

# Managing our forests sustainably:

## Forest Management Zoning in NSW State Forests







## MINISTER'S MESSAGE

The Forest Management Zoning system is a further step in the NSW Government's achievements in the conservation and sustainable management of our high conservation value public forests.

Sustainable management of our native forests is a central focus in meeting our community's current and future social, economic and ecological needs. For the first time in NSW, the future management of our public forests has been detailed in a clear, open and consistent manner.

Forest Management Zoning provides insight into future forest management and clearly identifies those areas of State forests specifically set aside for conservation and those available for other activities such as public recreation, research, grazing and timber production.

The Forest Management Zoning system presented here is based on nationally agreed reserve criteria and is linked to the International Union for Conservation of Nature categories for reserve protection.

The System has been developed in extensive consultation with a broad range of stakeholders and builds on the detailed information arising from the Comprehensive Regional Assessments and NSW Forest Agreements.

Our public forests are a resource held in trust for future generations.

The Forest Management Zoning system will ensure that our high conservation value forests will continue to be managed in perpetuity for the benefit of the whole community.



**Kim Yeadon MP**  
*Minister for Forestry, NSW*



## CHIEF EXECUTIVE'S MESSAGE

Sustainable forest management for wildlife, timber, water and other environmental values on State forests will be provided through the Forest Management Zoning System. This System will provide a robust, clear and auditable planning system for forest management.

The system defines intended management by mapping those areas of our State forests to be managed as conservation reserves and those areas to be managed for other values including timber production.

These forest management zones, in conjunction with complementary regional management plans, ensure our forest management meets the State's conservation objectives, contribute to NSW's Comprehensive, Adequate and Representative Reserves System and maintains a sustainable and value adding timber industry.

The development of the system in consultation and negotiation with stakeholders reflects the evolution and new era of publicly accountable forest management.



**Bob Smith**  
*Chief Executive, State Forests of NSW*



# The Planning Cycle and Forest Management Zoning

## Government Policy & Legislation

Forest Agreements  
Regional Forest Agreements  
Integrated Forest Operation Approvals  
Other Regulatory Requirements

State Forests  
Environmental Policy

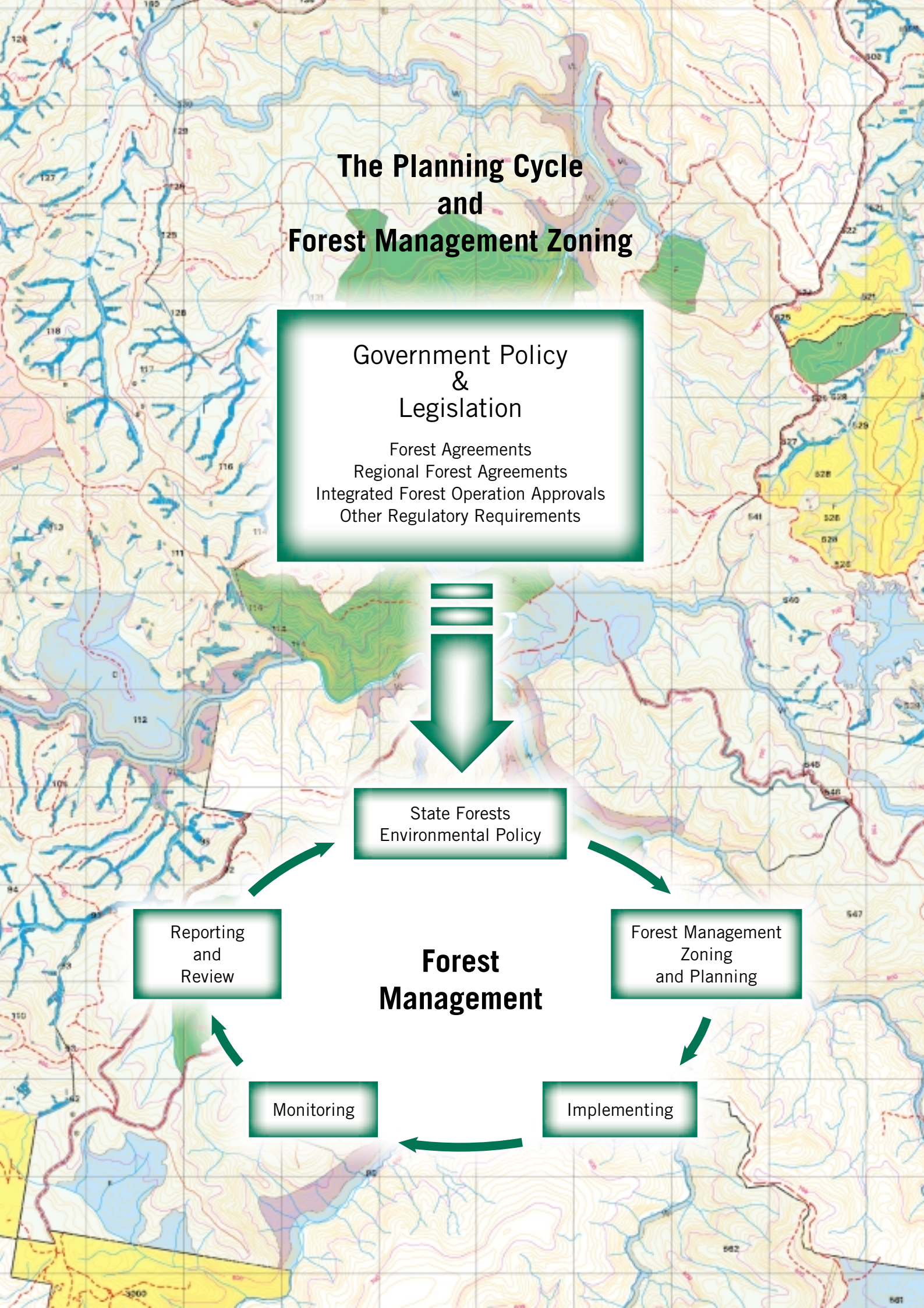
Reporting  
and  
Review

Forest Management  
Zoning  
and Planning

**Forest  
Management**

Monitoring

Implementing



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## INTRODUCTION

Forest Management Zoning (FMZ) is a land classification system which sets out in map format the way State Forests intends to manage forest areas across the entire State forest estate. It was developed by State Forests in consultation with the National Parks and Wildlife Service, the Resource and Conservation Division of the Department of Urban Affairs and Planning, the Department of Mineral Resources and community groups.

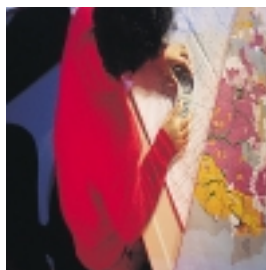
The FMZ system is based on nationally agreed reserve criteria<sup>1</sup> and clearly differentiates between those areas of State forests which are specifically set aside for conservation and those areas that are available for other activities including timber harvesting.

The FMZ system constitutes one of the basic planning and management tools for State Forests. It relies on spatial planning to help balance different management objectives such as wood production, protection of the forest environment and water and soil resources and the provision of recreation, education and research facilities.

The FMZ system replaces the Preferred Management Priority (PMP) classification system in areas with a Regional Forest Agreement.

The primary objective of this FMZ system is to separate clearly those areas of State forest managed as conservation reserves from those areas managed for timber production. This ensures that management of the forests by State Forests will contribute both to regional biodiversity and provision of a constant and sustainable supply of timber to industry.

The FMZ maps were negotiated with all stakeholders during the Comprehensive Regional Assessments (CRA) and the Regional Forest Agreements (RFA). The maps complement management plans derived from the CRA's. Any proposed



changes to areas set aside for conservation purposes require public comment and either Parliamentary action or Ministerial approval depending on the particular zone.

Forest Management Zoning is a two tiered classification system:

In the first tier each part of every State forest is classified into one of eight zones, according to the priority given to the management of particular forest values in the area and to the level of security that applies to the zone.

Each zone has an activities table to provide guidance for forest management: '*Activities Not Permitted*', '*Activities Permitted with Standard Conditions*' and '*Activities Permitted with Special Conditions*'.

- *Standard conditions* are conditions applicable to the proposed activity that are specified in relevant planning documents, such as Integrated Forestry Operation Approvals, codes of practice, operational circulars, protocols, licences, management and working plans. Generally these prescribed conditions are relevant wherever activities are permitted on the forest estate.
- *Special conditions* are conditions specified for the proposed activity that are in addition to, or supplement, the standard conditions. They may also include particular approvals or additional constraints that may be required as a condition for certain activities. Generally these prescribed conditions are relevant at a site-specific scale.

In the second tier each zone may be classified for its 'special values'. These values recognise particular natural or cultural features or specific forest uses and may be applied to the zone as a whole or to an individual site within a zone.

A FMZ map is a major strategic layer for other more detailed operational planning.

<sup>1</sup> The Commonwealth, State and Territory Governments agreed to the development of National Forest Reserve Criteria, in accordance with the National Forest Policy Statement. The Joint ANZECC/MCFFA National Forest Policy Statement Implementation Sub-committee (known as JANIS) produced a report outlining the criteria. Called 'Nationally Agreed Criteria For The Establishment Of A Comprehensive, Adequate And Representative Reserve System For Forests In Australia' the report sets out the components of the Comprehensive, Adequate And Representative (CAR) reserve system. These components are commonly referred to as the JANIS criteria. The criteria are linked to the International Union for Conservation of Nature (IUCN) guidelines for Protected Area Management Categories.



# ZONE 1 – SPECIAL PROTECTION

Management to maximise protection of very high natural and cultural conservation values.

Areas within this zone are designed to meet the requirements of JANIS dedicated (formal) reserves in the National Forest Policy Statement and, as such, are equivalent to IUCN -Protected Area categories I, II, III or IV. (See Appendix 1 for definitions of IUCN categories and Appendix 2 for an extract from JANIS on reserve design criteria.)



### Classification Guidelines

Size:

40 ha or more preferred; however where there are significant values to be protected and where, for example, available area is limited a smaller size may be appropriate.<sup>2</sup>

Boundaries:

Where practicable boundaries should be based on easily recognisable topographic features such as major creeks, cliff lines, distinct ridge lines and roads in combination with major legal (cadastral) boundaries such as State forest boundaries.

Examples:

- Representative examples of forest ecosystems and high conservation value old growth forest
- Outstanding examples of forest ecosystems, areas of known unique or uncommon biological values or areas of high biodiversity
- Rainforest that meets size and boundary requirements
- Areas of particular beauty, grandeur or attraction
- Sites of historical, indigenous or non-indigenous cultural heritage, or scientific significance
- Localities or habitat of key threatened and sensitive fauna and flora.

### Notification and Revocation of Zone Boundaries

- New areas are set apart as Flora Reserves under Section 25A of the Forestry Act
- Opportunity will be provided for public and inter-agency comment on new proposals and boundary amendments.<sup>3</sup>
- Notification of new areas requires publication of the proposal in the Parliamentary Gazette
- An Act of Parliament is required to revoke this Zoning.

<sup>2</sup> Based on Forest Preservation in State Forests of NSW, Research Note No 47  
<sup>3</sup> A process for public comment will be used that is similar to that listed in Schedule 8 Forestry and National Park Estate Act 1998



## MANAGEMENT GUIDELINES FOR ZONE 1 SPECIAL PROTECTION:



- Management and protection of native forests containing very high natural and cultural conservation values.
- Section 25A of the *Forestry Act* requires a working plan (management plan) for each Flora Reserve approved by the Minister for Forestry.<sup>4</sup> Opportunity will be provided for public and inter-agency comment on proposed new or amended working plans.<sup>5</sup>
- Activities within Flora Reserves are not included within Integrated Forest Operation Approvals and are subject to *Environmental Planning & Assessment Act* requirements.

<sup>4</sup> In the absence of an approved working plan (during the introductory or transitional period) the examples listed in the Activity Table: Zone 1 Special Protection will be adopted as management requirements. (See also prescribed burning reference note.)

<sup>5</sup> A process for public comment will be used similar to that listed in Schedule 8 *Forestry and National Park Estate Act* 1998



Activities Table: Zone 1 Special Protection.

ACTIVITIES NOT PERMITTED	ACTIVITIES PERMITTED WITH STANDARD CONDITIONS	ACTIVITIES PERMITTED WITH SPECIAL CONDITIONS
<ul style="list-style-type: none"> <li>• Any activity not permitted by the working plan</li> </ul> <p><i>Examples of activities that are not permitted:-</i></p> <ul style="list-style-type: none"> <li>• Timber harvesting <sup>1</sup></li> <li>• Removal of forest products and materials</li> <li>• Grazing by domestic stock <sup>2</sup></li> <li>• Gravel/hard rock quarrying</li> <li>• Mineral and petroleum exploration <sup>3</sup></li> </ul> 	<ul style="list-style-type: none"> <li>• Any activity consistent with the working plan</li> </ul> <p><i>Examples of activities that are permitted with standard conditions:-</i></p> <ul style="list-style-type: none"> <li>• Scientific studies (eg fauna surveys including trapping) approved by State Forests</li> <li>• Maintenance of existing roads and fire trails</li> <li>• General access for activities such as bush walking or photography is not restricted, except as required to meet specific management needs</li> <li>• Prescribed burning <sup>4</sup></li> <li>• Recreation developments where there is clearly an existing use</li> <li>• Limited tree removal for safety, viewing or construction of facilities in areas used for recreation</li> <li>• Beekeeping <sup>5</sup></li> <li>• Feral animal and noxious weeds control</li> </ul>	<ul style="list-style-type: none"> <li>• Any activity specified in the working plan as requiring special conditions or special approval</li> </ul> <p><i>Examples of activities that are permitted only with special conditions:-</i></p> <ul style="list-style-type: none"> <li>• Construction of new roads and fire trails</li> </ul> <p><i>Construction will only be permitted in exceptional instances and only under the following conditions:</i></p> <ul style="list-style-type: none"> <li>• no practical alternative location is available</li> <li>• the values of the zone will not be significantly affected by the road or fire trail</li> <li>• opportunity is provided for public comment on the proposal</li> <li>• Ministerial approval is given for the proposal</li> </ul> 

<sup>1</sup> Timber harvesting will not be permitted notwithstanding Section 27F *Forestry Act*.

<sup>2</sup> No new grazing Occupation Permits will be issued. Any existing Occupation Permits will be subject to phase-out requirements (including completion by mid year 2000) to be managed by the inter-agency Occupation Permits Taskforce. This Taskforce comprises the Chief Executive Officers of State Forests and NSW Farmers Federation and the Directors General of National Parks & Wildlife Service and Department Land & Water Conservation

<sup>3</sup> Many (but not all) Zone 1 areas will be exempted from the provisions of the mining legislation by agreement between Ministers under Section 21 of the *Forestry Act*. Where Zone 1 areas have not been so exempted, then exploration for minerals and petroleum may be permitted 'with special conditions'. Any mining proposals flowing from exploration require standard environmental impact assessment and development approval processes. A decision to proceed with mining may lead to a change of Zones, for example from Zone 1 or 2 to Zone 3, 4 or 7 - (or in some cases revocation of the State forest) if the mining is incompatible with the values of the original zone or continued forest management.

<sup>4</sup> Planned to be fully cognisant of the values that the zone is designed to protect. Where prescribed burning is other than an "Activity Permitted with Standard Conditions", specific requirements will be listed in the working plan. In some cases prescribed burning may be an "Activity Not Permitted", in other cases it may be an "Activity Permitted with Special Conditions". In the absence of a working plan (during the introductory or transitional period) prescribed burning will be An Activity Permitted with Special Conditions to emphasise the focus on environmental management.

<sup>5</sup> Permits will not be issued for new sites. Any existing permits may be renewed, transferred or reallocated.

# ZONE 2 – SPECIAL MANAGEMENT

Specific management and protection of natural and cultural conservation values where it is not possible or practicable to include them in Zone 1.

Areas within this zone are designed to meet the requirements of JANIS informal reserves in the National Forest Policy Statement, and as such are equivalent to IUCN Protected Area categories II, III, IV or VI. They are of a size and design sufficient to maintain the values they seek to protect and can be accurately located on maps.



### Classification Guidelines

Size:

40 ha or more preferred.  
A smaller size may be appropriate, however, where there are significant values to be protected and where, for example, available area is limited.

80 metres minimum width for linear areas.

Boundaries:

Where practicable boundaries should be based on easily recognisable topographic features such as major creeks, cliff lines, distinct ridge lines and roads in combination with major legal (cadastral) boundaries such as State forest boundaries.

Examples:

- Areas for conservation of fauna, eg corridors
- Representative examples of forest ecosystems and high conservation value old growth forest
- Examples of forest ecosystems, areas of known unique or uncommon biological values or areas of high biodiversity
- Rainforest that meets size and boundary requirements
- Areas of particular beauty, grandeur or attraction
- Sites of historical, indigenous or non-indigenous cultural heritage, or scientific significance
- Localities or habitat of key threatened and sensitive fauna and flora

- Areas of forest that have high conservation or biodiversity values which are not possible or practicable to include in Zone 1.

### Notification and Revocation of Zone Boundaries

- Opportunity will be provided for public and inter-agency comment on any proposed new declarations, revocations or boundary amendments <sup>6</sup>
- Minister for Forestry approval by notice in the Gazette is required for new declarations, revocations or boundary amendment.<sup>7</sup>

<sup>6</sup> See Schedule 8 Forestry and National Park Estate Act 1998 [viz new Section 21A (7) Forestry Act].

<sup>7</sup> Arising from CRA negotiations revocation or alterations to boundaries of areas listed in Appendix 3 require joint agreement of the Minister for the Environment, the Minister for Planning, the Minister for Forestry and the Minister for Mineral Resources.





## MANAGEMENT GUIDELINES FOR ZONE 2 SPECIAL MANAGEMENT.

- Management and protection of native forests containing significant natural and cultural conservation values. Specific management requirements are listed in Section 21A *Forestry Act*.
- Management direction and instructions will be included in Regional management plans.<sup>8</sup>

<sup>8</sup> In the absence of a Regional Management Plan (during the introductory or transitional period) the examples listed in Activity Table: Zone 2 Special Management will be adopted as management requirements. (See also prescribed burning reference note.)

## Activities Table: Zone 2 Special Management.

ACTIVITIES NOT PERMITTED	ACTIVITIES PERMITTED WITH STANDARD CONDITIONS	ACTIVITIES PERMITTED WITH SPECIAL CONDITIONS
<ul style="list-style-type: none"> <li>• Any particular kind of operation the Minister advises State Forests by notice in writing that is prohibited</li> </ul> <p><i>Examples of activities that are not permitted:-</i></p> <ul style="list-style-type: none"> <li>• Timber harvesting</li> <li>• Removal of forest product and materials</li> <li>• Grazing by domestic stock <sup>1</sup></li> <li>• Gravel/hard rock quarrying</li> </ul>	<ul style="list-style-type: none"> <li>• Any activity that is consistent with the management plan for the area</li> </ul> <p><i>Examples of activities that are permitted with standard conditions:-</i></p> <ul style="list-style-type: none"> <li>• Scientific studies (eg fauna surveys including trapping) approved by State Forests</li> <li>• Maintenance of existing roads and fire trails</li> <li>• General access for activities such as bush walking or photography is not restricted, except as required to meet specific management needs</li> <li>• Beekeeping</li> <li>• Prescribed burning <sup>2</sup></li> <li>• Recreation developments where there is a history of recreational use, or where there are outstanding scenic attractions</li> <li>• Limited tree removal for safety, viewing or construction of facilities in areas used for recreation</li> <li>• Mineral and petroleum exploration <sup>3</sup></li> <li>• Feral animal and noxious weeds control</li> <li>• Aboriginal use of forest products <sup>4</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Any particular kind of operation the Minister advises State Forests by notice in writing that is prohibited unless particular conditions are complied with</li> </ul> <p><i>Examples of activities that are permitted only with special conditions:-</i></p> <ul style="list-style-type: none"> <li>• Construction of new roads and fire trails <ul style="list-style-type: none"> <li><i>New roads or fire trails must only be constructed when no practicable alternative exists to provide for forest management or access to commercial forest. Such roads must be of minimum length, width and disturbance to facilitate safe and economic access.</i></li> </ul> </li> <li>• Snigging through (or via any road) where: <ol style="list-style-type: none"> <li>a) there is no alternative route available;</li> <li>b) the Manager of the Regional Office of SFNSW that is responsible for managing the relevant land (or a more senior officer), has authorised the snigging or use of the road in writing;</li> <li>c) all practicable measures are taken to minimise any adverse impacts of the snigging or road use, on the environment</li> </ol> </li> </ul>



<sup>1</sup> No new grazing Occupation Permits will be issued. Any existing Occupation Permits will be subject to phase out requirements (including completion by mid year 2000) to be managed by the inter-agency Occupation Permits Taskforce. This zone is applied on dedicated leasehold only where voluntary agreement is reached with the lessee.

<sup>2</sup> Planned to be fully cognisant of the values that the zone is designed to protect. In the absence of a regional management plan (during the introductory or transitional period) prescribed burning will be "An Activity Permitted with Special Conditions" to emphasise the focus on environmental management.

<sup>3</sup> Conditions of exploration licences are reviewed by State Forests prior to approval to undertake exploration. Issues such as the type of exploration and disturbance (such as additional roading to facilitate exploration) are reviewed to ensure any potential impacts are minimised. Any mining proposals flowing from exploration require standard environmental impact assessment and development approval processes. A decision to proceed with mining may lead to a change of zones (e.g. from Zone 1 or 2 to Zone 3, 4 or 7) or in some cases revocation of the State forest if the mining is incompatible with the values of the original zone or continued forest management.

<sup>4</sup> SFNSW may authorise an Aboriginal person to carry out forest products operations provided that:

- a) SFNSW is of the opinion that there is no other land reasonably accessible to the Aboriginal person on which the relevant trees, shrubs or other vegetation may be harvested, and
- b) The authority limits harvesting to a scale and intensity that is not inconsistent with the maintenance of the conservation values that the zoning of the relevant land aims to protect.

# ZONE 3 – HARVESTING EXCLUSIONS AND SPECIAL PRESCRIPTION

Management for conservation of identified values and/or forest ecosystems and their natural processes, in either Zone 3A or Zone 3B:

## Zone 3A Harvesting Exclusions:

1. Areas where harvesting is excluded but other management and production activities preclude Zone 1 or 2. These may be either:
  - I) Dedicated leasehold where lease conditions permit activities such as grazing and timber supply for lease fencing etc, and in some cases residency, or
  - II) Areas identified as important by Department of Mineral Resources where there current or imminent petroleum and mineral exploration and/or mining activities.

These areas are designed to comply with JANIS "values Protected by Prescription" but to the fullest extent possible they will be managed to meet the requirements of JANIS Informal Reserves.

2. Other areas, which are excluded from harvesting -"Net Harvest Area (NHA) exclusions"- but size, boundaries or management practicalities

preclude classification as Zone 1 or 2. These areas are managed and are designed to meet the JANIS "Values Protected by Prescription" in the National Forest Policy Statement.

## Zone 3B Special Prescription

Areas where other management and production activities are also facilitated. These activities (which in some cases may include timber, forest product and materials extraction) are minimised in their design and implementation to maintain or enhance the values that the area is zoned to protect.

Areas within this zone are designed to meet the requirements of JANIS "Values Protected by Prescription" in the National Forest Policy Statement. They are designated for both protection of the values contributing to the CAR reserve system and for other management activity including timber production under certain prescribed conditions.



## Classification Guidelines

### Size:

The minimum size is the size required for protection of the value and the facilitation of other management activity. For example, a minimum of 50 metres either side of a road might be required for a roadside visual aesthetics zone. Generally this classification will be broad areas or strips, rather than smaller areas around site specific points.

Minimum sizes for NHA exclusions are determined by regulatory requirements.

### Boundaries:

Where practicable boundaries should be based on easily recognisable topographic features such as major creeks, cliff lines, distinct ridge lines and

roads in combination with major legal (cadastral) boundaries such as State forest boundaries.

NHA exclusion boundaries are taken 'as mapped' and marked in the field prior to operations commencing.

### Examples:

- Visual protection areas
- Recreation areas
- Extensive areas (rather than individual specific sites) that may include numerous individual sites of Indigenous cultural heritage
- Extensive areas (rather than individual specific sites) that may include numerous individual sites of non-indigenous cultural heritage
- Catchment areas
- Education areas
- Scientific research areas

## Notification and Revocation of Zone Boundaries

- Opportunity will be provided for public and inter-agency comment on any proposed new declarations, revocations or boundary amendments
- Areas managed as Informal Reserves require the approval of the Minister for Forestry by notice in the Gazette for new declarations, revocations or boundary amendment.
- Special Prescription Areas requires approval of the Divisional Manager after considering public comment on the proposed amendments.<sup>9</sup>

<sup>9</sup> A process for public comment will be used similar to that included in Schedule 8 *Forestry and National Park Estate Act 1998* except that 'the Divisional Manager' replaces 'the Minister'.



MANAGEMENT GUIDELINES FOR ZONE 3 SPECIAL PRESCRIPTION.

- The priority is to protect and manage identified conservation values whilst allowing other management and production activities, modified where required, which enhance or maintain those values.
- The zone contributes to timber production, other forest product or materials extraction and/or other management objectives, only where identified conservation values can be satisfactorily protected.
- Each individual Zone 3 area will have prescribed 'activities not permitted', and 'special conditions' which must be implemented to facilitate certain activities. These activities and conditions for each Zone 3 area will be approved by the Regional Manager and then be included in State Forests' Geographic Information System (GIS) data base.<sup>10</sup>

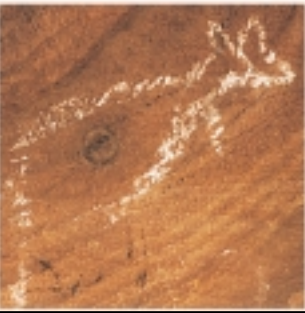
The Regional Manager is authorised to determine activities not permitted and to approve appropriate Special Conditions.

<sup>10</sup> In the absence of any approved conditions (during the introductory or transitional period) any proposal to undertake timber and other forest product extraction, gravel/hard rock quarrying, road construction or infrastructure development in the zone will require the Regional Manager to determine and approve (or exclude) activities and any associated special conditions.



Activities Table: Zone 3 Special Prescription.

ACTIVITIES NOT PERMITTED	ACTIVITIES PERMITTED WITH STANDARD CONDITIONS	ACTIVITIES PERMITTED WITH SPECIAL CONDITIONS
<ul style="list-style-type: none"><li>• Case by case assessment dependent on the specific special value involved</li></ul> <p><i>Individual areas may exclude specific activities to protect the value involved.</i></p> <p>Some special cases for UNE/ LNE areas are listed below in references <sup>1 &amp; 2</sup></p> <p>Examples of activities that are not permitted in Zone 3A:</p> <ul style="list-style-type: none"><li>• Timber harvesting</li><li>• Removal of forest products (<i>exceptions are listed in 'Activities Permitted with Standard Conditions'</i>) and materials</li><li>• Gravel/hard rock quarrying</li></ul>	<ul style="list-style-type: none"><li>• Case by case assessment dependent on the specific special values involved</li></ul> <p><i>Examples of activities that are usually permitted with standard conditions:</i></p> <ul style="list-style-type: none"><li>• Scientific studies approved by State Forests</li><li>• Infrastructure maintenance</li><li>• Road maintenance</li><li>• Feral animal and noxious weeds control</li><li>• Beekeeping</li><li>• Prescribed burning</li><li>• Mineral and petroleum exploration</li><li>• Grazing by domestic stock</li><li>• Aboriginal use of forest products <sup>3</sup></li></ul>	<ul style="list-style-type: none"><li>• Case by case assessment dependent on the specific special value involved</li></ul> <p>Special conditions specific to the identified Special Value of the Zone apply as well as standard conditions.</p> <p><i>Examples of activities that need particular consideration to be permitted with special conditions:-</i></p> <ul style="list-style-type: none"><li>• Zone 3B - Timber and other forest product extraction</li><li>• Gravel/hard rock quarrying in some circumstances</li><li>• Road and fire trail construction</li><li>• Snigging through (or via any road) where:<ul style="list-style-type: none"><li>a) there is no alternative route available;</li><li>b) the Manager of the Regional Office of SFNSW that is responsible for managing the relevant land (or a more senior officer), has authorised the snigging or use of the road in writing;</li><li>c) all practicable measures are taken to minimise any adverse impacts of the snigging or road use, on the environment</li></ul></li><li>• Infrastructure development</li></ul>



<sup>1</sup> In the UNE & LNE CRA Regions Zone 3 areas on dedicated leasehold have generally been designated to provide for 'Reserved Areas' and at the same time facilitate recognition of prior rights of lessees for grazing. (These pre-existing rights are not effected by zoning.) On these dedicated lease areas activities that are not permitted are:-timber harvesting, removal of forest products and materials and gravel/hard rock quarrying (except as permitted in lease conditions).

<sup>2</sup> In the UNE & LNE CRA Regions some Zone 3 areas have been designated to provide for 'Reserved Areas' and at the same time facilitate recognition of significant mineral or petroleum resources and ongoing or imminent exploration. On these areas activities that are not permitted are: timber harvesting and removal of forest products.

<sup>3</sup> SFNSW may authorise an Aboriginal person to carry out forest products operations provided that:

a) SFNSW is of the opinion that there is no other land reasonably accessible to the Aboriginal person on which the relevant trees, shrubs or other vegetation may be harvested, and

b) The authority limits harvesting to a scale and intensity that is not inconsistent with the maintenance of the conservation values that the zoning of the relevant land aims to protect.

ZONE 4 – GENERAL MANAGEMENT

Management of native forests for timber production utilising the full range of silvicultural options as appropriate; and conservation of broad area habitat and environmental values which are not dependent on the structure of the forest.

This zone is designed for a range of uses, but timber production has a high priority.

This zone contributes to the JANIS criteria “Values Protected by Prescription” through the application of protocols designed to detect and protect threatened flora and fauna species, communities and habitat listed under the *Threatened Species Conservation Act*.



Classification Guidelines

Size:

Minimum size and harvesting practicalities may vary with local conditions.

Boundaries:

Boundaries will largely be determined by requirements to identify adjoining zones.

Examples:

All native forest areas not classified in Zones 1, 2, 3, and 7.

Notification and Revocation of Zone Boundaries

Procedures for modification of Zone 4 areas will be dependent on which adjacent zones are involved and their requirements for amendment to boundaries.



MANAGEMENT GUIDELINES FOR ZONE 4 GENERAL MANAGEMENT.

- Sustainable timber production.
- Forest management will be directed towards improving overall long term timber productivity through appropriate harvesting and silvicultural practice and the establishment and development of effective regeneration in native forest.



Activities Table: Zone 4 General Management.

ACTIVITIES NOT PERMITTED	ACTIVITIES PERMITTED WITH STANDARD CONDITIONS	ACTIVITIES PERMITTED WITH SPECIAL CONDITIONS
	<p>All forest management activities, including:</p> <ul style="list-style-type: none"><li>• Production of timber and other forest products using the full range of silvicultural options as appropriate</li><li>• Infrastructure development and maintenance</li><li>• Road construction and maintenance</li><li>• Gravel/hard rock quarrying</li><li>• Recreation</li><li>• Scientific research</li><li>• Prescribed burning</li><li>• Beekeeping</li><li>• Grazing by domestic stock</li><li>• Mineral and petroleum exploration</li></ul>	



## ZONE 5 – HARDWOOD PLANTATIONS

Management of hardwood plantations to maximise sustainable timber production on a continuing and cyclical basis.

Hardwood plantations are managed:

- in a sustainable manner.
- to maximise the plantation value and productivity by appropriate intensive management regimes consistent with good forest practices as provided in approved codes of practice.



### Classification Guidelines

- All existing plantations of native hardwood species.
- Substantially cleared land or pastoral land acquired for the purpose of establishing hardwood plantations. Classification (which may occur prior to dedication as State forest to indicate management intent) must occur within two months of dedication.

- The zone may include small areas that are unsuitable for plantation (e.g. swamps, rocky areas, recreation sites, buildings) and areas subject to routine or statutory restraints (e.g. filter strips). However, significant mappable areas not managed as plantation such as rainforest and steep areas are not included as plantation but zoned appropriately as Zone 1, 2, 3, or 4.

- Joint venture plantations on freehold land are *not* subject to forest zoning.

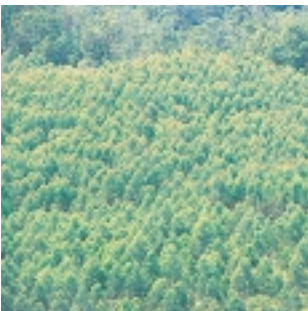
### Notification and Revocation of Zone Boundaries

Changes to the zone require approval of the Divisional Manager.



MANAGEMENT GUIDELINES FOR ZONE 5 HARDWOOD PLANTATIONS

- Establishment of hardwood plantations is restricted to substantially cleared areas or suitable end-of-rotation plantation stands.
- Management of hardwood plantations will conform to the *Timber Plantation Harvest Guarantee Act*, associated codes of practice and other regulatory requirements.
- Conservation values in plantations will be incidental to the primary purpose of intensive timber production.



Activities Table: Zone 5 Hardwood Plantations.

ACTIVITIES NOT PERMITTED	ACTIVITIES PERMITTED WITH STANDARD CONDITIONS	ACTIVITIES PERMITTED WITH SPECIAL CONDITIONS
	<p>All forest management activities including:</p> <ul style="list-style-type: none"><li>• Site preparation, establishment, cultural practices, infrastructure development and maintenance</li><li>• Road construction and maintenance</li><li>• Prescribed burning</li><li>• Production of plantation timber and other forest products</li><li>• Gravel/hard rock quarrying</li><li>• Recreation</li><li>• Grazing by domestic stock</li><li>• Beekeeping</li><li>• Mineral and petroleum exploration</li></ul>	



# ZONE 6 – SOFTWOOD PLANTATIONS

Management of softwood plantations to maximise sustainable timber production on a continuing and cyclical basis.

Softwood plantations are managed:

- in a sustainable manner.
- to maximise the plantation value and productivity by appropriate intensive management regimes consistent with good forest practices as provided in approved codes of practice.



### Classification Guidelines

- All existing softwood plantations
- Substantially cleared land or pastoral land acquired for the purpose of establishing softwood plantations and dedicated as State forest

- The zone may include small areas that are unsuitable for plantation (e.g. swamps, rocky areas, recreation sites, buildings) and areas subject to routine or statutory restraints (e.g. filter strips). However, significant mappable areas not managed as plantation such as rainforest, steep and native forest retention areas are not included as plantation but zoned appropriately as Zone 1, 2, 3, or 4.

### Notification and Revocation of Zone Boundaries

Changes to the zone require approval of the Divisional Manager.





**MANAGEMENT GUIDELINES FOR ZONE 6 SOFTWOOD PLANTATIONS**

- Establishment of softwood plantations is restricted to substantially cleared agricultural land acquired for the purpose or suitable end-of-rotation plantation stands.
- In plantation planning and design, the need for native forest connection corridors and retention strips for wildlife and general conservation values shall be considered and incorporated as appropriate.



**Activities Table: Zone 6 Softwood Plantations.**

ACTIVITIES NOT PERMITTED	ACTIVITIES PERMITTED WITH STANDARD CONDITIONS	ACTIVITIES PERMITTED WITH SPECIAL CONDITIONS
	<p><i>All forest management activities including:</i></p> <ul style="list-style-type: none"> <li>• Site preparation, establishment, cultural practices, infrastructure development and maintenance</li> <li>• Road construction and maintenance</li> <li>• Production of plantation timbers and other forest products</li> <li>• Prescribed burning</li> <li>• Gravel/hard rock quarrying</li> <li>• Recreation</li> <li>• Grazing by domestic stock</li> <li>• Mineral and petroleum exploration</li> </ul>	

ZONE 7 – NON FORESTRY USE .

Management of cleared (non-forested) areas, such as those used for special developments.

Classification Guidelines

Size:

10 ha minimum. For linear areas a minimum width of 80 metres (except where even a small area would be inconsistent with the surrounding area if it were similarly zoned, e.g. transmission line clearing 20 metres wide or a 2 ha gravel pit within or through a Zone 1 or 2 area.)

Boundaries:

Boundaries will be determined by the extent of the cleared area.

Examples:

- Electrical power lines and towers
- Communication towers
- Gas pipeline easements.

Notification and Revocation of Zone Boundaries:

Changes to the zone require approval of the Divisional Manager.



ZONE 7 NON-FORESTRY USE: MANAGEMENT GUIDELINES

Cleared land maintained in that state for a specific use of the area.

Activities Table: Zone 7 Non-Forestry use.

ACTIVITIES NOT PERMITTED	ACTIVITIES PERMITTED WITH STANDARD CONDITIONS	ACTIVITIES PERMITTED WITH SPECIAL CONDITIONS
<ul style="list-style-type: none"> <li>• Activities that conflict with the specific non-forest use of the site.</li> </ul>	<ul style="list-style-type: none"> <li>• Activities that don't conflict with the specific non-forest use of the site.</li> </ul>	



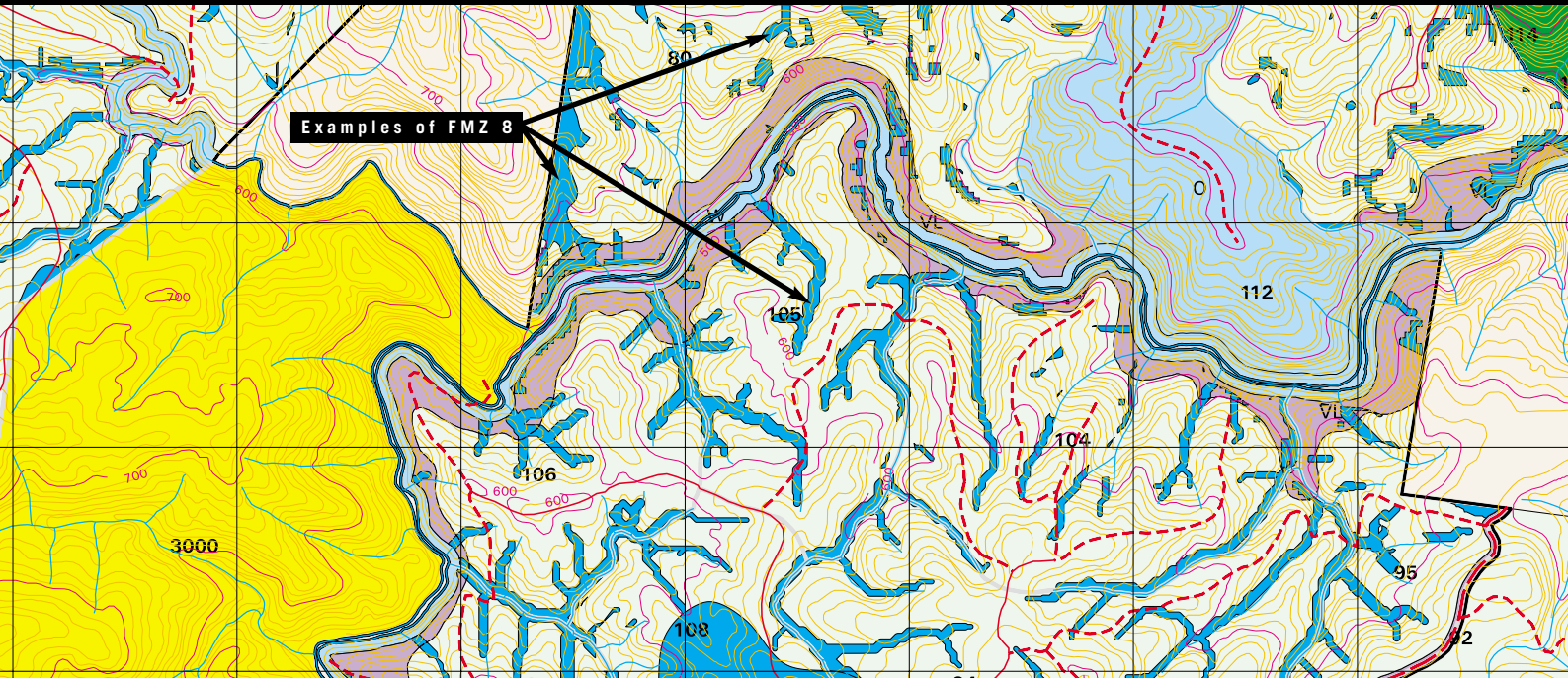
ZONE 8 – AREAS FOR FURTHER ASSESSMENT

An interim zoning of areas where field investigation is required to determine final Forest Management Zone classification. Field investigation will be undertaken as part of pre harvest planning.

These areas require field validation before allocation to a specific Forest Management Zone and are:

- I. Areas where there are gaps and/or known or suspected errors in 'forest type' or 'growth stage' GIS data layers.
- II. Areas of modelled GIS data where field verification is required to accurately map the features.

The corrected information will be mapped onto the harvesting plan, updated in the GIS data layers and then used to classify the area into the appropriate Forest Management Zone.



ZONE 8 MANAGEMENT GUIDELINES

Management will be for protection under the same requirements as FMZ 3A until field investigation allows determination of final FMZ classification.









C A T E G O R I E S   O F   S P E C I A L   V A L U E S

There are twelve **Special Values** that can be grouped into three categories:

NATURAL VALUES		CULTURAL VALUES		FOREST USE VALUES	
O	High Conservation Value Old Growth	I	Indigenous	T	Tourism/Recreation
R	Rainforest	H	Historical (Non indigenous)	E	Education
N	Natural Feature			S	Scientific Research
F	Flora			V	Visual Aesthetics
W	Wildlife (fauna)			C	Catchment



A P P L I C A T I O N S   O F   S P E C I A L   V A L U E S

The two applications of special values are described below and their utilisation in the various zones is illustrated in Table 1.

In the first application the special value *may* be attached to a Forest Zone classification to indicate the broad dominant values associated with a particular zone<sup>11</sup>. This may indicate the general nature of a reserve or to identify that the zone has a special value requiring additional management prescriptions.

- Zones 1 and 2 will always be identified with the dominant or most significant Special Value of the area to give a broad indication of the reason for creating each 'reserve'. Although there will almost always be more than one special value present in these areas the purpose of this system is to provide a simple

and very broad appreciation of the management intent of the reserves. There may be occasions to use two special values to identify these zones, however no more than two special values should be used.

- Zone 3 will always have at least one special value. In this case the special value identifies an area where additional management prescriptions (beyond the standard State Forests prescriptions) will apply. The specific additional prescription will be recorded with the zoning proposal and approval.
- Other zones may be identified by zone alone or by zone and one (or two) special values.

In the second application the special value classification identifies where specific special value sites are located within State

forests. In these cases the special value is specifically attached to the actual sites, irrespective of the zone in which it occurs. This application is most commonly used when applied to cultural values.

- For example, an area, identified by any Zone (1 to 7) and a forest uses value "C (catchment)", say Zone 3C, may have one or more non-indigenous cultural heritage sites located within it. In the FMZ system each site is specifically identified and classified "H" but such occurrence is not reflected in the classification of the broad management zone (Zone 3C).

<sup>11</sup> Specific details of all values within an area are recorded in State Forests' databases, compartment histories and specific reports.



Table 1 Application of Special Values Across Forest Management Zones.

	Special Values												
	NATURAL					CULTURAL		FOREST USES					
	Natural Feature	High Conservation Value	Old Growth	Rainforest	Flora	Wildlife (Fauna)	Indigenous Cultural Heritage	Non-Indigenous Cultural Heritage	Scientific Research	Visual Aesthetics	Catchment	Tourism Recreation	Education
	ZONE	N	O	R	F	W	I	H	S	V	C	T	E
1	Special Protection	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	1	1
2	Special Management	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	Special Prescription				2	2	✓	✓	✓	✓	✓	✓	✓
4	General Management						✓	✓	✓	✓	✓	✓	✓
5	Hardwood Plantation				3	3	✓	✓	✓	✓	✓	✓	✓
6	Softwood Plantation				3	3	✓	✓	✓	✓	✓	✓	✓
7	Non Forest Use						✓	✓	✓	✓	✓	✓	✓

<sup>1</sup> A new Zone 1 Special Protection would not usually be created for these special values.

<sup>2</sup> In exceptional circumstances these special values may be applied in Zone 3.

<sup>3</sup> May be used where natural vegetation is retained within plantation areas.

☐ These natural values are managed by prescription and would not usually require special value classification within these zones



## Natural Values

### F (Flora):

Flora of specific value or significance.

### O (High Conservation Value Old Growth):

Identified for protection in the RFA outcomes.

### R (Rainforest):

Rainforest identified for protection in the RFA outcomes.

### W (Wildlife):

Fauna or habitat of particular value or significance.

### N (Natural Feature):

Non-forest attributes such as geological and landform features or wetlands, for example, warranting management recognition and/or protection.

## Cultural Values

### I (Indigenous Cultural Heritage):

Broad areas where Indigenous Cultural Heritage issues significantly modify management.

- Specific site locations *are not included* in the Forest Management System (Site locations are maintained by National Parks and Wildlife Service in their Aboriginal Sites Register and a subset accessed through State Forests' GIS.)



### H (Non-indigenous Cultural Heritage):

All sites of non-indigenous exploration and settlement recognised to be of local or regional historical significance.

## Forest Use Values

### S (Scientific Research):

All sites of current long-term research, which require management consideration.

These are listed in State Forests Research Register, Special Purpose Permits, Permanent Growth Plot Register and Environmental Impact Statement and other environmental reports.

### V (Visual Aesthetics):

Aesthetic areas of known public sensitivity especially forested skylines that are visible from population centres, well-used major roads, or other vantage points where management practices need to be modified to protect landscape values

### C (Catchment):

Catchments in which manage-



ment practices need (or may be perceived to need) to be modified to provide additional protection to water quality and/or yield.

Examples include areas forming significant parts of catchments for domestic, industrial or aquaculture (e.g. trout farms) water supplies, wetlands or other

sensitive, high conservation-value aquatic systems.

### T (Tourism/Recreation):

Sites with established recreation facilities or sites planned and suitable for development requiring additional management to protect the inherent values.

Such sites commonly have easy and reliable access and proximity to sites of natural beauty (e.g. waterways, waterfalls, scenic vantage-points, or areas with outstanding vegetation features). Management provides amenities such as picnic tables, barbecues, forest drives, walking trails, water supply and toilets and understorey clearing and grassed areas.

It is not intended that broader recreational use of the forest, say,



general driving, walking and riding be included in this classification.

### E (Education):

Sites used to demonstrate forest values, ecologically sustainable forest management, and to promote forest management awareness.

These cover areas used by schools or other education groups near high population centres or field study centres, on relatively easy terrain with reliable access for large groups, or contain special attributes for demonstrating cultural heritage, forest values or forest practices.



# APPENDIX 1 – IUCN PROTECTED AREA CATEGORIES

The definition of “Protected Area” as defined by the International Union for the Conservation of Nature is:

*An area of land and/or sea especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means.*<sup>12</sup>

## Category Ia

Strict Nature Reserve:  
protected areas managed  
mainly for science.

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Areas of land and/or sea  
possessing some outstanding  
or representative ecosystems,  
geological or physiological fea-  
tures and/or species, available  
primarily for scientific research  
and/or environmental monitoring.

## Category Ib

Wilderness Area: protected  
area managed mainly for  
wilderness protection.

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Large areas of unmodified land,  
or slightly modified land, or  
land and water, retaining their  
natural character and influence,  
without permanent or significant  
habitation, which are protected  
and managed so as to preserve  
their natural condition.

## Category II

National Park: protected  
area managed mainly  
for ecosystem protection  
and recreation

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Natural area of land and/or  
sea, designated to (a) protect  
the ecological integrity of one  
or more ecosystems for this and  
future generations, (b) exclude  
exploitation or occupation  
inimical to the purposes of  
designation of the area and (c)  
provide a foundation for spiritual,  
scientific, educational, recre-  
ational and visitor opportunities,  
all of which must be environmen-  
tally and culturally compatible.

## Category III

Natural Monument:  
protected area managed  
mainly for conservation of  
specific natural features.

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Areas containing one, or more  
specific natural or natural/cultural  
features which are of outstanding  
or unique value because of its  
inherent rarity, representative  
of aesthetic qualities or cultural  
significance.

## Category IV

Habitat/Species  
Management Area:  
protected area managed  
mainly for conservation  
through management  
intervention

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Area of land and/or sea subject  
to active intervention for  
management purposes so as  
to ensure the maintenance of  
habitats and/or to meet the  
requirements of specific species.

## Category V

Protected Landscape/  
Seascape: protected area  
managed mainly for land-  
scape/seascape conservation  
and recreation.

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An area of land, with coast  
and sea as appropriate, where  
the interaction of people and  
nature over time has produced  
an area of distinct character  
with significant aesthetic,  
ecological and/or cultural values,  
and often with high biological  
diversity. Safe guarding the

integrity of this traditional inter-  
action is vital to the protection,  
maintenance and evolution of  
such an area.

## Category VI

Managed Resource  
Protected Area: protected  
area managed mainly for  
the sustainable use of  
natural ecosystems.

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Areas containing predominantly  
unmodified natural systems,  
managed to ensure long term  
protection and maintenance of  
biological diversity, while providing  
at the same time a sustainable  
flow of natural products and ser-  
vices to meet community needs.

<sup>12</sup> Guidelines for Protected Area Management  
Categories IUCN Commission on National Parks  
and Protected Areas with the assistance of the  
World Conservation Monitoring Centre. 1994



The criteria, which should influence reserve design, include:

- Boundaries should be set in a landscape context with strong ecological integrity, such as catchments;
- Large reserved areas are preferable to small reserved areas, though a range of reserve sizes may be appropriate to adequately sample conservation values;
- Boundary-area ratios should be minimised and linear reserves should be avoided where possible except for riverine systems and corridors identified as having significant value for nature conservation;
- Reserves should be developed across the major environmental gradients if feasible, but only if these gradients incorporate key conservation attributes which should be incorporated in the CAR system;



- Each reserve should contribute to satisfying as many reserve criteria as possible;
- Reserve design should aim to minimise the impact of threatening process, particularly from adjoining areas;
- Reserves should be linked through a variety of mechanisms, wherever practicable, across the landscape.

Reservation alone will not ensure conservation of biodiversity or other natural and cultural values,

and active management is required to ameliorate threatening processes and ensure that the reserve system retains the biodiversity and other values, including old-growth forest, for which it was established. Such management may involve the use of specific fire regimes, and even managed disturbance or selective reduction of certain populations. Extensively depleted forest ecosystems may need to be included in reserves and rehabilitated to ensure the primary criteria of comprehensiveness is achieved. Species and forest ecosystems recognised as endangered and vulnerable may require priority management action, such as development of recovery plans. Recognising the dynamic nature of forest ecosystems, and the inevitability of incremental loss of reserved old growth through wildfire and other natural processes, old growth values will need to be maintained by appropriate management strategies across the forest estate as a whole.

Reserves will require significant funding for establishment and ongoing management including the costs associated with data acquisition and monitoring of management performance.


Modifications to reserve design will be required through time as new values are identified and programs monitoring the effectiveness of established reserves identify deficiencies in reserve design and management. Monitoring programs should enable appropriate reporting of the effectiveness of the establishment and success of the CAR reserve system.

<sup>13</sup> An extract from "Nationally Agreed Criteria for the Establishment of a Comprehensive, Adequate and Representative Reserve System for Forests in Australia. A Report by the ANZECC/MCFFA National Forest Policy Statement Implementation Sub-committee. 1997



## APPENDIX 3 – SPECIFIC FMZ 2 AREAS WITHIN UNE/LNE CRA REGIONS requiring joint Ministerial agreement before boundaries can be changed.

Areas, negotiated in the CRA, in which any revocation or alterations to boundaries require joint agreement of the Minister for the Environment, the Minister for Planning, the Minister for Forestry and the Minister for Mineral Resources:

CRA REGION	STATE FOREST NUMBER	STATE FOREST NAME	COMPARTMENT NUMBER	AREA (HA)		CRA REGION	STATE FOREST NUMBER	STATE FOREST NAME	COMPARTMENT NUMBER	AREA (HA)
UNE	15	'DOUBLEDUKE'	147	630.1		LNE	911	'DOYLES RIVER'	232	105.5
UNE	19	'GIBBERAGEE'	123	324		LNE	911	'DOYLES RIVER'	233	200.7
UNE	19	'GIBBERAGEE'	124	291.4		LNE	911	'DOYLES RIVER'	247	24.6
UNE	303	'GIRARD'	35	85.4		LNE	911	'DOYLES RIVER'	249	144.9
UNE	303	'GIRARD'	38	4.4		LNE	911	'DOYLES RIVER'	250	105.4
UNE	303	'GIRARD'	40	90.6		LNE	911	'DOYLES RIVER'	251	110.3
UNE	303	'GIRARD'	41	80.1		LNE	911	'DOYLES RIVER'	252	95.8
UNE	303	'GIRARD'	42	109.3		LNE	911	'DOYLES RIVER'	254	124.8
UNE	303	'GIRARD'	47	88.8		LNE	911	'DOYLES RIVER'	256	97
UNE	303	'GIRARD'	59	66.3		LNE	911	'DOYLES RIVER'	257	91.6
UNE	303	'GIRARD'	60	34.8		LNE	911	'DOYLES RIVER'	258	12.2
UNE	303	'GIRARD'	61	45.5		LNE	911	'DOYLES RIVER'	259	1.9
UNE	303	'GIRARD'	62	4.3		LNE	911	'DOYLES RIVER'	260	144.4
UNE	535	'ORARA WEST'	818	292.9		LNE	911	'DOYLES RIVER'	61	134.1
UNE	662	'KEYBARBIN'	393	348.90		LNE	911	'DOYLES RIVER'	262	89.8
UNE	662	'KEYBARBIN'	394	309.2		LNE	911	'DOYLES RIVER'	263	135.5
UNE	662	'KEYBARBIN'	395	295.3		LNE	911	'DOYLES RIVER'	269	136.4
UNE	662	'KEYBARBIN'	396	335.1		LNE	911	'DOYLES RIVER'	270	128
UNE	662	'KEYBARBIN'	397	342.5		LNE	911	'DOYLES RIVER'	271	171.9
UNE	815	'BILLILIMBRA'	666	300.2		LNE	911	'DOYLES RIVER'	272	112.6
UNE	815	'BILLILIMBRA'	677	188.7		LNE	911	'DOYLES RIVER'	273	171.9
UNE	815	'BILLILIMBRA'	678	179.4		LNE	911	'DOYLES RIVER'	1138	194.6
UNE	815	'BILLILIMBRA'	679	83.8		LNE	911	'DOYLES RIVER'	1139	203
UNE	845	'EWINGAR'	670	261.7		LNE	911	'DOYLES RIVER'	1147	205.5
UNE	845	'EWINGAR'	676	133.3		LNE	911	'DOYLES RIVER'	1148	84.2
UNE	845	'EWINGAR'	684	344.9		LNE	911	'DOYLES RIVER'	1149	55.1
LNE	32	'YARRAHAPINNI'	486	138.3		LNE	911	'DOYLES RIVER'	1150	73.9
LNE	32	'YARRAHAPINNI'	494	92.4		LNE	911	'DOYLES RIVER'	1151	87.6
LNE	32	'YARRAHAPINNI'	495	158.1		LNE	911	'DOYLES RIVER'	1152	118.1
LNE	32	'YARRAHAPINNI'	496	73.4		LNE	911	'DOYLES RIVER'	1153	59.5
LNE	32	'YARRAHAPINNI'	499	96.3		LNE	911	'DOYLES RIVER'	1155	112.4
LNE	32	'YARRAHAPINNI'	500	107.1		LNE	911	'DOYLES RIVER'	1160	3
LNE	470	'WAY WAY'	483	139.9		LNE	911	'DOYLES RIVER'	1161	139.1
LNE	470	'WAY WAY'	484	171.7		LNE	911	'DOYLES RIVER'	1162	115.8
LNE	470	'WAY WAY'	485	140.1		LNE	911	'DOYLES RIVER'	1163	95.7
LNE	470	'WAY WAY'	486	8		LNE	911	'DOYLES RIVER'	1164	75.9
LNE	470	'WAY WAY'	487	152.8		LNE	911	'DOYLES RIVER'	1165	97.3
LNE	470	'WAY WAY'	488	114.3		LNE	911	'DOYLES RIVER'	1166	62.4
LNE	470	'WAY WAY'	489	151.3		LNE	911	'DOYLES RIVER'	1167	135.8
LNE	470	'WAY WAY'	494	91.5		LNE	911	'DOYLES RIVER'	1214	146.1
LNE	470	'WAY WAY'	496	104.4		LNE	911	'DOYLES RIVER'	1238	99.4
LNE	470	'WAY WAY'	497	84.5		LNE	911	'DOYLES RIVER'	1239	336.7
LNE	609	'OAKES'	402	385.9		LNE	911	'DOYLES RIVER'	1240	192.7
LNE	609	'OAKES'	403	212.2		LNE	911	'DOYLES RIVER'	1243	361.4
LNE	645	'BRASSEY'	1238	2.3		LNE	911	'DOYLES RIVER'	1244	268.1
LNE	645	'BRASSEY'	1261	4.8		LNE	911	'DOYLES RIVER'	1247	193.2
LNE	909	'CARRAI'	18	414		LNE	911	'DOYLES RIVER'	1248	96.6
LNE	909	'CARRAI'	20	257.6		LNE	911	'DOYLES RIVER'	1257	427.1
LNE	909	'CARRAI'	21	479		LNE	911	'DOYLES RIVER'	1258	258.2
LNE	911	'DOYLES RIVER'	229	121.2		LNE	911	'DOYLES RIVER'	1260	242.7
LNE	911	'DOYLES RIVER'	230	308.5		LNE	911	'DOYLES RIVER'	1261	502.8
LNE	911	'DOYLES RIVER'	231	134.9		LNE	911	'DOYLES RIVER'	1264	80.3

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