



## SUBMISSION

*Draft interpretation of FSC Principle 5.6 (sustainable yield) in the  
Australian Standard*

*August 2010*

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## Executive Summary

The Draft Interpretation of FSC Principles 5.6 (sustainable yield) in the Australian Standard fails to adequately and credibly address the issue of sustainable yield as required by the FSC Principles and Criteria. The Draft Interpretation should be withdrawn and redeveloped with the assistance of expert forestry science advice.

The VAFI has clearly outlined its concerns with the Draft Interpretation and has identified a number of recommendations for the consideration of FSC Australia.

The recommendations are included in the document at the end of each relevant section, and are also summarised:

### Recommendations:

1. FSC Australia sets a priority to detail a plan for development and consultation of the full Draft Australian National Standard.
2. FSC Australia adopts either the definition of sustainable yield used by the Commonwealth Department of Agriculture, Fisheries and Forestry or that of the United States National FSC Standard and incorporates this definition into the Australian National Standard.
3. That FSC Australia withdraws the Draft Interpretation and resubmits for stakeholder consultation an approach which adequately and credibly addresses the issue of sustainable yield.
4. That FSC Australia uses the United States National Standard approach as a benchmark and engages expert forest science assistance to prepare the revised Interpretation.
5. That FSC Australia reviews the categories and their definitions in line with major silvicultural and forest types for the native forest categories (2 to 5) on order that they make more sense in the context of Australian forestry
6. That FSC Australia remove the links to Criterion 9 in developing the Draft Interpretation.
7. That a category for post-1994 plantations be incorporated into the Draft Interpretation.

## **About VAFI**

The Victorian Association of Forest Industries (VAFI) is pleased to have the opportunity to submit this response to the Draft Interpretation of FSC Principle 5.6 (Sustainable Yield) In the Australian National Standard. The VAFI is also keen to continue to work with FSC Australia in the development of an Australian National Standard.

The VAFI is the peak forestry industry body in Victoria. It was established in 1945 and represents its members' interests to governments, communities and markets. Our members include forest growers, processors and associated bodies. The VAFI is committed to promoting an economically robust, socially responsible and environmentally sustainable forestry industry. We support and encourage best practice in industry and in forest and land management.

The VAFI is a member of FSC Australia and is committed to the 9 principles and 56 criteria of the Forest Stewardship Council.

The VAFI is also committed to the fundamental importance of increasing the penetration of credible forest management certification as the main objective, regardless of which credible scheme (in the Australian case, FSC and PEFC) is applied. It is the view of the VAFI membership that the managing bodies of the two credible certification options in Australia should be moving towards mutual recognition as a matter of priority. This is in order to embed the principle of applying certification to generate forest management improvements and actively demonstrate to the market the credentials of sustainably produced Australian forest and timber products.

## **Overview**

The approach taken by FSC Australia in developing its Draft Interpretation demonstrates a fundamental lack of understanding of the complex science which contributes to the calculation of sustainable yield.

Further, it is apparent from the commentary and assumptions included in the Draft Interpretation, that the approach taken by FSC Australia is overtly targeted at broader forest management issues which are of contemporary ideological contention in relation to native forest harvesting in Victoria, notably harvesting in Melbourne's water supply catchments.

Finally the Draft Interpretation inappropriately confuses the intent of Criterion 5.6 (sustainable yield) with the requirements of Principle 9 (Maintenance of High Conservation Values) with no reference to any of the remaining FSC Principles and Criteria.

FSC Australia has failed to adequately address the requirements of Criterion 5.6. FSC Australia should withdraw this Draft Interpretation and engage expert forestry assistance to prepare and resubmit a Draft Interpretation that clearly and adequately addresses the issue of sustainable yield as a core, stand-alone principle of sustainable forest management, and in a fashion that provides stakeholders with confidence that the standards development process is based on appropriate science and understanding of Australian forestry.



## Development of an Australian Standard

FSC Australia appears to be taking a disjointed approach to the development of the Australian Standard. A national FSC standard for FSC Australia is a desirable outcome and the VAFI is fully supportive of moving towards this goal, as it provides the forest industries with clarity and certainty about its requirements if enterprises choose to pursue FSC certification in Australia.

However, the current approach which sees individual elements of the FSC Principles and Criteria selected for resolution and consultation in isolation from one another is problematic. The Principles and Criteria are designed to work together to deliver sustainable forest management. It is therefore difficult to continue to make comment about individual elements without considering the whole of standard and how these various elements will work together in practice.

FSC Australia must, as a matter of priority, put forward a plan for developing and delivering a draft standard for consultation which allows stakeholders to consider the full implications for sustainable forest management, and provides enterprises seeking certification with clarity and certainty to assist their decision making.

### Recommendations

1. FSC Australia sets a priority to detail a plan for development and consultation of the full Draft Australian National Standard.

## What is sustainable yield?

The principle of sustainable yield is fundamental in responsible forest management. In Australia, sustainable yield principles have a foremost consideration in the substantial regional, state and federal level processes which have guided the development of forestry policy over a very long time. Considerable effort has been expended on describing and defining the principles of sustainable yield.

The Draft Interpretation does not include a high level definition of sustainable yield from which the rest of the document can be considered. The VAFI believes that a definition of sustainable yield is essential to reviewing and considering the information and assumptions incorporated into the Draft Interpretation.

It is our view that a useful starting point is the definition used by the Commonwealth Department of Agriculture, Fisheries and Forestry:

*“Sustainable yield is the quantity of timber or other product that can be harvested from a forest while ensuring that the functioning of the forest ecosystem as a whole is maintained and the flow products is continuous in perpetuity.”*

Alternatively, the United States National Standard defines sustainable yield as:

*“**Sustained yield harvest levels:** harvest levels and rates that do not exceed growth over successive harvests, that contribute directly to achieving desired future conditions, and that do not diminish the long term ecological integrity and productivity of the site. The sustained yield harvest level specific to the certified FMU is based on calculations made according to Indicator 5.6.a in this Standard.”*



Both of these definitions are consistent with the intent of FSC Criterion 5.6, which is stated on the FSC Australia website as:

*“This criterion requires that the production systems and harvesting practices do not prejudice the productive capacity of the site or impair species survival”*

**Recommendations:**

2. FSC Australia adopts either the definition of sustainable yield used by the Commonwealth Department of Agriculture, Fisheries and Forestry or that of the United States National FSC Standard and incorporates this definition into the Australian National Standard.

## **Concept of regrowth periods/harvesting rotation lengths**

From a forest science perspective it is inappropriate to focus on rotation length as the sole variable that determines sustainable yield.

The United States National FSC Standard offers a useful benchmark from which FSC Australia could better begin to address the issue of sustainable yield. The United States national Standard addresses the issue of sustainable yield as follows:

***“C5.6 The rate of harvest of forest products shall not exceed levels which can be permanently sustained.***

***Indicator 5.6.a*** *In FMUs where products are being harvested, the landowner or manager calculates the sustained yield harvest level for each sustained yield planning unit, and provides clear rationale for determining the size and layout of the planning unit. The sustained yield harvest level calculation is documented in the Management Plan.*

*The sustained yield harvest level calculation for each planning unit is based on:*

- *documented growth rates for particular sites, and/or acreage of forest types, age-classes and species distributions;*
- *mortality and decay and other factors that affect net growth;*
- *areas reserved from harvest or subject to harvest restrictions to meet other management goals;*
- *silvicultural practices that will be employed on the FMU;*
- *management objectives and desired future conditions.*

*The calculation is made by considering the effects of repeated prescribed harvests on the product/species and its ecosystem, as well as planned management treatments and projections of subsequent regrowth beyond single rotation and multiple re-entries.*

*The method used to calculate the sustained yield harvest level for timber products is commensurate with the size and intensity of the forest management operation.*

***Indicator 5.6.b*** *Average annual harvest levels, over rolling periods of no more than 10 years, do not exceed the calculated sustained yield harvest level.*



**Indicator 5.6.c** Rates and methods of timber harvest lead to achieving desired conditions, and improve or maintain health and quality across the FMU. Overstocked stands and stands that have been depleted or rendered to be below productive potential due to natural events, past management, or lack of management, are returned to desired stocking levels and composition at the earliest practicable time as justified in management objectives.

**Indicator 5.6.d** For NTFPs, calculation of quantitative sustained yield harvest levels is required only in cases where products are harvested in significant commercial operations or where traditional or customary use rights may be impacted by such harvests. In other situations, the forest owner or manager utilizes available information, and new information that can be reasonably gathered, to set harvesting levels that will not result in a depletion of the non-timber growing stocks or other adverse effects to the forest ecosystem.

*Guidance: If the intent is to change the species balance in a stand or planning unit, or to achieve a desired age class structure, or to manage a catastrophic or natural event such as fire or pest outbreak, a particular species might be harvested at a higher-than-sustainable rate until its optimal stand occupancy could be achieved (e.g., by restocking via planting, etc).*

*Intent: The term “sustained yield harvest” refers to harvest levels and rates that do not exceed growth over successive harvests, that contribute directly to achieving desired future conditions, and that do not diminish the long term ecological integrity and productivity of the site.*

*For FMUs in which harvesting occurs infrequently, harvest levels and/or re-entry frequencies are set consistent with achieving and/or maintaining desired future conditions.”*

FSC Australia clearly needs to reconsider its approach to interpretation of the issue of sustainable yield. By using the United States National Standard as a basis and engaging expert forestry assistance to present this in the context of Australian forestry, FSC Australia will provide confidence to stakeholders that the Australian National Standard is both relevant and scientifically credible.

**Recommendations:**

3. That FSC Australia withdraws the Draft Interpretation and resubmits for stakeholder consultation an approach which adequately and credibly addresses the issue of sustainable yield.
4. That FSC Australia uses the United States National Standard approach as a benchmark and engages expert forest science assistance to prepare the revised Interpretation.

## Categories for Consideration

The categories which FSC Australia has used for the Draft Interpretation are ill-defined and limited in application.

With respect to the native forest categories (2 to 5) they do not relate to accepted and well-documented and researched Australian silvicultural or forest types and in fact appear to be defined in order to allow ready reference and exclusion by other FSC Criteria, specifically Criterion 9 – Maintenance of High Conservation Value Forests.

The interlinking of criteria and principles at the level of interpretation is highly inappropriate, as each criteria and principle should, in general, be allowed to stand alone. The interpretation of Principle 5.6 should be established on its own merits.

The Draft Interpretation does not reference post-1994 plantations at all and similarly makes no reference to pre-1994 plantations established on other than bare land.

### Recommendations:

5. That FSC Australia reviews the categories and their definitions in line with major silvicultural and forest types for the native forest categories (2 to 5) on order that they make more sense in the context of Australian forestry
6. That FSC Australia remove the links to Criterion 9 in developing the Draft Interpretation.
7. That a category for post-1994 plantations be incorporated into the Draft Interpretation.

## FSC Assumptions

### ***1. Plantations of exotic or native species established before 1994 on bare land for the purposes of harvest followed by regrowth, coppice or replanting***

The VAFI has nothing further to add with respect to this assumption.

### ***2. Native trees established or regenerated on substantially disturbed land and grown over a short rotation period to a uniform age class for the purpose of harvesting followed by regrowth or regeneration***

The proposed assumption that current commercial rotation lengths will meet the requirements of Principle 5.6 is appropriate.

The VAFI has substantial concerns, however, about the rest of the assumption. It is a fact that all native forests contribute to ecosystem function. The intent of Principle 5.6 is that forestry activities do not impair ecosystem function. If an impairment is evident, then it cannot be automatically assumed that the impairment is due to rotation length. Further, the assumption singles out water supply catchments as the target with respect to ecosystem function. This is an exceedingly narrow definition which appears cynically to target harvesting of native forests in Melbourne's water catchments. This is highly inappropriate in the context of establishing a benchmark for assessing sustainable yield. In reality, unsustainable harvesting practices in any forest type can have an impact on water supply catchment function. This is not an issue of sustainable yield, but rather an issue of

appropriate forestry practices which mitigate against water pollution and reductions in water yield.

***3. Native trees established or regenerated on substantially disturbed land and grown to a uniform age class for the purpose of harvest using a silvicultural system (commercial or non commercial thinning) designed to create a uniform aged stand***

As above.

In addition, it is important to note that there are no silvicultural systems in use in Australia designed to create a uniform-aged stand. There are, however, silvicultural systems which are designed to maintain a distribution of even-aged stands in the forest estate where this reflects the natural stand growth habits of the forest type.

***4. Mature or mixed age class native forests that are the result of natural disturbance events, opportunistic natural regeneration following harvesting and not containing species that have been hand planted***

Maintenance of age class structure over a whole FMU is a fundamental principle of sustainable yield. Specifying it uniquely for this category reinforces that the Draft Interpretation as it currently stands demonstrates a fundamental lack of understanding of forest management principles and, more specifically, native forest management.

It is also unclear why salvage logging is singled out for this age class. Salvage logging is generally undertaken following either a fire, pest attack or severe weather event. None of these damage vectors is specific to any particular forest type or age class. They affect native forests and plantations alike and affect all age classes.

The impacts of any severe damage event must naturally be taken account of in determining future sustainable harvest levels. However, it is unclear how salvage logging affects this except that it may have some delay effect on reductions in sustainable harvest levels.

There are clearly arguments about whether or not salvage logging has an impact on ecosystem function. However, this issue is most appropriately dealt with in other principles and criteria. Salvage logging is, fundamentally, an issue of sustainable practices more broadly, not of sustainable yield specifically.

***5. Ecologically mature forest including ecologically mature mixed age class forest that has either not been harvested or where harvesting has occurred, the forest has functionally recovered***

It is assumed that these forests automatically will be considered to be HCV. This is not at all consistent with the principles of HCV, which VAFI has addressed in previous submissions. The issue of HCV is a complex one influenced by a range of variables, of which ecological maturity may be one. However, not all ecologically mature forest can be considered to be HCV. Therefore, the issue needs to be addressed, if this category is retained, about how sustainable yield principles are applied.

***6. Exceptions***

We note again the specific reference to Principle 9. It is important, in our view, that all the Principles and Criteria work together in determining the sustainability of forest

management practices. By singling out Principle 9, FSC Australia appears to be focussing the relationship of criterion 5.6 only in the context of High Conservation Values. The VAFI considers this to be far too narrow. References to Principle 9 should be removed from the Draft Interpretation.

In addition, the issue of reserves and offsets has to be dealt with more clearly and carefully. The FSC approach assumes that areas of forest be put aside to address the issue of management of conservation values. Where this has already occurred, which is generally the case in Australian forests, then the national standard must establish a benchmark for recognising it. Notwithstanding this comment, the issue of reserves is not relevant in the context of calculating sustainable yield. If we assume that the remainder of the FSC Principles and Criteria address the issue of conservation values and sustainable forest management practices, then calculation of sustainable yield is relevant only on the productive area of the FMU as this is where actual harvesting activity will occur.

### ***Terms and definitions***

**Salvage logging:** the proposed definition is appropriate, but is not relevant in relation to calculation of sustainable yield.

**Substantially disturbed land:** this definition appears limited. It does not include examples such as natural disturbance (fire, severe weather events, pest infestation), previous harvesting which is not clearfall, cleared agricultural land and so forth.

**Regrowth forest:** this definition is limited and does not address the issue of defining live young trees. There are well documented and understood definitions which could be used in place of this, and which are relevant to Australian forest types.

**Ecologically mature forests:** Ecologically mature forests are quite different to physically mature forests, which this definition appears to be addressing. In our view ecological maturity is a state where forests offer a full suite of values, structures, age classes and ecological opportunities at a larger scale than the individual stand.