IVG FOREST CONSERVATION REPORT 7B

Proposed strategic landscape approach for the management of RFA priority species and their habitats to be delivered via the Tasmanian forest practices system

Draft Biodiversity Landscape Planning Guideline: A framework for the management of RFA priority species and their habitats at the landscape scale

Summary Document

Forest Practices Authority

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Summary

- The Tasmanian forest practices system traditionally manages biodiversity values in off-reserve areas using a coupe-by-coupe approach. Guidance for landscape level planning is needed due to increasing awareness that forest biodiversity management focused at the coupe (local) scale can be inadequate for effective conservation management. A recent review of the biodiversity provisions of the Tasmanian Forest Practices Code by an expert panel (Biodiversity Review Panel, 2008) recognised that landscape-scale management was missing from the current system and recommended that the forest practices system increase its capacity to manage biodiversity strategically and at multiple scale.

- It is proposed that a Biodiversity Landscape Planning Guideline is developed to guide Forest Practices Officers, other forest planners and land managers in the management of biodiversity, including RFA priority species and their habitats, at the landscape-scale. The Guideline will also work inversely, by guiding consideration of the landscape-context in coupe scale planning.

- The Biodiversity Landscape Planning Guideline has been drafted by the Forest Practices Authority and will be communicated to the forest industry and other interested parties in 2012. Feedback from users of this draft document is an essential component of the communication strategy.

- The over-arching objective of the draft Biodiversity Landscape Planning Guideline is '*To contribute to the maintenance of habitat for RFA priority species at multiple spatial scales across the landscape.'* It will contribute to the overarching objective developed by an expert panel in 2007 as part of a review of the biodiversity provisions of the Tasmanian forest practices code (Biodiversity Review Panel 2008): '*To maintain biological diversity (biodiversity) across multiple spatial scales—from individual stands to entire regions—through sustainable forest use.'*

- To meet the objective of the guideline six goals (adapted from strategies proposed by the Biodiversity Review Panel, 2008 and based on current theory) and actions to meet the goals are proposed.

- The goals are based on current ecological theory and are designed to maintain a forest resource and aquatic ecosystem health, with emphasis on maintaining or restoring landscape heterogeneity and connectivity, and stand structural complexity.

- The Biodiversity Landscape Planning Guideline complements existing management strategies delivered via the forest practices system and is utilises the best available information from current and previous work - see background reports 1-4 (Chuter and Munks, 2011a, Chuter and Munks, 2011b, Koch et al., 2011, Munks and Koch, 2011). Managing at the landscape level may, in some cases or for some species, reduce or eliminate the need for actions at a local scale.

- The objectives of the Biodiversity Landscape Planning Guideline apply to all forested landscapes covered by the forest practices system, including plantations. All associated planning tools will be developed in accordance with the *Forest Practices Act 1985*, threatened species legislation and other relevant legislation and policy. Management actions will be delivered via existing planning processes and policies, including the procedures agreed between FPA and DPIPWE.

- The Biodiversity Landscape Planning Guideline will deliver processes and planning tools to facilitate the implementation of strategic plans for the management of species and their habitat. This Guideline and associated planning tools are intended to change with new information to ensure they remain updated and deliver on-ground actions to meet the goals and objective.

Objective of the Biodiversity Landscape Planning Guideline

Objectives are a key element of conservation management of biodiversity. They facilitate communication and understanding between stakeholders, provide direction for management strategies, and provide a framework for monitoring and, therefore, adaptive management. The role of objectives and the process for their development is discussed in Koch *et al*, (2011). Clear, achievable and measurable objectives are critical to the development of any plan for biodiversity conservation management.

The objective of Tasmania's forest practices system is *'To achieve sustainable management of Crown and private forests with due care for the environment.'*

The Biodiversity Landscape Planning Guideline aims to contribute to this objective. The over-arching objective of the Biodiversity Landscape Planning Guideline is '*To contribute to the maintenance of habitat for RFA priority species at multiple spatial scales across the landscape.'*

Secondary objectives developed by the Biodiversity Review Panel (Biodiversity Review Panel, 2008) have been used to develop six goals to meet this objective.

Biodiversity Landscape Planning Guideline goals

Six goals have been developed to meet the objective of the Biodiversity Landscape Planning Guideline, taking general principles of biodiversity management into account (Box 1). Each goal is broken down into one or more management targets. That is, management targets are the building blocks of the goal and achieving the targets will achieve the goal. However, it should be noted that the links between management targets and goal are mostly based on ecological theory, which makes monitoring and adaptive management an essential component of the Biodiversity Landscape Planning Guideline.

Box 1: Five goals identified to meet the objective of the Landscape Planning Guideline

Goal 1: Maintain an extensive and permanent native forest estate and avoid or minimise any permanent native forest loss

Management targets:

1. *Maintain native forest cover across Tasmania at no less than 95% of the 1996 CRA area*
2. *Maintain 100% or enhance condition of all viable threatened forest communities*
3. *Maintain 75% of the 1996 CRA area or a minimum of 2000 ha (whichever is higher) of non-threatened forest communities in each IBRA bioregion*
4. *Maintain RFA listed priority vegetation communities that are locally important for conservation*

Goal 2: Maintain structural complexity and landscape heterogeneity

Management targets:

1. *Maintain seral stage pattern across the landscape*
2. *Maintain remnant vegetation*
3. *Ensure adequate regeneration in native forest harvesting areas, including understorey, within harvest cycle*

Goal 3: Maintain connectivity of habitat

Management targets:

1.1 Maintain or enhance linkages along water courses and between water courses, capturing a range of habitat types and topographies

Box 1: five goals identified to meet the objective of the Landscape Planning Guideline

Goal 4: Maintain the resilience of freshwater ecosystems within the range of natural variation over time

Management targets

1. *Maintain water quality and flow*
2. *Maintain lateral and longitudinal connectivity*
3. *Maintain and/or restore riparian vegetation*

Goal 5: Maintain or improve the health of native habitats

Management targets

1. *Manage the risk of introducing weeks or disease into a 'healthy' habitat*
2. *Minimise harmful edge effects on reserves and sensitive vegetation communities*
3. *Manage the risk of genetic pollution in native eucalypt populations and areas of high conservation value*
4. *Maintain soil fertility and structure*

Goal 6: Maintain or improve the conservation status of forest species, natural levels of genetic diversity and the capacity for adaptability.

Management targets

1. *Maintain habitats important for threatened and RFA priority species throughout their range to ensure maintenance of breeding populations.*

Each management target has one or more actions to achieve the target. The actions are designed to be clear and practical to enable monitoring, review and adaptive management. Where possible the actions are aligned with the requirements of current policy and legislation for biodiversity conservation management. The actions highlight the extent to which the forest practices system is already working to achieve the management targets. Some 'gaps' in the current management system have also been highlighted through this process, such as the need for an ecologically rational definition of remnant vegetation. These 'gaps' become research priorities.

The actions are delivered through planning tools, which are practical documents that deliver information and guidelines which can be interpreted into on-ground actions. For the purposed of the Biodiversity Landscape Planning Guidelines, the planning tools are mostly aimed at forest planners and land managers but are adaptable to a number of situations.

Table 1 provides an example of the clear pathway from the goals to management targets to actions and finally the planning tools to deliver the action. Using the first example, the goal is to maintain connectivity of habitat. To do this, ecological theory and research findings suggest that it is important to maintain and/or enhance linkages along water courses and between water course, capturing a range of habitat types and topographies. This is practically achieved on-ground through maintaining streamside reserves (i.e. native undisturbed riparian vegetation) on watercourses and re-establishing streamside reserves where they have been previously lost. The guidelines and legal requirement for the minimum width and placement of the streamside reserves is provided through the Forest Practices Code.

Table 1: example of the pathway from the goal to the action and planning tools provided in the Biodiversity Landscape Planning Guideline. This is the first time where biodiversity management actions that are currently being implemented within the Tasmanian forest practices system have been pooled into one document and displayed to show how the current system is working towards achieving the goals of conservation management. The Biodiversity Landscape Planning Guideline also clearly highlights the gaps in the current management. For example, a threshold on the spatial and temporal disturbance to a catchment is needed to maintain water quality and flow; however this is currently missing from the suite of management actions delivered through the forest practices system.

Goal	**Management target**	**Action**	**Planning tool**
Maintain connectivity of habitat	Maintain or enhance linkages along water courses and between water courses, capturing a range of habitat types and topographies.	Maintain minimum streamside reserves on class 1-4 streams in native forest operations; progressively re-establish streamside reserves in pre-code plantations.	Forest Practices Code – soil and water guidelines

		Consider placement of wildlife habitat strips and biodiversity spines during strategic planning process.	FPA Technical Note 8: wildlife habitat strip location and management guidelines
Maintain the resilience of freshwater ecosystems within the range of natural variation over time	Maintain water quality and flow	Maintain catchment harvesting thresholds	Catchment Management Tool*
		Minimise use of chemicals where there is risk of water contamination of exposure to spray drift.	Forest practices code – soil and water guidelines

Implementation of the Biodiversity Landscape Planning Guideline

The Biodiversity Landscape Planning Guideline will be implemented through the forest practices system.

The Biodiversity Landscape Planning Guideline and associated planning tools have been developed in accordance with the *Forest Practices Act 1985*, threatened species legislation and other relevant legislation and policies and are implemented through the forest practices system. The process for the development and continual improvement of this guideline is provided in Appendix A.

The guideline is primarily intended for strategic planning at the landscape scale (e.g. three-year plans on state forest, whole property planning on private). However, many of the associated planning tools, such as the FPA technical notes, can be used in both strategic and operational planning. By designing the guideline to be used at the two levels of planning it will accommodate issues such as individual threatened species management requirements, or private property where strategic planning may not be possible.

The actions are the drivers of the guideline and it is envisaged that the planning tools (the delivery system) will be the most utilised part of the guideline. Some planning tools, such as the catchment management tool have not yet been developed and are a priority for FPA in 2012. Other planning tools, already being used within the forest practices system, currently deliver landscape-scale management provisions – such as FPA fauna technical note 8 which provides guidelines on the implementation of wildlife habitat strips in the landscape.

References

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