



Forest Stewardship Council
FSC Ireland

Irish Standard for Forest Management Certification

DRAFT No. 4 **for public consultation**

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Introduction

1. Preface

1.1 The Forest Stewardship Council

Forest Stewardship Council (FSC) is an independent, non-governmental, not-for-profit organization established to promote the responsible management of the world's forests. FSC is widely regarded as one of the most important initiatives of the last decade to promote responsible forest management worldwide. Products carrying the FSC label are independently verified to assure consumers that they come from forests that are managed to meet the social, economic and ecological needs of present and future generations. FSC is active in more than 45 countries worldwide.

Forests are an enormously important natural resource, and can provide us with products (such as timber and paper) as well as valuable 'ecosystem services' (such as flood control, climate regulation, and carbon sequestration) if managed appropriately. However, in some countries as much as 80% of the timber is harvested illegally. This often violates human rights and destroys protected forests. Poor management of plantations can also cause significant environmental problems. Certification helps to combat these problems by pursuing social protection, good environmental performance, and economic viability, the elements of sustainability.

The process of choosing to be audited for FSC forest management certification is voluntary and can only be initiated by the forest owners/managers. It is the forest management that is assessed (and not the current condition of the forest). FSC certification is open to all enterprises regardless of their starting point. Thus, the important issue with regard to certification is the steps taken by the forest owner/manager to continuously improve the forest management in accordance with the goals described in the Management Plan.

For further information, please visit: www.fsc.org

1.2 What is Forest Stewardship Council (FSC) forest certification?

Forest managers or owners who want to prove that their forest operation is socially beneficial and managed in an environmentally appropriate and economically viable manner can apply for Forest Stewardship Council (FSC) certification.

FSC certification offers forest managers rewards for managing their forests the FSC way – following high social and environmental criteria. In some instances rewards can be in the form of price premiums. But increasingly, FSC certification is rewarded with improved access to environmentally sensitive markets. Also, more and more governments and leading businesses specify FSC certified materials in their purchasing programs.

The FSC Principles and Criteria describe how the forests have to be managed to meet the social, economic, ecological, cultural and spiritual needs of present and future generations. They include managerial aspects as well as environmental and social requirements. FSC-accredited certification bodies certify and audit each individual forest management operation at least once a year. If the forest management is in full compliance with FSC requirements, the FSC certificate is awarded. If minor non-compliances are noted, the certificate can be issued with conditions that have to be met within a clearly determined time frame. If the forest management is not fully compliant with FSC requirements, preconditions are noted which have to be fulfilled before the FSC certificate can be awarded.

The certificate lasts for five years, with annual re-checks by the certification body. If during these audits, the certification body finds that a company has non-compliances with FSC requirements, Corrective Action Requests (CARs) are issued and the company is required to make the prescribed changes within a given time frame or else it will lose its FSC certificate. Depending on the seriousness of the infringement, the time can vary from one year for minor administrative infringements to three months or less for major infringements.

To trade forest products with the FSC logo, the forest manager or owner must also obtain FSC "Chain of Custody" certification. The timber can then carry the FSC label, ensuring that it comes from a well-managed forest and providing a credible link between responsible production and consumption of forest products.

For further information, please visit: www.fsc.org.

1.3 FSC Ireland, the FSC National Initiative in Ireland

FSC Ireland is the trading name of Irish Forestry Certification Initiative Ltd., a company established to develop a national forest management standard in Ireland based upon the principles and criteria of the Forest Stewardship Council (FSC). It is accredited by the Forest Stewardship Council as the National Initiative in Ireland.

The main objectives of FSC Ireland are:

- * To advance sustainable forest management in Ireland
- * To develop a certifiable forest management standard for Irish forests based upon the principles and criteria of the Forest Stewardship Council (FSC)
- * To engage the general public and relevant interest groups in the development of the Irish FSC forest management standard.

As the National Initiative, FSC Ireland also promotes the work and objectives of FSC International in Ireland and assists with information queries from the public and interested parties.

FSC Ireland is a membership based organisation, and membership of FSC Ireland is open to all interested individuals and organisations. As in FSC, members of FSC Ireland are affiliated with one of three chambers: economic, environmental and social.

FSC Ireland is structured and administered according to procedures laid down in its Memorandum and Articles of Association and the Companies Acts. FSC Ireland is directed by a Steering Committee.

For more information, see www.irishforestcertification.com.

2. Introduction

2.1 Purpose of this Standard

This Standard sets out the necessary steps for forest owners and manager to achieve and maintain Forest Stewardship Council (FSC) certification for their forest. Accredited "Certification Bodies" evaluate forest management practices according to the Standard. In order to become FSC-certified in Ireland, management of a forest management unit must comply with this Irish FSC Standard.

The FSC Principles and Criteria for Forest Stewardship (February 2000) provide an internationally recognised standard for responsible forest management. However, any national standard for forest management needs to be adapted at the regional or national level in order to reflect the diverse legal, social and geographical conditions in different parts of the world. The FSC International Principles and Criteria therefore require the addition of indicators that are adapted to regional or national conditions in order to be implemented at the forest management unit (FMU) level. The FSC Principles and Criteria together with a set of indicators accredited by FSC constitute an FSC Forest Stewardship Standard.

This Standard follows the requirements of FSC-STD-20-002 Structure and content of forest stewardship standards (November 2004). This is required to improve consistency and transparency in certification decisions between different certification bodies in the region/nation and in different parts of the world, and thereby to enhance the credibility of FSC certification as a whole.

2.2 Scope

This Standard is applicable to all forest operations seeking FSC certification for forests within Ireland.

The Standard applies to all forest types. The majority of Indicators apply to all forests, small and large. Some additional Indicators relate only to large forests (over 50 ha). These are denoted with the suffix "L" e.g. 8.5.3L.

It is the intention that this Standard is practical and cost-effective for owners of small forests, for whom group certification is an option (see FSC International's online resource centre: <http://www.fsc.org/publications.html>).

The Standard is aimed at "forest management units" (FMU) which may comprise anything from single forests with one owner/manager to a selection of forest holdings with several owners/managers that wish to obtain certification together under the FSC's rules for group certification. Accordingly, "the forest management unit" refers to the total forest area within the concerned holding(s)."

Endorsing this forest Standard does not mean that the evaluation process has stopped. On the contrary it has only started. A forest Standard has to be continually evaluated and revised every 5 year to accommodate new knowledge and stakeholder feedback. We therefore encourage your active participation in the ongoing discussion in the spirit of FSC.

2.3 Background information on the standard setting process

This Standard was developed for Ireland following a Workplan registered by FSC and in accordance with FSC-STD-60-006. Included in the process was announcement of the standard development process, establishment of the Standard Development Group (SDG), training by FSC Global Standards Manager Richard Robertson, analysis of the international Criteria, and drafting of indicators to reflect the aims of the Principles and Criteria for forest management in Ireland. Reference was made to existing literature, including previous draft Standards for Ireland and consultation responses to these. Technical experts were consulted where necessary, to base the indicators on relevant and most up to date science. The standard development process was guided by FSC policy and standard guidelines, including FSC-STD-60-006, FSC-STD-20-002, and the Principles and Criteria (FSC-STD- 01-001).

The SDG was supervised by the Steering Committee of FSC Ireland and facilitated by Dr Harriet Emerson. The SDG scrutinized, discussed, and recommended Indicators based on their range of expertise; reviewed comments submitted by technical experts; and agreed wording on specific aspects to achieve consensus support of all members of the SDG.

The Standard is being tested (field and desk studies) by experienced auditors and is being submitted to the Consultative Forum and wider public for comment for a period of 70 days. The Standard will be revised by FSC Ireland based on feedback from both field testing and public consultation.

FSC International has a set of Principles and Criteria that are universally applicable and not negotiable. The Standard document consists of these ten core 'Principles', under which a number of compliance Criterion are listed. Each national initiative develops Indicators and Verifiers for each Criterion, which detail the necessary measures to deliver the Principles and Criteria. Guidance is provided to clarify the requirements of Indicators where necessary.

The following hierarchy describes the function of each level in this Standard:

Principle - What is wanted

Criterion - What needs to happen

Indicator - What can be measured

Verifier - Where auditors can look for evidence

3. Version of the Standard

3.1 Version

This is Version 1 of the Irish (Ireland) Forest Management Standard, agreed in ___ 2009 by the Standard Development Group and reviewed and agreed in ___ by the Steering Committee of FSC Ireland. The draft Standard was assessed by FSC-accredited Certification Bodies in May 2009, and a revised Standard was available for public comment _____. It was agreed by the National Initiative on _____.

[Draft and version number; original date of the preparation and accreditation of the Standard; subsequent edition dates; current edition date, and the next anticipated revision details will be inserted as appropriate]:

3.2 Statement of the Standard Development Group

This Standard was developed by a 13-member, multi-interest Standard Development Group in early 2009.

[Statement of responsible parties that oversaw the development of the Standard, to be inserted on completion]

4. Context

4.1 General description of the geographical area covered by the Standard

Before the arrival of people in Ireland 8,500 years ago, forests were the natural vegetation on much of the island. Many thousands of years of human exploitation have created a modern landscape of fields, bogs, forests and settlements. Ireland had only 1% forest cover at the beginning of the 20th century. The progress of afforestation was initially slow and in 1951 less than 2% of Ireland was under woods and plantations, rising to over 7% by the 1980s. From 1980 on, EU grant-aided forestry and private or farm forestry grew to the extent that today, private planting is nine times greater than State planting, with over 10,000 farmers involved. Forest cover now accounts for 10% of Ireland's land area.

State forestry began in 1904 with the purchase of Avondale in Wicklow, which was used as a forest experimental station, testing many exotic species of tree under forest conditions. Rural employment and timber production, specifically, timber self-sufficiency, as a strategic aim, were the main objectives. Forests were managed in a manner similar to arable farming, with a focus on rapid production. This meant using relatively short rotations, and straightforward, single species systems were favoured.

Most of the land planted prior to the 1980s was in the uplands and on peaty or very wet sites because State afforestation was restricted to lands considered to be unsuitable for agriculture. The main commercial tree species planted during the 20th century in Irish forests came from humid western North America: Sitka spruce, Douglas fir and lodgepole pine. The recent focus on farm forestry has led to better quality land being planted. The availability of more fertile land and mineral soils has made it possible to establish a more diverse range of tree species, both conifer and broadleaf. Today, 30% of all new planting is comprised of broadleaf species such as oak, ash, beech, alder and sycamore.

4.2 List of members of the committee that prepared the Standard

This Standard was developed by a 13-person Standard Development Group representing Environmental, Social, and Economic interests, under the aegis of the FSC Ireland Steering Committee. The Standard Development process was facilitated by a professional facilitator.

Environmental chamber

Siobhán Egan, Birdwatch Ireland/ Cliona O'Brien, Heritage Council* (shared seat)

Dr. Ruth McGrath, VOICE/IPCC

Dr. Evelyn Moorkens, Evelyn Moorkens and Associates

Anja Murray, An Taisce

Economic chamber

Dr. Mick Keane, Coillte

Steven Meyen, Teagasc

Geraldine O'Sullivan, Irish Farmers' Association

Paddy Purser, Purser Tarleton Russell Ltd.

Social chamber

Kevin Birchall, Tree Care Ireland

Dr. Sasha Bosbeer, Galway Mayo Institute of Technology (GMIT)

Helen Lawless, Wicklow Uplands Council†

Peter Sweetman, The Swans and the Snails Ltd.

** Cliona O'Brien withdrew from the process in March 2009 as a result of it taking more time than had been originally anticipated, which couldn't be balanced with existing commitments.*

† Helen Lawless also resigned at this time as a result of changed economic circumstances and organization demands within the Wicklow Uplands Council.

4.3 List of key consultants and advisors who assisted the committee

The following is a list of professionals consulted for advice on different aspects of the Standard:

- Prof Fergus Kelly, School of Celtic Studies, Dublin Institute of Advanced Studies
- Oisín Sweeney, University College Cork (UCC)
- Dr Patrick J. Walsh, Galway Mayo Institute of Technology (GMIT)
- Dr. Padraic Kenna, National University of Ireland (NUI) (Galway)

4.4 Associated documentation referenced in the Standard

The following documentation was used by the Standard Development Group in their work on developing this Irish Standard:

FSC-STD-01-001-V4 International Principles and Criteria

FSC-STD-01-003 SLIMF Eligibility Criteria

FSC-STD-20-002 V1 Standard requirements

FSC-STD-60-006 Draft 4-5 Draft process standard

FSC-ADV-30-901 Interpretation of Criterion 9-2

FSC-GUI-30-004 Guidance on Principles 2 and 3

FSC-POL-30-401 (2002) FSC Certification and the ILO Conventions

FSC accredited certification standards:

- Standard for FSC Certification in Denmark
- National Forest Stewardship Standard for Finland
- German Standard for Forest Management Certification
- Swedish Standard for Forest Management Certification
- United Kingdom Standard for Forest Management Certification
- Control Union Generic Standard adapted for Ireland
- Woodmark Generic Standard adapted for Ireland
- Regional Certification Standards for British Columbia, FSC Canada, October 2005, Small Operations Standards
- Certification Standards for Best Forestry Practices in the Maritimes Region, FSC Canada, January 2008, Standard for Small and Low Intensity Forests
- Belgische FSC Standaard and annexes
- Protocol FSC groeps-certificering ANB

Draft 3 of the Irish National Standard (2006) and related stakeholder comments

FSC Survival Guide by Taiga Rescue Network

4.5 Terms and definitions

(those which are crucial to the Standard and are not defined in the FSC Principles and Criteria)

This Standard uses the FSC International definitions, supplemented by definitions from the Oxford English Dictionary. Definitions can be found in the glossary at the end of the Standard, but the following are crucial to understanding this Standard:

Plantations: Forest areas lacking most of the principal characteristics and key elements of native ecosystems as defined by FSC-approved national and regional standards of forest stewardship, which result from the human activities of either planting, sowing or intensive silvicultural treatments.

Natural Forest: Forest areas where many of the principal characteristics and key elements of native ecosystems such as complexity, structure and diversity are present, as defined by FSC approved national and regional standards of forest management.

Large forests ("L"): For the purpose of this Standard Large forests are considered to be those over 50 ha in size.

See the glossary for further explanation of terms.

5. Hierarchical framework

The Principles and Criteria in this Standard are international and have been set and agreed by the FSC membership. Under each Criteria are indicators which are interpretations for this region of the Criteria. The Verifiers listed under each Indicator are not normative; they comprise guidance for possible sources of verification of the related Indicator for the auditors. Any guidance or applicability notes associated with this Standard are also not normative but intended to be informative.

In some places, this Standard refers to Forest Service and other Government best practice guidelines (see Annex 1).

The specific form of words used in this Standard is required by FSC. The verb 'shall' indicates a requirement of the Standard, and "shall not" indicates a prohibition; 'should' and 'should not' indicate a recommendation; 'may' indicates a permitted course of action, and 'need not' indicates that a specified course of action is not a requirement.

The hierarchical framework implements the basic principles described in the introduction to the FSC Principles and Criteria for Forest Stewardship (February 2000):

"FSC and FSC-accredited certification organizations will not insist on perfection in satisfying the Principles and Criteria. However, major failures in any individual Principles will normally disqualify a candidate from certification, or will lead to de-certification. These decisions will be taken by individual certifiers, and guided by the extent to which each Criterion is satisfied, and by the importance and consequences of failures. Some flexibility will be allowed to cope with local circumstances." (FSC 01-001)

Indicators and Verifiers developed by FSC Ireland

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Principle #1: Compliance with laws and FSC Principles

Forest management shall respect all applicable laws of the country in which they occur, and international treaties and agreements to which the country is a signatory, and comply with all FSC Principles and Criteria.

Criterion C1.1 Forest management shall respect all national and local laws and administrative requirements.

Indicator 1.1.1

The forest owner/manager is conversant with the implications of, and abides by the relevant national and local laws and administrative requirements.

Indicator 1.1.2

If any non-compliance with legal or regulatory requirements has been identified by the forest owner/manager in the previous five years, they shall have been documented, promptly addressed, and effective action has been taken to prevent their recurrence.

Indicator 1.1.3

If there have been instances where third parties have raised in writing issues of possible non-compliance with legal or regulatory requirements with the forest owner/ manager in the previous five years, these shall be documented by the forest owner/ manager, investigated, if substantiated promptly addressed, and effective action have been taken to prevent recurrence, and records of correspondence kept

Exceptions to this Indicator may be considered in line with the requirements of Criterion 1.4.

Indicator 1.1.4

The forest owner/ manager shall have access to (physical or electronic) copies of the texts of relevant legislative and regulatory requirements, including at least those referenced in the applicable FSC standard.

(Refer to Annex 1 List of the national and local forest laws and administrative requirements, which apply in Ireland)

Indicator 1.1.5L

There shall be a procedure for familiarising staff with implications of applicable laws and other regulatory requirements for forest management on the forestry management unit, and updating staff when there are changes

Indicator 1.1.6

All personnel, including contractors, shall demonstrate a working knowledge of relevant codes of practice, operational guidelines and other accepted norms or agreements relevant to their responsibilities.

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- documentation (incl. Management Plan)
- interview with manager

- documentation

- consultation with regulatory authorities
- documentation
- interviews with stakeholders

- office visit
- interviews with forest owner/managers

- documentation
- interviews with staff

- documentation
- interviews with staff and contractors

Criterion C1.2 All applicable and legally prescribed fees, royalties, taxes and other charges shall be paid.

Indicator 1.2.1

All applicable and legally prescribed fees, royalties, taxes and other charges shall be paid or otherwise up to date. (see Annex 2)

Indicator 1.2.2L

Information regarding applicable fees, royalties, taxes and other financial charges (see Annex 2) is maintained up to date and accessible for audit purposes.

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- tax clearance certificate,
- receipts, VAT return receipts

- accounts
- records and receipts (including payments to third party contractors and consultants)

Criterion C 1.3 In signatory countries, the provisions of all binding international agreements such as CITES, ILO Conventions, ITTA, and Convention on Biological Diversity, shall be respected.

Indicator 1.3.1

The forest owner/manager shall be conversant with the implications of, and abides by, the international treaties and agreements as per Annex 4.

Indicator 1.3.2

Forest Management Plan and practice shall reflect compliance with existing international treaties and agreements in Annex 4.

Indicator 1.3.3

Forest owner/managers shall be aware of the national and local strategies, plans or programmes for the conservation and sustainable use of biological diversity (such as the National Biodiversity Plan and Local Biodiversity Plans) stemming from international agreements, and shall demonstrate how the management of the FMU contributes to delivering the objectives of these.

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- interview with forest owner/manager

- site visit
- Management Plan
- interview with forest owner/manager
- interview with staff/contractors

- Management Plan
- interviews with forest owner/manager
- documentation

Criterion C 1.4 Conflicts between laws, regulations and the FSC Principles and Criteria shall be evaluated for the purposes of certification, on a case by case basis, by the certifiers and the involved or affected parties.

Indicator 1.4.1

The forest owner/manager shall have carried out an assessment of where the certification requirements for the management unit are in conflict with laws and regulations.

Indicator 1.4.2

Identified conflicts between laws, regulations and the FSC Principles and Criteria shall be evaluated by the forest owner/manager and brought to the attention of the certifiers and the involved or affected parties. (See Annex 3) Any actions taken to address identified conflicts shall be documented.

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- list of identified conflicts
- written evaluation of conflicts by forest owner/manager
- record of consultation with all affected parties
- records of actions taken

Criterion C 1.5 Forest management areas should be protected from illegal harvesting, settlement and other unauthorized activities.

Indicator 1.5.1

The forest owner/manager shall have assessed the risk of unauthorised activities** and shall have systems for addressing risks identified for each forest management area.

Indicator 1.5.2

In case of unauthorised use, the forest owner / manager shall notify the responsible agency and shall take documented steps to prevent recurrence.

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- record of risk assessment
- record of systems
- consultation with owner/manager and staff
- site visits
- staff training

- records of unauthorised use, notifications made, and steps taken
- file of relevant communication, including third party correspondence
- interviews with owner/manager and staff
- consultation with locals
- site visits

Indicator 1.5.3L

Effectiveness of preventive measures shall be assessed at least annually by owner/manager and improved where needed.

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- records
- a file of unauthorised use and preventative steps is kept
- interviews with forest owner/manager
- interviews with staff

Criterion C1.6 Forest owner/managers shall demonstrate a long-term commitment to adhere to the FSC Principles and Criteria.

Indicator 1.6.1

Forest owners or managers shall have entered into a long-term written commitment to adhere to the FSC Principles and Criteria.

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- Management Plan
- documentation

Indicator 1.6.2L

There shall be a publicly available policy for each FMU endorsed by the owner/manager explicitly stating a long-term commitment to management practices consistent with FSC Principles and Criteria.

- policy document
- Management Plan Summary

Indicator 1.6.3L

A programme shall be in place to inform staff about FSC certification and the long-term management implications of adherence.

- interviews with staff
- record of information disseminated

Principle #2: Tenure and use rights and responsibilities

Long-term tenure and use rights to the land and forest resources shall be clearly defined, documented and legally established.

Criterion C2.1 Clear evidence of long-term forest use rights to the land (e.g. land title, customary rights, or lease agreements) shall be demonstrated
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Indicator 2.1.1

The name and legal status of the entity seeking certification for the forest shall be clearly identified.

Indicator 2.1.2

The forest owner/manager shall provide documentation (including associated maps), which clearly identifies the ownership of all the lands and forests in the FMU.

Indicator 2.1.3

The forest owner/manager seeking certification for the forest shall demonstrate that s/he has all the use rights and/or permissions needed to implement forest management which is compatible with long-term compliance with the requirements of the FSC Principles and Criteria for Forest Stewardship.

Indicator 2.1.4

There shall be documentation (including associated maps) that clearly identifies and describes rights of way and any use rights or use permissions applicable to the lands and forests under evaluation.

- folio or deeds (legal rights)
- map
- any other legal documents

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- certificate of incorporation for company
- signed statement for unincorporated bodies

- folio or deeds
- map

- folio or deeds (if landowner)
- lease agreement covering at least one rotation and/or providing for renewal of lease (if tenant)
- contract with landowner (if manager)

Criterion C2.2 Local communities with legal or customary tenure or use rights shall maintain control, to the extent necessary to protect their rights or resources, over forest operations unless they delegate control with free and informed consent to other agencies.

Indicator 2.2.1

All established tenure or use rights** to the forest of all local communities, associations, or individuals shall be clearly documented and mapped by the forest owner/managers.

Indicator 2.2.2

Holders of established legal rights shall be consulted, given time to reflect, and to respond, in order to ensure that the proposals developed and reviewed in the Management or in additional forest operations do not infringe their rights.

Indicator 2.2.3

Holders of established tenure and use rights shall be consulted, given information, and time to reflect, with the shared objective to reach agreement during the development and review of the Management Plan or when additional forest operations are planned. Where agreement is not reached, there shall be sufficient demonstration of the reasons why.

Indicator 2.2.4.

Sites of special cultural, ecological, economic or religious significance shall be clearly identified, and recognised and public access to these protected by forest owner/managers

Indicator 2.2.5

Established tenure or use rights to the forest resource of all local communities, associations, or individuals are incorporated into forest Management Plans.

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- interview with managers
- consultation with local community including relevant organisations
- annual public invitation to inform forest owner/managers of any unknown rights
- maps
- Management Plan
- documentation of all rights of way, use of common land, and usufructuary (use) rights, etc.

- records of consultation
- discussions with holders of legal rights

- Management Plan
- documentation
- interviews with use holders

- Management Plan
- maps
- historical documentation
- consultation with stakeholders

- reference to all use rights in Management Plan
- interviews with rights holders

Indicator 2.2.6

Where associations, or individuals have, with free and informed consent delegated control of their established tenure or use rights, or part thereof, this shall be documented.

(Note: FSC Ireland concluded that in Ireland local communities cannot be sufficiently legally established to delegate control of their rights and so are not included within this Indicator.)

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- confirmed by documented agreements and/or interviews with the legitimate representatives of local communities, organisations or individuals.
- documented agreements
- interviews with the legitimate representatives of local communities

Principle #3: Indigenous peoples' rights

The legal and customary rights of indigenous peoples to own, use and manage their lands, territories, and resources shall be recognized and respected.

FSC Ireland considered the working definition adopted by the UN Working Group on Indigenous Peoples (below) and used by FSC in relation to Principle 3: The legal and customary rights of indigenous peoples to own, use and manage their lands, territories, and resources shall be recognised and respected. The text below records FSC Ireland's agreement in relation to this Principle.

Definition

"The existing descendants of the peoples who inhabited the present territory of a country wholly or partially at the time when persons of a different culture or ethnic origin arrived there from other parts of the world, overcame them and, by conquest, settlement, or other means reduced them to a non-dominant or colonial situation; who today live more in conformity with their particular social, economic and cultural customs and traditions than with the institutions of the country of which they now form a part, under State structure which incorporates mainly the national, social and cultural characteristics of other segments of the population which are predominant."

Working definition adopted by the UN Working Group on Indigenous Peoples.

FSC Ireland concluded that within the international context of FSC indigenous peoples as defined above are not considered to be present in Ireland.

The aspects of this Principle that relate to the local communities' interest in relation to forest management are covered under Principles 2, 4 and 9.

Principle #4: Community relations and worker's rights

Forest management operations shall maintain or enhance the long-term social and economic well being of forest workers and local communities.

Criterion C4.1 The communities within, or adjacent to, the forest management area should be given opportunities for employment, training, and other services.

Indicator 4.1.1

When direct or indirect employment (including voluntary activity) or supply contracts arise, the owner/manager shall make efforts to provide opportunities for these to be taken up by workers or service providers from local communities.

Indicator 4.1.2

When training courses arise, the forest owner/manager shall encourage the training provider to generate opportunities for these to be taken up by members of local communities.

Indicator 4.1.3

The forest owner/ manager shall make efforts to facilitate sustainably managed access to its forest areas for local training and educational purposes, when requested.

Indicator 4.1.4

The forest owner/manager shall make efforts to facilitate sustainably managed access to its forest areas for local amenity and community initiatives, when requested. (See Principle 8)

Indicator 4.1.5

Where access is provided to a third party, the owner/manager shall inform them of FSC certification status and the management requirements (to which they must adhere) relevant to their activities on the site.

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- documentation
- communication with local contractors

- documentation
- communication with training providers

- documentation
- communication with stakeholders

- documentation
- communication with stakeholders

- documentation
- communication with stakeholders

Criterion C4.2 Forest management should meet or exceed all applicable laws and/or regulations covering health and safety of employees and their families.

Indicator 4.2.1

Forest owner/managers and workers shall be familiar with health and safety legislation, codes of practice, and industrial guidance.

Indicator 4.2.2

All work shall be carried out in accordance with health and safety legislation, codes of practice, and industrial guidance, with a contingency plan/emergency procedure for any accidents.

Indicator 4.2.3

Forest owner/managers shall promote current health and safety standards and ensure that all workers and/or contractors have had safety training and hold up to date certificates of competence, including evidence of refresher training.

Indicator 4.2.4

The forest owner/ manager shall provide staff with personal protective equipment appropriate to the task they have been assigned. Staff and contractors shall be prohibited from working without personal protective equipment when required.

Indicator 4.2.5

All tools, machines and safety equipment, including personal protective equipment, shall be in safe and serviceable condition.

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- interviews with forest owner/managers and workers
- training records

- accessible copies of health and safety legislation, codes of practice and industrial guidance notes
- discussions with workers
- site visits
- documentation
- contingency plan/ emergency procedure

- training records, certificate of competence (where appropriate), risk assessment
- interviews with workers
- field inspections.
- content of training programs

- safety equipment available
- records of equipment allocation
- interviews with staff and contractors

- evidence of maintenance of tools, machines and safety equipment
- visual condition of equipment
- equipment inspection records

Indicator 4.2.6

Forest owner/managers shall record all work-related accidents and deaths of employees in accordance with Health and Safety Authority requirements. Causes of accidents shall be identified, and a record kept of actions taken to prevent similar accidents in future. A record shall be kept of the implementation of these preventative actions.

Indicator 4.2.7

Forest owners/ manager and contractors employing staff shall hold employers liability insurance.

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- accident book
- documentation
- interviews with managers
- evidence that preventative actions are implemented

– copies of current insurance policies

Criterion C4.3 The rights of workers to organize and voluntarily negotiate with their employers shall be guaranteed as outlined in Conventions 87 and 98 of the International Labour Organisation (ILO).

Indicator 4.3.1

There shall be no restriction on any staff joining workers' unions

Indicator 4.3.2

Staff shall have the right to organise, voluntarily negotiate, collectively bargain, and make collective agreements with their employers as outlined in Conventions 87, 98, 144 and 154 of the International Labour Organisation (ILO).

Indicator 4.3.3

Staff representatives within the enterprise shall enjoy effective protection against any act prejudicial to them, including dismissal, based on their status or activities as a staff representative or on union membership or participation in union activities, in so far as they act in conformity with existing laws or collective agreements or other jointly agreed arrangements, as outlined in ILO Convention 135.

Indicator 4.3.4

Forest owners/ manager shall document, respect and implement agreements reached with the staff in relation to pay, conditions, etc.

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- interviews with forest owner/manager and staff
- interviews with forest trade union

- rights are made available to all workers
- interviews with the forest owner/manager and staff
- interviews with the forest trade union

- interviews with the forest owner/manager and staff
- interviews with the forest trade union
- employment agreements/contract

- documentation
- interviews with staff

Criterion C4.4 Management Planning and operations shall incorporate the results of evaluations of social impact.

Consultations shall be maintained with people and groups (both men and women) directly affected by management operations

Indicator 4.4.1

The forest owner/ manager shall maintain active consultation with the individuals and groups who are directly affected by its operations in order to identify social impacts** and the potential to enhance positive and avoid or reduce negative impacts on an ongoing basis.

Indicator 4.4.2

The forest owner/ manager shall demonstrate how it has incorporated the results of its evaluation of social impacts into its Management Planning and operations.

Indicator 4.4.3

The forest owner/ manager shall have a system in place to inform staff and contractors (or their representatives) of issues relating to current or future employment which affect them, and to provide such stakeholders with an opportunity to comment on the proposals and suggest ways to mitigate any expected negative impacts.

Indicator 4.4.4L

The forest owner/ manager shall implement a formal, documented protocol whereby the views and proposals of employees, members of local communities and other groups or individuals directly affected by management operations are sought.

Indicator 4.4.5L

The forest owner/ manager shall have a system in place to inform directly affected stakeholders (or their representatives) of the Management Plan summary publication, and in advance of operations that are likely to have an impact on their use of the forest resource or otherwise affect their daily lives. The forest owner/ manager shall also provide such stakeholders with an opportunity to comment on the operation(s) and suggest ways to enhance the outcome of the operation.

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- records / logs of consultations with local people / groups
- interviews with local people / groups
- interviews with contractors / employees

- Management Plan
- interviews with forest owner/manager
- interviews with local people / groups / contractors / employees

- documentation
- interviews with staff / contractors

- documented protocol
- Management Plan
- interviews with forest owner/manager
- interviews with individuals/ local people / groups / contractors / employees

- log of consultations prior to operations
- documented policy
- interviews with stakeholders

Criterion C4.5 Appropriate mechanisms shall be employed for resolving grievances and for providing fair compensation in the case of loss or damage affecting the legal or customary rights, property, resources, or livelihoods of local peoples. Measures shall be taken to avoid such loss or damage.

Indicator 4.5.1

The forest owner/manager shall have considered the actual and potential impacts of the relevant forest operation on the established tenure and use rights, property, resources and livelihoods of local people, and has mitigated against these in the Management Plan.

Indicator 4.5.2

The forest owner/manager shall take proactive steps to avoid and/or resolve grievances or potential grievances through consultation with affected parties.

Indicator 4.5.3

The forest owner/manager shall keep a record of and respond constructively to all suggestions or grievances, and efforts taken to resolve these. In the event that a solution has not been found following these efforts, the forest owner/manager shall suggest the use of an independent arbiter to help resolve the grievance.

Indicator 4.5.4L

The forest owner/ manager shall have a documented dispute resolution mechanism in place to resolve grievances promptly and fairly.

Indicator 4.5.5L

The documented dispute resolution mechanism (Indicator 4.5.4) shall include options for providing fair compensation in the case of proven loss or damage to either side.

Indicator 4.5.6L

In the event of any unresolved dispute, the forest owner/manager shall show that they have followed/are following this dispute resolution mechanism in all efforts to resolve the dispute.

Indicator 4.5.7

Where public access to the forest is permitted, public liability insurance shall be in place.

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- Management Plan
- conditions in harvesting contracts regarding disturbance, timber haulage routes, etc

- record of consultation
- record of proactive steps taken to avoid grievances

- documentation
- communication with stakeholders

- documented dispute resolution mechanism
- interviews with stakeholders and forest owner/manager

- dispute resolution mechanism

- documentation
- interviews with stakeholders

- documentation of current insurance

Principle #5: Benefits from the forest

Forest management operations shall encourage the efficient use of the forest's multiple products and services to ensure economic viability and a wide range of environmental and social benefits.

Criterion C5.1 Forest management should strive toward economic viability, while taking into account the full environmental, social, and operational costs of production, and ensuring the investments necessary to maintain the ecological productivity of the forest.

Indicator 5.1.1

The forest management unit shall comprise a range of tree species and products which are suitable for the site and that fulfil economic objectives without damaging the ecological integrity of the forest or its catchment.

Indicator 5.1.2

There shall be in place an annual budget showing the expected costs and revenues (including the cost of meeting economic, social and environmental commitments) for the forest enterprise associated with the implementation of the Management Plan for the certification period.

Indicator 5.1.3

The forest owner/manager's bookkeeping shall document in its accounting statements all relevant business proceedings from the sale of goods and services and the costs of production and provision.

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- Management Plan/management policies
- interviews with forest owner/manager and staff
- recommendations from statutory consultees
- site visit

- documentation

- documentation

Criterion C5.2 Forest management and marketing operations should encourage the optimal use and local processing of the forest's diversity of products.

Indicator 5.2.1

Forest products shall be available to the local market and for local processing.

Indicator 5.2.2

The owner/ manager shall encourage the development of niche markets for, and sustainable harvesting of common, lesser known forest species and/or non-timber forest products.

Indicator 5.2.3

In order to encourage optimal use, the forest owner/manager shall evaluate the harvest, use and range of forest products during forest Management Plan review (5 yearly). (See Indicator 7.2.1)

Indicator 5.2.4

Local forest-related businesses shall be given the opportunity to compete for forest products, and a record shall be kept by the forest owner/manager of the products that have been sold or procured locally.

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- record of timber sales
- record of non-timber forest products sales where such sales have occurred
- interviews with staff, local forest initiatives and local forest producer groups if they exist

- documentation

- Management Plan
- record of timber sales
- record of non-timber forest products sales
- interviews with staff

- documentation
- record of products sold or procured locally

Criterion C5.3 Forest management should minimize waste associated with harvesting and on-site processing operations and avoid damage to other forest resources.

Indicator 5.3.1

Harvesting operations shall be designed to avoid log breakage, uprooting of stumps, damage to standing trees and deterioration in timber quality (taking account of the deadwood requirements of Indicator 6.2.7).

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- site visits
- Management Plan
- clause(s) in harvesting contract

Indicator 5.3.2

To avoid soil and root damage, brush mats shall be used on machine routes.

Indicator 5.3.3

All timber sale contracts shall ensure that harvested wood and processed wood** shall be transported from the forest before deterioration occurs (taking account of the deadwood requirements of Indicator 6.2.7).

Indicator 5.3.4

Whole tree harvesting shall not take place where significant negative effects on biodiversity (i.e. run-off, leaching, soil compaction and nutrient loss) or forest productivity may occur.

Indicator 5.3.5

Detailed harvest plan maps (minimum scale 1:2,500) shall be developed for all sites prior to harvesting, identifying harvest site boundaries, protected areas, extraction routes and depots within the site, and storage sites for consumables and waste.

Indicator 5.3.6

Timber harvest operations shall be carried out in strict compliance with such maps.

Indicator 5.3.7

There shall be a system in place for assessing site damage and harvesting waste.

Indicator 5.3.8

Contractors and forest workers shall be encouraged through incentives and disincentives to minimise damage to the forest, soils and water.

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- site inspection of harvesting sites

- timber sale contracts
- site visits

- site visit of harvesting sites
- documented appraisal where whole tree harvesting is carried out
- Management Plans (harvest plans)

- harvest plan maps

- site visits

- interviews with forest owner/manager
- documentation
- site visits

- contracts
- documentation
- site visit

Criterion C5.4 Forest management should strive to strengthen and diversify the local economy, avoiding dependence on a single forest product.

Indicator 5.4.1

The forest owner/manager shall collate information on different opportunities to diversify forest products that could be supplied from its FMU thereby strengthening the local economy, including less commonly used timber species, a range of Non Timber Forest Products (NTFPs) and services, including opportunities for forest recreation.

Indicator 5.4.2

The forest owner/manager shall demonstrate that the diversification of forest products and services is being actively incorporated into forest management. The forest owner/manager shall have as a long-term objective the development of diverse multi-functional forests. (See Criterion 10.3 for delivery)

Indicator 5.4.3

The forest owner/manager shall make efforts to facilitate access for sustainably managed use of forest products and services by local organisations and entrepreneurs for their own or commercial use, where requested.

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- multi-resource inventory (in Management Plan)
- interviews with forest owner/ manager, forest users and local relevant organisations
- documentation

- Management Plan

- documents
- interviews with forest owner/ manager and with local organisations and entrepreneurs

Criterion C5.5 Forest management operations shall recognize, maintain, and, where appropriate, enhance the value of forest services and resources such as watersheds and fisheries.

Indicator 5.5.1

Catchments shall be explicitly recognised in the Management Plan. They shall be protected or enhanced during forest operations, and restored if catchment damage occurs. Protected species in the catchment must also be considered, as identified in Principle 6.

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- Management Plans
- maps
- site visits
- interviews with forest managers/ owners contractors
- correspondence relevant to statutory consultation
- EIS's
- documentation (see Criterion 6.1)

Indicator 5.5.2

Ecosystem services** shall be explicitly recognised in the Management Plan, and protected or enhanced during forest operations. Where damage occurs it shall be recorded, probable causes documented, and the ecosystem restored using current best practice.

Note: specific requirements relating to environmental aspects are addressed under Principles 6 and 9, below.

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- Management Plan
- documentation

Criterion C5.6 The rate of harvest of forest products shall not exceed levels which can be permanently sustained.
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Note: The monitoring aspects of this criterion are addressed under Criteria 8.2 and 8.4.

Indicator 5.6.1

The forest owner/manager shall have a clear methodology to determine the allowable cut.

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- Management Plan
- Multi- Resource inventory

Indicator 5.6.2

The forest owner/manager shall keep clear, accurate and up-to-date records of harvested volumes of all commercial timber species, and of the commercial harvest of any non-timber forest products.

- documentation

Indicator 5.6.3

The planned and actual harvest levels shall not in the medium and long term jeopardise the ability to sustain the forest's productive potential or its potential to permanently sustain its environmental or social services. This shall be revised based on analysis of growth rates from the multi-resource inventory

- site visits
- Management Plan
- documentation (see Criterion 6.1)

Indicator 5.6.4

The harvesting of Non Timber Forest Products shall be done on a sustainable basis and shall not exceed conservative estimates of replenishment rates over the long term.

- resource inventory
- Management Plan
- species specific data
- consultation with stakeholders

Indicator 5.6.5

The expected level of harvesting of forest products on an annual basis for the duration of the Management Plan, and in the long term (over more than one rotation) shall be clearly stated.

- Management Plan

Principle #6: Environmental impact

Forest management shall conserve biological diversity and its associated values, water resources, soils, and unique and fragile ecosystems and landscapes, and, by so doing, maintain the ecological functions and the integrity of the forest.

Criterion 6.1 Assessment of environmental impacts shall be completed -- appropriate to the scale, intensity of forest management and the uniqueness of the affected resources – and adequately integrated into management systems. Assessments shall include landscape level considerations as well as the impacts of on-site processing facilities. Environmental impacts shall be assessed prior to commencement of site-disturbing operations.

Indicator 6.1.1

The forest owner/manager shall have completed a baseline habitat survey** (to include a habitat map at a scale of 1:10,000 OR 1:10,560) prior to finalisation of the Management Plan. The baseline habitat survey shall be carried out in situ by suitably qualified personnel. Habitats shall be classified to level 3 (latest edition Fossitt, J.A. Guide to Habitats in Ireland, Heritage Council), with procedure and scale determined according to Heritage Council Draft Best Practice Guidelines, including target notes for special features.

Indicator 6.1.2

The Management Plan shall include a baseline catchment and FMU boundary map, the status of water quality, and other catchment and landscape level** environmental information (incl. flora, fauna, soils). Water quality status shall be obtained from Water Framework Directive implementation data held by the EPA.

Indicator 6.1.3

The forest owner/manager shall document an assessment of the potential environmental impacts within the FMU of its forest operations, as set out in the Management Plan. Processing operations such as saw milling or wood chipping within the certified area shall be included in this assessment.

Indicator 6.1.4

The forest owner/manager shall document an assessment of the potential environmental impacts outside the FMU of its forest operations, as set out in the Management Plan(s), including at the level of the landscape and catchment area in which it is situated. Processing operations such as saw milling or wood chipping within the certified area shall be included in this assessment.

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- habitat survey including map
- Management Plan

- catchment boundary map
- water quality, other environmental data
- Management Plan

- documented assessment
- Management Plan

- documented assessment
- Management Plan

Indicator 6.1.5

Forest uses other than timber production, such as game management and recreation shall be identified and documented where they occur, and shall be included in the above assessments (under Indicators 6.1.3 and 6.1.4).

Indicator 6.1.6

The Management Plans and any other relevant policies and procedures of the forest owner/manager shall identify the actions to be taken to enhance positive environmental impacts and to avoid, reduce or mitigate negative environmental impacts, identified as a result of the assessments in Indicators 6.1.3 and 6.1.4.

Indicator 6.1.7L

Relevant policies and procedures of the forest owner/manager shall identify the actions to be taken to enhance positive environmental impacts and to avoid, reduce or mitigate negative environmental impacts, identified as a result of the assessments in Indicator 6.1.3 and 6.1.4.

Indicator 6.1.8

The forest owner shall have reviewed and evaluated potential environmental impacts (identified under Indicators 6.1.3 and 6.1.4 above) and can demonstrate the specific actions taken to enhance positive impacts and mitigate negative impacts identified, on a site-by-site basis, prior to the commencement of site-disturbing operations.

Indicator 6.1.9L

A documented procedure to review and evaluate potential environmental impacts (identified under Indicators 6.1.3 and 6.1.4 above) shall be implemented. The specific actions taken to enhance positive impacts and mitigate negative impacts identified, on a site-by-site basis, prior to the commencement of site-disturbing operations shall be clearly documented.

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- documented assessment
- stakeholder and manager interviews

- Management Plans
- relevant policies/ procedures

- Management Plans
- relevant policies/ procedures

- site visits
- interviews with forest owner/manager

- documented procedure

Criterion 6.2 Safeguards shall exist which protect rare, threatened and endangered species and their habitats (e.g., nesting and feeding areas). Conservation zones and protection areas shall be established, appropriate to the scale and intensity of forest management and the uniqueness of the affected resources. Inappropriate hunting, fishing, trapping and collecting shall be controlled.

Indicator 6.2.1

There shall be an up to date list (based on survey and/or consultation with statutory and other appropriate bodies) of the rare, threatened or endangered species** and their habitats, as per Indicator 6.1.1, that are present or are likely to be present within the FMU, prior to the finalisation of the Management Plan. Source(s) of information shall be identified.

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- list of rare, threatened or endangered species
- map(s)

Indicator 6.2.2

The forest owner/manager shall consult with agencies responsible for environmental protection on the need for a survey of rare, threatened and endangered species and their habitats, and if advised, shall carry out a survey or ensure that one is carried out.

Indicator 6.2.3

There shall be an up to date list of the rare, threatened or endangered species** and their habitats that are present outside the FMU and are likely to interact with or be impacted by management of the FMU.

Indicator 6.2.4

The Management Plans and other relevant policies and procedures of the forest owner/manager shall clearly identify actions that are taken to maintain or enhance the presence of rare, threatened or endangered species** and their habitats (including ecological corridors) identified in Indicators 6.2.1 and 6.2.2 above within the FMU as a whole.

Indicator 6.2.5

The Management Plans and other relevant policies and procedures of the forest owner/manager shall clearly identify features of particular significance for conservation** and actions that are taken to safeguard these.

Indicator 6.2.6

Features (including trees) of particular significance for conservation** are marked for retention.

Indicator 6.2.7

A minimum of 5m³/ha of lying and 5m³ standing dead wood per hectare shall be maintained across the FMU.

Indicator 6.2.8

A minimum of 5m³ volume/ha (of trees shall be retained for natural decay and death and marked for retention. This is in addition to Indicator 6.2.7. These trees should preferably be mature**, native and of mixed species.

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- documentation- survey results
- records of correspondence
- EIS

- list of rare, threatened or endangered species
- map(s)
- documented methodology/ sources

- Management Plans

- site visit
- Management Plans
- relevant policies and procedures

- consultation with staff.
- map
- site visit.
- Management Plan/ management policies.

- site visits/survey
- map(s)

- field visits/survey
- map(s)

Indicator 6.2.9

Staff and contractors shall be instructed in how to recognise and avoid damage to the rare, threatened and endangered species and their habitats, designated trees and features identified in Indicators 6.2.1 to 6.2.7 above.

Indicator 6.2.10

Areas designated as Special Areas for Conservation, Special Protection Areas, Ramsar Sites, National Nature Reserves, and/or proposed/Natural Heritage Areas shall be managed in accordance with plans agreed with nature conservation authorities, and shall be marked on maps.

Indicator 6.2.11

The forest owner/manager shall demonstrate that the take from hunting, shooting, fishing, trapping or collecting of non- nuisance species, as permitted by the forest owner/manager, does not exceed replacement levels** within the FMU and permits recovery of depleted populations. Locally uncommon non- nuisance species are not taken. This indicator does not apply to invasive or pest species, which are addressed in Criteria 6.6, 6.8 and 6.9)

Indicator 6.2.12

Where the forest owner/manager holds these rights, hunting, fishing and collecting is controlled to safeguard the sustainability of the forest and other ecosystems and to protect rare, threatened and endangered species and their habitats.

Indicator 6.2.13

Where a third party holds the hunting and fishing rights, the forest owner/manager shall have informed the third party and NPWS of FSC requirements and have sought their co-operation in meeting these. Where the third party holder of rights is not contactable, the owner/manager shall demonstrate that s/he has made every effort to inform them

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- consultation with staff and contractors
- site visits
- Management Plan/ management policies
- training records

- documentation of management agreement
- Management Plans
- EIS

- documentation

- consultation with staff.
- map
- site visit
- Management Plan/ management policies

- documentation

Criterion 6.3 Ecological functions and values shall be maintained intact, enhanced, or restored, including:

- a) Forest regeneration and succession.**
- b) Genetic, species, and ecosystem diversity.**
- c) Natural cycles that affect the productivity of the forest ecosystem.**

Indicator 6.3.1 (ref. Criterion 6.3a)

Where natural regeneration and succession is occurring it shall be encouraged and enhanced by the forest management system, unless this is damaging to the integrity of the habitats identified in Criterion 6.1.1.

Indicator 6.3.2 (ref. Criterion 6.3a)

The silvicultural system(s) shall be designed to reflect the natural pattern of regeneration and succession of the planted species in order to maintain and enhance the ecological functions and values (see Criteria 6.1, 6.2, 7.1 & 8). This shall be evidenced by, for example: the size (and range of sizes) and distribution of harvested areas across the FMU, the maintenance of conservation areas (see Criterion 6.2), seed trees, and non-target tree & understorey species within the plantation matrix throughout the management cycle.

(See Criterion 10.3 for species diversity issues in monoculture plantations.)

Indicator 6.3.3 (ref. Criterion 6.3.b)

In FMUs in catchments that are naturally oligotrophic or ultraoligotrophic or contain protected aquatic species that are sensitive to siltation and nutrient enrichment, forest operations shall be designed to maintain, protect, or restore ecological functions of these catchments.

Indicator 6.3.4 (ref. Criterion 6.3.b)

Drainage shall not take place where it will negatively affect the ecological functions of the site (see Criteria 6.1.1, 6.1.3 and 6.2.1 and 6.2.2) or of other ecosystems (see Criteria 6.1.2 and 6.1.4).

Indicator 6.3.5 (ref. Criterion 6.3.b)

Old, non-commercial trees; trees with special ecological value; standing dead trees; and dead fallen wood shall all be systematically retained within the production area of the FMU, and in sufficient quantity to support populations of species of flora and fauna dependent on old trees and dead wood across the FMU.

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- field visits
- Management Plan

- site visits
- Management Plan
- documentation
-

- Management Plan
- site visits
- reference to species identified in 6.2.1 and 6.2.2

- Management Plan/management policies.
- site visits
- habitat survey & map

- site visit
- Management Plan

Indicator 6.3.6 (ref. Criterion 6.3.b)

Stable, site adapted and diverse forest fringes (internal and external to the forest) shall be maintained or established in connection with regeneration of the forest edge. Tree and shrub species characteristic to the region shall be used to ensure a stable and diverse transition zone to the open adjacent areas or internal roads/rides (to a minimum of 5% of the FMU area). Where such fringes are not present this shall be justified on ecological grounds, and they shall be planned into the next rotation.

Indicator 6.3.7 (ref. Criterion 6.3.b)

Any plant species recognised as invasive shall be recorded by the forest owner/manager, and action shall be taken to control these through planned management operations (in compliance with Criterion 6.6).

Indicator 6.3.8 (ref. Criterion 6.3.b)

The forest micro-climate** shall be maintained throughout the forest cycle in at least 5% of the FMU area.

Indicator 6.3.9 (ref. Criterion 6.3.b)

Small features of high ecological value (e.g. nesting sites, small wetlands, ponds, riparian zones, small open areas, etc.) shall be systematically retained and protected (e.g. through appropriate buffer zones) throughout the production area of the FMU.

Indicator 6.3.10 (ref. Criterion 6.3.b)

Where Annex bog habitats exist(ed) within the FMU prior to first planting and where there has not been canopy closure or yield class does not exceed Yield Class 10, the forest owner shall request agreement, from the Forest Service, to fell the trees and not replant in order to restore the affected areas to functioning bog habitat, or, where restoration to active bog habitat is not possible, to restore/or develop the area into wetland habitat types, this may include native wet woodland.

(Note: Replanting requirements under the existing Forestry Act may be waived at the discretion of the Minister. Where such a waiver is not granted, then the statutory obligations of the Act prevail.)

Indicator 6.3.11 (ref. Criterion 6.3.b)

Where fen** habitats exist(ed) within the FMU prior to first planting the forest owner shall request agreement from the Forest Service to fell the trees and not replant in order to restore these as functioning fen habitat/ native woodland.

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- field inspection.
- Management Plan

- site visit
- Management Plan

- site visit
- Management Plan

- site visits
- Management Plan
- maps

- site visits
- Management Plan
- documentation
- survey in Criterion 6.1.1

- site visits
- Management Plan
- documentation
- survey 6.1.1

Indicator 6.3.12 (ref. Criterion 6.3.b)

Where native tree species exist within the FMU they shall not be replaced with exotic tree species. (See Criterion 10.4 for genetic, species and ecosystem diversity within plantations)

Indicator 6.3.13 (ref. Criterion 6.3.b)

Where native species are used in an FMU, some native genetic stock shall be used and proportionally retained throughout the rotation. Plans and implementation of this shall be outlined in the Management Plan.

Indicator 6.3.14 (ref. Criterion 6.3.c)

Site preparation and harvesting methods shall be designed to minimise compaction and other damage to soil, so as not to compromise the overall long-term ecological functions (including timber productivity) of the forest ecosystem. (See Criteria 5.3 and 6.5)

Indicator 6.3.15 (ref. Criterion 6.3.c)

Brash shall not be removed off site unless it has been clearly established that the relevant forest ecosystem will not be affected adversely or, conversely, where brash removal has been identified as beneficial for ecological purposes.

Indicator 6.3.16 (ref. Criterion 6.3.c)

Current best practice for on-site brash management shall be implemented. Where brash is moved, removal of the litter layer shall be minimised and soil damage shall not occur.

Indicator 6.3.17 (ref. Criterion 6.3.c)

There shall be no use of fertilisers within the forest or plantation area, other than as a measure to restore growth of species suited to the site**, up to canopy closure. (See Criterion 5.1.1 on use of tree species appropriate to the site.)

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- Management Plan/management policies.
- reforestation plans
- field inspection.

- records of provenance
- Management Plan

- Management Plan
- site visits
- reference to water monitoring data from Principle 8

- harvest plan
- Management Plan
- documentation
- site visits

- site visits
- Management Plan
- current best practice documentation

- records of fertiliser applications
- site visits
- foliar analysis results

Criterion 6.4 Representative samples of existing ecosystems within the landscape shall be protected in their natural state and recorded on maps, appropriate to the scale and intensity of operations and the uniqueness of the affected resources.

Indicator 6.4.1

The FMU shall have been surveyed to identify any areas representative of ecosystems**, and all such areas shall be identified on maps (see Criterion 6.1.1).

Indicator 6.4.2

The forest owner/manager shall designate and map conservation zones that include representative samples of existing ecosystems within the landscape (see Criterion 6.1.1). These conservation zones should be managed for conservation, but it need not be a non-intervention area, e.g. hazel coppice, hedgerow, etc.

6.4.2a For FMU >10ha

Where the total area protected under area-based designations (not feature based protection) in Criteria 6.2, 6.3 and 6.4 is less than 20% of the FMU, the forest owner/manager shall create/restore areas of land as semi-natural habitat to reach this percentage

6.4.2b For FMU ≤10ha

Where the total area protected under area-based designations (not feature based protection) in Criteria 6.2, 6.3 and 6.4 is less than 15% of the FMU, the forest owner/manager shall create/restore areas of land as semi-natural habitat to reach this percentage.

Indicator 6.4.3

Management prescriptions and an ecologically robust monitoring time frame shall be specified in the forest Management Plan and other documents in order to protect the representative examples of ecosystems within conservation zones in their natural state and in the long term.

Indicator 6.4.4

Reference sites of the representative ecosystems within conservation zones, shall be identified and clearly marked on maps, and are monitored at least once in every five years, or more frequently if set out in the monitoring time frame in the forest Management Plan, to identify and evaluate long term changes. (see Principle 8)

Indicator 6.4.5

The management prescriptions shall be implemented and adapted as necessary, based on monitoring under Criterion 6.4.4 above.

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- habitat survey, including maps

- designation and maps in Management Plan

- Management Plan

- Management Plan
- reference sites on maps
- monitoring results
- site visits

- site visits
- documentation of actions taken

Criterion 6.5 Written guidelines shall be prepared and implemented to: control erosion; minimize forest damage during harvesting, road construction, and all other mechanical disturbances; and protect water resources.

Indicator 6.5.1

A written guideline for controlling erosion; minimising damage to the forest during harvest, establishment of tracks, construction of roads, and other mechanical disturbances; and protect water resources, shall be included in the Management Plan.

Indicator 6.5.2

The operational plans shall include specific provisions to prevent erosion by identifying areas which are susceptible to erosion/slippage, and in which practices must ensure no increased erosion or reduction in soil stability (which could impact adjacent ecosystems).

Indicator 6.5.3

For new roads, all necessary consents shall be obtained. Where new roads are planned and designed, the balance between timber extraction distances and road density shall be determined in order to minimise any negative impacts on the environment. This shall also apply to roads and tracks associated with non-timber activities.

Indicator 6.5.4

The transport network within the FMU shall be properly designed, constructed and maintained, so as to minimise erosion and disturbance to natural drainage patterns.
(See also Criterion 5.3 for reduced impact harvesting.)

Indicator 6.5.5

Construction and maintenance of roads, bridges and other infrastructure shall be done with environmentally appropriate materials, including any imported stone, that minimise damage to the surrounding environment. Local materials shall be used where available.

Indicator 6.5.6

Implementation of the guidelines shall be evidenced in Management Plans and other documents.

Indicator 6.5.7

Implementation of the guidelines shall be clearly and consistently evidenced in site level management practices.

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- Management Plan
- record of materials used for the construction
- site visits

- operational plans

- records of consents
- environmental assessment where required.

- site visits
- documentation

- Management Plan/management policies.
- documentation of decision making procedure for selection of materials used for the construction
- record of materials used for construction
- site visits

- Management Plans
- documentation

- site visits

Criterion 6.6 Management systems shall promote the development and adoption of environmentally friendly non-chemical methods of pest management and strive to avoid the use of chemical pesticides. World Health Organization Type 1A and 1B and chlorinated hydrocarbon pesticides; pesticides that are persistent, toxic or whose derivatives remain biologically active and accumulate in the food chain beyond their intended use; as well as any pesticides** banned by international agreement, shall be prohibited. If chemicals are used, proper equipment and training shall be provided to minimize health and environmental risks.

Indicator 6.6.1

The forest shall be monitored for early detection of forest invertebrate pests, tree diseases and invasive species, in order to enable early detection of these before they become established. The forest owner/manager shall co-operate in any national programme monitoring invasive and emergent pests and diseases as well as mammal damage. (Refer to Criterion 7.3, link to Principle 8)

Indicator 6.6.2

6.6.2.1 Any forest pests and diseases recognised as invasive shall be recorded by the forest owner/manager, and action shall be taken to control these through planned management operations. (Precautions to avoid accidental introduction of forest pests and diseases should be taken by acquiring biological material from trusted/certified sources.).

6.6.2.2 Any unrecognised or potentially invasive forest pests and diseases shall be brought to the attention of the relevant authorities and recorded by the forest owner/manager, and all action possible taken according to best national or international practice. Where action is not possible, justification for this shall be documented.

Indicator 6.6.3

Management systems shall promote the adoption of environmentally friendly non-chemical methods of pest management and strive to avoid the use of pesticides. Forest owners/ managers shall prepare and implement an effective plan for the minimisation of pesticide use as part of an integrated pest management approach.

Indicator 6.6.4

Silvicultural practices that minimise the impact of existing forest pests shall be explicitly considered as part of an integrated pest management approach, and non-use of such practices justified.

Indicator 6.6.5

EITHER: 6.6.5a

The forest owner/manager shall have a clear, documented policy not to use pesticides, and shall not use pesticides.

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- discussion with forest owner/manager
- documentation

- documentation
- Management Plans
-

- documentation

- documentation
- Management Plan

- documentation
- interviews with forest owner/manager
- site visit

- documentation/ management policy

OR: **6.6.5b** The forest owner/manager shall comply with the following indicators for the use of pesticides.

Indicator 6.6.5b.1

The forest owner/manager shall have an up-to-date copy of FSC's list of 'highly hazardous' pesticides, and of any derogations that have been approved and are applicable in Ireland. Relevant hazardous materials safety data sheets (MSDS) should be on-site and accessible.

Indicator 6.6.5b.2

Pesticides shall only be used when there is no effective and financially viable alternative action.

Indicator 6.6.5b.3

In any instance where pesticide use is considered necessary, the forest owner/manager shall document potential impacts on meeting the environmental, social and other objectives of the Management Plan, according to best available information. Where impact(s) on protected species are identified this shall prohibit the use of pesticides. (see Principle 1)

Indicator 6.6.5b.4

There shall be no storage or use of any pesticide included on FSC's list of 'highly hazardous' pesticides within the FMU, unless the forest owner/manager is subject to a current FSC pesticide derogation for the pesticide concerned.

Indicator 6.6.5b.5

The forest owner/manager shall maintain complete and up to date records of all pesticide usage, including trade name, active ingredient(s), quantity of active ingredient used, date of use, location of use, reason for use, and the names of persons involved in the use.

Indicator 6.6.5b.6

Pesticides shall be used in minimum effective quantities, and with strict observation of controls and regulations relating to use.

Indicator 6.6.5b.7

All staff and contractors involved in pesticide use shall have received accredited training in handling, application and storage procedures.

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- FSC's list of "highly hazardous" pesticides
- Material Safety Data Sheets (MSDS)

- documentation

- documentation

- derogation
- documentation

- documentation

- documentation
- interviews with staff and contractors

- documentation
- training records
- interviews with staff and contractors

Indicator 6.7.3

There shall be a documented procedure, supported by training and materials, for controlling and cleaning up chemicals, fuel and oil in the case of accidental spillage.

Indicator 6.7.4

A record shall be kept of all spillages of chemicals, fuel and oil, the actions taken listed, and the outcomes evaluated. The evaluation shall result in the inclusion in the procedure (Criterion 6.7.5) of any recommendations for the revision of the procedure or its implementation.

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- documentation
- Material Safety Data Sheets (MSDS)
- site visits

- documentation
- site visits

Criterion 6.8 Use of biological control agents shall be documented, minimized, monitored and strictly controlled in accordance with national laws and internationally accepted scientific protocols. Use of genetically modified organisms shall be prohibited.**

Indicator 6.8.1

The forest owner/manager shall provide a written guarantee that no genetically modified organisms (including trees and other organisms) are used or are present in the forest owner/manager's management, production or research program, and there shall be evidence of provenance of sourced stock to support this.

Indicator 6.8.2

If biological control agents are used, the forest owner/manager shall demonstrate that such use is minimised and is in strict compliance with national laws and internationally accepted scientific protocols.

Indicator 6.8.3

If biological control agents are used, comprehensive records of use shall be maintained by the forest owner/manager. The effects of such use shall be evaluated and procedures subsequently revised in accordance with internationally accepted scientific protocols.

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- documentation (including provenance certificates)

- documentation
- interviews with forest owner/manager

- documentation

Criterion 6.9 The use of exotic species shall be carefully controlled and actively monitored to avoid adverse ecological impacts.

Indicator 6.9.1

Exotic species** shall not be newly introduced into the FMU or onto new sites within the FMU unless there is convincing evidence available that species will not become invasive or have adverse ecological impacts at the local level.

Indicator 6.9.2

The use of exotic species** shall be carefully controlled and actively monitored under the programme set out in Criteria 8.1 & 8.2 to avoid adverse ecological impacts. If exotic species are found to be invasive, these should be managed as set out in Indicator 6.3.7.

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- Management Plan
- research publications
- site visits
- records of consultation

- monitoring programme

Criterion 6.10 Forest conversion to plantations or non-forest land uses shall not occur, except in circumstances where conversion:

- a) entails a very limited portion of the forest management unit; and**
- b) does not occur on high conservation value forest areas; and**
- c) will enable clear, substantial, additional, secure, long term conservation benefits across the forest management unit.**

Note: The 2005 FSC General Assembly Motion 10 determined that ‘the first word “forest” in Criterion 6.10 shall be interpreted to refer to natural or semi-natural forests rather than plantations.’

Indicator 6.10.1

Conversion of natural or semi-natural forests to plantations shall not occur.

Note: for areas previously converted, see Criterion 10.9.

Indicator 6.10.2

Conversion of natural or semi-natural forests to non-forest land uses shall not occur, except in circumstances where conversion:

- a) entails a very limited portion of the forest management unit; and
 - b) does not occur on high conservation value forest areas; and
 - c) will enable clear, substantial, additional, secure, long term conservation benefits across the forest management unit.
- Any conversion shall be in line with FSC International Excision policy (FSC-POL-20-003) and in line with 1.6.

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- site visit

- site visit
- maps
- documentation / demonstration of c)
- interviews with forest owner/manager

Principle 7: Management Plan

A Management Plan – appropriate to the scale and intensity of the operations – shall be written, implemented, and kept up to date. The long term objectives of management, and the means of achieving them, shall be clearly stated.

Criterion C7.1 The Management Plan and supporting documents shall provide:

- a) Management objectives.
- b) Description of the forest resources to be managed, environmental limitations, land use and ownership status, socio-economic conditions, and a profile of adjacent lands.
- c) Description of silvicultural and/or other management system, based on the ecology of the forest in question and information gathered through resource inventories.
- d) Rationale for rate of annual harvest and species selection
- e) Provisions for monitoring of forest growth and dynamics.
- f) Environmental safeguards based on environmental assessments.
- g) Plans for the identification and protection of rare, threatened and endangered species.
- h) Maps describing the forest resource base including protected areas, planned management activities and land ownership.
- i) Description and justification of harvesting techniques and equipment to be used.

Indicator 7.1.1 (ref: Criterion 7.1a)

The Management Plan shall clearly state the short, medium and long term** management objectives for the FMU.

Indicator 7.1.2 (ref: Criterion 7.1b)

The Management Plan shall include a resource inventory** and map(s) of the full range of forest services and resources to be managed (Criteria 5.4, 5.5), including any designations, environmental requirements** and habitats identified (Indicators 6.1.1 – 6.1.4, 6.2.1, 6.2.2, 6.2.5). The plan or supporting documentation shall include a description of the methods used in compiling this inventory.

Indicator 7.1.3L (ref: Criterion 7.1.b)

The Management Plan shall include a description of forest resources and associated forest enterprises, services and other related activities in the surrounding area. This may be augmented with maps.

Indicator 7.1.4 (ref: Criterion 7.1b)

The Management Plan shall include details of land use and ownership and use rights status (see Principle 2) and a description of neighbouring lands.

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- Management Plan
- documentation

- Management Plan
- documentation
- map(s)

- Management Plan (including regional maps)
- documentation

- Management Plan
- documentation

Indicator 7.1.5 (ref: Criterion 7.1b)

The Management Plan and supporting documents shall include a description of the regional social and economic context**, contribution of FMU to this context, and reference to other local and regional plans (see other relevant Indicators under other Criteria).

Indicator 7.1.6 (ref: Criterion 7.1c)

The Management Plan shall describe the silvicultural system(s) (including planned felling and regeneration) to be employed to achieve the management objectives and shall include a justification for the selected system(s) based on the ecology of the forest, the multi-resource inventory and the management objectives.

Indicator 7.1.7 (ref: Criterion 7.1d)

The Management Plan shall state the planned harvest volumes per annum for the management period and per species selected, and a rationale for these with reference to Indicator 7.1.5. The planned harvest volumes shall be in keeping with requirements under Criterion 5.6.

Indicator 7.1.8 (ref: Criterion 7.1e)

The Management Plan shall include provision for the monitoring of forest regeneration, growth and dynamics and record these as part of the multi-resource inventory. (See Criterion 8.2)

Indicator 7.1.9 (ref: Criterion 7.1f)

The Management Plan shall specify environmental safeguards (including fire Management Plans in fire prone areas, erosion and siltation control, etc.) for areas and features identified in the multi-resource inventory and based on Criteria 6.1 and 6.2.

Indicator 7.1.10 (ref: Criterion 7.1g)

The Management Plan shall state how protection measures for any rare, threatened or endangered species and their habitats, identified in Criterion 6.2, are incorporated into the Plan.

Indicator 7.1.11 (ref: Criterion 7.1.h)

The Management Plan shall include maps that describe;

- land ownership
- the forest resource
- protected areas and features
- Baseline Habitat Map (Indicator 6.1.1)
- Catchment and FMU map (Indicator 6.1.2)
- planned management activities
- roads

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- Management Plan
- documentation

- Management Plan
- documentation

- Management Plan

- Management Plan

- Management Plan (cross reference to P6)

- Management Plan

- Management Plan
- maps

Indicator 7.1.12 (ref: Criterion 7.1i)

The Management Plan shall provide description and justification of the proposed harvesting techniques and associated equipment to be used.

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- Management Plan

Criterion C7.2 The Management Plan shall be periodically revised to incorporate the results of monitoring or new scientific and technical information, as well as to respond to changing environmental, social and economic circumstances.

Indicator 7.2.1

The Management Plan shall be reviewed at least every 5 years and updated as necessary.

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- Management Plan

Indicator 7.2.2

Where the Resource Inventory (Indicator 7.1.2) in the Management Plan provides estimates of productivity that are different from previous estimates in previous Management Plans, these shall be highlighted and explained.

- Multi-resource inventory/ies
- Management Plan

Indicator 7.2.3

The Management Plan shall at each review, incorporate the results of any monitoring within or relevant to the FMU (Criterion 8.4). This shall include experience gained or observations made by the forest owner/manager.

- Management Plan
- record of monitoring

Indicator 7.2.4

The Management Plan shall at each review, incorporate any new scientific or technical knowledge that has been adopted as good practice by relevant authorities since the previous review.

- Management Plan
- record of monitoring showing sources of new scientific or technical knowledge
- evidence of review of new scientific and technical information

Indicator 7.2.5

The Management Plan shall at each review, identify any relevant change in social, environmental or economic circumstances, and adjust the Management Plan accordingly.

- Management Plan
- documentation

Indicator 7.2.6

Operational procedures and training shall be kept up to date to incorporate any changes as identified in Indicators 7.2.3, 7.2.4 and 7.2.5.

- documentation
- interviews with Staff

Indicator 7.2.7 L

The forest owner/manager shall have a formal system to identify and review new scientific and technical information that is relevant to its forest management, and shall show that these have been taken into account in the most recent revision of its Management Plan and supporting documents.

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- documentation
- Management Plan
- interviews with staff

Criterion C7.3 Forest workers shall receive adequate training and supervision to ensure proper implementation of the Management Plan.
Indicator 7.3.1

Forest owner/managers shall have qualifications, training and/or experience to ensure that they are able to plan, organise and supervise forestry operations and associated environmental management in accordance with the forest owner/manager's plans, policies and procedures.

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- documentation
- evidence of Continuous Professional Development of managers
- interviews with forest owner/managers

Indicator 7.3.2

All workers (including contractors and their employees) shall have up-to-date training and competence, to implement the tasks they are assigned properly, effectively and safely, and with due care to environmental and social issues.

- documentation (including Certificates of Competence)
- site visit
- interviews with staff

Indicator 7.3.3

All work (including that carried out by contractors and their workers) shall be supervised to ensure that it is implemented competently, and its quality is effectively monitored by the farm owner/ manager him or herself. (see Indicator 5.3.8)

- documentation
- visits to working sites
- discussions with staff / contractors

Indicator 7.3.4L

The forest owner/manager shall implement a documented system to identify the skills and training needs of its staff, and provides or supports an ongoing training programme for its staff to meet these needs. The forest owner/manager shall ensure that contractors and their staff are sufficiently trained for the tasks for which they are contracted.

- documentation
- discussions with staff / contractors

Indicator 7.3.5L

There shall be accurate and up-to-date records showing competency, training and education records of all staff and contractors.

- documentation

Criterion C7.4 While respecting the confidentiality of information, forest owner/managers shall make publicly available a summary of the primary elements of the Management Plan, including those listed in Criterion 7.1.

Indicator 7.4.1

A summary of the Management Plan shall be prepared which includes the primary elements of the Management Plan as listed in Criterion 7.1, and within the accepted norms of commercial confidentiality. The Summary Plan shall include a date for review of the Management Plan.

Indicator 7.4.2

Third parties that have been involved in consultations (including those identified in Indicator 4.4.5) on the development of the Management Plan shall be notified once the Summary Plan is available. When requested, the forest owner/manager shall provide a copy of the Summary Plan.

Indicator 7.4.3L

A summary of the Management Plan shall be made available (and easily accessible) to all interested parties, including representatives of local communities and organisations.

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- Management Plan summary

- documentation

- interviews with consultees

- availability of summary plan (as stated on the summary plan)

- interviews with stakeholders

Principle #8: Monitoring and assessment

Monitoring shall be conducted -- appropriate to the scale and intensity of forest management -- to assess the condition of the forest, yields of forest products, chain of custody, management activities and their social and environmental impacts.

Criterion 8.1 The frequency and intensity of monitoring should be determined by the scale and intensity of forest management operations as well as the relative complexity and fragility of the affected environment. Monitoring procedures should be consistent and replicable over time to allow comparison of results and assessment of change.

Indicator 8.1.1

Procedures for collecting the data specified in the Criterion 8.2 below shall be clearly documented.

Indicator 8.1.2

The procedures shall describe the methodologies** for collecting the data for each indicator of Criterion 8.2, and specify the frequency at which data are collected. The methodologies shall be determined by the scale and intensity of forest operations as well as the relative complexity and fragility of the affected environment, and based on current best practice.

Indicator 8.1.3

The described methodologies** shall be consistent and replicable over time and shall provide robust data (including relevant baseline information) to monitor change in the specified social, environmental and economic indicators over time, and at a frequency and in a format that is useful to inform good management (ref. Criterion 8.4).

Indicator 8.1.4

Personnel shall have been trained and shall be available to implement the procedures specified in Indicator 8.1.1

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- documentation

- documentation

- documentation

- consultation with statutory agencies

- documentation

- interviews with personnel

Criterion 8.2 Forest management should include the research and data collection needed to monitor, at a minimum, the following indicators:

- a) Yield of all forest products harvested.
- b) Growth rates, regeneration and condition of the forest.
- c) Composition and observed changes in the flora and fauna.
- d) Environmental and social impacts of harvesting and other operations.
- e) Costs, productivity, and efficiency of forest management.

Indicator 8.2.1

The owner/manager shall determine and document (see Criterion 8.1) what data/ information is needed in order to monitor progress towards their management objectives and compliance with FSC requirements. These data shall be collected as part of a monitoring programme and according to the procedures outlined in Criterion 8.1.

Indicator 8.2.2 (ref. Criterion 8.2.a)

Data (e.g. volume per species) regarding the yield of timber harvested sufficient to assess performance with respect to management objectives are collected and maintained.

Indicator 8.2.3 (ref. Criterion 8.2.a)

If non-timber forest products are harvested, data regarding the yield of each product/ species sufficient to assess performance with respect to management objectives shall be collected and maintained.

Indicator 8.2.4 (ref. Criterion 8.2.b)

Data shall be collected and updated at least every five years on tree growth rates, tree regeneration by species, productivity, condition of the forest (including tree health, the presence of pests, diseases, evidence of soil damage, erosion, invasive unwanted species etc.) and disturbances. (As per Criterion 7.1 Multi-resource inventory.) (See Criterion 10.4) Where this is not possible, the reason for this shall be provided, and estimates can be presented in lieu.

Indicator 8.2.5 (ref. Criterion 8.2.b)

Any High Conservation Value Forest attributes identified for the FMU (see Criterion 9.1) shall be monitored annually as in Criterion 9.4.

Indicator 8.2.6 (ref. Criterion 8.2.c)

The forest owner/ manager shall monitor within the FMU the effects of their management and forest operations on terrestrial and aquatic flora and fauna, including changes in rare, protected, and other notable species (e.g. red listed or invasive species) (See Criterion 6.2), commensurate with the extent and intensity of the forest management, and the rarity and fragility of the forest ecosystem.

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- documentation

- documentation

- documentation

- monitoring report
- HCVF assessment (Criteria 9.1)

- documentation

Indicator 8.2.7 (ref. Criterion 8.2.c)

The forest owner/manager shall document any indications of changes in flora and fauna beyond the FMU, (including qualitative observations) and shall bring these to the attention of the competent authority.

Indicator 8.2.8 (ref. Criterion 8.2.d)

Water quality that leaves the forest property shall be monitored according to the procedures set out in Criterion 8.1, sufficient to identify both short- and long-term impacts of forest management and operations (e.g. following harvesting, and/or prior to subsequent re-establishment).

Indicator 8.2.9 (ref. Criterion 8.2.d)

Where social impacts are identified with directly affected persons through the consultation process (see Criterion 4.4), relevant management activities shall be monitored as agreed to in the consultation process.

Indicator 8.2.10 (ref. Criterion 8.2.e)

The forest owner/ manager shall monitor costs, productivity, and efficiency (see Criterion 5.1).

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- correspondence with competent authorities
- documentation of indications of changes in flora and fauna
- interviews with forest owner/manager

- site visits
- monitoring programme
- monitoring data

- records of monitoring
- interviews with people directly affected by operations

- records of costs, accounts, budgets

Criterion 8.3 Documentation shall be provided by the forest owner/manager to enable monitoring and certifying organizations to trace each forest product from its origin, a process known as the "chain of custody."

Indicator 8.3.1

There shall be a system in place which allows all products (timber and non-timber) harvested within the FMU to be readily identified, from the time of harvesting through to the point of sale.

Indicator 8.3.2

Harvesting and timber sales documentation shall show: product, quantity, date of production, production site, forest (FMU) of origin, FSC certification code, destination, and persons/companies involved in processing, sale, and transport of the product.

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- documentation

- documentation
- file with harvesting and timber sales record.
- invoices.
- field inspection

Indicator 8.3.3

The forest owner/ manager shall keep sales invoices for all products sold, which identify at least:

- name and address of purchaser;
- the date of sale;
- type of product;
- the volume (or quantity) sold.

Indicator 8.3.4

All products that are sold as 'FSC-certified' shall be readily identifiable as such on the paper records and sales invoices accompanying the product.

Indicator 8.3.5

The forest owner/manager shall keep copies of production records and sales invoices for at least seven years.

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- documentation

- documentation

- documentation

Criterion 8.4 The results of monitoring shall be incorporated into the implementation and revision of the Management Plan.
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Indicator 8.4.1

The data collected as a result of the monitoring procedures specified under Criteria 8.1 and 8.2 shall be readily accessible to forest owners/ managers, and in a format which permits the analysis of trends over time.

Indicator 8.4.2

The data collected as a result of the monitoring procedures specified under Criteria 8.1 and 8.2 over the previous five year period shall have been examined, interpreted and the main results presented in a form which allows forest owners/ managers to review relevant aspects of the Management Plan and associated documents.

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- monitoring results (qualitative)
- monitoring results (quantitative)
- trend analysis
- discussion with forest owners/ managers (to assess accessibility of the data)

- monitoring report with quantitative and qualitative analysis of data gathered
- analysis for each aspect of the monitoring programme (see indicators 8.1. and 8.2)

Indicator 8.4.3

Forest owners/ managers shall have considered the implications of the results of the monitoring programme (see Criterion 8.2), and shall demonstrate, how these results have influenced subsequent changes to the Management Plan and associated documents. This shall have particular reference to Indicators under Principles 4, 5, 6 and 9.

Indicator 8.4.4

The monitoring of pests and diseases shall be integrated into the forest owner/manager's Integrated Pest Management (IPM) strategy or pest management systems (see Criterion 6.6).

Indicator 8.4.5

The Management Plan shall state that forestry activities will be managed and monitored in a flexible and cooperative manner to remove undue risk to the integrity of designated sites and/ or protected species. (See Principle 7)

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- documentation such as records of changes made to the Management Plan and associated documents,
- copies of sequential versions of the Management Plan, (see also Criterion 4.4.3)
- interviews with forest owner/manager/owner

- records of monitoring for pests and diseases
- reference to the monitoring results within the IPM
- records of changes made to the IPM on the basis of the results
- statements in the IPM explaining the rationale for changes by linking to the monitoring results

- Management Plan/management policies.
- management agreement with NPWS, such as voluntary Management Plan agreements made between NPWS/the Minister (DEHLG) and the landowner under the Wildlife Act (see <http://www.npws.ie/en/ProtectedSites/>)
- consultation with forest owner/manager and staff.
- field inspection.

Criterion 8.5 While respecting the confidentiality of information, forest owner/managers shall make publicly available a summary of the results of monitoring indicators, including those listed in Criterion 8.2.

Indicator 8.5.1

The forest owner/manager shall produce a summary of the Monitoring Programme results which includes the primary results of the Monitoring Programme as listed in Criterion 8.2. Unconfirmed or subjective observations need not be included in the summary; where they are included they shall be clearly identified as such. Data considered to be sensitive according to the accepted norms of confidentiality shall not be included or made publicly available.

Indicator 8.5.2

When requested, the forest owner/manager shall provide a copy of the Summary of the Monitoring Programme results. Third parties that have been involved in consultations (including those identified in Indicator 4.4.5) on the development of the Management Plan or monitoring shall be notified once the Summary of the Monitoring Programme results is available.

Indicator 8.5.3L

A summary of the Monitoring Programme results shall be made available (and easily accessible) to all interested parties, including representatives of local communities and organisations.

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- summary of Monitoring Programme results
- digital version of Summary of Monitoring Programme results

- documentation
- interviews with consultees

- availability of summary of Monitoring Programme results
- interviews with stakeholders

Principle #9: Maintenance of high conservation value forests

Management activities in high conservation value forests shall maintain or enhance the attributes which define such forests. Decisions regarding high conservation value forests shall always be considered in the context of a precautionary approach.

FSC Ireland has agreed to use the current Coillte draft definition for HCVF in Ireland, with a number of amendments (see below). FSC Ireland plans to hold a workshop following completion of the public consultation on this Draft Standard, in order to finalise the Irish definition for HCVF for use in the National Standard for at least the first 5 years of its operation.

HCV1

Description of the value: Forest areas containing globally, regionally or nationally significant concentrations of biodiversity values (e.g. endemism, endangered species, refugia).

Interpretation: In the Irish context EU and national designations such as Special Areas for Conservation (SACs), Species Protection Areas (SPAs) for birds and National Heritage Areas (NHAs) will be used to denote areas with significant concentrations of biodiversity values.

Further consideration: Further consideration should be given to areas known to hold significant concentrations of threatened, endangered or protected species that are *not* currently identified in one of the above designations. For example, areas known to contain significant populations of red squirrel. Additional consideration will be given to concentrations of other red-listed species as data becomes available. It is suggested that National concentrations of species listed by IUCN as Endangered or Critically Endangered will always be considered potential HCVs. Other information of nationally protected species should be reviewed on a case by case basis.

www.iucnredlist.org/search/details.php/40658/all

HCV3

Description of the value: Forest areas that are in or contain rare, threatened or endangered ecosystems.

Interpretation: This HCV will be denoted by priority habitats recognised under the EU Habitats Directive as being critically rare. These ecosystem types include:

- Designated alluvial woodland,
- Designated woodland associated with limestone pavement and
- Designated western Blanket Bog habitat
- Designated bog woodland,
- Designated yew woodland
- Designated midland Raised bog habitat

Many of these HCVs are protected as SACs and some as NHAs, but the latter process has yet to be completed for woodlands in Ireland. Proposed NHA (pNHA) sites and Annex 1 quality habitats (Habitats Directive) occurring outside of designated areas shall also be considered HCVF.

Therefore, in addition, some sites not identified under the EU Habitats directive will be considered HCVF. This may include *some* other examples of Old Woodland Sites, for example semi-natural oak ash woodlands (some of which are included in alluvial woodlands).

www.heritagecouncil.ie/publications/habitats/8.html .

Further consideration:

Once the NHA process has been completed for woodland areas, the completed list of NHA woodland sites will be included as HCV3. Any harvesting planned for such sites must only take place after an appropriate ecological survey, if one has not taken place.

In addition, broadleaf and Scots pine woodlands identified as continually present since the Second Edition OS maps should also be assessed for High Conservation Value. HCV "Forests" is taken to include non-forested areas with high conservation values, such as upland and raised bogs.

Note: High Conservation Value forest is not necessarily precluded from application for grant aid and participation in government forestry schemes.

Criterion 9.1 Assessment to determine the presence of the attributes consistent with High Conservation Value Forests will be completed, appropriate to scale and intensity of forest management.

Indicator 9.1.1

The forest owner/ manager shall have carried out an assessment of the FMU sufficient to identify all parts of the FMU that has any of the attributes listed in Annex 6.

Indicator 9.1.2

The forest owner/ manager shall have mapped all areas within the FMU which have any of the attributes indicated under Indicator 9.1.1

Indicator 9.1.3L

The forest owner/ manager shall have consulted with local and national stakeholders with relevant expertise or knowledge relating to the identification of areas with HCV values within the FMU.

Indicator 9.1.4L

The assessment procedure and its results including the comments and suggestions of stakeholders in response to consultation shall be fully documented.

Indicator 9.1.5L

The results of the assessment shall have been reviewed by individuals with expert knowledge of the listed HCVs and local knowledge of the area in which the FMU is located.

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- interviews with staff
- reports
- maps

- maps

- interviews with stakeholders

- reports
- maps

- records of review(s), correspondence

Criterion 9.2 The consultative portion of the certification process must place emphasis on the identified conservation attributes, and options for the maintenance thereof.

Indicator 9.2.1

The forest owner/manager shall have consulted with local and national stakeholders with relevant expertise or knowledge about the management options to maintain or enhance the identified High Conservation Values within each FMU.

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- interviews with stakeholders
- interviews with forest owner/manager
- documentation (including correspondence)

Indicator 9.2.2

Stakeholders consulted with under Indicators 9.1.3 and 9.2.1 shall be subsequently notified of the availability of the Management Plan Summary referring to management of High Conservation Values, and shall have been invited to submit any further comments in respect of the proposed management.

Indicator 9.2.3

The forest owner/ manager shall maintain a complete and up to date file of all stakeholder comments submitted in relation to its management of High Conservation Values.

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- interviews with stakeholders
- interviews with forest owner/manager
- documentation (including correspondence)

- interviews with stakeholders
- interviews with forest owner/manager
- documentation (including correspondence)

Criterion 9.3 The Management Plan shall include and implement specific measures that ensure the maintenance and/or enhancement of the applicable conservation attributes consistent with the precautionary approach. These measures shall be specifically included in the publicly available Management Plan summary.

Indicator 9.3.1

The Management Plan shall include specific measures for the management of identified high conservation value forest consistent with the precautionary approach to ensure the conservation values are maintained or increased. See also Criteria 6.2, 6.3 and 6.4.

Indicator 9.3.2

Measures for the management of high conservation value forests shall be made available to the public on application.

Indicator 9.3.3

In sites of high conservation value, if planting is required to maintain or enhance the conservation value, native seed/planting stock shall be used.

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- Management Plan/management policies.
- maps and records
- field inspection

- Management Plan/management policies.
- documentation for guidelines.

- certificates of provenance/origin

Criterion 9.4 Annual monitoring shall be conducted to assess the effectiveness of the measures employed to maintain or enhance the applicable conservation attributes.

Indicator 9.4.1

The forest owner/manager shall have an ongoing and dynamic monitoring plan for all identified HCVF areas to ensure the maintenance and enhancement of the conservation attributes identified in Indicator 9.1.1 (in addition to Criteria 6.2 and 8.2). (see Indicator 8.2.4)

Indicator 9.4.2

The forest owner/manager shall conduct and report** on annual monitoring of the identified HCVF as determined in the monitoring plan (Indicator 9.4.1). The report shall include monitoring results, interpretation and recommendations for management changes. If necessary, the forest owner/manager shall alter the management according to the precautionary principle, to ensure the maintenance and enhancement of these conservation attributes. This monitoring may be carried out by, or in co-operation with, other agencies and third parties.

Indicator 9.4.3

The forest owner/manager shall consider any impacts of forest operations and recreation activities have on HCVF values and shall include these considerations in the Management Plan and monitoring.

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- monitoring plan
- Management Plan

- monitoring reports
- consultation with the forest owner/manager.
- consultation with relevant authorities
- field inspection

- monitoring report.
- consultation with the forest owner/manager.
- field inspection

Principle #10: Plantations

Plantations shall be planned and managed in accordance with Principles and Criteria 1 - 9, and Principle 10 and its Criteria. While plantations can provide an array of social and economic benefits, and can contribute to satisfying the world's needs for forest products, they should complement the management of, reduce pressures on, and promote the restoration and conservation of natural forests.

In Ireland the majority of forests come under the category of "plantation" (see FSC International definition). In this context all Indicators under Principles 1-9 have been written to apply to both plantation and other forests. Principle 10 includes specific measures for plantations additional to those already detailed under Principle 1 – 9.

Criterion 10.1 The management objectives of the plantation, including natural forest conservation and restoration objectives, shall be explicitly stated in the Management Plan, and clearly demonstrated in the implementation of the plan.

Indicator 10.1.1

The management objectives of the plantation, including natural forest conservation and restoration objectives, shall be explicitly stated in the Management Plan, and clearly demonstrated in the implementation of the plan. This criterion is addressed under other Principles and specifically in the following criteria:

Criterion 5.1
Criterion 5.5
Criterion 6.2
Criterion 6.3
Criterion 6.4
Criterion 6.9
Criterion 7.1
Criterion 7.2

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

Criterion 10.2 The design and layout of plantations should promote the protection, restoration and conservation of natural forests, and not increase pressures on natural forests. Wildlife corridors, streamside zones and a mosaic of stands of different ages and rotation periods, shall be used in the layout of the plantation, consistent with the scale of the operation. The scale and layout of plantation blocks shall be consistent with the patterns of forest stands found within the natural landscape.

Indicator 10.2.1

The design, composition, and layout of plantations shall promote the protection, restoration and conservation of natural forests**, and not increase pressures on natural forests or remnant old woodland (see Criteria 10.5, and 6.1-6.4).

Indicator 10.2.2

In both afforestation and reforestation, the forest owner/manager shall design plantations (and subsequent operations) in line with up to date ecological best practice and/or professional ecological advice and based on the baseline habitat survey (Indicator 6.1.1) with regard to wildlife corridors, riparian areas (streamside zones), and delivery of a mosaic of stands of different ages and rotation periods. (see Criteria 6.1 and 6.2). Understanding of these site-specific ecological design recommendations shall be demonstrated by the forest owner/manager and/or by consulting with suitably qualified ecologists.

Indicator 10.2.3

The layout of plantations shall follow natural landscape patterns such as natural drainage, soil type and elevation. Enhancement of existing plantations' layout shall take place at times of major change (such as reforestation, felling, roading, etc.) This shall include consideration of size, shape, texture, colour, and existing semi-natural woodland.

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- documentation
- field visit

- record of consultations
- maps/GIS databases including ecological recommendations
- baseline habitat survey & map
- Management Plan

- field visits
- documentation
- Management Plan
- maps

Criterion 10.3 Diversity in the composition of plantations is preferred, so as to enhance economic, ecological and social stability. Such diversity may include the size and spatial distribution of management units within the landscape, number and genetic composition of species, age classes and structures.

Indicator 10.3.1

The schedule of felling and regeneration in the Management Plan shall provide for a variety of age classes, species and rotation periods. (See Indicator 7.1.5), except where the FMU is less than 10 ha where the schedule of felling and regeneration in the Management Plan shall provide for a variety of species and rotation periods.

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- Management Plan/management policies.
- reforestation plans.
- field inspection

Indicator 10.3.2

Transformation to continuous cover systems shall be considered as a means of achieving the management objectives, including potential measures that would facilitate this. In the case of the use of a non-continuous cover system, diversity shall be achieved in the size and spatial distribution of management units within the landscape, in the number and genetic composition of species, and in age classes and structures. (See Criterion 7.1.5)

Diversity in number and genetic composition of species are considered in Criterion 10.4

This criterion is also addressed under:

Criterion 5.1 Economic viability

Criterion 5.2 Optimal local use

Criterion 5.4 Diversify local economy

Criterion 6.3 Ecological functions

Criterion 6.5 Erosion control

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- Management Plan
- interview with forest owner/manager
- field visit

Criterion 10.4 The selection of species for planting shall be based on their overall suitability for the site and their appropriateness to the management objectives. In order to enhance the conservation of biological diversity, native species are preferred over exotic species in the establishment of plantations and the restoration of degraded ecosystems. Exotic species, which shall be used only when their performance is greater than that of native species, shall be carefully monitored to detect unusual mortality, disease, or insect outbreaks and adverse ecological impacts.

Indicator 10.4.1

There shall be a formal procedure for evaluating every site prior to (re-)planting to ensure that the species selected and subsequently planted are suited to the site and to the social, environmental and economic objectives of management.

Indicator 10.4.2

There shall be a clear justification for the choice of species chosen for the site, taking into account the social, environmental and economic objectives for the site, as well as soil, geology and present and future climate.

Indicator 10.4.3

If there are native species that meet the social, environmental and economic management objectives to the same level as exotic species, the native species shall be selected. Where exotic species have been selected for the site, the choice shall be explicitly justified. The most suitable native species shall have been identified and reasons given for its/their rejection.

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- Management Plan
- documented procedure

- interviews with staff
- site visits

- interviews with staff
- Management Plan
- site visits

Indicator 10.4.4

Exotic species shall be carefully monitored as part of the Monitoring Plan (see Criteria 8.2) to detect unusual mortality, disease, or insect outbreaks and adverse ecological impacts, and shall be addressed as detailed in Criterion 8.4.

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- monitoring plan

Criterion 10.5 A proportion of the overall forest management area, appropriate to the scale of the plantation and to be determined in regional standards, shall be managed so as to restore the site to a natural forest cover.

Indicator 10.5.1

Plantations on woodland sites, which were historically recorded as wooded on the First or Second Edition Ordnance Survey Maps, shall be identified, mapped, and managed with biodiversity as the first or second management objective.

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- maps

Indicator 10.5.2

At least 10% of the area of the FMU under assessment shall be managed with the objective of transforming to semi-natural woodland appropriate to the locale of the FMU. This area shall be included in the identified conservation zones. (See Indicator 6.4.2)

- maps
- Management Plan

Criterion 10.6 Measures shall be taken to maintain or improve soil structure, fertility, and biological activity. The techniques and rate of harvesting, road and trail construction and maintenance, and the choice of species shall not result in long term soil degradation or adverse impacts on water quality, quantity or substantial deviation from stream course drainage patterns.

Indicator 10.6.1

There shall be no long-term soil degradation, adverse impacts on water quality, adverse impacts on rates of drainage or substantial deviation from stream course drainage patterns as a result of forest design or operations.

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- site visits
- Management Plan

Indicator 10.6.2

Measures shall be taken on an ongoing basis to maintain or improve soil structure, fertility, and biological activity. The techniques and rate of harvesting, road and trail construction and maintenance, and the choice of species shall not result in long term soil degradation or adverse impacts on water quality, quantity or substantial deviation from stream course drainage patterns. This criterion is addressed under other Principles and specifically in the following criteria:

Criterion 5.5 – maintaining and enhancing forest services and catchments

Criterion 5.6 – rate of harvest

Criterion 6.3 – species selection, ecological functions, harvesting techniques

Criterion 6.5 – harvesting techniques, road and trail construction and maintenance, erosion control

Criterion 7.1 – rate of harvest, harvesting techniques, protection for endangered species and habitats

Criterion 8.4 – incorporating results of monitoring into Management Plan and practices

Criterion 10.8 – monitoring of potential ecological impacts

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

Criterion 10.7 Measures shall be taken to prevent and minimize outbreaks of pests, diseases, fire and invasive plant introductions. Integrated pest management shall form an essential part of the Management Plan, with primary reliance on prevention and biological control methods rather than chemical pesticides and fertilizers. Plantation management should make every effort to move away from chemical pesticides and fertilizers, including their use in nurseries. The use of chemicals is also covered in Criteria 6.6 and 6.7.

Indicator 10.7.1

Measures shall be taken on an ongoing basis to prevent and minimise outbreaks of pests, diseases, fire and invasive plant introductions. Integrated pest management shall form an essential part of the Management Plan, with primary reliance on prevention and biological control methods rather than chemical pesticides and fertilisers. Plantation management should make every effort to move away from chemical pesticides and fertilisers, including their use in nurseries. This criterion is addressed under other Principles and specifically in the following Indicators:

Indicators 6.6.1 & 6.6.2 – prevention and minimisation of outbreaks of pests, diseases and invasive species

Indicator 6.3.17 – control of fertiliser use

Indicator 6.6.3 – integrated pest management, minimise chemical pesticide use,

Indicator 6.6.4 – integrated pest management, move away from chemical pesticides,

Indicator 6.6.5a & b – move away from chemical pesticides

Indicator 8.2.3 – monitoring of pests and diseases, tree health

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

Indicator 10.7.2:

Measures designed to minimise the risk of damage from wind, fire, pests and diseases, including planting and restructuring plans, shall be included in the Management Plan.

Indicator 10.7.3:

There shall be a current fire plan that includes both preventative measures and emergency response procedures. This shall be reviewed annually and up-to-date copies of the fire plan shall be provided to all those identified in the plan.

Indicator 10.7.4

Nurseries within the control of the forest operation shall have in place an integrated pest management strategy with primary reliance on prevention and biological control methods rather than chemical pesticides and fertilisers.

Indicator 10.7.5

Plant and animal species shall only be introduced if they are not invasive, and all introductions shall be monitored for signs of their becoming invasive.

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- Management Plan
- discussions with owner/manager
- design plan.

- fire plan

- integrated pest management strategy

- results of monitoring programme
- discussions with the owner/manager
- habitat survey

Criterion 10.8 Appropriate to the scale and diversity of the operation, monitoring of plantations shall include regular assessment of potential on-site and off-site ecological and social impacts, (e.g. natural regeneration, effects on water resources and soil fertility, and impacts on local welfare and social well-being), in addition to those elements addressed in principles 8, 6 and 4. No species should be planted on a large scale until local trials and/or experience have shown that they are ecologically well-adapted to the site, are not invasive, and do not have significant negative ecological impacts on other ecosystems. Special attention will be paid to social issues of land acquisition for plantations, especially the protection of local rights of ownership, use or access.

Indicator 10.8.1

The monitoring programme (specified in Criterion 8.1) shall be sufficient to identify potential on-site and off-site ecological impacts related to plantations within the FMU. This is also addressed under the requirements of:

Criterion 6.1 – assessment of environmental impacts

Criterion 6.2 – safeguards for habitats and species

Criterion 6.3 – maintenance of ecological functions and values

Criterion 6.7 – storage and disposal of wastes

Criterion 6.8 – use of biological control agents

Criterion 6.9 – use of exotic species

Indicator 7.2.3 - inclusion of monitoring results in Management Plan

Indicator 7.2.4 - adjustment of Management Plan to social, environmental and economic changes

Criterion 8.1 – frequency & intensity of monitoring programme

Criterion 8.2 – research and data collection

Criterion 8.4 – incorporation of monitoring into Management Plan.

Indicator 10.8.2

The monitoring programme (specified in Indicator 4.4.1) shall be sufficient to identify potential on-site and off-site social impacts related to plantations within the FMU. This is also delivered under the requirements of:

Criterion 4.4 - incorporation of social impacts into Management Plan

Indicator 7.2.3 - inclusion of monitoring results in Management Plan

Indicator 7.2.4 - adjustment of Management Plan to social, environmental and economic changes

Indicator 8.1.3 - monitoring of social impacts

Indicator 8.2.6 - identification of social impacts

Indicator 8.5 - availability of information.

Indicator 10.8.3

No species shall be planted on a large scale until local trials and/or experience have shown that they are ecologically well-adapted to the site, are not invasive, and do not have significant negative ecological impacts on other ecosystems. This is also addressed in the requirements of Indicator 10.4.1 to 10.4.4 and 10.7.5.

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- monitoring programme
- Management Plan

- monitoring programme
- Management Plan
- records of consultation

- Management Plan
- research publications
- site visits
- records of consultation

Indicator 10.8.4

Where land is acquired for plantation establishment, local rights of ownership, use or access shall be demonstrably recognised and protected. This is also addressed in the requirements of

Indicator 2.1.3 – demonstration of use rights by forest owner/manager

Indicator 2.1.4 – documented rights

Criterion 2.2 – established tenure or use rights

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- records of consultation
- folios
- other legal documents

Criterion 10.9 Plantations established in areas converted from natural forests after November 1994 normally shall not qualify for certification. Certification may be allowed in circumstances where sufficient evidence is submitted to the certification body that the manager/owner is not responsible directly or indirectly of such conversion.

Indicator 10.9.1

Plantations established in areas converted from semi-natural forests after November 1994, shall not qualify for certification.

Verifiers (potential sources of information an auditor may find useful in evaluating compliance)

- planting records
- consultation with local stakeholders
- historical aerial photographs
- documentation

Supporting Guidance

Indicator 1.5.1

“unauthorised activities” - would include dumping, littering, timber theft, burning, quad bikes

Indicator 2.2.1

There are few customary rights (established tenure and use rights) in Ireland except public rights of way (easements) or commonages. Public rights of way can be upheld by the Common Law (judge-made law based on precedent) and do not have to be registered, neither do individual rights of way. (source: Dr. Padraic Kenna)

Indicator 2.2.3

There are few customary rights (established tenure and use rights) in Ireland except public rights of way (easements) or commonages. Public rights of way can be upheld by the Common Law (judge-made law based on precedent) and do not have to be registered, neither do individual rights of way. (source: Dr. Padraic Kenna)

Indicator 4.4.1

“social impacts” - include landscape and aesthetic values, cultural & recreational values in terms of quality of life indicators

Indicator 5.3.3

“processed wood” - includes wood processed beyond initial felling, processing; secondary processing

Indicator 5.5.2

“ecosystem services” are the benefits provided by ecosystems. These include provisioning services such as food, water, timber, fibre, and genetic resources; regulating services such as the regulation of climate, floods, disease, and water quality as well as waste treatment; cultural services such as recreation, aesthetic enjoyment, and spiritual fulfilment; and supporting services such as soil formation, pollination, and nutrient cycling. (*Ecosystems and human wellbeing: a framework for assessment*. Millenium Ecosystem Assessment, 2003)

For more detailed information also see Rudolf S. de Groot, Matthew A. Wilson, Roelof M.J. Boumans. *A typology for the classification, description and valuation of ecosystem functions, goods and services*. Ecological Economics 41 (2002) 393–408, available at http://www.uvm.edu/giee/publications/deGroot_et_al.pdf

Indicator 6.1.1

“baseline habitat survey” – is a record and map of the different types of plant communities present on any given piece of land. Habitat survey techniques outlines in A Guide to Habitats in Ireland (Fossitt, 2000) presents a standard scheme for Ireland providing a relatively rapid system to record semi-natural vegetation and other wildlife habitats that are present. Each habitat type and feature is allocated a named habitat type and associated code from the survey system, and is briefly described
see the latest edition Fossitt, J.A. Guide to Habitats in Ireland, Heritage Council and also see the Heritage Council Best Practice Guidelines for Habitat Survey in Ireland (available late 2009)

Indicator 6.1.2

“landscape level” - is the wider landscape context within which the FMU is located and the environmental information relating to this scale.

Indicator 6.2.1

“rare, threatened or endangered species” - are listed in Annex 5 and sources of information on these include NPWS, the National Biodiversity Data Centre, local naturalists clubs, local conservation officers, wildlife rangers, NGOs, etc.

Indicator 6.2.3

“rare, threatened or endangered species” - are listed in Annex 5 and sources of information on these include NPWS, the National Biodiversity Data Centre, local naturalists clubs, local conservation officers, wildlife rangers, NGOs, etc.)

Indicator 6.2.4

“rare, threatened or endangered species” - are listed in Annex 5 and sources of information on these include NPWS, the National Biodiversity Data Centre, local naturalists clubs, local conservation officers, wildlife rangers, NGOs, etc.)

Indicator 6.2.5

“features of particular significance for conservation” - may include other valuable or diverse wildlife communities, rare or vulnerable species, breeding sites, feeding areas and habitats of notable species, water courses, ponds, boggy pools and hummocks, and other wetland habitats, unplanted peatland and turbary, ride lines and open ground, woodland remnants/ margins and hedgerows, old, dead, hollow and specimen trees, buildings and stone walls.

Indicator 6.2.6

“features of particular significance for conservation” - may include other valuable or diverse wildlife communities, rare or vulnerable species, breeding sites, feeding areas and habitats of notable species, water courses, ponds, boggy pools and hummocks, and other wetland habitats, unplanted peatland and turbary, ride lines and open ground, woodland remnants/ margins and hedgerows, old, dead, hollow and specimen trees, buildings and stone walls.

Indicator 6.2.8

A “mature” tree - is a specimen of dimensions typical of a full-grown specimen of its species. Future growth would tend to be extremely slow with little, if any, dimensional increase.)

Indicator 6.2.11

“replacement level” - for any species is dynamic and dependent on its local, regional and national status, but is understood as being the level at which the population of that species is stable and not in quantitative or qualitative decline.

A “nuisance species” – is one that can negatively disrupt ecosystems and environments.

Indicator 6.3.8

“micro-climate” – variation of the climate within a given area, usually influenced by hills, hollows, structures or proximity to bodies of water, how much sunlight, shade, or exposure to the wind there is.

Indicator 6.3.11

“fens” - are peat forming systems that differ from bogs in that they are fed by groundwater or moving surface water. They occur in river valleys, poorly drained basins or hollows, and beside open stretches of water (lake margins or river flood plains). Fossitt, 2000, p.46)

Indicator 6.3.17

See *Developing a forest resource on industrial cutaway peatland. The BOGFOR programme*. Renou-Wilson, F., Keane, M. McNally, G. O'Sullivan, J. & Farrell, E.P. (2008) for best practice for plantations on cut-over bog

Indicator 6.4.1

"ecosystems" – a community of all plants and animals and their physical environment, functioning together as an interdependent unit. (FSC –STD-01-001 Principles and Criteria for Forest Stewardship, glossary)

Indicator 6.6

In the Irish Draft Standard pesticides are understood to include herbicides, insecticides, fungicides, and acaricides.

Indicator 6.8

"biological control agents" - are living organisms used to eliminate or regulate the populations of other living organisms. (FSC –STD-01-001 Principles and Criteria for Forest Stewardship, glossary)

Indicator 6.9.1

"Exotic species" - are introduced species not native to Ireland or endemic to the area in question (FSC –STD-01-001 Principles and Criteria for Forest Stewardship, glossary).
A plant or animal is "endemic" if it is 'native to, and especially restricted to, a certain country or area' (Oxford English Dictionary)

Indicator 6.9.2

"Exotic species" - are introduced species not native to Ireland or endemic to the area in question (FSC –STD-01-001 Principles and Criteria for Forest Stewardship, glossary).
A plant or animal is "endemic" if it is 'native to, and especially restricted to, a certain country or area' (Oxford English Dictionary)

Indicator 7.1.1

"short term" =0-5 years, "medium term" =6-20yrs, "long term" =20+ years)

Indicator 7.1.2

"resource inventory" – is a detailed list of wood and of other specific non-wood supplies that can be drawn on within the FMU

"environmental requirements" – shall include requirements of rare, threatened and endangered species, acid sensitive catchments, and such requirements may apply outside of the FMU

Indicator 8.1.2

"Methodologies" - include frequency and timing of sampling, data collection procedures, sampling intensity, etc.

Indicator 8.1.3

"Methodologies" - include frequency and timing of sampling, data collection procedures, sampling intensity, etc.

Indicator 9.4.2

"annual monitoring reports" - shall include monitoring results, interpretation and recommendations for management changes

Indicator 10.2.1

“Natural forest” - forest areas where many of the principal characteristics and key elements of native ecosystems are present, such as complexity, structure and diversity. FSC International P&C glossary. In the Irish context such forests are normally described as semi-natural woodland.)