

# **FINAL REPORT**

## Gap Analysis and Options for Certification of Private Native Forests in Queensland

*Prepared for*

### **AgForests Queensland**

500 Brunswick Road,  
Fortitude Valley, Queensland

21 December 2006

42822310

# **URS**

Forestry

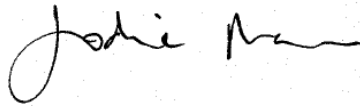
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# List of Abbreviations

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<b>Abbreviation</b>	<b>Full description</b>
ACDC Act	The Agricultural Chemicals Distribution Control Act 1966
AFS	The Australian Forestry Standard
CAR	Corrective Action Request
Code	Code Applying to a Native Forest on Freehold Land
ENGOs	Environmental non-government organisations
EPA	Environmental Protection Agency
FISAP	Forest Industry Structural Adjustment Package
FSC	Forest Stewardship Council
HCVF	High Conservation Value Forests
PMAV	Property Map of Assessable Vegetation
RE	Regional Ecosystem
SEQFA	South East Queensland Forests Agreement
VMA	The Vegetation Management Act 1999

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AgForests Queensland (AgForests) has requested URS Forestry to undertake a gap analysis relating to certification of private native forest management in Queensland under both the Australian Forestry Standard (AFS) and the standard developed by the Forest Stewardship Council (FSC). The two standards are jointly referred to in this report as ‘the Standards’. The study is a result of a growing awareness of the need for forest managers to demonstrate compliance with internationally accepted principles for sustainable forest management. The project has been initiated by the AgForests project, which is jointly managed by Timber Queensland and AgForce, with funding from the Commonwealth Government via the Forest Industry Structural Adjustment Package (FISAP).

The analysis has been undertaken in two stages, the first week was based in Queensland and included field visits and discussions with private forest managers (referred to as landowners throughout this report), representatives of AgForests and Timber Queensland plus a small number of other relevant stakeholders. The field trip was followed by a period of report preparation and collation of other relevant information at the desktop level.

The focus of the gap analysis is on those areas of the Standards where there are most likely to be non-compliance issues, so that guidance can be provided on work that needs to be undertaken prior to a full assessment under either standard. Areas of the Standards that are largely duplicative with other requirements in the context of private native forest management or are governed by national state and federal government laws have not been included in the report. As the Standards are very similar in their terminology and structure, the discussion in the report is generic with key differences outlined where appropriate.

Section 2 of the report provides some relevant background information on the forest region that has been reviewed and the Standards. Sections 3 to 10 use the structure of the AFS to identify relevant criteria associated with the Standards, findings from the field component of the review and major gaps in compliance with the Standards. The final section of the report identifies major Corrective Action Requests that might be identified if the private native forest managers were to be audited based on current operations and recommendations regarding the certification process going forward.

Properties visited as part of this project were located within the Burnett region of Queensland, which was originally settled in the mid 19<sup>th</sup> century. The primary production objective has been grazing and forest areas have been “high grade” harvested over time, with the largest and preferred species taken from the property. Regeneration often returns at a high stocking and without treatment the areas can be overstocked with the poorer quality stems suppressing the potentially commercial stems.

Opportunities to undertake any more clearing for grazing production have recently been restricted as part of the Vegetation Management Act 1999 (the VMA) and there is now an increased focus on timber production within the ‘remnant’ areas that are now protected from further clearing. At the same time, the Queensland State Government has been reducing the volume of timber removed from public land with the objective of ceasing all harvesting within the next 20 years. Development of a hardwood plantation estate to substitute for the native forest resource has begun, however there has been an increasing demand for wood from private properties during the transition period. This increased demand has resulted in significantly higher prices being paid for sawlogs from private forests.

There are also large areas of land that still have significant volumes of timber that do not meet the definition of ‘remnant’ under the Vegetation Management Act. Many landowners are still considering their options on this land. While there is an opportunity to thicken the vegetation and manage for timber production there is also some concern that these areas may have further restrictions placed on them if vegetation thickening is encouraged and future opportunities to improve grazing capacity will be foregone.

In very general terms, there are three main commercial forest types in the Burnett region:

- Areas dominated by spotted gum (*Corymbia citriodora*);
- Areas dominated by narrow leaved red ironbark (*Eucalyptus crebra*); and
- Open forest of Queensland blue gum/forest red gum (*Eucalyptus tereticornis*).

## 2.1 Consultation

Table 2-1 and Table 2-2 list the landholders and other stakeholders consulted as part of the gap analysis,

**Table 2-1: Landholders consulted**

Landholder	Property Name (s)	Location
John and Jane McLaughlin	Moune Fontein	Kingaroy
Bob and Joanna Creagh	Japarra and Weir Weir	Mundaberra
Arthur and Vanessa Bambling	Penwhaupell	Gayndah
Brian and Pam Dray	-	Woolooga
Owen Thomson/ Graeme Blowers	Goorah/Rosevale	Gundiah
Cam Hughes	Blairmore	Bam Bam Springs

**Table 2-2: Other stakeholders consulted**

<b>Stakeholder</b>	<b>Organisation</b>
Theresa Eyre	Environmental Protection Agency
Peter MacDonald	Environmental Protection Agency
Steve Howell	Environmental Protection Agency
Erwin Epp	Department of Natural Resources, Mines and Water
Steve Ward	Department of Natural Resources, Mines and Water
Lesley Shirreffs	Department of Natural Resources, Mines and Water
Bob Baldwin	Forestry Consultant
Rohan Allen	AgForests
Jim Burgess	Timber Queensland
Andrew Freeman	AgForce
Lauren Hewitt	AgForce

## 2.2 Certification standards

The Standards that were used for the gap analysis are briefly described below. Each of the standards is based on fundamental principles of sustainable forest management that address social, economic and environmental aspects. There are a number of criteria and within each of the criteria there are performance indicators that are used by auditors to assess compliance.

### ***Australian Forestry Standard***

The AFS is an initiative sponsored by the Primary Industries Ministerial Council, as well as industry and forest grower representatives. The standard was prepared by a Technical Reference Committee that comprised a cross section of stakeholder organisations. A number of guidance documents are available for organisations that are seeking certification to the AFS, including supplements to the AFS for small, medium and large native forest ownerships and checklists for small-scale growers that have been developed by Australian Forest Growers (AFG) and URS Forestry.

In this report the AFS refers to *Interim Australian Standard: Forest Management –Economic, Social, Environmental and Cultural Criteria and requirements for Wood Production*, published as *AS 4708(Int)-2003* by the Australian Forestry Standards Steering Committee. The AFS is recognised internationally by the Programme for the Endorsement of Forest Certification Schemes.

### ***Forest Stewardship Council***

The Forest Stewardship Council (FSC) is an international network that promotes responsible management of the world’s forests. It relies on consultative processes to set international standards and accredits independent third party organizations which can certify forest managers to FSC standards.

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In this report the FSC standard refers to the *SmartWood Certification Interim FSC Standard For Assessing Forest Management in Australia (Second Draft, September 2002)*. SmartWood is one of several organisations that are accredited to certify forest management in Australia against the FSC Principles and Criteria. Regional guidelines are currently being developed under an FSC national initiative. This process is expected to take a number of years and, in the absence of region specific guidelines, SmartWood has the authority to develop its own standard using a number of sources of information, including the AFS.

### 2.3 Types of forest certification

Forest managers may seek certification under both standards either as an individual or as a group. As an individual, the forest manager must meet or demonstrate substantial progress towards all of the requirements of the Standards before being issued with a certificate. The interpretation of criteria varies slightly within the Standards to acknowledge the size of ownerships and the extent to which management systems can reasonably be expected to have been developed.

The Standards have processes and guidelines for the evaluation and certification of groups of forest owners or managers under a single certificate, a process known as 'group certification'. Two levels of responsibility are identified in group certification schemes - the 'group' level, and the 'member' level. At the group level, responsibilities are implemented by a 'group entity'. At the member level, responsibilities are implemented by individual group members.

The group entity is the body that applies for group certification, and holds the group certificate. The group entity may be an individual, a cooperative body, an owner association, or other similar legal entity. The group entity is responsible for:

- Communications with the certification body and with group members;
- Implementing the administrative requirements of the group certification; and
- Implementing management and/or monitoring responsibilities at the group level.

Group members are typically the individual forest owners or managers who are responsible for most aspects of operations management and/or decision making. The actual division of responsibilities will differ greatly between different group structures. Members of a group do not hold individual certificates, but so long as they comply with all the requirements of group membership, their forest lands are covered by the group certificate. Forest products from these lands may be covered by a chain of custody certificate, and may thereafter carry the relevant Logo.

The basis of group certification is that the forest area of each member of the group must comply with all the requirements of the Standards. Responsibilities for meeting criteria may not be 'traded' between different members or properties, for example with one member meeting all conservation objectives whilst another does not meet any.

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Other relevant aspects of group certification include:

- For small group populations (eg less than 50 members) sampling will generally ensure that at least one third of separate forest areas are visited by at least one evaluation team member during the initial evaluation; and
- A commitment to long-term management in accordance with the Standards is required for all members of the groups.

### ***Small and low intensity managed forests (SLIMFs)***

Under FSC procedures, streamlined certification processes are available for operations that meet criteria for small and low intensity managed forests (SLIMFs). The criteria for SLIMFs are yet to be defined in the Australian context and vary in different parts of the world depending on the type of forest present, and the productivity of the forest type. Guidelines provided by the FSC for SLIMFs are as follows:

- **For Small Forest Management Units**, the forest area must be between 100 and 1,000 ha; and
- **For Low Intensity Forest Management Units**, the rate of harvesting should be less than 20% of the mean annual increment, AND the average annual harvest (over the period of the certificate) should be no more than 5,000 m<sup>3</sup>/annum.

Group certification is also possible where all group members meet the criteria for SLIMFs.

The streamlined certification processes decrease the cost of the initial audit by reducing the size of the audit team. Annual audit costs are also reduced because of the need for only two on-site visits during the five-year period of the certificate.

## **2.4 Defining the forest area**

The individual or group entity that is seeking certification must clearly define the forest area to be certified. It is important to note that certification does not have to include all the forests over which the applicant has some degree of involvement. In such a case the applicant for certification must make a full disclosure of all forest areas over which the applicant has some responsibility and must explain the reasons for excluding any areas from the certificate. The certification body will be responsible for deciding, on the basis of readily available information, whether stewardship of the forest lands not covered by the certificate is consistent with a demonstration of a long-term commitment to adhere to the requirements of the Standards.

The intent of criteria related to forest management planning is to ensure that a framework is established that enables the forest manager (in this case the landowner) to conduct operations in accordance with defined performance requirements. The detail associated with forest management plans is expected to be commensurate with the nature and scale of the business, as well as the associated risks.

Each of the Standards emphasises the importance of management planning and lists specific requirements that are to be included in the management plan and associated operational procedures. The management plan and the operational procedures form a *management system* and it is the objective of the Standards that planning is undertaken as a process and that the management plan is not just a written document. It is acknowledged however that a written plan provides consistency in the face of change and landowners that seek certification under the Standards would be expected to have a written management plan.

Criteria within the standards that are relevant to management planning are shown in Table 3-1.

**Table 3-1: Criteria within the Standards applicable to management planning**

Standard	Relevant criteria
AFS	4.1.1 to 4.1.5
FSC	7.1 to 7.4

### 3.1 Findings

Native Forest Property Management Plans had been prepared for three of the properties visited. The plans were prepared by consultants engaged by the landowners with financial assistance from AgForests. For the ongoing management of native forest on private property there is no regulatory requirement to produce a forest management plan and these plans were produced as a voluntary initiative.

The plans typically include the following content:

- History of the property, including both timber production and other land uses;
- Description of the location, including title details, geology and climate;
- Vegetation types and forest condition;
- Management objective - typically to optimise the combination of timber and grazing production while maintaining environmental values;
- Timber production plan and silvicultural guidelines by forest type and condition;
- Relevant State, Commonwealth and Local Government legislation;
- Fire management; and
- Details of any inventory that has been undertaken.

No evidence was presented of documented operational procedures to support the management plans and there was generally a low level of interest in the development of any additional document control processes.

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### 3.2 Gaps identified

The management plans reviewed were professional in their presentation and cover several aspects of the Standards very well. The following provides a summary of those areas where the plans will require additional attention if the landowners are to pursue certification under the Standards:

- **Monitoring and review:** The management plans do not currently describe the processes that are in place to monitor whether operations are achieving their objectives in terms of economic, environmental or social performance. Examples of actions that could be included to monitor economic aspects are stocking surveys, future inventory assessments and the development of permanent sample plots to better understand growth rates.

From an environmental perspective the plans could include provision for the monitoring of water quality, and the species composition of understorey and overstorey vegetation. Where ecosystems are classified as either ‘endangered’ or ‘of concern’ (see Section 5 of this report) it will be necessary for the plans to demonstrate an understanding of the reason for these classifications and any monitoring that will be necessary to ensure that any unique aspects of these ecosystems are not threatened by forest management practices.

Measures against which the landowners might measure the effectiveness with which they work with the community might include a register of any comments received (positive or negative) about forest management, or the performance against objectives to advise neighbours or other potentially affected stakeholders at the time of forest operations.

It will be necessary to keep the records associated with monitoring operations and the landowners will need to be able to demonstrate that the results of monitoring are used to adapt and modify the forest management plan.

- **Stakeholder management:** The plans are weak in their attention to the needs of stakeholders. In their current form, the plans do not specifically identify who the stakeholders are that might have an interest in forest management or how their input will be incorporated into the planning process. Stakeholders typically include local and State government agencies, neighbours, customers, contractors, indigenous groups and ENGOS. The isolated nature of properties will mean that stakeholder interest is less intense than some other forest operations, however stakeholder management will need to be addressed at an appropriate scale.
- **Socio-economic conditions and cultural heritage:** The socio-economic context within which forest management is undertaken will be important to the identification of stakeholders and the economic sustainability of the regional industries that are supplied from the forest. The management plans should provide a brief overview of the socio-economic environment, including a discussion of the dynamics of the rural communities and industries that may be impacted by forest operations. For example, some landowners mentioned that people are increasingly moving from the city to rural areas (“tree changers”) and are showing an interest in the management of vegetation and fire regimes on private land. The current dependence of the sawmilling industry on logs produced from crown

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land, and the potential impact of reductions in supply, is also particularly relevant to private forest managers.

A demonstrated knowledge of cultural heritage (see Section 9 of this report) will similarly be important to the identification of indigenous stakeholders and any management processes that are necessary for the maintenance of cultural heritage.

- **Supporting operational procedures:** The Standards put an emphasis not only on the management plan, but also on the operational procedures that support the management system. Allowance is made within the Standards for the differing capability of organisations to prepare procedures, depending on the size and intensity of the operations. It will nevertheless be important that operational procedures and checklists are developed over time and, where there are common practices between properties, this could be a role for the group manager. The silvicultural guidelines that are being prepared by AgForests would be considered as progress towards this objective.

In addition to forming a critical component of the management system, written procedures, and evidence that they have been provided to staff and contractors, will be important as demonstration that forest workers have received adequate instructions on the implementation of the management system.

- **Environmental impacts:** A Code Applying to a Native Forest on Freehold Land (the Code) has been developed for the purpose of managing environmental aspects of operations, including biodiversity, land and water quality, land degradation, forest structure and species composition. The extent to which the Code reflects the views of various stakeholders would be examined as part of a full audit. For purposes of this review, it is assumed that a demonstrated knowledge of the Code and a commitment to its implementation will be a sufficient basis for managing many of the environmental aspects associated with timber production on private property.

It is noted that the Code is only referred to within the management plans in the context of forest management on remnant areas, which is the regulatory requirement. The management plans point out that the Code does not apply to forest management on non-remnant areas and most of the landowners consulted advised that it was not their attention to apply the Code on areas of non-remnant. As the Standards require forest management to meet environmental objectives across the entire area that is certified, it will be necessary to plan for, and implement, compliance with the Code on all forest areas covered by the certificate.

- **Expected harvest volumes:** Timber production from private native forests has historically been on an opportunistic basis, driven by cash flow requirements. As such, harvesting may take place on a particular property only every 5-30 years with a volume of 100-1,000 m<sup>3</sup> produced in a given year. Landowners had a reasonable knowledge of the volumes that had been produced historically from their land, but only a 'gut feel' of the volumes that could be produced on an ongoing basis. Certification to either of the standards will require an improved understanding of the volume of timber that can be produced over time from each of the properties.

The contribution of any one landowner to regional log volumes is unlikely to be significant to regional processors over a period of time and it would therefore be unlikely that auditors would place any significant emphasis on the need for integrated regional planning at a property level. Under a group certificate however, the manager might be expected to make some attempt at scheduling the combined woodflows from members such that it is consistent with the needs for a sustainable regional processing industry.

In addition to any changes required as a result of the above, it will also be necessary for the management plan to clearly state the forest manager's commitment to requirements of the standard to which is audited.

Certified forest operations are expected to be good neighbours in local communities. For smaller operations this may be quite simple, such as responsible operation of harvesting equipment on local roads, protection of historic cultural or archaeological sites, or positive relationships with adjoining landowners. Larger operations will need to give more detailed and stringent consideration to local recreational needs, hiring practices that emphasize the training and participation of local people, and contributions for local services such as health or education. Large operations must also have in place a formal documented system for public interaction on forest management activities.

Criteria within the standards that are relevant to community relations and stakeholder management are shown in Table 4-1.

**Table 4-1: Criteria within the Standards applicable to community relations and stakeholder management**

Standard	Relevant criteria
AFS	4.2.1 to 4.2.3
FSC	4.1 to 4.5

## 4.1 Findings

Apart from the State Government officials and industry bodies listed in Table 2-2, there was not any substantial contact with stakeholders scheduled as part of the Scope of Work for this project. The relationship with communities and others stakeholders was therefore gauged primarily through discussion with the landowners.

Most of the forest management on private land is undertaken by the landowners themselves, with contractors employed to undertake specific tasks such as thinning and harvesting. Harvesting contractors are engaged by either the landowner or the sawmiller. The nature of these employment arrangements are such that any employment is usually from the community or adjacent communities in which the property is located.

Landowners described themselves as active members of the community through sporting associations, Landcare groups etc. Many of those consulted had also actively participated in field days related to forest management and some had provided access to their own properties for these activities. Landowners were generally reticent about being proactive in encouraging other property managers to give a greater priority to forest management, but were keen to be recognised as leaders in the successful integration of timber production and grazing within properties.

Like any successful business operation, it was apparent that the landowners proactively engaged with a wide range of interested parties as part of their day-to-day activities. All of the landowners considered that their relationships with their neighbours, contractors and customers were generally good and that they were not aware of any major concerns regarding the way in which forest management was being undertaken. There was considerable respect for indigenous heritage and evidence that this heritage had been incorporated into management plans. Nevertheless, landowners were extremely wary of providing

details concerning areas of cultural significance because of fears that such information may be used to unreasonably restrict commercial activities.

There was less respect shown for State Government officials and for ENGOs. Attitudes of landowners towards the State Government appear to be the result of a belief that regulations, and specifically the VMA, have been imposed without adequate consultation. These regulations are viewed as a restriction on the commercial activities of rural industries to protect environment values, while the urban communities that impose the laws are perceived to be unsustainable and inefficient.

There was concern that the nature of communities was changing and that city people moving to rural areas for a lifestyle change ('tree changers') would be trying to force further restrictions on private land management, particularly in regard to forest management and burning regimes. While landowners were wary of ENGOs and 'tree changers', there did not appear to be any significant contact with these groups.

## 4.2 Gaps identified

The Standards require that the forest manager must consult with all people and groups that are affected by, or *interested in*, forest management. A list of these stakeholders must be maintained and a participatory approach must be developed for stakeholder input to develop plans. The forest manager must demonstrate a history of positive and proactive engagement with stakeholders and respond constructively to any complaints or requests. The standards recognise that stakeholder input does not have to be incorporated into the plans – just that there needs to be a process for the constructive evaluation of this input.

There is a subtle difference in the way in which these requirements are audited within the Standards. The emphasis within the AFS is to review documentation that has been kept by the forest manager as evidence that consultation has occurred. The FSC process seeks input from Stakeholders as part of the audit process and can often draw out opinions, praise and criticism of which the forest manager was not previously aware. This can expose forest managers that have not been as proactive as they could have been. A landowner might, for example, claim to be unaware of ENGOs in a particular region, but the audit team will actively seek to make contact and will be assisted in this by the environmental chamber of the FSC.

The concerns that landowners have when liaising with indigenous groups, State Governments, ENGOs and community groups are likely to be appreciated by auditors under either Standard. However, landowners will need to be respectful of any differences in opinion and to be dealing with these groups in a positive and proactive fashion. 'Agreeing to disagree' will be an acceptable outcome if there are no clear breaches of the requirements of the Standards.

Under a group certification approach, there appears to be a logical division of responsibility in stakeholder management. While landowners should be responsible for the relationships developed at a local level, the group manager could take on responsibility for liaison with state regulatory bodies and peak conservation groups.

The intent of the requirements under criteria related to significant biodiversity values is to protect and maintain the significant, or high conservation value forest (HCVF), elements of the biological diversity of forests. The FSC is currently working on developing clearer guidance to assist certifiers in developing procedures for more consistent application of HCVF concept. Technical environmental, forest and social assessments must occur to determine HCVF presence; and stakeholder consultation procedures need to be particularly strong in areas where HCVF may exist.

Scale issues are particularly important in the assessment of these criteria; no one expects small landowners to be able to cover HCVF issues as well as larger organizations, but conservation of HCVF values must be stressed in all cases.

Criteria within the standards that are relevant to the management of significant biodiversity are shown in Table 5-1.

**Table 5-1: Criteria within the Standards applicable to significant biodiversity values**

Standard	Relevant criteria
AFS	4.3.1 to 4.3.7
FSC	9.1 to 9.4

## 5.1 Findings

Landowners believed that significant biodiversity values were protected as a result of their compulsory compliance with the VMA and the Code on their freehold land. The VMA aims to prevent broad scale clearing of vegetation and requires the landholder to obtain a permit to clear in other than defined situations. Under the VMA, landowners have been advised of the extent and conservation status of remnant vegetation on their properties via a Regional Ecosystem (RE) map. The conservation status of the regional ecosystems is classified as:

- Category 1: *Endangered regional ecosystems*
- Category 2: *Of concern*
- Category 3: *Not of concern*
- Category 4: *Regrowth from pre-1990 clearing on leasehold land*
- Category 5: *No vegetation or not remnant*

If vegetation is classified as Category 1-3 ('remnant' or 'coloured areas' in reference to the RE map), the landowner cannot clear the land, but they are able to carry out a 'forest practice', provided this operation is in accordance with the Code. No management plan is required for the forest management operation, but a single notification must be provided by the landowner to the State Government indicating that the landowner intends to carry out forest practices. This notification only has to be provided once for future operations, but it can be revoked.

If vegetation is classified as Category 5 ('non remnant' or 'white areas' on the RE map) there are no controls on forest operations, including clearing.

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The Code applies from 30 November 2005 to native forest practice activities conducted on freehold land subject to regulation by the VMA. The Code allows for the felling of trees for the purpose of being sawn into timber or processed into another value added product. It also allows for non-commercial thinning of regeneration and the commercial and non-commercial thinning of mid-storey and upper storey trees. The use of fire is also permitted to manage regeneration. The objective of the Code is to allow timber production in remnant areas while ensuring the following required outcomes (RO) of the Code are met:

- RO 1: The biodiversity and ecological processes associated with natural wetlands, lakes and springs are maintained.
- RO 2: The wildlife habitats of the forest stand are maintained
- RO 3: Streams, drainage lines and adjacent vegetation are protected by:
- Maintaining bank stability through protection against erosion and slumping
  - Maintaining water quality through providing for the filtering of sediment, nutrients and other pollutants,
  - Maintaining aquatic habitat, and
  - Maintaining wildlife habitat
- RO 4: The soil resource is protected against the loss of chemical and physical fertility through compaction, erosion or mass movement.
- RO 5: No adverse effects on the environment are caused by the release of acid and metal contaminants from the disturbance of acid sulfate soils.
- RO 6: Any harvesting or silvicultural operation is only for the forestry component of an ongoing business.
- RO 7: The floristic composition and stand structure of the forest regional ecosystem for the locality is maintained over time.

Landowners were questioned about any initiatives to protect more diverse ecosystems or riparian zones. Several responded that the more diverse ecosystems were generally unproductive and therefore had not been disturbed. In some cases creek lines had been fenced off to protect riparian vegetation and manage erosion.

There was little information revealed about any threatened species on the properties and it was apparent that State Government processes were acting to encourage a 'head in the sand' approach to the identification of any threatened flora and fauna.

## 5.2 Gaps identified

Under the AFS the values that are to be protected under the relevant criterion are referred to as *Significant Biological Biodiversity Values*. Under the FSC, the equivalent definition is *High Conservation Value Forest*. Table 5-2 provides a description of both values and the relevant required outcome of the Code:

**Table 5-2: Definitions of significant biological diversity**

<b>Australian Forestry Standard (Significant Biological Diversity Values)</b>	<b>Forest Stewardship Council (High Conservation Value Forests)</b>
<ul style="list-style-type: none"> <li>• Threatened (including vulnerable, rare and endangered) forest types or ecosystems and old-growth forest which is depleted within a forest type or ecosystem as identified under the nationally agreed forest reserve criteria <b>(RO 2; RO 3, RO 7)</b>;</li> <li>• Forest types or ecosystems and old-growth forest which are under-represented in the regional conservation reserve system as implemented through Regional Forest Agreements <b>(RO 2; RO 7)</b>;</li> <li>• Known and likely occurrences of threatened (including vulnerable, rare, or endangered) species and communities and relevant habitat;</li> <li>• Habitat of migratory species listed under the Commonwealth's Environment Protection and Biodiversity Conservation Act 1999;</li> <li>• Ramsar wetlands; and natural heritage places with regionally or nationally significant concentrations of biological diversity values (e.g. refugia and centres of endemism). <b>(RO 1)</b></li> </ul>	<ul style="list-style-type: none"> <li>• Globally, regionally or nationally significant concentrations of biodiversity values including:               <ul style="list-style-type: none"> <li>- protected areas <b>(Act)</b>,</li> <li>- threatened and endangered species,</li> <li>- endemic species <b>(RO 1, RO 2, RO 3, RO 7)</b></li> <li>- critical temporal use.</li> </ul> </li> <li>• Globally, regionally or nationally significant large landscape level forests <b>(RO 1; RO 7)</b>;</li> <li>• Forest areas that are in or contain rare, threatened or endangered ecosystems <b>(RO 1, RO 7)</b></li> <li>• Forest areas that provide basic services of nature in critical situations (including forests critical to water catchments, erosion control and as barriers to destructive fire). <b>(RO 1, RO 3)</b></li> </ul>

When the Code is applied in conjunction with the management of regional ecosystems identified as part of the VMA, it could reasonably be expected to manage many of significant biodiversity values as defined by the Standards. It provides for protection of values at the ecosystem level and in so doing, also manages the habitat of endemic flora and fauna.

The Code does not actively manage aspects of biodiversity that are significant at the local level, particularly the protection of threatened, including vulnerable, rare or endangered species. Landowners consulted as part of this project were generally unaware of the presence of, or potential for, threatened species on their property. Furthermore there was, with one exception, no knowledge of where to access information on the potential for threatened species or the adaptive management practices necessary for their management.

The identification and management of threatened species should be seen as a three step process by landowners:

Step 1: Identify the potential for threatened species through services such as the Environmental Protection Agency's (EPA) wildlife database. This website enables the user to access a list of

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wildlife that the EPA has recorded for areas defined by the user. By selecting the rare and threatened species it is possible to obtain a list of species that are currently listed as rare or threatened under the *Nature Conservation Act 1992*.

- Step 2: If the potential for rare or threatened species is identified, the landowner should engage the services of someone with appropriate qualifications to determine whether the particular flora or fauna is present on the property.
- Step 3: If the threatened species is present, or likely to be present, management practices should be adapted (if necessary) to protect the habitat. Guidance on threatening processes and adaptive management for a number of species has been prepared by the EPA.

In cases where regional ecosystems have been described as either 'endangered' or 'of concern', forest managers would be expected to explain to an auditor why these classifications have been made and whether any of the current management practices threaten the values that have led to these classifications. Similarly, in situations where there is known to be a State Wildlife Corridor (or similar areas marked on property maps), the reasons for the creation of such a corridor will need to be understood and management practices adapted to protect the associated fauna values.

The intent of criteria relating to the Productive Capacity of Forests is to ensure that harvesting and utilisation of wood products is consistent with the objective of maintaining the long-term productive capacity of the land. By ensuring that certified operations remain economically viable over the long-term it is possible to maximize the value of forest operations in terms of local economies.

Criteria within the standards that are relevant to the management of productive capacity are shown in Table 6-1.

**Table 6-1: Criteria within the Standards applicable to the productive capacity of forests**

Standard	Relevant criteria
AFS	4.4.1 to 4.4.6
FSC	5.2, 5.3, 5.6

## 6.1 Findings

Landowners are managing two primary production objectives – grazing and timber production. Grazing was described as the regular cash flow business while trees are viewed as an investment back, from which a cash withdrawal can be made when required. The primary forest products produced are sawlogs and all landowners consulted had a good understanding of the log grades and their market value. It was suggested that this is not necessarily the case for all private forest managers, with some selling on a lump sum basis to sawmillers without an awareness of the value of the products produced.

Consistent with the philosophy of timber production as the investment bank, most landowners harvest on an opportunistic basis and there may be long periods (ie. 5-50 years) between harvests. Others have the intention of producing a steady volume of product over time. As individual growers producing relatively small volumes of timber, it has not been important for landowners to have a well founded estimate (ie. technically based forecasts derived from inventory measurements) of the sustainable volume that could be produced from their forests. Yield estimates are generally based on ‘gut feeling’ developed from historical yields. Some landowners commented that they had been harvesting at levels greater than those which they felt could be sustained, largely because of the sovereign risk associated with the potential for future changes to government regulations that impact on timber harvesting.

Natural regeneration in spotted gum and ironbark forests reviewed as part of this project is reported to be prolific, with landowners suggesting that up to 1,800 stems per hectare may regenerate after disturbance. The need for proactive encouragement of regeneration to maintain productive capacity is therefore minimal. In blue gum and forest red gum forest types regeneration sometimes requires the temporary removal of stock.

The greatest issue with respect to maintaining or enhancing productive capacity is the need for thinning of regeneration to retain stems of better form and to encourage volume growth on the retained trees. Where this thinning is carried out it is generally driven by a need to maximise production based on objectives for both grazing and timber production. The balance between the two objectives varied, depending on the landowner and management area.

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The need for timely and effective thinning was identified as the greatest constraint on timber production for private landowners. The primary factors limiting optimal stand treatment were silvicultural knowledge and cash flow. The latter is particularly constraining for a private landowner because the financial benefits of thinning may not be realised for 20-30 years. A project has been initiated by AgForests to consider different investment options that might improve the economic viability of thinning operations.

Landowners advised that both harvesting and stand treatment operations within remnant vegetation are monitored against the Code, but there are no checklists or formal processes.

All landowners used fire as a tool to manage their properties. Fire regimes were primarily driven by the objective to manage grass species, but there were differing schools of thought on the optimal frequency of fire. While fire was acknowledged as an effective tool to encourage and manage regeneration, fire was also noted to be the agency that had greatest impact on productivity as a result of scars.

## 6.2 Gaps identified

The most critical deficiency under these criteria is the lack of knowledge regarding sustainable yield. This will become increasingly important within a regional context as the supply from State Forests reduces and the regional sawmilling industry becomes increasingly dependent on private native forests.

Developing a good knowledge of sustainable yield is likely to be a long term process and the recent inventories that have been conducted as part of the management planning processes are a good start towards increasing this knowledge. Further work is required however, including the development of a network of permanent sample plots that are representative of different ecosystems and regions.

Stand treatment is essential to maintaining and enhancing the productive capacity of the estate, but auditors are likely to acknowledge the cash constraint that private landowners have in conducting these treatments. At the time of an audit, it will be important to demonstrate that there is a budget amount allocated for stand treatment and that there is a process for prioritising the operations such that production is maximised.

Checklists should be prepared for the purpose of monitoring the outcomes of forest operations against the Code.

The protection of ecosystem health and vitality in certified forest management includes a combination of proactive and protective measures. Proactive measures may include efforts to increase landscape-level biological diversity value of the lands being managed or restoration activities. Protective measures may focus on ensuring that the forest is protected from both external and internal damaging agents, such as insects, disease, vertebrate pests and competition from non-endemic species that can affect basic ecosystem processes and cause significant changes to the nature and condition of forests. Certification also requires forest managers to place attention on the protection or restoration of endangered ecosystems (e.g. wetlands), conservation of threatened/endangered species, and precautionary use of chemicals.

Criteria within the Standards that are relevant to the management of ecosystem health and vitality are shown in Table 7-1.

**Table 7-1: Criteria within the Standards applicable to the ecosystem health and vitality**

Standard	Relevant criteria
AFS	4.5.1 to 4.5.5
FSC	6.1 to 6.10

## 7.1 Findings

As discussed in Section 5, most landowners believed that ecosystem health is protected in remnant vegetation as a result of their compulsory compliance with the VMA and the Code. It is a required outcome of the code to protect biodiversity and ecological processes.

Properties are managed for both grazing and timber production. Together with altered fire regimes, grazing is perhaps the greatest threat to ecosystems as it has the potential to significantly change the understorey and changes are likely to have been occurring since settlement of the land in the mid 19<sup>th</sup> century.

There was a general view among landowners that the current road reserves (where grazing has been at a lower intensity) may provide a guide to condition of the forest at the time of European settlement. These reserves are generally open woodlands with grasses and very little woody vegetation in the understorey. Landowners suggest that the most common native grasses in these stands are those that are most palatable to cattle. Current best practice land management practices (eg cell grazing, less frequent burning) are therefore aimed at promoting a species composition that is similar to this natural state. Resource management experts are more circumspect and question the baseline that should be used for any comparisons (pre-European settlement versus pre-Aboriginal settlement) and also suggest that some grass species may have disappeared as a result of grazing and altered fire regimes.

As the vegetation being managed is native to the area, very few pests and diseases were identified that impact on productivity of the forests. Those that were identified to be present included ramularia, bulls eye borer and mistletoe. None of these pests and diseases were considered to have a material impact on productivity or ecosystem health.

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Both the Commonwealth Government and the governments of the states and territories have legislation regulating agricultural chemicals. The Commonwealth Government regulates their sale and supply and the states and territories regulate their control of use. In Queensland the Agricultural Chemicals Distribution Control Act 1966 (ACDC Act) and Regulation requires commercial operators licenses to be issued to persons distributing herbicides on land that the persons or their near relatives do not own or occupy and to the businesses that direct or authorise ground distribution.

Landowners were uncertain about the requirements for chemical licensing. Most understood that any contractors engaged to use chemicals were required to have chemical training every five years. Others believed that no accreditation was required on private property.

The major chemicals used as part of the management of private native forests in Queensland are Velpar (active ingredient hexazinone), Tordon (picloram triisopropanolamine salt), Diuron (diuron), Roundup (glyphosate), and Taskforce (sodium 2,2,3,3 tetrafluoropropanate). One landowner also indicated that 2,4-D was used in some applications.

## 7.2 Gaps identified

FSC Advice Note 20-007 *Certification of forest remnants* includes some relevant guidance on the ecological baselines that should be used in meeting the criteria for management of ecosystem health and vitality. It indicates that where Criterion 6.3 of the FSC standard refers to “ecological functions and values shall be maintained intact, enhanced or restored”, this relates to existing functions and not those that would have been present prior to land clearance. This guidance is assumed to apply equally to other disturbance such as that provided by grazing pressure.

Demonstrated compliance with the VMA and the Code will go some way towards demonstrating that ecosystem processes are being maintained. However, it will be necessary to demonstrate that the Code is being applied on *both* remnant *and* non-remnant vegetation. Landowners should also be evaluating opportunities to enhance the condition of native vegetation. A possibly useful tool for evaluating the current condition of native vegetation, identifying actions to enhance the condition, and monitoring any improvements has been developed by the EPA in the form of a *BioCondition assessment toolkit*<sup>1</sup>.

The aim of the BioCondition assessment toolkit is to provide a framework for measuring how well a terrestrial ecosystem is functioning for the maintenance of biodiversity values. It is claimed to be a site-based, quantitative and therefore repeatable assessment that provides a numeric score of biodiversity condition. As such a tool is available for native forest managers, it would be expected that landowners have knowledge of its availability and plans to incorporate BioCondition assessment into their monitoring processes.

Annex II of FSC Guidance Document FSC-GUI-30-001 contains a list of a list of pesticides that it considers to be ‘highly hazardous’ based on technical indicators that are described in the same document.

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<sup>1</sup> <http://www.epa.qld.gov.au/publications/?id=1927>

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The use of any pesticide containing an active ingredient included on the current FSC list constitutes a major non compliance with the FSC Principles and Criteria.

Chemicals used by landowners that are included on this list are diuron, hexazinone and 2,4-D. These chemicals cannot currently be used in a FSC-certified forest unless there is no viable alternative and derogation for ongoing use has been granted by the FSC. Derogations are only granted under circumstances where there is a demonstrated need, controls are specified to reduce risk, a program is in place to identify alternatives, and an appropriate level of stakeholder consultation and support has been demonstrated.

At the time of an audit it will be important for landowners to demonstrate a clear understanding of relevant legislation regarding chemical use and licensing. Procedures will need to be in place to ensure that any contractors using chemicals on the property have the necessary accreditation.

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The Standards aim to maintain the protective and productive functions of forests and their ecosystem services to society through good management of factors, such as erosion, vegetation cover, and chemical pollutants and contaminants. These factors affect a range of important soil and water properties, such as soil biology, structure and fertility, water quality and water flows.

Criteria within the Standards that are relevant to the protection of soil and water resources are shown in Table 7-1.

**Table 8-1: Criteria within the Standards applicable to the protection of soil and water resources**

<b>Standard</b>	<b>Relevant criteria</b>
AFS	4.6.1 to 4.6.5
FSC	5.5, 6.5

## **8.1 Findings**

As outlined in Section 5, the protection of soil and water resources is a required outcomes of the Code (RO 3 & RO 4) that applies to forest practices within remnant vegetation.

## **8.2 Gaps identified**

Demonstrated compliance with the Code on both remnant and non-remnant vegetation should be sufficient to demonstrate performance under these criteria. On non-remnant vegetation there may be scope for some variance to the Code if the landowner is able to demonstrate that variations do not compromise soil and water resources. An example may be where the maintenance of lower tree stocking (and therefore higher grass cover) than that required by the Code affords equivalent or better protection of stream banks from erosion.

The intent of the requirements under these criteria is to recognise rights of forest users and to ensure protection of sites of cultural heritage, ceremonial and spiritual affiliation, aesthetic and religious value (that is, cultural, religious, spiritual, and social heritage values). The Standards focus on positive interactions with indigenous people, identifying any sites that are significant to indigenous people and demonstrating a commitment to cease operations if any such sites are uncovered during operations.

Criteria within the Standards that are relevant to the management of indigenous rights are shown in Table 9-1.

**Table 9-1: Criteria within the Standards applicable to indigenous rights**

Standard	Relevant criteria
AFS	4.6.1 to 4.6.5
FSC	3.1 to 3.3

### 9.1 Findings

There was considerable respect for indigenous heritage and evidence that this heritage had been incorporated into operational management plans. Nevertheless, landowners were extremely wary of providing details concerning areas of cultural significance because of fears that such information may be used to unreasonably restrict commercial activities.

### 9.2 Gaps identified

Criteria regarding tenure rights are not directly relevant to forest operations on freehold land as all native title rights have been extinguished on this tenure. However, native title rights should not be confused with Aboriginal cultural heritage values, which can exist on an area regardless of the nature of land tenure. In Queensland the *Aboriginal Cultural Heritage Act 2003* binds all persons, including the State, and is intended to provide effective recognition, protection and conservation of Aboriginal cultural heritage. It requires that a person must exercise due diligence and reasonable precaution before undertaking an activity which may harm Aboriginal cultural heritage and mirrors many of the requirements within the Standards.

Landowners will need to be more proactive in order to meet the requirements of these criterion and less defensive in their responses to questions regarding indigenous heritage. Actions that could be taken in order to demonstrate a commitment to criterion on indigenous rights include:

- Identifying indigenous groups that have a cultural, economic, or religious interest in the land and making contact with representatives;
- Organise training in the identification of any significant sites for forest workers that may be in a position to disturb any such sites;

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- Check any records of significant places that are kept in the Aboriginal and Torres Strait Islander Cultural Heritage Database, and the Aboriginal and Torres Strait Islander Cultural Heritage Register, which are administered by the State Government;
  - Have a map available for the audit team that identifies the location of any significant sites; and
  - Make any adaptations to management practices that are necessary as a result of the information collated.

Landowners are expected to manage forests in such a way that they meet community needs, including the value and volume of wood production, recreation and tourism, employment, income, and social well-being, in particular for regional communities with a high economic and social reliance on forests and forest-related industries

Criteria within the Standards that are relevant to the management of social and economic benefits are shown in Table 10-1.

**Table 10-1: Criteria within the Standards applicable to social and economic benefits**

Standard	Relevant criteria
AFS	4.9.1 to 4.9.5
FSC	5.4

## 10.1 Findings

Logs harvested from private native forests are sold to regional sawmills, which are supplied from both private forests and from public land. As a result of the South East Queensland Forests Agreement (SEQFA), production is expected to cease from public land in the south east Queensland region by 2025. Under the draft Western Hardwoods Plan, production is also expected to cease from public land in the Western Hardwoods Region over the next 20 years. The State Government has an objective of replacing the volume foregone from public land under the SEQFA with timber harvested from hardwood plantations and private native forests.

Added to the uncertainty over future supply from public native forests and plantations, there is no clear indication of the sustainable volume that can be produced from private land. With reductions in the amount of volume produced from public land in recent years, it seems reasonable to expect that the demand for private resource would have increased, and log prices seem to reflect this. There is consequently no reason to expect that volumes produced from private land in recent years can be maintained into the future.

This uncertainty over the sustainability of the regional industry in its current form was discussed with landowners. All of those consulted acknowledged the issue, but did not feel that it was their direct responsibility to take any action to manage sustainability issues beyond their own property. In the extreme case that there was not a viable sawmilling industry in the future, some landowners indicated that they could engage someone to mill the logs on their own property using a portable mill.

Responsibility for supporting a regional industry was generally seen to be that of the State Government and of Timber Queensland.

Criteria related to social and economic performance also address health and safety issues. Landowners all advised that they were committed to providing a safe work place, however there did not appear to be any formal agreements with contractors that established obligations of the parties with respect to health and safety.

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### 10.2 Gaps identified

If landowners were to seek certification as individual entities, it is likely that auditors would acknowledge the difficulties associated with addressing issues related to regional sustainability as a result of the scale and temporal nature of production.

If certification were to be through a group certificate with a number of landowners under the certificate, it could be argued that the group has sufficient scale to make a contribution to regional sustainability. This could start with an understanding of the available resource and sustainable yield from the group members. Information from the group regarding future woodflows could then be used to provide input to regional industry planning processes. Future supply agreements could also be negotiated with processors for a proportion of the resource. Such agreements would provide some resource security to regional processors, who would then have a basis for capital investment that would enable them to maintain a competitive economic position.

The lack of any formal agreements regarding Occupational Health and Safety is likely to be an issue at the time of an audit against the Standards. Landowners should consider putting in place the following procedures prior to an audit:

- Occupational Health and Safety policy and practices for staff and contractors;
- Systematic risk assessments and induction processes;
- Assurance that all operators are trained to designated industry standards in the safe and efficient use of equipment and machinery; and
- Processes to ensure contractors meet their safety obligation including compliance with relevant safety legislation.

Many of these issues could be addressed through a standard contract between the landowner and any staff or contractors. In the case of group certification, the template for such an agreement could be prepared by the group manager.

Gaps identified in compliance to the Standards will provide some guidance to landowners on the work that needs to be undertaken, or changes in policies and procedures that would be necessary, in order to obtain certification. There are some deficiencies in current practices that would result in major Corrective Action Requests (CARs) if the operations were audited today and these would need to be addressed prior to being granted a certificate under the Standards. Other deficiencies would also be identified at the time of an audit, and minor CARs would be listed, together with a timeframe for their completion. An organisation can be certified while it addresses minor CARs.

Table 11-1 lists the major CARs (ie those that would prevent certification) that might be issued by an auditor if landowners were to seek certification at the present time.

**Table 11-1: Issues to be addressed prior to undertaking a certification audit (likely to prevent certification)**

Principle	Issues to be addressed
Management Planning	Management plans should be prepared for all properties. Existing management plans require further information in order to meet certification standards.
Community relations and stakeholder management	A stakeholder list should be prepared.
Significant biodiversity values	Management plans should indicate a commitment to management of non-remnant forests in accordance with the Code.
Productive capacity of forests	Procedures should be established that are aimed at identifying the long term productive capacity of the forest estate.
Ecosystem health and vitality	For the purpose of FSC certification, cease the use of chemicals prohibited under Annex II of FSC Guidance Document FSC-GUI-30-001.  Demonstrate a clear understanding of relevant legislation regarding chemical use and licensing.  Establish procedures to ensure that any contractors using chemicals on the property have the necessary accreditation.
Protection of soil and water resources	
Indigenous rights	
Social and economic benefits	A formal approach should be established to ensure compliance with Occupational Health and Safety regulations, including a policy and contractual arrangements with third parties that clearly outline the obligations of the parties.

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In terms of the type of certification that should be pursued, it is strongly recommended that group certification should be investigated further. This recommendation is based on issues of both cost and practicality. In relation to cost, a group certification process whereby only one third of the group members are audited at any one time and the group manager takes on responsibility for a number of overarching responsibilities, will be more cost efficient than certification of an individual landowner.

From a practical perspective there are a number of requirements of the standards in terms of engagement with stakeholders (other than local groups), development of operational procedures, and industry development that landowners are unlikely to have the desire or capacity to address as individual entities. A group manager would be better placed to manage these requirements on behalf of a number of landowner.

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The methodology adopted and sources of information used by URS are outlined in this report. URS has made no independent verification of this information beyond the agreed scope of works and URS assumes no responsibility for any inaccuracies or omissions. No indications were found during our investigations that information contained in this report as provided to URS was false.

This report was prepared from July to December 2006 and is based on the conditions encountered and information reviewed at the time of preparation. URS disclaims responsibility for any changes that may have occurred after this time.

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