Department of Sustainability and Environment

# **Forests**

# East Gippsland Forest Management Plan

#### December 1995

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# Summary

Publicly owned forest in East Gippsland covers approximately 1 million hectares in a vast, contiguous tract stretching from Bass Strait to the Australian Alps and from south-eastern New South Wales to Central Gippsland. State forest comprises 640 000 ha of this land and has an important role in complementing the management of national parks and other reserves for conservation, recreation and a growing tourism industry. State forest also supplies a third of Victoria's annual sawlog harvest and protects catchments from which local communities draw clean water supplies.

The major challenges addressed in this Plan are to meet a number of conservation and resource use requirements, including the Flora and Fauna Guarantee Act 1988, the National Forest Policy Statement, current sawlog licence commitments to the timber industry and the sustainable yield requirements of the Forests (Timber Harvesting) Act 1990. The strategy used to address these challenges has three main strands:

Conservation guidelines specify minimum levels of planned protection to be provided for natural values in State forest, taking into account the extent of those values in national parks and conservation reserves. They provide a systematic basis for zoning decisions in State forest and therefore introduce stability into the process for balancing conservation with timber production goals.

Forest management zones set priorities and permitted uses in different parts of State forest. The Special Protection Zone will be managed for conservation, and timber harvesting will be excluded. The Special Management Zone will be managed for specific features while catering for timber production under certain conditions. The General Management Zone will cater for a range of uses with timber production as a high priority.

A process for reviewing management strategies and zones will enable progressive refinement of the Plan in response to new information and developments in natural resource management.

This strategy provides a network of protected areas that complements the system of national parks and conservation reserves in East Glppsland, a framework for sustainable use of the forest for timber production and other purposes, and a process for adapting to change in a systematic, orderly manner. In doing so, this Plan will fulfil the major requirements of the National Forest Policy Statement.

- · Conservation of Biodiversity
- Forest Production
- Forest Protection
- Cultural Values

### Conservation of biodiversity

- Minimum levels of protection of 30% to 90% have been set for each of 44 vegetation classes according to their rarity in the landscape. Where conservation reserves do not meet these targets, areas of State forest have been protected to fill the gap.
- All heathlands and buffering vegetation of 40 m width have been included in the Special Protection Zone.
   Potentially species-rich vegetation mosaics, which include the hinterlands of many heathland areas, have also been included in this Zone.
- All rainforest stands are protected, the level of protection increasing according to the significance of different rainforest areas. The minimum standard is provided by timber harvesting prescriptions which require that buffers be retained between logging coupes and rainforest. A higher level of protection is provided by linear reserves which include many significant rainforest stands on major rivers and streams. The highest level of protection is provided in sub-catchment areas. Overall, at least 59% of rainforest, including the most significant stands, will be protected by buffers of 100 m width or larger.
- Formal reservation is provided for at least 90% of the Mixed Forests identified in the FMA. Mixed Forests are
  the forest stands where a eucalypt canopy is emergent above an understorey of rainforest species.
- · A strategy for conserving rare and threatened plant species is established.
- Formal protection is provided for 67% of the total area of old-growth forest, including at least 60% within each
  Ecological Vegetation Class. Outside formally protected areas, an additional 18% of old-growth forest is
  protected by virtue of it being unsuitable for timber production. Provision is made for recruitment of old-growth
  forest so that its total area will increase in the long term.
- Conservation guidelines have been established for key threatened and sensitive faunal species in State
  forest. These include protection of Long-footed Potoroos in accordance with the management strategy for this
  species, and planned protection for at least 100 pairs of Powerful, Sooty and Masked Owls. Specific
  strategies are also established for a range of other forest fauna including the Spot-tail Quoll, high-density
  populations of arboreal mammals, forest bats, diurnal raptors, threatened frog species, significant fish
  populations, rare butterflies and crayfish.
- A network of linear reserves of 200 m average width has been designed to maintain resident populations of sensitive fauna such as arboreal mammals, forest bats and hollow-nesting birds across the landscape. These will also facilitate the re-colonisation of areas that are harvested for wood production or burnt by wildfire.
- A number of areas in the Special Management Zone will be managed to supply timber while retaining high wildlife values.
- The system of sites of biological significance identified by pre-logging flora and fauna surveys between 1983 and 1993 has been reviewed and incorporated into the zoning scheme according to the significance, sensitivity and representation status of values in each site.

#### Forest production

 Sawlog supplies will be maintained to meet existing licence commitments and forecasts indicate that, given suitable markets for low grade logs sawlog supplies can be maintained at current levels until around 2030

- Targets have been set for the annual area to be harvested in each major forest type in order to redress a past
  bias towards the higher-elevation and most productive forest types, and to provide a relatively even flow of
  products of different species and grades.
- A schedule is established to ensure that all harvested coupes are adequately regenerated. A program of reforestation will also be implemented for former coupes that have failed to regenerate adequately.
- The species composition and productive capacity of forest areas degraded by previous selective harvesting
  and disease will be progressively restored by integrating harvesting of minor forest produce with sawlog
  production, and by specific measures to ensure adequate regeneration of species that yield durable timbers.
- Commercial thinning of regrowth forests will continue in selected stands and, if possible, be expanded to approximately 500 ha per year.

#### Forest protection

- The forest management zones in this Plan have been reconciled as far as possible with zones for fuelreduction burning in the Fire Protection Plans covering the FMA.
- The Plan provides for the ongoing protection of water quality as well as regular consultation with water supply authorities.
- The catchments of the Betka and Rocky Rivers have been placed in the Special Management Zone in recognition of the priority that domestic water supply considerations are to be given in these areas.
- Priorities are established for control of pest plants and animals in State forest to complement the efforts of private land owners and ensure an integrated approach across all public land.

#### Cultural values

- Management strategies for flora, fauna and cultural sites have been designed to encompass the values identified to date in the joint assessment of national estate values by the Australian Heritage Commission and the Department.
- A scenic-drive network (using the existing road system) will provide access to national parks as well as a
  focus for protection of landscape values, and recreation and interpretive facilities.
- A system for protecting landscape values from the visual impact of timber harvesting is established. It aims to minimise the impact on areas seen from the scenic-drive network and key lookout points.
- Provisions have been made to protect the landscape around W-Tree so that the area continues to be of value for both tourism and timber production. The arrangements involve restricting the size and timing of logging coupes in the most visible areas.
- A process is established to protect Aboriginal places of significance in State forest while maintaining confidentiality about their locations.
- Significant historic places are incorporated in the zoning system to ensure that they are appropriately managed.

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# Foreword

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# Chapter 2: Forest Management Strategy

2.1 - Forest management vision The vision for the sustainable management of East Gippsland's forests has the following characteristics:

- Forest management will be flexible and responsive to new information. Change will be introduced in a proactive but orderly fashion so as to maintain the confidence and stability of forest based industries and the local economy.
- Management will aim to ensure that all indigenous species and communities will survive and flourish across
   their natural range.
- Use of State forest resources will be according to world best practice. Standards will be maintained and improved by implementation and review of codes of practice, management guidelines, prescriptions, licensing and regulation of commercial activities on public land, and by staff training.
- Forest management will be sensitive to the cultural significance of the East Gippsland forests to the Australian community. Aboriginal places particularly will be respected and the Aboriginal community will play an increasing role in natural resource management.
- Sustainable use of the forest for recreation and tourism will be encouraged and facilitated.

# 2.2 - Forest management strategy

The strategy adopted by this plan to meet this vision has three main parts.

- Guidelines for the protection of conservation values or the management of uses have been developed based
  on the best information and expert opinion available to the Department. Where insufficient is known about a
  particular area a precautionary approach has been adopted. These guidelines provide a systematic basis for
  management decisions and a framework for reviewing these as more information becomes available.
- Forest management zones have then been identified based on the principles adopted in the guidelines. These zones set priorities and specify permitted activities for different parts of the forest. The three zones adopted (the Special Protection Zone, Special Management Zone and the General Management Zone) are defined according to the type of management that will be permitted and they cater for the range of forest uses including nature conservation, forest recreation, and timber harvesting. The zoning scheme is presented below in Section 2.3.

context of improving knowledge, changing government policies and community attitudes, and developments in natural resource management. Some examples of the circumstances where changes to the plan would be required include:

- o new information on the location or habitat requirements of threatened species.
- · the practicalities of road construction around some zones, or
- the need to accommodate substantial infrastructure developments (such as transportation corridors).

While the need for flexibility is clear, the conservation of certain forest values and a suitable land base for timber production must remain secure. Chapter 8 outlines the mechanism to be used for reviewing the status of management zones.

## 2.3 - Zoning scheme

As noted in the previous section, the zoning scheme divides State forest into three zones (see Table 1, Figure 1, and Map 26):

- The Special Protection Zone (SPZ) will be managed for conservation, and timber harvesting will be excluded. It forms a network designed to complement conservation reserves.
- The Special Management Zone (SMZ) will be managed to conserve specific features, while catering for timber production under certain conditions.
- The General Management Zone (GMZ) will be managed for a range of uses, but timber production will have a high priority.

Table 1. Extent of forest management zones and other land categories1 in the Forest Management

Descriptive	Area(ha)	% of all land	% of public land	% of State forest
STATE FOREST				
Special Protection Zone	164,300	14	16	26
Special Management Zone	37,900	3	4	6
General Management Zone	434,500	36	41	68
Timber production (2)	(332,600)	(28)	(32)	(52)
Other uses	(101,900)	(8)	(9)	(16)
STATE FOREST TOTAL	636,700	53	61	100
OTHER PUBLIC LAND				
Conservation reserves	409,500	34	39	
Other reserves & public land (1)	4,900	<1	<1	
PUBLIC LAND TOTAL	1,051,100	87	100	
		Was a second		

Altogether, 67% of old-growth forest will be formally protected (Figure 6) and an additional 18% will be informally protected by virtue of being unsuitable for timber production.

# Dynamic nature of old-growth forest

The area of old-growth forest is dynamic. New areas will be recruited as trees reach their older growth stages, or as the effects of past disturbance diminish. Other areas will cease to be old-growth forest due to wildfires, clear-felling and other disturbances. The key to management of old-growth forest is management of disturbance. In the past the impacts of human activities on native forests were dispersed according to the location, desirability and accessibility of natural resources (timber, fodder, minerals and arable land). Over two centuries the cumulative effect of these activities has left few areas in East Gippsland undisturbed.

In recent times the creation of national parks and improved management of native forests has confined human disturbance to specified locations. As the effects of historical disturbances diminish, many forest stands will recover to an essentially natural condition. This change in the pattern of human disturbances means that the potential area of old-growth forest is actually greater than its current area. Exclusion of 'unnatural' disturbance agents such as grazing, timber harvesting and inappropriate fuel-reduction burning from conservation reserves and the SPZ will allow recruitment of old-growth forest as the effect of past disturbances become negligible. The ratio of old-growth forest to that dominated by younger growth stages in these areas will then be determined almost solely by wildfire.

# 3.4 - Native fauna

As a result of extensive studies over the last decade or so, the vertebrate fauna of East Gippsland is perhaps better known than that of any other area of comparable size and vegetation type in Australia. This information has been reviewed and issues identified by Lugg et al. (1993).

The fauna conservation strategy has been developed in the context of conservation reserves, representative conservation of EVCs and old-growth forest (discussed earlier in this chapter), and the large areas of State forest unsuitable for timber harvesting. Together these provide a high level of protection for most significant fauna habitats and should cater for most forest fauna. For example, habitats supporting particularly rich or characteristic fauna, such as heathland, Warm Temperate Rainforest, Riparian Forest, Rainshadow Woodland, Rocky Outcrops, box—ironbark areas and wetlands, are well protected by the park system and the flora conservation strategy. Consequently this strategy concentrates on some key species that are threatened or are sensitive to timber harvesting. Appendix J lists threatened, sensitive and geographically limited faunal species in the East Gippsland.

Over the next 30 years or so, the timber industry will be in a state of transition—from being based on older forest to one based on regrowth. The main thrust of this strategy is to ensure that a suitable habitat network is retained as the ratio of older forest to regrowth decreases. The strategy has three elements:

- · conservation guidelines for featured threatened and sensitive fauna.
- · a network of linear reserves to maintain sensitive fauna populations across the forest landscape.
- modified timber-harvesting arrangements to retain high fauna values in the Special Management Zone.

## Aims

### Guidelines for conservation of featured species

Conservation guidelines have been developed for threatened or sensitive species with major habitat requirements in State forest, and whose needs may not be fully met by other conservation strategies (featured species). These guidelines are intended as tools to help devise a network of protected habitat catering for all forest fauna in the FMA. They are not to form the basis of State-wide fauna management, as other Forest Management Areas may differ in their specific requirements and situations.

The purpose of the guidelines is to:

- provide planned protection for sensitive and threatened species in State forest to meet the requirements of the Flora and Fauna Guarantee Act 1988 and the precautionary principle outlined in the National Forest Policy Statement.
- take account of the contribution of national parks and other conservation reserves towards meeting these
  requirements.
- initiate an orderly process for ongoing reconciliation of timber production with conservation of threatened species.

The guidelines for large forest owls and Long-footed Potoroo indicate the minimum number of individuals or minimum area of suitable habitat that will receive planned protection on public land. Where conservation reserves do not provide this, areas of State forest will be identified to fill the gap. Additional resources for these species will also persist in other parts of State forest. Guidelines for other species indicate a level of protection that, once reached, will 'trigger' a review of the guideline.

In applying the guidelines consideration will be given to the status of fauna records and the quality of habitat in the area. For example a well documented and substantial population of a threatened species warrants a higher priority for protection than an area of marginal habitat where the same species was incidentally recorded.

The guidelines are a step towards more comprehensive conservation strategies to be developed as more information becomes available. Preparation and implementation of Flora and Fauna Guarantee (FFG) action statements, for example, may supersede some guidelines. Chapter 8 provides a mechanism for progressive refinement of management guidelines.

# **Mammals**

Conservation reserves, coupled with strategies for conservation of old-growth forest and large forest owls, contribute significantly to mammal conservation in the FMA. Additionally, linear reserves (see page 33) are designed to maintain resident populations of arboreal mammals across the forest landscape. However, some further measures are necessary to conserve key threatened species and areas of high mammal richness or diversity.

# CONSERVATION GUIDELINE Mammals

#### Long-footed Potoroo

The management strategy (Saxon et al. 1994) and FFG Action Statement (Thomas et al. 1994) for this species will govern its management. Accordingly, 400—500 ha around confirmed sites will be protected. These will be

with other values.

Once 17,500 ha has been protected (which should be sufficient habitat for about 1000 individuals) new potoroo records may be used to adjust the zoning scheme (see Chapter 8). However, they should not create a net addition to the area of the SPZ or SMZ. The strategy will be reviewed in the year 2,000 in the light of research currently in progress.

Some of the areas identified for Long-footed Potoroo conservation have been placed in the SMZ. This is in recognition of the fact that potoroos utilise regrowth forest and that carefully planned timber harvesting may be compatible with their conservation. Research on the species needs to be further advanced before any harvesting is permitted in these areas, however.

## Spot-tail Quoll

This guideline builds on the FFG Action Statement for the species (Mansergh and Belcher 1992). Until further work on habitat requirements is completed a precautionary approach of protecting areas of undisturbed forest as foraging habitat will be adopted.

Approximately 500 ha will be protected within a 1500 ha area that includes the detection site. The aim will be to protect a network of areas within the likely home range of the animal recorded. The protected area may include conservation reserves, larger patches of SPZ, as well as stream buffers, steep slopes and areas unsuitable for timber harvesting. Preference will be given to riparian vegetation, and rock outcrops which may provide suitable denning areas. Known latrine and den sites will be protected along with a buffer zone of at least 200m radius. [Note: Due to considerations of scale, the network of protected areas cannot all be shown on Map 26].

Predator-control works involving the use of 1080 baits will only be undertaken in the vicinity of quall detection sites as part of a threatened-species conservation program.

Once 50 sites have been identified, this guideline will be reviewed.

# Cave-roosting bats (Eastern Horseshoe Bat, Large-footed Myofis and Common Bent-wing Bat)

All breeding and roosting caves and mines and known over-wintering sites will be protected by a buffer of about 100m and be included in the SPZ Sites will not be publicised and visitors will generally be discouraged, except as part of planned interpretive activities.

### Forest-dwelling bats

Where high densities (>10 individuals captured in one trapping session) of the threatened Eastern Broad-nosed Bats or Yellow-bellied Sheathtail-bat are recorded, approximately 100 ha of older forest in close proximity to the site will be included in the SPZ.

Once 20 sites have been identified, this guideline will be reviewed.

## Dingoes

There will be no poisoning, trapping or snaring for dingoes in State forest except at endangered-species sites or adjacent to farmland carrying vulnerable livestock.