities.

(Source: Adapted from United Nations Permanent Forum on Indigenous, Factsheet 'Who are Indigenous Peoples' October 2007; United Nations Development Group, 'Guidelines on Indigenous Peoples' Issues' United Nations 2009, United Nations Declaration on the Rights of Indigenous Peoples, 13 September 2007). (IGI Glossary)

Infrastructure: In the context of forest management, roads, bridges, culverts, log landings, quarries, impoundments, buildings and other structures required in the course of implementing the *Management Plan**.

(IGI Glossary)

Intact Forest Landscape: a territory within today's global extent of forest cover which contains forest and non-forest *ecosystems** minimally influenced by human economic activity, with an area of at least 500 km² (50,000 ha) and a minimal width of 10 km (measured as the diameter of

(Source: Intact Forests / Global Forest Watch. Glossary definition as provided on Intact Forest website. 2006-2014). (IGI Glossary)

This definition is pending further discussion related to IFLs*.

Intensity: A measure of the force, severity or strength of a management activity or other occurrence affecting the nature of the activity's impacts.

(Source: FSC-STD-01- 001 V5-0) (IGI Glossary)

Interested stakeholder: Any person, group of persons, or entity that has shown an interest, or is known to have an interest, in the activities of a *Management Unit**. The following are examples of *interested stakeholders**.

- Conservation organizations, for example environmental NGOs;
- Labor (rights) organizations, for example labor unions;
- Human rights organizations, for example social NGOs;
- Local development projects;
- Local governments;
- National government departments functioning in the region;
- FSC National Offices;
- Experts on particular issues, for example High Conservation Values.

(Source: FSC-STD-01-001 V5-0) (IGI Glossary)

Intellectual property: Practices as well as knowledge, innovations and other creations of the mind.

(Source: Based on the Convention on Biological Diversity, Article 8(j); and World Intellectual Property Organization. What is Intellectual Property? WIPO Publication No. 450(E)). (IGI Glossary)

Inter-quartile range: a measure of variability based on dividing a data set into quartiles that defines the middle 50% of values in a distribution.

(Source: Ontario Ministry of Natural Resources 2014)

Intermittent Stream: A stream in contact with the groundwater table that flows only at certain times of year, such as when the groundwater table is high and/or when it receives water from springs or from surface areas. Also known as a seasonal stream.

(Source: FSC Canada National Boreal Standard - addition)

Internationally accepted scientific protocol: A predefined science-based procedure which is either published by an international scientific network or union, or referenced frequently in the international scientific literature.

(Source: FSC-STD-01- 001 V5-0). (IGI Glossary)

Invasive species: Species that are rapidly expanding outside of their native range. Invasive species can alter ecological relationships among native species and can affect *ecosystem function** and human health.

(Source: Based on World Conservation Union (IUCN). Glossary definitions as provided on IUCN website). (IGI Glossary)

IUCN Protected Area Designations: The IUCN recognizes seven protected area designations:

1. Category Ia – Strict Nature Reserves
2. Ib – Wilderness Areas



3. II – National Parks
4. III – National Monument of Feature
5. IV – Habitat/Species Management Area
6. V – Protected Landscape/Seascape
7. VI – Protected Area with Sustainable Use of Natural Resources (Source IUCN 2008)

Lands and territories: For the purposes of the Principles and Criteria these are lands or territories that Indigenous Peoples or local communities have traditionally owned, or customarily used or occupied, and where access to natural resources is vital to the sustainability of their cultures and livelihoods (Source: Based on World Bank safeguard OP 4.10 Indigenous Peoples, section 16 (a). July 2005.). (IGI Glossary)

Landscape: A geographical mosaic composed of interacting ecosystems* resulting from the influence of geological, topographical, soil, climatic, biotic and human interactions in a given area.

(Source: Based on World Conservation Union (IUCN). Glossary definitions as provided on IUCN website). (IGI Glossary)

Landscape values: Landscape values can be visualized as layers of human perceptions overlaid on the physical landscape. Some landscape values, like economic, recreation, subsistence value or visual quality are closely related to physical landscape attributes. Other landscape values such as intrinsic or spiritual value are more symbolic in character and are influenced more by individual perception or social construction than physical landscape attributes.

(Source: Based on website of the Landscape Value Institute) (IGI Glossary)

Legal: In accordance with primary legislation (national or local laws) or secondary legislation (subsidiary regulations, decrees, orders, etc.). 'Legal' also includes rule-based decisions made by legally competent agencies where such decisions flow directly and logically from the laws and regulations. Decisions made by legally competent agencies may not be legal if they do not flow directly and logically from the laws and regulations and if they are not rule-based but use administrative discretion.

(Source: FSC-STD-01-001 V5-0). (IGI Glossary)

Legally competent: Mandated in law to perform a certain function.

(Source: FSC-STD-01-001 V5-0) (IGI Glossary)

Legal registration: National or local *legal** license or set of permissions to operate as an enterprise, with rights to buy and sell products and/or services commercially. The license or permissions can apply to an individual, a privately-owned enterprise or a publicly-owned corporate entity. The rights to buy and sell products and/or services do not carry the obligation to do so, so *legal** registration applies also to Organizations operating a Management Unit without sales of products or services; for example, for unpriced recreation or for conservation of biodiversity or habitat.

(Source: FSC-STD-01-001 V5-0). (IGI Glossary)

Legal status: The way in which the Management Unit is classified according to law. In terms of tenure, it means the category of tenure, such as communal land or leasehold or freehold or State land or government land, etc. If the Management Unit is being converted from one



category to another (for example, from State land to communal indigenous land) the status includes the current position in the transition process. In terms of administration, legal status could mean that the land is owned by the nation as a whole, is administered on behalf of the nation by a government department, and is leased by a government Ministry to a private sector operator through a concession.

(Source: FSC-STD-01-001 V5-0). (IGI Glossary)

Living wage: The remuneration received for a standard work week by a worker in a particular place sufficient to afford a decent standard of living for the worker and her or his family. Elements of a decent standard of living include food, water, housing, education, health care, transport, clothing, and other essential needs including provision for unexpected events.

(Source: A Shared Approach to a Living Wage. ISEAL Living Wage Group. November 2013). (IGI Glossary)

Local communities: (Human) Communities of any size that are in or adjacent to the Management Unit, and also those that are close enough to have a significant impact on the economy or the environmental values of the Management Unit or to have their economies, rights or environments significantly affected by the forest management activities or the biophysical aspects of the Management Unit. A local community in Canada must be a group of people who have identified a formal representative and who represent more than one family unit. (Source: IGI and TEP P4)

Local laws: The whole suite of primary and secondary laws (acts, ordinances, statutes, decrees) which is limited in application to a particular geographic district within a national territory, as well as secondary regulations, and tertiary administrative procedures (rules / requirements) that derive their authority directly and explicitly from these primary and secondary laws. Laws derive authority ultimately from the Westphalian concept of sovereignty of the Nation State.

(Source: FSC-STD-01-001 V5-0). (IGI Glossary)

Long Term: For indicators that refer to long-term or longer-term as a basis for defining when modelled quantitative objectives or targets of indicators should be achieved, the term means the longest modelling horizon of the existing forest management plan. The term is also used in reference to the time-scale of the forest owner or manager as manifested by the objectives of the *Management Plan**, the rate of harvesting, and the commitment to maintain permanent forest cover. The length of time involved will vary according to the context and ecological conditions, and will be a function of how long it takes a given *ecosystem** to recover its natural structure and composition following harvesting or disturbance, or to produce mature or primary conditions.

(Source: P6P9 TEP and FSC-STD-01-002 V1-0 FSC Glossary of Terms (2009) – adaption?)

Management activities: Any or all of the operations, processes or procedures associated with managing a *forest**, including, but not limited to: planning, consultation, harvesting, access construction and maintenance, silvicultural activities (planting, site preparation, tending), monitoring, assessment, and reporting.

(Source: FSC Canada National Boreal Standard 2004 - addition)

Management objective: Specific management goals, practices, outcomes, and approaches established to achieve the requirements of this standard.



(IGI Glossary)

Management Plan: The collection of documents, reports, records and maps that describe, justify and regulate the activities carried out by any manager, staff or organization within or in relation to the Management Unit, including statements of objectives and policies.

(Source: FSC-STD-01-001 V5-0). (IGI Glossary)

Management plan monitoring: Follow up and oversight procedures for the purpose of evaluating the achievement of the *management objectives**. The results of the monitoring activities are utilized in the implementation of *adaptive management**.

(IGI Glossary)

Management Unit: A spatial area or areas submitted for FSC certification with clearly defined boundaries managed to a set of explicit long term management objectives which are expressed in a *management plan**. This area or areas include(s):

- all facilities and area(s) within or adjacent to this spatial area or areas under *legal** title or management control of, or operated by or on behalf of *The Organization*, for the purpose of contributing to the management objectives; and
- all facilities and area(s) outside, and not adjacent to this spatial area or areas and operated by or on behalf of *The Organization**, solely for the purpose of contributing to the management objectives.

(Source: FSC-STD-01-001 V5-0). (IGI Glossary)

Managerial control: Responsibility of the kind defined for corporate directors of commercial enterprises in national commercial law, and treated by FSC as applicable also to public sector organizations.

(Source: FSC-STD-01-001 V5-0). (IGI Glossary)

National laws: The whole suite of primary and secondary laws (acts, ordinances, statutes, decrees), which is applicable to a national territory, as well as secondary regulations, and tertiary administrative procedures (rules / requirements) that derive their authority directly and explicitly from these primary and secondary laws.

(Source: FSC-STD-01-001 V5-0). (IGI Glossary)

Native species: Species, subspecies, or lower taxon, occurring within its natural range (past or present) and dispersal potential (that is, within the range it occupies naturally or could occupy without direct or indirect introduction or care by humans).

(Source: Convention on Biological Diversity (CBD). Invasive Alien Species Programme. Glossary of Terms as provided on CBD website). (IGI Glossary)

Natural conditions/native ecosystem: For the purposes of the Principles and Criteria and any applications of restoration techniques, terms such as 'more natural conditions', 'native ecosystem' provide for managing sites to favor or restore native species and associations of native species that are typical of the locality, and for managing these associations and other environmental values so that they form *ecosystems** typical of the locality. Further guidelines may be provided in FSC Forest Stewardship Standards.

(Source: FSC-STD-01-001 V5-0). (IGI Glossary)



Natural forest: A forest area with many of the principal characteristics and key elements of native ecosystems, such as complexity, structure and biological diversity, including soil characteristics, flora and fauna, in which all or almost all the trees are native species, not classified as plantations.

'Natural forest' includes the following categories:

- Forest affected by harvesting or other disturbances, in which trees are being or have been regenerated by a combination of natural and artificial regeneration with species typical of natural forests in that site, and where many of the above-ground and below-ground characteristics of the natural forest are still present. In boreal and north temperate forests which are naturally composed of only one or few tree species, a combination of natural and artificial regeneration to regenerate forest of the same native species, with most of the principal characteristics and key elements of native ecosystems of that site, is not by itself considered as conversion to plantations;
- Natural forests which are maintained by traditional silvicultural practices including natural or assisted natural regeneration;
- Well-developed secondary or colonizing forest of native species which has regenerated in non-forest areas;
- The definition of 'natural forest' may include areas described as wooded ecosystems, woodland and savannah. The description of natural forests and their principal characteristics and key elements may be further defined in FSC Forest Stewardship Standards, with appropriate descriptions or examples. 'Natural forest' does not include land which is not dominated by trees, was previously not forest, and which does not yet contain many of the characteristics and elements of native ecosystems. Young regeneration may be considered as natural forest after some years of ecological progression. FSC Forest Stewardship Standards may indicate when such areas may be excised from the Management Unit, should be restored towards more natural conditions, or may be converted to other land uses. FSC has not developed quantitative thresholds between different categories of forests in terms of area, density, height, etc. FSC Forest Stewardship Standards may provide such thresholds and other guidelines, with appropriate descriptions or examples. Pending such guidance, areas dominated by trees, mainly of native species, may be considered as natural forest. Thresholds and guidelines may cover areas such as:
- Other vegetation types and non-forest communities and ecosystems included in the Management Unit, including grassland, bushland, wetlands, and open woodlands;
- Very young pioneer or colonizing regeneration in a primary succession on new open sites or abandoned farmland, which does not yet contain many of the principal characteristics and key elements of native ecosystems. This may be considered as natural forest through ecological progression after the passage of years;
- Young natural regeneration growing in natural forest areas may be considered as natural forest, even after logging, clear-felling or other disturbances, since many of the principal characteristics and key elements of native ecosystems remain, above-ground and below-ground;
- Areas where deforestation and forest degradation have been so severe that they are no longer 'dominated by trees' may be considered as non-forest, when they have very few of the principal above-ground and below-ground characteristics and key elements of natural forests. Such extreme degradation is typically the result of combinations of repeated and excessively heavy logging, grazing, farming, fuelwood collection, hunting,



fire, erosion, mining, settlements, infrastructure, etc. FSC Forest Stewardship Standards may help to decide when such areas should be excised from the Management Unit, should be restored towards more natural conditions, or may be converted to other land uses.

(Source: FSC-STD-01-001 V5-0). (IGI Glossary)

Natural Hazards: disturbances that can present risks to social and *environmental values** in the *Management Unit** but that may also comprise important *ecosystem functions**; examples include drought, flood, fire, landslide, storm, avalanche, etc.

(IGI Glossary)

Near Term: For indicators which refer to near-term as a basis for defining when aspects of indicators should be achieved or for the extent of a planning horizon, the term means within the time frame of implementation of operational activities identified in existing management plans. Typically, this is around 5-10 years.

(Source: SAR TEP - addition)

Non-timber forest products (NTFP): All *forest** products other than timber derived from the *Management Unit**.

(Source: FSC-STD-01-001 V5-0). (IGI Glossary)

Objective: The basic purpose laid down by *The Organization** for the forest enterprise, including the decision of policy and the choice of means for attaining the purpose.

(Source: Based on F.C. Osmaston. 1968. *The Management of Forests*. Hafner, New York; and D.R. Johnston, A.J. Grayson and R.T. Bradley. 1967. *Forest Planning*. Faber & Faber, London). (IGI Glossary)

Obligatory code of practice: A manual or handbook or other source of technical instruction which The Organization must implement by law.

(Source: FSC-STD-01- 001 V5-0). (IGI Glossary)

Occupational accident: An occurrence arising out of, or in the course of, work which results in fatal or non-fatal injury.

(Source: International Labour Organization (ILO). Bureau of Library and Information Services. ILO Thesaurus as provided on ILO website). (IGI Glossary)

Occupational disease: Any disease contracted as a result of an exposure to risk factors arising from work activity.

(Source: International Labour Organization (ILO). Bureau of Library and Information Services. ILO Thesaurus as provided on ILO website). (IGI Glossary)

Occupational injuries: Any personal injury, disease or death resulting from an occupational accident.

(Source: International Labour Organization (ILO). Bureau of Library and Information Services. ILO Thesaurus as provided on ILO website). (IGI Glossary)

Old Forest: Later stages in forest development which may be distinctive in composition, but are always distinctive in structure from earlier (young and mature) successional stages.



(Source: FSC Canada National Boreal Standard 2004 - addition)

Organism: Any biological entity capable of replication or of transferring genetic material
(Source: Council Directive 90/220/EEC). (IGI Glossary)

The Organization: The person or entity holding or applying for certification and therefore responsible for demonstrating compliance with the requirements upon which FSC certification is based.

(Source: FSC-STD-01-001 V5-0). (IGI Glossary)

Overlapping tenure holder: A licensee, also known as a third-party licensee, that either:

- holds the right to harvest timber on either all or a defined portion of an area that is licensed to and/or managed by another entity; or
- holds a license for exploitation of another resource (e.g., oil and gas) on a land base also occupied by a timber licensee or managed in part for the production of forest products.

(Source adapted from FSC Canada National Boreal Standard 2004)

Peatland: Is constituted by flooded and soggy areas, with large accumulations of organic material, covered by a layer of poor vegetation associated with a certain degree of acidity, and which presents a characteristic amber color.

(Source: Aguilar, L. 2001. *About Fishermen, Fisherwomen, Oceans and tides*. IUCN. San Jose (Costa Rica)). (IGI Glossary)

Peer review: Review by an *independent expert** on the subject being considered. A key part of the peer-review process is documentation by the forest manager of the manner in which the peer review was considered and incorporated into the products being reviewed.

(Source: Adapted from FSC Canada National Boreal Standard 2004 - adaption)

Pesticide: Any substance or preparation prepared or used in protecting plants or wood or other plant products or human health or livestock or biodiversity from pests; in controlling pests; or in rendering such pests harmless. (This definition includes insecticides, rodenticides, acaricides, molluscicides, larvaecides, fungicides and herbicides).

(Source: FSC-POL-30-001 FSC Pesticides Policy (2005). (IGI Glossary)

Plans for species at risk: In this Standard, these plans are documented strategies and procedures for managing *species at risk** and/or their habitats. Plans can consist of a range of documents including those that have been developed and approved in accordance with federal or provincial legislation, sometimes called "Action Plans" or "Recovery Strategies". Plans can also include documents written by qualified specialists specifically to direct management in the Forest Management Unit and included in Forest Management Plans. Plans written specifically for the Forest Management Unit should not be in conflict with approved Action Plans or Recovery Strategies. Plans written specifically for the Management Unit are not intended to replicate the detail and scope of Action Plans or Recovery Strategies, but simply to outline the ways in which the manager is taking a precautionary approach to mitigating the impact of its activities on the species and/or allowing for its recovery. Measures may involve habitat protection, *conservation zones**, seasonal closures, etc. They will not necessarily require a stand-alone plan or strategy for each species, and may be reflected in measures to implement other requirements of this Standard.

(Source: Adapted from FSC Canada National Boreal Standard - adaption)



Plantation: A forest area established by planting or sowing with using either alien or native species, often with one or few species, regular spacing and even ages, and which lacks most of the principal characteristics and key elements of natural forests. The description of plantations may be further defined in FSC Forest Stewardship Standards, with appropriate descriptions or examples, such as:

- Areas which would initially have complied with this definition of 'plantation' but which, after the passage of years, contain many or most of the principal characteristics and key elements of native ecosystems, may be classified as natural forests. Plantations managed to restore and enhance biological and habitat diversity, structural complexity and ecosystem functionality may, after the passage of years, be classified as natural forests.
- Boreal and north temperate forests which are naturally composed of only one or few tree species, in which a combination of natural and artificial regeneration is used to regenerate forest of the same native species, with most of the principal characteristics and key elements of native ecosystems of that site, may be considered as natural forest, and this regeneration is not by itself considered as conversion to plantations.

(Source: FSC-STD-01-001 V5-0) (IGI Glossary)

Precautionary approach: An approach requiring that when the available information indicates that management activities pose a threat of severe or irreversible damage to the environment or a threat to human welfare, *The Organization** will take explicit and effective measures to prevent the damage and avoid the risks to welfare, even when the scientific information is incomplete or inconclusive, and when the vulnerability and sensitivity of environmental values are uncertain.

(Source: Based on Principle 15 of Rio Declaration on Environment and Development, 1992, and Wingspread Statement on the Precautionary Principle of the Wingspread Conference, 23–25 January 1998). (IGI Glossary)

Pre-harvest [condition]: The diversity, composition, and structure of the *forest** or *plantation** prior to felling timber and appurtenant activities such as road building.

Principle: An essential rule or element; in FSC's case, of forest stewardship.

(Source: FSC-STD-01-001 V4-0). (IGI Glossary)

Protected area: An area protected by legislation, regulation, or government land-use policy to permanently control human occupancy or activity. Although protection can be of many different forms, it most often excludes industrial activities. The International Union for the Conservation of Nature (IUCN) identified six main categories of protected areas. See Appendix X for definitions of the IUCN protected area categories.

(Source: Adapted from FSC Canada National Boreal Standard 2004 - addition)

Protection Areas: Areas that are managed by the *Organization** primarily to safeguard species, *habitats**, *ecosystems**, natural features or other site-specific values because of their natural environmental or cultural values. Harvesting and road building generally do not occur in protection areas, except where used as part of a restoration plan (e.g. fuel reduction in association with controlled burning in fire-maintained ecosystems), or to meet the conservation objectives for specific reserves, or for the purposes of monitoring, evaluation or research. The term '*protected area**' is not used for these areas, because that term (i.e. protected area)



implies legal or official status, covered by national or provincial regulations. In the context of the Principles and Criteria, management of these areas (i.e. protection areas) may involve active conservation, not passive protection’.

(Source: adapted from FSC 2011 and FSC Canada BC Standard 2005).

Publicly available: In a manner accessible to or observable by people generally.

(Source: Collins English Dictionary, 2003 Edition). (IGI Glossary)

Qualified specialist(s): Individuals whose expertise qualifies them to carry out work (e.g. assessments, design of management practices, etc.) required by the FSC Canadian National Standard, taking into account the following:

- professional ethics and independence;
- accountability;
- experience;
- training;
- formal qualifications;
- familiarity with the FSC Canadian National Standard.
- familiarity with the ecosystem condition and/or cultural/social/Indigenous factors relevant to the management unit.

(Source: B.C. Regional Standard 2005 - addition)

Range of Natural Variation (RONV) – The range of dynamic change in natural *ecosystems** taking into account all natural factors that affect the breadth of *ecosystem** condition.

(Source: Adapted from FSC Canada BC Standard 2005 –adaption).

Rare species: FSC (2014) defines rare species as “Species that are uncommon or scarce but not classified as threatened. These species are located in geographically restricted areas or specific habitats, or are scantily scattered on a large scale. They are approximately equivalent to the IUCN (2001) category of Near Threatened (NT), including species that are close to qualifying for, or are likely to qualify for, a threatened category in the near future. They are also approximately equivalent to imperilled species.

(Source: Based on IUCN. (2001). IUCN Red List Categories and Criteria: Version 3.1. IUCN Species Survival Commission. IUCN. Gland, Switzerland and Cambridge, UK. Adaption CW

Ratified: The process by which an international law, convention or agreement (including multilateral environmental agreement) is legally approved by a national legislature or equivalent *legal** mechanism, such that the international law, convention or agreement becomes automatically part of national law or sets in motion the development of national law to give the same *legal** effect.

(Source: FSC-STD-01-001 V5-0). (IGI Glossary)

Reasonable: Judged to be fair or appropriate to the circumstances or purposes, based on general experience.

(Source: Shorter Oxford English Dictionary). (IGI Glossary)

Recharge areas- Areas in which groundwater recharge occurs – where water moves downward from the surface to groundwater. An area in which water reaches the zone of saturation by surface infiltration.



(Heath, 1984 - addition)

Reduced impact harvesting: Harvesting (or logging) using techniques to reduce the impact on the residual stand.

(Source: Based on Guidelines for the Conservation and Sustainable Use of Biodiversity in Tropical Timber Production Forests, IUCN 2006). (IGI Glossary)

Refugia: An isolated area where extensive changes, typically due to changing climate or by disturbances such as those caused by humans, have not occurred and where plants and animals typical of a region may survive.

(Source: Glen Canyon Dam, Adaptive Management Program Glossary as provided on website of Glen Canyon Dam website). (IGI Glossary)

Relevant Workers: workers assigned to carry out specialized activities in the workplace. (SDG addition)

Representative Sample Areas: Portions of the *Management Unit** delineated for the purpose of conserving or restoring viable examples of an *ecosystem** that would naturally occur in that geographical region.

(IGI Glossary)

Residual structure - Elements such as living trees (individuals or patches), snags, cavity trees, downed woody debris and plants, that are left behind following a harvest operation to maintain the biological legacies of the stand.

(Source: FSC Canada National Boreal Standard 2004 - addition)

Resilience: The ability of a system to maintain key functions and processes in the face of stresses or pressures by either resisting or adapting to change. Resilience can be applied to both ecological systems and social systems.

(Source: IUCN World Commission on Protected Areas (IUCN-WCPA). 2008. Establishing Marine

Protected Area Networks – Making it Happen. Washington D.C.: IUCN-WCPA National Oceanic and Atmospheric Administration and The Nature Conservancy.). (IGI Glossary)

Restore / Restoration: These words are used in different senses according to the context and in everyday speech. In some cases 'restore' means to repair the damage done to environmental values that resulted from *management activities** or other causes. In other cases 'restore' means the formation of more natural conditions in sites which have been heavily degraded or converted to other land uses. In the Principles and Criteria, the word 'restore' is not used to imply the recreation of any particular previous, pre-historic, pre-industrial or other pre-existing *ecosystem**.

(Source: FSC-STD-01-001 V5-0).

*The Organization** is not necessarily obliged to restore those *environmental values** that have been affected by factors beyond the control of *The Organization**, for example by natural disasters, by climate change, or by the legally authorized activities of third parties, such as public *infrastructure**, mining, hunting or settlement. FSC-POL-20-003 *The Excision of Areas from the Scope of Certification* describes the processes by which such areas may be excised from the



area certified, when appropriate.

*The Organization** is also not obliged to restore *environmental values** that may have existed at some time in the historic or pre-historic past, or that have been negatively affected by previous owners or organizations. However, *The Organization** is expected to take *reasonable** measures to mitigate, control and prevent environmental degradation which is continuing in the *Management Unit** as a result of such previous impacts.

(IGI Glossary)

Riparian zone: Interface between land and a water body, and the vegetation associated with it.

(IGI Glossary)

Risk: The probability of an unacceptable negative impact arising from any activity in the *Management Unit** combined with its seriousness in terms of consequences.

(Source: FSC-STD-01-001 V5-0). (IGI Glossary)

Road: a constructed linear feature capable of supporting use by a pickup truck.

(Source: P6P9 TEP addition)

Scale: A measure of the extent to which a management activity or event affects an environmental value or a management unit, in time or space. An activity with a small or low spatial scale affects only a small proportion of the forest each year, an activity with a small or low temporal scale occurs only at long intervals.

(Source: FSC-STD- 01-001 V5-0). (IGI Glossary)

Scale, intensity and risk: See individual definitions of the terms 'scale', 'intensity', and 'risk'.

(IGI Glossary)

Significant: For the purposes of Principle 9, HCVs 1, 2 and 6 there are three main forms of recognizing significance.

- A designation, classification or recognized conservation status, assigned by an international agency such as IUCN or Birdlife International;
- A designation by national or regional authorities, or by a responsible national conservation organization, on the basis of its concentration of biodiversity;
- A voluntary recognition by the manager, owner or *Organization**, on the basis of available information, or of the known or suspected presence of a significant biodiversity concentration, even when not officially designated by other agencies.

Any one of these forms will justify designation as HCVs 1, 2 and 6. Many regions of the world have received recognition for their biodiversity importance, measured in many different ways. Existing maps and classifications of priority areas for biodiversity conservation play an essential role in identifying the potential presence of HCVs 1, 2 and 6.

(Source: FSC-STD-01-001 V5-0). (IGI Glossary)

Silviculture: The art and science of controlling the establishment, growth, composition, health and quality of *forests** and woodlands to meet the targeted diverse needs and values of landowners and society on a sustainable basis.



(Source: Nieuwenhuis, M. 2000. Terminology of Forest Management. IUFRO World Series Vol. 9. IUFRO 4.04.07 SilvaPlan and SilvaVoc). (IGI Glossary)

Species at Risk: All species or subspecies or designated populations formally listed in schedules referenced in federal or provincial endangered species/SAR legislation or provincial wildlife/biodiversity legislation that have been classified as Endangered, Threatened, Vulnerable, Special Concern or similar designations. For the purpose of this Standard the term "species at risk" also includes all species that have been assessed as 'at risk' designation by bodies formally recognized in federal or provincial endangered species legislation (e.g. the Committee on the Status of Endangered Wildlife in Canada – COSEWIC, plus equivalent provincial bodies).

(Addition)

Sphere of Influence: Professional associations with colleagues or businesses or agencies with whom individuals or businesses or agencies interact. When required by indicators to work within one's Sphere of Influence, *The Organizations** and forest managers should interact with their colleagues, other professionals, businesses and agencies (including government Ministries, Departments and other agencies) to achieve the indicators' objectives.

(Source: SAR/Caribou TEP addition)

Stakeholder: See definitions for 'affected stakeholder' and 'interested stakeholder'. (IGI Glossary)

Stand: A community of trees possessing sufficient uniformity in composition, constitution, age, arrangement or condition to be distinguishable from adjacent communities.

(Source: FSC Canada National Boreal Standard 2004 - addition)

Statutory law or statute law: The body of law contained in Acts of Parliament (national legislature).

(Source: Oxford Dictionary of Law). (IGI Glossary)

Tenure: Socially defined agreements held by individuals or groups, recognized by *legal** statutes or customary practice, regarding the 'bundle of rights and duties' of ownership, holding, access and/or usage of a particular land unit or the associated resources there within (such as individual trees, plant species, water, minerals, etc.).

(Source: World Conservation Union (IUCN). Glossary definitions provided on IUCN website). (IGI Glossary)

Threat: An indication or warning of impending or likely damage or negative impacts.

(Source: Based on Oxford English Dictionary). (IGI Glossary)

Threatened species: FSC defines threatened species as "Species that meet the IUCN (2001) criteria for Vulnerable (VU), Endangered (EN) or Critically Endangered (CR), and are facing a high, very high or extremely high risk of extinction in the wild. These categories may be reinterpreted for FSC purposes according to official national classifications (which have legal significance) and to local conditions and population densities (which should affect decisions about appropriate conservation measures).

(Source: Based on IUCN. (2001). IUCN Red List Categories and Criteria: Version 3.1. IUCN Species Survival Commission. IUCN. Gland, Switzerland and Cambridge, UK.)" Adaption CW

In this Standard, the phrase 'threatened species' is rooted in *Criterion** 6.4 which deals with both 'rare' and 'threatened' species. In a Canadian context, the term which most clearly embodies the categorization of species whose survival is of concern is 'species at risk' and so that term is used throughout the Standard's indicators rather than either 'rare' or 'threatened'. 'Species at Risk' is defined separately in this Glossary.

Timber harvesting level: The actual harvest quantity executed on the *Management Unit**, tracked by either volume (e.g. cubic meters or board feet) or area (e.g. hectares or acres) metrics for the purpose of comparison with calculated (maximum) allowable harvest levels. (IGI Glossary)

Timely manner: As promptly as circumstances reasonably allow; not intentionally postponed by *The Organization**; in compliance with applicable laws, contracts, licenses or invoices. (IGI Glossary)

Traditional Knowledge: Information, know-how, skills and practices that are developed, sustained and passed on from generation to generation within a community, often forming part of its cultural or spiritual identity. (Source: based on the definition by the World Intellectual Property Organization (WIPO). Glossary definition as provided under Policy / Traditional Knowledge on the WIPO website). (IGI Glossary)

Traditional peoples: Traditional peoples are social groups or peoples who do not self-identify as indigenous and who affirm rights to their lands, *forests** and other resources based on long established custom or traditional occupation and use. (Source: Forest Peoples Programme (Marcus Colchester, 7 October 2009)). (IGI Glossary)

Uphold: To acknowledge, respect, sustain and support. (Source: FSC-STD-01-001 V5-0). (IGI Glossary)

Use rights: Rights for the use of resources of the *Management Unit** that can be defined by local custom, mutual agreements, or prescribed by other entities holding access rights. These rights may restrict the use of particular resources to specific levels of consumption or particular harvesting techniques. (Source: FSC-STD-01-001 V5-0). (IGI Glossary)

Verifiable targets: Specific statement, describing a desired future state or condition of an indicator, established to measure progress towards the achievement of each of the *management objectives**. They are expressed as clear outcomes, such that their attainment can be verified and it is possible to determine whether they have been accomplished or not. (IGI Glossary)

Very Limited portion: The area affected *shall** not exceed 0.5% of the area of the *Management Unit** in any one year, nor affect a total of more than 5% of the area of the *Management Unit** (Source: based on FSC-STD-01-002 V1-0 FSC Glossary of Terms (2009)). (IGI Glossary)

Waste materials: unusable or unwanted substances or by-products, such as:

- Hazardous waste, including chemical waste and batteries;
- Containers;
- Motor and other fuels and oils;



- Rubbish including metals, plastics and paper; and
- Abandoned buildings, machinery and equipment.

(IGI Glossary)

Water bodies (including water courses): Seasonal, temporary, and permanent brooks, creeks, streams, rivers, ponds, and lakes. Water bodies include riparian or wetland systems, lakes, swamps, bogs and springs.

(IGI Glossary)

Water scarcity: A water supply that limits food production, human health, and economic development. Severe scarcity is taken to be equivalent to 1,000 cubic meters per year per person or greater than 40% use relative to supply.

(Source: **Millennium Ecosystem Assessment. 2005. Ecosystems and Human Well-Being: Policy Responses. Findings of the Responses Working Group. Washington DC: Island Press, Pages 599-605.**) (IGI Glossary)

Water stress: Occurs when the demand for water exceeds the available amount during a certain period or when poor quality restricts its use. Water stress causes deterioration of freshwater resources in terms of quantity (aquifer over-exploitation, dry rivers, etc.) and quality (eutrophication, organic matter pollution, saline intrusion, etc.).

(Source: **UNEP, 2003, cited in Gold Standard Foundation. 2014. Water Benefits Standard.**) (IGI Glossary)

Wetlands: Transitional areas between terrestrial and aquatic systems in which the water table is usually at or near the surface or the land is covered by shallow water.

(Source: **Cowardin, L.M., Carter, V., Golet, F.C., Laroe, E.T. 1979. Classification of Wetlands and Deepwater Habitats of the United States. DC US Department: Washington.**) (IGI Glossary)

Under the Ramsar Convention, wetlands can include tidal mudflats, natural ponds, marshes, potholes, wet meadows, bogs, peatlands, freshwater swamps, mangroves, lakes, rivers and even some coral reefs.

(Source: **IUCN, No Date, IUCN Definitions – English.**) (IGI Glossary)

Workers: All employed persons including public employees as well as 'self-employed' persons. This includes part-time and seasonal employees, of all ranks and categories, including laborers, administrators, supervisors, executives, contractor employees as well as self-employed contractors and sub-contractors.

(Source: **ILO Convention C155 Occupational Safety and Health Convention, 1981.**) (IGI Glossary)



PRELIMINARY REFERENCE LIST

This is a working draft of the Reference list.

Documents Cited

Armson, K.A.; Grinnell, W.R.; Robinson, F.C. 2001. History of reforestation in Ontario. In *Regenerating the Canadian Forest: Principles and Practice for Ontario*, R.G. Wagner and S.J. Colombo (eds.). Fizhenry & Whitside, Markham, Ontario: 3-22.

British Columbia Ministry of the Environment. 2015. Guidelines and Best Management Practices (BMPs). <http://www.env.gov.bc.ca/wld/BMP/bmpintro.html>

Business Dictionary. 2015. *best management practice (BMP)*
<http://www.businessdictionary.com/definition/best-management-practice-BMP.html>

Comeau, P. 2014. Effects of aerial strip spraying on mixed-wood stand structure and tree growth. *The Forestry Chronicle*. 90.4: 479-485.

Environment Canada. 2008. Scientific Review for the Identification of Critical Habitat for Woodland Caribou (*Rangifer tarandus caribou*), Boreal Population, in Canada. Ottawa, Ontario, Canada.

Environment Canada, 2011. Scientific Assessment to Inform the Identification of Critical Habitat for Woodland Caribou (*Rangifer tarandus caribou*), Boreal Population in Canada: 2011 update. Ottawa, Ontario, Canada.

Environment Canada. 2012. Recovery Strategy for the Woodland Caribou (*Rangifer tarandus caribou*), Boreal population, in Canada. Species at Risk Act Recovery Strategy Series. Environment Canada, Ottawa.

Environment Canada. 2014. Recovery Strategy for the Woodland Caribou, Southern Mountain population (*Rangifertarandus caribou*) in Canada [Proposed]. Species at Risk Act Recovery Strategy Series. Environment Canada, Ottawa, Ontario, Canada.

FAO (Food and Agriculture Organization). 2012. Environmental impact assessment, guidelines for FAO field projects. Food and agriculture organization of the United Nations: Rome.

FAO Food and Agriculture Organization of the United Nations). 2002. *Proceedings: Expert Meeting on Harmonizing forest-related definitions for use by various stakeholders*. Rome, 22-25 Jan. 2002. <http://www.fao.org/docrep/005/Y4171E/Y4171E34.htm>

Grumbine, R.E. 1993. *Ghost Bears: Exploring the Biodiversity Crisis*. Island Press. Washington D.C.



Heath, R.C., 1984. *Ground-water regions of the United States*. U.S. Geological Survey Water-Supply Paper 2242. U.S. Department of the Interior, U.S. Geological Survey.
<http://pubs.usgs.gov/wsp/wsp2242/#pdf>

Homagain, K., Shahi, C., Luckai, N., Leitch, M. F., and Bell, M. 2011. Benefit-cost Analysis of Vegetation Management Alternatives: An Ontario Case Study. *The Forestry Chronicle*. 87.2: 260-273.

IUCN (International Union for the Conservation of Nature). 2008. *Guidelines for Applying Protected Area Management Categories*. N. Dudley, (ed.). Gland, Switzerland.

Lund, H.G. 2002. Definitions of Old Growth, Pristine, Climax, Ancient Forests and Similar Terms (Definitions of Forest State, Stage and Origin). Forest Information Services.
<http://www.grida.no/geo/GEO/Geo-2-408.htm>

OMNR (Ontario Ministry of Natural Resources). 1986. Survey of artificial regeneration in northern Ontario: Summary report for Northwestern, North Central and Northern Regions, based on field sampling, 1984- 1986. Ministry of Natural Resources files (cited by Armson et al. 2001).

OMNR (Ontario Ministry of Natural Resources). 1988. Survey of artificial regeneration in northern Ontario: Summary report for Northeastern and Algonquin regions, based on field sampling, 1987-1988. Ministry of Natural Resources files (cited by Armson et al. 2001)

OMNR 2014. *Forest Management Guide for Boreal Landscapes*. Published by Ontario Ministry of Natural Resources.

Thifault, N. & Roy, V. 2011. Living without herbicides in Québec (Canada): historical context, current strategy, research and challenges in forest vegetation management. *European journal of forest research*. 130.1: 117-133.

Thiffault, N., Roy, V., Prigent, G., Cyr, G., Jobidon, R et Ménétrier, J.. 2003. La sylviculture des plantations résineuses au Québec. *Le naturaliste canadien*. 127.1: 63-80.

Wikeem, B. and Miller., V. 2006. *Invasive Plants in British Columbia Protected Lands: A Strategic Plan*. British Columbia Ministry of Environment.

Relevant FSC Documents

The following referenced documents are relevant for the application of this document. For references without a version number, the latest edition of the referenced document (including any amendments) applies.

FSC-STD-01-004 International Generic Indicators: Final Draft
FSC-STD-01-005 FSC Dispute Resolution System
FSC-DIR-20-007 FSC Directive on FSC Forest Management Evaluations
FSC-POL-01-004 Policy for the Association of Organizations with FSC
FSC-POL-20-003 The Excision of Areas from the Scope of Certification



FSC-POL-30-001 FSC Pesticides Policy
FSC-POL-30-401 FSC Certification and the ILO Conventions
FSC-POL-30-602 FSC Interpretation on GMOs (Genetically Modified Organisms)
FSC-PRO-01-001 The Development and Revision of FSC Normative Documents
FSC-PRO-01-005 Processing Appeals
FSC-PRO-01-008 Processing Complaints in the FSC Certification Scheme
FSC-PRO-01-009 Processing Policy for Association Complaints in the FSC Certification Scheme
FSC-PRO-60-006 Development and Transfer of NFSS to FSC P&C V5-1
FSC-STD-01-001 FSC Principles and Criteria for Forest Stewardship
FSC-STD-01-002 FSC Glossary of Terms
FSC-STD-01-003 SLIMF Eligibility Criteria
FSC-STD-30-005 FSC Standard for Group Entities in Forest Management Groups
FSC-STD-60-002 Structure and Content of National Forest Stewardship Standards
FSC-STD-60-006 Process requirements for the development and maintenance of National Forest Stewardship Standards
FSC-GUI-60-002 SIR Guideline for Standard Developers