# **Draft for Public Comment Australian Standard**

SUBJECT TO ALTERATION - DO NOT USE AS A STANDARD

**BEGINNING DATE** 

FOR COMMENT: 19 March 2012

**CLOSING DATE** 

FOR COMMENT: 18 May 2012

## **Sustainable Forest Management**



# Invitation for Public Comment Draft Australian Standard

The Australian Forestry Standard is currently under review. A Standard Review Committee (the Committee) has been established for this purpose and is responsible for the issue of this draft (DR AS 4708). The Committee comprises representatives of organizations interested in the development and application of the proposed Standard. These organizations are listed inside the back cover.

The Committee is inviting comments from interested parties on the technical content, wording and general arrangement of the draft.

This is the first of two planned public comment periods before the final Standard is accepted and approved for publication.

The preferred method of submission of comment on this document is to complete the Stakeholder Feedback Form that is available at <a href="https://www.forestrystandard.org.au">www.forestrystandard.org.au</a>.

Please place relevant criterion or requirement numbers beside each comment.

Editorial matters (i.e. spelling, punctuation, grammar etc.) will be corrected before final publication.

It is convention for Standards that the international spellings apply, so for example words with optional z or s spellings use the z version.

Please provide supporting reasons and suggested wording for each comment. Where you consider that specific content is too simplistic, too complex or too detailed please provide an alternative.

If the draft is acceptable without change, an acknowledgement to this effect would be appreciated.

Please nominate your stakeholder sector classification so that the Committee consideration of the comments can be directed to the relevant Committee members.

Completed forms are to be submitted to SRC AS 4708 Project Manager at PO Box 7031, YARRALUMLA, ACT 2603. Alternatively forms can be faxed to (03) 9470 3390 or emailed to <a href="mailto:sRC-AS4708@forestrystandard.org.au">SRC-AS4708@forestrystandard.org.au</a>. Your comments should be received by 18 May 2012.

All submissions will be acknowledged. If you don't receive an acknowledgement within 7 days of submission please either resubmit it or contact the Project Manager at <a href="mailto:SRC-AS4708@forestrystandard.org.au">SRC-AS4708@forestrystandard.org.au</a> or by telephone at (03) 9470 3391 or 0428 408 144.

The Committee will consider all comments received by the due date.

Further copies of the draft are available from the Australian Forestry Standard Limited at <a href="https://www.forestrystandard.org.au">www.forestrystandard.org.au</a>.

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## **Draft for Public Comment**

## STANDARDS AUSTRALIA

## Standard Review Committee SRC AS 4708

#### DRAFT

## **Australian Standard**

Sustainable Forest Management

(To be AS 4708-2012)

First published as AS 4708 (Int) - 2003 Second published as AS 4708 - 2007

Comment on the draft is invited from individuals and organizations with an interest in this subject. The procedure for public comment is set out on the inside cover of this document.

This document is a Draft Australian Standard and is liable to alteration in the light of comments received during the review. It is not to be regarded as an Australian Standard until finally issued by Standards Australia.

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#### **PREFACE**

The objective of this Australian Standard is to provide forest managers and owners with environmental, economic, social, and cultural criteria and requirements that support the sustainable management of forests. The Standard was first published as an interim standard in 2003 and a full Standard in 2007. After 5 years of application it is appropriate for the Standard to be reviewed in light of stakeholder expectations, new scientific and technological information, and changes to international standards.

The Standard is intended for voluntary application to any forests in Australia being managed for the production of forest products and services, whether native or planted forests. It can be utilized by forest owners and managers who are seeking independent, third-party certification of their forest management in response to codes of practice or market demands that forest products come from certified forests. It will also support and strengthen the framework of policy and regulation that delivers improved environmental, economic, social, and cultural outcomes from well-managed forests.

Independent, third-party certification against the Standard provides a clear and unambiguous statement that the production of forest products and services in a particular defined forest area was managed in accordance with a set of predetermined and clearly defined environmental, economic, social and cultural performance requirements that support the sustainable management of forests.

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#### STANDARDS AUSTRALIA

# AUSTRALIAN STANDARD Sustainable Forest Management

#### Introduction

#### Sustainable Forest Management

Sustainable forest management is the management of forests according to the principles of sustainable development. Sustainable development is a pattern of resource use that aims to meet human needs while preserving the environment, so that these needs can be met not only in the present, but also for generations to come.

Management of forests should use the precautionary principle for prevention of environmental degradation and the principle of inter-generational equity to maintain the suite of forest values for present and future generations. A key objective of ecologically sustainable forest management is to maintain an extensive and permanent forest estate. The criteria and requirements set out in the Standard aim to ensure that this objective is not compromised.

On the basis of these definitions, and in common with other efforts to define sustainable forest management, there are four principles to sustainable forest management that are embraced by the Standard:

#### Environmental sustainability

This entails maintaining:

- the ecological processes within forest ecosystems;
- the forest soil;
- food chains and energy flows;
- carbon, nutrient and water cycles; and
- the biodiversity of forests.

so as to maintain viable and functional forest ecosystems. The forest ecosystem needs to support healthy organisms, whilst maintaining its productivity, adaptability and capability for self renewal. Forest management needs to understand, and build upon these natural ecological components and processes.

#### Economic sustainability

This entails optimising the economic benefits for income, employment, goods and services from the mixture of forest uses within ecological constraints. It requires that benefits to the group(s) in question exceed the costs incurred, and that some form of equivalent capital is handed down from one generation to the next so that our use of the forest does not preclude or foreclose on future use options by future generations.

#### Social sustainability

This entails maintaining and enhancing the net social benefit derived from the mixture of forest uses while maintaining options for the future. This includes sustaining the relationship between ethics, social norms and development. An activity is socially sustainable if it conforms to ethical values and social norms, or does not exceed a community's tolerance of change.

#### Cultural sustainability

This entails maintaining and enhancing the cultural capital of the community. Cultural capital refers to non-financial social assets, they may be educational or intellectual, which might promote social mobility beyond economic means and which are passed from generation to generation by various means.

#### Forest Certification Principles

The Standard was developed and revised cognisant of the requirement for international recognition, and is based on the principles of:

- being independent and impartial, including a clear separation between development of standards and accreditation of certification bodies;
- being accessible to all interested stakeholders with a balance of influences;
- incorporating performance levels at appropriate scales through an open process involving all interested stakeholders;
- being voluntary and including the broad participation of forest owners;
- accommodating all forest sizes and ownership structures appropriate to scale of enterprise or management;
- being scientifically based and involving the scientific community in its development;
- · being based on the principles of sustainability;
- · combining with an internationally-recognised environmental management system;
- having transparent and understandable process that is accessible to all interested parties;
- being easily understood and leading to the same results when used by different certifiers;
- being regularly assessed, revised and updated in the light of new knowledge as part of a continual improvement process;
- allowing bearable costs of certification and not making forest products uneconomical in comparison to other materials;
- · complying with and where practical exceeding, legal and other requirements; and
- involving competent accreditation bodies and independent, accredited third party certification bodies.

#### Use of the Standard

The Standard recognises that native forests and plantations are managed for a variety of objectives. It sets out specific forest management performance requirements for operations and activities on the defined forest area and to the point where ownership of forest products is transferred. It establishes a systematic approach to management and requirements for public participation. The Standard does not include any criteria related to the fitness of the wood products for any purpose. As such, it is fundamentally a clear and unambiguous statement that the forest product was grown and harvested at a location that was managed in accordance with a set of predetermined and clearly defined environmental, economic, social and cultural performance requirements that support the sustainable management of forests.

The Standard is intended for voluntary application to any forests in Australia regardless of size or ownership. It is intended to be compatible with relevant international and national policy instruments, and has been developed with national and international audiences in mind, as well as for implementation by Australian forest managers. The Standard also recognises the importance of meeting both national and international sustainable wood production and marketing requirements, the resource management needs of the industry, as well as promoting voluntary adoption by producers.

The Standard is supported by guidance notes that identify appropriate approaches to implementation and differentiate between different scales of ownership (size, groups and management regime) and between native and planted forests.

Forest owners or managers can form group forest certification schemes that can be certified to this Standard. There is a guidance document supporting this application of the Standard.

The Standard relates to the management operations and activities within the forest and in relation to product chain of custody whilst the forest products are under the control and ownership of the forest owner/manager. Also, some off-site effects of forest management including impacts on neighbours and adjacent environments are addressed under the Standard.

The Standard is not intended to replace or override the regulatory framework within which Australian forest managers operate. Compliance with legislation is a minimum requirement, however, the Standard will set a suite of requirements that supports the achievement of sustainable forest management and which may involve going beyond a legal minimum in order to gain benefits from certification.

The Standard does not set site-specific requirements for particular forest types, communities or individual operations as they vary with bioregion and legal jurisdiction. These are addressed under external legal requirements such as Commonwealth, State and Territory planning, management and operational control processes, including regional and local planning approvals, regulations, licences, codes of practice, prescriptions and operational guidelines.

There are requirements for monitoring and evaluating the outcomes of management in relation to the forest management performance and public participation requirements, and review and continual improvement of the management system.

Certification to the Standard is only available on the basis of an audit by an independent third party auditor from an accredited Certification Body. Such an audit

is entirely voluntary. No forest owner or manager is required by law or regulation to undergo such an audit.

#### Process of Development and Revision

This draft revised standard has been prepared for public comment by the Standard Review Committee formed for this purpose (SRC AS 4708). The Committee is made up of representatives of a broad range of stakeholders in forestry and the Standard. They will review comments received during the public comment phases and will prepare a final consensus standard that will be submitted for approval.

The requirements of the Standard are derived from certain elements of the International Organization for Standardisation (ISO) environmental management system (EMS) Standard AS:NZS ISO 14001:2004, the Montreal Process criteria and indicators for temperate and boreal forests and the principles and criteria of the Forest Stewardship Council. The Standard has mutual recognition by the Programme for the Endorsement of Forest Certification Schemes. These processes provide a basis for the development of the Standard that is compatible with other national and international schemes and standards that aim to achieve sustainable forest management.

#### Structure of the Standard

The Australian Standard consists of:

- An Introduction that describes the rationale for a forest standard; the process for its development including its structure, content, and use;
- The Standard that describes the normative elements and provides definitions. The Standard is made up of criteria that specify the principles required for sustainable forest management and requirements that are normative. Each criterion and requirement is named with a heading and number. In this draft version for public comment a section describing the changes to each requirement is provided in the margin.

There are two informative supporting guidelines that will accompany the final standard. The existing three supplements will become one guideline for the application of the Standard. There will also be a guideline on the management of group forest certification schemes seeking Australian Forestry Standard certification. These two guidelines will be subject to public comment in the second period of public consultation.

#### The Standard

#### Scope

The Australian Standard specifies environmental, economic, social and cultural criteria and requirements for the production of forest products and services that support continual improvement towards sustainable forest management.

The Standard can be applied to any defined forest area irrespective of scale or type of ownership, or whether native or planted forest. The requirements for each criterion are the normative elements to which a forest manager seeking independent, third-party certification, must comply. To be certified, forest management shall meet all these requirements. The requirements are grouped under a series of criteria which are generally stated in a positive form.

The informative guidance on the use and auditing of the requirements of Standard to accommodate different forestry enterprises, large and small, native forests and plantations is provided as separate Guidelines. This guidance does not create additional normative elements. Rather, they are intended to add clarity through additional information and practical examples where appropriate.

#### Normative references

There are no normative references.

#### **Definitions**

For the purpose of the Standard, the definitions below apply.

Aspect An element of an organization's activities that can interact with environmental, economic, social or cultural factors and that can affect the outcomes of forest management for the production of forest products and services. They address environmental, economic, social, and cultural aspects. A significant aspect is one that has, or can have a significant impact.

Process of determining the status or condition of a forest value by a person with technical expertise before or after a forest management activity, usually to determine its impact and effectiveness.

A systematic and documented verification process of objectively obtaining and evaluating evidence to determine whether an organization's management system conforms with forest management performance criteria and requirements of the Standard and which takes account of the likelihood of failure to detect breaches, and for communication of the results of this process to management.

Biodiversity is the diversity of plants, animals and other living organisms in all their forms and levels of organization, and includes the diversity of genes (or units of heredity), species and ecosystems. It also includes the composition, structure and function of ecosystems and the evolutionary and functional processes that link them.

Assessment

Audit

**Biodiversity** 

Bioregion Bioregions are large, geographically distinct areas of land with

common characteristics such as geology, landform patterns, climate, ecological features and plant and animal communities. The bioregions are described in the latest version of the Interim Biogeographic

Regionalisation for Australia (IBRA).

Carbon sink Components of the land and biomass where carbon is held in non-

gaseous form for substantial periods of time.

Code of practice A set of objectives, outcomes, goals or operating procedures designed

to control, regulate or govern field activities.

Continual improvement Process of enhancing the management system to achieve improvements

in overall performance in line with the organization's forest management policy through monitoring, evaluation and review.

Damage agents Damage agents include endemic and exotic weeds, insect and

vertebrate pests (including feral animals) and pathogens.

Defined forest area An area of forest (including land and water) to which the requirements

of this Standard are applied, and to which the forest manager can demonstrate management control and legal rights, which allows them to

achieve the requirements of this Standard.

Disturbance regime A pattern of disturbance events, such as fire or flooding, followed by a

period of recovery from the disturbance, e.g. regrowth of a forest after a

fire.

Ecological integrity The ability of the forest ecosystem to support and maintain key

ecological processes and a community of organisms with a species composition, diversity and functional organization as comparable as far

as possible with that of natural habitats within a region.

Ecosystem The aggregate of all living organisms and their interactions with each

other and the non-living parts of the environment for a defined place or

kind of habitat.

Environment Surroundings in which an organization operates, including air, water,

land, natural resources, flora, fauna, humans and their interaction.

Erosion Detachment and movement of soil particles or aggregates by processes

such as rainfall, runoff, through-flow, wind and frost.

Establishment The creation of a new forest or plantation arising from the treatment,

seeding or the planting of a site with trees.

Extraction track A track along which logs are pulled from the felling point to a nearby

landing (also known as a snig track).

Forest A land area, incorporating all living and non-living components, that is

dominated by trees having usually a single stem and a mature or potentially mature stand height exceeding two metres and crown cover or potential crown cover of overstorey strata about equal to or greater than 20 per cent. This definition includes Australia's diverse native forests and plantations, regardless of age. It is also sufficiently broad to encompass areas of trees that are sometimes described as woodlands.

Forest conversion Removing native vegetation, or a significant portion of the

characteristic suite of species for the vegetation community, to establish

a plantation or replace with non-forest cover.

Forest management

policy

Statement of intentions and principles in relation to overall forest management which provides a framework for action and setting of objectives and targets.

Forest manager

The person or entity with legal control of forest operations within the defined forest area.

Forest operations

A process, method or series of actions, especially of a practical or mechanical nature within a forest related to its management or use for the production of forest products, including but not limited to road construction and/or maintenance, timber harvesting and extraction, stream crossing constructions, non-commercial thinning, slash disposal and/or prescribed burning, etc.

Forest products

Genetically-modified trees

A term that embraces all wood and non-wood products.

Trees in which the genetic material has been altered in a way that does not occur naturally by mating and/or natural recombination, taking into account applicable legislation providing a specific definition of genetically modified organisms.

The following techniques are considered as genetic modification resulting in genetically modified trees (EU Directive 2001/18/EC):

- Recombinant nucleic acid techniques involving the formation of new combinations of genetic material by the insertion of nucleic acid molecules produced by whatever means outside an organism, into any virus, bacterial plasmid or other vector system and their incorporation into a host organism in which they do not naturally occur, but in which they are capable of continued propagation;
- Techniques involving the direct introduction into an organism of heritable material prepared outside the organism including micro-injection, macro-injection, and micro-encapsulation;
- Cell fusion (including protoplast fusion) or hybridization techniques where live cells with new combinations of heritable genetic material are formed through the fusion of two or more cells by means of methods that do not occur naturally.

Greenhouse gases

Gases that affect the temperature of the Earth's surface and climate. They include water vapour, ozone, chlorofluorocarbons, carbon dioxide, methane and nitrous oxide.

Group forest certification scheme

A scheme or arrangement managed by a Group Manager on behalf of a Group Entity allowing for the certification of Group Members under one Forest Management Certificate.

Impact Any change to environmental, economic, social or cultural factors,

whether adverse or beneficial, wholly or partially resulting from an organization's activities, products or services including environmental,

economic, social, and cultural impacts.

Indigenous people People of Aboriginal or Torres Strait Islander descent.

Introduced species A plant or animal not native to the ecosystem, region or country.

Inventory Inventory is the systematic collection of data and forest information for

assessment or analysis.

Known and potential

habitat

Known and potential habitat means an area or areas occupied, or periodically or occasionally occupied, by a species, population or ecological community and includes any biotic or abiotic component, and into which organisms of that kind have the potential to be

reintroduced.

Local Communities Affected or interested individuals or groups neighbouring or local to the

forest management unit.

Monitoring A systematic, planned series of measurements or observations taken at

regular intervals of time to provide the basis for analysing and reporting

trends of change.

Montreal Process The informal agreement by the Montreal Process Group of countries

(currently 12) to work towards the implementation of a comprehensive set of criteria and indicators for the conservation and sustainable

management of forests.

Native vegetation Any locally indigenous vegetation community containing the suite of

species and habitats normally associated with that vegetation type.

Non-wood products Forest products other than wood e.g. honey, water, wildflowers.

Objective Overall goal arising from forest management policy that an

organization sets itself to achieve and which is quantified where

practical.

Old-growth forest Ecologically mature forest in which the effects of disturbances are now

negligible.

Performance/Outcomes Measurable results of the management system related to an

organization's environmental, economic, social and cultural aspects based on the forest management performance criteria and requirements

of this Standard.

Pesticides Chemicals (including herbicides, insecticides and fungicides) used to

control biological damage agents.

Plantation Stands of trees of either native or exotic species, created by the regular

placement of cuttings, seedlings or seed.

Precautionary principle

Where there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.

In the application of the precautionary principle, public and private decisions should be guided by:

- i. careful evaluation to avoid, wherever practicable, serious or irreversible damage to the environment; and
- ii. an assessment of the risk-weighted consequences of various options.

Productive capacity

Capacity to produce forest products and services. Includes non-wood products and for plantations, alternative crop types. It can be applied to non-market benefits such as ecosystem services.

Provenance

A term identifying the original geographic source of seed, pollen, or propagules.

Regeneration

New trees arising naturally or with human assistance after harvesting, fire or other causes have removed all or some of the overstorey.

Region

An area considered as a unit for geographical, functional, social or cultural reasons; an administrative division of country.

Riparian zone

An area, usually of linear configuration, that is geographically and ecologically associated with a river, stream or wetland.

Rotation

The planned number of years between regeneration or planting and the final harvesting of a stand of trees.

Significant Biodiversity Values

Significant Biodiversity Values include:

- known or likely occurrences of threatened, vulnerable, rare, or endangered species, populations and their known and potential habitat; and/or as listed on current schedules of relevant Commonwealth, State or Territory legislation;
- threatened, vulnerable, rare and endangered ecological communities or ecosystems and/or as listed on current schedules of relevant Commonwealth, State or Territory legislation;
- regionally or nationally significant concentrations of biodiversity;
- disjunct or outlier populations;
- refugia and centres of endemism;
- old-growth forest which is rare or depleted within the forest type (generally less than 10% of the extant distribution);
- ecosystems that are currently reserved at less than 15% of their pre-European distribution;
- forest types or ecosystems and old-growth forest which are rare, depleted or under-represented in the regional conservation reserve system;

Significant Biodiversity Values (continued)

- habitat of migratory species listed under the Commonwealth's Environment Protection and Biodiversity Conservation Act 1999:
- Ramsar wetlands; or
- natural heritage places with regionally or nationally significant concentrations of biodiversity.

Silviculture

The science and practice of controlling the establishment, growth, composition, health and quality of forests and woodlands to meet the diverse needs and values of landowners and society.

Silvicultural system

A planned program of treatments throughout the life of a stand to achieve stand structural objectives, for the production of forest products or other values based on integrated resource management goals. A silvicultural system includes harvesting, regeneration and stand-tending methods or phases. It covers all activities for the entire length of a rotation or cutting cycle.

Site

The area in which a plant or stand grows, considered in terms of its environment, particularly as this determines the type and quality of the vegetation the area can carry.

Social benefit

The non-monetary and rarely calculable benefits to society arising from forms of unpriced economic activity.

Stakeholders

Groups and individuals who have environmental, economic, social, cultural or indigenous people's interests in the management of the defined forest area.

Stand

A contiguous group of trees sufficiently uniform in age-class distribution, composition, and structure, and growing on a site of sufficiently uniform quality, to be a distinguishable unit.

Seral stages

The stages of ecological succession of a plant community, for example, from young stage to old stage; the characteristic sequence of biotic communities that successively occupy and replace each other, altering in the process some components of the physical environment over time.

Thinning

A silvicultural treatment made to reduce the stand density of trees to generate a financial return for the forest owner, to improve growth, enhance forest health, and or recover potential mortality.

Threatened species and communities

A species or community listed on current schedules of relevant Commonwealth, State or Territory legislation, including schedules of rare, endangered and vulnerable species, populations and ecological communities.

Threatening process

A process that threatens, or may threaten, the survival, abundance or evolutionary development of a native species or ecological community.

Traditional uses

Legal and authorised uses with a long habitual or customary history.

#### Forest management criteria and requirements

The Standard defines sustainable forest management according to a set of nine criteria. Criterion 1 addresses the management system itself, Criterion 2 addresses public participation and governance, and the remaining criteria address management performance. For each criterion, the Standard establishes a number of requirements that must be met in order to achieve certification.

This approach enables and encourages improvement to forest management practices and outcomes based on learning and experience. It recognises that forests will change over time due to human activities and natural processes, and requires management to be adapted as our understanding of the relationship between management actions and forest values improves. While the Standard separates the key forest values to set particular performance requirements for them, it is recognised that they are interconnected and cannot be considered in isolation.

#### Criterion 1 - Systematic Management

Forest management shall be undertaken in a systematic manner appropriate to the nature and scale of the enterprise and provide for continual improvement.

1.1 POLICY	The forest manager shall define a forest management policy that includes a commitment to:	Removed the informative note.
	a. a systematic approach to forest management appropriate to the nature, scale and impacts of the forest and forest activities;	D. Jakoba
	b. continual improvement in management performance and forest management outcomes;	Removed the list of values covered by requirement b.
	c. compliance with relevant legislation and other requirements to which the forest manager subscribes;	
	d. provision of resources appropriate to the nature, scale and impacts of the forest and forest activities;	
	e. a process of regular review of forest management; and	Add benefits to local
	f. consideration of the views of stakeholders and the	communities.
	environmental, economic, social, and cultural benefits to local communities.	
1.2 PLANNING	The forest manager shall develop a forest management plan or equivalent instruments that:	Removed the informative note.
	a. identifies applicable legal requirements and other external requirements to which the forest manager subscribes;	
	b. identifies and assesses the significance of specific aspects and impacts of activities relevant to the full range of forest management performance requirements of this Standard;	
	c. sets management objectives and targets and establishes a monitoring process for identified significant impacts relevant to the forest management performance requirements of this Standard;	
	d. respects stakeholder input provided under requirement 2.2;	

publically available; and  f. describes and records the entire defined forest area to which it applies.  The forest management plan or equivalent instruments should provide:  a. scope and objectives of management;  b. description of the forest estate including current condition and inventory results and forecasts;  c. forest values to be managed, including those important for the protection of social and cultural benefits;  d. rationale for the annual harvesting rates including commercial non-wood products;  e. description and rationale for silvicultural regimes;  f. for review on a periodic basis; and  g. reference to relevant operating conditions and controls for specified activities.  The forest manager shall implement the management system to meet the forest management performance and legal requirements that is based on a series of inventory, plan, implement, monitor and evaluate processes.  The forest manager shall ensure that: a. evidence of a legal right to forest management is maintained; b. operational plans, procedures, controls and guidelines are in place to achieve the forest management; d. staff and contractors have an adequate skills base and competencies to achieve the forest management objectives and targets; e. procedures for communication and documentation are established and maintained; and f. contingency/emergency plans are in place and periodically tested to respond to and manage accidents and emergency situations including the prevention and evaluate forest management environmental impacts.  The forest manager shall monitor and evaluate forest management activities and their outcomes to ensure that forest management activities and their outcomes to ensure that forest management activities and their outcomes to ensure that forest management activities and their outcomes to ensure that forest management activities and their outcomes to ensure that forest management activities and their outcomes to ensure that forest management activities and their outcomes to ensure that forest management ac			
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management.		activities and their outcomes to ensure that forest management performance requirements are met and that identified deficiencies are corrected to support continual improvement in forest	

	<ul> <li>The forest manager shall ensure procedures are in place for:</li> <li>a. checking management plans and practices for compliance with legislation, codes of practice, regional and local prescriptions, guidelines and other relevant controls;</li> <li>b. monitoring and auditing of forest operations for conformance with planned arrangements and to ensure that the forest management performance requirements are met;</li> <li>c. routine monitoring and evaluation of the outcomes of forest management using scientifically-rigorous and sufficiently-powerful approaches that allow timely remedial actions to be applied when performance requirements are not met;</li> <li>d. periodically auditing the forest management system to determine whether or not it conforms to the planned arrangements and has been properly implemented and maintained; and</li> <li>e. monitoring and documenting any changes to the defined forest area.</li> </ul>	Added requirement to monitor and document changes to the defined forest area (e).
1.5 REVIEW	The forest manager shall periodically review and where necessary modify the forest management system and its procedures to ensure its continuing suitability, adequacy and effectiveness and to ensure continual improvement in management performance and forest management outcomes are achieved. The review shall cover:  a. the results of auditing and monitoring of forest operations and activities, and other relevant information;  b. monitoring and feedback mechanisms, including the adequacy of monitoring activities; and  c. policies, plans, objectives and targets, and changes to other elements of the management system to meet changing circumstances, new information and the commitment to continual improvement.  The review shall document any improvements to management performance and forest management outcomes.	Removed the informative note.
1.6 RESEARCH	Forest management shall be based amongst other things on the results of current and ongoing scientific research. Forest managers shall contribute to research activities and data collection needed for sustainable forest management or support relevant research activities carried out by other organizations, as appropriate.	New requirement.

## Criterion 2 – Stakeholder Engagement

Forest management shall include stakeholder engagement and demonstrate that this is considered in the development of both forest management policy and forest management plans.

2.1 IDENTIFY STAKEHOLDERS	The forest manager shall establish and maintain a register of stakeholders that are directly affected by or have an interest in the management of the defined forest area.	Removed the informative note.  Shortened
2.2 STAKEHOLDER ENGAGEMENT PLAN	The forest manager shall establish and maintain a stakeholder engagement plan which ensures ongoing stakeholder feedback is considered in the development of forest management plans or equivalent instruments.	New requirement.
	This plan shall: a. include an evaluation of environmental, economic, social, and cultural impacts associated with forest management activities; b. identify the ways in which stakeholder feedback is sought and considered; and c. be in accordance with the scale and intensity of operations.	
2.3 STAKEHOLDER PARTICIPATION	The forest manager shall facilitate and encourage meaningful participation of stakeholders in actioning the stakeholder engagement plan.  This shall include:	Removed the informative note.  Focused the requirement.
	a. providing culturally appropriate opportunities for stakeholders to make their views known on important issues related to management of the defined forest area and to influence decision-making in the forest management planning process; and	теципешен.
	b. explaining how decisions were made, including demonstrating how stakeholders' views were considered and where relevant incorporated in the plan.	
	The nature of the stakeholder participation shall be appropriate to the type of forest, the scale of ownership and nature of planned operations.	
2.4 RELATIONSHIP	The forest manager shall foster positive relationships with local communities including:	Removed the informative note.
WITH LOCAL COMMUNITIES	<ul> <li>a. consideration of the environmental, economic, social, and cultural impacts and benefits of forest operations on local communities;</li> </ul>	Changed from neighbours to local community.
	b. notifying local communities that may be directly affected and appropriate responsible authorities before commencing forest operations and;	Made issue resolution a separate
	c. taking appropriate actions to minimize any adverse impacts.	requirement.

2.5 RESOLUTION OF ISSUES & CONCERNS	The forest manager shall maintain a record of significant stakeholder communication including a register of all issues and concerns and all correspondence relating to the exploration and resolution of these.  The forest manager shall employ appropriate mechanisms to resolve disputes and grievances.	New separate requirement.	
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### Criterion 3 – Maintain and or Enhance Biodiversity

The forest manager shall develop effective strategies to maintain, and/or enhance biodiversity according to their requirements at ecosystem, species and genetic levels, within their defined forest area, and where appropriate, contribute to biodiversity at the landscape level.

3.1 IDENTIFY BIODIVERSITY	The forest manager shall actively identify biodiversity including structural elements.	Removed the informative note. Entirely new words.
3.2 ASSESS SIGNIFICANCE OF BIODIVERSITY	The forest manager shall assess the biodiversity to identify the Significant Biodiversity Values. The assessment of the significance of biodiversity shall be based on existing knowledge and relevant forest planning instruments and shall be undertaken in a local, bioregional (IBRA) or State or Territory context.	New requirement.
3.3 MAINTAIN OR ENHANCE SIGNIFICANT BIODIVERSITY	The forest manager shall implement effective strategies and practices to support the maintenance, and/or enhancement of Significant Biodiversity Values.  Planning and implementation of all forest operations shall be consistent with those actions specified in relevant recovery, action or threat abatement plans and prescriptions, or equivalent instruments.  Where management practices are being developed for new identifications and listings of threatened species and ecological communities, the forest manager shall minimize adverse impacts by ensuring forest practices follow recognized interim guidelines and takes account of known information and relevant specialist advice.  Where Significant Biodiversity Values have been diminished or degraded through the actions of the current forest manager, the forest manager shall develop and implement a plan to enhance the capacity of the forest to support Significant Biological Values.	Add enhancement as an optional requirement.

3.4 MONITOR BIODIVERSITY	The forest manager shall support monitoring of the Significant Biodiversity Values to determine if values are being maintained and/or enhanced within the defined forest area (commensurate with its scale and ownership) and to underpin continual improvement. This monitoring shall be undertaken using field measurements repeated at periodic intervals over time. Monitoring must be undertaken in a scientifically rigorous way, and the results made available publically commensurate with the scale and ownership of the forest.	New requirement.
3.5 REVIEW BIODIVERSITY	The forest manager shall periodically review the biodiversity within their defined forest area and reassess its significance.	New requirement.
3.6 SPATIAL CONFIGUR- ATION OF VALUES	Forest managers commercially managing native forests shall progressively establish and maintain a spatial configuration of forest cover, stand structural elements and growth stages that is intended to support the maintenance and/or enhancement of biodiversity values.  The nature of the planned actions shall be appropriate to:  a. the type and condition of forest and the scale of ownership; and b. identified biodiversity priorities.	Made relevant to native forest only.
3.7 REGENERATION	The forest manager shall regenerate native forest with species and provenances native to the area, or from an equivalent locality, as far as reasonably practicable, to maintain local gene pools and species mixes.	Removed the informative note.
3.8 INTRODUCED GENETICS	Forest managers managing plantations shall evaluate the impact of introduced species, provenances or populations, and where possible constrain their spread, incidence and growth to inhibit their reproduction and to protect the ecological integrity of adjacent native vegetation.  Genetically modified trees shall not be used.  Forest managers managing plantations shall develop and implement strategies to minimize the risk and consequences of genetic pollution from pollen flow between plantation and native forest species. The strategy will involve identification of the conservation status of any adjacent forest ecosystem or gene pool, the probability that pollen-mediated gene flow will occur, and the impact that such gene flow is likely to have on any adjacent population.  Forest managers shall contain the escape of non-endemic	Formerly requirement 4.3.6.  Added requirement to manage introduced genes.  Prohibit GM trees.  New wording on genetic pollution.
	plantation species into areas outside the defined forest area.	New requirement.

3.9 FOREST CONVERSION	The forest manager shall not convert native vegetation to plantation forest cover or non-forest cover except in the limited circumstances outlined below:	Formerly requirement 4.3.2.
	a. infrastructure development either required by legislation or regulation, or ancillary to the approved forest management plan or equivalent instrument under requirement 1.2, or	Increased restriction on conversion for
	b. small scale clearing up to 5 per cent, to a maximum of 5 ha, of a single forest operation for purposes such as the establishment of practical operational units, re-alignment of boundaries at subsequent rotations and incorporation of new areas within the defined forest area with appropriate offsets, and	infrastructure and estate rationalization.
	c. for large and medium forest growers, the annual conversion is less than one percent of the annual harvest area, or	
	d. the defined forest area complies with the requirements listed in 3.10.	
	The forest manager shall commit to and demonstrate an offset process to effectively balance the environmental outcomes of the conversion for relevant environmental values.	New requirement.
	In any of these circumstances, the forest manager shall ensure that forest conversion occurs only where it does not involve occurrences of Significant Biodiversity Values.	New requirement.
3.10 FOREST DEVELOPMENT	The Standard Review Committee confirmed the view expressed in AS 4708-2007 that native vegetation conversion to plantation is not considered best practice and should cease.	New requirement recognizing the particular requirements of
	The Committee recognizes the importance of development opportunities for Indigenous people and the role that plantation development could play. Subject to the development of formal guidance consistent with the general principles of requirements 3.9 and 8.1, plantation development on native vegetation land may be permissible, within the context of such guidance.	Indigenous people for development in forest rich locations.

## Criterion 4 – Forest Productive Capacity

## Forest management shall maintain the productive capacity of forests and land.

4.1 IDENTIFY PRODUCTIVE USES	The forest manager shall identify existing and potential productive uses of the defined forest area to support the maintenance of the land's long term productive capacity.	Removed the informative note. Simplified the requirement.
4.2 PLAN OPERATIONS	The forest manager shall plan forest operations to ensure the productive capacity of the land, relating to productive uses identified at requirement 4.1, is not compromised.  Forest managers managing plantations shall also ensure that planning considers the selection of suitable species for plantation establishment appropriate to each site.	Removed planning list of requirements to the guidance notes.
4.3 SILVICULTURE	The forest manager shall use silvicultural systems that have been demonstrated to be appropriate for the forest type, the specific stand and site conditions, forest management objectives and market/product requirements.	Removed the informative note.
4.4 REGENERATION ESTABLISH- MENT	The forest manager shall ensure that regeneration of native forests and establishment of plantations is effective and timely.  Species composition and the density, health and productive potential of the regeneration of native forests and the stocking rate of plantations shall be assessed and remedial action taken where necessary to ensure effective regeneration establishment and growth.	Removed the informative note.  Added health and growth requirements.
4.5 DAMAGE TO GROWING STOCK	The forest manager shall ensure damage to forest growing stock during forest operations is minimized.	Simplified to requirement.
4.6 UNPLANNED FIRE	The forest manager shall implement measures to manage the extent and impact of unplanned fires.	
4.7 NON-WOOD PRODUCTS	The exploitation of non-wood products, including hunting, and fishing, shall be regulated, monitored and controlled where it is the responsibility of the forest manager and included in forest management.	New requirement.

## Criterion 5 – Forest Ecosystem Health

## Forest management shall maintain forest ecosystem health and vitality.

5.1 IDENTIFY DAMAGE AGENTS	The forest manager shall identify and assess any potential damage agents that could impact forest ecosystem health and vitality.	Removed the informative note and simplified the requirement.
5.2 MAINTAIN HEALTH	The forest manager shall plan, prioritize and implement practices to support the maintenance of forest ecosystem health and vitality and ensure that damage stays within tolerable levels and degradation is minimized. Management shall include procedures for forest health surveillance and monitoring, control or eradication of damage agents.	
5.3 PESTS	Forest managers shall evaluate the impact of introduced weed species, pest animals and introduced species, and, where possible, constrain their spread to protect the ecological integrity of adjacent native vegetation and integrity of adjacent land uses or where required by State or Territory weed or pest legislation.	New requirement.
5.4 FIRE AND DISTURBANCE REGIMES	Forest managers managing native forests shall use fire and other disturbance regimes to maintain and or enhance forest ecosystem health and biodiversity where appropriate to the forest type and scale of the defined forest area.  Forest managers shall periodically review the contribution of the disturbance regime to the maintenance of biodiversity, forest health and vitality.  Forest managers shall use the results of the review to adjust the way the disturbance regime is used in the future in order to increase its effectiveness.	
5.5 REHABILITATE DEGRADED FOREST	The forest manager shall identify the areas that have been degraded and facilitate the rehabilitation of degraded forests.	Rehabilitate all degraded forests.

5.6 CHEMICAL USE	The forest manager shall:  a. reduce reliance on chemicals (including pesticides and fertilizers) with potential for environmental harm;	Removed the informative note.
	<ul> <li>b. favour alternative cost-effective methods (including safe biological agents) and more benign chemicals that minimize adverse actual and potential impacts on the environment;</li> <li>c. prohibit the use of World Health Organization Type 1A and 1B pesticides and other highly toxic pesticides unless legally approved for use in Australia and no other cost-effective</li> </ul>	New requirement.
	viable alternative is available; d. prohibit the use of pesticides, such as chlorinated hydrocarbons whose derivatives remain biologically active and accumulate in the food chain beyond their intended use, and any banned by international agreement as defined in the Stockholm Convention on Persistent Organic Pollutants 2001; and	New requirement.  New requirement.
	e. apply fertilizers in a controlled manner and with due consideration for the environment.	
5.7 FOREST VITALITY	The forest manager shall ensure that:  a. forest management practices wherever, and as far as economically feasible, make best use of natural structures and processes, adequate genetic, species and structural diversity, and use preventative biological measures to maintain and enhance the health and vitality of forests; and	New PEFC requirement.
	b. adequate genetic, species and structural diversity is encouraged and or maintained to enhance the stability, vitality and resistance capacity of the forests to adverse environmental factors and strengthen natural regulation mechanisms.	

# **Criterion 6 – Protect Soil and Water Resources**Forest management shall protect soil and water resources.

6.1 IDENTIFY SOIL AND WATER VALUES	The forest manager shall identify and assess the soil and water values that can be adversely affected by forest operations.	Removed the informative note. Simplified the requirement.
6.2 WATER QUALITY	The forest manager shall manage forest operations to minimize adverse changes to water quality (physical, chemical or biological) with the objective of:  a. minimizing transport of soil into waterways;  b. maintaining riparian zones and protective buffer strips; and  c. designing, constructing and maintaining temporary and permanent roads and roadway crossings of waterways to recognised standards intended to minimize degradation of water quality.	Removed the informative note.  Minimize all soil transport.

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6.3 WATER QUANTITY	The forest manager shall manage forest operations to ensure hydrological flows are in accordance with regulated catchment goals.  The forest manager shall liaise with the relevant catchment management authorities and minimize adverse environmental	Requirement now applies to all catchments.
	impacts of changes in hydrological flows by ensuring that:	
	a. both long term and short term disturbances to hydrological flows relative to the existing situation are taken into account; and	
	b. the environmental impacts of both increased and reduced hydrological flows are taken into account.	
6.4 SOIL PROPERTIES	The forest manager shall manage forest operations to protect and maintain soil physical, chemical and biological properties and improve those properties where appropriate and practicable.	Changed reasonably practicable to practicable.
	The forest manager shall during harvesting activities:	r-m-m-m-
	a. minimize the extent of land within forest harvesting areas occupied by zones of major soil disturbance;	Separated soil protection
	b. ensure that rutting does not exceed that specified in relevant codes and equivalent instruments or operational guidelines;	requirements for harvesting and establishment.
	c. promptly rehabilitate extraction tracks, temporary roads and product storage areas with appropriate techniques including revegetation and drainage; and	
	d. minimize any nutrient loss.	
	The forest manager shall during establishment activities use techniques that maintain soil properties in the long term.	New requirement.
	The forest manager shall manage forest operations to prevent or	
6.5 POLLUTION	constrain water pollution and soil contamination, and to ensure that:	Changed to use consistent terminology.
	a. chemicals from planned applications are not transported into waterways; and	
	b. disposal of waste fuels, lubricants and chemicals is carried out in the prescribed manner.	

#### Criterion 7 - Forest Carbon

# Forest management shall maintain and or enhance forests' contribution to the carbon cycle

7.1 CARBON SINK	The forest manager shall acknowledge the capacity of the forests in the defined forest area to act as a net carbon sink.	Removed the informative note.	
7.2 GREENHOUSE GASES	The forest manager shall demonstrate a commitment to minimizing greenhouse gas emissions.	Separated one requirement into two.	

#### Criterion 8 - Cultural Values

Forest management shall protect and maintain, for Indigenous and non Indigenous people, their natural, cultural, social, recreational, religious and spiritual heritage values.

8.1 INDIGENOUS PEOPLES'	The forest manager shall recognise the rights, responsibilities and values of Australia's Indigenous people based on their prior ownership of the forests.	Removed the informative note.
VALUES	<ul> <li>On areas where these rights remain, this shall include:</li> <li>a. providing for significant Indigenous people's input into decision making;</li> <li>b. applying Indigenous people's knowledge of sustainable development and management of forests to the management of the defined forest area;</li> <li>c. supporting education and promotion to the wider Australian community of Indigenous people's rights and interests in forests as an important part of Australia's national interest;</li> <li>d. supporting Indigenous people's economic aspirations in sharing benefits from the management of forests and associated environments; and</li> <li>e. recognizing Indigenous people's cultural and traditional customs and promote their eco-cultural sustainability.</li> </ul>	Separate cases where native title rights have been extinguished.
8.2 HERITAGE VALUES	The forest manager shall protect important natural heritage and cultural, religious, spiritual and social heritage values.  Protection of Indigenous people's heritage values shall be undertaken in consultation with relevant Indigenous people to avoid damage to important values during forest operations.  Forest managers shall safeguard non-Indigenous people's heritage values through identification of known values.  The assessment of the importance of non-Indigenous people's heritage values shall be based on relevant studies and forest planning instruments and shall be undertaken in a regional context.	Removed the informative note.

	The identified important non-Indigenous people's heritage values shall be considered in the preparation of forest management plans or equivalent instruments and appropriate actions implemented in consultation with the appropriate bodies.	
8.3 TRADITIONAL USES	The forest manager shall allow exercise of existing traditional legal uses of the forests to continue.  Where such uses threaten the condition of the forest or the achievement of the forest management performance criteria, the forest manager shall pursue negotiated outcomes with users.	Removed the informative note.

### Criterion 9 – Social and Economic Benefits

# Forest management shall maintain and enhance long-term social and economic benefits.

9.1 REGIONAL DEVELOPMENT	<ul> <li>The forest manager shall:</li> <li>a. identify opportunities that allow the forests to play an environmental, economic, social, and cultural role in rural and regional development; and</li> <li>b. implement appropriate actions to support regional industry and regional communities.</li> </ul>	Removed the informative note.  Separated the identification from implementation requirements.
9.2 OPTIMAL USE	The forest manager shall pursue the efficient and optimal use of harvested forest products to encourage best use of the defined forest area having due regard to the environmental, economic, social and cultural requirements of the Standard.  The recovery and value adding of otherwise wasted forest products shall be encouraged wherever possible.	
9.3 SALVAGE OPERATIONS	The forest manager shall exclude all formal and informal reserve areas from salvage harvesting except where required for safety, fire management, rehabilitation or other reasons and subject to additional stringent conditions.  The forest manager shall ensure that the planning and implementation of salvage harvesting shall maintain Significant Biodiversity Values.  The forest manager shall, where opportunities exist, retain biological legacies and stand structural elements on burned areas including variations in the intensity of salvage logging, retaining a range of growth stages to maintain biodiversity values within the fire-affected area, and minimizing the levels of physical disturbance on regenerating areas.	New requirement.

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	The forest manager shall ensure that the planning and implementation of salvage harvesting operations shall protect soil structure, water quality, forest health and vitality and the productive capacity of the forest recognizing the changed conditions.	
9.4 MINE SITE REHABILITATION	When the defined forest area is being used for approved mining operations, salvage operations to remove forest products shall be subjected to this Standard.  Mine site rehabilitation shall be conducted in a manner that is practical and effective. The revegetation objectives are:  a. restore a representation of the original functioning ecosystem, if possible; or  b. restore effective vegetation cover to stabilize soil and water values and provide potential longer term ecological values and or provide an economic return from the establishing vegetation including plantations.	
9.5 ILLEGAL ACTIVITIES	The forest manager shall take appropriate action to constrain unauthorized or illegal activities.	New requirement.
9.6 EMPLOYEE SKILLS DEVELOPMENT	The forest manager shall:  a. identify opportunities to support employment and skills development of forest workers including, but not limited to, nationally endorsed and or recognized competencies and qualifications where appropriate; and  b. implement appropriate actions.	Separated the identification from implementation requirements  Added formal training outcomes.
9.7 SAFETY	The forest manager shall:  a. commit to occupational health and safety;  b. foster a safe working environment;  c. comply with relevant occupational health and safety employment legislation; and  d. develop reforms to facilitate improvements in workplace health and safety.	Separated the elements of safety management.

9.8 WORKER'S RIGHTS	The forest manager shall respect the rights of employees and other workers, including their right to join a union or association, and to collective bargaining.	Removed the informative note.
	<ul> <li>The forest manager shall:</li> <li>a. support equal employment opportunities and use qualifications, skill and experience as the basis for recruitment and advancement of staff;</li> <li>b. comply with any collective agreements currently in force; and</li> <li>c. carry out bargaining with workers and their representatives in good faith and with best efforts to reach agreement.</li> </ul>	The Standards Reference Committee intends to include guidance to assist forest managers to comply with requirements 9.6 - 9.8 by demonstrating best practice in respect for core International Labor Organization conventions in an Australian context
9.9 CHAIN OF CUSTODY	The forest manager shall ensure that forest products that are sold as certified are readily identifiable as originating from the defined forest area.	New requirement.



#### PREPARATION OF AUSTRALIAN STANDARDS

Australian Standards are prepared by a consensus process involving representatives nominated by organizations drawn from all major interests associated with the subject. Australian Standards may be derived from existing industry Standards, from established international Standards and practices or may be developed within a Standards Australia technical committee or by accredited Standards Development Organizations.

Australian Forestry Standards Limited (AFSL) is accredited by Standards Australia as a Standards Development Organization.

As part of the development process, AFSL is making this draft available through a wide range of avenues including the AFSL website in order that all interests concerned with the application of a proposed Standard are given the opportunity to submit views on the requirements to be included. This is done on behalf of the Standards Review Committee (SRC AS4708)

The following interests are represented on the Committee responsible for this draft Australian Standard:

Australian Forest Growers (AFG)

Australian Forest Products Association (AFPA)

Australasian Pulp and Paper Industry Technical Association (APPITA)

Construction Forestry Mining Energy Union (CFMEU)

**CSIRO** 

Ecological Society of Australia

Forest and Wood Products Australia (FWPA)

Forest Plantations Queensland

Forestry Tasmania

**ForestWorks** 

Joint Accreditation System of Australia and New Zealand (JAS-ANZ)

PF Olsen Australia

Planet Ark

**SFM Forest Products** 

Timber Communities Australia (TCA)

University of Melbourne

#### Australian Forestry Standard Limited

Australian Forestry Standard Limited is an accredited Standards Development Organization and is a not-for profit public company registered in July 2003. The company owns the standard development functions, maintains their currency and manages the mandatory revision process. The scope of the accreditation was "to develop Australian Standards for forest management for wood production and Australian Standards that are aligned with international benchmarks". It owns two standards, AS4708 Sustainable Forest Management and AS4707 Chain of Custody.

#### Standards Australia

Standards Australia is an independent company, limited by guarantee, which prepares and publishes most of the voluntary technical and commercial standards used in Australia. These standards are developed through an open process of consultation and consensus, in which all interested parties are invited to participate. Through a Memorandum of Understanding with the Commonwealth government, Standards Australia is recognized as Australia's peak national standards body.

#### Australian Standards

Australian Standards are prepared by committees of experts from industry, governments, consumers and other relevant sectors. The requirements or recommendations contained in published Standards are a consensus of the views of representative interests and also take account of comments received from other sources. They reflect the latest scientific and industry experience. Australian Standards are kept under continuous review after publication and are updated regularly to take account of changing technology.

#### International Involvement

Standards Australia is responsible for ensuring that the Australian viewpoint is considered in the formulation of international Standards and that the latest international experience is incorporated in national Standards. This role is vital in assisting local industry to compete in international markets. Standards Australia represents Australia at both ISO (The International Organization for Standardization) and the International Electrotechnical Commission (IEC).

#### **Electronic Standards**

All Australian Standards are available in electronic editions, either downloaded individually from SAI Global, or via on-line and CD ROM subscription services. For more information phone 131 242 or visit www.saiglobal.com/shop.