

Forest Stewardship Council®



The FSC Forest Stewardship Standard for New Zealand

FSC-STD-NZL-02.1-2023 Plantations EN



Standard

Photo Credit

From Left to Right:

Photo 1. Two people walking in forest (Craig Kenney, FSC New Zealand).

Photo 2. Pine sapling (Craig Kenney, FSC New Zealand).

Photo 3. Lake beach surrounded by forest (Craig Kenney, FSC New Zealand).

NOTE ON THIS ENGLISH VERSION:

This is the official version of the FSC Forest Stewardship Standard that is approved by FSC International Center, and it is available at ic.fsc.org. Any translation of this version is not an official translation approved by FSC International Center. If there is any conflict or inconsistency between the approved English version and any translated version, the English version shall prevail.

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¹ The transition period is the timeline in which there is a parallel phase-in of the new version and phase-out of the old version of the standard. Six (6) months after the end of the transition period, certificates issued against the old version are considered invalid.

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A Preface

(Informative section)

A.1 Descriptive statement of the Forest Stewardship Council (FSC)

The Forest Stewardship Council A.C. (FSC) was established in 1993, as a follow-up to the United Nations Conference on Environment and Development (the Earth Summit at Rio de Janeiro, 1992) with the mission to promote environmentally appropriate, socially beneficial, and economically viable management of the world's forests.

Environmentally appropriate Forest management ensures that the production of timber, non-timber products and ecosystem services maintains the forest's biodiversity, productivity, and ecological processes. Socially beneficial forest management helps both local people and society at large to enjoy long term benefits and also provides strong incentives to local people to sustain the forest resources and adhere to long-term management plans. Economically viable forest management means that forest operations are structured and managed so as to be sufficiently profitable, without generating financial profit at the expense of the forest resource, the ecosystem, or affected communities. The tension between the need to generate adequate financial returns and the principles of responsible forest operations can be reduced through efforts to market the full range of forest products and services for their best value (FSC A.C. By-Laws, ratified, September 1994; last revision in June 2011).

FSC is an international organization that provides a system for voluntary accreditation and independent third-party certification. This system allows certificate holders to market their products and services as the result of environmentally appropriate, socially beneficial, and economically viable forest management. FSC also sets standards for the development and approval of FSC Stewardship Standards which are based on the FSC Principles and Criteria. In addition, FSC sets standards for the accreditation of Conformity Assessment Bodies (also known as Certification Bodies) that certify compliance with FSC's standards. Based on these standards, FSC provides a system for certification for organizations seeking to market their products as FSC certified.

A.2 Descriptive statement of the National Office and Standard Development Group

The FSC National Office consists of a single team member. This team member's role is to oversee the growth, development and advocacy of the FSC brand in New Zealand.

The New Zealand Standard Development Group (SDG) is typical of an FSC SDG except that it represents 4 chambers (instead of the standard 3 chambers). These chambers include an Economic Chamber, an Environmental Chamber, a Social Chamber, and a Māori Chamber. The Māori Chamber exists to represent the significant role Māori (the indigenous peoples of New Zealand) play in the stewardship of New Zealand forests, water ways, lakes and other natural and cultural values. Three chambers of the SDG are comprised of 2 representatives each (Economic, Environmental and Māori), and the Social Chamber, due to its diversity, has 3 representatives (with the voting rights of 2).

To ensure a balanced approach, an independent facilitator was engaged. The SDG has made its decisions by consensus, defined as general agreement in favour of a proposal, plus the absence of a sustained objection to the proposal.

A.3 The New Zealand Standard Development Group

Chair: Craig Kenney (FSC New Zealand)

Chamber	Representative
Economic	Colin Maunder (Coordinator) [General Manager - Sustainability at Timberlands Ltd]
	Brett Gilmore [Environmental and Technical Advisor at Pan Pac Forest Products Ltd 2007 - 2017, Director at Brett Gilmore Consulting Ltd
	-Present]
	Sally Strang (Alternate) [Environmental Manager at Manulife Investment Management Forest Management (NZ) Ltd]
Environmental	Bill Gilbertson Campaigner- Environmental Conservation Organisations of Aotearoa New Zealand Convenor Environment Chamber
	Meg Graeme [Principal Ecologist at Natural Solution]
	Kevin Hackwell (Alternate) [Chief Conservation Advisor (previously: Group Manager Campaigns and Advocacy) at Royal Forest & Bird Protection Society]
Maori	George Asher [CEO at Lake Taupo Forest Trust]
Social	Hugh Barr [Secretary at Council of Outdoor Recreation Associations]
	Rhys Millar [Managing Director at Ahika Consulting]
	Ed Miller, replaced by Robert Reid [President at First Union]
	Louisa Jones (Alternates) [NZ First Union]

Table 1: Technical Experts

Name	Expertise	List of documents (ToR, work plan, documents produced)
Geoff Cameron	Former auditor	Draft Standard version 1.9
Katie Rhodes	Editing reviewer	Draft Standard version 2.4

A.4 Background information on the standard development

The development process involved the adaptation of FSC International Generic

Indicators (IGI's) to the FSC Forest Stewardship Standard (FSC-STD-NZL-02-2023). The National Standard for Certification of Plantation Forest Management in New Zealand, Approved Version 5.7 FSC Code: FSC-STD-NZL-01-2012 New Zealand plantations EN (effective date: 27th September 2013) was also used as a basis for this process.

The SDG initially used a matrix where each of the IGI's was used as the starting point and then compared with relevant indicators from the current NZ standard. The SDG followed the approach in FSC-PRO-60-006 V2-0 EN Development and Transfer of National Forest Stewardship Standards to the FSC Principles and Criteria Version 5-1. Where the IGI was not suitable for New Zealand, the SDG either adapted, replaced, or deleted the indicator (in order of preference). In some cases where the IGI's were not considered adequate or appropriate, New Zealand-specific indicators were added.

The key phases/components of development were:

- Eighteen face-to-face meetings of the SDG
- Two SDG sub-group meetings on high-risk erosion areas.
- Three SDG sub-group meetings on riparian management including two field visits.
- In between meetings the SDG members used e-mail and telephone to further refine the draft standard.
- A review by a former FSC auditor.
- Two reviews by a professional editor.

A.5 Draft vVersion history of the standard

<u>Version</u>	Description	Final approval date
<u>V1.0</u>	The FSC National Standard for Certification of Plantation Forest Management in New Zealand (FSC-STD-NZL-01- 2012) conditionally approved by the Policy and Stand- ards Committee at their 11th meeting on 30th October 2012 and finally approved by the Performance and Standards Unit (Policy and Standards Unit at that time) in June 2013	-
<u>V2.0</u>	The FSC Forest Stewardship Standard for New Zealand (FSC-STD-NZL-02-2023 plantations), conditionally ap- proved by the Policy and Standards Committee at their 47th meeting on 20th August 2021 and finally approved by the Performance and Standards Unit on 31st March 2022	31/03/2022
<u>V2.1</u>	Editorial corrections in Criteria 4.6 and 7.6 approved by the Performance and Standards Unit on 6th January 2025	<u>06/01/2025</u>

This standard (FSC-STD-NZL-02.1-2023) is subject to the review and revision requirements as described in FSC-STD-60-006 (V1-2) EN.

Version 1.0 of the standard f2013 The initial versions were created in a matrix that compared each of FSC's IGI's to the current NZ standard (National Standard for Certification of Plantation Forest Management in New Zealand, Approved Version 5.7 FSC Code: FSC-STD-NZL-01-2012 New Zealand plantations EN). A final version of the matrix is available with the consultation documentation and also provides a brief rationale where the SDG has proposed different wording from the FSC IGI. After three matrix versions, the SDG developed word versions.

Due to the breadth and nature of submissions and the amendments that followed, the SDG decided a second consultation was necessary.

Version 2.1 of the standard was, including editorial corrections to Criteria 4.6 and 7.6

B Preamble

B.1 Purpose of the standard

(Informative section)

This standard sets out the required elements against which FSC accredited Certification Bodies shall evaluate forest plantation management practices in New Zealand within the scope (see 2.2. below) of the standard.

The FSC Principles and Criteria (P&C) for Forest Stewardship provides an internationally recognised standard for responsible forest management. However, any international standard for forest management needs adapting at the regional or national level to reflect the diverse legal, social and geographical conditions of forests in different parts of the world. The FSC P&C, therefore, requires the addition of indicators adapted to regional or national conditions implemented at the management unit (MU) level.

With the approval of FSC-STD-60-004 V1-0 EN the FSC International Generic Indicators (IGI) by the FSC Board of Directors in March 2015, the adaptation of the P&C to regional or national conditions is done using the IGI Standard and the FSC-STD-NZL-01-2012 New Zealand plantations EN as the starting point. This has the advantage to:

- Ensure the consistent implementation of the P&C across the globe;
- Improve and strengthen the credibility of the FSC System;
- Improve the consistency and quality of Forest Stewardship Standards;
- Support a faster and more efficient approval process of Forest Stewardship Standards.

The FSC Principles and Criteria together with the IGIs provide the basis for the development of locally adapted FSS. The FSC Principles and Criteria together with a set of indicators approved by FSC Policy and Standards Committee (PSC) constitute an FSC Forest Stewardship Standard (FSS).

The development of FSS follows the requirements set out in the following FSC normative documents:

- FSC-PRO-60-006 V2-0 EN Development and Transfer of National Forest Stewardship Standards to the FSC Principles and Criteria Version 5-1;
- FSC-STD-60-002 (V1-0) EN Structure and Content of National Forest Stewardship Standards;
- FSC-STD-60-006 (V1-2) EN Process requirements for the development and maintenance of National Forest Stewardship Standards.

The above documents have been developed by the FSC Performance and Standards Unit (PSU) to improve consistency and transparency in certification decisions between various Certification Bodies in a region/nation and different parts of the world, and thereby to enhance the credibility of the FSC certification scheme.

B.2 Scope of the standard

(Normative section)

Geographic region	New Zealand
Forest types	Plantations
Ownership types	All types of ownerships, including public, private and community
Scale and intensity categories	All categories of management units, including provisions for small MUs
(according to Section 6 of FSC-STD-60-002)	(see section E of the standard for further details)
Forest products (according to FSC-STD-40- 004a)	Rough wood (including logs), bark, chip, sawdust and other plantation tree products. NTFP <i>(see the list below in this section)</i>

FSC certification of NTFP requires that the rest of this standard has also to be complied with, proportional to the scale and intensity of management activities. In case of intention to certify NTFP not included in this list, these products have to be included into the standard and relevant additional indicators developed, if necessary. The following is the list of NTFP that can be certified within the framework of this standard:

- 1. Animal products: Fur, meat, and other products from non-pest species. Note: Products from pest species are subject to requirements of pest control indicators which focuses on ecological sustainability, not sustainability of the pest species.
- **2. Leaves:** Oils and extracts from manuka, radiata pine, or other plantation species.
- **3. Bee Products:** Honey and other extracts produced by bees.

Where "NTFP" is designated, the indicators are mandatory when NTFP are harvested for commercial purpose (whether FSC-certified or not).

B.3 Responsibility for conformity

(Normative section)

The requirements in this standard cover all of The Organization's management activities that are related to the Management Unit, whether within the Management Unit or outside; whether directly undertaken or contracted out.

In terms of geographical space, the requirements in this standard apply generally to the entire geographic space inside the boundary of the Management Unit which is being submitted for (re)certification. However, some of the Criteria and indicators apply beyond the boundary of the Management Unit. This would include those infrastructural facilities that are part of the Management Unit, as defined by the FSC Principles and Criteria.

This standard is to be used in conjunction with international, national and local laws and regulations.

Where there might be situations of conflict between the requirements in this standard and laws, specific FSC procedures will apply.

Responsibility for ensuring conformity with the requirements in this standard lies with the person(s) or entities that is/are the certificate applicant or holder. For the purpose of FSC certification, this person(s) or entities are referred to as 'The Organization'.

The Organization is responsible for decisions, policies and management activities related to the Management Unit.

The Organization is also responsible for demonstrating that other persons or entities that are permitted or contracted by The Organization to operate in, or for the benefit of the Management Unit, conform with the requirements in this standard.

The Organization is required to take corrective actions in the event of such persons or entities not being in conformity with the requirements in this standard.

C Context

(Informative section)

New Zealand's forests cover 38% of the country's total land area. According to recent satellite imagery and reported in New Zealand's Third Country Report to the Montreal Process (MPI, 2015), the total forest area in NZ is about 10.1 million ha. This figure is broken into 8 million hectares of indigenous forests (6.833 million ha of "tall indigenous forest"; 1.234 million ha of "regenerating indigenous forest") and 2.1 million ha of exotic or plantation forest of which 1.7 million ha are considered productive. The remaining 400 thousand hectares consists of reserves or unplanted areas near water bodies and infrastructure. Thus, indigenous forests cover about 30% of the country's total land area, and exotic plantation forests cover 7.8%.

C.1 Exotic forest plantations

There are 22 FSC certified exotic plantations in New Zealand, consisting of a total of roughly 1.22 million hectares (72% of the total productive plantation forest area). 29% of total plantations are small grower forestry plantations (including farm forestry plantations) (under 10,000 hectares), with a total area of approximately 490,000 hectares. Apart from a small number of owners in the PF Olsen Group Scheme, small growers are not FSC certified. Limited harvesting of specialty species occurs, Specialty end uses require sustainability, natural durability, or decorative appearance. Both large- and small-scale plantation forests are subject to the regulations present in the national regulation; National Environmental Standard – Plantation Forestry (NES-PF).

C.2 Indigenous forests and indigenous plantations

There exists in New Zealand, one FSC certified indigenous forest. It consists of 11,916 hectares of privately-owned indigenous forest. 2,0195.2 million hectares (76%) of indigenous forest is in public conservation land managed by the State through the Department of Conservation (DOC), no production-based forest management activities are undertaken in these forests. A further 206,000 hectares of indigenous forest is privately, or Māori owned but covenanted for conservation purposes. Of the remaining area, 1.734 million hectares is privately owned indigenous forest (including Māori land). "Estimates of the area of indigenous plantations range from 100 to 2500 hectares. Most are small, and many may not have been established for the sole purpose of producing timber". The harvesting, milling, and exporting of indigenous

timber is managed under the Forests Act 1949. Under the Act, native timber can only be taken from natural forests in a way that maintains forest cover and ecological balance.

Part 3A of the Act discourages unsustainable harvesting and clearance of private indigenous forests and provides for their sustainable management. It gives owners options for managing their forests to harvest and mill timber. It also places controls on the milling and exporting of indigenous timber. Ministry of Primary Industries (MPI) takes responsibility for effectively monitoring and enforcing the Forests Act. Their roles include but are not limited to:

- monitoring and auditing milling and export activities
- maintaining indigenous forestry statistics
- ensuring compliance with export and sawmilling controls
- ensuring compliance with sustainable forest management provisions.
- The Forests Act only allows indigenous timber to be milled at registered sawmills. Milled timber must come from a source approved under the Forests Act.

C.3 The Māori, Indigenous Peoples of New Zealand

The Māori are the indigenous Polynesian people of mainland New Zealand. Māori originated with settlers from eastern Polynesia, who arrived in New Zealand in several waves of waka (canoe) voyages between roughly 1320 and 1350.[7] Over several centuries in isolation, these settlers developed their own distinctive culture, whose language, mythology, crafts and performing arts evolved independently from those of other eastern Polynesian cultures.

Māori connections to forestry and forest land in NZ are strongly cultural and spiritual, as well as commercial. Māori own over 400 000 ha of indigenous forests (6% of total indigenous forest) and some 238 000 ha of planted exotic forests (13% of total exotic forests). These forests contribute significantly to Māori socio- economic development. Māori involvement in commercial forestry commenced over 40 years ago with the planting of pine forests under forestry leases involving the Crown, companies, and Māori landowners. These forests are now maturing and Māori participation is moving to a stronger commercial involvement.

Currently, forestry comprises 10% of Māori's total asset base. This will grow as Māori take increasing ownership and control of their land and forests. The use of former State-owned forest land to fund Māori claims under the Treaty of Waitangi could see Māori owning up to 41% of the planted forests in the future. The sustainable management of indigenous forests represents a relatively undeveloped opportunity for Māori, both for timber and non timber benefits. Māori owners are a very significant group within the forestry sector.

(Source:

https://www.researchgate.net/publication/237230851_MAORI_CONNECTIONS_TO_FORES_TRY_IN_NEW_ZEALAND)

C.4 New Zealand's terrain and its influence on forestry

Much of New Zealand is a geographically young mountainous or steep hill country. The geology is also highly varied with hard, brittle rocks in mountain areas. These shatter easily, forming screes. In North Island hill country soft rocks and soils can erode with heavy rain. Added to this are many fault lines which cause weakness in rocks and

can trigger landslides in an earthquake. The maritime climate also means high rainfall. All these factors contribute to a high potential for landslides in many hilly parts of the country.

(Source:

https://teara.govt.nz/en/zoomify/8780/new-zealandsterrain#:~:text=Much%20of%20New%20Zealand%20is,These%20shatter%20easily%2C%20f orming%20screes.)

These hilly and mountainous landscapes can make forestry challenging as erosion poses a real threat to NZ forest management, both in harvesting and planting. Special considerations, included in this standard, must be taken to minimize and mitigate the risk of landslides that could lead to the harm of forest *workers*, waterways, communities, flora, and fauna.

D References

(Informative section)

The following referenced documents are relevant for the development and application of this standard. For references without a version number, the latest edition of the referenced document (including any amendments) applies.

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-STD-01-001	FSC Interpretation on GMOs (Genetically Modified Organisms) FSC Principles and Criteria for Forest Stewardship
FSC-STD-01-002	Glossary of Terms
FSC-STD-01-003	SLIMF Eligibility Criteria
FSC-STD-20-007	Forest Management Evaluations
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-60-004	International Generic Indicators, version 2.1, effective date 1 July 2018
FSC-STD-60-006	Development of National Forest Stewardship Standards
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-30-006	Ecosystem Services Procedure: Impact Demonstration and Market Tools
FSC-DIR-20-007	FSC Directive on Forest Management Evaluations

FSC-GUI-60-005 FSC-GUI-30-003	Promoting Gender Equity in National Forest Stewardship Standards
FSC-GUI-60-009	FSC Guidelines for the implementation of the right to Free, Prior and Informed Consent (FPIC)
	Guidance for Standard Development Groups: Developing National High Conservation Value Frameworks
FSC-GUI-60-009a	Template for National High Conservation Value Frameworks
FSC-PRO-60-006	Development and Transfer of National Forest Stewardship Standards to the FSC Principles and Criteria Version 5-1
FSC-STD-60-004	International Generic Indicators
FSC-GUI-60-002	Scale, Intensity and Risk (SIR) Guideline for Standard Developers

Other

- New Zealand Forest Accord 1991
- NZS8409:2004 Code of Practice for the Management of Agrichemicals
- Approved Code of Practice for Safety and Health in Forestry Operations
- Competenz Best Practice Guidelines
- United Nations Conference on Environment and Development 1992
- Ecological Regions and Districts of NZ (W.M McEwen)
- The New Zealand Protected Natural Areas Programme, Kelly and Park, 1986
- Principles for Commercial Plantation Forest Management in New Zealand, 1995
- NZ Environmental Code of Practice for Plantation Forestry
- IUCN Red List of Threatened Species
- N.Z. Threat Classification system and most recent species list
- ICOMOS New Zealand Charter, 1993
- DSS 1. Calculating Wilding Spread Risk from New Plantings. Ledgard and Langer, Scion
- Erosion Susceptibility Classification and Analysis of Erosion Risks for Plantation Forestry. Bloomfield, et al., School of Forestry, University of Canterbury, 2011
- The National Environmental Standard for Plantation Forestry's Erosion Susceptibility Classification (ESC)
- Approaches to the Selection of a Network of Freshwater Ecosystems within New Zealand for Conservation. West, et al, Department of Conservation – Biodiversity Group, 2019.

E Note on the use of indicators

(Normative section)

The standard follows the FSC Principles and Criteria and for each criterion there are indicators, and in many cases, verifiers and notes. These are described below.

The following elements of this standard are normative: scope, effective date, validity period, glossary of terms, principles, criteria and indicators, tables and annexes, unless indicated otherwise.

The verifiers as well as guidance notes (in Annex J), applicability notes and explanatory notes in this standard are not normative.

Considering the current size pattern of management units (MUs) in New Zealand (see Section 3.1 above), the specifically designated working group recommended three respective size classes: large, medium and small MUs. Specific indicators and other related requirements were developed for these size classes. The SDG also agreed that as the scope of standard covers plantations (and not natural forests), much of SIR is already inherent in the standard. This was kept mind when the SDG considered each indicator.

The NZ SDG has determined SIR in two ways (that also affects the way the indicators are used):

- 1. Primarily the standard is developed for medium to large plantation operations, so SIR is already inherent in the proposed indicators. For example, it has been incorporated into standard practice for higher risk operations such as clear-felling, chemical use, and species mix found in NZ.
- 2. SIR has additionally been addressed by attributing, where necessary, either a small, medium or large qualifier either as an Indicator, a verifier or as guidance. For example:
 - a. For each criterion where indicators are numbered with no additional letter (like Indicator 1.1.1) then the indicator is intended to be applicable to all sizes and types of plantation forests.
 - b. Where an Indicator, a verifier or guidance note is followed by a large, medium or small, then it is only applicable to that particular size(s) of forest. For example, medium and small would only apply to small and medium MUs.

For this standard, the SDG, in consultation with other stakeholders, have established the following size thresholds for the respective categories listed above:

- 1. Management Units with area of less than 100 ha are classified as small.
- 2. Management Units with an area between 100 hectares and 1000 hectares are classified as medium.
- 3. Management Units greater than 1000 hectares are classified as large.

F Essential elements of the FSS

(Normative section)

FSC Principles and Criteria

The Standard includes the FSC Principles and Criteria. Principles are an essential rule or element in FSC's position on Forest stewardship. These are the main numbered items e.g. 1 - 10. Criteria are a means of judging whether Principles have been fulfilled and these are the second-tier numbers e.g. 1.1, 1.2.

Indicator

An Indicator is 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. Indicators are the third-tier numbers e.g. 2.3.5.

Verifier

A potential source of information that allows an auditor to evaluate compliance with an indicator. A certification body may justifiably use alternative means of verification to those listed in this FSS.

Guidance

Similar to a verifier but written to primarily guide the auditor on the intent of an indicator or verifier.

G Conflicts Between the Principles and Criteria and Laws

(Normative section)

The SDG recognises that there may be situations where it is not possible to comply with the Principles and Criteria and law at the same time. Where known, these have been addressed in developing the standard and were included in the Transfer Matrix as an explanation. It is the role of the Certification Body (auditor) to identify these conflicts with The Organisation during audits and to address with FSC in the prescribed manner.

G.1 Interpretations and disputes

(Normative section)

Interpretation requests regarding the FSC Forest Stewardship Standards are submitted directly to FSC for processing and approval. Approved interpretations are published in the international FSC website (see: INT-STD-60-006_01).

Disputes between stakeholders concerning certification requirements are managed by FSC dispute resolution procedure (see: FSC-PRO-01-008).

H Principles, criteria and indicators

(Normative section)

PRINCIPLE* 1: COMPLIANCE WITH LAWS

The Organisation^{*} shall comply with all *applicable laws*^{*}, regulations and nationally-*ratified*^{*} international treaties, conventions and agreements.

- 1.1 *The Organisation*^{*} shall be a *legally*^{*} defined entity with clear, documented, and unchallenged *legal registration*^{*}, with written authorization from the *legally competent*^{*} authority for specific activities.
 - 1.1.1 Legal registration to carry out all activities within the scope of the certificate is documented and unchallenged.
 - Verifiers: Relevant land titles, leases, licences, *forestry** rights, Crown *Forestry** Rights, rights, easements, *resource consents**, authorities to modify, knowledge of permitted activity status (under legislation such as the RMA) and other legal mechanisms for land or property under the management units.
 - 1.1.2 Legal registration is granted in accordance with New Zealand law.

1.2 *The Organisation*^{*} shall demonstrate that the *legal*^{*} status of the *management unit*^{*}, including *tenure*^{*} and use *rights*^{*}, and its boundaries, are clearly defined.

- 1.2.1 Legal tenure to manage and use resources within the scope of the certificate is documented.
 - Verifiers: Relevant land titles, leases, licences, *forestry** rights, Crown *Forestry** Rights, rights, easements and other legal mechanisms for land or property under the management units.
- 1.2.2 Legal tenure is granted by a legally competent authority according to legally prescribed processes.
- 1.2.3 The boundaries of all management units within the scope of the certificate are clearly marked or documented and clearly shown on maps.
 - Verifiers: Legal boundaries for the management units in a GIS system, on physical maps, or a map showing property ownership including formal public access routes, public access easements and formed and unformed legal roads on these maps.

Guidance: Guidance can be found in Annex: J.

1.3 The Organisation* shall have legal* rights to operate in the management unit*, which fit the legal* status of The Organisation* 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 Organisation* shall pay the legally* prescribed charges associated with such rights and obligations.

- 1.3.1 Activities covered by the management plan are designed to comply with all applicable laws.
- 1.3.2 All activities undertaken in the management unit are carried out in compliance with:
 - 1) Applicable laws and regulations and administrative requirements
 - 2) Legal and customary rights; and
 - 3) Obligatory codes of practice.
- NTFP 1.3.3 When non-timber forest products are aimed to human or animal consumption, all applicable legal and administrative requirements for hygiene and food safety are complied with.
- 1.3.4 Payment is made in a timely manner of all applicable legally prescribed charges connected with forest management.

1.4 The Organisation* 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.

1.4.1 Measures are implemented to provide protection from unauthorized or *illegal** harvesting, hunting, fishing, trapping, collecting, settlement, and other unauthorized activities.

Guidance: Guidance can be found in Annex: J.

- 1.4.2 Where protection is the legal responsibility of regulatory bodies, a system is implemented to work with these regulatory bodies to identify, report, control, and discourage unauthorised or *illegal** activities.
- 1.4.3 If *illegal** or unauthorised activities are detected, measures are undertaken to address them.
- 1.5 *The Organisation** shall comply with the *applicable laws**, local *laws**, *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.
 - 1.5.1 Compliance with applicable laws, local laws, ratified international conventions and *obligatory* codes of practice relating to the transportation and trade of forest products up to the point of first sale is demonstrated.

Guidance: Guidance can be found in Annex: J.

1.5.2 Compliance with CITES provisions is demonstrated, including through possession of certificates for harvest and trade in any CITES species.

Applicability note: This indicator is only applicable when The Organisation or other entity is taking, using and trading in CITES-listed species from the management unit.

- 1.6 *The Organisation** 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**.
 - 1.6.1 A publicly available *dispute resolution process** is in place and

modified where necessary in *Culturally appropriate engagement** with 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**.
- 1.6.3 Up-to-date records of disputes related to issues of applicable laws or customary law, are held including:
 - 1) Steps were taken to resolve disputes;
 - 2) Outcomes of all *Dispute resolution processes*;* and
 - Unresolved disputes and the reasons why they are not resolved and how they will be resolved.
- 1.6.4 Operations cease in areas while disputes exist:
 - 1) Of substantial magnitude*; or
 - 2) Of substantial duration*; or
 - 3) Involving a significant number of interests.
- 1.7 The Organisation* 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 anti-corruption legislation, *The Organisation** shall implement other anti-corruption measures proportionate to the *scale** and *intensity** of management activities and the *risk** of corruption.
 - 1.7.1 A policy is implemented that includes a commitment not to offer or receive bribes of any description.

- 1.7.2 The policy is publicly available at no charge.
- 1.7.3 Bribery, coercion and other acts of corruption do not occur, and there is compliance with:
 - Crimes Act 1961
 - Tax Administration Act 1994
 - Goods and Services Tax Act 1985
 - Sale of Goods Act 1908
 - Income Tax Act 2007
 - Commerce Act 1986
 - Companies Act 1993
 - Consumer Guarantees Act 1993
 - Contracts (Privity) Act 1982
 - Electoral Act 1993
 - New Zealand Institute of Chartered Accountants Code of Ethics.
- 1.7.4 Corrective measures are implemented if corruption does occur.
- 1.8 The Organisation* 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.

- 1.8.1 A written policy, 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.
- 1.8.2 The policy is publicly available at no cost.

PRINCIPLE* 2: WORKERS** RIGHTS AND EMPLOYMENT CONDITIONS

The Organisation* shall maintain or enhance the social and economic wellbeing of workers*.

- 2.1 The Organisation* 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.
 - 2.1.1 Employment practices and conditions for workers demonstrate conformity with or uphold the principles and rights of work addressed in the eight ILO Core Labour Conventions as defined in the ILO Declaration on Fundamental Principles and Rights at Work (1998).

Guidance: Guidance can be found in Annex: J.

- 2.1.2 Workers are able to establish or join labour organisations of their choosing subject only to the rules of the labour organisation concerned.
- 2.1.3 The forest manager has documentation indicating the existence of any Treaty of Waitangi Claims over the land.

Guidance: Guidance can be found in Annex: J.

- 2.1.4 The Organisation respects the full freedom of workers' organisations to draw up their constitutions and rules.
 - **Explanatory note:** Forestry Workers Network is a free network provided by First Union which is the official union representing forestry workers.
- 2.1.5 Agreements resulting from collective bargaining with representatives from trade unions or informal organisations are implemented.
- 2.1.6 The Organisation facilitates union access to workers including the employees of contractors and sub-contractors in accordance with section 20 of the Employment Relations Act 2000.

2.2 *The Organisation*^{*} shall promote *gender equality*^{*} in employment practices, training opportunities, awarding of contracts, processes of *engagement*^{*} and management activities.

- 2.2.1 Systems promote gender equality and prevent gender discrimination in employment practices, training opportunities, awarding of contracts, processes of engagement and management activities, in accordance with the Human Rights Act 1993 and Equal Pay Act 1972.
- 2.2.2 Job opportunities are open to all persons under the same conditions, and women are encouraged to actively participate in all levels of employment, in accordance with the Human Rights Act 1993 and Equal Pay Act 1972.
- 2.2.3 Work such as silviculture, non-timber forest product harvesting, weighing, packing, nursery service, etc. is included in training and health & safety programs to the same extent as any other type of work.
- 2.2.4 Parental leave and partner's/paternity leave (where the spouse/partner is an employee) complies with the Parental Leave

and Employment Protection Act 1987.

- 2.2.5 All persons receive the same rate of remuneration when they do the same or substantially similar work in accordance with the Equal Pay Act 1972.
 - **Guidance:** Refer to New Zealand law and guidance. There continue to be proposed changes to this legislation so that the specifics may change.
- 2.2.6 Meetings, management committees and decision-making forums are organized to include women and men, and to facilitate the active participation of both.
- 2.2.7 Confidential and effective mechanisms exist for reporting and eliminating cases of sexual harassment and discrimination based on gender, marital status, parenthood, sexual orientation or any other ground.
- 2.3 *The Organisation** 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.
 - 2.3.1 The Organisation complies with the Health and Safety at Work Act and has systems in place to ensure compliance with the Approved Code of Practice for Safety and Health in Forest Operations.

- 2.3.2 Workers are given the opportunity to participate in health and safety initiatives.
- 2.3.3 Workers have personal protective equipment appropriate to their assigned tasks and provided by their employer, compliant with the Health and Safety at Work Act and the Approved Code of Practice for Safety and Health in Forest Operations.
- 2.3.4 Use of personal protective equipment is enforced.
- 2.3.5 The Organisation operates a health and safety management system that is consistent with the Health and Safety at Work Act.
- 2.3.6 There is a system for reporting and investigating health and safety incidents, which includes:
 - 1) Notifiable incidents (previously serious harm incidents) are reported to WorkSafe and fully investigated; and
 - 2) relevant findings of investigations are communicated to workers; and
 - 3) the Health and Safety practices are reviewed and revised as required after major incidents or accidents; and
 - 4) records are kept on health and safety practices, including accident rates and lost time to accidents.
- NTFP 2.3.7 (applicable for commercial hunting only) Safety measures are implemented in areas with ongoing hunting activities to protect the public from casualties.

- 2.4 The Organisation* 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 Organisation* shall through engagement* with workers* develop mechanisms for determining living wages*.
 - 2.4.1 Wages paid by The Organisation meet or exceed the requirements of the Minimum Wage Act 1983.
 - 2.4.2 For employees on piece rates, the amount earned can't be less than the minimum hourly wage equivalent.
 - 2.4.3 Wages paid meet or exceed:
 - 1) Minimum forest industry standards; or
 - 2) Other recognized forest industry wage agreements; or
 - 3) Living wages that are higher than legal minimum wages.

Guidance: Guidance can be found in Annex: J.

- 2.4.4 Where contractors are engaged in the management unit the living wage is calculated into the contract for workers.
- 2.4.5 The Organisation has a method to determine that the workers receive the living wage.
- 2.4.6 Wages, salaries and contracts are paid on time.
- 2.4.7 Workers are paid directly and using mutually agreed methods to ensure they safely receive and retain their wages, e.g. direct bank transfer.

2.5 *The Organisation*^{*} shall demonstrate that *workers*^{*} have job-specific training and supervision to safely and effectively implement the *management plan*^{*} and all management activities.

- 2.5.1 Workers are trained, or in training, for the task(s) they are performing, with supervision to safely and effectively contribute to the implementation of the management plan and all management activities.
 - Verifiers: Approved Code of Practice for Safety and Health in forest Operations requirement that "every person undertaking *forestry** work should be either under documented training and close supervision, or deemed competent"; and/or industry certification requirements or similar schemes relevant to their role of workers.

Guidance: Guidance can be found in Annex: J.

2.5.2 Up-to-date training records are kept for all relevant workers.

- 2.6 The Organisation* 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 Organisation*.
 - 2.6.1 The Organisation complies with the dispute resolution requirements of the Employment Relations Act 2000, including provisions in the worker's individual/collective employment agreement.

- 2.6.2 Workers grievances are identified and responded to and are either resolved or are in the *dispute resolution process**.
- 2.6.3 Up-to-date records of workers grievances related to workers loss or damage of property, occupational diseases or injuries are maintained including:
 - 1) Steps taken to resolve grievances; and
 - 2) outcomes of all *Dispute resolution processes** including fair compensation; and
 - 3) unresolved grievances and the reasons why they were not resolved.
- 2.6.4 The Organisation complies with the provisions of New Zealand law to ensure work-related occupational disease or injuries are covered by ACC.
 - **Guidance:** The relevant legislation which The Organisation must comply with, includes the Employment Relations Act 2000, the Wage Protection Act 1983, the Accident Compensation Act, and the Health and Safety at Work Act.
- 2.6.5 The Organisation complies with the provisions of New Zealand law (see the guidance to 2.6.4) to offer remedial action or fair compensation in the case of work-related loss or damage of property.

PRINCIPLE* 3: INDIGENOUS PEOPLES'* RIGHTS

The Organisation^{*} shall identify and *uphold*^{*} *Indigenous Peoples*^{*} *legal*^{*} and *customary rights*^{*} of ownership, use and management of land, territories^{*} and resources affected by management activities.

- 3.1 The Organisation* shall identify the Indigenous Peoples* that exist within the management unit* or those that are affected by management activities. The Organisation* 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 Organisation* shall also identify areas where these rights are contested.
 - 3.1.1 *Tangata whenua*^{*} and their representative bodies within the management unit and those outside the management unit that may be affected by management activities are identified and, up to date records are kept by management.
 - 3.1.2 Through *Culturally appropriate engagement** the following *Tangata whenua** rights relating to the management unit are identified and documented by management:
 - 1) Tenure rights and agreements;
 - 2) customary rights and obligations;
 - agreements relating to mana whenua*, access and the use of natural resources;
 - agreements, arrangements and requests for the protection and safeguarding of cultural *taonga** including *wahi tapu** and *wahi tupuna**.
 - 3.1.3 Through *Culturally appropriate engagement**:
 - Identify and document the customary obligations of *Tangata* whenua* relating to *tino rangati ratanga** and kaitiakitanga* and any other customary values and practices that *Tangata whenua** may deem important in the management of their customary lands and *taonga** within the management unit; and
 - Identify and document disputes or disagreements with *Tangata* whenua* relating to legal and/or customary rights and the application of customary obligations within the Management unit.
 - 3.1.4 Through *Culturally appropriate engagement** identify and document the aspirations and goals that *Tangata whenua** may have to their ancestral land and *taonga** within the management unit.
- 3.2 The Organisation* 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*.
 - 3.2.1 Through *Culturally appropriate engagement* Tangata whenua** are informed of when, where, and how they can comment on, and request modification to, management activities to the extent necessary to *protect** their rights and maintain their obligations.

- 3.2.2 The legal and customary rights of *Tangata whenua** are not violated by The Organisation.
- 3.2.3 Where evidence exists that legal and customary rights of *Tangata* whenua* related to management activities have been violated, the situation is recorded and corrected, if necessary, through *Culturally* appropriate engagement* and/or through the dispute resolution process* required in Criteria 1.6 or 4.6.
- 3.2.4 Free, Prior and Informed Consent is granted by *Tangata whenua** before management activities that affect their identified legal and customary rights through a mutually agreed proc that includes the provisions listed in 3.2.4c.

Guidance: Guidance can be found in Annex: J.

- 3.2.5 Mandated representatives of *Tangata whenua** organisations are engaged by mutually agreed communication protocols.
- 3.2.6 Formal meeting minutes have been recorded and agreed.
- 3.2.7 *Tangata whenua** have been informed of:
 - 1) The economic, social, and environmental value (by the delegation of control of their re-sources) to The Organisation;
 - Their right to withhold consent to the proposed management activities to the extent necessary to protect rights, customary obligations and resources and *taonga**.
- 3.2.8 The Organisation provides reasonable opportunities for employment, training and other services to *Tangata whenua*^{*} contractors and suppliers proportionate to intensity of its management activities.

Guidance: Guidance can be found in Annex: J

3.2.9 The Organisation implements additional activities, through engagement with *Tangata whenua**, that contribute to their natural environment and social and economic development, proportionate to the scale and socio-economic impact of its management activities.

Guidance: Refer to 4.4 as guidance and as a means to incorporate 3.2.9 in a whole of community approach

3.2.10 The Organisation, through engagement with *Tangata whenua**, takes action to identify, avoid, remedy and mitigate significant negative social, environmental and economic impacts of its management activities on *Tangata whenua**. The action taken is proportionate to the scale, and risk of those activities and negative impacts.

Guidance: Refer to 4.5 as guidance and as a means to incorporate 3.2.10 in a whole of community approach.

3.2.11 Where there has been proven evidence of negative or adverse impacts that cannot be remedied or mitigated upon *Tangata whenua*^{*} as a result of management activities, The Organisation through engagement with *Tangata whenua*^{*} has mechanisms to recognise negative impacts, resolving grievances, and providing fair compensation.

Guidance: Refer to 4.6 as guidance and as a means to incorporate

- 3.3 In the event of delegation of control over management activities, a binding agreement* between *The Organisation** 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 Organisation*'s* compliance with its terms and conditions.
 - 3.3.1 Where control over management activities has been granted the binding agreement contains the duration, provisions for renegotiation, renewal, termination, economic conditions and other terms and conditions. The binding agreement was established through Free Prior and Informed Consent based on *Culturally appropriate engagement**.
 - 3.3.2 Records of binding *a*greements are maintained.
 - 3.3.3 The binding agreement contains the provision for monitoring by *Tangata whenua*^{*} of The Organisation's compliance with its terms and conditions.

3.4 *The Organisation** 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 (UNDRIP) and ILO Convention 169 (1989).

- 3.4.1 The rights, customs, and culture of *Tangata whenua** as defined in UNDRIP and ILO Convention 169 are not violated by The Organisation.
- 3.4.2 Where evidence that rights, customs and culture of *Tangata whenua**, as defined in UNDRIP and ILO Convention 169, have been violated by The Organisation, the situation is documented including steps to restore these rights, customs and culture of *Tangata whenua**, to the satisfaction of the rights holders.
- 3.5 The Organisation*, 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 Organisation* and their management, and/or protection* shall be agreed through engagement* with these Indigenous Peoples*.
 - 3.5.1 Sites and natural features of special cultural, ecological, economic, religious or spiritual significance for which *Tangata whenua** hold legal or customary rights are identified through *Culturally appropriate engagement**.

Guidance: Refer to 4.7 as guidance and as a means to incorporate 3.5.1 in a whole of community approach.

3.5.2 Measures to protect such sites and natural features are agreed, documented, and implemented through *Culturally appropriate engagement** with *Tangata whenua**. If *Tangata whenua** 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

applied to ensure their protection.

- 3.5.3 Wherever sites and natural features of special cultural, ecological, economic, religious or spiritual significance are newly observed or discovered, management activities that could affect these sites cease immediately in the vicinity until protective measures have been agreed to with *Tangata whenua**, in accordance with any existing local laws.
- 3.6 The Organisation* 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 Organisation* 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.
 - 3.6.1 Traditional knowledge and intellectual property are protected and are 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 *a*greement.
 - 3.6.2 *Tangata whenua*^{*} are compensated according to the binding agreement^{*} reached through Free, Prior and Informed Consent for the use of traditional knowledge and intellectual property.

PRINCIPLE* 4: COMMUNITY RELATIONS

The Organisation^{*} shall contribute to maintaining or enhancing the social and economic wellbeing of *local communities*^{*}.

- 4.1 The Organisation* shall identify the local communities* that exist within the management unit* and those that are affected by management activities. The Organisation* 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*.
 - 4.1.1 Local communities that exist in the management unit and those that may be affected by management activities are identified.

- 4.1.2 Through *Culturally appropriate engagement** with the local communities, identified in 4.1.1 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 obligations that apply;
 - 4) the evidence supporting these rights and obligations;
 - 5) areas where rights are contested between local communities, governments and/or others;
 - 6) summary of how the legal and customary rights, and contested rights are addressed by The Organisation; and
 - 7) the aspirations and goals of local communities related to management activities and the effects of these.
- 4.2 The Organisation* 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 and lands and territories*. Delegation by local communities* of control over management activities to third parties requires Free, Prior, and Informed Consent*.
 - 4.2.1 Through *Culturally appropriate engagement** local communities are informed of when, where, and how they can comment on and request modification to management activities to the extent necessary to protect their rights.
 - 4.2.2 The legal and customary rights of local communities are not violated by The Organisation.
 - 4.2.3 Where evidence exists that legal and customary rights of local communities related to management activities have been violated the situation is corrected, if necessary, through *Culturally appropriate engagement** and/or through the *dispute resolution process** in Criteria 1.6 or 4.6.
 - 4.2.4 Free, Prior, and Informed Consent is granted by local communities prior to management activities that affect their identified rights through a process that includes:
 - 1) Ensuring local communities know their rights and obligations

regarding the resource and its qualities and the impacts of and risks posed by the management activities

- 2) Informing the local communities of the value and risks, in economic, social and environmental terms, of the resource and environment over which they are considering delegation of control
- Informing the local communities of their right to withhold or modify consent to the proposed management activities to the extent necessary to protect rights and resources; and
- 4) Informing the local communities of the current and future planned forest management activities.
- 4.3 *The Organisation** 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.
 - 4.3.1 Reasonable opportunities are, communicated and provided to local communities, local contractors and local suppliers for:
 - 1) Employment;
 - 2) training; and
 - 3) other services.

Guidance: Guidance can be found in Annex: J.

- 4.4 *The Organisation** shall implement additional activities, through *engagement** with *local communities**, that contribute to their social and economic development, proportionate to the *scale**, *intensity** and socioeconomic impact of its management activities.
 - 4.4.1 Opportunities for local social and economic development are identified through *Culturally appropriate engagement** with local communities and other relevant organisations.

Guidance: Guidance can be found in Annex: J.

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

Guidance: Guidance can be found in Annex: J.

4.4.3 The Organisation seeks to enable different types of recreational access and use by the community, and taking account of any constraints of legal, safety, environmental protection, economic protection and landowner requirements. The Organisation has a process to address requests for recreational access.

Verifier: A process to address requests for recreational access.

4.4.4 Large A public-access policy and/or plan has been developed and is periodically reviewed in *consultation** with recreational and community representative groups and affected stakeholders.

- 4.4.5 Access, including recreational access through *forestry** areas to adjacent land, is provided in *consultation** with the affected landowners.
- 4.5 *The Organisation*,* 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.

- 4.5.1 Through *Culturally appropriate engagement** with local communities, measures are implemented to identify, avoid and mitigate negative social, environmental and economic impacts of management activities.
- <u>4.6</u> The Organisation*, 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 Organisation*.
 - 4.6.1 A publicly available *dispute resolution process** is in place, modified where necessary with *Culturally appropriate engagement** with affected local communities.
 - 4.6.2 Grievances related to the impacts of management activities are responded to in a timely manner and are either resolved or are in the *dispute resolution process**.
 - 4.6.3 An up-to-date record of grievances related to the impacts of management activities is held including:
 - 1) The nature of the grievance and parties involved;
 - 2) steps taken to resolve grievances;
 - 3) outcomes of all *Dispute resolution processes** including fair compensation consistent with New Zealand law; and
 - 4) Unresolved grievances and the reasons why they are not resolved and how they will be resolved.

Guidance: Guidance can be found in Annex: J.

- 4.6.4 Operations cease in areas while disputes exist:
 - 1) Of substantial magnitude*; or
 - 2) of substantial duration*; or
 - 3) involving a significant number of interests.

- 4.7 The Organisation*, 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 Organisation*, and their management and/or protection* shall be agreed through engagement* with these local communities*.
 - 4.7.1 Sites of special cultural, ecological, economic, religious or spiritual significance for which local communities hold legal or customary rights are identified through *Culturally appropriate engagement** and are recognized by The Organisation.
 - 4.7.2 Measures to protect such sites are agreed, documented and implemented through *Culturally appropriate engagement** with local communities. If 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.

4.7.3 Whenever sites of special cultural, ecological, economic, religious or spiritual significance are newly observed or discovered, management activities cease immediately in the vicinity until protective measures have been agreed.

Guidance: Guidance can be found in Annex: J.

- 4.8 The Organisation* 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 Organisation* 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.
 - 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.

Guidance: Guidance can be found in Annex: J.

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.

PRINCIPLE* 5: BENEFITS FROM THE FOREST*

The Organisation^{*} 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 Organisation** 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.
 - 5.1.1 The range of resources and ecosystem services that could strengthen and diversify the local economy and environment are identified.
 - 5.1.2 Consistent with management objectives and the scale of The Organisation, The Organisation produces and makes available opportunities to produce benefits and products to strengthen and diversify the local economy and environment.
 - 5.1.3 When The Organization uses FSC *Ecosystem services** Claims, The Organization complies with applicable requirements in FSC-PRO-30-006.

5.2 *The Organisation** shall normally harvest products and services from the *management unit** at or below a level which can be permanently sustained.

- 5.2.1 Timber harvesting volumes are based on an analysis of current *Best Available Information** on growth and yield; inventory of the forest; mortality rates; and *maintenance** of *ecosystem functions**.
- 5.2.2 Large and medium Based on the *timber harvesting level** analysis, a maximum allowable annual cut for timber is determined that does not exceed the harvest level that can be permanently sustained including by ensuring that harvest rates do not exceed inter-rotational growth.

Guidance: Guidance can be found in Annex: J.

- 5.2.3 Small Harvesting of the entire forest can occur in one stage, so long as *ecosystem services** are maintained. Actual harvest rates are recorded.
- 5.2.4 Actual annual harvest volumes for timber are recorded and the harvest over a defined period does not exceed the allowable cut determined in 5.2.2 or 5.2.3 for the same defined period.

- NTFP 5.2.5 For extraction of commercially harvested services and nontimber forest products under The Organisation's control a sustainable harvest level is calculated and adhered to, except for removal/elimination of *pest** species. Sustainable harvest levels are based on *Best Available Information**.
- NTFP 5.2.6 A record is kept of the annual harvest rate for each NTFP harvested.
- NTFP 5.2.7 (applicable for honey and other bee products) Feeding of

bees only takes place in cases of lack of natural food sources, due to climatic conditions or alike, e.g. during winter periods. When bee families are fed, a log book is kept for each bee family/beehive, including:

- 1) Food product fed, e.g. sugar;
- 2) Amount fed; and
- 3) date/period fed.

5.3 *The Organisation*^{*} shall demonstrate that the positive and negative *externalities*^{*} of operations are included in the *management plan*^{*}.

- 5.3.1 Large Costs related to preventing, mitigating, or compensating for negative social and environmental impacts of management activities are included in the management plan.
- 5.3.2 Large Benefits related to positive social and environmental impacts of management activities are identified and included in the management plan.
- 5.4 The Organisation* shall use local* processing, local* services, and local* value adding to meet the requirements of The Organisation* where these are available, proportionate to scale, intensity, and risk*. If these are not locally* available, The Organisation* shall make reasonable* attempts to help establish these services.
 - 5.4.1 Where cost, quality and capacity are at least equivalent to non-local options, local goods, services, processing and value-added facilities are used.

Guidance: Guidance can be found in Annex: J.

5.4.2 Reasonable attempts are made to establish and encourage capacity where local goods, services, processing and value-added facilities are not available.

5.5 *The Organisation** shall demonstrate through its planning and expenditures proportionate to *scale, intensity, and risk**, its commitment to *long-term** economic viability*.

5.5.1 Sufficient funds are allocated to implement the management plan to meet this standard and to ensure long-term economic viability.

Guidance: Guidance can be found in Annex: J.

5.5.2 Expenditures and investments are made to implement the *management plan* in order to meet this standard and to ensure long-term economic viability.

PRINCIPLE* 6: ENVIRONMENTAL VALUES* AND IMPACTS

The Organisation^{*} shall maintain, *conserve*^{*} and/or *restore*^{*} *ecosystem services*^{*} and *environmental values*^{*} of the *management unit*^{*}, and shall avoid, repair or mitigate negative environmental impacts.

- 6.1 The Organisation* 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.
 - 6.1.1 *Best Available Information** is used to identify environmental values within, and, where potentially affected by management activities, outside of the management unit.
 - 6.1.2 Assessments of environmental values are conducted with a level of detail and frequency so that:
 - 4) Impacts of management activities on the identified environmental values can be assessed as per Criterion 6.2;
 - 5) risks to environmental values can be identified as per Criterion 6.2;
 - 6) necessary conservation measures to protect values can be identified as per Criterion 6.3; and,
 - 7) monitoring of impacts or environmental changes can be conducted as per Principle 8.

Guidance: Guidance can be found in Annex: J.

6.1.3 Large *Fine level evaluation*^{*} of conservation zones and protection areas is progressively undertaken appropriate to scale to determine viability and establish specific management requirements of poorly represented areas.

Guidance: Guidance can be found in Annex: J.

6.1.4 All assessments of ecological value and actions are recorded and identified on maps and used to inform future implementation at harvest time, where applicable.

6.2 Prior to the start of site-disturbing activities, *The Organisation** shall identify and assess the *scale, intensity, and risk** of potential impacts of management activities on the identified *environmental values**.

- **Guidance Small:** To assist in the requirements of Criterion 6.2, The Organisation should use the assessment sheet in Annex F "Identifying Biodiversity Requirements for Small Plantations" or a similar alternative.
- 6.2.1 A documented *environmental impact assessment** identifies potential present and future impacts of management activities on environmental values, from the stand level to the landscape level.
- 6.2.2 This assessment process occurs before the start of site-disturbing activities taking into account the interaction with adjoining land, nearby habitats and downstream impacts.

- 6.3 *The Organisation*^{*} 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.
 - **Guidance Small:** To assist in the requirements of Criterion 6.3, The Organisation should use the assessment sheet in Annex F "Identifying Biodiversity Requirements for Small Plantations" or a similar alternative.
 - 6.3.1 Measures seeking to prevent negative impacts are planned, documented, and implemented to protect environmental values prior to the commencement of works.
 - 6.3.2 The Organisation has safeguards in place to minimise adverse effects on environmental values.
 - 6.3.3 The Organisation has written guidelines to:
 - 1) Control accelerated erosion that may occur because of the removal of vegetation;
 - 2) avoid or minimise riparian area damage during harvesting, road construction, or other mechanical disturbances; and
 - 3) enable protection of water resources within and downstream of the management unit including specifying *wetlands**, water body and streamside *protection zones* in which harvesting and other disturbance are prohibited or minimised.
 - 6.3.4 Large The Organisation operates and documents a *decision support system*^{*} to manage operations in high-risk areas.
 - 6.3.5 Road and track construction is prohibited in conservation zones and protection areas, except where:
 - 1) It can be demonstrated that this is the best environmental solution to an access issue;
 - 2) it is part of a habitat restoration plan designed to meet the objectives of the protection zone; and
 - 3) a track is part of a recreation or nature interpretation activity and does not adversely affect the objectives of the protection zone.
 - Verifiers: Roads and tracks within conservation zones and protection areas documented in management plans with their purpose and justification and associated mitigation activities.
 - 6.3.6 A record is kept of any adverse impacts that occur to identified environmental values.
 - 6.3.7 Where negative impacts to environmental values occur, measures are adopted that seek to prevent further damage, and negative impacts are mitigated and/or repaired.

- 6.3.8 A record is kept identifying corrective actions where non-compliance with prescriptions occurs and records:
 - 1) Change in future activities that will prevent similar impacts occurring; and

- 2) Actions were taken to mitigate the negative impact.
- 6.4. The Organisation* 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 Organisation* 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*.
 - **Guidance Small:** To assist in the requirements of Criterion 6.4, The Organisation should use the assessment sheet in Annex F "Identifying Biodiversity Requirements for Small Plantations" or a similar alternative.
 - 6.4.1 *Best Available Information** is used to identify rare and threatened species, and their habitats, including CITES species (where applicable) and those listed on national, regional and local lists of rare and threatened species that are present or likely to be present within and adjacent to the management unit.
 - 6.4.2 Generic policy and plans for the maintenance of populations of rare or threatened species within the management unit are prepared and progressively updated in consultation with competent experts.

6.4.3 Indigenous habitat within, adjacent to and/or downstream of the management unit that supports or is likely to support rare or threatened species and may be affected by The Organisation's activities is identified in management planning.

Guidance: Refer to 6.1.1.

6.4.4 Potential impacts of management activities on rare and threatened species and their habitats are identified, and management activities are modified to avoid negative impacts on the viability of the populations.

Guidance: Refer to 6.2.1.

- 6.4.5 Rare and threatened species and their habitats within the management unit are protected, including through the provision of habitat maintenance, conservation zones, protection areas, connectivity, and other direct means for their survival and viability, such as species' recovery programs.
- 6.4.6 Hunting, fishing, trapping and collection of rare or threatened species is prevented.

Guidance: Guidance can be found in Annex: J.

- 6.4.7 The need for wildlife corridors for rare and threatened species is assessed within the *ecological landscape*^{*} and existing and established corridors (based on the outcomes of the assessment) are managed to promote the viability of these species).
- 6.4.8 Wildlife corridors for rare and threatened species are:

- 1) identified on management maps and
- 2) wildlife corridors for rare and threatened species identified within production areas are detailed in harvest plans with appropriate management actions considered

- 6.5 The Organisation* 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 Organisation* 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.
 - 6.5.1 *Best Available Information** is used to identify native ecosystems that exist or would exist under natural conditions within the management unit.

Guidance: Guidance can be found in Annex: J

- 6.5.2 Representative Sample Areas of native ecosystems are protected, where they exist.
- 6.5.3 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 progressively to more natural conditions.

Guidance: Guidance can be found in Annex: J

6.5.4 Large and medium The size of the Representative Sample Areas and/or restoration areas is proportionate to the conservation status and value of the ecosystems at the landscape level, the size of the management unit, and the viability of the Representative Sample Area.

Guidance: Guidance can be found in Annex: J

- 6.5.5 Where modified *threatened significant environments** 1 or 2, *wetland** or *duneland** areas occur within the management unit they are documented together with efforts to restore them progressively.
- 6.5.6 An area equivalent to or exceeding 10% of the area of the management unit is identified, mapped, and managed as *conservation areas network**.
- 6.5.7 The Organisation has developed a detailed plan to achieve the requirements of 6.5.6.
- 6.5.8 At least 10% of the area of the management unit in each *ecological district** (overlapping with the management unit), and if not possible, each *ecological region**, is identified, mapped and managed as a *conservation areas network**; any shortfall (at the *ecological district** or *ecological region** level) is made up through *equivalent ecological effort** (without compromising the requirements of 6.5.6).

Guidance: Annex C provides instructions for calculating

conservation area network* areas.

6.5.9 Where equivalent *ecological effort** is required to meet the 10% CAN requirement at the *ecological district**, or *ecological region** level (as outlined in 6.5.7) within the management unit, The Organisation has documented the process used, demonstrating that consideration was given to all practical options of *equivalent ecological effort**, and in the stated order of priority.

Guidance: Annex C provides instructions for calculating *conservation area network** areas.

- 6.5.10 The Organisation records *conservation areas network** management actions.
- 6.6 *The Organisation** 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 Organisation** shall demonstrate that effective measures are in place to manage and control hunting, fishing, trapping and collecting.
 - 6.6.1 Management activities ensure maintenance of the plant communities and habitats found within native ecosystems in which the management unit is located.
 - 6.6.1a Management activities designed to ensure the maintenance of plant and animal communities and habitats found within native ecosystems within the management unit are detailed in planning documents and implemented.
 - 6.6.2 *Active restoration** or activities in excess of maintenance are detailed in planning documents and implemented.
 - 6.6.3 Maintenance actions and *active restoration** are progressively undertaken to support the maintenance and enhancement of ecological functions including ecosystem regeneration and species diversity.

Guidance: Guidance can be found in Annex: J.

- 6.6.4 Management maintains, enhances, or restores *habitat features** associated with native ecosystems, to support the diversity of naturally occurring species and their genetic diversity.
- 6.6.5 Before harvest, adjacent areas of existing habitat for rare and threatened species or representative sample ecosystems are assessed, and where appropriate, *active restoration** undertaken following harvest.

Guidance: Guidance can be found in Annex: J.

- 6.6.6 The Organisation records *conservation area network** management actions for individual or ecologically related reserves.
- 6.6.7 Effective measures are taken to manage and control hunting, fishing, trapping, and collecting activities and other recreational activities to ensure that naturally occurring native species, their diversity within species and their natural distribution are maintained and not compromised.

- 6.7 *The Organisation** shall *protect** or *restore** natural water courses*, *water bodies**, *riparian zones** and their *connectivity**. *The Organisation** shall avoid negative impacts on water quality and quantity and mitigate and remedy those that occur.
 - 6.7.1 Riparian zones of a minimum of 10m each side of the water body are identified and documented on all water bodies that have permanent water when forested.

- 6.7.2 No commercial afforestation is undertaken in riparian zones, with the exceptions described in 6.7.4.
- 6.7.3 At replanting The Organisation assesses whether any additional *setback** is possible beyond the existing stump-line without creating an area or areas of deforestation under the Climate Change Response Act and Climate Change Regulations.

Guidance: Guidance can be found in Annex: J.

6.7.4 [Large/Medium] Where it is possible to setback without creating deforestation under 6.7.3, no commercial replanting is undertaken in riparian zones except where catchment planning has been undertaken and one of two exemption options to manage replanting setbacks is implemented:

Option 1 exemption:

The Organisation has a Riparian Decision Support System* specified within the Management Plan that:

a) addresses in-stream environmental conditions to maintain long term aquatic values and;

b) allows commercial replanting within the riparian zone of any 3rd order stream catchment where it reaches more than 100m into the MU, and does not exceed 20% of the length of streams in that catchment.

Option 2 exemption:

A minimum 25m continuous setback (each side) is applied on any 3rd order stream (where it reaches more than 100m into the MU) to the top of its sub-catchment that includes at least one significant headwater, and all other tributaries on that stream must have a minimum 5m setback and be replanted no closer than the previous planted stump line.

Verifiers: Mapped 3rd order stream catchments.

Guidance: Guidance can be found in Annex: J.

- 6.7.5 Small Where a continuous cover regime is used in a riparian zone and adjoining forest, species suitable for indigenous habitat and protection of riparian values may be planted and harvested in that riparian zone only when in-stream values are not compromised by this activity.
- 6.7.6 Where plantation planting has been undertaken within a riparian

zone, evidence of the assessments carried out in the riparian *decision support system** are recorded along with resulting effects on aquatic values.

- 6.7.7 Any vegetation felled within the riparian zone is felled away from the water body, except where safety practices require it.
- 6.7.8 All practicable steps are taken to avoid dragging logs or trees through the bed of a flowing river, lake or *wetland** or the sea. Where this is planned to occur, documentation of the decision-making process is recorded.
- 6.7.9 The decision-making process includes examination of alternative harvesting methods away from the waterway or use of haul corridors to minimise the stream reach affected.
- 6.7.10 Where vegetation is cleared within a designated riparian zone, regeneration of suitable riparian vegetation is promoted.

Guidance: Guidance can be found in Annex: J.

6.7.11 Where riparian clearance has been as a result of harvest activities then a re-planting plan details actions that seek to avoid riparian clearance or minimise damage in the next harvest cycle.

Guidance: Guidance can be found in Annex: J.

- 6.7.12 No earthworks are undertaken within riparian zones, except:
 - 1) In association with designated stream crossings;
 - 2) Where it is maintenance of an existing road;
 - 3) Where a topographical constraint leaves no alternative for the formation of a road;
 - 4) In emergencies such as firefighting.
- 6.7.13 Steps are taken to ensure disturbed vegetation, soil or debris are deposited or contained to prevent, with the exception of major storm events, the:
 - 1) Diversion, damming or blockage of any river or stream;
 - 2) passage of fish being impeded;
 - 3) destruction of any habitat in a water body or coastal water;
 - 4) flooding or erosion; and
 - 5) downstream property damage.

Guidance: Guidance can be found in Annex: J.

6.7.14 The Organisation complies with any conditions established in *resource consents** and relevant codes of practice including conditions required by permitted activities under the NES – PF.

Guidance: Guidance can be found in Annex: J.

6.7.15 Where continued degradation exists to water bodies, and water quality caused solely or partially by *forestry** activities, measures are implemented that prevent or mitigate this degradation.

Guidance: Guidance can be found in Annex: J.

6.7.16 In *pre-harvest** planning a risk assessment of erosion susceptibility and potential effected values is undertaken to determine where

potential erosion risk is very high.

Guidance: Guidance can be found in Annex: J.

- 6.7.17 In areas identified as very high risk in 6.7.16 a *pre-harvest** evaluation is undertaken to establish the most appropriate method to transition to *forestry** practices that support soil stability on this land. This evaluation is documented and include consideration of:
 - 1) Post-harvest retirement to suitable permanent vegetation;
 - 2) transition to a continuous cover forest;
 - 3) alternative species, silvicultural practices and regimes; and
 - 4) retirement without harvest and encouragement of suitable longterm soil stability vegetation.
- 6.7.18 Large and medium If areas identified in 6.7.16 are clear-felled then:
 - 1) For replanting of plantation species that require clear fell harvesting a programme of erosion monitoring is undertaken covering the full rotation of the crop to determine effects, including identifying where sediment has reached water bodies; and
 - 2) areas left to revert to an indigenous vegetation cover are monitored to ensure natural regeneration is occurring.
 - Verifiers: Documented erosion monitoring following rainfall events (including 10% AEP or more intense storm events) over the course of the rotation, management practices and their relationship to erosion, particularly during the first six years following harvest.

Guidance: Guidance can be found in Annex: J.

- 6.7.19 Small If plantation species that require clear fell harvesting are replanted within areas identified in 6.7.16 then a photographic record or similar form of monitoring is undertaken to determine soil erosion effects; or if the area is clear-felled and left to revert to indigenous vegetation it is monitored to ensure natural regeneration is occurring.
 - Verifiers: Documentation of erosion monitoring following high rainfall events, and during the first six years following harvest, including:
 - *a.* erosion sites (e.g. slips, stream bank erosion) and/or;
 - b. water quality and/or;
 - *c.* related weather events and/or;
 - *d. forestry** activity data.

Guidance: Guidance can be found in Annex: J.

6.7.20 Afforestation in very high-risk *erosion** areas is not conducted with species that requires clear felling.

Guidance: Guidance can be found in Annex: J.

- 6.7.21 No storage or mixing of fuels, oils, chemicals, or similar substances is undertaken in areas where a deliberate or inadvertent discharge could enter any water body.
- 6.8 The Organisation* 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*^{*}.

6.8.1 A varying mosaic of species, sizes, ages, spatial scales, and regeneration cycles is maintained appropriately to the landscape.

Guidance: Guidance can be found in Annex: J.

6.8.2 The mosaic of species, sizes, ages, spatial scales, and regeneration cycles is maintained and/or restored where it has not been maintained appropriate to the landscape.

6.9 *The Organisation** 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**.
- 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:
 - 1) Affects a very limited portion of the management unit; and
 - 2) the conversion will produce clear, substantial, additional, secure, long-term conservation benefits in the management unit; and
 - does not damage or threaten high conservation values, nor any sites or resources necessary to maintain or enhance those high conservation values.
- 6.9.2 Conversion of the areas of naturally occurring indigenous vegetation with the following characteristics to plantation is not conducted even within the limits established by 6.9.1:
 - Any area of 5 hectares or greater which has an actual or emerging predominance of naturally occurring indigenous tree species of any height. For this clause an indigenous tree species is defined as any woody plant which ultimately forms part of the canopy of a naturally occurring forest or any indigenous tree species that attains a diameter at breast height of 30cm or greater;
 - 2) any natural indigenous forest vegetation, including riparian of between 1 and 5 hectares in area with an average canopy height of at least 6 m which is practical to protect. This recognises that in some instances some small pockets of native vegetation within a plantation forest management area cannot practically be protected from disturbance. However, viable stands will be excluded from clearance and reasonable effort made to ensure such areas are not damaged in subsequent forestry* operations;
 - any vegetation recommended for protection in a survey report in the Protected Natural Areas Programme or classified as a Site of

Special Wildlife Interest (SSWI) in a published report of the former Wildlife Service;

- significant Natural Areas (Areas recognised as significant indigenous vegetation or significant habitats of indigenous fauna) as defined in an operative District and Regional Plan under the Resource Management Act 1991;
- 5) indigenous habitat of rare, threatened or endangered species;
- 6) geopreservation* Sites as listed in The Geopreservation* Inventory;
- 7) wetlands* as defined in the Resource Management Act 1991;
- 8) *dunelands** where the primary vegetation is indigenous;
- 9) geothermal areas where there are indigenous plant communities adapted to geothermal conditions.
- 6.9.3 The following lands are not considered for conversion to plantation unless *consultation*^{*} is undertaken with affected and interested *stakeholders*^{*} and the respective measures do not violate the requirements of 6.9.1 or 6.9.2:
 - High-country tussock scrublands or herb fields as defined in MfE's LENZ* publication;
 - Coastal scrub and coastal herb fields with an indigenous plant content of greater than 30 per cent within the area being considered;
 - Any indigenous vegetation that is mapped as *LENZ** Threatened Environment 1–3*;
 - Areas of indigenous vegetation within Outstanding Natural Features and Landscapes identified in Regional and District Plans.

Guidance: Guidance can be found in Annex: J.

- 6.9.4 Where conversion has taken place (within the allowed limits defined in 6.9.1), this is documented along with the relevant justifications.
- 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 Organisation** 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*.
 - 6.10.1 Based on *Best Available Information**, accurate data is compiled on all conversions since 1994.
 - 6.10.2 Areas converted from natural forest to plantation since November 1994 are not certified, except where:
 - 1) The Organisation 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.

PRINCIPLE* 7: MANAGEMENT PLANNING

The Organisation* 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.

- 7.1 *The Organisation** 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.
 - 7.1.1 Policies (vision and values) that contribute to meeting the requirements of this standard are defined.
 - 7.1.2 Specific, operational management objectives that address the requirements of this standard are defined.

Guidance: Elements to be included in the management plan are listed in Annex D.

- 7.1.3 Summaries of the defined policies and management objectives are included in the management plan and publicized.
- 7.2. The Organisation* 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.
 - 7.2.1 The management plan includes management actions, procedures, strategies and measures to achieve the management objectives.
 - 7.2.2 The management plan addresses the elements listed in Annex D and is implemented.
 - NTFP 7.2.3 (applicable for hunting only) The management plan includes the following elements:
 - 1) Policies and procedures for game managers.
 - 2) Hygiene and food safety regulations in cases that the game is used for food.
 - 3) Maps of all hunting areas.
 - 4) Procedures for monitoring of the impacts of hunting.
 - 5) A general evaluation of the ecological impact of hunting.
 - 6) Procedures for processing, packing and sales (if applicable).
- 7.3 The *management plan*^{*} shall include *Verifiable targets*^{*} by which progress towards each of the prescribed *management objectives*^{*} can be assessed.
 - 7.3.1 Verifiable targets and the frequency that they are assessed, are established for monitoring the progress towards each management

objective.

- 7.4 *The Organisation** 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.
 - 7.4.1 The management plan is revised and updated periodically, consistent with Annex D to incorporate:
 - 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.

Guidance: Guidance can be found in Annex: J.

- 7.5 The Organisation* 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.
 - 7.5.1 A summary of the management plan in a format understandable to stakeholders including maps and excluding Confidential information, is made publicly available at no cost.
 - 7.5.2 Relevant components of the management plan, excluding Confidential information, are available to affected stakeholders on request at the actual costs of reproduction and handling.
- 7.6 The Organisation* 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.
 - 7.6.1 *Culturally appropriate engagement** is used to ensure that affected stakeholders are proactively and transparently engaged in the following processes:
 - 1) *Dispute resolution processes** (Criterion 1.6, Criterion 2.6, Criterion 4.6);
 - Identification of rights (Criterion 3.1, Criterion 4.1), sites (Criterion 3.5, Criterion 4.7) and impacts (Criterion 4.5);
 - 3) Local communities' socio-economic development activities (Criterion 4.4); and
 - 4) High conservation value assessment, management and monitoring (Criterion 9.1, Criterion 9.2, Criterion 9.4).
 - 7.6.2 *Culturally appropriate engagement** is used to:
 - Determine appropriate mandated representatives and contact points (including where
 - 2)1) appropriate, local institutions, organizations and authorities);
 - Determine mutually agreed communication channels allowing for information to flow in both

4)2) directions;

5)3) Ensure all actors (women, youth, elderly, minorities) are

represented and engaged equitably;

- 6)4) Ensure all meetings, all points discussed and all agreements reached are recorded;
- $\frac{7}{5}$ Ensure the content of meeting records is approved; and
- 8)6) Ensure the results of all *culturally appropriate engagement** activities are shared with those involved.
- 7.6.3 Affected stakeholders are provided with an opportunity for *culturally appropriate engagement** in monitoring and planning processes of management activities that affect their interests.
- 7.6.4 On request, interested stakeholders are provided with an opportunity for engagement in monitoring and planning processes of management activities that affect their interests.

PRINCIPLE* 8: MONITORING AND ASSESSMENT

The Organisation* 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*.

- 8.1 *The Organisation** 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**.
 - 8.1.1 Procedures are documented and executed for monitoring the implementation of the management plan including its policies and management objectives and achievement of verifiable targets.
 - 8.1.2 Persons responsible for implementing and maintaining monitoring programmes are identified.
- 8.2 *The Organisation** shall *monitor** and evaluate the environmental and social impacts of the activities carried out in the *management unit**, and changes in its environmental condition.
 - 8.2.1 The social and environmental impacts of management activities are monitored consistent with Annex E.
 - 8.2.2 Changes in environmental conditions are monitored consistent with Annex E.
 - NTFP 8.2.3 (applicable for hunting only) Areas where reintroduction, restocking programs or other animal releases take place are monitored to identify and mitigate potential adverse impacts.

8.3 *The Organisation** shall analyze the results of *monitoring** and evaluation and feed the outcomes of this analysis back into the planning process.

8.3.1 Adaptive management procedures are implemented so that monitoring results feed into periodic updates to the management plan.

Guidance: Guidance can be found in Annex: J

8.3.2 If monitoring results show non-conformities with the FSC Standard then management objectives, Verifiable targets and/or management activities are revised.

8.4 *The Organisation** shall make *publicly available** a summary of the results of *monitoring** free of charge, excluding *Confidential information**.

- 8.4.1 A summary of the monitoring results consistent with Annex E, in a format understandable to stakeholders including maps and excluding Confidential information is made publicly available at no cost.
- 8.4.2 When requested, additional information in sufficient detail is provided for the stakeholder to understand the nature and results of the monitoring.
- 8.5 *The Organisation*^{*} 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.

- 8.5.1 A system is implemented to track and trace all products that are marketed as FSC certified.
- 8.5.2 Information about all products sold is compiled and documented, including:
 - 1) The common and scientific species name
 - 2) Product name or description
 - 3) Volume (or quantity) of product
 - 4) Information to trace the material to the source of origin logging block
 - 5) Logging date
 - 6) If basic processing activities take place in the forest, the date and volume produced; and
 - 7) Whether or not the material was sold as FSC certified.
- 8.5.3 Sales invoices or similar documentation are kept for a minimum of five years for all products sold with an FSC claim, which identify at a minimum, the following information:
 - 1) Name and address of the purchaser
 - 2) The date of sale
 - 3) The 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.
- NTFP 8.5.4 (applicable for honey and other bee products) It is demonstrated based on *Best Available Information** or pollen analysis that at least 50% of the collected pollen originates from within the FSC certified MU before the honey can be sold with FSC claim: FSC 100%.
- NTFP 8.5.5 (applicable for animal products, except bee products) It is demonstrated based on *Best Available Information** or other means (e.g. telemetric data) that the target species spent at least 50% of its lifespan within the FSC certified MU before the products can be sold with FSC claim: FSC 100%.

PRINCIPLE* 9: HIGH CONSERVATION VALUES*

*The Organisation** shall maintain and/or enhance the *high conservation values** in the *management unit** through applying the *precautionary approach**.

9.1 The Organisation*, through engagement* with affected stakeholders*, interested stakeholders and other means and sources, shall assess and record the presence and status of the following high conservation values* in the management unit*, proportionate to the scale, intensity, and risk* of impacts of management activities, and likelihood of the occurrence of the high conservation values* (HCV):

HCV 1 – 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* and 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 livelihoods, health, nutrition, water, etc.), 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**.

- 9.1.1 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 (Annex H), and their condition.
- 9.1.2 The assessment uses results from *Culturally appropriate engagement** (Annex H) with affected and interested stakeholders with an interest in the conservation of the high conservation values.

Guidance: Guidance can be found in Annex: J.

9.2 *The Organisation** shall develop effective strategies that maintain and/or enhance the identified *high conservation values**, through *engagement** with *affected stakeholders**, *interested stakeholders** and experts.

- 9.2.1 *Threats** to high conservation values are identified using *Best Available Information**.
- 9.2.2 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.

- 9.2.3 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.
- 9.2.4 The strategies developed are effective to maintain and/or enhance the high conservation values.
- 9.3 *The Organisation** 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.
 - 9.3.1 The high conservation values and the *high conservation value areas** on which they depend are maintained and/or enhanced, including by implementing the strategies developed (Annex G).
 - 9.3.2 The strategies and actions prevent damage and avoid risks to high conservation values, even when the scientific information is incomplete or inconclusive, and when the vulnerability and sensitivity of high conservation values are uncertain.
 - 9.3.3 Activities that harm high conservation values cease immediately and actions are taken to restore and protect the high conservation values.
- 9.4 The Organisation* 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.
 - 9.4.1 A programme of periodic monitoring assesses:
 - 1) Implementation of strategies
 - 2) The status of *high conservation values* including *high conservation value areas** on which they depend; and
 - The effectiveness of the management strategies and actions for the protection of high conservation value to fully maintain and/or enhance the high conservation values.
 - 9.4.2 The monitoring programme includes engagement with affected and interested stakeholders and experts.
 - 9.4.3 A public summary of monitoring results is made available, excluding Confidential information.
 - 9.4.4 The monitoring programme has sufficient scope, scale, detail and frequency to detect changes in high conservation values, relative to the initial assessment and status identified for each high conservation value.
 - 9.4.5 Management strategies and actions are adapted when monitoring or other new information shows that these strategies and actions are ineffective to ensure the maintenance and/or enhancement of high conservation values.

PRINCIPLE* 10: IMPLEMENTATION OF MANAGEMENT ACTIVITIES

Management activities conducted by or for *The Organisation*^{*} for the *management unit*^{*} shall be selected and implemented consistent with *The Organisation*'s^{*} economic, environmental and social policies and *objectives*^{*} and in compliance with the *Principles*^{*} and *Criteria*^{*} collectively.

- 10.1 After harvest or in accordance with the *management plan**, *The Organisation** shall, by natural or artificial regeneration methods, regenerate vegetation cover in a timely fashion to pre-harvesting* or more *natural conditions**.
 - 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.
 - 10.1.2 *Regeneration activities** are implemented in a manner that:
 - 1) For harvest of existing plantations, regenerate to the vegetation or similar species cover that existed prior to the harvest or to more natural conditions using ecologically well-adapted species, or any other species in line with 10.2.1, 10.2.2 and 10.3.1 of this standard;
 - 2) For harvest of natural forests, regenerate to *pre-harvest** or to more natural conditions; or
 - 3) For harvest of degraded natural forests, regenerate to more natural conditions.
- 10.2 *The Organisation** shall use species for regeneration that are ecologically well adapted to the site and to the *management objectives**. *The Organisation** shall use *native species** and *local** *genotypes** for regeneration, unless there is clear and convincing justification for using others.
 - 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.

Guidance: Guidance can be found in Annex: J

- 10.2.2 There is a clear justification for the choice of species and genotypes chosen for the plantation, which is consistent with the objectives of the plantation, and the climate, geology, and soils at the planting sites.
- 10.2.3 If there is a native species, which meets the management objectives, as well as an exotic species, the native species is selected in preference to the exotic species.

10.3 *The Organisation** 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.

- 10.3.1 Alien species are used only when direct experience and / or the results of scientific research demonstrate that invasive impacts can be controlled.
- 10.3.2 Alien species are used only when effective mitigation measures are

in place to prevent and/or control their spread outside the area in which they are established.

Guidance: Guidance can be found in Annex: J.

- 10.3.3 The spread of invasive plantation species introduced by The Organization is controlled in accordance with regional *pest** management plans and relevant landowners permission.
- 10.3.4 The Organisation complies with any applicable Regional Council *pest** management strategy including where this identifies a wilding species as a *pest**.
- 10.3.5 In the absence of a species being identified in the regional *pest*^{*} management strategy, The Organisation removes *wildings*^{*} in adjoining properties before seed production where:
 - 1) The adjoining property owner agrees to wilding control on their land, and
 - 2) *Wildings** are identified as the progeny of species planted within the plantation area; and
 - 3) *Wilding** spread has occurred from The Organisation's trees planted after 2001.
- 10.3.6 Large The Organisation monitors and/or carries out research to evaluate the potential invasiveness and/or other adverse ecological impacts of the species in the local area.

10.4 *The Organisation** shall not use *Genetically modified organisms** in the management unit*.

- 10.4.1 Genetically modified organisms are not used.
- 10.5 *The Organisation** shall use silvicultural practices that are ecologically appropriate for the vegetation, species, sites and *management objectives**.
 - 10.5.1 Silvicultural practices are implemented that are ecologically appropriate for the vegetation, species, sites and management objectives.
- 10.6 *The Organisation** shall minimize or avoid the use of *fertilisers**. When *fertilisers** are used, *The Organisation** shall demonstrate that use is equally or more ecologically and economically beneficial than use of silvicultural systems that do not require *fertilisers**, and prevent, mitigate, and/or repair damage to *environmental values**, including soils.
 - 10.6.1 The use of fertilisers is minimized or avoided.
 - 10.6.2 The decision to use fertilisers is based on forest health surveys and/or soil or foliage analyses that demonstrate a need for intervention to address tree health and/or productivity.
 - 10.6.3 When fertilisers are used, their ecological and economic benefits are equal to or higher than those of silvicultural systems that do not require fertilisers.
 - 10.6.4 When fertilisers are used, their types and additives; rates, methods, and frequencies; and site of application are documented.

- 10.6.5 When fertilisers are used, environmental values are protected, including through implementation of measures to prevent damage.
- 10.6.6 Damage to environmental values resulting from fertiliser use is avoided, remedied or mitigated
- 10.7 The Organisation* shall use integrated pest* management and silviculture* systems which avoid, or aim at eliminating, the use of chemical pesticides*. The Organisation* shall not use any chemical pesticides* prohibited by FSC policy. When pesticides* are used, The Organisation* shall prevent, mitigate, and/or repair damage to environmental values* and human health.
 - 10.7.1 Integrated *pest** management, including selection of silviculture systems, is used to avoid, or aims to eliminate the frequency, extent, and amount of chemical pesticide applications, and result in non-use or overall reductions in applications.
 - 10.7.2 The use of pesticides complies with FSC Pesticide Policy FSC-POL-30-001 V3-0.
 - 10.7.3 Records of pesticide usage are maintained, including trade name, the active ingredient, the quantity of active ingredient used, the period of use, area of use, location of use, and reason for use.
 - 10.7.4 The use of pesticides complies with the ILO document "Safety in the use of chemicals at work" regarding requirements for the transport, storage, handling, application and emergency procedures for cleanup following accidental spillages.
 - 10.7.5 If pesticides are used, application methods minimise quantities used, while achieving effective results, and provide effective protection to surrounding landscapes.
 - 10.7.6 Damage to environmental values and human health from pesticide use is prevented and mitigated or repaired where damage occurs.
 - 10.7.7 When pesticides are used:
 - 1) The selected pesticide, additives or adjuvants, application method, timing, and pattern of use offers the least risk to humans, recreation and non-target species; and
 - 2) Objective evidence demonstrates that the pesticide is the only effective, practical and cost-effective way to control the *pest**.
 - NTFP 10.7.8 (applicable for honey and other bee products) Sickness of the bees is treated physically such as with steam or fire to disinfect the beehives. For treatment of varroa mites, the following substances are used:
 - 1) Formic acid, lactic acid, acetic acid and oxalic acid.
 - 2) Menthol, eucalyptol and camphor.
- 10.8 The Organisation* 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 Organisation* shall prevent, mitigate, and/or repair damage to environmental values*.
 - 10.8.1 The use of biological control agents is minimised, monitored and

controlled.

- 10.8.2 Use of biological control agents complies with internationally accepted scientific protocols and includes local HSNO requirements
- 10.8.3 The use of biological control agents is recorded including type, quantity, period, location and reason for use.
- 10.8.4 Damage to environmental values caused by the use of biological control agents released by The Organisation is prevented and mitigated or repaired where damage occurs.

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

- 10.9.1 Potential negative impacts of natural hazards on *infrastructure**, forest resources and communities in the management unit are assessed.
- 10.9.2 Management activities mitigate these impacts.

Guidance: Guidance can be found in Annex: J.

- 10.9.3 The risk for management activities to increase the frequency, distribution, or severity of natural hazards is identified for those hazards that may be influenced by management.
- 10.9.4 Management activities are modified and/or measures are developed and implemented that reduce the identified risks.
- 10.9.5 The Organisation complies with fire prevention and management requirements of Fire and Emergency New Zealand.
- 10.10 *The Organisation** 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.
 - 10.10.1 Development, maintenance and use of *infrastructure**, as well as transport activities, are managed to protect environmental values identified in *Criterion* 6.1.
 - 10.10.2 Silviculture activities are managed to ensure protection of the environmental values identified in Criterion 6.1.
 - 10.10.3 Disturbance or damages to water bodies, soils, rare and threatened species, habitats, ecosystems and landscape values are prevented, mitigated and repaired in a timely manner, and management activities modified to prevent further damage.

10.11 *The Organisation** 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.

10.11.1 Harvesting and extraction practices for timber and non-timber forest products are implemented in a manner that conserves environmental values as identified in Criterion 6.1.

- 10.11.2 Adverse effects to environmental values identified in 6.1 are mitigated, repaired, and restored in a timely manner, and management activities modified to prevent further damage.
- 10.11.3 Harvesting practices optimise the use of forest products and merchantable materials.
- 10.11.4 Sufficient amounts of dead and decaying biomass and forest structure are retained to conserve environmental values.

10.11.5 Harvesting practices avoid damage to standing residual trees, residual woody debris on the ground and other environmental values.

10.12 *The Organisation** shall dispose of *waste materials** in an environmentally appropriate manner.

10.12.1 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 and is consistent with provisions of the Resource Management Act, HSNO Act, Biosecurity Act and Local Government Act.

I Annexes

(Normative section)

Annex A List of applicable laws, regulations and nationally-ratified international treaties, conventions and agreements

Please note that this list is not an exhaustive list and other normative documents pertaining to national legislation may exist elsewhere.

1. Legal* rights to harvest	
1.1. Land <i>tenure</i> * and management rights	 Forestry Encouragement Act 1962 Forestry Rights Registration Act 1983 Forests Act 1949 Government Roading Powers Act 1989 Land Act 1948
	Overseas Investment Act 2005
1.2 Concession licenses	Land Transfer Act 1952
1.3. Management and harvesting planning	 Land Transport Act 1998 Personal Property Securities Act 1999 Property Law Act 2007 NZ Forest Accord NZ Forest Road Engineering Manual NZ Principles for Commercial Plantation Forest Management
1.4. Harvesting permits	Forests Act 1949Public Works Act 1981
2. Taxes and fees	
2.1. Payment of royalties and harvesting fees	 Commerce Act 1986 Companies Act 1993 Local Government (Rating) Act 2002 Local Government Act 1974 and 2002
2.2. Value added taxes and other sales taxes	Goods and Services Tax Act 1985
2.3. Income and profit taxes	Income Tax Act 2007Tax Administration Act 1994
3. Timber harvesting activiti	es
3.1. Timber harvesting regulations	Crown Forest Assets Act 1989Fencing Act 1978
3.2. Protected sites and	Conservation Act 1987

species	Native Plants Protection Act 1934
species	
	NZFOA Guidelines for the Management of Rare
	and Endangered Species
3.3. Environmental	Climate Change Response Act 2002
requirements	Crown Minerals Act 1991
	Hazardous Substances and New Organisms Act
	1996
	Plant Variety Rights Act 1987
	Plants Act 1970
	Reserves Act 1977
	Resource Management Act 1991
	Wild Animal Control Act 1977
	Wildlife Act 1953
	NZ Environmental Code of Practice for Forest
	Operations
	NZS8409:2004 Management of Agrichemicals
	Soil Conservation and Rivers Control Act 1941
3.4. Health and safety	Accident Compensation Act 2001
o.a. nearth and safety	Fire and Emergency NZ Act
	Health and Safety at Work Act 2015
	Machinery Act 1950
	Misuse of Drugs Act 1975
	Trespass Act 1980
	Walking Access Act 2008
	The Road Code
2 E. Logalt ampleument	Contracts (Privity) Act 1982
3.5. <i>Legal*</i> employment	Crimes Act 1961
	Employment Relations Act 2000
	Equal Pay Act 1972
	Holidays Act 2003
	Human Rights Act 1993
	Immigration Act 2009
	Minimum Wage Act 1983
	Parental Leave and Employment Protection Act
	1987
	 Patents Act 1953 and 2013
	 Privacy Act 1993
	Approved Code of Practice for Safety and Health in

	 Forest Operations COP for Operator Protective Structures – on self- Propelled Mobile Mechanical Plant COP for Safety and Health in tree Work – Part 2 Maintenance of Trees Around Power Lines. Competenz Best Practice Guidelines Growsafe Agrichemical Users' Code
4. Third parties' rights	
4.1. Customary rights*	Te Turi Whenua Māori Act 1993/Maori Land Act 1993
4.2 Free Prior and Informed Consent*	Treaty of Waitangi Act 1975
4.3. <i>Indigenous Peoples</i> '* rights	 Heritage New Zealand Pouhere Taonga Act 2014 Historic Places Act 1993 Maori Reserved Land Act 1955
as processing and trade. 5.1. Classification of species, quantities,	 equirements for <i>forest</i>* management operations as well Biosecurity Act 1993
qualities 5.2. Trade and transport	 Consumer Guarantees Act 1993 Sale of Goods Act 1908
	 Land Transport Safety Council Code of Practice Log Transport Safety Council – Industry Standards
5.3. Offshore trading and transfer pricing	
	 Log Transport Safety Council – Industry Standards New Zealand Institute of Chartered Accounts Code
transfer pricing	 Log Transport Safety Council – Industry Standards New Zealand Institute of Chartered Accounts Code of Ethics
transfer pricing 5.4. Custom regulations	 Log Transport Safety Council – Industry Standards New Zealand Institute of Chartered Accounts Code of Ethics Biosecurity Act 1993

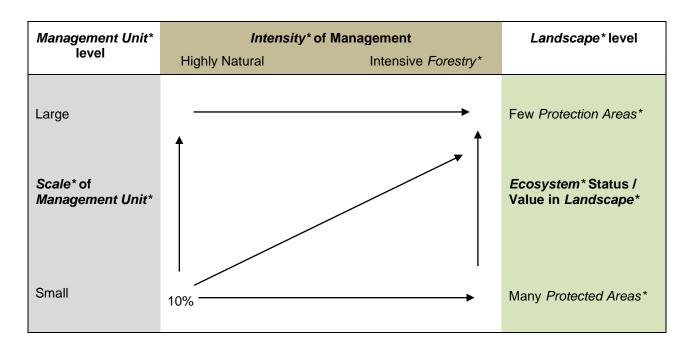
Annex B Training requirements for workers

Training for workers is primarily covered by the Health and Safety at Work Act 2015, but specifically for forestry in the <u>Approved Code of Practice for Safety and Health in</u> <u>Forest Operations</u> and Best Practice Guidelines produced by FITEC. All workers must be trained or under training and supervised.

Workers shall be 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);
- 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);
- Identify where Indigenous Peoples have legal and customary rights related to management activities (Criterion 3.2);
- Identify and implement applicable elements of UNDRIP and ILO Convention 169 (Criterion 3.4);
- 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);
- Identify where local communities have legal and customary rights related to management activities (Criterion 4.2);
- 10) Carry out social, economic and environmental impact assessments and develop appropriate mitigation measures (Criterion 4.5);
- 11) Implement activities related to the maintenance and/or enhancement of declared ecosystem services (Criterion 5.1);
- 12) Handle, apply and store pesticides (Criterion 10.7); and
- 13) Implement procedures for cleaning up spills of waste materials (Criterion 10.12).

Annex C Conservation Area Network* Conceptual Diagram.



The diagram shows how the area of the management unit included in the *Conservation Area Network*^{*} is generally expected to increase from the 10% minimum as the size, intensity of management, and/or the status and value of ecosystems at the landscape level each increase. The arrows and their direction represent these increases.

The far right column titled 'Ecosystems Status/Value in the Landscape' signifies the extent to which native ecosystems are protected at the landscape level and the relative requirements for further protection in the management unit.

The leftmost column titled 'Area of management unit shows that as the management unit area increases, the management unit will itself be at the landscape level and so will be expected to have a *Conservation Area Network** containing functional examples of all of the naturally occurring ecosystems for that landscape.

Guidance for Calculating the Conservation Areas Network* Set Aside Requirements

Annex C has been added to help clarify the requirements around how The Organisation can establish the *conservation areas network*^{*} (CAN). Indicators 6.5.6 - 6.5.10 introduce concepts around minimum area, not only as a total percentage but by specific ecological boundaries. Also, they bring in options to have the CAN on third-party land, or by paying a certain amount for another party to do the equivalent work if the CAN was within the management unit. To complicate it further, there is a hierarchy and different requirements if the forest is small or large, and on what things can, and how much of it, constitutes CAN area.

Step 1: Deciding what can contribute to *conservation areas network** area

The areas in the following table may contribute to the CAN within the management unit:

Area description that may contribute to CAN	Management Unit Size (small and medium or all)	Multiplier	Maximum contribution to CAN
Conservation zones and protection areas identified and managed under 6.4, 6.5, 6.6 & 6.7.	All	1	NA
Retired areas currently under maintenance to allow transition to indigenous vegetation.	All	1	NA
Exotic species plantations managed for continuous cover, where threatened species and pest control plans are prepared and implemented.	All	0.5	Up to 3% of the total CAN requirement
Areas of plantation trees with specific threatened habitat values that have been set aside from harvest and are being managed to protect a specific threatened species e.g. bat roosts, population of threatened orchid.	All	1	NA
HCVs that meet HCV Criteria 1–4	All	1	NA

Indigenous species <i>plantations</i> managed for continuous cover. <i>Pest*</i> and weed control plans must be prepared and implemented in these areas.	All	0.7	Up To 5% of the total CAN requirement
 Riparian zones with permanent native, or mixed exotic/ native, (non-harvestable) suitable for protection of instream values with a minimum 10m width each side of waterway. Stock exclusion and <i>pest*</i> and weed management is carried out to the extent required for maintenance. Planned <i>incursions*</i> by logging disturbance or roading requirements at harvest will exclude a riparian zone from being part of the CAN. 	All	1	Small up to 5% of the total CAN requirement Medium up to 3% of the total CAN requirement Large and medium up to 1% of the total CAN requirement
Permanent non-harvestable exotic or mixed exotic / indigenous (non- harvestable) areas. This may include multi-tier, double- row shelter belts, with double fencing (small only). Management plans must detail what actions are being undertaken on these areas to ensure enhancement	Small and medium	0.5	Up to 2% of the total CAN requirement

of indigenous biodiversity including <i>pest*</i> control.			
Alternative forest crop species apart from Radiata pine and Douglas fir (excludes short-term coppicing for firewood). Stock excluded, understorey allowed to develop and <i>pest</i> * control carried out.	Small and medium	0.3	Up to 4% of total CAN requirements

For example, 100 ha in a conservation zone counts as 100 ha towards the CAN. However, a 100 ha in alternative non- radiata or Douglas fir forest only counts towards 30 ha of CAN area.

For small forests, the above CAN areas can be outside the management unit but within the landowner's property that adjoins the management unit. For example, the management unit may be within a farming property that may have a QE11 covenant, and other riparian zone remnants. These can be included.

To take into consideration that *ecological district** boundaries were mapped at 1:250,000 using old technology and can create inconsistencies at management unit resolution level, and the Management Unit might span multiple *ecological districts** and *ecological regions**, the following adjustments may be made:

- 1) Where *ecological district** or *Region** boundary/ies arbitrarily bisect a management unit with similar ecological character and landforms, the areas bisected can be considered as one ecological unit.
- 2) Outlying areas of a management unit, where each is less than 50ha in any one ecological district/or equivalent can be combined with an adjacent area of the management unit.

There is no requirement that an existing *plantation* needs to be converted to Conservation zone or protection areas to meet the CAN Indicators. However, this is an option that may occur, particularly to buffer or extend areas, to achieve Representative Sample Areas of native ecosystems, or to restore *threatened environments** 1 and 2.

Annex D Elements of the management plan

- 1) Objectives, including a commitment to FSC.
- 2) Forest and Land Description
- 3) Legal Framework
- 4) The results of assessments, including:
 - a. Natural resources and environmental values, as identified in Principle 5, 6 and 9
 - b. Social, economic and cultural resources and condition, as identified in Principle 2 to 6 and Principle 9; and
 - c. Major social and environmental risks in the area, as identified in Principle 2, 3, 4, 5, 6 and 9.
 - d. Rationale for species selection and regime.
 - e. The maintenance and/or enhancement of ecosystem services for which promotional claims are made as identified in Criterion 5.1.
- 5) Programs and activities regarding:
 - a. Workers' rights, occupational health and safety, gender equality, as identified in Principle 2
 - b. Indigenous Peoples, community relations, local economic and social development, identified, as in Principle 3, Principle 4 and Principle 5
 - c. Stakeholder engagement and the resolution of disputes; and grievances, as identified in Principle 3, 4, 7 and 9
 - d. Planned management activities and timelines, silvicultural systems used, typical harvesting methods and equipment, as identified in Principle 5 and 10
 - e. The rationale for harvesting rates of timber and other natural resources, as identified in Principle 5
 - f. Protecting the forest and management objectives, in particular from pests and natural hazards.
- 6) Measures to conserve and/or restore:
 - a. Rare and threatened species and habitats
 - b. Water bodies and riparian zones
 - c. Landscape connectivity, including wildlife corridors
 - d. Representative Sample Areas, as identified in Principle 6; and
 - e. High conservation values, as identified in Principle 9.
- 7) Measures to assess, prevent, and mitigate negative impacts of management activities on:
 - a. Environmental values, as identified in Principle 5, 6 and Principle 9; and
 - b. Social Values, as identified in Principle 2 to Principle 5 and Principle 9
- 8) A description of the monitoring programme, as identified in Principle 8, including:
 - a. Growth and yield, as identified in Principle 5
 - b. Environmental values, as identified in Principle 6
 - c. Operational impacts, as identified in Principle 10
 - d. High conservation values, as identified in Principle 9; and
 - e. Monitoring systems based on stakeholder engagement planned or in place, as identified in Principle 2 to Principle 5 and Principle 9; and
 - f. Maps describing the natural resources and land use zoning on the forest management unit.

Annex E Conceptual framework for planning and monitoring

The purpose of this checklist is to help The Organisation identify where there may be gaps or non-conformance in their monitoring.

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

mp		Yes / No NA
a.	The results of regeneration activities (Criterion 10.1);	
b.	The use of ecologically well-adapted species for regeneration (Criterion 10.2)	
C.	Invasiveness or other adverse impacts associated with any Alien species within and outside the management unit (Criterion 10.3);	
d.	The use of Genetically modified organisms to confirm that they are not being used. (Criterion 10.4);	
e.	The results of silvicultural activities (Criterion 10.5);	
f.	Number of Adverse impacts to environmental values from fertilisers (Criterion 10.6);	
g.	List of fertilisers and application rates kept ongoing	
h.	Any damage from fertiliser use documented including remedy as occurs	
i.	Adverse impacts from the use of pesticides (Criterion 10.7)	
j.	Pesticides used are checked against FSC prohibited list and NZ exempt list on introduction of new pesticide;	
k.	Checks are made to ensure environmental damage is avoided after spray releases;	
I.	Adverse impacts from the use of biological control agents (Criterion 10.8);	
m.	Any biological control agents are documented by outside agency on release;	
n.	The impacts from natural hazards (Criterion 10.9);	
0.	The impacts of infrastructural development, transport activities and silviculture to rare and threatened species, habitats, ecosystems, landscape values water and soils (Criterion 10.10);	
p.	Soil stabilisation including roading is <i>monitored</i> ongoing or until stability achieved;	
q.	The impacts of harvesting and extraction of timber and non-timber forest products, environmental values, merchantable wood waste and other products and services (Criterion 10.11);	
r.	Environmentally appropriate disposal of waste materials (Criterion 10.12)	

2)	Monitoring in 8.2.1 are sufficient to identify and describe social impacts of
	management activities, including where applicable:

mai	agement activities, including where applicable.	Yes /	No
a.	Evidence of illegal or unauthorized activities (Criterion	NA	
	1.4);		
b.	Compliance with applicable laws, local laws, ratified		
	international conventions and obligatory codes of		
	practice (Criterion 1.5);		
C.	Resolution of disputes and grievances (Criterion 1.6,		
_	Criterion 2.6, Criterion 4.6);		
d.	Programs and activities regarding workers' rights		
	(Criterion 2.1);		
e.	Gender equality, sexual harassment and gender		
	discrimination (Criterion 2.2);		
f.	Programmes and activities regarding occupational		
~	health and safety (Criterion 2.3);		
g.	Payment of wages (Criterion 2.4);		
h.	Worker training (Criterion 2.5);		
i.	Where pesticides are used, the health of workers		
	exposed to pesticides (Criterion 2.5 and Criterion		
	10.7)		
j.	The identification of Indigenous Peoples and local		
	communities and their legal and customary rights		
	(Criterion 3.1 and Criterion 4.1);		
k.	Full implementation of the terms in binding		
	Agreements (Criterion 3.2 and Criterion 4.2);		
I.	Indigenous Peoples and community relations		
	(Criterion 3.2, Criterion 3.3 and Criterion 4.2);		
m.	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);		
n.	The use of traditional knowledge and intellectual		
	property (Criterion 3.6 and Criterion 4.8);		
0.	Local economic and social development (Criterion 4.2,		
•	Criterion 4.3, Criterion 4.4, Criterion 4.5);		
p.	The production of diversified benefits and/or products		
1	(Criterion 5.1);		
q.	Actual compared to projected annual harvests of		
•	timber and non-timber forest products (Criterion 5.2);		
r.	The use of local processing, local services and local		
	value added manufacturing (Criterion 5.4);		
s.	Long-term economic viability (Criterion 5.5);		
t.	High conservation values 5 and 6 identified in		
	Criterion 9.1.		

3) Monitoring procedures in 8.2.2 are sufficient to identify and describe changes in environmental conditions, including where applicable:

Yes / No NA

a.	Environmental values and ecosystem functions including carbon sequestration and storage Criterion 6.1);	
b.	Rare and threatened species (Criterion 6.4);	
C.	Rare and threatened species populations and habitat monitored;	
d.	Representative Sample Areas (Criterion 6.5);	
e.	Large – representative areas health and restoration programs are monitored;	
f.	Naturally occurring native species and biological diversity (Criterion 6.6);	
g.	Maintenance is monitored;	
h.	Water bodies and water quality (Criterion 6.7);	
i.	Landscape values (Criterion 6.8);	
j.	Large - Trials monitored;	
k.	Conversion of natural forest to plantations (Criterion 6.9);	
I.	The status of plantations established after 1994 (Criterion 6.10);	
m.	High conservation values 1 to 4 identified in Criterion 9.1.	

Annex F Identifying biodiversity requirements for small plantations

Annex F provides guidance on the biodiversity requirements for small plantations, those with a management unit of less than 100 hectares (described in section 5: Notes on the Use of Indicators). The following process steps will assist *The Organisation** to meet the requirements of criteria 6.1 through 6.5. This Annex uses, Significant Natural Areas (SNA) or their equivalent, for example, SEA, ASCV.

A. Identification and protection of environmental values (refer to 6.1)

Does the management unit contain indigenous vegetation, water courses or has continuous cover indigenous harvest areas?



A1. Requirements for The Organisation

- a) Carry out animal pest and weed control to ensure maintenance of indigenous plant communities and associated wildlife.
- b) Riparian margins are mapped and protection measures are implemented (refer to 6.7)

B. Identification and protection of threatened species and their habitats (refer to 6.2 and 6.4)

Has the local authority completed their SNA mapping in your area?

Yes	Νο
Ļ	Ļ
Go to B1	Go to B2

B1. Does the management unit or area downstream of the management unit contain a SNA?

Yes	No
↓	Ļ
Go to B3	No further requirements

- B2. Carry out the requirements of 6.1.1 and 6.1.2 to gather information and identify priorities for protection as per the guidance. **Go to B3**
- B3. Requirements of Forest Manager
 - a) SNAs or areas identified B2 are identified on maps
 - b) Stock is excluded by fencing from the SNAs or areas identified B2
 - c) Invasive Plant Control program in place for SNAs or areas identified B2 sufficient to ensure maintenance of indigenous plant communities.
 - Animal Pest Control Program in place within management unit sufficient to ensure maintenance of species associated with the SNAs or areas identified in B2
 - e) Opportunities are identified to enhance the resilience of the SNAs or areas identified in B2 - for example, buffers to protect against harvesting affects, corridor linkages with other SNAs or areas identified in B2.

Annex G Strategies for maintaining high conservation values

Strategies for maintaining high conservation values may not necessarily preclude harvesting (plantations only). However, the only way to maintain some high conservation values will be through protection of the *High conservation value area** that supports them.

HCV 1 – *Protection zones*, harvest prescriptions, and/or other strategies to *protect** *threatened**, endangered, endemic species, or other concentrations of *biological diversity** and the ecological communities and *habitats** upon which they depend, sufficient to prevent reductions in the extent, integrity, quality, and viability of the *habitats** and species occurrences. Where enhancement is identified as the *objective**, measures to develop, expand, and/or *restore** *habitats** for such species.

HCV 2 – Strategies that fully maintain the extent and intactness of the *forest** *ecosystems** and the viability of their biodiversity concentrations, including plant and animal *indicator** species, keystone species, and/or guilds associated with large intact *natural forest** *ecosystems**. Examples include *protection zones** and set-aside areas, with any commercial activity in areas that are not set-aside being limited to low *intensity** operations that fully maintain *forest** structure, composition, regeneration, and disturbance patterns at all times. Where enhancement is identified as the *objective**, measures to *restore** and reconnect *forest** *ecosystems**, their intactness, and *habitats** that support natural *biological diversity**.

HCV 3 – Strategies that fully maintain the extent and integrity of rare or *threatened ecosystems**, *habitats**, or *refugia**. Where enhancement is identified as the *objective**, measures to *restore** and/or develop rare or *threatened ecosystems**, *habitats**, or *refugia**.

HCV 4 – Strategies to *protect** any water catchments of importance to *local communities** located within or downstream of the *management unit**, and upstream and upslope areas within the unit that are particularly unstable or susceptible to erosion. Examples may include *protection zones**, harvest prescriptions, chemical use restrictions, and/or prescriptions for road construction and *maintenance**, to *protect** water catchments and upstream and upslope areas. Where enhancement is identified as the *objective**, measures to *restore** water quality and quantity. Where identified HCV 4 *ecosystem services** include climate regulation, strategies to maintain or enhance carbon sequestration and storage.

HCV 5 – Strategies to *protect** the community's and/or *Indigenous Peoples** needs in relation to the *forest** *management unit** developed in cooperation with representatives and members of *local communities** and *Indigenous Peoples**.

HCV 6 - Strategies to *protect** the cultural values developed in cooperation with representatives and members of *local communities** and *Indigenous Peoples**.

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

IDENTIFICATION OF HCV 1

- Description of Best Available Information* in the country for identifying HCV1: Best Available Information* in this context includes an assessment by an ecologist to determine whether a site has concentrations of biodiversity that are nationally or globally significant. Past assessments (SNA, PNA etc.) may identify sites as being nationally significant. If not, it is recommended that an assessment is carried out by an experienced qualified ecologist.
- 2. Description of interested and affected stakeholders:

Interested and affected stakeholders will vary depending on the *forest** location but could often include: local communities and *iwi**; environmental, economic and social organizations; and government organisations like district and regional councils, and the Department of Conservation.

3. Description of *culturally appropriate engagement** for identifying HCVs:

An ecologist can assess for HCV1 including drawing on local knowledge to determine if the criteria have been met.

4. Examples of rare / threatened / endangered species in the country <u>http://rarespecies.nzfoa.org.nz/</u> https://nztcs.org.nz

Examples are:

- The Iwitahi orchid reserve which has population of RTE native orchard under an approximate 17 ha of plantation forest
- Cook Road Forest
- Whatoro forest significant kiwi population in a strategic location linking Trounson Park to Kaihu Forest Park.
- 5. Geographic areas where HCV1 is likely present: HCV1 can be in any geographic areas in NZ.
- 6. Maps of HCV1 areas in the country: No national level mapping of FSC HCV1 areas exists, however, regional and national databases such as territorial authority mapping (SNAs), DOC PNAP (Protected Natural Areas Programme) identify significant areas, and in some instances specifically identify areas that are nationally or globally significant. LENZ, DOC threat classification and the FOA rare species website provide useful references.
- 7. Threats to HCV1 areas in the country:
 - The spread of plant *pest** species.
 - The spread or increase in population of introduced animal *pests**, e.g. possums, cats, mustelids, pigs, and wallaby.
 - Loss of habitat when tree felling in neighbouring plantation forestry where a threatened species has spread to the plantation area

New Zealand's indigenous (native) plants and animals evolved without predatory or browsing mammals. Humans introduced animals and plants that are now considered *pests** and these introduced *pests** have a major impact on indigenous (native) biodiversity

(http://www.mfe.govt.nz/publications/environmentalreporting/environmentaotearoa-2015-biodiversity/impacts-biodiversity). Alien animal species eat indigenous animals and plants and compete with them for food or habitat. Possums, rats, and stoats pose the greatest threat to indigenous plants and animals and are present across most of the country. They prey on indigenous birds and have contributed to declines in populations of forest birds such as the North Island kōkako, kererū, kākāriki, yellow head (mōhua), and brown creeper. Possums also eat large quantities of indigenous vegetation and are a major cause of decreasing distributions of indigenous tree species – such as pōhutukawa, Hall's tōtara, kāmahi, māhoe, tawa, and rātā. In the process they can also change the composition and structure of native forests. Possums, rats and mice also slow forest regeneration by eating seeds and seedlings. Other *pests**, such as feral goats, red deer, and Himalayan tahr, have a more limited distribution, but when concentrated in large numbers, they can have significant effects on forest and alpine ecosystems.

STRATEGIES FOR MAINTAINING HCV1

- Clear identification of HCV1 areas in the forest management system. protection zones, harvest prescriptions, and/or other strategies to protect threatened, endangered, endemic species, or other concentrations of biological diversity and the ecological communities and habitats upon which they depend, sufficient to maintain the extent, integrity, quality, and viability of the habitats and species occurrences.
- 2) Where enhancement is identified as the objective, measures to develop, expand, and/or restore habitats for such species are in place.

MONITORING HCV1

Establishing a *monitoring* program that assesses:

- The status and area of HCV 1, through monitoring of indicator or flagship species as indicators of habitat quality or changes in the species.
- The effectiveness of the activities carried out to conserve, maintain or increase HCV 1 according to the scale, intensity and risk of the operations
- Compliance with agreements established with neighbours and stakeholders, where applicable.

The monitoring programme defines the appropriate scope, scale and frequency to detect changes in the HCV, in relation to the initial assessment.

HCV 2 – Landscape*-level ecosystems* and mosaics. Intact Forest Landscapes* and 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.

IDENTIFICATION OF HCV 2

- 1. Description of *Best Available Information** in the country for identifying HCV2: In NZ, *Intact Forest Landscapes** and large landscape-level ecosystems and ecosystem mosaics are often designated as conservation/forest parks or national parks and are outside of MU. However in some cases where the intact landscape adjoins the MU and the adjoining sections of the MU are managed as protection zone, these sections of the MU may add to or be part of the larger significant landscape.
- 2. Description of interested and affected stakeholders: Interested and affected stakeholders will vary depending on the forest location but could often include: local communities and *iwi**; environmental, economic and social organizations; and government organisations like district and regional councils, and the Department of Conservation.
- 3. Description of *Culturally appropriate engagement** for identifying HCVs: DOC or an ecologist can assess for HCV2 including drawing on local knowledge to determine if the criteria have been met.
- 4. Examples of HCV2 areas in the country: conservation or forest parks and National parks are located throughout New Zealand. Examples are Raukumara Conservation Park, Kaimanawa Forest Park, and Kahurangi National Park.
- 5. Geographic areas where IFLs or other types of HCV2 is likely present: HCV2 can be in any geographic areas in NZ.
- 6. Maps of HCV2 areas in the country: DOC National, Conservation and Forest Park maps http://www.intactforests.org/data.ifl.html
- 7. Threats to HCV2 areas in the country: Where FSC certified plantations adjoin or form part of an intact forest landscape, large landscape-level ecosystem or ecosystem mosaic, planning is required to ensure plantation activities do not adversely impact the landscape values. Threats include:
 - The spread of wilding conifers.
 - Other plant *pest** species.
 - The spread or increase in population of introduced animal *pests**, e.g. possums, cats, mustelids, pigs, and wallaby.
 - Incremental ecosystem loss through forestry activities.

STRATEGIES FOR MAINTAINING HCV2

- 1) Identify where HCV2 occur adjacent to the MU.
- 2) Manage protection zones that adjoin HCV by adopting strategies that fully maintain the extent and intactness of the forest landscapes and large landscape-level ecosystems and ecosystem mosaics and the viability of their biodiversity concentrations, including plant and animal indicator species, keystone species, and/or guilds associated with large intact natural forest

ecosystems. These strategies shall be developed in conjunction with the manager of the adjacent land to the MU with the intention to protect these HCVs.

3) The core area* of each *Intact Forest Landscape** within the management unit is protected, comprising at least 80% of the *Intact Forest Landscapes** within the management unit (Motion 65, GA2014 and ADVICE-20-007-018 V1-0).

MONITORING HCV2

Establishing a monitoring program that assesses:

- The surface area and status of HCV 2;
- The presence of indicator or flag species of the identified landscape status;
- The implementation and effectiveness of activities carried out to maintain and/or improve HCV 2;
- The presence or absence of human disturbance for HCV 2;

The monitoring programme defines the appropriate scope, scale and frequency to detect changes in the HCV, in relation to the initial assessment.

HCV3 – Ecosystems* and habitats*. Rare*, threatened*, or endangered ecosystems*, habitats* or refugia*.

IDENTIFICATION OF HCV3

1. Description of *Best Available Information** in the country for identifying HCV3: An assessment by an ecologist to determine whether a site qualifies as a rare, threatened or endangered ecosystem. In some instances, past assessments (SNA, PNA etc.) may identify sites that are particularly rare. If not, it is recommended that an assessment is carried out by an experienced qualified ecologist. Several national priorities for protecting rare and threatened indigenous biodiversity relate to rare, threatened or endangered ecosystems.

National Priority 1 land environments have 20% or less remaining under indigenous cover (<u>https://www.mfe.govt.nz/more/biodiversity/national-policy-statement-biodiversity/statement-national-priorities-biodiversity</u>).

National Priority 2 includes indigenous vegetation associated with sand dunes and *wetlands** that are now uncommon. These are often poorly mapped in regional council databases.

National Priority 3 ecosystems include indigenous vegetation associated with 'originally rare' terrestrial ecosystem types not covered by priorities 1 and 2 (<u>https://www.landcareresearch.co.nz/publications/factsheets/rare-ecosystems</u>).

 Description of Interested and affected stakeholders: Interested and affected stakeholders will vary depending on the forest location, but could often include: local communities and *iwi**; environmental, economic and social organizations; and government organisations like district and regional councils, and the Department of Conservation.

3. Description of <i>culturally appropriate engagement</i> * for identifying <i>HCV</i> s: An independent assessment by an experienced, qualified ecologist is necessary to determine whether the site meets <i>HCV</i> 3.
4. Examples of HCV3 ecosystems and habitats in the country:
 Rangitaiki <i>wetlands</i>* (Kaingaroa Forest). Waiotapu Geothermal Reserve (Kaingaroa Forest). Duneland and dune lakes (Te Hiku Forest)
5. Geographic areas where HCV3 is likely present: HCV3 could be located throughout New Zealand.
6. Maps of HCV3 areas in the country: No maps of FSC <i>HCV</i> exist, however, national databases such as territorial authority mapping (SNAs), LENZ, DOC <i>threat</i> classification and the FOA <i>rare species</i> website provide useful references.
The National Priority 1 land environments maps identify, at a national level, our most rare and <i>threatened environments</i> * and ecosystems across New Zealand (<u>http://www.mfe.govt.nz/more/biodiversity/national-policy-statement-biodiversity/statement-national-priorities-biodiversity</u>)
See maps under the 6 naturally uncommon ecosystem (National Priority 3) categories - <u>https://www.landcareresearch.co.nz/publications/factsheets/rare-ecosystems</u>
7. Threats to HCV3 areas in the country: Refer to HCV1.
The threats include:
 The spread of wilding conifers and other plant <i>pest*</i> species. The spread or increase in population of introduced animal <i>pests*</i>, e.g. possums, cats, mustelids, pigs, and wallaby. Loss of habitat through neighbouring forestry operations e.g. tree felling.
STRATEGIES FOR MAINTAINING HCV3
 Strategies that fully maintain the extent and integrity of rare or threatened ecosystems, habitats, or refugia.
 Where enhancement is identified as the <i>objective</i>, measures to restore and/or develop rare or threatened ecosystems, habitats, or refugia are in place.
MONITORING HCV3
Establish a monitoring program that assesses:
 The area and status of HCV 3: comparing it every year
 The implementation and effectiveness of the activities carried out to maintain or increase the HCV 3, to confirm whether the objectives are being met.

- The reduction in size and geographic presence of the ecosystem or habitat in

the area.

The monitoring programme must have defined the appropriate scope, scale and frequency to detect changes in the HCV, in relation to the initial assessment.

HCV4 – *Critical** ecosystem services*. Basic ecosystem services* in critical* situations, including protection* of water catchments and control of erosion of vulnerable soils and slopes.

IDENTIFICATION OF HCV4

1. Description of additional *Best Available Information** in the country for identifying HCV4:

Ecosystem services are defined as the benefits people obtain from ecosystems. These include: provisioning services such as food, forest products and water; regulating services such as reducing 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 nonmaterial benefits. Criticality refers to the importance and risk for natural resources and environmental and socio-economic values. An ecosystem service is considered to be critical 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, or on HCVs;

The following areas may on assessment be considered HCV4 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:

Legal community water supply catchments within or downstream of the MU where the activity of the MU is likely to cause, or poses a threat of, severe negative impacts.

*Very high risk erosion** areas or areas identified during *pre-harvest** planning as having very high *risk* of erosion.

Areas subject to a soil conservation order.

Forest protecting significant infrastructure or communities from flood events.

- 2. Description of Interested and affected stakeholders: Interested and affected stakeholders will vary depending on the forest location, but could often include: local communities and *iwi**; environmental, economic and social organizations; and government organisations like district and regional councils, and the Department of Conservation. Forest managers, local communities, *iwi**, The Ministry for Environment, local and regional councils.
- 3. Examples of HCV4 critical ecosystem services in the country: Legal community water supply catchments within or downstream of the MU where the activity of the MU is likely to cause, or poses a threat of, severe negative impacts.
 - Torupatutahi Soil conservation area (Kaingaroa Forest)
 - Mangatu Slip (Gisborne)
 - Hunua (Auckland) water supply catchments.
- 4. Geographic areas where HCV4 is likely present: HCV4 could be located

throughout New Zealand.

5. Maps of HCV4 areas in the country: Maps of New Zealand's lakes and rivers (https://www.niwa.co.nz/freshwater-andare available online estuaries/nzffd/NIWA-fish-atlas/map-ofNZ-rivers), which along with information likelihood on the of high intensity rainfall events (https://www.niwa.co.nz/information-services/hirds) can be used to highlight areas at risk of flooding.

ESC and/or The Land Resource Information System includes soil erosion type and severity maps for the country (<u>https://lris.scinfo.org.nz/layer/48054-nzlrierosion-type-and-severity/</u>) and can inform more detailed erosion assessments.

Regional and District plans outlining amenity and landscape significance.

6. Threats to HCV4 areas in the country:

The most widespread cause of altered river flow from water takes appears to be irrigation, although other uses such as hydroelectricity are important in some catchments. There is currently no national-scale data on water use, and the analysis so far is done with consented information. Climate change is predicted to exacerbate pressures on water flows and the availability of water (http://www.mfe.govt.nz/sites/default/files/media/Environmental%20reporting/o ur-fresh-water-2017_1.pdf). Forest management was not raised as a factor threating to reduce of water quantity. However, plantation forests can affect water flows, but are close to natural when compared to other land uses.

- 7. Key threats in relation to forestry are:
 - Climate change including increased and more intense rainfall events.
 - Large scale harvesting on vulnerable sites.

STRATEGIES FOR MAINTAINING HCV4

- 1) Strategies to protect any water catchments of importance to local communities located within or downstream of the management unit, and areas within the unit that are particularly unstable or susceptible to erosion.
- 2) Examples may include protection zones, harvest area limitations or requirement to ensure a permanent forest cover, chemical use restrictions, and/or prescriptions for road construction and maintenance, to protect water catchments and upstream and upslope areas.
- 3) Where enhancement is identified as the objective, measures to restore water quality and quantity are in place and avoid future degradation.
- 4) Where identified HCV4 ecosystem services include climate regulation, strategies to maintain or enhance carbon sequestration and storage are in place.

MONITORING HCV4

Establish a monitoring program that assesses:

- The implementation and effectiveness of activities carried out to maintain

and/or improve HCV 4, so that compliance with the established objectives can be confirmed. Namely, that harvesting practices do not affect water bodies, and that barriers have been established and are maintained to control fires.

- The quality and quantity of water for large plantation forest companies and MU.
- The incidence of landslides or gullies in the MU, affected areas, their control and status.
- Incidence and control of forest fire and incipient fires in the MU, affected areas, control and status.

The monitoring program must have defined the appropriate scope, scale and frequency to detect changes in the HCV, in relation to the initial assessment.

HCV5 – Community needs. Sites and resources fundamental for satisfying the basic necessities of *local communities*^{*} or *Indigenous Peoples*^{*} (for livelihoods, health, nutrition, water, etc.), identified through *engagement*^{*} with these communities or *Indigenous Peoples*^{*}.

IDENTIFICATION OF HCV5

 Description of additional Best Available Information* in the country for identifying HCV5: Both exotic plantation and natural forests provide recreational opportunities including hiking, mountain biking, hunting, bird watching, food collecting and medicinal plant collecting (http://www.TeAra.govt.nz/en/protected-areas/page-5). Several planted forests in New Zealand provide recreational opportunities to the people who visit them, including walking, mountain biking, horse riding, running, and exercising dogs (http://www.landcareresearch.co.nz/ data/assets/pdf file/0019/77032/1_4 Y ao.pdf
 Where these activities occur on private land, landowners work with local communities to agree access protocols.

Clarification: Exotic plantations and associated industries are often major employers in rural communities, thus supporting the livelihoods of many members of these communities.

Forests provide the basis for many traditional uses, among them collection of edible products of the forests (fruiting berries of indigenous plants, fern root, seeds, etc.), timbers for carving and building, physical remedies derived from trees, leaves, berries, fruits, bark and moss used to treat particular ailments, among others

(<u>https://www.landcareresearch.co.nz/__data/assets/pdf_file/0017/43910/maori__values_native_forest.pdf</u>).

However, traditional subsistence living is almost totally absent in New Zealand, so none of the above activities could be considered as being of fundamental importance to satisfy basic livelihood needs. Therefore, HCV5 sites are rare in New Zealand's planted forests.

Generally, there are few examples where forest recreation is fundamental to basic necessities, perhaps the only example could be Whakarewarewa Forest and its significant contribution to tourism and recreational business in Rotorua.

- 2. Description of Interested and affected stakeholders: Local communities, *iwi**, Doc, territorial authorities, recreation groups.
- 3. Description of *culturally appropriate engagement** for identifying HCVs: Engagement with a community representative group, territorial authority or DOC and with *mana whenua** through FIPC agreed tikaanga. Refer to *culturally appropriate engagement**.
- 4. Examples of HCV5 sites and resources fundamental for local communities in the country:
 - Whakarewarewa Core Mountain Bike Area.
 - Blue and Green Lake Covenants (Whakarewarewa Forest, Rotorua).
- 5. Geographic areas where HCV5 is likely present: HCV5 could be located throughout New Zealand.
- 6. Maps of HCV5 areas in the country: No FSC HCV5 maps exist, however Territorial Authority planning maps provide a resource that could be used to help identify *HCV*5 areas, for example significant amenity sites or fisheries.
- 7. Threats to HCV5 areas in the country:
 - Forest management activities.
 - Restricting access.
 - Conversion to other land uses.

STRATEGIES FOR MAINTAINING HCV5

1) Strategies to protect the community's and/or Indigenous Peoples' needs in relation to the management unit are developed in cooperation with representatives and members of local communities and Indigenous Peoples.

MONITORING HCV5

Establish a monitoring program that assesses:

- The implementation of the strategies established to maintain and/or enhance the HCV; allowing to confirm if the objectives were achieved.
- Whether the management is affecting the identified HCV 5.
- Permanent access to HCV 5 used by local communities, Indigenous Peoples or *iwi**.
- Type of resource and volume used by local communities, Indigenous Peoples or *iwi** to cover their basic needs.

The monitoring programme must have defined the appropriate scope, scale and frequency to detect changes in the HCV, in relation to the initial assessment.

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**.

IDENTIFICATION OF HCV 6

 Description of Best Available Information* in the country for identifying HCV6: Internationally significant heritage sites World heritage sites are designated by UNESCO under the World Heritage Convention, which provides for the protection of places that are of outstanding universal value. New Zealand has three and the map from UNESCO website identifies their location on the New Zealand territory (<u>http://whc.unesco.org/en/statesparties/NZ</u>).

Significant heritage sites are scattered throughout New Zealand, but mainly are found in or around urban areas (<u>http://www.heritage.org.nz/the-list</u>).

Consultation with *mana whenua*^{*} may identify HCV6 where sites have significant cultural heritage. Noting some may be silent file where location and description are not made public.

- 2. Description of Interested and affected stakeholders: *Iwi** (*mana whenua**) and local communities, The Department of Conservation, Heritage New Zealand
- Description of *Culturally appropriate engagement** for identifying HCVs: Engagement with a registered archaeologist or consultation with *mana whenua** through FIPC agreed tikaanga. Refer to *Culturally appropriate engagement**. geographic areas where HCV6 is likely present: HCV6 could be located throughout New Zealand.
- 4. Examples of HCV6 significant cultural values in the country:
 - Caves Historic Site, Kaingaroa Forest
 - Takiroa Rock Art Shelter, Takiroa, Otago.
- 5. Maps of HCV6 areas in the country: Certificate holder GIS. Heritage NZ maps and archaeological site records.

Nationally significant heritage sites under Heritage New Zealand archaeological sites only and under local authorities' administration. There is a list online that serves as a recognition tool and where any individual can propose new sites through a written application. The list of heritage sites of national significance is divided into five parts, based on the type of sites (http://www.heritage.org.nz/the-list).

6. Threats to HCV6 areas in the country: Forest management activities.

International significance heritage sites According to UNESCO (<u>https://whc.unesco.org/en/soc/?action=list&id_search_state=115</u>), the factors affecting world heritage site of Te Wahipounamu – South West New Zealand in 2004 relate to oil spill and effects arising from use of transportation infrastructure. Potential logging is listed as one factor affecting the site identified in previous reports.

National significance heritage sites under HNZ -archaeological sites only- and under local authorities' administration. Damage can be caused to both archeological sites and national heritage sites during harvesting, extraction and replanting. Potential threats to such sites from forest management is the restriction of access for Māori communities to hunt, fish, extract plants, and maintain contact with resources for traditional use and sacred places.

STRATEGIES FOR MAINTAINING HCV6

1) Strategies to protect the cultural values are developed in cooperation with representatives and members of local communities and Indigenous Peoples.

MONITORING HCV6

Establish a monitoring program that assesses:

- The implementation of the strategies established to maintain and/or enhance HCV 6; allowing to confirm if the objectives were achieved.
- Whether the management is affecting the identified HCV 6.
- Permanent access to HCV 6, with which local communities, Indigenous Peoples or *iwi** have a religious/cultural/economic linkage with the area or the forest.
- Changes in the status of the HCV 6 with indicators accepted and credible by local communities, Indigenous Peoples or *iwi** who have a religious/cultural/economic linkage with the area or the forest.

The monitoring programme must have defined the appropriate scope, scale and frequency to detect changes in HCV 6, in relation to the initial assessment.

Annex I List of rare and threatened species in the country or region

In New Zealand, the Department of conservation maintains and updates a database of known animal species and their conservation status. This information is broken down in separate documents based on each animal family (Hominidae).

This information can be found here: <u>https://www.doc.govt.nz/about-us/science-publications/Conservation-publications/nz-threat-classification-system/</u>

Annex J Guidance notes

In the interest of readability and overall document flow most of the guidance in this document has been presented here, in a separate annex. Crucial pieces of guidance are located with their indicators.

For each indicator that states "Guidance can be found in Annex: J" here you will find that guidance, broken down by principles in numerical order.

Principle 1 Guidance

Indicator 1.2.3

Large – The Organisation can provide forest boundary information to be placed on the FSC NZ website nz.fsc.org.

Indicator 1.4.1

Measures can be operating the following:

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

Indicator 1.5.1

In meeting this Indicator, The Organisation can consider the policies, resolutions and recommendations of the International Union for the Conservation of Nature, IUCN.

Indicator 1.7.1

Includes, but is not limited to, non-collusion under the Commerce Act 1986.

Principle 2 Guidance

Indicator 2.1.1

Where the New Zealand legislation contains ILO provisions compliance with New Zealand laws is sufficient for meeting the requirements of this indicator. This includes compliance with the following Acts:

- Health & Safety at Work Act 2015;
- Accident Compensation Act 2001;
- Employment Relations Act 2000;

- Holidays Act 2003;
- Human Rights Act 1993;
- Minimum Wage Act 1983;
- Parental Leave and Employment Protection Act 1987;
- Privacy Act 1993;
- Equal Pay Act 1972;
- Wages Protection Act 1983.

Indicator 2.1.3

Documents available on-line are sufficient to meet this indicator.

The existence of claims may not be made available to the forest manager by the Crown or claimant. Where this is the case the forest manager cannot be expected to have the relevant documentation.

Indicator 2.3.1

The Approved Code of Practice (ACOP) is a minimum standard. The Health & Safety at Work Act is goal setting legislation based on leadership, risk management and engagement and allows for companies to manage their risks in the best way possible. New control methods may be identified which surpass those of the existing ACOP.

SafeTree (www.safetree.nz) provides resources on forest safety management for owners, managers, contractors, foremen and workers.

Indicator 2.4.3

The living wage can be obtained from the independently calculated national living wage produced by the New Zealand Family Centre Social Policy Unit at http://www.livingwage.org.nz/

Forestry Employment Standards are created by The Forestry and Wood Processors Council.

The Organisation may find it useful to include policies that provide for parttime and under-training workers. For example:

- 1) How to progress workers in training, or work creation schemes, to where they are full time and fully trained
- 2) How to manage seasonal or part-time workers on piece rates where they may not be able to meet minimum hourly rates.

Indicator 2.5.1

Safetree certification can provide a means of verification, for example *workers* and contractors certified to either the:

1) Professional Forest Worker or high risk tasks such as tree felling and

breaking are available at https://safetree.nz/training/, or

2) Safetree Contractor Certification at https://safetree.nz/certification/.

Indicator 2.5.2

Records can be kept by the contractor but are available for review.

Indicator 2.6.1

This provision provides for union representation, where the workers are members. The union for forestry workers in New Zealand is the Forestry Workers Network

Indicator 2.6.4

Relevant legislation includes the Employment Relations Act 2000, the Wage Protection Act 1983, the Accident Compensation Act, and the Health and Safety at Work Act.

Principle 3 Guidance

Indicator 3.2.4

Observing the following steps may assist in developing Free, Prior and Informed Consent:

- 1) Mandated representatives of *Tangata whenua** organisations are engaged by mutually agreed communication protocols.
- 2) Formal meeting minutes are recorded and agreed.
- 3) *Tangata whenua** are informed of:
 - a. The economic, social, and environmental value (by the delegation of control of their resources) to The Organisation.
 - b. Their right to withhold consent to the proposed management activities to the extent necessary to protect rights, customary obligations and resources and *taonga**; and agreed communication protocols.

Indicator 3.2.8

Refer to 4.3 as guidance and as a means to incorporate 3.2.8 in a whole community approach.

Indicator 3.5.2

Protection may include processes that involve *Tangata whenua** to monitor and access the site.

Principle 4 Guidance

Indicator 4.1.1

Local communities that may be affected include:

- 1) Territorial authorities, including wards and Council Community Boards
- 2) Adjacent townships or groups of dwellings
- 3) Tangata whenua* (addressed in Principle 3 of this standard)
- 4) Forest recreational, user or conservation groups
- 5) Affected or interested community groups
- 6) Neighbours and neighbouring communities

Indicator 4.3.1

Large – The Organisation can meet the standard by providing and/or offering a combination or all of the following:

- 1) Employment:
 - a. Using a majority of local businesses and suppliers
 - b. Advertising or promoting employment in local media
 - c. Participating in relevant local forum and/or initiatives.
- 2) Training:
 - a. An identifiable provision in contracts
 - b. Direct training initiatives
 - c. Support for local training organisations through funding, sites and resources
 - d. Scholarships
 - e. Internships.
- 3) Other services:
 - a. Using a majority of local businesses and suppliers
 - b. Provision of other services beneficial to local communities through licenses, contracts and agreements.

Small and medium – The Organisation can meet the standard by giving preference to local people and services wherever possible.

Indicator 4.4.1

Large – The Organisation can meet the standard by:

- 1) Participating in relevant local forum, and/or initiatives; and/or
- 2) Supporting (for example through long-term supply agreements) to existing and new processing; and/or
- 3) Engaging with local iwi* regarding social and economic development.

Small and medium – The Organisation considers relevant opportunities as they arise.

Indicator 4.4.2

The Organisation can:

- 1) Use a majority of local businesses and suppliers; and/or
- 2) Support existing and new processing (for example through long-term supply agreements); and/or
- 3) Provide for activities (such as recreation) that generate meaningful social and economic benefit; and/or
- 4) Provide for other services beneficial to local communities through

licences, contracts and agreements.

Indicator 4.4.4

- 1) For non-freehold land, the agreement of the landowners may be obtained
- 2) Where practical, a permit system, appropriate to the nature of access or any other access management method that accurately records forest use can be implemented by The Organisation to support public access policy.
- 3) Access through forestry areas shall not be permitted where it will lead to adverse effects, e.g., impact safety and health, affect the growth and protection of the trees, increase fire risk or put at risk sensitive ecological and cultural areas
- 4) Known sportfish and game bird habitats within the certified forest area may be documented
- 5) Terms and conditions of existing public access rights are respected
- 6) Public-access rights are on The Organisation's website (including formal public access routes, public access easements and formed and unformed legal roads) and clearly signposted at the entry point, where required.

Indicator 4.6.3

Compliance with the relevant provisions of Property Act, Human Rights Act and/or the Fencing Act are among options available for the fulfilment of the requirements of this indicator.

Indicator 4.6.4

Disputes where The Organisation has no control or influence, i.e. between outside parties, may not be covered by the standard.

Indicator 4.7.3

Compliance with this indicator can be supported via the Heritage New Zealand Pouhere Taonga Act 2014, Wildlife Act 1953, Conservation Act 1987, Resource Management Act 1991, and the Treaty of Waitangi Act 1975.

Indicator 4.8.1

Compliance with this indicator can be supported via the Patents Act 1953 and 2013, Trademarks Act 2002, the Designs Act 1953, and Plant Variety Rights Act 1987.

Principle 5 Guidance

Indicator 5.2.2

Productive capacity may be informed by productivity indices, estate models, growth models and past historical records.

Indicator 5.2.4

Unplanned events such as wind events, fire, and *pest** incursions may result in changes to short and long-term yields. The Organisation should record and evaluate the effect of such events on the sustained yield should they occur.

Indicator 5.4.1

To support compliance with this indicator, The Organisation should make reasonable attempts to:

- 1) Use a majority of local businesses and suppliers; and/or
- 2) Support existing and new processing, for example, through long-term supply agreements; and/or
- 3) Provide for other services beneficial to local communities through licenses, contracts and agreements.

Indicator 5.5.1

The organisation can meet the standard by following a budget consistent with the management plan where significant variances in the budget are explained; and/or The Organisation should be liquid and capable of paying invoices.

Principle 6 Guidance

Indicator 6.1.2

The identification of Acutely or chronically threatened environments can be made easier by using the Land Environment NZ (LENZ) system. Information is available through Nature Heritage Publications on the proportion and percentage for many regions. Protected Natural Areas (PNA) and Significant Natural Areas (SNA) databases will assist in identifying important areas. Regional Council and Territorial Authority Plans may highlight these areas. DOC is also a good source of information.

This assessment will help inform the identification of HCV 1, 2, 3 and 4.

Indicator 6.1.3

This should be timed to allow the appropriate decisions to be made around harvesting and re-planting.

Criterion 6.2

Small – To assist in the requirements of Criterion 6.2, The Organisation can use the assessment sheet in Annex F "Identifying Biodiversity Requirements for Small Plantations" or a similar alternative.

Indicator 6.2.2

Reference to the New Zealand Environmental Code of Practice for Plantation Forestry will assist this assessment process. The assessment should include consideration of the potential for the following:

- 1) Soil erosion
- 2) Water quality and hydrological impact
- 3) Compaction and changes to soil productivity
- 4) Changes to invasive exotic flora or fauna abundance
- 5) Potential impacts on any areas identified as having High conservation value
- 6) Impacts to poorly represented, threatened or endangered species
- 7) Pesticide or fertiliser impacts (by runoff, spray drift or spillage)
- 8) Visual changes to significant landscapes identified in Regional or District Plans, or very prominent landscapes
- 9) Community and recreation impacts
- 10) Damage to riparian/stream buffer strips.

Indicator 6.3.7

Measures undertaken need to be relevant and of a scale to the potential adverse impact, e.g. if accelerated erosion occurs, then appropriate mitigation may be the establishment of constructed *wetlands** to absorb sediment run-off.

Criterion 6.4

Small – To assist in the requirements of Criterion 6.4, The Organisation can use the assessment sheet in Annex F "Identifying Biodiversity Requirements for Small Plantations" or a similar alternative.

Indicator 6.4.2

Guidance for the management of rare and threatened species can be obtained from:

- 1) The NZFOA Guidance for managing rare species in pine forests guidelines on rare and threatened species in the management unit
- 2) DOC
- 3) Regional Councils and Territorial authorities.

Indicator 6.4.6

In limited instances trapping of threatened species is acceptable, provided it is carried out legally. Examples include authorised trapping or collection for scientific purposes

Indicator 6.4.8

A harvest plan may include:

- a. Planning of size and spacing of harvest areas to assist movement of rare and threatened species; and
- b. harvest methods to protect the identified corridors.

Indicator 6.5.1

Generalised information can be found on the LENZ and Land Cover Database (LCDB) databases. Overlaid with the protection database, threatened environments can then be mapped to highlight critical existing ecosystems and opportunities for restoration where they have been lost or severely degraded. However, the LENZ system does not always identify *dunelands** and *wetlands** well.

Indicator 6.5.3

Modified threatened environments 1 or 2, *wetlands** or *dunelands** ecosystems that occur within the management unit are examples of priority environments for restoration due to their high value.

Indicator 6.5.4

- 1) Undertake following the principles of protecting and expanding native ecosystems
- Modified threatened environments* 1 or 2, wetlands* or dunelands* ecosystems that occur within the management unit are examples of priority environments for restoration due to their high value.
- 3) Restoration will often be concentrated around riparian margins e.g. threatened floodplain forest and coastal setbacks* where the width is key to determining the viability of the reserve. If the coastal environment has a stable substrate, a width of 50m may be suitable depending on wind exposure conditions; however, if it is duneland*, factor in the shoreline fluctuation from multi-decadal erosion cycles* needs to be factored in.
- International standards for the practices of ecological restoration are available on the Society for Ecological Restoration's website -<u>http://www.ser.org/?page=SERStandards</u>.

Indicator 6.6.3

When considering ecological projects, the following may be used to assist The Organisation in prioritising any ecological effort:

- Guidance on priorities provided in the document 'Protecting Our Places, Information About the Statement of National Priorities for Protecting Rare and Threatened Biodiversity on Private Land', MfE, April 2007 (or updated equivalent)
- 2) Security of tenure and the ability to achieve long-term ecological management outcomes
- 3) The level of community or *Tangata whenua** interest in an area or project
- 4) DOC priorities for species management
- 5) The anticipated ecological benefits and relative costs of the effort compared to alternative projects within the management unit.

Indicator 6.6.5

The main reasons for the *active restoration** are to:

1) Significantly increase the survival of the threatened species for which

the habitat has been protected; and/or

- 2) Increase the viability of the representative sample area; and/or
- 3) Assist in compliance with the requirements of 6.5.7.

Indicator 6.7.1

While 10m is the minimum, slope, soil stability and future harvest disturbance should be considered when defining the width of the riparian zone.

Indicator 6.7.3

- The assessments for increases in setback* include consideration of a. Compliance with 6.7.1
 - b. Increase of a riparian zone for local factors of viability and health of the riparian zone, safety at future harvest, future disturbance of the riparian zone.
- 2) The Climate Change Response Act and Climate Change Regulations have different requirements depending on whether the forest is pre-1990 or post-1989 forest. Where removal of plantation species to improve riparian protection may result in carbon liabilities, The Organisation may choose to leave >30% of plantation trees unharvested within riparian zones to avoid liabilities and meet Indicator 6.7.4. This decision will be dependent on local* variabilities, such as exposure to windthrow and safety.

Indicator 6.7.4

Large and medium

- 1) Riparian *setback*^{*} establishment under 6.7.4 can be progressive as different reaches of a catchment are harvested.
- 2) There is no requirement to fell existing crop trees located in the riparian until they are normally scheduled for harvesting.
- 3) A fully implemented 6.7.4 will take one rotation from the date of this standard to complete.
- 4) Different catchments can use either of the two methods for establishing riparian *setbacks**, or all catchments could use the same method.
- 5) A number of options are suitable to determine 3rd order streams, this includes, but is not limited to, the Stahler system, the NIWA River Environment Classification (REC), the DOC National Sub catchment Ranking or The Organisation's own knowledge and GIS system (whichever is the more accurate for the locality).
- 6) The national stream priority mapping developed in Approaches to the Selection of a Network of Freshwater Ecosystems within New Zealand for Conservation by West et al (2019) may be useful when determining which stream reaches could benefit from comprehensive riparian protection.
- 7) Deciding which riparian management approach is to be followed, and mapping the corresponding planting setbacks before harvesting begins in a catchment, will help ensure subsequent harvesting within the catchment follows the same riparian management approach.

Indicator 6.7.10

This can be planting and/or extra *pest** control, where necessary.

Indicator 6.7.11

This could entail larger riparian margins, restricting the number of stream haulthrough points and harvest corridors, or plan re-planting to limit future riparian damage.

Indicator 6.7.13

Where a major storm event in excess of 5% AEP (NES-PF threshold) occurs, prevention may not be possible, but planning should consider the risk of higher intensity events and should seek to ensure compliance with 6.7.10.

Indicator 6.7.14

Relevant codes of practice include the "NZ Environmental Code of Practice for Plantation Forestry" and The Forest Practice Guides and any subsequent updates to these documents.

Indicator 6.7.15

It is important to consider whether measures being undertaken are relevant and of a scale to the adverse impact. For example, if accelerated erosion occurs then appropriate mitigation may be the establishment of constructed *wetlands** to absorb sediment run-off and the retirement of erosion prone areas from clear-felling.

Indicator 6.7.16

Principally this is using erosion susceptibility mapping. However, due to the methodology and scale of erosion susceptibility mapping some land may be more appropriately mapped in a higher or lower category. In carrying out an assessment of erosion susceptibility, local landscapes containing historic erosion will elevate likelihood of risk and the presence of sensitive downstream environments increases the potential consequences. A summary of the process to update the ESC mapping is provided by Te Uru Rākau at https://www.mpi.govt.nz/dmsdocument/28542/send which also provides a list of approved providers that can field assess and make changes where needed. Also, a background report by Landcare Research is available at https://www.mpi.govt.nz/dmsdocument/7998/direct.

Indicator 6.7.18

This indicator is included in light of a lack of research identifying effective and efficient methods to transition to suitable soil stabilising land uses. It is anticipated that this indicator will become redundant when this information is available nationally.

Erosion monitoring techniques may include but are not limited to LiDAR, aerial photography and field inspections that link management practices to the erosion events and quantify sediment movement. Further monitoring guidance is available at

https://www.gdc.govt.nz/assets/Files/Documents/LandcareReport_GDC_Stor m_initiated-debris-flows-and-plantation-Forestry_protocol_final.pdf. Monitoring should also identify where sediment has reached water bodies.

Indicator 6.7.19

This indicator is included in light of a lack of research identifying effective and efficient methods to transition to suitable soil stabilising land uses. It is anticipated that this indicator will become redundant when this information is available nationally.

Indicator 6.7.20

Due to the erosion susceptibility mapping scale, some land may be more appropriately mapped in a higher or lower category. In carrying out an assessment of erosion risk, local landscapes containing historic erosion will elevate likelihood of risk and the presence of sensitive downstream environments increases the potential consequences.

Indicator 6.8.1

Economic and environmental resilience can be more easily achieved by undertaking one or more of the following:

- 1) Environmental resilience:
 - a. Maintaining a mix of production and reserve areas within the management unit.
 - b. Maintaining the ecological health of natural ecosystems within and downstream of the management unit.
- 2) Economic resilience:
 - a. Choosing a species mix which:
 - i. Caters well to local conditions; or
 - ii. Enables The Organisation to respond rapidly to changing market requirements; or
 - iii. Can supply a diversity of markets.
 - b. Using a diversity of genotypes;
 - c. Having a mix of age classes and/or rotation lengths;
 - d. Using a variety of silvicultural regimes;
 - e. Establish species that meet a diverse range of markets and product requirements;
 - f. Demonstrating an understanding of future market trends;
 - g. Taking into account local markets/processors;
- 3) If only radiata pine and Douglas fir are used within the Management Unit, The Organization may consider the use of alternative species, based on the study of the social, environmental, and economic values and impacts of those alternative species. The Organization may use those alternative species in planting, if the study proves that they are appropriate in terms of the requirements of this criterion and the standard in general.;
- 4) The Organisation may, if possible, produce information demonstrating that the environmental, social and economic performance of exotic species is significant; or
- 5) Appropriate to size and scale, The Organisation can engage in

operational trials or research of exotic species other than radiata and Douglas fir. This may be met by participating in a collaborative trial.

Indicator 6.9.3

This refers to lands within the management unit or lands that are being considered to be added to the management unit.

Principle 7 Guidance

Indicator 7.4.1

Management plans generally consist of a variety of documents and resources which will be updated as information is received including from stakeholder engagement, science and technical sources, and changing environmental social and economic circumstances.

Principle 8 Guidance

Indicator 8.3.1

Management plans generally consist of a variety of documents and resources which will be updated individually as information is received from stakeholder engagement, science, technical sources, and changing environmental social and economic circumstances.

Principle 9 Guidance

Indicator 9.1.2

Stakeholders will depend on the values identified and may include:

- 1) Tangata whenua*
- 2) DOC
- 3) Local Conservation groups
- 4) Outdoor recreation groups
- 5) Adjoining landowners
- 6) Neighbours
- 7) Territorial authorities; and
- 8) Local community groups.

Principle 10 Guidance

Indicator 10.2.1

Controlled trials to determine whether species are ecologically adapted can be undertaken within the MU provided controls are sufficient to prevent negative impacts on the environment.

Indicator 10.3.2

Following a *decision support system** may help The Organisation to prevent wilding spread and use the wilding spread risk calculator: http:// wildingconifers.org.nz/assets/wilding-conifer-Guidelines-for-using-the-DSS-for-new-Forest-plantings.pdf

Indicator 10.9.2

A management plan including emergency procedures to react to and manage natural disturbances and hazards may assist in mitigating these impacts.

Indicator 10.11.4

This may be applied in a forest landscape perspective, where a mosaic of age classes, within or outside the MU, contributes to the retention of trees.

Annex K Glossary of terms

This glossary includes internationally accepted definitions whenever possible. These sources include, for instance, the Food and Agriculture Organization of the United Nations (FAO), the Convention on Biological diversity (1992), the Millennium Ecosystem Assessment (2005) as well as definitions from online glossaries as provided on the websites of the World Conservation Union (IUCN), the International Labour Organization (ILO) and the Invasive Alien species Programme of the Convention on Biological diversity. When other sources have been used they are referenced accordingly.

The term 'based on' means that a definition was adapted from an existing definition as provided in an international source.

Words used in the International Generic Indicators, if not defined in this Glossary of Terms or other normative FSC documents, are used as defined in the Shorter Oxford English Dictionary or the Concise Oxford Dictionary.

Active Restoration: A programme that involves direct intervention management to increase the survival and recovery of species or ecosystems. Such a programme is in advance of maintenance. This could involve supplementary planting, feeding or breeding programmes, reintroducing species lost to the area, and enhancing natural hydrological functions and processes. This could include pest control in advance of maintenance.

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).

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

- o Indigenous Peoples
- o Workers
- Forest dwellers
- o Neighbors
- o Downstream landowners
- o Local processors
- Local businesses
- o 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 V5-2).

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).

Applicable law: Means applicable to The Organisation 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 V5-2).

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)).

Best Available Information (updated for the FSS of New Zealand): Data, facts, documents, expert opinions, and results of field surveys or consultation 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. For example:

- Large Best Available Information includes formal assessment and information gathering exercises
- Small and medium Best Available Information can be what The Organisation knows and observes, what is learnt from neighbours, and other local stakeholders, together with existing assessments and mapping.

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.

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).

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).

Coarse (assessment): A desktop exercise assessing existing data rather than collecting new data.

Confidential information (updated for the FSS of New Zealand): Private facts, data and content that, if made publicly available, might put at risk The Organisation, its business interests or its relationships with stakeholders, clients and competitors. 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; and
- About sites which are of special cultural, ecological, economic, religious or spiritual significance to Indigenous Peoples or local communities (see Criteria 3.5 and 4.7) as requested by these groups.

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 V5-2).

Connectivity: A measure of how connected or spatially continuous a corridor, network, or matrix is. The fewer gaps, the higher the connectivity. Related to the structural connectivity concept; functional or behavioural connectivity refers to how connected an area is for a process, such as an animal moving through different types of landscape elements. Aquatic connectivity deals with the accessibility and transport of materials and organisms, through groundwater and surface water, between different patches of aquatic ecosystems of all kinds. (Source: based on R.T.T. Forman. 1995. Land Mosaics. The Ecology of Landscapes and Regions. Cambridge University Press, 632pp).

Conservation/protection: These words are used interchangeably when referring to management activities designed to maintain the identified environmental or cultural values in existence long-term. 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 V5-2).

Conservation Areas Network: Those portions of the management unit for which conservation is the primary and, in some circumstances, exclusive objective; such areas include Representative Sample Areas, conservation zones, protection areas, connectivity areas and high conservation value areas.

Conservation zones and Protection areas: 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. For the purposes of the Principles and Criteria, these terms are used interchangeably, without implying that one always has a higher degree of conservation or protection than the other. The term 'protected area' is not used for these areas, because this term implies legal or official status, covered by national regulations in many countries. In the context of the Principles and Criteria, management of these areas should involve active conservation, not passive protection (Source: FSC-STD-01-001 V5-2).

Consultation: The act of asking advice or opinion from other persons or parties, and of deliberating together over that advice or opinion. When consulting, the consulting person or persons must do so with an open mind and not have carried out any actions that would prevent the opinion or advice being actioned. Adequate information and time are provided for those consulted to form a view.

Continuous Cover (Forest): The use of silvicultural systems which maintain the forest canopy at one or more levels without clear felling. The requirement is the management of forests using ecological principles which mimic natural processes, to maintain the forest canopy at one or more levels. Harvest removals are by single tree or small coupe felling, seeking to enhance other forest values.

Core Area: The portion of each Intact Forest Landscape designated to contain the most important cultural and ecological values. Core areas are managed to exclude industrial activity. Core areas meet or exceed the definition of Intact Forest Landscape.

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. The notion of criticality here refers to the importance and risk for natural resources and environmental and socio-economic value. (Source: FSC-STD-01-001 V5-2).

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).

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.

Culturally appropriate engagement: Following standard and reasonable consultation and engagement norms practised in NZ with individuals or mandated representatives, and includes, but is not limited to:

- Consultation under the provisions of the Resource Management Act 1991, Heritage New Zealand Pouhere Taonga Act 2014, and other relevant legislation
- 2. Direct engagement of Affected stakeholders with the appropriate person(s) or mandated representative using methods such as:
 - a. Over-the-fence meetings, telephone calls, email for individuals or validated representatives such as neighbours, rights holders, etc.
 - b. Group meetings, group email, for groups with multiple representatives or directly affected people.
 - c. Participation in organised community forum.

For iwi the above apply, but should also be undertaken with respect to tikaanga Māori.

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).

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).

Decision Support Systems (DSS): A clearly defined and documented process that provides a structured framework to help improve the effectiveness of decision making. Components of a DSS include assessment Criteria, procedures and rules or guidelines to manage how operational activities are undertaken and how risks are managed. The assessment Criteria may include operational and economic, legal and industry agreements, physical and social factors like soil/geology, topography, rainfall, hydrology, ecology, visual, downstream values, neighbours, community, Māori and cultural. Management procedures, rules or guidelines would include meeting industry Best Management Practices, or requirements more stringent than these.

Dispute: for the purpose of the IGI, this is an expression of dissatisfaction by any person or organization presented as a complaint to The Organisation, 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).

Dispute resolution process: The process whereby reasonable effort shall be made to resolve grievances (that are not vexatious or frivolous) initially through negotiation,

and if negotiation is unsuccessful, through an agreed unbiased third-party facilitator/mediator. If mediation is unsuccessful then the case may be referred to arbitration.

Negotiation: The process of discussions between parties aimed at reaching an agreement over common issues.

Facilitation/Mediation: The process where an independent and impartial third-party assist those in dispute to negotiate an agreement.

Arbitration: An alternative to litigation where the parties in disputes submit their case to an arbitrator appointed under the Arbitration Act 1996, who makes a decision that is binding.

Dispute of substantial duration: Dispute that continues for more than twice as long as the predefined timelines in the FSC System (this is, for more than 6 months after receiving the complaint, based on FSC-STD-20-001).

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:

- Affects 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.

Dunelands: Dunelands are coastal areas that owe their physical, landscape and ecological character to the movement of sand by wind. Duneland vegetation covers ranges from bare sand to low grasses, sedges and herbs to mature coastal forest.

Ecological district: A geographical area that has a characteristic landscape and range of biological communities. (Source: McEwen, W. Mary; Biological Resources Centre (N.Z.), New Zealand. Dept. of Conservation. (1987). Ecological regions and districts of New Zealand. Wellington, N.Z.: Dept. of Conservation. <u>ISBN 0-478-01000-1</u>)

Ecological region: A geographical region that has a characteristic landscape and range of biological communities. (Source: McEwen, W. Mary; Biological Resources Centre (N.Z.), New Zealand. Dept. of Conservation. (1987). Ecological regions and districts of New Zealand. Wellington, N.Z.: Dept. of Conservation. <u>ISBN 0-478-01000-1</u>)

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).

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).

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).

Ecosystem services: The benefits people obtain from ecosystems. These include:

- o provisioning services such as food, forest products and water
- regulating services such as regulation of floods, drought, land degradation, air quality, and climate
- o diseases supporting services such as soil formation and nutrient cycling
- 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).

Engaging / engagement: The process by which The Organisation communicates, consults and/or provides for the participation of interested and/or affected stakeholders ensuring that their concerns, desires, expectations, needs, rights and opportunities are considered in the establishment, implementation and updating of the management plan.(Source: FSC-STD-01-001 V5-2).

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. (Source: based on Environmental impact assessment, guidelines for FAO field projects. Food and agriculture organization of the United Nations (FAO). Rome, FSC-STD-01-001 V5-2).

Environmental values (updated for the FSS of New Zealand): The following set of elements of the biophysical and human environment:

- Ecosystem functions (including carbon sequestration and storage)
- o Biological diversity
- Water resources
- o Soils
- o Atmosphere
- Landscape values (including cultural and spiritual values)
- o Biophysical and biogeochemical processes and functions
- o Air and air quality
- Light and darkness; and
- Quiet and noise

The actual worth attributed to these elements depends on human and societal perceptions. (Source: FSC-STD-01-001 V5-2).

Equivalent ecological effort: Is expenditure (either direct spend or in-kind contribution) on biodiversity-related projects to compensate for the shortfall in the conservation areas network. Equivalent ecological effort that would qualify, is additional to maintenance and shall produce real and measurable biodiversity gain. For clarity, this can include projects carried out to meet other ecological objectives. The equivalent ecological effort required for a given hectare shortfall is based on the area shortfall x the benchmark dollar spend per hectare for management of conservation zones. This can be calculated, but is not limited to, one or a combination of the following methods:

- 1. The resources used for maintenance of conservation areas network described in Criteria 6.4 6.8 within the management units managed by other organisations, and/or
- 2. The resources required for maintenance of similar protected areas managed by the Department of Conservation.

For example: If the equivalent spent on protected areas by Department of Conservation is 8/ha/annum and the reserve shortfall in a District or Region is 100ha, the equivalent ecological effort spend required is $8 \times 100ha = 800/annum$.

Erosion Susceptibility Classification (ESC): means the system that determines the risk of erosion on land across New Zealand based on environmental characteristics, including rock type and slope, and that:

- o classifies land into the following 4 categories of erosion susceptibility
- according to level of risk: low (green), moderate (yellow), high (orange), and very high (red); and
- provided in the electronic tool referred to in item 1 of Schedule 2 (Source: http://www.mpi.govt.nz/growing-and-producing/Forestry/overview/ national-environmental-standards-for-plantation-Forestry/erosion-susceptibility-classification/)

Exotic species: Refer to Alien species.

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 V5-2).

Fair compensation: Remuneration that is proportionate to the magnitude and type of services rendered by another party or of the harm that is attributable to the first party.

Fertiliser: Mineral or organic substances, most commonly N, P2O5 and K20, which are applied to soil for the purpose of enhancing plant growth.

Fine level evaluation: An on the ground evaluation that will include, but not limited to:

- vegetation types present and condition
- o fauna present and known habitat requirements and relationships
- o threatened species distributions, habitat and ranges
- o focal, indicator or umbrella species
- seral stages and ecotones
- micro-landscapes, particular physical features, and landforms any evidence of threats to ecosystem values present, such as animal pest damage, pathogens, or invasive plant or fungal pests
- The benefit of expanding the area of a reserve to secure the viability of the ecosystems; guided by the following site Criteria:
 - a) biologically viable shape and size
 - b) socially and economically logical
 - c) suitable for restoration to habitat for species being considered
 - d) links to other reserve areas
 - e) buffering from adjoining land uses pests and disturbance events like fire and wind.

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.).

Forest: A tract of land dominated by trees (Source: FSC-STD-01-001 V5-2. 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, ADVICE-20-007-01).

Forestry: the science and craft of creating, managing, using, conserving and repairing forests, woodlands, and associated resources for human and environmental benefits (Source: Dictionaryofforestry.org. 2008-10-22).

Formal and informal workers organization: association or union of *workers*, whether recognized by law or by The Organisation or neither, which have the aim of promoting *workers* rights and to represent *workers* in dealings with The Organisation particularly regarding working conditions and compensation.

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).

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.).

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)).

Genotype: The genetic constitution of an organism (Source: FSC-STD-01-001 V5-2).

Geopreservation: The act of ensuring the survival of the best representative examples of the broad diversity of a country's geological features, landforms, soil sites and active physical processes so that we can understand its unique geological history and development of its landforms and evolution of its biota.

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).

Habitat: The place or type of site where an organism or population occurs (Source: based on the Convention on Biological diversity, Article 2).

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.

Hapu: A number of whānau from a common ancestor. Sub-tribe (Source: Waitangi Tribunal 1991).

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
- o 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 V5-2).

High conservation value areas: Zones and physical spaces which possess and/or are needed for the existence and maintenance of identified high conservation values.

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).

Illegal: Contrary to or forbidden by law, especially criminal law.

Incursion: An invasion or attack.

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)).

Indigenous Peoples (updated for the FSS of New Zealand): 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;
- \circ $\;$ 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). For the purposes of this standard indigenous peoples should be taken to mean tangata whenua.

Infrastructure (updated for the FSS of New Zealand): 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 and for non-Forest infrastructure that may be present within the Forest includes powerlines, pipelines, telecommunication towers, etc.

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 a circle that is entirely inscribed within the boundaries of the territory) (Source: Intact Forests / Global Forest Watch. Glossary definition as provided on Intact Forest website. 2006-2014).

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)).

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 V5-2).

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;
- o 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.

 Members of the FSC SDG (Source: FSC-STD-01-001 V5-2)

Iwi: A group of hapu from a common ancestor. Tribe, people. (Source: Waitangi Tribunal, 1991).

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 V5-2).

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).

Kaitiaktanga: Customary and traditional stewardship practices.

Lands and territories: 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.

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).

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.

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. 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 V5-2).

Legally competent: Mandated in law to perform a certain function (Source: FSC-STD-01-001 V5-2).

Legal registration: National or local legal licence or set of permissions to operate as an enterprise, with rights to buy and sell products and/or services commercially. The licence 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 an organisation operating a management unit without sale of products or services; for example, for unpriced recreation or for Conservation of biodiversity or habitat. (Source: FSC-STD-01-001 V5-2).

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 V5-2).

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).

Local: Local can be defined depending on the circumstance, but for the purposes of the standard is generally within the District(s) and Region(s) the management unit is located, and/or a community that is potentially affected by the activities undertaken by The Organisation under the scope of their certification. For the purposes of 5.4.1 local can be either the North or South Island relevant to the location of the management unit.

Local communities: Communities, including tangata whenua groups (iwi and hapu), 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 management activities or the biophysical aspects of the management unit. (Source: FSC-STD-01-001 V5-2).

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 V5-2).

Long-term: The timescale 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: FSC-STD-01-002 V1-0 FSC Glossary of Terms (2009)).

Maintenance (in relation to the Conservation areas network): Actions aimed at preventing irreversible decline of species or ecosystems in the short term and any decline in the long-term and enabling natural regeneration to take place including in particular an animal and plant pest control programme and prevention of external disturbance.

Management objective: Specific management goals, practices, outcomes, and approaches established to achieve the requirements of this standard.

Management plan: The collection of documents, reports, records and maps that describe, justify and regulate the activities carried out by any manager, staff or organisation within or in relation to the management unit, including statements of objectives and policies. (Source: FSC-STD-01-001 V5-2).

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.

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) 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 Organisation, for the purpose of contributing to the management objectives; and also includes conservation areas networks established to satisfy the 10% reserve set aside.

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 V5-2).

Mana whenua: Territorial rights, power from the land, authority over land or territory, jurisdiction over land or territory – power associated with possession and occupation of tribal land.

Monitor/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.

Multi-decadal erosion cycles: Multi-decadal erosion cycles of sandy beaches are driven by changing environmental conditions including climatic variability and sediment supply and may result in an order of magnitude greater change than shoreline fluctuations associated with short-term weather events.

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 V5-2).

Native ecosystems: An ecosystem whose presence in a particular area is the result of only natural process, with little human intervention. In the context of New Zealand forestry and legislation, native ecosystems are synonymous with natural areas.

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).

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 V5-2).

Natural forest (updated for the FSS of New Zealand): 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 V5-2).

In addition, the NZ FSS-PF defines natural forests as Areas of land which are

predominantly covered in indigenous tree species that are naturally established, including managed indigenous forest areas where regeneration is supplemented by planting of indigenous species. This includes vegetation that is native or endemic to an area and is growing naturally, i.e. has not been planted.

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, earthquake, coastal erosion, volcanism, etc.

Non-timber forest products (NTFP): All products other than timber derived from the management unit (Source: FSC-STD-01-001 V5-2).

Objective: The basic purpose laid down by The Organisation 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).

Obligatory code of practice: A manual or handbook or other source of technical instruction which The Organisation must implement by law (Source: FSC-STD-01-001 V5-2).

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).

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).

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).

Organism: Any biological entity capable of replication or of transferring genetic material (Source: Council Directive 90/220/EEC).

The Organisation: 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 V5-2).

Pest: A pest is a plant, animal, fungi, micro-organism or pathogen that is adversely affecting something of value. A pest is something in the wrong place e.g. the brushtail possum is a valued Australian native animal but a pest in New Zealand as it threatens New Zealand's indigenous biodiversity. In the FSC context a pest is either a plant or animal that is adversely affecting the plantation crop or the indigenous biodiversity values of the management unit.

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)).

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, but

is not limited to insecticides, rodenticides, acaricides, molluscicides, larvaecides, fungicides and herbicides). (Source: FSC-POL-30-001 FSC Pesticides Policy (2005).

Plantation (updated for the FSS of New Zealand): 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 V5-2)

In addition, the NZ FSS-PF defines plantations as a forest area established by planting or sowing with 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.

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 Organisation 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).

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).

Principles of Protecting and Expanding Natural Areas:

- 1. Biologically viable shape and size;
- 2. Socially and economically logical;
- 3. Suitable for restoration to habitat for species being considered;
- 4. Links to other reserve area;
- Buffering from adjoining land uses, pests and disturbance event like fire and wind;
- 6. Reflect proportion and representation of ecosystems. [from 10.5.10];
- 7. Culturally important.

Protection: See definition of conservation.

Protection Area/Protection Zone: See definition of conservation Zone.

Publicly available: In a manner accessible to or observable by people generally (Source: Collins English Dictionary, 2003 Edition).

Rare species (updated for the FSS of New Zealand): 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 imperiled 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).

In addition, New Zealand defines rare species based on the NZ Threat Classification System. These include Species that are uncommon or scarce, but not classified as threatened. Species classified under the NZ Threat Classification System (revised 2007) as 'At Risk - Relict' and 'At Risk - Naturally Uncommon."

- Relict = Taxa that have undergone a documented decline within the last 1000 years, and now occupy < 10% of their former range and meet one of the following Criteria:
 - a. A 5000–20 000 mature individuals; population stable (±10%)
 - b. $B > 20\ 000$ mature individuals; population stable or increasing at > 10%
- 2) Naturally Uncommon = Taxa whose distribution is confined to a specific geographic area or which occur within naturally small and widely scattered populations, where this distribution is not the result of human disturbance.

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 V5-2).

Reasonable: Judged to be fair or appropriate to the circumstances or purposes, based on general experience (Source: Shorter Oxford English Dictionary).

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).

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).

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.

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.).

Resource consent: A formal approval from respective governmental council to implement activities that the council haven't clearly identified in their plan as either permitted or prohibited. It could include the following:

- \circ using or subdividing land
- o taking water
- o discharging contaminants in water, soil or air
- using or occupying coastal space.

(Source: <u>https://www.building.govt.nz/projects-and-consents/</u>)

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 V5-2).

The Organisation is not necessarily obliged to restore those environmental values that have been affected by factors beyond the control of The Organisation, 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 Organisation 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 Organisation 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.

Restoration (Restore): Ecological restoration is the process of assisting the recovery of an ecosystem that has been degraded, damaged, or destroyed. (Source: Society for Ecological Restoration, Science & Policy Working Group, Version 2, October 2004).

Riparian zone: Interface between land and a water body, and the vegetation associated with it. Riparian zone vegetaion can consist of indigenous, exotic or mixed species.

Risk: The probability of a negative impact arising from any activity in the management unit combined with its seriousness in terms of consequences. (Source: FSC-STD-01-001 V5-2).

Rodenticides: Poison used to kill rodents.

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 V5-2).

Scale, intensity and risk: See individual definitions of the terms scale, intensity and risk.

Seral: Natural stages of natural forest succession.

Setback: the distance from the edge of a surface freshwater body (river, stream, lake, wetland) to a production area, such as fenced-off livestock or the edge of a cultivated land use. A setback is defined in the National Environmental Standards for Plantation

Forestry5 (NES-PF) as 'the distance measured horizontally from a feature or boundary that creates a buffer within which certain activities cannot take place' (Source: Tasman District Council, Landcare Health NZ, Riparian setback distances from water bodies for high-risk land uses and activities, 2020).

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 organisation, based on its concentration of biodiversity
- A voluntary recognition by The Organisation, based on 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).

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).

Stakeholder: See definitions for affected stakeholder and interested stakeholder.

Statutory law or statute law: The body of law contained in Acts of Parliament (national legislature) (Source: Oxford Dictionary of Law).

Substantial Magnitude (disputes of): A dispute that involves one or more of the following:

- Affects 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;
- o Acts of intimidation against Forest workers and stakeholders.

Tangata whenua: 'People of the land'. In relation to a particular area, means the iwi, hapü and whānau, that hold mana whenua (customary authority associated with tino rangatiratanga) over that area. (Source: RMA 1991). Tangata whenua includes, mandated:

- Iwi and hapu who have mana whenua (verified through adjudication or a signed agreement of all overlapping claimants) over lands within or adjoining the management unit;
- Māori landowners or governance entities who hold legal 'ownership' rights within the management unit mandated by the landowners; and
- Iwi, hapu and landowners whose customary rights may be affected by management activities within the management unit.

Taonga: Treasured possessions; includes both tangible and intangible treasures.

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).

Threat: An indication or warning of impending or likely damage or negative impacts (Source: based on Oxford English Dictionary).

Threatened environments: The Threatened Environment Classification is a combination of three national databases: Land Environments New Zealand (LENZ), classes Land Cover Database (LCDB) and the protected areas network (reflecting areas legally protected for the purpose of natural heritage Protection). The classification combines this information into a simple and practical GIS tool. 'Threatened environments' (categories 1 to 5) are those in which much indigenous vegetation has been cleared and/or only a small proportion of what remains is legally protected. The Threatened Environment Classification is managed by Landcare Research.

Threatened species: 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 re-interpreted 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.).

The Organisation (NZ)/Organization (US): The person or entity holding or applying for certification and therefore responsible for demonstrating compliance with the requirements upon which FSC certification is based. This is often the Forest manager or Forest owner.

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.

Timely manner: As promptly as circumstances reasonably allow; not intentionally postponed by The Organisation; in compliance with applicable laws, contracts, licenses or invoices.

Tino rangatiratanga: The right of Tangata whenua to exercise full authority and control over their lands, resources and taonga.

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).

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 (Source: Marcus Colchester, 7 October 2009)).

Uphold: To acknowledge, respect, sustain and support (Source: FSC-STD-01-001 V5-2).

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 V5-2).

Verifiable targets: Specific goals, such as desired future Forest conditions, established to measure progress towards the achievement of each of the management objectives. These goals 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. Verifiable targets should be developed that include, but are not limited to:

- Site productivity, yield of all products harvested;
- Growth rates, regeneration and condition of the vegetation;
- Composition and observed changes in the flora and fauna;
- Water quality and quantity;
- Soil erosion, compaction, fertility and carbon content;
- Wildlife populations, biodiversity and status of high conservation values;
- Sensitive cultural and environmental resources;
- Stakeholder satisfaction with engagement;
- o Benefits of management operations provided to local communities;
- Number of occupational accidents; and
- Overall economic viability of the management unit.

Very high-risk erosion: Areas classified as Very High-Risk Erosion Susceptibility by the Erosion Susceptibility Classification within the National Environmental Standards for Plantation Forestry Regulations.

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)).

Vexatious: Instituted without sufficient grounds and serving only to cause annoyance to the defendant.

Wahi tapu: Place sacred to Māori in the traditional, spiritual, religious, ritual or mythological sense. (Source: Historic Places Act 1993).

Wahi tupuna: Place important to Māori for its ancestral significance and associated cultural and traditional values (Source: Heritage New Zealand Pouhere Taonga Act 2014)

Waste materials: unusable or unwanted substances or by-products, such as:

- o Hazardous waste, including chemical waste and batteries;
- Containers;
- Motor and other fuels and oils;
- o Rubbish including metals, plastics and paper; and
- Abandoned buildings, machinery and equipment.

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, coastal waters, lagoons, estuaries, springs.

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).

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).

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: Cowarding, 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).

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).

Whānau: Extended family or family group, a familiar term of address to many people - the primary economic unit of traditional Māori society.

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).

Working Forest area: The production area + plantation forest infrastructure.



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