Government Gazette

OF THE STATE OF

NEW SOUTH WALES

Number 14

Friday, 8 January 2008

Published under authority by Government Advertising

LEGISLATION

Regulations

New South Wales

Native Vegetation Amendment (Miscellaneous) Regulation 2008

under the

Native Vegetation Act 2003

Her Excellency the Governor, with the advice of the Executive Council, has made the following Regulation under the *Native Vegetation Act 2003*.

PHILIP KOPERBERG, M.P.,
Minister for Climate Change, Environment and Water

Explanatory note

The object of this Regulation is to make further provision with respect to private native forestry property vegetation plans, the submission of draft property vegetation plans, routine agricultural management activities, minor variations of the *Private Native Forestry Code of Practice* and minor variations of the Assessment Methodology for broadscale clearing.

This Regulation is made under the *Native Vegetation Act 2003*, including sections 11, 15, 26 (2) (b), 28, 32 and 51 (the general regulation-making power).

Native Vegetation Amendment (Miscellaneous) Regulation 2008

under the

Native Vegetation Act 2003

1 Name of Regulation

This Regulation is the *Native Vegetation Amendment (Miscellaneous) Regulation 2008*.

2 Commencement

This Regulation commences on 8 February 2008.

3 Amendment of Native Vegetation Regulation 2005

The *Native Vegetation Regulation 2005* is amended as set out in Schedule 1.

Schedule 1 Amendments

(Clause 3)

[1] Clause 12 Information about PVPs and development consents

Omit clause 12 (1) (b). Insert instead:

(b) a statement of the area (expressed in hectares) of land:

(i) in the case of a private native forestry PVP—to which the PVP applies, or

(ii) in any other case—that is authorised to be cleared by the development consent or PVP concerned, and

[2] Clause 12 (6)

Omit the subclause. Insert instead:

(6) Subclauses (1) (c), (2) and (3) do not apply in relation to a private native forestry PVP.

[3] Clause 12B

Insert after clause 12A:

12B Consent for submission of draft PVPs

A forestry right within the meaning of section 87A of the *Conveyancing Act 1919* is prescribed as an interest in land for the purposes of section 26 (2) (b) of the Act.

[4] Clause 18A Infrastructure works by councils

Insert after clause 18A (1) (f):

(g) outdoor playgrounds, playing fields, netball courts, tennis courts, volleyball courts, basketball courts, swimming pools, skateboard ramps or similar outdoor recreation areas or facilities, that are normally open to the public, including any buildings that are ancillary to any such area or facility.

[5] Clauses 23A and 23B

Omit clause 23A. Insert instead:

23A Restrictions on RAMAs—land to which a private native forestry PVP applies (excluding critical environmental areas)

(1) This clause does not apply in respect of land within a critical environmental area.

(2) Despite any other provision of the Act or this Regulation, obtaining timber for use in the construction of rural infrastructure does not comprise a routine agricultural management activity on land to which a private native forestry PVP applies.

(3) Without limiting subclause (2) but subject to subclauses (1) and (4), the activities that comprise a routine agricultural management activity under section 11 (1) (a) of the Act are limited, in the case of land to which a private native forestry PVP applies, to the construction, operation or maintenance of the following types of rural infrastructure only, and are further limited so as to permit clearing only within the distances or areas specified:

(a) permanent boundary fence—6 metres either side,

(b) permanent internal fence—6 metres total width of clearing,

(c) roads and track—in accordance with the PNF code of practice,

(d) pipeline—3 metres total width of clearing,

(e) ground tank—15 metres from outer edge of structure,

(f) pumps—3 metres from outer edge of structure,

(g) tanks—3 metres from outer edge of structure,

(h) water point—3 metres from outer edge of structure,

(i) dam—15 metres from outer edge of structure,

(j) bore—10 metres from outer edge of structure,

(k) stockyard—20 metres from outer edge of structure.

(4) The Director-General may, by order in writing, on application by the landholder, increase a distance specified in this clause in its application to the land concerned, but only if the Director-General is satisfied that:

(a) the proposed increase is minor, and

(b) the proposed increase is for a legitimate purpose associated with the management of the land concerned, and

(c) the increase is necessary in the circumstances.

(5) The Director-General is to make details of any order issued under subclause (4) publicly available on a register kept by the Director-General for the purpose and is to include in the register a statement of the reasons for the authorisation or increase concerned.

(6) The distances and areas provided for by this clause are maximum distances and areas and do not affect the operation of section 22 of the Act which provides that clearing for routine agricultural management activities is not authorised if it exceeds the minimum extent necessary for carrying out the activity.

(7) In this clause, ***critical environmental area*** has the same meaning as it has in clause 29C (5).

23B Restrictions on RAMAs—land to which a private native forestry PVP applies (critical environmental areas only)

(1) This clause applies only in respect of land within a critical environmental area.

(2) Despite any other provision of the Act or this Regulation, obtaining timber for use in the construction of rural infrastructure does not comprise a routine agricultural management activity on land to which a private native forestry PVP applies.

(3) Without limiting subclause (2) but subject to subclauses (1) and (4), the activities that comprise a routine agricultural management activity under section 11 (1) (a) of the Act are limited, in the case of land to which a private native forestry PVP applies, to the operation or maintenance of the following types of rural infrastructure only, and are further limited so as to permit clearing only within the distances or areas specified:

(a) permanent boundary fence—6 metres either side,

(b) permanent internal fence—6 metres total width of clearing,

(c) roads and track—in accordance with the PNF code of practice,

(d) pipeline—3 metres total width of clearing,

(e) ground tank—15 metres from outer edge of structure,

(f) pumps—3 metres from outer edge of structure,

(g) tanks—3 metres from outer edge of structure,

(h) water point—3 metres from outer edge of structure,

(i) dam—15 metres from outer edge of structure,

(j) bore—10 metres from outer edge of structure,

(k) stockyard—20 metres from outer edge of structure.

(4) The Director-General may, by order in writing, on application by the landholder, authorise the clearing of land for the construction of the types of rural infrastructure specified in subclause (3),

within the areas or distances specified in subclause (3), but only if the Director-General is satisfied that:

(a) the proposed clearing is minor, and

(b) the proposed clearing is for a legitimate purpose associated with the management of the land concerned, and

(c) the clearing is necessary in the circumstances.

(5) The Director-General is to make details of any order issued under subclause (4) publicly available on a register kept by the Director-General for the purpose and is to include in the register a statement of the reasons for the authorisation or increase concerned.

(6) The distances and areas provided for by this clause are maximum distances and areas and do not affect the operation of section 22 of the Act which provides that clearing for routine agricultural management activities is not authorised if it exceeds the minimum extent necessary for carrying out the activity.

(7) In this clause, ***critical environmental area*** has the same meaning as it has in clause 29C (5).

[6] Clause 27 Special provisions for minor variation

Insert after clause 27 (2):

(2A) However, a variation to the Assessment Methodology in relation to the following aspects of the Assessment Methodology is allowable if an accredited expert is also of the opinion that the proposed clearing will have additional conservation benefits on a landscape scale:

(a) classification of the condition of vegetation,

(b) classification of the vegetation type or landscape type as overcleared,

(c) the assessment of the regional value of vegetation.

[7] Clause 27 (3A) and (3B)

Insert after clause 27 (3):

(3A) In determining that the proposed clearing will have additional conservation benefits on a landscape scale, an accredited expert must:

(a) provide reasons for the opinions of the accredited expert, and

(b) comply with any assessment protocols approved by the Minister for Climate Change, Environment and Water.

(3B) Any assessment protocol approved for the purposes of subclause (3) (b) or (3A) is to be published on the website of the Department of Environment and Climate Change.

[8] Clause 27 (4)

Insert in alphabetical order:

minor variation, in relation to the Assessment Methodology, includes, but is not limited to, a variation that involves or results in the reclassification of vegetation from "not of low condition" to "low condition" (as referred to in the Assessment Methodology).

[9] Clause 29A PNF code of practice

Omit "1 August 2007" from paragraph (b) of the definition of ***PNF code of practice***.

Insert instead "8 February 2008".

[10] Clause 29C Special provisions for minor variation

Omit clause 29C (1). Insert instead:

(1) This clause only applies in relation to a private native forestry PVP that has been approved by the Minister if more than 10% of the area to which the PVP applies (excluding any critical environmental area) consists of areas that are restricted areas.

[11] Clause 29C (2) (b1) and (b2)

Insert after clause 29C (2) (b):

(b1) the variation does not apply to an endangered ecological community or vulnerable ecological community within the meaning of the *Threatened Species Conservation Act 1995*, and

(b2) the variation does not apply to canopy openings (as determined in accordance with the PNF code of practice), and

[12] Clause 29C (5), definitions of "critical environmental area", "net harvestable area" and "restricted area"

Omit the definitions. Insert instead:

critical environmental area, in relation to a private native forestry PVP, means any of the following areas to which the PVP applies:

(a) riparian exclusion zones,

(b) old growth forest,

(c) rainforest,

(d) steep land (that is, land with a slope greater than 30 degrees).

restricted area, in relation to a private native forestry PVP, means that part of any of the following types of areas to which the PVP applies (other than any critical environmental area) that is not permitted to be cleared, or in which clearing is restricted, under the PNF code of practice:

(a) rocky outcrops and cliffs (as defined in the PNF code of practice),

(b) areas of existing mass movement (as defined in the PNF code of practice),

(c) exclusion zones (as set out in the listed ecological prescriptions in the appendix to each Part of the PNF code of practice),

(d) riparian buffer zones (as set out in the relevant tables in the PNF code of practice),

(e) caves, tunnels and disused mineshafts (excluding open pits less than 3 metres deep),

(f) endangered ecological communities (as set out in Part 3 of Schedule 1 to the *Threatened Species Conservation Act 1995*),

(g) vulnerable ecological communities (as set out in Part 2 of Schedule 2 to the *Threatened Species Conservation Act 1995*),

(h) areas containing Aboriginal objects or Aboriginal places (within the meaning of the *National Parks and Wildlife Act 1974*),

(i) areas containing items identified as heritage items in an environmental planning instrument.

Native Vegetation Amendment (Miscellaneous) Regulation 2008

For the purposes of clause 29 A of the *Native Vegetation Amendment Miscellaneous Regulation 2008* the *Private Native Forestry Code of Practice* is the following document:

A. Private Native Forestry Code of Practice for Northern NSW
B. Private Native Forestry Code of Practice for Southern NSW
C. Private Native Forestry Code of Practice for the River Red Gum Forests
D. Private Native Forestry Code of Practice for Cypress and Western Hardwood Forests

A

Private Native Forestry Code of Practice

Private Native Forestry Code of Practice for Northern NSW

Department of **Environment & Climate Change** NSW

Published by:
Department of Environment and Climate Change NSW
59–61 Goulburn Street, Sydney
PO Box A290, Sydney South 1232
Ph: (02) 9995 5000 (switchboard)
Ph: 131 555 (environment information and publications requests)
Ph: 1300 361 967 (national parks information and publications requests)
Fax: (02) 9995 5999
TTY: (02) 9211 4723
Email: info@environment.nsw.gov.au
Website: www.environment.nsw.gov.au

DECC 2008/37
ISBN 978 1 74122 719 2
February 2008
Printed on recycled paper

Contents

Tables and figures

Introduction

The object of this Private Native Forestry Code of Practice (the 'Code') is to ensure the supply of timber products from privately owned forests at a regular rate that can be maintained indefinitely for present and future generations, while at the same time maintaining non-wood values at or above target levels considered necessary by society for the prevention of environmental harm and the provision of environmental services for the common good.

'Northern NSW' means that part of the state north of the latitude of Sydney: 33^0 52' 02.71 S. These Code prescriptions apply to all forests in Northern NSW except those that meet the definitions of either River Red Gum Forests or Cypress and Western Hardwood Forests.

Assessment of broadscale clearing for private native forestry

Under the Code, broadscale clearing for the purpose of private native forestry improves or maintains environmental outcomes if:

- it complies with the requirements of this Code
- any area cleared in accordance with the Code is allowed to regenerate and is not subsequently cleared, except where otherwise permitted by this Code.

Note: A landowner may seek development consent to undertake private native forestry (PNF) outside the provisions of the Code under the *Native Vegetation Act 2003* (NV Act).

Minor variation of Code

If, when preparing a Forest Operation Plan under the Code, the projected impact on the net harvestable area is greater than 10%, a landholder can request an accredited expert to examine the Forest Operation Plan and determine if it is appropriate to modify the environmental prescriptions of the Code in a specified manner.

A private native forestry Property Vegetation Plan (PVP) may modify in a specified manner the environmental prescriptions of the Code if an accredited officer is satisfied that:

(1) the variation of the environmental prescriptions is minor

(2) the proposed clearing will improve or maintain environmental outcomes

(3) strict adherence to the Code is in the particular case unreasonable and unnecessary.

The Code

1. Property Vegetation Plans

(1) Before any forestry operations commence on private land, a Property Vegetation Plan (PVP) under the NV Act must be approved by the Minister for Climate Change, Environment and Water.

(2) Forest operations under an approved PVP must be conducted in accordance with all provisions of this Code.

(3) For the purpose of preparing a PVP, the Department of Environment and Climate Change (DECC) will provide available digital information on landscape features (as identified in Table C) and any drainage features (as identified in Table F).

2. Forest operation planning and management

2.1 Forest Operation Plan

(1) A Forest Operation Plan must be prepared before forest operations commence.

(2) A Forest Operation Plan must be in an approved form and consistent with the provisions of this Code and the requirements of the Listed Species Ecological Prescriptions for Northern NSW Forests, which are set out in the Appendix to this Code.

(3) The landowner and anyone else carrying out forest operations must read, sign and date the Forest Operation Plan.

(4) A copy of the Forest Operation Plan must be available on-site when forest operations are occurring.

(5) A Forest Operation Plan must contain the following:

(a) A map (or maps) showing:

(i) the location and boundaries of the area in which harvesting and/or other forest operations will occur

(ii) recorded locations of any populations or endangered ecological communities listed under the schedules of the *Threatened Species Conservation Act 1995* and species in the Listed Species Ecological Prescriptions for Northern NSW Forests, which are set out in the Appendix to this Code

(iii) the location of landscape features as listed in Table C and drainage features as listed in Table F

(iv) the indicative location of existing and proposed roads and drainage feature crossings

(v) the indicative location of log landings and portable mill sites

(vi) the classification of the forest area into one or more of the broad forest types listed in Table A, and

(b) A written component that provides:

(i) details of ownership of the land

(ii) a description of the broad forest types (including overstorey species composition, disturbance history and current condition of the forest)

(iii) the estimated stand height and basal area for each broad forest type

(iv) details of forest access, including any necessary construction, upgrading or maintenance of forest roads and drainage feature crossings

(v) details of harvesting and/or other proposed forest operations

(vi) details of flora and fauna management actions

(vii) details of tree marking activities (where applicable)

(viii) details of activities to promote regeneration

(ix) details of relevant silvicultural treatments that may be carried out as part of the Forest Operation Plan.

(6) The landowner may amend the Forest Operation Plan at any time, except for matters referred to in clause 2.1(5)(b)(iii). Any amendments to either the map or the written component must be noted on the Forest Operation Plan.

(7) The landowner must retain each Forest Operation Plan, including any amendments, for the life of the PVP or for three years after completion of the harvesting operations for which it was prepared, whichever is the later date.

(8) The landowner must provide the Forest Operation Plan, including any amendments, to an authorised officer from the Department of Environment and Climate Change if requested to do so.

2.2 Reporting

(1) The landowner must lodge a report with the Department of Environment and Climate Change by 31 March each year if:

(a) forest operations have been carried out on the land to which the PVP applies in the previous calendar year, or

(b) in the current calendar year:

(i) it is intended to carry out forest operations in the next 12 months, or

(ii) forest operations have been carried out.

(2) If forest operations have been carried out on the land to which the PVP applies in the previous calendar year, the report must specify:

(a) the approximate volumes of the timber products harvested

(b) the approximate number of hectares on which forest operations occurred

(c) the silvicultural treatments that were applied during that period.

3. Silvicultural operations

3.1 Single tree selection and thinning

(1) Single tree selection and thinning operations must not reduce the stand basal area below the limits specified in Table A.

(2) The **minimum** stand basal areas in Table A are to be calculated in accordance with the *Silvicultural Guidelines for the Code of Practice for Private Native Forestry* prepared by the Department of Environment and Climate Change and available at www.environment.nsw.gov.au/pnf.

Table A: Minimum stand basal areas for single tree selection and thinning operations

Broad forest type	Stand height (< 25 metres)	Stand height (≥ 25 metres)
Tablelands hardwood	12 m^2/ha	16 m^2/ha
Tablelands ash	12 m^2/ha	16 m^2/ha
Spotted gum	12 m^2/ha	16 m^2/ha
North coast dry mixed hardwood	12 m^2/ha	16 m^2/ha
North coast moist mixed hardwood	12 m^2/ha	16 m^2/ha
North coast flooded gum	12 m^2/ha	18 m^2/ha
North coast blackbutt	14 m^2/ha	18 m^2/ha

3.2 Australian Group Selection

(1) Harvest operations that result in canopy openings must conform with the following requirements:

(a) the sum of canopy openings must at no time exceed 20% of the net harvestable area

(b) the maximum width of a canopy opening must not exceed twice the stand height

(c) the minimum distance between canopy openings must not be less than twice the stand height.

(2) A **canopy opening** is an area greater than 0.1 hectares in size, measured between canopy perimeters, where any vegetation remaining within the opening is less than one-half of the stand height.

Note: For the purposes of selecting an appropriate silvicultural management regime, reference should be made to the *Silvicultural guidelines for the Code of Practice for Private Native Forestry* prepared by the Department of Environment and Climate Change and available at www.environment.nsw.gov.au/pnf.

Note: This provision:
(1) uses stand basal area as a simple tool to determine disturbance thresholds
(2) establishes harvesting limits to both maintain forest biodiversity values and manage forests while considering appropriate silvicultural practices.

3.3 Regeneration and stocking

(1) The minimum stand stocking (as determined by the percentage of stocked plots specified in Table B) must be achieved within 24 months of a regeneration event.

(2) In this clause, **regeneration event** is a harvesting or thinning operation.

(3) A harvesting operation must not occur in a previously harvested area until stocking levels meet the minimum stocked plot requirements in Table B.

(4) The percentage of stocked plots is to be measured in accordance with the method for measuring plots for sampling and measuring stocking found in the Department of Environment and Climate Change's *Private Native Forestry Code of Practice Guideline No. 1: Guidelines for assessing regeneration and stocking* available at www.environment.nsw.gov.au/pnf.

(5) A landowner must comply with any requirements of the Director General of DECC for the purpose of regenerating or re-establishing the forest, if the minimum percentage of stocked plots has not been reached within a period of 24 months following a regeneration event.

Table B: Minimum percentage of stocked plots

Broad forest type	Within canopy openings	Elsewhere in the forest
Tablelands hardwood	50%	60%
Tablelands ash	55%	65%
Spotted gum	60%	70%
North coast dry mixed hardwood	50%	60%
North coast moist mixed hardwood	55%	65%
North coast flooded gum	55%	65%
North coast blackbutt	60%	70%

Note: Stocking is a measure of the occurrence and distribution of trees of any age throughout the forest. The simplest way to assess whether a forest is adequately stocked is to sample the level of stocking by measuring a number of plots. Plots will be found to be either stocked or unstocked. The percentage of stocked plots reflects the adequacy of stocking within the forest. Where stocking is found to be inadequate, regeneration will be required to meet the stocking requirements.

4. Protection of the environment

4.1 Protection of landscape features of environmental and cultural significance

(1) Forest operations in and adjacent to specified landscape features must comply with the requirements in Table C.

(2) Old growth will be identified according to the protocol approved by the Minister for Climate Change, Environment and Water available at www.environment.nsw.gov.au/pnf.

(3) Rainforest will be identified according to the protocol approved by the Minister for Climate Change, Environment and Water available at www.environment.nsw.gov.au/pnf.

Table C: Requirements for protecting landscape features

Landscape feature	Operational conditions
Endangered ecological communities listed in the *Threatened Species Conservation Act 1995* at the date the private native forestry PVP is approved by the Minister	Forest operations may only occur in endangered ecological communities as part of an approved Ecological Harvesting Plan approved by the Director General of the Department of Environment and Climate Change, except that existing roads may be maintained.
Endangered populations listed in the *Threatened Species Conservation Act 1995* at the date the private native forestry PVP is approved by the Minister	Forest operations must not result in any harm to an animal that is part of an endangered population, or result in the picking of any plant that is part of an endangered population, except that existing roads may be maintained.
Vulnerable ecological communities listed in the *Threatened Species Conservation Act 1995* at the date the private native forestry PVP is approved by the Minister	Forest operations must not occur in vulnerable ecological communities, except that existing roads may be maintained.
Rainforest	Forest operations must not occur within rainforest, except that existing roads may be maintained.
Old growth forest	Forest operations must not occur within old growth forest, except that existing roads may be maintained.
Wetlands	Forest operations must not occur in any wetland or within 20 metres of any wetland, except that existing roads may be maintained.
Heathland	Forest operations must not occur in any heathland or within 20 metres of heathland, except that existing roads may be maintained.
Rocky outcrops	Forest operations must not occur on any rocky outcrop or within 20 metres of a rocky outcrop, except that: • existing roads may be maintained • existing snig tracks may be used.
Cliffs, caves, tunnels and disused mineshafts (excluding open pits less than 3 metres deep)	Forest operations must not occur within 10 metres of cliffs, caves, tunnels or disused mineshafts, except that existing roads may be maintained.
Steep slopes	Forest operations must not occur on slopes greater than 30 degrees, except that: • existing roads and tracks may be maintained • new roads and tracks may be constructed subject to conditions in clause 5.1(18) of the Code.
Aboriginal object or place as defined in the *National Parks and Wildlife Act 1974*	Forest operations must not occur: • within 50 metres of a known burial site • within 20 metres of an Aboriginal scarred or carved tree • within 10 metres of a known Aboriginal object or place (this requirement does not apply to Aboriginal objects or places that may lawfully be destroyed).
Areas containing items identified as heritage items in an environmental planning instrument	Forest operations must not occur within 10 metres of a listed heritage site.
Areas of existing mass movement	Harvesting operations which create canopy openings must not occur within the area. Harvesting machinery must not enter the area. Existing roads may be maintained. New roads must not be constructed.
Dispersible and highly erodible soils	Existing roads may be maintained. Drainage feature crossings must be armoured with erosion-resistant material. Road batters and table drains must be stabilised using erosion-resistant material, vegetation or slash. Log landings must be stabilised using erosion-resistant

Landscape feature	Operational conditions
	material, vegetation or slash at the completion of forestry operations. Measures must be taken to immediately stabilise any erosion of roads or snig tracks.

4.2 Protection of habitat and biodiversity

(1) Habitat trees must be retained in accordance with Table D.

(2) Hollow bearing trees, recruitment trees, food resource trees, roost trees and nest trees are defined as habitat trees retained for the purposes of this Code.

(3) An individual tree may satisfy more than one condition in the tree retention standards (see Table D) if it has the appropriate characteristics.

(4) Retained habitat trees should, where possible, represent the range of species in mature and late mature growth stages.

(5) Habitat trees should, where possible, be evenly distributed throughout the area of harvesting operations and within the net logging area. Preference should be given to trees with well developed spreading crowns and minimal butt damage.

(6) For the purpose of this clause:

(a) A **hollow bearing tree** is a dominant or co-dominant living tree, where the trunk or limbs contain hollows, holes or cavities. Such hollows may not always be visible from the ground but may be apparent from the presence of deformities such as protuberances or broken limbs, or places where the head of the tree has broken off. If there are more than the minimum required number of habitat trees, preference shall be given to the largest. Trees that pose a health or safety risk may be removed and, where possible, substituted with other hollow bearing trees, and if not possible, by recruitment trees.

(b) **Dead standing** trees cannot be counted as hollow bearing trees.

(c) A **feed tree** is a tree that provides a source of nectar or other food for wildlife, and is listed in Table E.

(d) A **recruitment tree** is a large, vigorous tree capable of developing hollows to provide habitat for wildlife. Preference must be given to trees from the next cohort to that of retained hollow bearing trees.

(e) **Roost, nest** and **food resource trees** are defined as:

(i) trees with nests or roosts of any species of raptor, including powerful owls, barking owls, sooty owls and masked owls

(ii) trees which support maternity bat roosts

(iii) trees with recent V-notch incisions or other incisions made by a yellow-bellied glider or squirrel glider. Recent incisions are incisions less than two years old as evidenced by the fact the incision has not closed.

Table D: Minimum standards for tree retention

Trees that must be retained
• 10 hollow bearing trees per 2 hectares, where available. • One recruitment tree from the next cohort and representing the range of species in the forest before forest operations commenced must be retained for every hollow bearing tree. • Where the total number of hollow bearing trees is less than 10 trees per 2 hectares, additional recruitment trees must be retained to bring the total number of retained hollow bearing and recruitment trees up to 20 trees per 2 hectares. • Up to half of all required recruitment trees can be located in a riparian buffer zone where the subject 2-hectare area is within 200 metres of, and partly includes, that riparian buffer zone. • A minimum of 6 feed trees per 2 hectares should be retained where available. • All feed trees that have marks or 'V' notches from sap-feeding mammals must be retained. • All roost, nest or food resource trees must be retained.

Table E: Feed trees

White mahogany – *Eucalyptus acmenoides*, *E. umbra*, *E. carnea*	Spotted gum species – *Corymbia* spp.
Ironbark species – *E. ancophila*, *E. tetrapleura*, *E. ophitica*	Mountain gum – *E. dalrympleana*
Swamp mahogany – *E. robusta*	Manna gum – *E. viminalis*
Forest red gum – *E. tereticornis*	Needlebark stringybark – *E. planchoniana*
Bloodwood species – *Corymbia* spp.	Tindale's stringybark – *E. tindaliae*
Craven grey box – *E. largeana*	Red stringybark – *E. macrorhyncha*
Yellow box – *E. melliodora*	Fuzzy box – *E. conica*
White box – *E. albens*	Red ironbark – *E. fibrosa*
Grey ironbark – *E. paniculata*, *E. siderophloia*, *E. placita*, *E. fusiformis*	Mugga ironbark – *E. sideroxylon*
Grey box – *E. molucanna*	Caley's ironbark – *E. caleyi*
Narrow-leaved ironbark – *E. crebra*	Rudder's box – *E. rudderi*
Ferguson's ironbark – *E. fergusonii*	Steel box – *E. rummeryi*

4.3 Minimising damage to retained trees and native vegetation

(1) As far as practicable, forestry operations must not damage protected trees.

(2) Without detracting from subclause (1):

(a) debris must not be heaped around protected trees

(b) machinery operations must not harm protected trees

(c) directional felling techniques must be employed to avoid (as far as is practicable) damage to protected trees.

(3) In this clause **protected trees** are defined as:

(a) trees required to be retained under clause 4.2

(b) plants of the genus *Xanthorrhoea* (grass trees), genus *Allocasuarina* (forest oak) and genus *Banksia*

(c) other trees that are required to be retained by this Code.

4.4 Drainage feature protection

(1) Forest operations must not occur in riparian exclusion zones, other than in accordance with this clause, and except where otherwise allowed by this Code. For

the purpose of this clause, riparian exclusion zones are defined as those areas within the distances specified for 'Drainage feature', as listed in Table F.

Table F: Riparian exclusion and riparian buffer zones

Drainage feature	Riparian exclusion zone distance from drainage feature	Riparian buffer zone distance beyond riparian exclusion zone
Mapped first-order streams	5 metres	10 metres
Mapped second-order streams	5 metres	20 metres
Mapped third-order or higher streams	5 metres	30 metres
Prescribed Streams	20 metres	15 metres

For an explanation of stream order, see Figure 3 in the Appendix.

(2) Riparian buffer zones extend from the boundary of the riparian exclusion zone outwards away from the drainage feature for the distance specified in Table F. Limited forest operations may occur within riparian buffer zones subject to the following limitations:

(a) snig track construction is limited to the construction of one ridge line or spur snig track per ridge or spur

(b) machinery, using walkover techniques, may extract logs from any area within a riparian buffer zone

(c) all rainforest species and all hollow bearing trees are retained

(d) only 30% of the pre-harvest basal area can be removed in any ten-year period and the minimum basal area limit for the broad forest type set out in Table A is maintained within the riparian buffer zone

(e) felling is directed away from the drainage line/riparian exclusion zone

(f) any furrows resulting from log removal are treated to prevent concentration of water flow

(g) clearing and disturbance within the riparian buffer zone is minimised.

(3) For the purposes of Table F, stream order is determined according to the Strahler System, using the largest scale topographic map available for that area, and as published by the NSW Government. See Figure 3 in the Appendix for more information.

(4) The distance specified in Table F must be measured from the top edge of each bank and away from the incised channel or, where there is no defined bank, from the edge of the channel of each specified drainage feature.

(5) Where harvesting is occurring adjacent to riparian buffer zones, all tree felling should employ directional felling to minimise as far as practicable disturbance to vegetation within the riparian buffer zone.

(6) Where a tree cannot be felled into the area outside the riparian buffer zone using directional felling, it may be felled into the riparian buffer zone provided that not more

than 6 trees within any distance of 200 metres along the boundary of the riparian buffer zone enter the riparian buffer zone.

(7) Where a tree is felled into the riparian buffer zone, the crown must not be removed from the riparian buffer zone.

(8) Machinery exclusion zones must be applied to all unmapped drainage lines. For the purposes of this clause, machinery exclusion zones are areas within 10 metres of the top edge of the bank of any unmapped drainage line.

(9) Machinery using walkover techniques may operate in machinery exclusion zones. All other machinery must not enter machinery exclusion zones unless otherwise allowed to by this Code.

(10) Trees may be felled within machinery exclusion zones provided:

(a) felling is directed away from the drainage line

(b) any furrows resulting from log removal are treated to prevent concentration of water flow

(c) groundcover (including grasses, herbs and forest litter) is retained or groundcover similar to groundcover in the surrounding area is artificially reinstated.

(11) Harvesting machinery must not enter riparian exclusion zones, riparian buffer zones, or machinery exclusion zones other than in accordance with this clause, clauses 4.4(2), 4.4(9) and section 5.

(12) New roads may be constructed and old roads re-opened within riparian exclusion zones, riparian buffer zones and machinery exclusion zones provided that:

(a) the road is identified on the Forest Operation Plan

(b) the road prism crosses the riparian zones at right angles or as close to right angles as is practicable

(c) clearing and disturbance within the exclusion zone are minimised

(d) any other necessary permits have been obtained**.**

(13) If trees are accidentally felled into riparian exclusion zones, they may be removed from those zones if they contain a saleable log, provided that the crown is cut off the log at the boundary of the riparian exclusion zone and left where it has fallen, and that the log is recovered without any machinery being operated on the ground within the riparian exclusion zone. Such removal must result in minimal disturbance to the bed and banks of the drainage feature.

(14) Trees may be felled within unmapped drainage depressions, and machinery may enter unmapped drainage depressions. However disturbance must be minimised by:

(a) using walkover techniques wherever possible

(b) preventing skewing of machinery tracks as much as possible

(c) operating with the blade up at all times (except during crossing construction)

(d) not snigging along drainage depressions.

(15) Machinery must not operate in drainage depressions when the soil is saturated.

(16) Australian Group Selection logging systems must not be used within:

(a) any riparian exclusion zone

(b) any riparian buffer zone

(c) any machinery exclusion zone.

5. Construction and maintenance of forest infrastructure

5.1 Construction and maintenance of roads

(1) Clearing of native vegetation for the purpose of roads, drainage structures, log landings, mill sites, snig tracks or extraction tracks must not occur except in accordance with this Code, and the clearing must be limited to the minimum extent necessary.

(2) Construction of new roads and drainage feature crossings should be minimised as far as practicable, consistent with the requirements for management, harvesting and fire control in the Property Vegetation Plan area.

(3) As far as practicable, roads must be located on ridgetops or just off the crest of the ridge to facilitate outfall drainage.

(4) Clearing for road construction must be to the minimum extent necessary and should not be more than 3 metres from the outside edges of batters or table drains. If it is necessary to clear a wider area, a minimum of 70% groundcover must be established on all the cleared area beyond the road formation within one month of the date of construction.

(5) Trees and other debris must not be stacked in landscape features referred to in Table C or riparian exclusion zones or riparian buffer zones referred to in Table F.

(6) Any fill batter must be stabilised.

(7) Tree stumps or other woody debris must not be used to provide fill for road construction.

(8) New roads must be constructed, upgraded and maintained with a maximum grade of 10 degrees. The maximum grade may be increased to 15 degrees where it would result in an improved environmental outcome or to avoid difficult ground conditions. The Forest Operation Plan must be noted.

(9) Roads must be maintained according to Table G.

(10) Roads must be maintained to ensure that road surfaces remain stable and drainage systems and sediment controls remain functional.

(11) Soil exposure on road verges must be kept to a minimum.

(12) Roads that are not required for ongoing property management must be stabilised, drained and allowed to revegetate.

(13) Haulage must not be undertaken over any section of road where the surface has broken down, as evidenced by rutting more than 150 millimetres deep for any distance exceeding 20 metres.

(14) Haulage on natural surface roads must cease when there is runoff from the road surface, except for trucks that have already been loaded or partially loaded. These trucks can travel to their intended destination.

(15) Where existing roads are overgrown and require re-opening, the clearing width must be minimised to the extent required to make the road suitable for traffic.

(16) As far as practicable, grass cover must be maintained and disturbance to existing drainage structures must be minimised.

(17) Blading-off of roads must not occur.

(18) Sections of new roads may be constructed on ground slopes exceeding 25 degrees only if:

(a) there is no practical alternate route available, and

(b) the sections are designed by a suitably qualified person using currently acceptable engineering standards to ensure stability.

Table G: Maximum distance that water may travel along road surfaces and table drains

Road grade (degrees)	Maximum distance (metres)
0 to ≤ 3	150
> 3 to ≤ 5	100
> 5 to ≤ 10	60
> 10 to ≤ 15	40
> 15 to ≤ 20	30

5.1.1 Road drainage

(1) All reasonable steps must be taken to minimise soil erosion from roads. Accordingly, at least one of the following measures must be adopted, as appropriate in the circumstances:

(a) maintain vegetative cover (that is, plant material, living or dead) that protects the soil surface from erosion

(b) establish a grass cover using a sterile seed or native grass seed, where available

(c) crossfall-drain the road or track with outfall or infall drainage (preferably with the outward or inward slope being between 4% and 6%) or by shaping the road to a crown so water drains to both of its sides

(d) construct drainage structures to convey water away from the road formation (for example, cross drains, mitre drains or relief culverts).

(2) Any drainage structure must be designed to convey the peak flow from a 1-in-5-year storm event.

(3) Drainage structures must be established on a road if concentrated water flow on the road surface or table drains is likely to occur for distances exceeding the relevant spacing, as shown in Table G.

(4) Earth windrows resulting from road construction and upgrading operations must be removed from the shoulders of all roads unless they are specifically constructed to prevent erosion of fill batters or where infall drainage is used.

(5) Earth windrows from road maintenance must be cut through at regular intervals to ensure that water flow on road surfaces does not exceed the distances specified in Table G.

(6) Rollover banks must have a minimum effective bank height of 15 centimetres (consolidated). Spoon drains must have a minimum effective depth of 15 centimetres.

(7) Drainage structures must divert water onto a stable surface and must be kept free of debris that may impede flow of water.

(8) A drop-down structure and dissipater must be installed where drains divert water over an exposed fill batter more than 1 metre high.

5.1.2 Roads crossing drainage features

(1) Drainage feature crossings must be stable causeways, culverts or bridges. Existing gully stuffers may be used if they are stable, but new crossings of these types must not be constructed.

(2) Crossings must be designed, constructed and maintained to minimise disturbance to the passage of fish and other aquatic fauna. They must be located and constructed to cause minimum disturbance to stream banks, stream beds and natural flows. The base of the crossing must be made of erosion-resistant material such as rock, concrete or heavy timber and must conform to the natural level of the stream bed.

(3) Crossings must be constructed as close as practicable to right angles to the water flow unless an angled approach reduces soil and ground disturbance.

(4) Disturbance to the bed and banks of the drainage feature during crossing construction or maintenance must be minimised. Disturbed areas must be reshaped and stabilised as soon as possible following crossing construction or maintenance.

(5) Any approaches to a crossing over a drainage line must be drained, using a drainage structure, within 5 to 30 metres of the crossing. (Where this is impracticable, a drainage structure must be constructed as near as practicable to the crossing.)

(6) Permanent drainage crossing structures must be designed to convey a 1-in-5-year storm event and withstand a 1-in-10-year storm event. Bridges must be designed and constructed so the natural stream flow is not restricted and erosion is minimised.

(7) The surface of any crossing and the approaches on both sides of it must be made of stable material that is unlikely to be displaced during normal use of the crossing or approach or by any flood up to and including peak flow of a 1-in-10-year storm event.

(8) Causeways must be constructed of stable, non-soil material such as crushed gravel, rock, bitumen, concrete, logs or other stable material that is unlikely to produce water turbidity.

(9) Construction equipment must minimise disturbance or damage to the watercourse bed and banks. Fill and construction material must not be placed into watercourses, and surplus fill must be located outside the drainage feature exclusion zone. Stream banks and bridge embankments must be protected to minimise erosion.

(10) Soil stabilisation must be undertaken in all areas disturbed by crossing construction, upgrading or maintenance.

5.2 Log landings, portable mill sites and snig tracks

(1) Wherever practicable, log landings and portable mill sites must be located on ridge-tops or spurs.

(2) Log landings and portable mill sites must be no larger than the minimum size necessary for efficient operations.

(3) If topsoil is removed, it must be stockpiled and respread at completion of harvesting operations.

(4) Log landings and portable mill sites must be located and constructed as far as practicable to allow effective crossfall drainage during harvesting operations.

(5) Log landings and portable mill sites must not be located nearer than 10 metres to an exclusion zone or riparian buffer zone.

(6) Runoff from log landings and portable mill sites must not be directly discharged into a drainage feature.

(7) Vegetation and debris from log landings and portable mill sites must not be deposited in a riparian exclusion zone or riparian buffer zone.

(8) Woody waste and debris on log landings and portable mill sites must not be stacked against retained trees.

(9) Bark accumulated on log landings, and sawdust on mill sites, must be progressively dispersed away from the site during harvesting operations to prevent significant accumulations.

(10) On completion of operations, log landings and portable mill sites must be drained and reshaped to safely disperse runoff onto surrounding vegetation, and topsoil must be respread evenly over the landing.

5.2.1 Snig tracks and extraction tracks

(1) Snig track or extraction track construction must be minimised and, as far as practicable, walkover extraction must be used and slash retained on snig and extraction tracks.

(2) Soil disturbance and exposure on snig and extraction tracks must be minimised.

(3) As far as practicable, snig tracks from previous operations must be used.

(4) Old snig tracks or extraction tracks must not be used if they are incised and cannot be drained.

(5) In re-opening old snig tracks and extraction tracks, the use of blades should be restricted to the removal of obstructions such as understorey vegetation, logs/tree heads and surface rock, and ensuring that the track is adequately drained.

(6) Wherever practicable, snigging and timber extraction must be uphill.

(7) Snig tracks and extraction tracks must be located where they can be drained effectively, and should be located where there is sufficient natural crossfall to remove runoff from the track surface.

(8) Snig tracks and extraction tracks must not encroach on exclusion zones or riparian buffer zones except at designated crossings and where permitted by clause 4.4(2).

(9) Blading-off of snig tracks and extraction tracks must not occur.

(10) The grade of snig tracks must not exceed 25 degrees, except in the following circumstances:

(a) It will result in a better environmental outcome than construction and/or use of a side cut snig track to access the same area using a snig track of less than 25 degrees.

(b) The Forest Operation Plan is noted.

(c) The snig track can be effectively drained.

(d) The maximum grade is 28 degrees.

(e) The maximum combined length of the snig track exceeding 25 degrees, commencing from the serviced log landing, is not greater than 75 metres.

(11) Where downhill snigging is necessary, snig tracks and extraction tracks must enter the log landing from beside or below. Where this is not possible, a drainage structure must be installed at the entrance to the log landing at the end of each day's operations.

(12) Drainage must be incorporated as soon as practicable at the completion of operations on each extraction track or snig track, and in any event within two days, unless the soil is saturated.

(13) Temporary drainage must be installed on any snig or extraction track that will not be used for a period of five days or more.

(14) Track drainage structures must be located, constructed and maintained to divert water onto a stable surface which can handle concentrated water flow, and which provides for efficient sediment trapping.

(15) Snig tracks and extraction tracks must be located and constructed to ensure that water running along the track surface does not flow for longer than the distances specified in Table H. This could be achieved by one of the following techniques or a combination:

(a) retain the existing groundcover using walkover techniques

(b) retain or cover the track surface with slash and harvesting debris

(c) construct outfall drainage or maintain the track's outfall drainage

(d) construct track drainage structures.

Table H: Maximum distance that water may run along snig and extraction tracks

Track grade (degrees)	Maximum distance (metres)
0 to ≤ 5	100
> 5 to ≤ 10	60
> 10 to ≤ 15	40
> 15 to ≤ 20	25
> 20 to ≤ 25	20
> 25 to ≤ 28	15

(16) On completion of operations, the following measures must be implemented:

(a) where practicable, snig tracks and extraction tracks must be reshaped, all earth windrows, wheel ruts and log furrows removed, and recoverable topsoil spread back over the track, and

(b) crossfall drainage must be reinstated on snig tracks or, where this is not sufficient to divert runoff from the track, crossbanks must be installed consistent with the spacings in Table H.

(17) Crossbanks must be constructed to have a minimum effective height of 35 centimetres unconsolidated, or 25 centimetres consolidated, and as a guide should not be greater than 50 centimetres in height.

(18) Crossbanks must not be constructed of bark or woody debris.

5.2.2 Snig track and extraction track crossings on drainage features

(1) The location of log landings and snig/extraction tracks must be planned to minimise the number of crossings required.

(2) Snig track and extraction track crossings must be stable causeways (including natural surface causeways), culverts or bridges. Existing gully stuffers may only be used if they are stable. New crossings of this type must not be constructed.

(3) Machinery must not cross a drainage feature which is running water or when the soil is saturated, unless by means of a stable crossing.

(4) Approaches to crossings must be as close as possible to right angles to the flow of water.

(5) A crossbank must be installed on each approach, between 5 and 20 metres from the drainage feature crossing. The distance must be measured from the top of the bank of the incised channel or, where there is no defined bank, from the edge of the channel or centre of the depression. The drainage structure must divert water onto a stable surface. If such a surface is not available, sediment control measures must be used to prevent sediment entering the drainage feature.

(6) Disturbance to the bed and banks of the drainage feature must be minimised, and any spoil must be removed from the drainage feature.

(7) All areas disturbed during crossing construction and use, including approaches, must be rehabilitated following completion of use. Rehabilitation includes the reshaping of the crossing to conform as closely as possible to the original ground surface. If groundcover is not likely to recover naturally, sowing with a suitable sterile seed or endemic native seed/fertiliser mix must be undertaken to establish effective groundcover.

5.2.3 Wet weather limitations for snigging, log landing and portable mill operations

(1) Harvesting operations must not occur when:

(a) there is runoff from the snig track surface, or

(b) soils are saturated, or

(c) soil is rutted to a depth of more than 200 millimetres below the track surface over a 20-metre section or longer.

(2) Forest operations involving machinery disturbance must not occur within the Northern Rivers Catchment Management Authority area as follows:

(a) during the months of December, January, February and March, and

(b) where the annual Rainfall Erosivity is equal to, or greater than, 6000, and

(c) where groundslopes are equal to, or greater than, 20 degrees.

(3) Forwarders, excavators and truck-mounted loaders may be used as stationary loaders when there is runoff from the log landing.

(4) All other machinery on the log landing must remain stationary when there is runoff from the log landing surface, unless the log landing is constructed of gravel or other stable material.

Appendix:
Listed species ecological prescriptions

Introduction

These prescriptions must be applied within the forest operations area where there is a **known record** or **site evidence** of a threatened species. A known record is a sighting or record of the species in the NSW Wildlife Atlas available at www.wildlifeatlas.nationalparks.nsw.gov.au. Site evidence is a sign a species has visited or regularly uses a site, and includes observations of, for example, faecal pellets or scats, chewed seed cones or a nest, or evidence that the site has been used as a latrine.

A list of threatened species under the *Threatened Species Conservation Act 1995* and species profiles for each species can be viewed on the Department of Environment and Climate Change (DECC) website at www.threatenedspecies.environment.nsw.gov.au.

The prescriptions set out below assist in the protection of threatened species, and include:

(1) additional widths to stream exclusion zones

(2) exclusion zones around locations of threatened species records

(3) additional tree retention requirements around locations of threatened species records.

Exclusion zones and buffer zones requiring additional tree retention requirements must be applied within the Property Vegetation Plan (PVP) area subject to the Forest Operation Plan.

Wildlife Atlas records that trigger these prescriptions are those less than 20 years old which have a reliability level of 1 to 5. Records in an adjoining protected area of public land (for example, in State Forests or National Parks) can be ignored if it can be demonstrated that the species has been protected and the conditions of the relevant Threatened Species Licence or Integrated Forestry Operation Agreement have been met.

Some species prescriptions vary according to the region in which they occur. Unless otherwise stated, the regions referred to in the prescriptions are based on the catchments administered by Catchment Management Authorities (CMAs) shown in Figure 1.

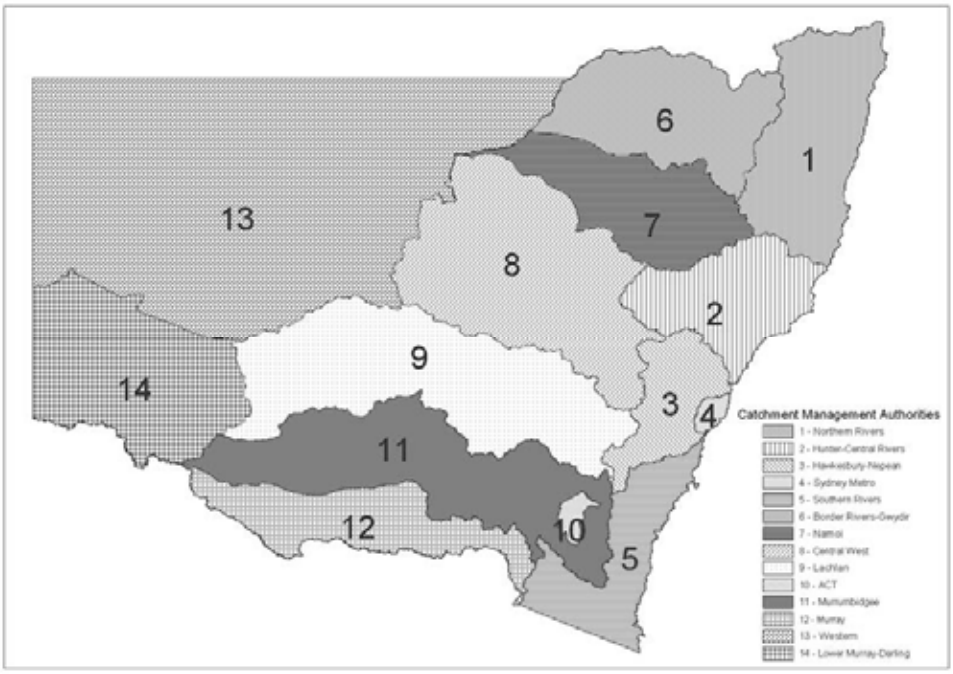


Figure 1: Catchment Management Authority (CMA) areas where prescriptions for some threatened species may vary

Further information about individual threatened species may be sourced from DECC. The DECC website provides species profiles and additional information. Visit www.environment.nsw.gov.au and www.threatenedspecies.environment.nsw.gov.au.

General conditions

For all threatened species prescriptions, the following applies:

- Where a retained eucalypt tree (as required by these prescriptions) also meets the requirements of a habitat tree, the eucalypt tree may be counted as a habitat tree.
- Where other exclusion zones form part of the habitat area required for threatened species prescriptions, the exclusion zones may count towards the area of habitat required to be retained.
- Buffer and exclusion zones are to be marked in the field where they adjoin the area, subject to forest operations. This marking has to be visible while forestry operations are occurring.

Amphibians

Green and golden bell frog (*Litoria aurea*)

CMAs for application of prescription
Hawkesbury–Nepean, Hunter–Central Rivers, Northern Rivers and Sydney Metro

Prescription

(a) Where there is a record of a green and golden bell frog in an area of forest operations or within 50 metres of the boundary of the area of forest operations, an exclusion zone with at least a 50-metre radius must be implemented around the location of the record.

(b) In addition, where the record is associated with a wetland or dam, a 20-metre-wide exclusion zone must be implemented around the wetland or dam.

(c) The exclusion zone around wetlands must be measured from the edge of the current saturated area, or from the outer edge of where the vegetation type indicates a wetter micro-environment than the surrounding country, whichever is larger.

(d) The exclusion zone around dams must be measured from the top water level.

Additional information
Distribution: The frog occurs from Byron Bay along the east coast of NSW, to the Australian Capital Territory, and into east Gippsland, Victoria. Records often occur within 20–30 kilometres of the coast but may also occur west of this area.
***Macrohabitat*:** The frog is found in shallow, still or slow-moving water (both ephemeral and permanent) with a sand substrate and emergent vegetation, especially bullrushes. It is often found in locations with a sunny aspect.
***Microhabitat*:** The frog shelters under ground debris. It basks during daytime on emergent vegetation or near the edge of water and is also active at night.

Pouched frog (*Assa darlingtoni*)

CMAs for application of prescription
This prescription applies only to the Northern Rivers CMA areas in the northern half of the Bellingen local government area and the southern section of Clarence Valley local government area (generally south of Dundurrabin) in north-east NSW, as shown in Figure 2.

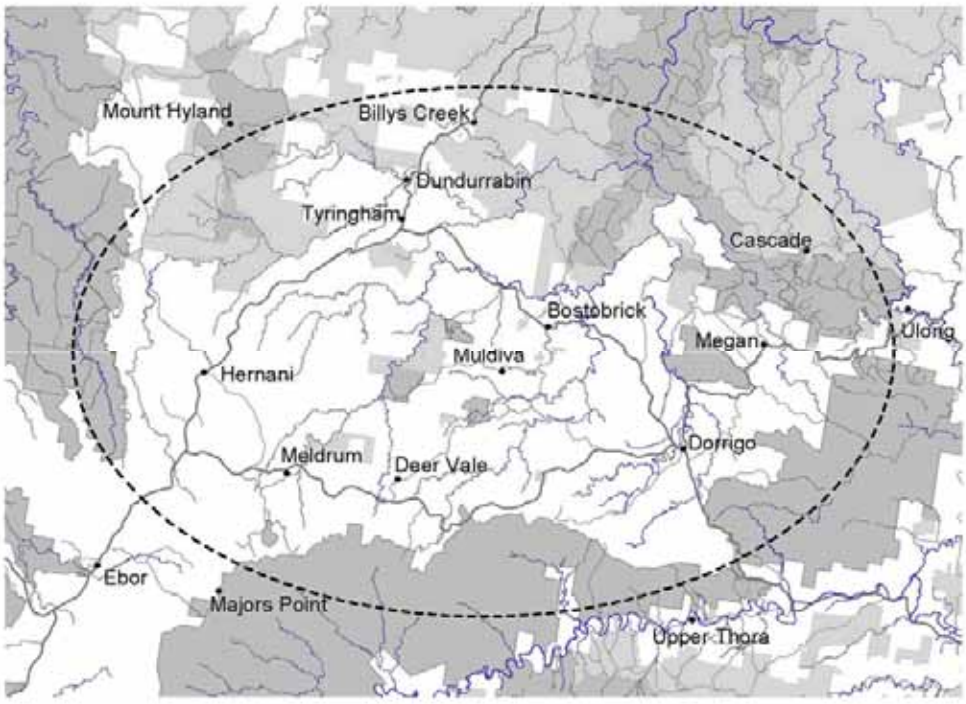


Figure 2: Area of application of pouched frog prescription

Prescription
Where there is a record of a pouched frog within the area of forest operations or within 50 metres of the boundary of the area of forest operations, an exclusion zone with at least a 50-metre radius must be implemented around the location of the record.

Additional information
The pouched frog lives in cool, moist rainforest with trees such as Antarctic beech, or in moist eucalypt forest in mountainous areas. It lives mostly above 800 metres above sea level and spends most of its time in damp leaf litter or under rocks and rotten logs.

Giant burrowing frog (*Heleioporous australiacus*)

CMAs for application of prescription
Hawkesbury–Nepean, Hunter–Central Rivers and Sydney Metro

Prescription
Where there is a record of a giant burrowing frog in an area of forest operations or within 300 metres of the boundary of the area of forest operations, the following must apply:

(a) An exclusion zone with a 300-metre radius must be identified, centred on the location of the record.

(b) No post-harvest burns must occur in the exclusion zone.

Additional information
The giant burrowing frog occurs from the NSW Central Coast to eastern Victoria, but is most common in Sydney sandstone environments. It has been found from the coast to the Great Dividing Range. It lives in heath, woodland and open forest with sandy soils, and will travel several hundred metres to creeks to breed.

Giant barred frog (*Mixophyes iterates*), Fleay's frog (*Mixophyes fleayi*) and stuttering frog (*Mixophyes balbus*)

CMAs for application of prescription
Giant barred frog*:* Hawkesbury–Nepean, Hunter–Central Rivers and Northern Rivers
Fleay's frog*:* Northern Rivers
Stuttering frog: Hawkesbury–Nepean, Hunter–Central Rivers, Northern Rivers and Sydney Metro

Prescription
Where there is a record of a giant barred frog, Fleay's frog or stuttering frog in an area of forest operations or within 200 metres outside the boundary of the area of forest operations, the following must apply:

(a) A 30-metre wide exclusion zone must be implemented on both sides of all streams (including Prescribed Streams, and first-, second- and third-order and above streams – see Figure 3) within the forest operations area, within 200 metres of the location of the record.

(b) The width of the exclusion zone must be measured from the top of the bank of the incised channel or, where there is no defined bank, from the edge of the channel.

Additional information
Habitat:
Giant barred frog – streamside vegetation, mostly in subtropical and cool temperate rainforests, but also in wet sclerophyll forest.
Fleay's frog – streamside vegetation mostly in subtropical and cool temperate rainforests.
Stuttering frog – forest communities ranging from heaths (tea-tree) in dry upland forests to closed forests, including wet sclerophyll forest and rainforest.

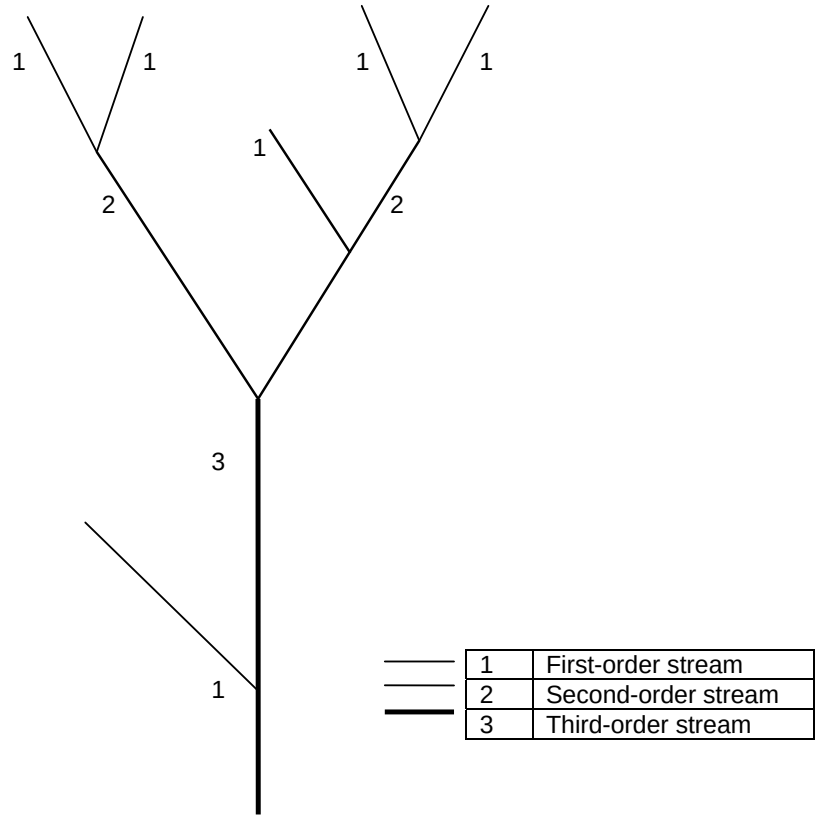


Figure 3: Schematic diagram of stream order (After Strahler, AN 1964, 'Quantitative geomorphology of drainage basins and channel networks' in Chow, VT (ed.), *Handbook of Applied Hydrology*, New York, McGraw-Hill, section 4-11.)

Philoria species: Loveridge's frog (*Philoria loveridgei*), *P. pughi* and mountain frog (*P. kundagungan*)

CMAs for application of prescription
Border Rivers–Gwydir and Northern Rivers

Prescription
Where there is a record of any of the species of *Philoria* within an area of forest operations or within 50 metres of the boundary of the area of forest operations, an exclusion zone with at least a 50-metre radius must be implemented around the location of the record.

Mammals

Black-striped wallaby (*Macropus dorsalis*)

CMAs for application of prescription
Border Rivers–Gwydir, Namoi and Northern Rivers

Prescription
Where there is a black-striped wallaby record within the area of forest operations, the following must apply:

(a) A buffer zone with a 500-metre radius (about 78 hectares) must be identified, centred on the location of the record.

(b) Within this buffer zone, the following additional prescriptions must be implemented:

  (i) Only single-tree selection and thinning operations can occur (i.e. no canopy openings).

  (ii) No post-harvesting burning can occur.

  (iii) Disturbance to understorey trees and shrubs, ground logs, rocks and litter must be minimised.

Additional information
Potential black-striped wallaby habitat is characterised by dense woody or shrubby vegetation within three metres of the ground. This dense vegetation must occur near a more open, grassy area to provide suitable feeding habitat.
Habitat is common on north-west slopes associated with dense vegetation, including brigalow, ooline and semi-evergreen vine thicket.
On the north coast, habitat is often associated with dry rainforest but can also be moist eucalypt forest with a rainforest understorey or a dense shrub layer.

Brush-tailed phascogale (*Phascogale tapoatafa*)

CMAs for application of prescription
Border Rivers–Gwydir, Central West, Hawkesbury–Nepean, Hunter–Central Rivers, Northern Rivers and Sydney Metro

Prescription
Where there is a brush-tailed phascogale record within the area of forest operations, the following must apply:

(a) A buffer zone with a 500-metre radius (about 78 hectares) must be identified, centred on the location of the record.

(b) Within this buffer zone, the following additional prescriptions must be implemented:

  (i) A minimum of 15 trees per 2 hectares with visible hollows must be retained where available.

  (ii) A recruitment tree must be retained for each hollow bearing tree retained. Where the total number of hollow bearing trees and recruitment trees is less than 30 trees per 2 hectares, additional recruitment trees must be retained to bring the number up to 30 trees per 2 hectares.

  (iii) Disturbance to understorey trees and shrubs, ground logs, rocks and litter must be minimised.

  (iv) Trees to be retained as above should be late-mature, over-mature or senescent rough-barked trees where available.

(c) Where there are records of den or roost sites, these must be contained within the buffer zones and these trees be protected.

Additional information
Potential brush-tailed phascogale habitat is dry sclerophyll open forest or woodland with a generally open understorey, preferably containing large trees with rough bark and hollows to provide optimal foraging and denning habitat.

Eastern pygmy-possum (*Cercartetus nanus*)

CMAs for application of prescription
Border Rivers–Gwydir, Central West, Hawkesbury–Nepean, Hunter–Central Rivers, Namoi, Northern Rivers and Sydney Metro

Prescription
Where there is an eastern pygmy-possum record within the area of forest operations, the following must apply:

(a) An exclusion zone with a 50-metre radius (about 0.8 hectares) must be identified, centred on the location of the record, with no forest operations or removal of understorey plants permitted.

(b) Within a 100-metre radius (about 3.5 hectares) of the exclusion zone, a buffer zone must be identified within which the following additional prescriptions must be implemented:

  (i) Only single-tree selection and thinning operations can occur (i.e. no canopy openings).

  (ii) No post-harvest burning is permitted.

  (iii) A minimum of 26 trees with visible hollows must be retained where available.

  (iv) Disturbance to understorey trees and shrubs (particularly banksias, bottlebrush and acacias), ground logs, rocks and litter must be minimised.

Additional information
Potential eastern pygmy-possum habitat is found in a broad range of habitats including rainforest, sclerophyll (including box–ironbark) forest, woodland and heath. In most areas, woodlands and heath appear to be preferred, except in north-eastern NSW where they are most frequently encountered in rainforest.

Hastings River mouse (*Pseudomys oralis*)

CMAs for application of prescription
Hunter–Central Rivers and Northern Rivers

Prescription
Where there is a Hastings River mouse record within the area of forest operations or within 200 metres of the area of forest operations, the following must apply:

(a) An exclusion zone with a 200-metre radius (about 12.5 hectares) must be identified, centred on the location of the record, within which the following additional prescriptions must be implemented:

  (i) No forest operations or removal of understorey plants or groundcover are permitted.

  (ii) No post-harvest burning is permitted.

  (iii) Disturbance to any seepage areas within or adjacent to the exclusion zone, as well as to ground logs, rocks and litter, must be minimised.

Additional information
Potential Hastings River mouse habitat includes a variety of dry open forest types with dense, low ground cover and a diverse mixture of ferns, grass, sedges and herbs. Access to seepage zones, creeks and gullies is important, as is permanent shelter such as rocky outcrops. Habitat is usually found at elevations between 500 and 1100 metres.

Spotted-tailed quoll (*Dasyurus maculatus*)

CMAs for application of prescription
Border Rivers–Gwydir, Central West, Hawkesbury–Nepean, Hunter–Central Rivers, Namoi, Northern Rivers and Sydney Metro

Prescription
Where there is a record of a spotted-tailed quoll den site, maternal den or latrine site within the area of forest operations, the following must apply:

(a) An exclusion zone with a 200-metre radius (about 12.5 hectares), centred on the location of the record, must be implemented around a spotted-tailed quoll maternal den site or latrine site. This exclusion area must be linked to riparian exclusion zones or riparian buffer zones where practicable.

(b) An exclusion zone with a 100-metre radius (about 3.5 hectares), centred on the location of the record, must be implemented around spotted-tailed quoll permanent den sites. This exclusion zone must be linked to riparian exclusion zones or riparian buffer zones where practicable.

(c) Areas of riparian exclusion and protection zone must not be counted towards exclusion zones for the spotted-tailed quoll.

Squirrel glider (*Petaurus norfolcensis*)

CMAs for application of prescription
Border Rivers–Gwydir, Central West, Hawkesbury–Nepean, Hunter–Central Rivers, Namoi, Northern Rivers and Sydney Metro

Prescription
Where there is a squirrel glider record in an area of forest operations or within 125 metres of the boundary of the area of forest operations (unless specified otherwise in this condition), the following must apply:

(a) A buffer zone with a 250-metre radius (about 20 hectares) must be identified, centred on the location of the record or records.

(b) Within this buffer zone, the following additional prescriptions must be implemented:

  (i) A minimum of 15 trees per 2 hectares with visible hollows must be retained where available.

  (ii) A recruitment tree must be retained for each hollow bearing tree retained. Where the total number of hollow bearing trees and recruitment trees is less than 30 trees per 2 hectares, additional recruitment trees must be retained to bring the number up to 30 trees per 2 hectares.

  (iii) Disturbance to understorey trees and shrubs (particularly banksias and acacias), ground logs, rocks and litter must be minimised.

(c) Where there are records of dens or roosts, these must be contained within buffer zones encompassing suitable habitat.

(d) Where there are more than two squirrel glider records closer than 250 metres apart within the forest operation area, advice on the location of the buffer area must be sought from DECC before commencing forest operations.

Additional information
Squirrel glider habitat is generally dry eucalypt forest and woodland. In coastal areas, potential habitat is blackbutt, bloodwood and ironbark forest with a heathy understorey. In the absence of these forest types, areas of mature or old growth forest must be retained.

Yellow-bellied glider (*Petaurus australis*)

CMAs for application of prescription
Border Rivers–Gwydir, Central West, Hawkesbury–Nepean, Hunter–Central Rivers, Namoi, Northern Rivers and Sydney Metro

Prescription

(a) An exclusion zone with a 50-metre radius must be implemented around trees used as dens by yellow-bellied gliders (trees with moderate to large hollows).

(b) All yellow-bellied glider sap feed trees must be retained and marked for retention. A sap feed tree is a tree with recent V-notch incisions or other incisions made by a yellow-bellied glider. Recent incisions are incisions less than two years old as proven by the incision not having closed.

(c) Within a 100-metre radius of each retained yellow-bellied glider sap feed tree, observation or den site record, 15 feed trees must be retained (not counting existing yellow-bellied glider sap feed trees). The 15 retained feed trees must have good crown development and should have minimal butt damage and should not be suppressed. Mature and late mature trees must be retained as feed trees where these are available.

(d) The feed trees retained as above must be of the same species as the identified sap feed tree or identified den tree, or should be trees that shed their bark in long strips, e.g. species from blue, flooded, grey, red and white gum groups.

(e) The retained feed trees must be marked for retention.

Additional information
Yellow-bellied gliders occur in tall mature eucalypt forest, generally in areas with high rainfall and nutrient-rich soils. Forest type preferences vary with latitude and elevation: mixed coastal forests to dry escarpment forests in the north, and moist coastal gullies and creek flats to tall montane forests in the south. The gliders feed primarily on plant and insect exudates, including nectar, sap, honeydew and manna with pollen and insects providing protein. They extract sap by incising or biting into the trunks and branches of favoured food trees, often leaving a distinctive ‘V’-shaped scar.

Long-nosed potoroo (*Potorous tridactylus*)

CMAs for application of prescription
Northern Rivers

Prescription
Where there is a record of a long-nosed potoroo in an area of forest operations, the following must apply:

(a) Forestry operations must be excluded from a 5-metre radius buffer around 12 retained trees per 2 hectares. These 12 trees can include trees retained under other prescriptions.

(b) No post-harvest burning is permitted within or adjacent to the 5-metre radius buffers identified in point (a) above.

Additional information
The long-nosed potoroo inhabits coastal heaths, and dry and wet sclerophyll forests. Dense understorey with occasional open areas is an essential part of habitat and may consist of grass-trees, sedges, ferns or heath, or of low shrubs of tea-trees or melaleucas. A sandy loam soil is also common. The fruit-bodies of hypogeous (underground-fruiting) fungi are a large component of the diet of the long-nosed potoroo.

Koala (*Phascolarctos cinereus*)

CMAs for application of prescription
Border Rivers–Gwydir, Central West, Hawkesbury–Nepean, Hunter–Central Rivers, Namoi, Northern Rivers and Sydney Metro

Note: Koala populations are generally sparse or of low density in the South Coast, Central and Southern Tablelands and Western Koala Management Areas (Koala Management Areas 3, 5, 6 and 7; see Figure 4) and, as a result, scats are rarely encountered. Therefore, recording of any scat or a sighting of a koala in these areas should be considered significant.

Prescription

(a) Forest operations are not permitted within any area identified as 'core koala habitat' within the meaning of *State Environmental Planning Policy No. 44 – Koala Habitat Protection*.

(b) Any tree containing a koala, or any tree beneath which 20 or more koala faecal pellets (scats) are found (or one or more koala faecal pellets in Koala Management Area 5) must be retained, and an exclusion zone of 20 metres (50 metres in Koala Management Area 5) must be implemented around each retained tree.

(c) Where there is a record of a koala within an area of forest operations or within 500 metres of an area of forest operations or a koala faecal pellet (scat) is found beneath the canopy of any primary or secondary koala food tree (see Table I below), the following must apply:

  (i) A minimum of 10 primary koala food trees and 5 secondary koala food trees must be retained per hectare of net harvesting area (not including other exclusion or buffer zones), where available.

  (ii) These trees should preferably be spread evenly across the net harvesting area, have leafy, broad crowns and be in a range of size classes with a minimum of 30 centimetres diameter at breast height over bark.

  (iii) Damage to retained trees must be minimised by directional felling techniques.

  (iv) Post-harvest burns must minimise damage to the trunks and foliage of retained trees.

Additional information
Generally, koala habitat comprises eucalypt forest and woodland containing primary and secondary food trees (see Table I). Koala droppings (faecal pellets or scats) are relatively distinctive, being cylindrical and pit-shaped. Colour varies between green–yellow to yellow–brown. Scats can remain under trees on or within the leaf litter for periods of several weeks to months. For further information on the identification of koala pellets or scats, contact DECC or refer to the DECC website – www.environment.nsw.gov.au.

Private Native Forestry Code of Practice for Northern NSW

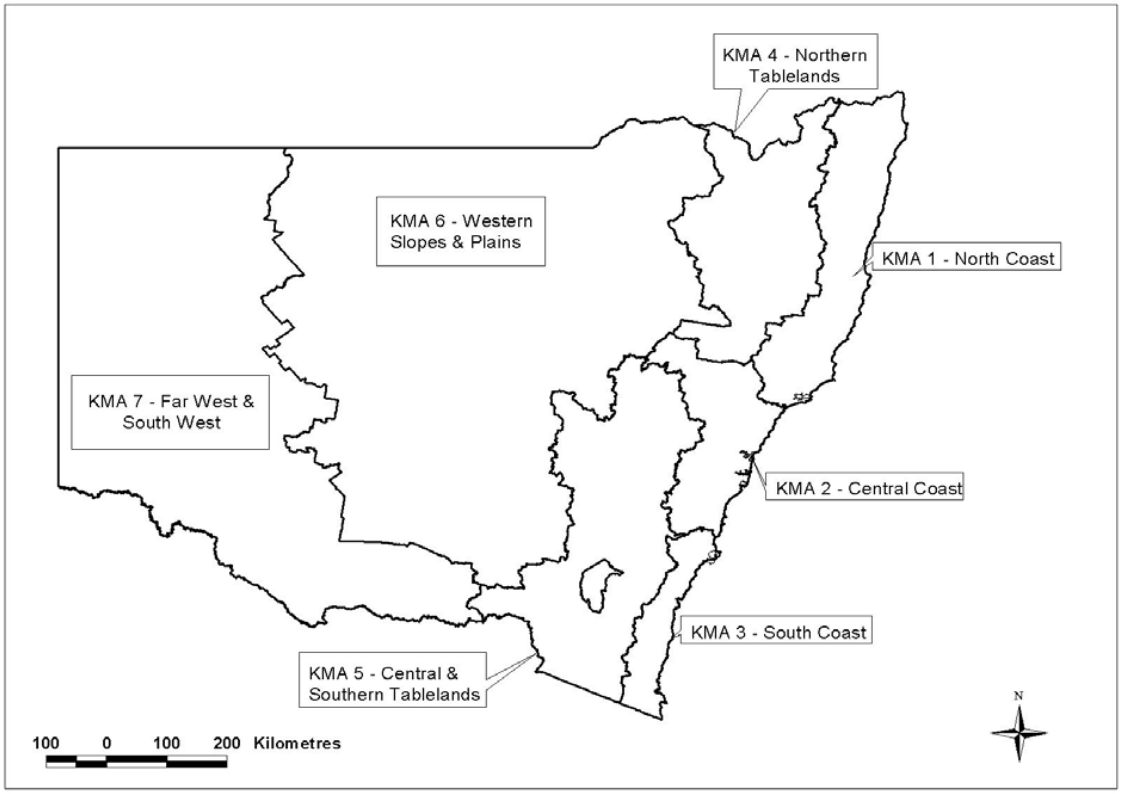


Figure 4: Koala Management Areas in NSW (from Draft State Koala Recovery Plan)

Table I: Primary and secondary koala food trees for Koala Management Areas in the Northern PNF Code areas

Koala food tree species		**Koala Management Area**			
Common name	**Scientific name**	**1**	**2**	**4**	**5**
Primary tree species					
Cabbage gum	*E. amplifolia*	X	X	X	
Orange gum	*E. bancrofti*	X			
Tallowwood	*E. microcorys*	X	X		
Parramatta red gum	*E. parramattensis*	X	X		
Swamp mahogany	*E. robusta*	X	X		
Forest red gum	*E. tereticornis*	X	X	X	
Ribbon gum	*E. viminalis*		X	X	X
Secondary tree species					
Narrow-leaved peppermint	*E. acaciiformis*			X	
White box	*E. albens*			X	X
Tenterfield woolybutt	*E. banksii*			X	
Blue box	*E. baueriana*		X		
Eurabbie	*E. bicostata*			X	X
Grey gum	*E. biturbinata*	X			
Blakely's red gum	*E. blakelyi*			X	X
Coast grey box	*E. bosistoana*		X		
Apple-topped box	*E. bridgesiana*			X	X
Broad-leaved sally	*E. camphora*		X	X	X
Large-fruited grey gum	*E. canaliculata*	X			
Argyle apple	*E. cinerea*				X
Fuzzy box	*E. conica*		X	X	

Yertchuk	*E. consideniana*		X		
Monkey gum	*E. cypellocarpa*		X		
Mountain gum	*E. dalrympleana*			X	X
Tumbledown gum	*E. dealbata*			X	X
Dwyer's red gum	*E. dwyeri*		X	X	
Slaty red gum	*E. glaucina*	X	X		
Bundy	*E. goniocalyx*		X	X	X
n/a	*E. interstans*			X	
Craven grey box	*E. largeana*	X	X		
Woolybutt	*E. longifolia*		X		
Maiden's gum	*E. maidenii*		X		X
Moonbi apple box	*E. malacoxylon*			X	
Brittle gum	*E. mannifera*		X	X	X
Yellow box	*E. melliodora*			X	X
Brittle gum	*E. michaeliana*		X	X	
Western grey box	*E. microcarpa*		X		
Grey box	*E. moluccana*	X	X	X	
Narrow-leaved black peppermint	*E. nichollii*			X	
Large-flowered bundy	*E. nortonii*			X	X
Mountain mahogany	*E. notabilis*	X	X	X	
New England peppermint	*E. nova-anglica*			X	
Swamp gum	*E. ovata*		X		
Snow gum	*E. pauciflora*			X	X
Red box	*E. polyanthemos*			X	X
Orange gum	*E. prava*			X	
Brittle gum	*E. praecox*		X	X	
Small-fruited grey gum	*E. propinqua*	X			
Grey gum	*E. punctata*		X		
White-topped box	*E. quadrangulata*	X	X	X	
Red mahogany	*E. resinifera*	X	X		
n/a	*E. retinens*			X	
Candlebark	*E. rubida*			X	
Rudder's box	*E. rudderi*	X	X		
Steel box	*E. rummeryi*	X			
Large-fruited red mahogany	*E. scias*		X		
Narrow-leaved red gum	*E. seeana*	X			
n/a	*E. volcanica*			X	

Grey-headed flying-fox (*Pteropus poliocephalus*) and black flying-fox (*Pteropus alecto*) camps

CMAs for application of prescription
Border Rivers–Gwydir, Central West, Hawkesbury–Nepean, Hunter–Central Rivers, Namoi, Northern Rivers and Sydney Metro

Prescription
Forest operations and any associated activities must be excluded within a flying-fox camp, and within a 50-metre exclusion zone around any camp which contains grey-headed or black flying-foxes.

Additional information
Flying-foxes congregate (roost) in large numbers known as 'camps'. These areas are typically within 20 kilometres of known food sources, and 'camp' localities vary over different seasons, depending on regional food availability. Camps are often located in riparian vegetation such as rainforest remnants, swamp forest (paperbarks) or casuarina forests. They are often used annually. Camps are extremely important for day-time roosting and socialising and are used as maternity sites for rearing young.

Common blossom-bat (*Syconycteris australis*)

CMAs for application of prescription
Hunter–Central Rivers and Northern Rivers

Prescription
In areas of common blossom-bat potential habitat (i.e. wet sclerophyll and swamp sclerophyll forest within 30 kilometres of the coast), at least 75% of mature individuals of each species of coast banksia (*Banksia integrifolia*), broad-leaved paperbark (*Melaleuca quinquenervia*), silky oak (*Grevillea robusta*), white bottlebrush (*Callistemon viminalis*) and swamp mahogany (*Eucalyptus robusta*) in the net harvest area must be protected from damage from forest operations activities. During forest operations activities, the potential for damage to these trees must be minimised by using directional felling techniques.

Additional information
The common blossom-bat feeds on winter-flowering species such as those species listed in the above paragraph.

Golden-tipped bat (*Kerivoula papuensis*)

CMAs for application of prescription
Border Rivers–Gwydir, Hawkesbury–Nepean, Hunter–Central Rivers and Northern Rivers

Prescription
Where there is a record of a golden-tipped bat within the area of forest operations or within 200 metres of the boundary of the area of forest operations, the following must apply:

(a) Exclusion zones with at least a 30-metre radius must be implemented on both sides of all Prescribed Streams, first-order, second-order and third-order streams (see Figure 3) within 200 metres of the location of the record. Other standard riparian exclusion zones apply within this area.

(b) The width of exclusion zones must be measured from the top of the bank of the incised channel or, where there is no defined bank, from the edge of the channel.

Additional information
Habitat for the golden-tipped bat is in rainforest and adjacent sclerophyll forest. The bats roost in abandoned hanging yellow-throated scrubwren and brown gerygone (brown warbler) nests located in rainforest gullies on small first-order and second-order streams.
They will fly up to two kilometres from roosts to forage in rainforest and sclerophyll forest on upper slopes. The species is a specialist feeder on small web-building spiders.

Large-footed myotis (*Myotis adversus*)

CMAs for application of prescription
Border Rivers–Gwydir, Central West, Hawkesbury–Nepean, Hunter–Central Rivers, Northern Rivers and Sydney Metro

Prescription
Where there is a record of large-footed myotis in an area of forest operations or within 100 metres of the boundary of the area of forest operations, the following must apply:

(a) An exclusion zone with a 30-metre radius must be implemented on all dams and permanent water bodies. Permanent water bodies include lakes, lagoons or any other permanent collection of still water that is not impounded by an artificial structure. The exclusion zone must be measured from the top of the high bank of the permanent water body.

(b) An exclusion zone with a 30-metre radius must be implemented on all permanent streams within 100 metres of the location of the record.

(c) The width of exclusion zones must be measured from the top of the bank of the incised channel or, where there is no defined bank, from the edge of the channel.

Additional information
Large-footed myotis generally roost in groups of 10–15 close to water in caves, mine shafts, hollow bearing trees, stormwater channels, buildings, under bridges and in dense foliage. They forage over streams and pools, catching insects and small fish by raking their feet across the water's surface.

Reptiles

Broad-headed snake (*Hoplocephalus bungaroides*)

CMAs for application of prescription
Central West, Hawkesbury–Nepean, Hunter–Central Rivers and Sydney Metro

Prescription
Where there is a broad-headed snake record in the area of forest operations, the following must apply:

(a) A buffer zone with a 100-metre radius (about 3 hectares) must be identified, centred on the location of the record.

(b) Within this buffer zone, the following additional prescriptions must be implemented:

  (i) A minimum of 26 trees with visible hollows with openings greater than 10 centimetres must be retained where available.

  (ii) Disturbance to understorey trees and shrubs, ground logs and, in particular, rock outcrops and ledges must be minimised.

Additional information
Potential habitat for the broad-headed snake is largely confined to Triassic sandstones, including the Hawkesbury, Narellan and Shoalhaven formations on the coast and in the ranges, in an area within approximately 250 kilometres of Sydney. The snake shelters in rock crevices and under flat sandstone rocks on exposed cliff edges during autumn, winter and spring, and shelters in hollows in large trees within 200 metres of escarpments in summer.

Rosenberg's goanna (*Varanus rosenbergi*)

CMAs for application of prescription
Central West, Hawkesbury–Nepean, Hunter–Central Rivers and Sydney Metro

Prescription
Where there is a Rosenberg's goanna record in the area of forest operations, the following must apply:

(a) A buffer zone with a 200-metre radius (about 12.5 hectares) must be identified, centred on the location of the record.

(b) Within this buffer zone, the following additional prescriptions must be implemented:

(i) All termite mounds must be protected from any disturbance.

(ii) Disturbance to understorey trees and shrubs and, in particular, ground logs and rock outcrops and ledges must be minimised.

(iii) No post-harvest burning is permitted.

Additional information
Rosenberg's goanna occurs on Sydney sandstone in Wollemi National Park north-west of Sydney, in the Goulburn and ACT regions and near Cooma in the south. There are records from the south-west slopes near Khancoban and the Tooma River. It is found in heath, open forest and woodland. This species nests in termite mounds, which are a critical component of its habitat.

White-crowned snake (*Cacophis harriettae*)

CMAs for application of prescription
Northern Rivers

Prescription
Where there is a record of a white-crowned snake in an area of forest operations or within 30 metres of the boundary of the area of forest operations, an exclusion zone with at least a 30-metre radius must be implemented around the location of the record.

Additional information
Distribution: The snake has a patchy distribution in NSW from Forster to the Queensland border, west to Urbenville.
Macrohabitat: The snake has been recorded in a range of habitats: wet sclerophyll, heathlands, open forest, woodland, dry eucalypt forest, coastal stringybark forest, rainforest and wet sclerophyll forest. Low elevation sclerophyll forests are favoured in northern NSW.
Microhabitat: The snake shelters during the day under logs, leaf litter and rocks.

Pale-headed snake (*Hoplocephalus bitorquatus*)

CMAs for application of prescription
Border Rivers–Gwydir, Central West, Hawkesbury–Nepean, Hunter–Central Rivers, Namoi and Northern Rivers

Prescription
Where there is a record of the pale-headed snake in an area of forest operations or within 300 metres of the boundary of the area of forest operations, the following must apply:

(a) An exclusion zone with at least a 100-metre radius must be implemented around the location of the record.

(b) If forest operations are being conducted during the months of May, June, July, August or September, an additional 200 metre-wide buffer zone must be implemented around the exclusion zone. Within this buffer zone, the following must apply:

(i) A minimum of 26 trees with visible hollows with openings greater than 10 centimetres must be retained where available.

(ii) All stags must be retained where it is safe to do so.

(iii) During forest operations, the potential for damage to these trees must be minimised by the use of directional felling techniques.

Additional information
Distribution: The snake has a patchy distribution from north-eastern NSW to north Queensland. It is found in NSW on both sides of the Great Dividing Ranges as far south as Tuggerah.
Macrohabitat: The snake is mainly found in dry eucalypt forests and woodlands and occasionally in rainforest or moist eucalypt forest.
***Microhabitat*:** The snake shelters during the day between loose bark and tree trunks, or in hollow trunks and limbs of dead trees, especially near watercourses.

Birds

Rufous scrub-bird (*Atrichornis rufescens*)

CMAs for application of prescription
Hunter–Central Rivers and Northern Rivers

Prescription
If there is a record of a rufous scrub-bird in an area of forest operations or within 300 metres of the boundary of an area of forest operations, the following must apply:

(a) An exclusion zone must be implemented which encompasses all rufous scrub-bird microhabitat (as defined below) within 300 metres of the location of the record.

(b) An additional exclusion zone at least 20 metres wide must be implemented around all microhabitat referred to above.

Additional information
Distribution: Rufous scrub-birds occur in rainforest and wet sclerophyll forest at higher elevations. There are considered to be five major habitat refuges: Barrington Tops, Werrikimbe–Mt Boss, New England–Killiekrankie Mountain, Gibraltar Range and Border Ranges.
Microhabitat: Potential rufous scrub-bird habitat is defined as areas of rainforest and wet sclerophyll forest that are one hectare or greater in size, and contain extremely dense cover between 2 and 50 centimetres above the ground and moderate cover between 50 and 100 centimetres above the ground. The cover may consist of both living and non-living plant material. These areas generally have a moist ground level microclimate and abundant leaf litter.

Albert's lyrebird (*Menura alberti*)

CMAs for application of prescription
Northern Rivers

Prescription
Where there is an Albert's lyrebird record within an area of forest operations or within 300 metres of the boundary of the area of forest operations, the following must apply:

(a) An exclusion zone at least 20 metres wide must be implemented on both sides of all first-order streams (see Figure 3) within 300 metres of the location of the record.

(b) An exclusion zone at least 30 metres wide must be implemented on both sides of all second-order streams (see Figure 3) within 300 metres of the location of the record.

(c) The width of these exclusion zones must be measured from the top of the bank of the incised channel or, where there is no defined bank, from the edge of the channel.

(d) Logging and snigging are prohibited in these exclusion zones (road construction and road re-opening are permitted only where there is no other practical means of access).

Additional information
Habitat: The bird lives in mixed rainforest and wet open forest, which is frequently dominated by brush box. In winter, birds commonly forage in moist forest on ridges between wetter forests.

Marbled frogmouth (*Podargus ocellatus*)

CMAs for application of prescription
Northern Rivers

Prescription
Where there is a record of a marbled frogmouth within an area of forest operations or within 30 metres of the boundary of the area of forest operations, the following must apply:

(a) An exclusion zone at least 20 metres wide must be implemented on both sides of all first-order streams (see Figure 3) in the area to be logged.

(b) An exclusion zone at least 30 metres wide must be implemented on both sides of all second-order streams (see Figure 3) in the area to be logged.

(c) The width of these exclusion zones must be measured from the top of the bank of the incised channel or, where there is no defined bank, from the edge of the channel.

(d) Logging and snigging are prohibited in these exclusion zones (road construction and road re-opening are permitted only where there is no other practical means of access).

Additional information
Habitat: The bird lives in mixed rainforest and wet open forest.

Powerful owl (*Ninox strenua*), masked owl (*Tyto novaehollandiae*), sooty owl (*Tyto tenebricosa*) and barking owl (*Ninox connivens*)

CMAs for application of prescription
Border Rivers–Gwydir, Central West, Hawkesbury–Nepean, Hunter–Central Rivers, Namoi, Northern Rivers and Sydney Metro

Prescription
Nest trees (trees with hollows containing a nest of a powerful, masked, sooty or barking owl) must be retained and protected by a 60-metre exclusion zone.

Roost trees (trees where a powerful, masked, sooty or barking owl have been observed roosting or signs of roosting are observed) must be retained and protected by a 50-metre exclusion zone.

Where there is a record within the area of forest operations or within 500 metres of the area of forest operations for the powerful owl, masked owl or sooty owl or 250 metres for the barking owl, the following prescriptions apply:

(a) Buffer zones with a 1000-metre radius (about 300 hectares) for the powerful owl, masked owl or sooty owl and 500-metre radius (about 78 hectares) for the barking owl must be identified, centred on the location of the record or records. The radius of the buffer zone must be measured from the location of the record. Where there is more than one record, the radius of the buffer zone must be measured from a point equidistant from most records, where possible.

(b) Within this buffer zone, the following additional prescriptions must be implemented:

  (i) A minimum of 15 trees per 2 hectares with visible hollows must be retained where available.

  (ii) A recruitment tree must be retained for each hollow bearing tree retained. Where the total number of hollow bearing trees and recruitment trees is less than 30 trees per 2 hectares, additional recruitment trees must be retained to bring the number up to 30 trees per 2 hectares.

  (iii) Disturbance to understorey trees and shrubs, ground logs, and rocks and litter must be minimised.

(c) Where there are records of nests or roosts, these must be contained within buffer zones encompassing suitable habitat.

(d) Where there are more than two owl records consecutively less than 1000 metres apart but collectively spreading over an area greater than 1000 metres in any direction, advice on the location of the buffer area must be sought from DECC.

Additional information
Potential owl habitat comprises rainforest, wet and dry sclerophyll forest, and woodland.

Regent honeyeater (*Xanthomyza phrygia*)

CMAs for application of prescription
Border Rivers–Gwydir, Central West, Hawkesbury–Nepean, Hunter–Central Rivers, Namoi, Northern Rivers and Sydney Metro

Prescription
Where there is a record of a regent honeyeater in an area of forest operations, the following must apply:

(a) At least ten eucalypt feed trees (refer to Table E) must be retained within every two hectares of the net harvest area. These must be marked for retention. Where retained eucalypt feed trees also meet the requirements of habitat or recruitment trees, the retained eucalypt feed trees can be counted as habitat or recruitment trees.

(b) Where a regent honeyeater is observed feeding, the tree in which it is feeding must be retained.

(c) Trees containing regent honeyeater nests must be retained, with a 20-metre radius exclusion zone around them.

Additional information
This species inhabits dry open forest and woodland, particularly box–ironbark woodland and riparian forests of river she-oak. Regent honeyeaters inhabit woodlands that support a significantly high abundance and richness of bird species. These woodlands have many mature trees and mistletoes and high canopy cover. The bird also forages in winter-flowering coastal swamp mahogany and spotted gum forests on the central coast and the upper north coast. These birds are also occasionally seen on the south coast.

Swift parrot (*Lathamus discolor*)

CMAs for application of prescription
Border Rivers–Gwydir, Central West, Hawkesbury–Nepean, Hunter–Central Rivers, Namoi, Northern Rivers and Sydney Metro

Prescription
Where there is a record of a swift parrot in an area of forest operations, the following must apply:

(a) At least ten eucalypt feed trees (refer to Table E) must be retained within every two hectares of the net harvest area. These must be marked for retention. Where retained eucalypt feed trees also meet the requirements of habitat or recruitment trees, the retained eucalypt feed trees can be counted as habitat or recruitment trees.

(b) Where a swift parrot is observed feeding, the tree in which it is feeding must be retained.

Additional information
Swift parrots migrate to the Australian south-east mainland between March and October. On the mainland, they occur where eucalypts are flowering profusely or where there are abundant lerps (from sap-sucking bugs). Favoured feed trees include winter-flowering species such as swamp mahogany (*Eucalyptus robusta*), spotted gum (*Corymbia maculata*), red bloodwood (*C. gummifera*), mugga ironbark (*E. sideroxylon*) and white box (*E. albens*). Commonly used lerp-infested trees include grey box (*E. microcarpa*), grey box (*E. moluccana*) and blackbutt (*E. pilularis*).

Eastern bristlebird (*Dasyornis brachypterus*)

CMAs for application of prescription
Northern Rivers

These birds are very rare, with fewer than 40 individuals known in northern NSW. The area for the application of the prescription is shown in Figure 5 below.

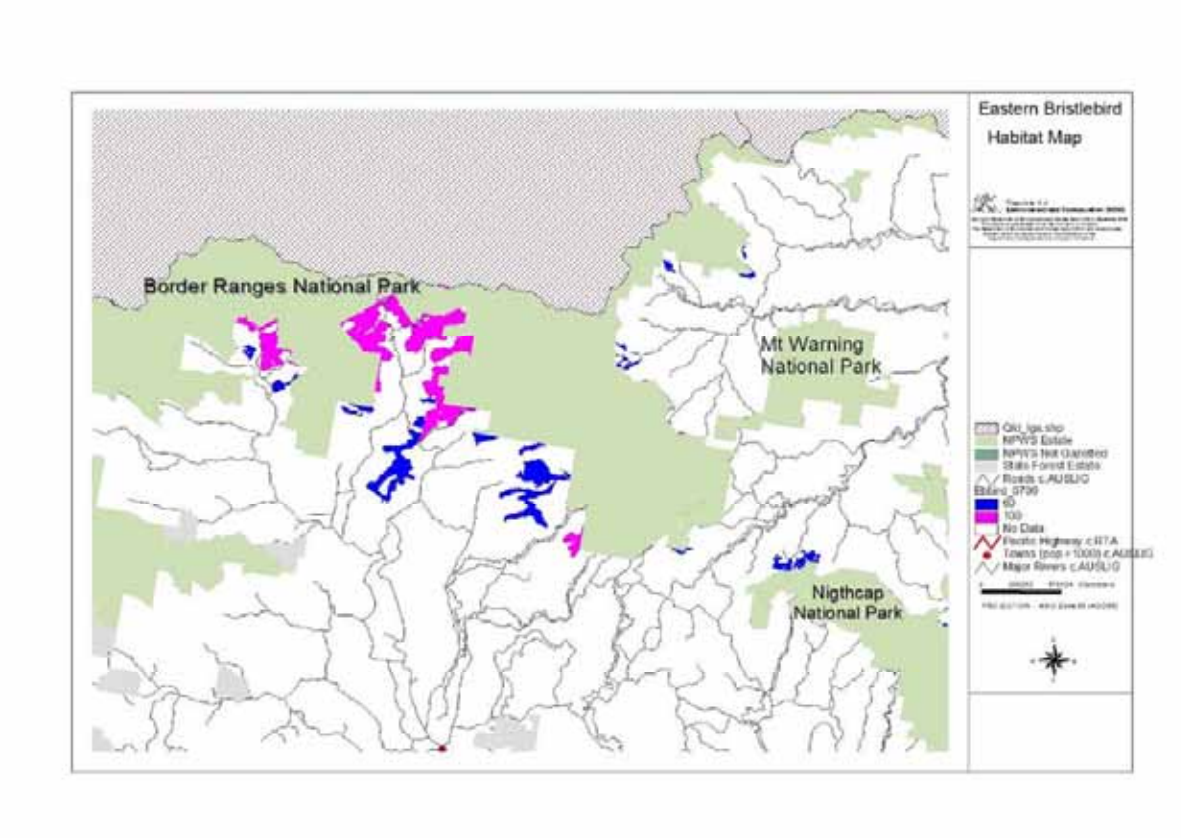


Figure 5: Area of eastern bristlebird prescription application

Prescription
Where there is an eastern bristlebird record, the following must apply:

(a) A 200-metre radius (about 12.5 hectares) exclusion zone must be identified, centred on the record.

(b) Additionally, a 150-metre buffer must be identified around the exclusion zone, and within this buffer zone the following prescriptions must be implemented:

(i) No forestry operation can be undertaken within the breeding season between 1 August and 1 February in any year.

(ii) Disturbance to understorey trees and shrubs and, in particular, ground cover and litter must be minimised.

(iii) No post-harvesting burning is permitted.

Additional information
Eastern bristlebird habitat is characterised by dense, low vegetation including open woodland and open forest (montane open forest) with tussocky grass understorey; all these vegetation types are fire-prone. The age of the habitat since fires (fire-age) is of paramount importance to this species.

Bush stone-curlew (*Burhinus grallarius*)

CMAs for application of prescription
All

Prescription
No forest operations are permitted within a 50-metre radius of all bush stone-curlew ground nests.

Additional information
Bush stone-curlew nests are found in areas of dry, grassy open forest or woodland and are a small scrape on bare ground, often near a bush or tree or beside a fallen limb. Eggs are stone-coloured, blotched dark brown and grey. Nesting season is August through to January.

Glossy black-cockatoo (*Calyptorhynchus lathami*)

CMAs for application of prescription
All except for Lower Murray–Darling

Prescription

(a) There must be a 50-metre-radius exclusion zone around all glossy black-cockatoo nests, within which no forest operations may occur.

(b) Within a 200-metre radius of any location of a glossy black-cockatoo record, damage to stands of she-oaks (*Allocasuarina* and *Casuarina* spp.) containing trees more than 3 metres in height and seed cones must be minimised.

(c) Any she-oaks with evidence of foraging by glossy black-cockatoos (i.e. chewed seed cones under the tree) must be protected.

Additional information
Glossy black-cockatoos nest in tree hollows usually in larger, mature trees. Nest locations are indicative of where a glossy black-cockatoo is seen entering a hollow. Nesting season is from March to August.
The presence of she-oaks (*Allocasuarina* and *Casuarina* spp.) is a key indicator of likely feeding habitat. Mature trees with hollows are required for nesting.

Red-tailed black-cockatoo (*Calyptorhynchus banksii*)

CMAs for application of prescription
Border Rivers–Gwydir, Central West, Namoi and Northern Rivers

Prescription
No forest operations are permitted within a 50-metre radius of all red-tailed black-cockatoo nests.

Additional information
Red-tailed black-cockatoos nest in tree hollows, usually in larger, mature trees. Nest locations are indicative of where a bird is seen entering a hollow. Nesting season is from March to August.
Red-tailed black-cockatoos are found in a wide variety of habitats. In coastal north-east NSW they have been recorded in dry open forest and areas of mixed rainforest/eucalypt forest.

Osprey (*Pandion haliaetus*)

CMAs for application of prescription
All except for Lower Murray–Darling and Western

Prescription
No forest operations are permitted within a 100-metre radius of all osprey nests.

Additional information
Ospreys have a large stick nest (up to 2 metres wide) usually in tall, dead or occasionally live trees, often in an exposed position close to lakes, rivers or the ocean. Nesting season is from June to October.

Square-tailed kite (*Lophoictinia isura*)

CMAs for application of prescription
All

Prescription
No forest operations are permitted within a 100-metre radius of all square-tailed kite nests.

Additional information
Square-tailed kites have a large stick nest usually between 60 and 100 centimetres in diameter, and some 12–26 metres above the ground, generally in a eucalypt. Nesting season is from July to November.

Turquoise parrot (*Neophema pulchella*)

CMAs for application of prescription
All except for Lower Murray–Darling and Western

Prescription
No forest operations are permitted within a 30-metre radius of all turquoise parrot nests.

Additional information
Turquoise parrots occur mainly west of the escarpment on the tablelands and western slopes, but are occasionally found more widely through most of eastern NSW in open woodlands, dry sclerophyll forest and adjacent grasslands. Nests range from 1–20 metres above the ground. They are in hollows in small trees, often dead eucalypts, or in holes or stumps, fence posts or even logs lying on the ground. Nesting season is from August to December and from April to May.

Threatened flora – specific prescriptions

Table J: Conditions applying to flora species

(Note: Numbers in first column relate to conditions listed below this table.)

Condition	Scientific name	Common name	Catchment Management Authority
B	*Acacia acrionastes*	Pindari wattle	Border Rivers–Gwydir
H	*Acacia bynoeana*	Bynoe's wattle	Hawkesbury–Nepean, Hunter–Central Rivers, Sydney Metro
D	*Acacia courtii*	North Brother wattle	Northern Rivers
H	*Acacia flocktoniae*	Flockton wattle	Hawkesbury–Nepean
B	*Acacia macnuttiana*	MacNutt's wattle	Border Rivers–Gwydir, Northern Rivers
B	*Acacia pubescens*	Downy wattle	Hawkesbury–Nepean, Hunter–Central Rivers, Sydney Metro
B	*Acacia pubifolia*	Velvet wattle	Border Rivers–Gwydir, Namoi, Northern Rivers
B	*Acacia pycnostachya*	Bolivia wattle	Border Rivers–Gwydir
G	*Acacia ruppii*	Rupp's wattle	Northern Rivers
F	*Acalypha eremorum*	Acalypha	Northern Rivers
G	*Allocasuarina simulans*	Nabiac casuarina	Hunter–Central Rivers, Northern Rivers
G	*Almaleea cambagei*	Torrington pea	Border Rivers–Gwydir, Northern Rivers
G	*Amorphospermum whitei*	Rusty plum	Northern Rivers
A	*Amyema plicatula*	Formerly known as *A. scandens*	Northern Rivers
A	*Angiopteris evecta*	Giant fern	Northern Rivers
B	*Angophora exul*	Gibraltar rock apple	Border Rivers–Gwydir
B	*Angophora inopina*	Charmhaven apple	Hunter–Central Rivers
G	*Angophora robur*	Sandstone rough-barked apple	Northern Rivers
B	*Arthraxon hispidus*	Hairy jointgrass	Border Rivers–Gwydir, Northern Rivers
A	*Arthropteris palisotii*	Lesser creeping fern	Northern Rivers
B	*Asperula asthenes*	Trailing woodruff	Hunter–Central Rivers, Northern Rivers
D	*Asterolasia elegans*	*Asterolasia elegans*	Hawkesbury–Nepean
A	*Austromyrtus fragrantissima*	Sweet myrtle	Northern Rivers
A	*Baloghia marmorata*	Jointed baloghia	Northern Rivers
H	*Bertya ingramii*	Narrow-leaved bertya	Northern Rivers
A	*Bertya* sp. *Cobar-Coolabah*	Coolabah bertya	Namoi, Northern Rivers, Western
B	*Boronia granitica*	Granite boronia	Border Rivers–Gwydir
G	*Boronia umbellata*	Orara boronia	Northern Rivers
A	*Bosistoa transversa*	Yellow satinheart	Northern Rivers
A	*Cadellia pentastylis*	Ooline	Border Rivers–Gwydir, Namoi
B	*Caesia parviflora* var. *minor*	Small pale grass-lily	Hawkesbury–Nepean, Murrumbidgee, Northern Rivers, Sydney Metro
H	*Caladenia tessellate*	Tessellated spider orchid	Hawkesbury–Nepean, Hunter–Central Rivers, Sydney Metro
B	*Callitris baileyi*	Bailey's cypress pine	Northern Rivers
D	*Callitris oblonga*	Pygmy cypress pine	Northern Rivers
E	*Calophanoides hygrophiloides*	Native justicia	Northern Rivers

A	*Choricarpia subargentea*	Giant ironwood	Northern Rivers
G	*Corchorus cunninghamii*	Native jute	Northern Rivers
D	*Corokia whiteana*	Corokia – rhyolite	Northern Rivers
G	*Cryptostylis hunteriana*	Leafless tongue orchid – southern populations	Hawkesbury–Nepean, Hunter–Central Rivers, Northern Rivers
H	*Cymbidium canaliculatum* (Protected Native Plant Schedule 13 NP&W Act)	Tiger orchid	Northern Rivers, Hunter–Central Rivers, Border Rivers–Gwydir, Namoi
G	*Cynanchum elegans*	White-flowered wax plant	Hawkesbury–Nepean, Hunter–Central Rivers, Northern Rivers, Sydney Metro
B	*Cyperus aquatilis*	Water nutgrass	Northern Rivers
A	*Davidsonia jerseyana*	Davidson's plum	Northern Rivers
A	*Davidsonia johnsonii*	Smooth Davidson's plum	Northern Rivers
B	*Dendrocnide moroides*	Gympie stinger	Northern Rivers
E	*Desmodium acanthocladum*	Thorny pea	Northern Rivers
H	*Dichanthium setosum*	Bluegrass	Border Rivers–Gwydir, Namoi, Northern Rivers
G	*Diospyros mabacea*	Red-fruited ebony	Northern Rivers
G	*Diospyros major* var. *ebenus forma australiensis*	Shiny-leaved ebony	Northern Rivers
A	*Diploglottis campbellii*	Small-leafed tamarind	Northern Rivers
G	*Dipodium atropurpureum* (Protected Native Plant Schedule 13 NP&W Act)	*Dipodium atropurpureum*	Northern Rivers, Hunter–Central Rivers, Border River–Gwydir, Namoi
G	*Dipodium pulchellum* (Protected Native Plant Schedule 13 NP&W Act)	*Dipodium pulchellum*	Northern Rivers, Hunter–Central Rivers, Border Rivers–Gwydir, Namoi
B	*Diuris disposita*	Willawarrin doubletail	Northern Rivers
B	*Diuris pedunculata*	Small snake orchid	Border Rivers–Gwydir, Central West, Hunter–Central Rivers, Namoi, Northern Rivers
D	*Diuris praecox*	Rough double tail	Hunter–Central Rivers, Sydney Metro
E	*Doryanthes palmeri* (Protected Native Plant Schedule 13 NP&W Act)	Giant spear lily	Northern Rivers
B	*Drynaria rigidula*	Basket fern	Northern Rivers
A	*Elaeocarpus* sp. *'Rocky Creek'*	Minyon quandong	Northern Rivers
A	*Endiandra floydii*	Crystal Creek walnut	Northern Rivers
C	*Endiandra hayesii*	Rusty rose walnut	Northern Rivers
A	*Endiandra muelleri* subsp. *bracteata*	Green-leaved rose walnut	Northern Rivers
E	*Eriostemon myoporoides subsp. conduplicatus* (Protected Native Plant Schedule 13 NP&W Act)	Long-leaf wax flower	Border Rivers–Gwydir, Namoi, Northern Rivers
D	*Eucalyptus caleyi* subsp. *ovendenii*	Ovenden's ironbark	Border Rivers–Gwydir
D	*Eucalyptus camfieldii*	Camfield's stringybark	Hawkesbury–Nepean, Hunter–Central Rivers, Sydney Metro
G	*Eucalyptus camphora* subsp. *relicta*	Warra broad-leaved sally	Northern Rivers
B	*Eucalyptus fracta*	Broken back ironbark	Hunter–Central Rivers
B	*Eucalyptus glaucina,* (southern population)	Slaty red gum	Hunter–Central Rivers

G	*Eucalyptus glaucina,* (northern population)	Slaty red gum	Northern Rivers
F	*Eucalyptus mckieana*	McKie's stringybark	Border Rivers–Gwydir, Namoi
B	*Eucalyptus nicholii*	Narrow-leaved black peppermint	Border Rivers–Gwydir, Namoi, Northern Rivers
B	*Eucalyptus parramattensis* subsp. *decadens*	*Eucalyptus parramattensis* subsp. *decadens*	Hunter–Central Rivers
G	*Eucalyptus pulverulenta*	Silver-leafed gum	Central West, Hawkesbury–Nepean, Murrumbidgee
B	*Eucalyptus pumila*	Pokolbn mallee	Hunter–Central Rivers
F	*Eucalyptus robertsonii* subsp. *hemisphaerica*	Robertson's peppermint	Central West
B	*Eucalyptus rubida* subsp. *barbigerorum*	Blackbutt candlebark	Border Rivers–Gwydir, Northern Rivers
E	*Eucalyptus tetrapleura*	Square-fruited ironbark	Northern Rivers
B	*Euphrasia bella*	Pretty eyebright	Northern Rivers
A	*Floydia praealta*	Ball nut	Northern Rivers
C	*Fontainea australis*	Southern fontainea	Northern Rivers
A	*Fontainea oraria*	Coastal fontainea	Northern Rivers
G	*Gastrodia sesamoides* (Protected Native Plant Schedule 13 NP&W Act)	Cinnamon bells, Potato orchid	Northern Rivers, Hunter–Central Rivers, Border Rivers–Gwydir, Namoi, Hawkesbury–Nepean
E	*Goodenia macbarronii*	McBarron's goodenia	Border Rivers–Gwydir, Central West, Hunter–Central Rivers, Namoi, Northern Rivers
D	*Grevillea banyabba*	Banyabba grevillea	Northern Rivers
D	*Grevillea beadleana*	Beadle's grevillea	Border Rivers–Gwydir, Northern Rivers
G	*Grevillea evansiana*	Evans grevillea	Central West, Hawkesbury–Nepean
D	*Grevillea guthrieana*	Guthrie's grevillea – Carrai metapopulation	Hunter–Central Rivers, Northern Rivers
B	*Grevillea masonii*	Mason's grevillea	Northern Rivers
G	*Grevillea mollis*	Soft grevillea	Northern Rivers
A	*Grevillea obtusiflora subsp. obtusiflora*	*Grevillea obtusiflora subsp. obtusiflora*	Central West
G	*Grevillea parviflora* subsp. *parviflora*	Small-flower grevillea	Hawkesbury–Nepean, Hunter–Central Rivers, Sydney Metro
G	*Grevillea quadricauda*	Four-tailed grevillea	Northern Rivers
E	*Grevillea rhizomatosa*	Gibraltar grevillea	Northern Rivers
D	*Grevillea scortechinii* subsp. *sarmentosa*	Backwater grevillea	Northern Rivers
D	*Grevillea shiressii*	*Grevillea shiressii*	Hawkesbury–Nepean
E	*Hakea archaeoides*	Big Nellie hakea	Hunter–Central Rivers, Northern Rivers
B	*Hakea fraseri*	Gorge hakea	Northern Rivers
G	*Haloragis exalata* subsp. *exalata*	Square raspwort	Hunter–Central Rivers
B	*Hedyotis galioides*	Sweet false galium	Northern Rivers
D	*Hibbertia hexandra*	Tree guinea flower	Northern Rivers
G	*Hibbertia marginata*	Bordered guinea flower	Northern Rivers
B	*Hicksbeachia pinnatifolia*	Red boppel nut	Northern Rivers
G	*Homoranthus lunatus*	Crescent-leaved homoranthus	Border Rivers–Gwydir, Northern Rivers
G	*Homoranthus prolixus*	Granite homoranthus	Border Rivers–Gwydir, Central West, Namoi, Northern Rivers
A	*Hypolepis elegans*	*Hypolepis elegans*	Northern Rivers
B	*Knoxia sumatrensis*	*Knoxia sumatrensis*	Northern Rivers

D	*Lasiopetalum longistamineum*	*Lasiopetalum longistamineum*	Hunter–Central Rivers
A	*Lepidium hyssopifolium*	Aromatic peppercress	Central West, Northern Rivers
A	*Lepidium peregrinum*	Wandering peppercress	Border Rivers–Gwydir
B	*Leucopogon confertus*	Torrington beard-heath	Border Rivers–Gwydir
B	*Lindsaea brachypoda*	Short-footed screw fern	Northern Rivers
A	*Lindsaea fraseri*	Fraser's screw fern	Northern Rivers
A	*Lindsaea incisa*	Slender screw fern	Northern Rivers
E	*Macrozamia johnsonii*	Johnson's cycad	Northern Rivers
B	*Marsdenia longiloba*	Slender marsdenia	Northern Rivers
G	*Melaleuca biconvexa*	Biconvex paperbark	Hawkesbury–Nepean, Hunter–Central Rivers, Northern Rivers
D	*Melaleuca tamariscina* subsp. *irbyana*	Weeping paperbark	Northern Rivers
B	*Melichrus hirsutus*	Hairy melichrus	Northern Rivers
A	*Melichrus* sp. *'Gibberagee'*	Narrow-leaf melichrus	Northern Rivers
A	*Micromelum minutum*	*Micromelum minutum*	Northern Rivers
F	*Monotaxis macrophylla*	Large-leafed monotaxis	Border Rivers–Gwydir, Central West, Lachlan, Northern Rivers
A	*Muellerina myrtifolia*	Myrtle-leaf mistletoe	Northern Rivers
A	*Myriophyllum implicatum*	*Myriophyllum implicatum*	Northern Rivers, Hunter–Central Rivers, Border Rivers–Gwydir, Namoi
A	*Ochrosia moorei*	Southern ochrosia	Northern Rivers
G	*Olax angulata*	Square-stemmed olax	Northern Rivers
B	*Olearia cordata*	*Olearia cordata*	Hawkesbury–Nepean, Hunter–Central Rivers
E	*Olearia flocktoniae*	Dorrigo daisy bush	Northern Rivers
A	*Owenia cepiodora*	Onion cedar	Northern Rivers
G	*Parsonsia dorrigoensis*	Milky silkpod	Northern Rivers
G	*Persicaria elatior*	Tall knotweed	Hawkesbury–Nepean, Hunter–Central Rivers, Northern Rivers
B	*Phaius australis*	Southern swamp orchid	Northern Rivers
B	*Phaius tankervilleae*	Lady Tankerville's swamp orchid	Northern Rivers
B	*Phebalium glandulosum* subsp. *eglandulosum*	Rusty desert phebalium	Border Rivers–Gwydir
B	*Picris evae*	Hawkweed	Border Rivers–Gwydir, Northern Rivers
G	*Pimelea venosa*	Bolivia Hill pimelea	Border Rivers–Gwydir
D	*Plectranthus nitidus*	Nightcap plectranthus	Northern Rivers
D	*Polygala linariifolia*	Native milkwort	Border Rivers–Gwydir, Northern Rivers
B	*Pomaderris brunnea*	Brown pomaderris	Hawkesbury–Nepean, Hunter–Central Rivers, Northern Rivers
B	*Pomaderris queenslandica*	Scant pomaderris	Border Rivers–Gwydir, Central West, Hunter–Central Rivers, Namoi, Northern Rivers
A	*Prostanthera askania*	Cut-leaf mint-bush	Hawkesbury–Nepean, Hunter–Central Rivers
F	*Prostanthera densa*	Villous mint-bush	Hunter–Central Rivers, Sydney Metro
A	*Prostanthera junonis*	Somersby mint-bush	Hawkesbury–Nepean, Hunter–Central Rivers, Sydney Metro
D	*Prostanthera staurophylla*	Torrington mint-bush	Border Rivers–Gwydir, Northern Rivers
B	*Pseudanthus ovalifolius*	Oval-leafed pseudanthus	Border Rivers–Gwydir
B	*Pterostylis cucullata*	Leafy greenhood	Hunter–Central Rivers

G	*Pterostylis gibbosa*	Illawarra greenhood	Hunter–Central Rivers
D	*Quassia* sp. *'Moonee Creek'*	Moonee quassia	Northern Rivers
A	*Randia moorei*	Spiny gardenia	Northern Rivers
H	*Restio longipes*	*Restio longipes*	Hawkesbury–Nepean, Hunter–Central Rivers
H	*Rulingia prostrata*	Dwarf kerrawang	Hawkesbury–Nepean, Hunter–Central Rivers
B	*Rutidosis heterogama*	Heath wrinklewort	Border Rivers–Gwydir, Hunter–Central Rivers, Northern Rivers
B	*Sarcochilus fitzgeraldii*	Ravine orchid	Northern Rivers
B	*Sarcochilus hartmannii*	Hartman's sarcochilus	Northern Rivers
A	*Sauropus albiflorus* subsp. *microcladus*	Brush sauropus	Northern Rivers
G	*Senna acclinis*	Rainforest cassia	Hawkesbury–Nepean, Hunter–Central Rivers, Northern Rivers
A	*Sophora fraseri*	Brush sophora	Northern Rivers
D	*Styphelia perileuca*	Montane green five-corners	Hunter–Central Rivers, Northern Rivers
A	*Syzygium hodgkinsoniae*	Red lilly pilly	Northern Rivers
A	*Syzygium moorei*	Durobby	Northern Rivers
G	*Syzygium paniculatum*	Magenta lilly pilly	Hawkesbury–Nepean, Hunter–Central Rivers, Northern Rivers, Sydney Metro
A	*Tarenna cameronii*	Cameron's tarenna	Northern Rivers
D	*Tasmannia glaucifolia*	Fragrant pepperbush	Hunter–Central Rivers, Northern Rivers
G	*Tasmannia purpurascens*	Broad-leaved pepperbush	Hunter–Central Rivers, Namoi
D	*Tetratheca glandulosa*	*Tetratheca glandulosa*	Hawkesbury–Nepean, Hunter–Central Rivers, Sydney Metro
D	*Tetratheca juncea*	Black-eyed Susan	Hunter–Central Rivers, Sydney Metro
G	*Thesium australe*	Austral toadflax	Border Rivers–Gwydir, Hawkesbury–Nepean, Hunter–Central Rivers, Namoi, Northern Rivers
D	*Tinospora smilacina*	Tinospora vine	Northern Rivers
D	*Tinospora tinosporoides*	Arrow-head vine	Northern Rivers
B	*Triplarina imbricata*	Creek triplarina	Northern Rivers
A	*Tylophora woollsii*	Cryptic forest twiner	Northern Rivers
F	*Velleia perfoliata*	Velleia perfoliata	Hawkesbury–Nepean, Hunter–Central Rivers
H	*Zieria floydii*	Floyd's zieria	Northern Rivers
D	*Zieria involucrata*	*Zieria involucrata*	Hawkesbury–Nepean

A. Threatened flora: 50-metre exclusion zone, all individuals

Where there is a record of a species to which this condition applies:

(a) An exclusion zone with at least a 50-metre radius must be implemented around all individuals.

(b) An exclusion zone at least 50 metres wide must be implemented around all groups of individuals. A group is defined as more than one individual located less than 20 metres apart.

B. Threatened and protected flora: 20-metre exclusion zone, all individuals

Where there is a record of a species to which this condition applies:

(a) An exclusion zone with at least a 20-metre radius must be implemented around all individuals.

(b) An exclusion zone at least 20 metres wide must be implemented around all groups of individuals. A group is defined as more than one individual located less than 20 metres apart.

C. Threatened flora: 50-metre exclusion zone, 90% of individuals

Where there is a record of a species to which this condition applies:

(a) An exclusion zone or exclusion zones at least 50 metres wide must be implemented around 90% of individuals.

(b) The exclusion zone or exclusion zones must include areas where the density of individuals is greatest.

Note: Where there are few individuals within the forest operations area and the individuals are widely dispersed within the area, an exclusion zone with at least a 50-metre radius must be implemented around at least 90% of individuals. Where there are a large number of individuals within the forest operations area and they occur in groups, the exclusion zone or exclusion zones may be positioned around the group or groups. A group is defined as more than one individual, located less than 20 metres apart.

D. Threatened and protected flora: 20-metre exclusion zone, 90% of individuals

Where there is a record of a species to which this condition applies:

(a) An exclusion zone or exclusion zones at least 20 metres wide must be implemented around 90% of individuals.

(b) The exclusion zone or exclusion zones must include areas where the density of individuals is greatest.

Note: Where there are few individuals within the forest operations area and the individuals are widely dispersed within the area, an exclusion zone with at least a 20-metre radius must be implemented around at least 90% of individuals. Where there are a large number of individuals within the forest operations area and they occur in groups, the exclusion zone or exclusion zones may be positioned around the group or groups. A group is defined as more than one individual, located less than 20 metres apart.

E. Threatened and protected flora: protection of 90% of individuals

Where there is a record of a species to which this condition applies:

(a) A minimum of 90% of individuals must be protected from specified forestry activities. During forest operations, the potential for damage to these plants must be minimised by the use of directional felling techniques.

Note: Where there are few individuals within the forest operations area and the individuals are widely dispersed within the area, at least 90% of individuals must be protected from specified forestry activities. Where there are a large number of individuals within the forest operations area and they occur in groups, the group or groups should be protected**.** A group is defined as more than one individual located less than 20 metres apart.

F. Exclusion of specified forestry activities from 100% of individuals with a 10-metre exclusion zone and a further 10-metre buffer

Where there is a record of a species to which this condition applies:

(a) An exclusion zone with a 10-metre radius must be implemented around all individuals.

(b) An additional buffer zone 10 metres wide must be implemented around all exclusion zones. Limited operations (snigging and selective tree removal) may be conducted in the buffer zone.

G. Exclusion of specified forestry activities from 100% of individuals and no buffer

Individuals of the threatened species or protected native plants to which this condition applies must not be picked in the course of carrying out specified forestry activities.

H. Damage to individuals avoided

Damage to individuals of the species to which this condition applies should be avoided to the greatest extent practicable.

Glossary

Expressions that are defined in the *Native Vegetation Act 2003* and Native Vegetation Regulation 2005 have the same meanings in this Code as the meanings given to them in that Act and Regulation, unless they are otherwise defined in this Code. All other expressions are defined as in this glossary.

Accidentally felled	A tree is accidentally felled into any area of land only if it is apparent that techniques of directional felling were used in an attempt to fell the tree away from the area. Despite the above, a tree is not accidentally felled into an area if the person responsible knew or could reasonably have been expected to know that the tree would fall into the area.
Australian Group Selection	A silvicultural technique that creates canopy openings for the purpose of stimulating regeneration in certain forest types.
Batter	An earth slope formed from fill material (fill batter) or cut into the natural hillside (cut batter) during road construction.
Diameter at breast height over bark (dbhob)	The diameter of a tree measured at 1.3 metres above the ground. Measurements are made over the bark and horizontal to the trunk.
Directional felling	The felling of a tree so it falls in a pre-determined direction.
Dispersible soil	A structurally unstable soil which readily disperses into its constituent particles (clay, silt, sand) in water.
Drainage depression	A shallow depression with smoothly concave cross-section that conveys runoff only during or immediately after periods of heavy rainfall.
Drainage feature	A drainage depression, drainage line, river or watercourse.
Drainage line	A channel down which surface water naturally concentrates and flows. Drainage lines exhibit one or more of the following features which distinguish them from drainage depressions: • evidence of active erosion or deposition, e.g. gravel, pebble, rock, sand bed, scour hole or nick point • an incised channel more than 30 centimetres deep with clearly defined bed and banks • a permanent flow.
Drainage structure	A structure designed to convey water away from a road, track or area of soil disturbance.
Earth windrow	A mound of soil material or gravel on the edge of a road or snig track formed by the spillage from the edge of a blade or similar machine during earthmoving operations.
Ecological logging regime	The use of logging (commercial and non-commercial) to rehabilitate or regenerate an ecological community. The primary goal is ecological improvements and commercial logging provides an economic incentive for the forest owner to undertake the works. Also known as ecological silvicultural logging.

Exclusion zone	Means an area of land (within a specified distance of landscape features identified in Tables C or F) where forest operations are prohibited, unless otherwise allowed under this Code.
Extraction track	A track constructed for use by forwarding machinery.
Food resource trees	Trees with recent V-notch incisions or other incisions made by a yellow-bellied glider or squirrel glider. Recent incisions are incisions less than two years old as evidenced by the fact the incision has not closed.
Forest operations	All clearing resulting from activities associated with forest management including harvesting operations, construction and maintenance of roads and tracks, and prescribed burning for regeneration.
Girders	High quality logs used in a round or flat faced form to support a deck such as a bridge or wharf or as large end section, heart-free, sawn timber suitable for heavy construction.
Gross forest area	The total area of forest defined in a Property Vegetation Plan.
Gully stuffer	A drainage feature crossing formed by filling the drainage feature with trees, debris, spoil, soil, rock or other material to the level of the road or track.
Habitat tree	A tree retained for habitat purposes under this Code.
Harvesting operations	Harvesting operations include: • timber felling, snigging and extraction • construction and maintenance of log landings, snig tracks and extraction tracks.
Heathland	Areas dominated (covers more than 50% of the area) by shrubs generally less than 2 metres tall at maturity.
Highly erodible soil	A soil where the particles are readily detached and transported by erosive forces. The presence of these soils may be identified by evidence of existing erosion (gully or rill erosion), or by commonly known problem soil types, e.g. some coarse-grained granites.
Incised channel	A channel more than 30 centimetres deep with clearly defined bed and banks.
Inundation	Flooding of the forested area by water overflowing the banks of a river.
Log landing	An area (usually cleared) where timber products are assembled for processing and sorting before being loaded onto a truck.
Machinery exclusion zone	Land within 10 metres of the top edge of the bank of any unmapped drainage line.
Mass movement	The downslope movement of greater than 10 cubic metres of soil, where gravity is the primary force or where no transporting medium such as wind, flowing water or ice is involved.
Nest trees	• Trees with nests or roosts of any species of raptor, including powerful owls, barking owls, sooty owls and masked owls. • Trees with nests of colonial-nesting water birds (groups of stick-nests).
Net harvestable area	The area under the private native forestry PVP where harvesting is permitted in accordance with the Code.

Old growth	Ecologically mature forest where the effects of disturbance are now negligible. This includes an area of forest greater than 5 hectares where: • the overstorey is in late to over-mature growth stage with the presence of relatively large old trees (many containing hollows and often with the presence of dieback or dead branches in the crown) • the age (growth) structure of the stand measured as relative crown cover consists of less than 10% of regeneration and advance growth and more than 10% of late to over-mature (senescent) growth • the effects of unnatural disturbance are now negligible. Old growth woodlands west of the Great Dividing Range, while comprising a characteristic canopy of late to over-mature trees (many with hollows), may comprise a woodland structure with less diverse or often shrubby understorey and a groundcover of grasses and herbs.
Portable mill site	A site where a portable mill (easily movable milling equipment) operates.
Posts	Term generally used to describe posts in round or split form used for fencing.
Prescribed Stream	Stream listed in the Major Rivers database of the Assessment Methodology database Department of Environment and Climate Change webpage.
Protected trees	Trees required to be retained under clause 4.3(3): • trees required to be retained under section 4.2 • plants of the genus *Xanthorrhoea* (grass trees), genus *Allocasuarina* (forest oak) and genus *Banksia* • other trees that are required to be retained by this Code.
Pulp logs	Logs cut and prepared primarily to produce wood pulp for the manufacture of reconstituted products including paper and panel board.
Rainfall erosivity	A measure of the ability of rainfall to cause erosion at any location. It is directly related to the likelihood of high intensity storms and can be used to predict times of the year when erosion risk is greatest.
Rainforest	Tree-dominated vegetation where the tree stratum (over 3 metres in height) which has the greatest crown cover has rainforest species making up 50% or more of the crown cover, except where non-rainforest emergent species (including brushbox and turpentine) occur and exceed 30% or more of the upper stratum crown cover. Rainforest includes all areas of rainforest mappable at a 1:25000 scale. Rainforest also includes areas exceeding 0.5 hectares occurring as isolated clumps or lineal strips of rainforest trees.
Recovery plan	As defined in the *Threatened Species Conservation Act 1995*.
Recruitment tree	A tree capable of developing hollows to provide habitat for wildlife and which comes from the next smaller cohort than habitat trees.
River red gum forests	A forest dominated by *Eucalyptus camaldulensis* consistent with description of Forest Type 199 (River Red Gum) in State Forests of NSW, Research Note 17.
Riparian exclusion zones	Those areas within the distances specified for 'Drainage feature' as listed in Table F where forest operations are not permitted, unless otherwise allowed by this Code.
Road	Any route used for vehicular access to, and the transport of logs from, the point of loading (log landing) within the forest area.

Road prism	That part of the road from the inflexion point at the toe of the fill batter to the inflexion point at the top edge of the cut batter. Where there is no cut or fill batter as part of the road, the road prism is to be taken from the outside edge of the table drain on either side of the road.
Rocky outcrops and cliffs	A 'rocky outcrop' has an area of 0.2 hectares or larger, where 70% or more of the surface is composed of exposed boulders of more than 0.6 of a metre in diameter. 'Cliff' means a rocky slope steeper than 70 degrees and more than three metres high.
Rollover bank	A crossbank constructed with a smooth cross-section and gentle batters, which is well-compacted to provide permanent vehicular trafficability.
Roost trees	Trees with nests or roosts of any species of raptor, including powerful owls, barking owls, sooty owls and masked owls, and trees which support maternity bat roosts.
Sawlog	Log of a species suitable for processing through a sawmill into solid timber products.
Silvicultural operations	The activities associated with the management of trees within a forest for the purpose of meeting sustainable long-term productivity objectives, including thinning, single tree selection and creation of canopy openings.
Single tree selection	A harvesting operation where the trees harvested are either single trees or small groups of trees. For the purposes of this Code, single tree selection operations will not create canopy openings.
Snig track	A track used by snigging or skidding equipment.
Spoon drain	A drain with a semi-circular cross-section, which has no associated ridge of soil. Its capacity is solely defined by the excavated channel dimensions.
Stand height	Mean height of the dominant trees in the stand. Measurement of stand height must conform to methods described in approved guidelines.
Stocking level	A measure of the frequency of occurrence of tree stems assessed as being capable of growing to canopy level. Measurement of stocking levels must conform with methods described in approved guidelines.
Thinning	A silvicultural practice where some trees are removed in order to increase the growth rates of retained trees.
Timber products	Commercial timber products removed from or felled within the forest, including sawlogs, veneer logs, poles, girders, piles and pulp logs.
Veneer log	High quality logs that are rotary peeled or sliced to produce sheets of veneer.
Walkover techniques	Timber extraction or snigging without removing or unduly disturbing the existing natural groundcover, i.e. where no snig track construction involving soil disturbance is required.
Wetland	Includes any shallow body of water (such as a marsh, billabong, swamp or sedgeland) that is: • inundated cyclically, intermittently or permanently with water, and • vegetated with wetland plant communities.

B

Private Native Forestry Code of Practice

Private Native Forestry Code of Practice for Southern NSW

Department of **Environment & Climate Change** NSW

Published by:
Department of Environment and Climate Change NSW
59–61 Goulburn Street, Sydney
PO Box A290, Sydney South 1232
Ph: (02) 9995 5000 (switchboard)
Ph: 131 555 (environment information and publications requests)
Ph: 1300 361 967 (national parks information and publications requests)
Fax: (02) 9995 5999
TTY: (02) 9211 4723
Email: info@environment.nsw.gov.au
Website: www.environment.nsw.gov.au

DECC 2008/40
ISBN 978 1 74122 722 2
February 2008
Printed on recycled paper

Contents

Tables and figures

Introduction

The object of this Private Native Forestry Code of Practice (the 'Code') is to ensure the supply of timber products from privately owned forests at a regular rate that can be maintained indefinitely for present and future generations while at the same time maintaining non-wood values at or above target levels considered necessary by society for the prevention of environmental harm and the provision of environmental services for the common good.

'Southern NSW' means that part of the state south of the latitude of Sydney: 33^0 52' 02.71 S. These Code prescriptions apply to all forests except those forests that meet the definitions of either River Red Gum Forests or Cypress and Western Hardwood Forests.

Assessment of broadscale clearing for private native forestry

Under the Code, broadscale clearing for the purpose of private native forestry improves or maintains environmental outcomes if:

- it complies with the requirements of this Code
- any area cleared in accordance with the Code is allowed to regenerate and is not subsequently cleared, except where otherwise permitted by this Code.

Note: A landowner may seek development consent to undertake private native forestry (PNF) outside the provisions of the Code under the *Native Vegetation Act 2003* (NV Act).

Minor variation of Code

If, when preparing a Forest Operation Plan under the Code, the projected impact on the net harvestable area is greater than 10%, a landholder can request an accredited expert to examine the Forest Operation Plan and determine if it is appropriate to modify the environmental prescriptions of the Code in a specified manner.

A private native forestry Property Vegetation Plan (PVP) may modify in a specified manner the environmental prescriptions of the Code if an accredited officer is satisfied that:

(1) the variation of the environmental prescriptions is minor

(2) the proposed clearing will improve or maintain environmental outcomes

(3) strict adherence to the Code is in the particular case unreasonable and unnecessary.

The Code

1. Property Vegetation Plans

(1) Before any forestry operations commence on private land, a Property Vegetation Plan (PVP) under the NV Act must be approved by the Minister for Climate Change, Environment and Water.

(2) Forest operations under an approved PVP must be conducted in accordance with all provisions of this Code.

(3) For the purpose of preparing a PVP, the Department of Environment and Climate Change (DECC) will provide available digital information of landscape features (as identified in Table C) and any drainage features (as identified in Table F).

2. Forest operation planning and management

2.1 Forest Operation Plan

(1) A Forest Operation Plan must be prepared before forest operations commence.

(2) A Forest Operation Plan must be in an approved form and consistent with the provisions of this Code and the requirements of the Listed Species Ecological Prescriptions for Southern NSW Forests, which are set out in the Appendix to this Code.

(3) The landowner and anyone else carrying out forest operations must read, sign and date the Forest Operation Plan.

(4) A copy of the Forest Operation Plan must be available on-site when forest operations are occurring.

(5) A Forest Operation Plan must contain the following:

(a) A map (or maps) showing:

(i) the location and boundaries of the area in which harvesting and/or other forest operations will occur

(ii) recorded locations of any populations or endangered ecological communities listed under the schedules of the *Threatened Species Conservation Act 1995* and species in the Listed Species Ecological Prescriptions for Southern NSW Forests, which are set out in the Appendix to this Code

(iii) the location of landscape features as listed in Table C and drainage features as listed in Table F

(iv) the indicative location of existing and proposed roads and drainage feature crossings

(v) the indicative location of log landings and portable mill sites

(vi) the classification of the forest area into one or more of the broad forest types listed in Table A; and

(b) A written component that provides:

(i) details of ownership of the land

(ii) a description of the broad forest types (including overstorey species composition, disturbance history and current condition of the forest)

(iii) the estimated stand height and basal area for each broad forest type

(iv) details of forest access, including any necessary construction, upgrading or maintenance of forest roads and drainage feature crossings

(v) details of harvesting and/or other proposed forest operations

(vi) details of flora and fauna management actions

(vii) details of tree marking activities (where applicable)

(viii) details of activities to promote regeneration

(ix) details of relevant silvicultural treatments that may be carried out as part of the Forest Operation Plan.

(6) The landowner may amend the Forest Operation Plan at any time, except for matters referred to in clause 2.1(5)(b)(iii). Any amendments to either the map or the written component must be noted on the Forest Operation Plan.

(7) The landowner must retain each Forest Operation Plan, including any amendments, for the life of the PVP or for three years after completion of the harvesting operations for which it was prepared, whichever is the later date.

(8) The landowner must provide the Forest Operation Plan, including any amendments, to an authorised officer from the Department of Environment and Climate Change if requested to do so.

2.2 Reporting

(1) The landowner must lodge a report to the Department of Environment and Climate Change by 31 March each year if:

(a) forest operations have been carried out on the land to which the PVP applies in the previous calendar year, or

(b) if in the current calendar year:

(i) it is intended to carry out forest operations in the next 12 months, or

(ii) forest operations have been carried out.

(2) If forest operations have been carried out on the land to which the PVP applies in the previous calendar year, the report must specify:

(a) the approximate volumes of the timber products harvested

(b) the approximate number of hectares on which forest operations occurred

(c) the silvicultural treatments that were applied during that period.

3. Silvicultural operations

3.1 Single tree selection and thinning

(1) Single tree selection and thinning operations must not reduce stand basal area below the limits specified in Table A.

(2) The **minimum** stand basal areas in Table A must be calculated in accordance with the *Silvicultural Guidelines for the Code of Practice for Private Native Forestry* prepared by Department of Environment and Climate Change and available at www.environment.nsw.gov.au/pnf.

Table A: Minimum stand basal areas for single tree selection and thinning operations

Broad forest type	Stand height (< 25 metres)	Stand height (≥ 25 metres)
Tablelands hardwood	12 m^2/ha	16 m^2/ha

Broad forest type	Stand height (< 25 metres)	Stand height (≥ 25 metres)
Tablelands ash	12 m^2/ha	16 m^2/ha
South coast ash/stringybark	12 m^2/ha	18 m^2/ha
Spotted gum	12 m^2/ha	16 m^2/ha

Note: This provision:
- uses stand basal area as a simple tool to determine disturbance thresholds
- establishes harvesting limits to both maintain forest biodiversity values and manage forests while considering appropriate silvicultural practices.

3.2 Australian Group Selection

(1) Harvest operations that result in canopy openings must conform with the following requirements:

(a) the sum of canopy openings must at no time exceed 20% of the net harvestable area

(b) the maximum width of a canopy opening must not exceed twice the stand height

(c) the minimum distance between canopy openings must not be less than twice the stand height.

(2) A **canopy opening** is an area greater than 0.1 hectares in size, measured between canopy perimeters, where any vegetation remaining within the opening is less than one-half of the stand height.

Note: For the purposes of selecting an appropriate silvicultural management regime, reference should be made to the *Silvicultural Guidelines for the Code of Practice for Private Native Forestry* prepared by Department of Environment and Climate Change and available at www.environment.nsw.gov.au/pnf.

3.3 Regeneration and stocking

(1) The minimum stand stocking (as determined by the percentage of stocked plots specified in Table B) must be achieved within 24 months of a regeneration event.

(2) In this clause, **regeneration event** is a harvesting or thinning operation.

(3) A harvesting operation must not occur in a previously harvested area until stocking levels meet the minimum stocked plot requirements in Table B.

(4) The percentage of stocked plots is to be measured in accordance with the method for measuring plots for sampling and measuring stocking found in the Department of Environment and Climate Change's *Private Native Forestry Code of Practice Guideline No. 1: Guidelines for assessing regeneration and stocking*.

(5) A landowner must comply with any requirements of the Director General of DECC for the purpose of regenerating or re-establishing the forest, if the minimum percentage of stocked plots has not been reached within a period of 24 months following a regeneration event.

Table B: Minimum percentage of stocked plots

Broad forest type	Within canopy openings	Elsewhere in the forest
Tablelands hardwood	50%	60%
Tablelands ash	55%	65%
South coast ash/stringybark	60%	70%

Broad forest type	Within canopy openings	Elsewhere in the forest
Spotted gum	60%	70%

Note: Stocking is a measure of the occurrence and distribution of trees of any age throughout the forest. The simplest way to assess whether a forest is adequately stocked is to sample the level of stocking by measuring a number of plots. Plots will be found to be either stocked or unstocked. The percentage of stocked plots reflects the adequacy of stocking within the forest. Where stocking is found to be inadequate, regeneration will be required to meet the stocking requirements.

4. Protection of the environment

4.1 Protection of landscape features of environmental and cultural significance

(1) Forest operations in and adjacent to specified landscape features must comply with the requirements in Table C.

(2) Old growth will be identified according to the protocol approved by the Minister for Climate Change, Environment and Water, available at www.environment.nsw.gov.au/pnf.

(3) Rainforest will be identified according to the protocol approved by the Minister for Climate Change, Environment and Water, available at www.environment.nsw.gov.au/pnf.

Table C: Requirements for protecting landscape features

Landscape feature	Operational conditions
Endangered ecological communities listed in the *Threatened Species Conservation Act 1995* at the date the private native forestry PVP is approved by the Minister	Forest operations may only occur in endangered ecological communities as part of an approved Ecological Harvesting Plan approved by the Director General of the Department of Environment and Climate Change, except that existing roads may be maintained.
Endangered populations listed in the *Threatened Species Conservation Act 1995* at the date the private native forestry PVP is approved by the Minister	Forest operations must not result in any harm to an animal that is part of an endangered population, or result in the picking of any plant that is part of an endangered population, except that existing roads may be maintained.
Vulnerable ecological communities listed in the *Threatened Species Conservation Act 1995* at the date the private native forestry PVP is approved by the Minister	Forest operations must not occur in vulnerable ecological communities, except that existing roads may be maintained.
Rainforest	Forest operations must not occur within rainforest, except that existing roads may be maintained.
Old growth forest	Forest operations must not occur within old growth forest, except that existing roads may be maintained.
Wetlands	Forest operations must not occur in any wetland or within 20 metres of any wetland, except that existing roads may be maintained.
Heathland	Forest operations must not occur in any heathland or within 20 metres of heathland, except that existing roads may be maintained.
Rocky outcrops	Forest operations must not occur on any rocky outcrop or within 20 metres of a rocky outcrop, except that: • existing roads may be maintained • existing snig tracks may be used.

Landscape feature	Operational conditions
Cliffs, caves, tunnels and disused mineshafts (excluding open pits less than 3 metres deep)	Forest operations must not occur within 10 metres of cliffs, caves, tunnels or disused mineshafts, except that existing roads may be maintained.
Steep slopes	Forest operations must not occur on slopes greater than 30 degrees, except that: • existing roads and tracks may be maintained • new roads and tracks may be constructed subject to conditions in clause 5.1(18) of the Code.
Aboriginal object or place as defined in the *National Parks and Wildlife Act 1974*	Forest operations must not occur within: • within 50 metres of a known burial site • within 20 metres of an Aboriginal scarred or carved tree • within 10 metres of a known Aboriginal object or place (this requirement does not apply to Aboriginal objects or places that may lawfully be destroyed).
Areas containing items identified as heritage items in an environmental planning instrument	Forest operations must not occur within 10 metres of a listed heritage site.
Areas of existing mass movement	Harvesting operations which create canopy openings must not occur within the area. Harvesting machinery must not enter the area. Existing roads may be maintained. New roads must not be constructed.
Dispersible and highly erodible soils	Existing roads may be maintained. Drainage feature crossings must be armoured with erosion-resistant material. Road batters and table drains must be stabilised using erosion-resistant material, vegetation or slash. Log landings must be stabilised using erosion-resistant material, vegetation or slash at the completion of forestry operations. Measures must be taken to immediately stabilise any erosion of roads or snig tracks

4.2 Protection of habitat and biodiversity

(1) Habitat trees must be retained in accordance with Table D.

(2) Hollow bearing trees, recruitment trees, food resource trees, roost trees and nest trees are defined as habitat trees retained for the purposes of this Code.

(3) An individual tree may satisfy more than one condition in the tree retention standards (see Table D), if it has the appropriate characteristics.

(4) Retained habitat trees should, where possible, represent the range of species in mature and late mature growth stages.

(5) Habitat trees should, where possible, be evenly distributed throughout the area of harvesting operations and within the net logging area. Preference shall be given to trees with well developed spreading crowns and minimal butt damage.

(6) For the purpose of this clause:

(a) A **hollow bearing tree** is a dominant or co-dominant living tree, where the trunk or limbs contain hollows, holes or cavities. Such hollows may not always be visible from the ground but may be apparent from the presence of deformities such as protuberances or broken limbs, or places where the head of the tree has broken off. If there are more than the minimum required number of habitat trees, preference shall be given to the largest. Trees that pose a health or safety risk

may be removed and, where possible, substituted with other hollow bearing trees, and if not possible, by recruitment trees.

(b) **Dead standing** trees cannot be counted as hollow bearing trees.

(c) A **feed tree** is a tree that provides a source of nectar or other food for wildlife and is listed in Table E.

(d) A **recruitment tree** is a large vigorous tree capable of developing hollows to provide habitat for wildlife. Preference must be given to trees from the next cohort to that of retained hollow bearing trees.

(e) **Roost, nest and food resource trees** are defined as:

(i) trees with nests or roosts of any species of raptor, including powerful owls, barking owls, sooty owls and masked owls

(ii) trees which support maternity bat roosts

(iii) trees with recent V-notch incisions or other incisions made by a yellow-bellied glider or squirrel glider. Recent incisions are incisions less than two years old as evidenced by the fact the incision has not closed.

Table D: Minimum standards for tree retention

Trees that must be retained
• 10 hollow bearing trees per 2 hectares, where available. • One recruitment tree from the next cohort and representing the range of species in the forest before forest operations commenced must be retained for every hollow bearing tree. • Where the total number of hollow bearing trees is less than 10 trees per 2 hectares, additional recruitment trees must be retained to bring the total number of retained hollow bearing and recruitment trees up to 20 trees per 2 hectares. • Up to half of all required recruitment trees can be located in a riparian buffer zone where the subject 2-hectare area is within 200 metres of, and partly includes, that riparian buffer zone. • A minimum of 6 feed trees per 2 hectares should be retained where available. • All feed trees that have marks or 'V' notches from sap-feeding mammals must be retained. • All roost, nest or food resource trees must be retained.

Table E: Feed trees

Ironbark – *Eucalyptus tricarpa*	Swamp mahogany – *E. robusta*
Grey ironbark – E. *paniculata*	Yellow stringybark – *E. muelleriana*
River peppermint – *E. elata*	Black sallee – *E. stellulata*
Mountain grey gum – *E. cypellocarpa*	Swamp gum – *E. ovata*
Maiden's gum – *E. maidenii*	Red bloodwood – *Corymbia gummifera*
Forest red gum - *E. tereticornis*	Spotted gum – *C. maculata*
Mountain gum – *E. dalrympleana*	Blue-leaved stringybark – *E. agglomerata*
Manna gum – *E.viminalis*	Red stringybark – *E. macrorhyncha*
Snow gum – *E. pauciflora*	Alpine ash – *E. delegatensis*
White stringybark – *E. globoidea*	Eurabbie – *E. bicostata*

4.3 Minimising damage to retained trees and native vegetation

(1) As far as practicable, forestry operations must not damage protected trees.

(2) Without detracting from subclause (1):

(a) debris must not be heaped around protected trees

(b) machinery operations must not harm protected trees

(c) directional felling techniques must be employed to avoid (as far as is practicable) damage to protected trees.

(3) In this clause **protected trees** are defined as:

(a) trees required to be retained under clause 4.2

(b) plants of the genus *Xanthorrhoea* (grass trees), genus *Allocasuarina* (forest oak) (except bull oak (*Allocasuarina luehmannii*)), and genus *Banksia*

(c) other trees that are required to be retained by this Code.

4.4 Drainage feature protection

(1) Forest operations must not occur in riparian exclusion zones, other than in accordance with this clause, and except where otherwise allowed by this Code. For the purpose of this clause, riparian exclusion zones are defined as those areas within the distances specified for 'Drainage feature' as listed in Table F.

Table F: Riparian exclusion and riparian buffer zones

Drainage feature	Riparian exclusion zone distance from drainage feature	Riparian buffer zone distance beyond riparian exclusion zone
Mapped first-order streams	5 metres	10 metres
Mapped second-order streams	5 metres	20 metres
Mapped third-order or higher streams	5 metres	30 metres
Prescribed Streams	20 metres	15 metres

For an explanation of stream order, see Figure 2 in the Appendix to this Code.

(2) Riparian buffer zones extend from the boundary of the riparian exclusion zone outwards away from the drainage feature for the distance specified in Table F. Limited forest operations may occur within riparian buffer zones subject to the following limitations:

(a) snig track construction is limited to the construction of one ridge line or spur snig track per ridge or spur

(b) machinery, using walkover techniques, may extract logs from any area within a riparian buffer zone

(c) all rainforest species and all hollow bearing trees are retained

(d) only 30% of the pre-harvest basal area can be removed in any ten-year period and the minimum basal area limit for the broad forest type set out in Table A is maintained within the riparian buffer zone

(e) felling is directed away from the drainage line/riparian exclusion zone

(f) any furrows resulting from log removal are treated to prevent concentration of water flow

(g) clearing and disturbance within the riparian buffer zone is minimised.

(3) For the purposes of Table F, stream order is determined according to the Strahler System, using the largest scale topographic map available for that area and as published by the NSW Government. See Figure 2 in the Appendix for more information.

(4) The distance specified in Table F must be measured from the top edge of each bank and away from the incised channel or, where there is no defined bank, from the edge of the channel of each specified drainage feature.

(5) Where harvesting is occurring adjacent to riparian buffer zones, all tree felling should employ directional felling to minimise as far as practicable disturbance to vegetation within the riparian buffer zone.

(6) Where a tree cannot be felled into the area outside the riparian buffer zone using directional felling, it may be felled into the riparian buffer zone provided that not more than 6 trees within any distance of 200 metres along the boundary of the riparian buffer zone enter the riparian buffer zone.

(7) Where a tree is felled into the riparian buffer zone, the crown must not be removed from the riparian buffer zone.

(8) Machinery exclusion zones must be applied to all unmapped drainage lines. For the purposes of this clause, machinery exclusion zones are areas within 10 metres of, the top edge of the bank of any unmapped drainage line.

(9) Machinery using walkover techniques may operate in machinery exclusion zones. All other machinery must not enter machinery exclusion zones unless otherwise allowed by this Code.

(10) Trees may be felled within machinery exclusion zones provided:

(a) felling is directed away from the drainage line

(b) any furrows resulting from log removal are treated to prevent concentration of water flow

(c) groundcover (including grasses, herbs and forest litter) is retained or artificially reinstated, similar to the surrounding area.

(11) Harvesting machinery must not enter riparian exclusion zones, riparian buffer zones, or machinery exclusion zones other than in accordance with this clause and clauses 4.4(2), 4.4(9) and 5.

(12) New roads may be constructed and old roads re-opened within riparian exclusion zones, riparian buffer zones and machinery exclusion zones provided that:

(a) the road is identified on the Forest Operation Plan

(b) the road prism crosses the riparian zones at right angles or as close to right angles as is practicable

(c) clearing and disturbance within the exclusion zone is minimised

(d) any other necessary permits have been obtained.

(13) If trees are accidentally felled into riparian exclusion zones, they may be removed from those zones if they contain a saleable log, provided that the crown is cut off the log at the boundary of the riparian exclusion zone and left where it has fallen, and that the log is recovered without any machinery operation on the ground within the riparian exclusion zone. Such removal must result in minimal disturbance to the bed and banks of the drainage feature.

(14) Trees may be felled within unmapped drainage depressions, and machinery may enter unmapped drainage depressions. However disturbance must be minimised by:

(a) using walkover techniques wherever possible

(b) preventing skewing of machinery tracks as much as possible

(c) operating with the blade up at all times (except during crossing construction)

(d) not snigging along drainage depressions.

(15) Machinery must not operate in drainage depressions when the soil is saturated.

(16) Australian Group Selection logging system must not be used within:

(a) any riparian exclusion zone

(b) any riparian buffer zone

(c) any machinery exclusion zone.

5. Construction and maintenance of forest infrastructure

5.1 Construction and maintenance of roads

(1) Clearing of native vegetation for the purpose of roads, drainage structures, log landings, mill sites, snig tracks or extraction tracks must not occur except in accordance with this Code, and the clearing must be limited to the minimum extent necessary.

(2) Construction of new roads and drainage feature crossings should be minimised as far as practicable, consistent with the requirements for management, harvesting and fire control in the Property Vegetation Plan area.

(3) As far as practicable, roads must be located on ridgetops or just off the crest of the ridge to facilitate outfall drainage.

(4) Clearing for road construction must be to the minimum extent necessary and should not be more than 3 metres from the outside edges of batters or table drains. If it is necessary to clear a wider area, a minimum of 70% groundcover must be established on all the cleared area beyond the road formation within one month of the date of construction.

(5) Trees and other debris must not be stacked in landscape features referred to in Table C or riparian exclusion zones or riparian buffer zones referred to in Table F.

(6) Any fill batter must be stabilised.

(7) Tree stumps or other woody debris must not be used to provide fill for road construction.

(8) New roads must be constructed, upgraded and maintained with a maximum grade of 10 degrees. The maximum grade may be increased to 15 degrees where it would result in an improved environmental outcome or to avoid difficult ground conditions. The Forest Operation Plan must be noted.

(9) Roads must be maintained according to Table G.

(10) Roads must be maintained to ensure that road surfaces remain stable and drainage systems and sediment controls remain functional.

(11) Soil exposure on road verges must be kept to a minimum.

(12) Roads that are not required for ongoing property management must be stabilised, drained and allowed to revegetate.

(13) Haulage must not be undertaken over any section of road where the surface has broken down, as evidenced by rutting greater than 150 millimetres deep for any distance exceeding 20 metres.

(14) Haulage on natural surface roads must cease when there is runoff from the road surface, except for trucks that have already been loaded or partially loaded. These trucks can travel to their intended destination.

(15) Where existing roads are overgrown and require re-opening, the clearing width must be minimised to the extent required to make the road trafficable.

(16) As far as practicable, grass cover must be maintained, and disturbance to existing drainage structures must be minimised.

(17) Blading-off of roads must not occur.

(18) Sections of new roads may be constructed on ground slopes exceeding 25 degrees only if:

(a) there is no practical alternate route available, and

(b) the sections are designed by a suitably qualified person using currently acceptable engineering standards to ensure stability.

Table G: Maximum distance that water may travel along road surfaces and table drains

Road grade (degrees)	Maximum distance (metres)
0 to ≤ 3	150
> 3 to ≤ 5	100
> 5 to ≤ 10	60
> 10 to ≤ 15	40
> 15 to ≤ 20	30

5.1.1 Road drainage

(1) All reasonable steps must be taken to minimise soil erosion from roads. Accordingly, at least one of the following measures must be adopted, as appropriate in the circumstances:

(a) maintain vegetative cover (that is, plant material, living or dead) that protects the soil surface from erosion

(b) establish a grass cover using a sterile seed or native grass seed, where available

(c) crossfall-drain the road or track with outfall or infall drainage (preferably with the outward or inward slope being between 4% and 6%), or by shaping the road to a crown so water drains to both of its sides

(d) construct drainage structures to convey water away from the road formation (for example, cross drains, mitre drains or relief culverts).

(2) Any drainage structure must be designed to convey the peak flow from a 1-in-5-year storm event.

(3) Drainage structures must be established on a road if concentrated water flow on the road surface or table drains is likely to occur for distances exceeding the relevant spacing, as shown in Table G.

(4) Earth windrows resulting from road construction and upgrading operations must be removed from the shoulders of all roads unless they are specifically constructed to prevent erosion of fill batters or where infall drainage is used.

(5) Earth windrows from road maintenance must be cut through at regular intervals to ensure that water flow on road surfaces does not exceed the distances specified in Table G.

(6) Rollover banks must have a minimum effective bank height of 15 centimetres (consolidated). Spoon drains must have a minimum effective depth of 15 centimetres.

(7) Drainage structures must divert water onto a stable surface and must be kept free of debris that may impede flow of water.

(8) A drop-down structure and dissipater must be installed where drains divert water over an exposed fill batter more than 1 metre high.

5.1.2 Roads crossing drainage features

(1) Drainage feature crossings must be stable causeways, culverts or bridges. Existing gully stuffers may be used if they are stable, but new crossings of these types must not be constructed.

(2) Crossings must be designed, constructed and maintained to minimise disturbance to the passage of fish and other aquatic fauna. They must be located and constructed to cause minimum disturbance to stream banks, stream beds and natural flows. The base of the crossing must be made of erosion-resistant material such as rock, concrete or heavy timber and must conform to the natural level of the stream bed.

(3) Crossings must be constructed as close as practicable to right angles to the water flow unless an angled approach reduces soil and ground disturbance.

(4) Disturbance to the bed and banks of the drainage feature during crossing construction or maintenance must be minimised. Disturbed areas must be reshaped and stabilised as soon as possible following crossing construction or maintenance.

(5) Any approaches to a crossing over a drainage line must be drained, using a drainage structure, within 5 to 30 metres of the crossing. (Where this is impracticable, a drainage structure must be constructed as near as practicable to the crossing.)

(6) Permanent drainage crossing structures must be designed to convey a 1-in-5-year storm event and withstand a 1-in-10-year storm event. Bridges must be designed and constructed so the natural stream flow is not restricted and erosion is minimised.

(7) The surface of any crossing and the approaches on both sides of it must be made of stable material that is unlikely to be displaced during normal use of the crossing or approach or by any flood up to and including peak flow of a 1-in-10-year storm event.

(8) Causeways must be constructed of stable, non-soil material such as crushed gravel, rock, bitumen, concrete, logs, or other stable material that is unlikely to produce water turbidity.

(9) Construction equipment must minimise disturbance or damage to the watercourse bed and banks. Fill and construction material must not be placed into watercourses, and surplus fill must be located outside the drainage feature exclusion zone. Stream banks and bridge embankments must be protected to minimise erosion.

(10) Soil stabilisation must be undertaken in all areas disturbed by crossing construction, upgrading or maintenance.

5.2 Log landings, portable mill sites and snig tracks

(1) Wherever practicable, log landings and portable mill sites must be located on ridge-tops or spurs.

(2) Log landings and portable mill sites must be no larger than the minimum size necessary for efficient operations.

(3) If topsoil is removed, it must be stockpiled and respread at completion of harvesting operations.

(4) Log landings and portable mill sites must be located and constructed as far as practicable to allow effective crossfall drainage during harvesting operations.

(5) Log landings and portable mill sites must not be located nearer than 10 metres to an exclusion zone or riparian buffer zone.

(6) Runoff from log landings and portable mill sites must not be directly discharged into a drainage feature.

(7) Vegetation and debris from log landings and portable mill sites must not be deposited in an exclusion zone or riparian buffer zone.

(8) Woody waste and debris on log landings and portable mill sites must not be stacked against retained trees.

(9) Bark accumulated on log landings, and sawdust on mill sites, must be progressively dispersed away from the site during harvesting operations to prevent significant accumulations.

(10) On completion of operations, log landings and portable mill sites must be drained and reshaped to safely disperse runoff onto surrounding vegetation, and topsoil must be respread evenly over the landing.

5.2.1 Snig tracks and extraction tracks

(1) Snig track or extraction track construction must be minimised and, as far as practicable, walkover extraction must be used and slash retained on snig and extraction tracks.

(2) Soil disturbance and exposure on snig and extraction tracks must be minimised.

(3) As far as practicable, snig tracks from previous operations must be used.

(4) Old snig tracks or extraction tracks must not be used if they are incised and cannot be drained.

(5) In re-opening old snig tracks and extraction tracks, the use of blades should be restricted to the removal of obstructions such as understorey vegetation, logs/tree heads and surface rock, and ensuring that the track is adequately drained.

(6) Wherever practicable, snigging and timber extraction must be uphill.

(7) Snig tracks and extraction tracks must be located where they can be drained effectively, and should be located where there is sufficient natural crossfall to remove runoff from the track surface.

(8) Snig tracks and extraction tracks must not encroach on exclusion zones or riparian buffer zones except designated crossings and where permitted by clause 4.4(2).

(9) Blading-off of snig tracks and extraction tracks must not occur.

(10) The grade of snig tracks must not exceed 25 degrees, except in the following circumstances:

(a) It will result in a better environmental outcome than construction and/or use of a side cut snig track to access the same area using a snig track of less than 25 degrees.

(b) The Forest Operation Plan is noted.

(c) The snig track can be effectively drained.

(d) Maximum grade is 28 degrees.

(e) The maximum combined length of the snig track exceeding 25 degrees, commencing from the serviced log landing, is not greater than 75 metres.

(11) Where downhill snigging is necessary, snig tracks and extraction tracks must enter the log landing from beside or below. Where this is not possible, a drainage structure must be installed at the entrance to the log landing at the end of each day's operations.

(12) Drainage must be incorporated as soon as practicable at the completion of operations on each extraction track or snig track, and in any event within two days, unless the soil is saturated.

(13) Temporary drainage must be installed on any snig or extraction track that will not be used for a period of five days or more.

(14) Track drainage structures must be located, constructed and maintained to divert water onto a stable surface which can handle concentrated water flow, and which provides for efficient sediment trapping.

(15) Snig tracks and extraction tracks must be located and constructed to ensure that water running along the track surface does not flow for longer than the distances specified in Table H. This could be achieved by one of the following techniques or a combination:

(a) retain the existing groundcover using walkover techniques

(b) retain or cover the track surface with slash and harvesting debris

(c) construct outfall drainage or maintain the track's outfall drainage

(d) construct track drainage structures.

Table H: Maximum distance that water may run along snig and extraction tracks

Track grade (degrees)	Maximum distance (metres)
0 to ≤ 5	100
> 5 to ≤ 10	60

Track grade (degrees)	Maximum distance (metres)
> 10 to ≤ 15	40
> 16 to ≤ 20	25
> 20 to ≤ 25	20
> 25 to ≤ 28	15

(16) Upon completion of operations, the following measures must be implemented:

(a) where practicable, snig tracks and extraction tracks must be reshaped, all earth windrows, wheel ruts, and log furrows removed, and recoverable topsoil spread back over the track

(b) crossfall drainage must be reinstated on snig tracks or, where this is not sufficient to divert runoff from the track, crossbanks must be installed consistent with the spacings in Table H.

(17) Crossbanks must be constructed to have a minimum effective height of 35 centimetres unconsolidated, or 25 centimetres consolidated, and as a guide should not be greater than 50 centimetres in height.

(18) Crossbanks must not be constructed of bark or woody debris.

5.2.2 Snig track and extraction track crossings on drainage features

(1) The location of log landings and snig/extraction tracks must be planned to minimise the number of crossings required.

(2) Snig track and extraction track crossings must be stable causeways (including natural surface causeways), culverts or bridges. Existing gully stuffers may only be used if they are stable. New crossings of this type must not be constructed.

(3) Machinery must not cross a drainage feature which is running water or when the soil is saturated, unless by means of a stable crossing.

(4) Approaches to crossings must be as close as possible to right angles to the flow of water.

(5) A crossbank must be installed on each approach, between 5 and 20 metres from the drainage feature crossing. The distance must be measured from the top of the bank of the incised channel or, where there is no defined bank, from the edge of the channel or centre of the depression. The drainage structure must divert water onto a stable surface. If such a surface is not available, sediment control measures must be used to prevent sediment entering the drainage feature.

(6) Disturbance to the bed and banks of the drainage feature must be minimised, and any spoil must be removed from the drainage feature.

(7) All areas disturbed during crossing construction and use, including approaches, must be rehabilitated following completion of use. Rehabilitation includes the reshaping of the crossing to conform as closely as possible to the original ground surface. If groundcover is not likely to recover naturally, sowing with a suitable sterile seed or endemic native seed/fertiliser mix must be undertaken to establish effective groundcover.

5.2.3 Wet weather limitations for snigging, log landing and portable mill operations

(1) Harvesting operations must not occur when:

(a) there is runoff from the snig track surface, or

(b) soils are saturated, or

(c) soil is rutted to a depth of more than 200 millimetres below the track surface over a 20-metre section or longer.

(2) Forwarders, excavators and truck-mounted loaders may be used as stationary loaders when there is runoff from the log landing.

(3) All other machinery on the log landing must remain stationary when there is runoff from the log landing surface, unless the log landing is constructed of gravel or other stable material.

Appendix:
Listed species ecological prescriptions

Introduction

These prescriptions must be applied within the forest operations area where there is a **known record** or **site evidence** of a threatened species. A known record is a sighting or record of the species in the NSW Wildlife Atlas available at www.wildlifeatlas.nationalparks.nsw.gov.au. Site evidence is a sign a species has visited or regularly uses a site, and includes observations of, for example, faecal pellets or scats, chewed seed cones or a nest, or evidence that the site has been used as a latrine.

A list of threatened species under the *Threatened Species Conservation Act 1995* and species profiles for each species can be viewed on the Department of Environment and Climate Change (DECC) website at www.threatenedspecies.environment.nsw.gov.au.

The prescriptions set out below assist in the protection of threatened species, and include:

(1) additional widths to stream exclusion zones

(2) exclusion zones around locations of threatened species records

(3) additional tree retention requirements around locations of threatened species records.

Exclusion zones and buffer zones requiring additional tree retention requirements must be applied within the Property Vegetation Plan (PVP) area subject to the Forest Operation Plan.

Wildlife Atlas records that trigger these prescriptions are those less than 20 years old which have a reliability level of 1 to 5. Records in an adjoining protected area of public land (for example, in State Forests or National Parks) can be ignored if it can be demonstrated that the species has been protected and the conditions of the relevant Threatened Species Licence or Integrated Forestry Operation Agreement have been met.

Some species prescriptions vary according to the region in which they occur. Unless otherwise stated, the regions referred to in the prescriptions are based on the catchments administered by Catchment Management Authorities (CMAs) shown in Figure 1.

General conditions

For all threatened species prescriptions, the following applies:

- Where a retained eucalypt tree (as required by these prescriptions) also meets the requirements of a habitat tree, the eucalypt tree may be counted as a habitat tree.
- Where other exclusion zones form part of the habitat area required for threatened species prescriptions, the exclusion zones may count towards the area of habitat required to be retained.
- Buffer and exclusion zones are to be marked in the field where they adjoin the area, subject to forest operations. This marking has to be visible while forestry operations are occurring.

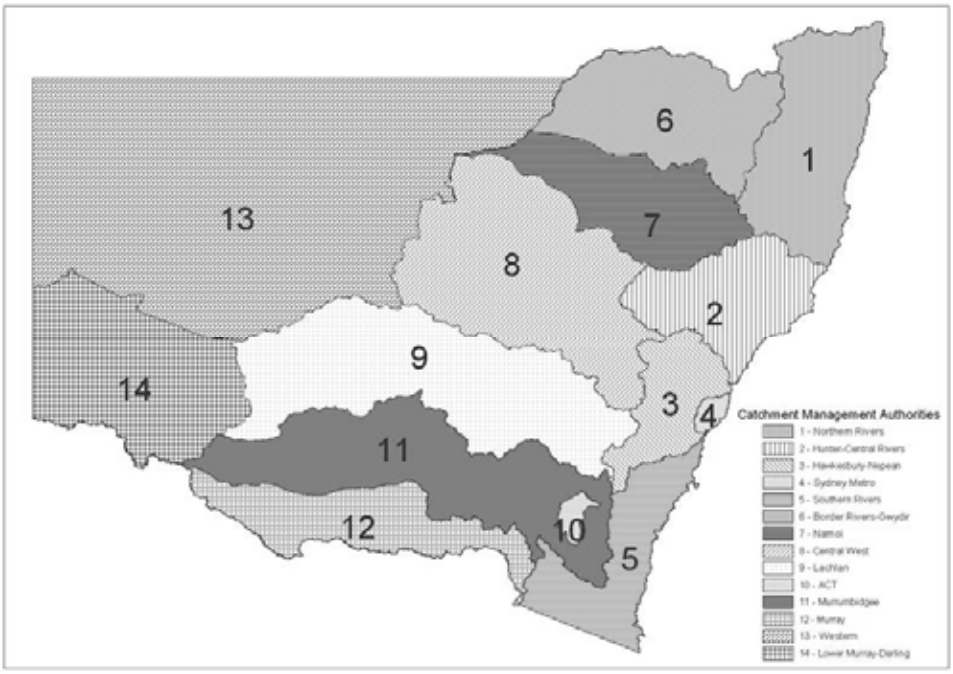


Figure 1 – Catchment Management Authority (CMA) areas where prescriptions for some threatened species may vary

Further information about individual threatened species may be sourced from DECC. The DECC website provides species profiles and additional information. Visit www.environment.nsw.gov.au and www.threatenedspecies.environment.nsw.gov.au.

Amphibians

Green and golden bell frog (*Litoria aurea*)

CMAs for application of prescription
Central West, Murrumbidgee, Southern Rivers and Sydney Metro

Prescription

(a) Where there is a record of a green and golden bell frog in an area of forest operations or within 50 metres of the boundary of the area of forest operations, an exclusion zone with at least a 50-metre radius must be implemented around the location of the record.

(b) In addition, where the record is associated with a wetland or dam, a 20-metre-wide exclusion zone must be implemented around the wetland or dam.

(c) The exclusion zone around wetlands must be measured from the edge of the current saturated area, or from the outer edge of where the vegetation type indicates a wetter micro-environment than the surrounding country, whichever is larger.

(d) The exclusion zone around dams must be measured from the top water level.

Additional information
Distribution: The frog occurs from Byron Bay along the east coast of NSW, to the Australian Capital Territory, and into east Gippsland, Victoria. Records often occur within 20–30 kilometres of the coast but may also occur west of this area.

***Macrohabitat*:** The frog is found in shallow, still or slow-moving water (both ephemeral and permanent) with a sand substrate and emergent vegetation, especially bullrushes. It is often found in locations with a sunny aspect.
***Microhabitat*:** The frog shelters under ground debris. It basks during daytime on emergent vegetation or near the edge of water and is also active at night.

Giant burrowing frog (*Heleioporous australiacus*)

CMAs for application of prescription
Southern Rivers

Prescription
Where there is a record of a giant burrowing frog in an area of forest operations or within 300 metres of the boundary of the area of forest operations, the following must apply:

(a) An exclusion zone with a 300-metre radius must be identified, centred on the location of the record.

(b) No post-harvest burns must occur in the exclusion zone.

Additional information
The giant burrowing frog occurs from the NSW Central Coast to eastern Victoria, but is most common in Sydney sandstone environments. It has been found from the coast to the Great Dividing Range. It lives in heath, woodland and open forest with sandy soils, and will travel several hundred metres to creeks to breed.

Stuttering frog (*Mixophyes balbus*)

CMAs for application of prescription
Hawkesbury–Nepean and Southern Rivers

Prescription
Where there is a record of a stuttering frog in an area of forest operations or within 200 metres outside the boundary of the area of forest operations, the following must apply:

a. A 30-metre wide exclusion zone must be implemented on both sides of all streams (including Prescribed Streams, first-, second- and third-order and above streams – see Figure 2) in the forest operations area, within 200 metres of the location of the record.

b. The width of the exclusion zone must be measured from the top of the bank of the incised channel or, where there is no defined bank, from the edge of the channel.

Additional information
Habitat: Forest communities ranging from heaths (tea-tree) in dry upland forests to closed forests, including wet sclerophyll forest and rainforest.

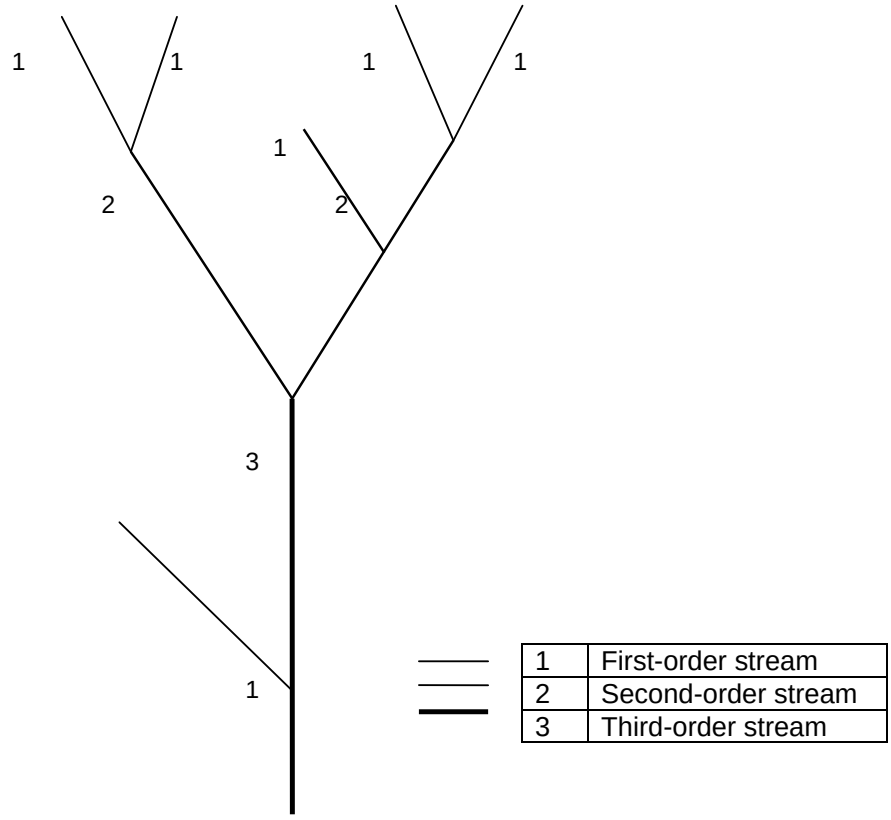


Figure 2: Schematic diagram of stream order (after Strahler, AN 1964, 'Quantitative geomorphology of drainage basins and channel networks' in Chow, VT (ed.), *Handbook of applied Hydrology*, New York, McGraw-Hill, section 4-11)

Northern corroboree frog (*Pseudophryne pengilley*)

CMAs for application of prescription

Murrumbidgee, Murray (East of Tumbarumba and north of Khancoban) and Southern Rivers (north of Eucumbene). For information on the more specific area of distribution, refer to Figure 3.

Prescription

a. A 30-metre exclusion zone must be established around all bogs, soaks and seepages. The exclusion zone must be measured from the outer edge of the bog, soak or seepage. Where the bog, soak or seepage is fringed by tea-tree, the exclusion zone must be measured from the outer edge of the tea-tree.

b. All bogs, soaks and seepages that are protected by this prescription must be clearly recorded on the Forest Operation Plan map.

c. The width of exclusion areas must be measured from greatest extent of the bog, soak or seepage.

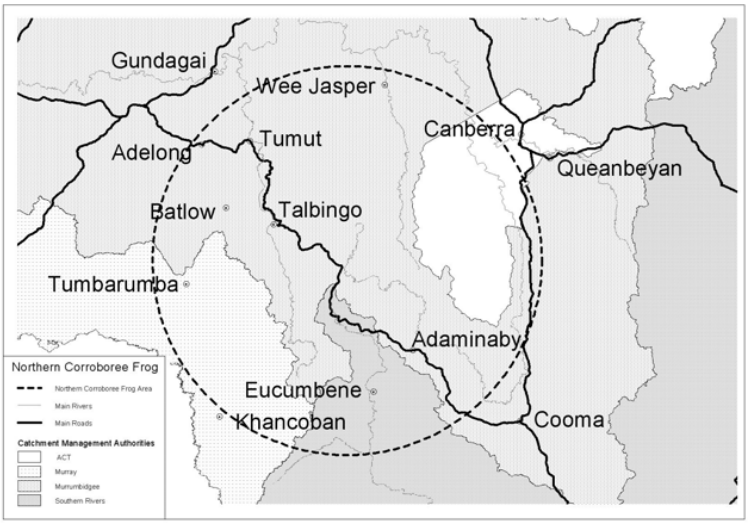


Figure 3: Area of application of northern corroboree frog prescription

Mammals

Brush-tailed phascogale (*Phascogale tapoatafa*)

CMAs for application of prescription

Central West, Hawkesbury–Nepean, Lachlan, Murray, Murrumbidgee and Southern Rivers

Prescription

Where there is a brush-tailed phascogale record within the area of forest operations, the following must apply:

(a) A buffer zone with a 500-metre radius (about 78 hectares) must be identified, centred on the location of the record.

(b) Within this buffer zone, the following additional prescriptions must be implemented:

- (i) A minimum of 15 trees per 2 hectares with visible hollows must be retained where available.
- (ii) A recruitment tree must be retained for each hollow bearing tree retained. Where the total number of hollow bearing trees and recruitment trees is less than 30 trees per 2 hectares, additional recruitment trees must be retained to bring the number up to 30 trees per 2 hectares.
- (iii) Disturbance to understorey trees and shrubs, ground logs, rocks and litter must be minimised.
- (iv) Trees to be retained as above should be late-mature, over-mature or senescent rough-barked trees where available.

(c) Where there are records of den or roost sites, these must be contained within the buffer zones and these trees be protected.

Additional information

Potential brush-tailed phascogale habitat is dry sclerophyll open forest or woodland with a generally open understorey, preferably containing large trees with rough bark and hollows to provide optimal foraging and denning habitat.

Eastern pygmy-possum (*Cercartetus nanus*)

CMAs for application of prescription

Central West, Hawkesbury–Nepean, Lachlan, Murray, Murrumbidgee and Southern Rivers

Prescription
Where there is an eastern pygmy-possum record within the area of forest operations, the following must apply:

(a) An exclusion zone with a 50-metre radius (about 0.8 hectares) must be identified, centred on the location of the record, with no forest operations or removal of understorey plants permitted.

(b) Within a 100-metre radius (about 3.5 hectares) of the exclusion zone, a buffer zone must be identified within which the following additional prescriptions must be implemented:

  (i) Only single-tree selection and thinning operations can occur (i.e. no canopy openings).

  (ii) No post-harvest burning is permitted.

  (iii) A minimum of 26 trees with visible hollows must be retained where available.

  (iv) Disturbance to understorey trees and shrubs (particularly banksias, bottlebrush and acacias), ground logs, rocks and litter must be minimised.

Additional information
Potential eastern pygmy-possum habitat is found in a broad range of habitats including rainforest, sclerophyll (including box–ironbark) forest, woodland and heath. In most areas, woodlands and heath appear to be preferred, except in north-eastern NSW where they are most frequently encountered in rainforest.

Spotted-tailed quoll (*Dasyurus maculatus*)

CMAs for application of prescription
Central West, Hawkesbury–Nepean, Lachlan, Murray, Murrumbidgee and Southern Rivers

Prescription
Where there is a record of a spotted-tailed quoll den site, maternal den or latrine site within the area of forest operations, the following must apply:

(a) An exclusion zone with a 200-metre radius (about 12.5 hectares), centred on the location of the record, must be implemented around a spotted-tailed quoll maternal den site or latrine site. This exclusion area must be linked to riparian exclusion zones or riparian buffer zones where practicable.

(b) An exclusion zone with a 100-metre radius (about 3.5 hectares), centred on the location of the record, must be implemented around spotted-tailed quoll permanent den sites. This exclusion zone must be linked to riparian exclusion zones or riparian buffer zones where practicable.

(c) Areas of riparian exclusion and protection zone must not be counted towards exclusion zones for the spotted-tailed quoll.

Squirrel glider (*Petaurus norfolcensis*)

CMAs for application of prescription
Central West, Hawkesbury–Nepean, Lachlan, Murray, Murrumbidgee and Southern Rivers

Prescription
Where there is a squirrel glider record in an area of forest operations or within 125 metres of the boundary of the area of forest operations (unless specified otherwise in this condition), the following must apply:

(a) A buffer zone with a 250-metre radius (about 20 hectares) must be identified, centred on the location of the record or records.

(b) Within this buffer zone, the following additional prescriptions must be implemented:

(i) A minimum of 15 trees per 2 hectares with visible hollows must be retained where available.

(ii) A recruitment tree must be retained for each hollow bearing tree retained. Where the total number of hollow bearing trees and recruitment trees is less than 30 trees per 2 hectares, additional recruitment trees must be retained to bring the number up to 30 trees per 2 hectares.

(iii) Disturbance to understorey trees and shrubs (particularly banksias and acacias), ground logs, rocks and litter must be minimised.

(c) Where there are records of dens or roosts, these must be contained within buffer zones encompassing suitable habitat.

(d) Where there are more than two squirrel glider records closer than 250 metres apart within the forest operation area, advice on the location of the buffer area must be sought from DECC before commencing forest operations.

Additional information
Squirrel glider habitat is generally dry eucalypt forest and woodland. In coastal areas, potential habitat is blackbutt, bloodwood and ironbark forest with a heathy understorey. In the absence of these forest types, areas of mature or old growth forest must be retained.

Southern brown bandicoot (eastern) (*Isoodon obesulus*)

CMAs for application of prescription
Hawkesbury–Nepean and Southern Rivers

Prescription
Where there is a southern brown bandicoot (eastern) record, the following must apply:

a. A 200-metre-radius exclusion zone (about 12.5 hectares) must be identified, centred on the record.

b. Within this exclusion zone, the following additional prescriptions must be implemented:
(i) No forest operations, or removal of understorey plants or groundcover, are permitted.
(ii) No post-harvesting burning is permitted.
(iii) Disturbance to understorey trees and shrubs, ground logs, and rocks and litter must be minimised.

Additional information
Potential habitat for the southern brown bandicoot is generally heath or open forest with a heathy understorey on sandy or friable soils. Bandicoots eat various ground-dwelling invertebrates and the fruit-bodies of hypogeous (underground-fruiting) fungi. Their searches for food often create distinctive conical holes in the soil.

Yellow-bellied glider (*Petaurus australis*)

CMAs for application of prescription
Central West, Hawkesbury–Nepean, Lachlan, Murray, Murrumbidgee, Namoi and Southern Rivers

Prescription

(a) An exclusion zone with a 50-metre radius must be implemented around trees used as dens by yellow-bellied gliders (trees with moderate to large hollows).

(b) All yellow-bellied glider sap feed trees must be retained and marked for retention. A sap feed tree is a tree with recent V-notch incisions or other incisions made by a yellow-bellied glider. Recent incisions are incisions less than two years old as proven by the incision not having closed.

(c) Within a 100-metre radius of each retained yellow-bellied glider sap feed tree, observation or den site record, 15 feed trees must be retained (not counting existing yellow-bellied glider sap feed trees). The 15 retained feed trees must have good crown development and should have minimal butt damage and should not be suppressed. Mature and late mature trees must be retained as feed trees where these are available.

(d) The feed trees retained as above must be of the same species as the identified sap feed tree or identified den tree, or should be trees that shed their bark in long strips, e.g. species from blue, flooded, grey, red and white gum groups.

(e) The retained feed trees must be marked for retention.

Additional information
Yellow-bellied gliders occur in tall mature eucalypt forest, generally in areas with high rainfall and nutrient-rich soils. Forest type preferences vary with latitude and elevation: mixed coastal forests to dry escarpment forests in the north, and moist coastal gullies and creek flats to tall montane forests in the south. The gliders feed primarily on plant and insect exudates, including nectar, sap, honeydew and manna with pollen and insects providing protein. They extract sap by incising or biting into the trunks and branches of favoured food trees, often leaving a distinctive 'V'-shaped scar.

Long-footed potoroo (*Potorous longipes*)

CMAs for application of prescription
Southern Rivers

Prescription
Where there is a long-footed potoroo record in an area of forest operations, the following must apply:

a. A 200-metre-radius exclusion zone (about a 12.5 hectares) must be identified, centred on the record.

b. Within this exclusion zone, the following prescriptions must be implemented:

(i) No forest operations, or removal of understorey plants or groundcover, are permitted.

(ii) No post-harvest burning is permitted.
(iii) Disturbance to ground logs, rocks and litter must be minimised.

Additional information
Potential habitat for the long-footed potoroo includes moist forests from montane wet sclerophyll forests over 1000 metres in altitude to lowland forests at 150 metres in altitude. Moist soil throughout the year is an essential component of habitat, allowing the potoroo's primary food source, the fruit-bodies of hypogeous (underground fruiting) fungi, to persist.

Long-nosed potoroo (*Potorous tridactylus*)

CMAs for application of prescription
Southern Rivers

Prescription
Where there is a record of a long-nosed potoroo in an area of forest operations, the following must apply:

(a) Forestry operations must be excluded from a 5-metre radius buffer around 12 retained trees per 2 hectares. These 12 trees can include trees retained under other prescriptions.

(b) No post-harvest burning is permitted within or adjacent to the 5-metre radius buffers identified in point (a) above.

Additional information
The long-nosed potoroo inhabits coastal heaths, and dry and wet sclerophyll forests. Dense understorey with occasional open areas is an essential part of habitat and may consist of grass-trees, sedges, ferns or heath, or of low shrubs of tea-trees or melaleucas. A sandy loam soil is also common. The fruit-bodies of hypogeous (underground-fruiting) fungi are a large component of the diet of the long-nosed potoroo.

Koala (*Phascolarctos cinereus*)

CMAs for application of prescription
Central West, Hawkesbury–Nepean, Lachlan, Murray, Murrumbidgee and Southern Rivers

Note: Koala populations are generally sparse or of low density in the South Coast, Central and Southern Tablelands and Western Koala Management Areas (Koala Management Areas 3, 5, 6 and 7; see Figure 4) and, as a result, scats are rarely encountered. Therefore, recording of any scat or a sighting of a koala in these areas should be considered significant.

Note: Koala populations are generally sparse or of low density in the South Coast, Central and Southern Tablelands and Western Koala Management Areas (Koala Management Areas 3, 5, 6 and 7; see Figure 4) and, as a result, scats are rarely encountered. Therefore, recording of any scat or a sighting of a koala in these areas should be considered significant.

Prescription

(a) Forest operations are not permitted within any area identified as ‘core koala habitat’ within the meaning of *State Environmental Planning Policy No. 44 – Koala Habitat Protection*.

(b) Any tree containing a koala or any tree beneath which 20 or more koala faecal pellets (scats) are found (or one or more koala faecal pellets in Koala Management Areas 3 and 5) must be retained, and an exclusion zone of 20 metres (50 metres in Koala Management Area 5) must be implemented around each retained tree.

(c) Where there is a record of a koala within an area of forest operations or within 500 metres of an area of forest operations or a koala faecal pellet (scat) is found beneath the canopy of any primary or secondary koala food tree (see Table I below), the following must apply:

- A minimum of 10 primary koala food trees and 5 secondary koala food trees must be retained per hectare of net harvesting area (not including other exclusion or buffer zones), where available.
- These trees should preferably be spread evenly across the net harvesting area, have leafy, broad crowns and be in a range of size classes with a minimum of 30 centimetres diameter at breast height over bark.

- Damage to retained trees must be minimised by directional felling techniques.
- Post-harvest burns must minimise damage to the trunks and foliage of retained trees.

Additional information
Generally, koala habitat comprises eucalypt forest and woodland containing primary and secondary food trees (see Table I). Koala droppings (faecal pellets or scats) are relatively distinctive, being cylindrical and pit-shaped. Colour varies between green–yellow to yellow–brown. Scats can remain under trees on or within the leaf litter for periods of several weeks to months. For further information on the identification of koala pellets or scats, contact DECC or refer to the DECC website – www.environment.nsw.gov.au.

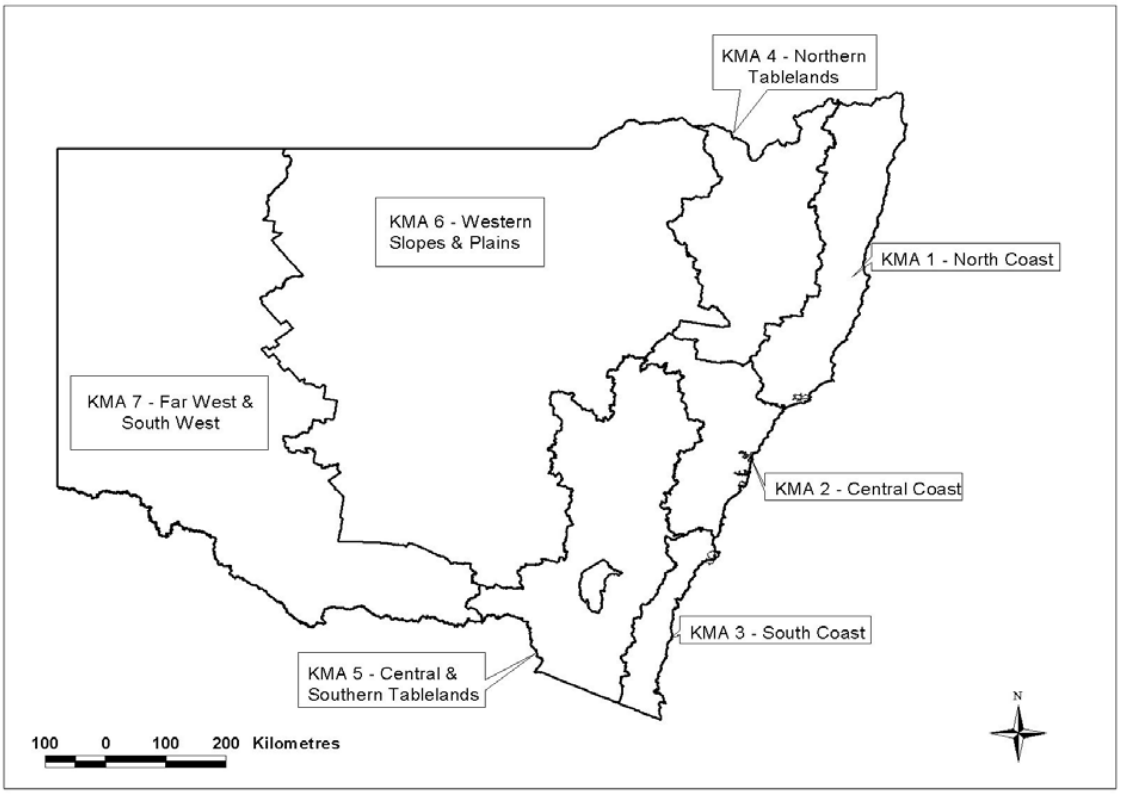


Figure 4: Koala Management Areas in NSW (from Draft State Koala Recovery Plan)

Table I: Primary and secondary koala food treesfor each Koala Management Area in the Southern NSW Code

Koala food tree species		Koala Management Area		
Common name	**Scientific name**	**2**	**3**	**5**
Primary tree species				
Cabbage gum	*E. amplifolia*	X		
Tallowwood	*E. microcorys*	X		
Parramatta red gum	*E. parramattensis*	X		
Swamp mahogany	*E. robusta*	X		
Forest red gum	*E. tereticornis*	X	X	
Ribbon gum	*E. viminalis*	X	X	X
Secondary tree species				
White box	*E. albens*			X
Blue box	*E. baueriana*	X	X	
Eurabble	*E. bicostata*			X
Blakely's red gum	*E. blakelyi*			X
Coast grey box	*E. bosistoana*	X	X	
Apple-topped box	*E. bridgesiana*		X	X
Broad-leaved sally	*E. camphora*	X		X
Argyle apple	*E. cinerea*			X
Fuzzy box	*E. conica*	X		
Yertchuk	*E. consideniana*	X	X	
Monkey gum	*E. cypellocarpa**	X	X	
Mountain gum	*E. dalrympleana*			X
Tumbledown gum	*E. dealbata*			X
Dwyer's red gum	*E. dwyeri*	X		
Slaty red gum	*E. glaucina*	X		
Bundy	*E. goniocalyx*	X		X
Craven grey box	*E. largeana*	X		
Woolybutt	*E. longifolia*	X	X	
Maiden's gum	*E. maidenii*	X	X	X
Brittle gum	*E. mannifera*	X	X	X
Yellow box	*E. melliodora*			X
Brittle gum	*E. michaeliana*	X		
Western grey box	*E. microcarpa*	X		
Grey box	*E. moluccana*	X		
Large-flowered bundy	*E. nortonii*			X
Mountain mahogany	*E. notabilis*	X		
Swamp gum	*E. ovata*	X	X	
Snow gum	*E. pauciflora*		X	X
Red box	*E. polyanthemos*		X	X
Brittle gum	*E. praecox*	X		
Bastard eurabbie	*E. pseudoglobulus*		X	
Grey gum	*E. punctata*	X		
White-topped box	*E. quadrangulata*	X		
Red mahogany	*E. resinifera*	X		
Candlebark	*E. rubida*		X	
Rudder's box	*E. rudderi*	X		
Large-fruited red mahogany	*E. scias*	X		

Grey-headed flying-fox (*Pteropus poliocephalus*) and black flying-fox (*Pteropus alecto*) camps

CMAs for application of prescription
Central West, Hawkesbury–Nepean, Southern Rivers and Sydney Metro

Prescription
Forest operations and any associated activities must be excluded within a flying-fox camp, and within a 50-metre exclusion zone around any camp which contains grey-headed or black flying-foxes.

Additional information
Flying-foxes congregate (roost) in large numbers known as 'camps'. These areas are typically within 20 kilometres of known food sources, and 'camp' localities vary over different seasons depending on regional food availability. Camps are often located in riparian vegetation such as rainforest remnants, swamp forest (paperbarks) or casuarina forests. They are often used annually. Camps are extremely important for day-time roosting and socialising and are used as maternity sites for rearing young.

Golden-tipped bat (*Kerivoula papuensis*)

CMAs for application of prescription
Hawkesbury–Nepean and Southern Rivers

Prescription
Where there is a record of a golden-tipped bat within the area of forest operations or within 200 metres of the boundary of the area of forest operations, the following must apply:

(a) Exclusion zones with at least a 30-metre radius must be implemented on both sides of all Prescribed Streams, first-order, second-order and third-order streams (see Figure 3) within 200 metres of the location of the record. Other standard riparian exclusion zones apply within this area.

(b) The width of exclusion zones must be measured from the top of the bank of the incised channel or, where there is no defined bank, from the edge of the channel.

Additional information
Habitat for the golden-tipped bat is in rainforest and adjacent sclerophyll forest. The bats roost in abandoned hanging yellow-throated scrubwren and brown gerygone (brown warbler) nests located in rainforest gullies on small first-order and second-order streams.
They will fly up to two kilometres from roosts to forage in rainforest and sclerophyll forest on upper slopes. The species is a specialist feeder on small web-building spiders.

Large-footed myotis (*Myotis adversus*)

CMAs for application of prescription
Central West, Hawkesbury–Nepean, Lachlan, Murray, Murrumbidgee and Southern Rivers

Prescription
Where there is a record of large-footed myotis in an area of forest operations or within 100 metres of the boundary of the area of forest operations, the following must apply:

(a) An exclusion zone with a 30-metre radius must be implemented on all dams and permanent water bodies. Permanent water bodies include lakes, lagoons or any other permanent collection of still water that is not impounded by an artificial structure. The exclusion zone must be measured from the top of the high bank of the permanent water body.

(b) An exclusion zone with a 30-metre radius must be implemented on all permanent streams within 100 metres of the location of the record.

(c) The width of exclusion zones must be measured from the top of the bank of the incised channel or, where there is no defined bank, from the edge of the channel.

Additional information
Large-footed myotis generally roost in groups of 10–15 close to water in caves, mine shafts, hollow bearing trees, stormwater channels, buildings, under bridges and in dense foliage. They forage over streams and pools, catching insects and small fish by raking their feet across the water's surface.

Reptiles

Broad-headed snake (*Hoplocephalus bungaroides*)

CMAs for application of prescription
Central West, Hawkesbury–Nepean and Southern Rivers

Prescription
Where there is a broad-headed snake record in the area of forest operations, the following must apply:

(a) A buffer zone with a 100-metre radius (about 3 hectares) must be identified, centred on the location of the record.

(b) Within this buffer zone, the following additional prescriptions must be implemented:

- A minimum of 26 trees with visible hollows with openings greater than 10 centimetres must be retained where available.
- Disturbance to understorey trees and shrubs, ground logs and, in particular, rock outcrops and ledges must be minimised.

Additional information
Potential habitat for the broad-headed snake is largely confined to Triassic sandstones, including the Hawkesbury, Narellan and Shoalhaven formations on the coast and in the ranges, in an area within approximately 250 kilometres of Sydney. The snake shelters in rock crevices and under flat sandstone rocks on exposed cliff edges during autumn, winter and spring, and shelters in hollows in large trees within 200 metres of escarpments in summer.

Rosenberg's goanna (*Varanus rosenbergi*)

CMAs for application of prescription
Central West, Hawkesbury–Nepean, Lachlan, Murray, Murrumbidgee and Southern Rivers

Prescription
Where there is a Rosenberg's goanna record in the area of forest operations, the following must apply:

(a) A buffer zone with a 200-metre radius (about 12.5 hectares) must be identified, centred on the location of the record.

(b) Within this buffer zone, the following additional prescriptions must be implemented:

- All termite mounds must be protected from any disturbance.
- Disturbance to understorey trees and shrubs and, in particular, ground logs and rock outcrops and ledges must be minimised.

- No post-harvest burning is permitted.

Additional information
Rosenberg's goanna occurs on Sydney sandstone in Wollemi National Park north-west of Sydney, in the Goulburn and ACT regions and near Cooma in the south. There are records from the south-west slopes near Khancoban and the Tooma River. It is found in heath, open forest and woodland. This species nests in termite mounds, which are a critical component of its habitat.

Birds

Powerful owl (*Ninox strenua*), masked owl (*Tyto novaehollandiae*), sooty owl (*Tyto tenebricosa*) and barking owl (*Ninox connivens*)

CMAs for application of prescription
Central West, Hawkesbury–Nepean, Lachlan, Murray, Murrumbidgee and Southern Rivers

Prescription
Nest trees (trees with hollows containing a nest of a powerful, masked, sooty or barking owl) must be retained and protected by a 60-metre exclusion zone.

Roost trees (trees where a powerful, masked, sooty or barking owl have been observed roosting or signs of roosting are observed) must be retained and protected by a 50-metre exclusion zone.

Where there is a record within the area of forest operations or within 500 metres of the area of forest operations for the powerful owl, masked owl or sooty owl or 250 metres for the barking owl, the following prescriptions apply:

(a) Buffer zones with a 1000-metre radius (about 300 hectares) for the powerful owl, masked owl or sooty owl and 500-metre radius (about 78 hectares) for the barking owl must be identified, centred on the location of the record or records. The radius of the buffer zone must be measured from the location of the record. Where there is more than one record, the radius of the buffer zone must be measured from a point equidistant from most records, where possible.

(b) Within this buffer zone, the following additional prescriptions must be implemented:

- A minimum of 15 trees per 2 hectares with visible hollows must be retained where available.
- A recruitment tree must be retained for each hollow bearing tree retained. Where the total number of hollow bearing trees and recruitment trees is less than 30 trees per 2 hectares, additional recruitment trees must be retained to bring the number up to 30 trees per 2 hectares.
- Disturbance to understorey trees and shrubs, ground logs, and rocks and litter must be minimised.

(c) Where there are records of nests or roosts, these must be contained within buffer zones encompassing suitable habitat.

(d) Where there are more than two owl records consecutively less than 1000 metres apart but collectively spreading over an area greater than 1000 metres in any direction, advice on the location of the buffer area must be sought from DECC.

Additional information
Potential owl habitat comprises rainforest, wet and dry sclerophyll forest, and woodland.

Regent honeyeater (*Xanthomyza Phrygia*)

CMAs for application of prescription
Central West, Hawkesbury–Nepean, Lachlan, Murray, Murrumbidgee and Southern Rivers

Prescription
Where there is a record of a regent honeyeater in an area of forest operations, the following must apply:

(a) At least ten eucalypt feed trees (refer to Table E) must be retained within every two hectares of the net harvest area. These must be marked for retention. Where retained eucalypt feed trees also meet the requirements of habitat or recruitment trees, the retained eucalypt feed trees can be counted as habitat or recruitment trees.

(b) Where a regent honeyeater is observed feeding, the tree in which it is feeding must be retained.

(c) Trees containing regent honeyeater nests must be retained, with a 20-metre radius exclusion zone around them.

Additional information
This species inhabits dry open forest and woodland, particularly box–ironbark woodland and riparian forests of river she-oak. Regent honeyeaters inhabit woodlands that support a significantly high abundance and richness of bird species. These woodlands have many mature trees and mistletoes and high canopy cover. The bird also forages in winter-flowering coastal swamp mahogany and spotted gum forests on the central coast and the upper north coast. These birds are also occasionally seen on the south coast.

Swift parrot (*Lathamus discolor*)

CMAs for application of prescription
Central West, Hawkesbury–Nepean, Lachlan, Murray, Murrumbidgee and Southern Rivers

Prescription
Where there is a record of a swift parrot in an area of forest operations, the following must apply:

(a) At least ten eucalypt feed trees (refer to Table E) must be retained within every two hectares of the net harvest area. These must be marked for retention. Where retained eucalypt feed trees also meet the requirements of habitat or recruitment trees, the retained eucalypt feed trees can be counted as habitat or recruitment trees.

(b) Where a swift parrot is observed feeding, the tree in which it is feeding must be retained.

Additional information
Swift parrots migrate to the Australian south-east mainland between March and October. On the mainland, they occur where eucalypts are flowering profusely or where there are abundant lerps (from sap-sucking bugs). Favoured feed trees include winter-flowering species such as swamp mahogany (*Eucalyptus robusta*), spotted gum (*Corymbia maculata*), red bloodwood (*C. gummifera*), mugga ironbark (*E. sideroxylon*) and white box (*E. albens*). Commonly used lerp-infested trees include grey box (*E. microcarpa*), grey box (*E. moluccana*) and blackbutt (*E. pilularis*).

Bush stone-curlew (*Burhinus grallarius*)

CMAs for application of prescription
All
Prescription

No forest operations are permitted within a 50-metre radius of all bush stone-curlew ground nests.

Additional information
Bush stone-curlew nests are found in areas of dry, grassy open forest or woodland and are a small scrape on bare ground, often near a bush or tree or beside a fallen limb. Eggs are stone-coloured, blotched dark brown and grey. Nesting season is August through to January.

Glossy black-cockatoo (*Calyptorhynchus lathami*)

CMAs for application of prescription
All except for Lower Murray–Darling

Prescription

(a) There must be a 50-metre-radius exclusion zone around all glossy black-cockatoo nests, within which no forest operations may occur.

(b) Within a 200-metre radius of any location of a glossy black-cockatoo record, damage to stands of she-oaks (*Allocasuarina* and *Casuarina* spp.) containing trees more than 3 metres in height and seed cones must be minimised.

(c) Any she-oaks with evidence of foraging by glossy black-cockatoos (i.e. chewed seed cones under the tree) must be protected.

Additional information
Glossy black-cockatoos nest in tree hollows usually in larger, mature trees. Nest locations are indicative of where a glossy black-cockatoo is seen entering a hollow. Nesting season is from March to August.
The presence of she-oaks (*Allocasuarina* and *Casuarina* spp.*)* is a key indicator of likely feeding habitat. Mature trees with hollows are required for nesting.

Osprey (*Pandion haliaetus*)

CMAs for application of prescription
All except for Lower Murray–Darling and Western

Prescription
No forest operations are permitted within a 100-metre radius of all osprey nests.

Additional information
Ospreys have a large stick nest (up to 2 metres wide) usually in tall, dead or occasionally live trees, often in an exposed position close to lakes, rivers or the ocean. Nesting season is from June to October.

Square-tailed kite (*Lophoictinia isura*)

CMAs for application of prescription
All

Prescription
No forest operations are permitted within a 100-metre radius of all square-tailed kite nests.

Additional information
Square-tailed kites have a large stick nest usually between 60 and 100 centimetres in diameter, and some 12–26 metres above the ground, generally in a eucalypt. Nesting season is from July to November.

Turquoise parrot (*Neophema pulchella*)

CMAs for application of prescription
All except for Lower Murray–Darling and Western

Prescription
No forest operations are permitted within a 30-metre radius of all turquoise parrot nests.

Additional information
Turquoise parrots occur mainly west of the escarpment on the tablelands and western slopes, but are occasionally found more widely through most of eastern NSW in open woodlands, dry sclerophyll forest and adjacent grasslands. Nests range from 1–20 metres above the ground. They are in hollows in small trees, often dead eucalypts, or in holes or stumps, fence posts or even logs lying on the ground. Nesting season is from August to December and from April to May.

Threatened flora – specific prescriptions

Table J: Conditions applying to flora species

(Note: Numbers in first column relate to conditions listed below this table.)

Condition	Scientific name	Common name	Catchment Management Authority
H	*Acacia bynoeana*	Bynoe's wattle	Hawkesbury–Nepean, Southern Rivers
H	*Acacia georgensis*	Bega wattle	Southern Rivers
G	*Ammobium craspedioides*	Yass daisy	Lachlan, Murrumbidgee
A	*Arthropteris palisotii*	Lesser creeping fern	Southern Rivers
G	*Bossiaea oligosperma*	Few-seeded bossiaea	Hawkesbury–Nepean, Southern Rivers
H	*Caladenia concolor*	Crimson spider orchid	Murray, Murrumbidgee
H	*Caladenia tessellata*	Tessellated spider orchid	Hawkesbury–Nepean, Southern Rivers
D	*Callitris oblonga*	Pygmy cypress pine	Southern Rivers
G	*Callitris oblonga* ssp. *Corangensis*	*Callitris oblonga* ssp. *corangensis*	Southern Rivers, Murrumbidgee, Hawkesbury–Nepean
H	*Calotis glandulosa*	Mauve burr-daisy	Central West, Murrumbidgee, Southern Rivers
H	*Correa baeuerlenii*	Chef's cap correa	Southern Rivers
G	*Cryptostylis hunteriana*	Leafless tongue orchid – southern populations	Hawkesbury–Nepean, Southern Rivers
G	*Cynanchum elegans*	White-flowered wax plant	Hawkesbury–Nepean, Southern

			Rivers
G	*Daphnandra* sp. *C*	Illawarra socketwood	Southern Rivers
G	*Dillwynia glaucula*	Michelago parrot-pea	Murrumbidgee, Southern Rivers
H	*Discaria nitida*	Leafy anchor plant	Murrumbidgee, Southern Rivers
H	*Diuris aequalis*	Doubletail buttercup	Hawkesbury–Nepean, Lachlan, Murrumbidgee, Southern Rivers
B	*Diuris pedunculata*	Small snake orchid	Central West, Murrumbidgee, Southern Rivers
H	*Eucalyptus kartzoffiana*	Araluen gum	Southern Rivers
H	*Eucalyptus langleyi*	Albatross mallee	Southern Rivers
G	*Eucalyptus parvula*	Small-leaved gum	Murrumbidgee, Southern Rivers
G	*Eucalyptus pulverulenta*	Silver-leafed gum	Central West, Hawkesbury–Nepean, Murrumbidgee, Southern Rivers
A	*Eucalyptus recurva*	Mongarlowe mallee	Southern Rivers
F	*Eucalyptus robertsonii* subsp. *hemisphaerica*	Robertson's peppermint	Central West, Lachlan
G	*Eucalyptus saxatilis*	Suggan buggan mallee	Southern Rivers
H	*Eucalyptus sturgissiana*	Ettrema mallee	Southern Rivers
B	*Euphrasia collina* subsp. *Muelleri*	Mueller's eyebright	Murrumbidgee, Southern Rivers
F	*Euphrasia scabra*	Rough eyebright	Central West, Hawkesbury–Nepean, Murrumbidgee, Southern Rivers
G	*Gastrodia sesamoides* (Protected Native Plant Schedule 13 NP&W Act)	Cinnamon bells, potato orchid	Lachlan, Murrumbidgee, Murray, Hawkesbury–Nepean
H	*Genoplesium vernale*	Genoplesium vernale	Southern Rivers
E	*Goodenia macbarronii*	McBarron's goodenia	Central West, Lachlan, Murray
G	*Grevillea iaspicula*	Wee Jasper grevillea	Murrumbidgee
G	*Grevillea parviflora* subsp. *Parviflora*	Small-flower grevillea	Hawkesbury–Nepean, Southern Rivers
G	*Grevillea wilkinsonii*	Tumut grevillea	Murrumbidgee
G	*Haloragis exalata* subsp. *exalata*	Square raspwort	Murray, Southern Rivers
H	*Irenepharsus magicus*	Elusive cress	Murray
H	*Irenepharsus trypherus*	Illawarra Irene	Southern Rivers
A	*Lepidium hyssopifolium*	Aromatic peppercress	Central West, Lachlan, Murrumbidgee
H	*Leptospermum thompsonii*	Monga tea tree	Southern Rivers
G	*Melaleuca biconvexa*	Biconvex paperbark	Hawkesbury–Nepean, Southern Rivers
F	*Monotaxis macrophylla*	Large-leafed monotaxis	Central West, Lachlan, Southern Rivers
G	*Monotoca rotundifolia*	Trailing monotoca	Murrumbidgee, Southern Rivers
G	*Persicaria elatior*	Tall knotweed	Hawkesbury–Nepean, Southern Rivers
G	*Persoonia glaucescens*	Mittagong geebung	Hawkesbury–Nepean, Southern Rivers
H	*Phyllota humifusa*	Dwarf phyllota	Hawkesbury–Nepean
H	*Pilularia novae-hollandiae*	Austral pillwort	Hawkesbury–Nepean, Lachlan, Murray, Murrumbidgee
G	*Pimelea spicata*	Spiked rice-flower	Hawkesbury–Nepean
G	*Plinthanthesis rodwayi*	Budawangs wallaby grass	Southern Rivers
B	*Pomaderris brunnea*	Brown pomaderris	Hawkesbury-Nepean
G	*Pomaderris cotoneaster*	Cotoneaster pomaderris	Murrumbidgee, Southern Rivers
G	*Pomaderris elachophylla*	Lacy pomaderris	Southern Rivers
G	*Pomaderris pallida*	Pale pomoderris	Murrumbidgee, Southern Rivers
H	*Pomaderris parrisiae*	Parris' pomaderris	Southern Rivers

F	*Prostanthera densa*	Villous mint-bush	Southern Rivers
B	*Pseudanthus ovalifolius*	Oval-leafed pseudanthus	Southern Rivers
G	*Pterostylis gibbosa*	Illawarra greenhood	Hunter–Central Rivers, Southern Rivers
H	*Pultenaea parrisiae* subsp. *parrisiae*	Parris' bush-pea	Southern Rivers
H	*Restio longipes*	Restio longipes	Southern Rivers, Hawkesbury–Nepean
H	*Rulingia prostrata*	Dwarf kerrawang	Hawkesbury–Nepean, Southern Rivers
H	*Rutidosis leiolepis*	Monaro golden daisy	Murrumbidgee, Southern Rivers
H	*Rutidosis leptorrhynchoides*	Button wrinklewort	Murrumbidgee
G	*Senna acclinis*	Rainforest cassia	Hawkesbury–Nepean
G	*Syzygium paniculatum*	Magenta lilly pilly	Hawkesbury–Nepean, Southern Rivers
G	*Thesium australe*	Austral toadflax	Hawkesbury–Nepean, Murray, Murrumbidgee, Southern Rivers
H	*Triplarina nowraensis*	Nowra heath myrtle	Southern Rivers
H	*Zieria adenophora*	Araluen zieria	Southern Rivers
H	*Zieria baeuerlenii*	Bomaderry zieria	Southern Rivers
H	*Zieria citriodora*	Lemon zieria	Murrumbidgee
H	*Zieria granulata*	Illawarra zieria	Central West, Southern Rivers
H	*Zieria murphyi*	Velvet zieria	Central West, Hawkesbury–Nepean, Southern Rivers
H	*Zieria tuberculata*	Warty zieria	Southern Rivers

A. Threatened flora: 50-metre exclusion zone, all individuals

Where there is a record of a species to which this condition applies:

a. An exclusion zone with at least a 50-metre radius must be implemented around all individuals.

b. An exclusion zone at least 50 metres wide must be implemented around all groups of individuals. A group is defined as more than one individual located less than 20 metres apart.

B. Threatened and protected flora: 20-metre exclusion zones, all individuals

Where there is a record of a species to which this condition applies:

a. An exclusion zone with at least a 20-metre radius must be implemented around all individuals.

b. An exclusion zone at least 20 metres wide must be implemented around all groups of individuals. A group is defined as more than one individual located less than 20 metres apart.

D. Threatened and protected flora: 20-metre exclusion zone, 90% of individuals

Where there is a record of a species to which this condition applies:

a. An exclusion zone or exclusion zones at least 20 metres wide must be implemented around 90% of individuals.

b. The exclusion zone or exclusion zones must include areas where the density of individuals is greatest.

Note: Where there are few individuals within the forest operations area and the individuals are widely dispersed within the area, an exclusion zone with at least a 20-metre radius must be implemented around at least 90% of individuals. Where there are a large number of

individuals within the forest operations area and they occur in groups, the exclusion zone or exclusion zones may be positioned around the group or groups. A group is defined as more than one individual, located less than 20 metres apart.

E. Threatened and protected flora: protection of 90% of individuals

Where there is a record of a species to which this condition applies:

a. A minimum of 90% of individuals must be protected from specified forestry activities. During forest operations, the potential for damage to these plants must be minimised by the use of directional felling techniques.

Note: Where there are few individuals within the forest operations area and the individuals are widely dispersed within the area, at least 90% of individuals must be protected from specified forestry activities. Where there are a large number of individuals within the forest operations area and they occur in groups, the group or groups should be protected**.** A group is defined as more than one individual located less than 20 metres apart.

F. Exclusion of specified forestry activities from 100% of individuals with a 10-metre exclusion zone and a further 10-metre buffer

Where there is a record of a species to which this condition applies:

a. An exclusion zone with a 10-metre radius must be implemented around all individuals.

b. An additional buffer zone 10 metres wide must be implemented around all exclusion zones. Limited operations (snigging and selective tree removal) may be conducted in the buffer zone.

G. Exclusion of specified forestry activities from 100% of individuals and no buffer

Individuals of the threatened species or protected native plants to which this condition applies must not be picked in the course of carrying out specified forestry activities.

H. Damage to individuals avoided

Damage to individuals of the species to which this condition applies should be avoided to the greatest extent practicable.

Glossary

Expressions that are defined in the *Native Vegetation Act 2003* and Native Vegetation Regulation 2005 have the same meanings in this Code as the meanings given to them in that Act and Regulation, unless they are otherwise defined in this Code. All other expressions are defined as in this glossary.

Accidentally felled	A tree is accidentally felled into any area of land only if it is apparent that techniques of directional felling were used in an attempt to fell the tree away from the area. Despite the above, a tree is not accidentally felled into an area if the person responsible knew or could reasonably have been expected to know that the tree would fall into the area.
Australian Group Selection	A silvicultural technique that creates canopy openings for the purpose of stimulating regeneration in certain forest types.
Batter	An earth slope formed from fill material (fill batter) or cut into the natural hillside (cut batter) during road construction.
Diameter at breast height over bark (dbhob)	The diameter of a tree measured at 1.3 metres above the ground. Measurements are made over the bark and horizontal to the trunk.
Directional felling	The felling of a tree so it falls in a pre-determined direction.
Dispersible soil	A structurally unstable soil which readily disperses into its constituent particles (clay, silt, sand) in water.
Drainage depression	A shallow depression with smoothly concave cross-section that conveys runoff only during or immediately after periods of heavy rainfall.
Drainage feature	A drainage depression, drainage line, river or watercourse.
Drainage line	A channel down which surface water naturally concentrates and flows. Drainage lines exhibit one or more of the following features which distinguish them from drainage depressions: • evidence of active erosion or deposition, e.g. gravel, pebble, rock, sand bed, scour hole or nick point • an incised channel more than 30 centimetres deep with clearly defined bed and banks • a permanent flow.
Drainage structure	A structure designed to convey water away from a road, track or area of soil disturbance.
Earth windrow	A mound of soil material or gravel on the edge of a road or snig track formed by the spillage from the edge of a blade or similar machine during earthmoving operations.
Ecological logging regime	The use of logging (commercial and non-commercial) to rehabilitate or regenerate an ecological community. The primary goal is ecological improvements and commercial logging provides an economic incentive for the forest owner to undertake the works. Also known as ecological silvicultural logging.
Exclusion zone	Means an area of land (within a specified distance of landscape features identified in Tables C or F) where forest operations are prohibited, unless otherwise allowed under this Code.
Extraction track	A track constructed for use by forwarding machinery.

Food resource trees	Trees with recent V-notch incisions or other incisions made by a yellow-bellied glider or squirrel glider. Recent incisions are incisions less than two years old as evidenced by the fact the incision has not closed.
Forest operations	All clearing resulting from activities associated with forest management including harvesting operations, construction and maintenance of roads and tracks, and prescribed burning for regeneration.
Girders	High quality logs used in a round or flat faced form to support a deck such as a bridge or wharf or as large end section, heart-free, sawn timber suitable for heavy construction.
Gross forest area	The total area of forest defined in a Property Vegetation Plan.
Gully stuffer	A drainage feature crossing formed by filling the drainage feature with trees, debris, spoil, soil, rock or other material to the level of the road or track.
Habitat tree	A tree retained for habitat purposes under this Code.
Harvesting operations	Harvesting operations include: • timber felling, snigging and extraction • construction and maintenance of log landings, snig tracks and extraction tracks.
Heathland	Areas dominated (covers more than 50% of the area) by shrubs generally less than 2 metres tall at maturity.
Highly erodible soil	A soil where the particles are readily detached and transported by erosive forces. The presence of these soils may be identified by evidence of existing erosion (gully or rill erosion), or by commonly known problem soil types, e.g. some coarse-grained granites.
Incised channel	A channel more than 30 centimetres deep with clearly defined bed and banks.
Inundation	Flooding of the forested area by water overflowing the banks of a river.
Log landing	An area (usually cleared) where timber products are assembled for processing and sorting before being loaded onto a truck.
Machinery exclusion zone	Land within 10 metres of the top edge of the bank of any unmapped drainage line.
Mass movement	The downslope movement of greater than 10 cubic metres of soil, where gravity is the primary force or where no transporting medium such as wind, flowing water or ice is involved.
Nest trees	• Trees with nests or roosts of any species of raptor, including powerful owls, barking owls, sooty owls and masked owls. • Trees with nests of colonial-nesting water birds (groups of stick-nests).
Net harvestable area	The area under the private native forestry PVP where harvesting is permitted in accordance with the Code.
Old grey	A late-mature/over-mature cypress tree that regenerated before the 1890s and which has bark that is bleached to a characteristic light grey colour and that is weathered to a smoother surface texture than is typical of younger trees.

Old growth	Ecologically mature forest where the effects of disturbance are now negligible. This includes an area of forest greater than 5 hectares where: • the overstorey is in late to over-mature growth stage with the presence of relatively large old trees (many containing hollows and often with the presence of dieback or dead branches in the crown) • the age (growth) structure of the stand measured as relative crown cover consists of less than 10% of regeneration and advance growth and more than 10% of late to over-mature (senescent) growth • the effects of unnatural disturbance are now negligible. Old growth woodlands west of the Great Dividing Range, while comprising a characteristic canopy of late to over-mature trees (many with hollows), may comprise a woodland structure with less diverse or often shrubby understorey and a groundcover of grasses and herbs.
Portable mill site	A site where a portable mill (easily movable milling equipment) operates.
Posts	Term generally used to describe posts in round or split form used for fencing.
Prescribed Stream	Stream listed in the Major Rivers database of the Assessment Methodology database Department of Environment and Climate Change webpage.
Protected trees	Trees required to be retained under clause 4.3(3): • trees required to be retained under section 4.2 • plants of the genus *Xanthorrhoea* (grass trees), genus *Allocasuarina* (forest oak) and genus *Banksia* • other trees that are required to be retained by this Code.
Pulp logs	Logs cut and prepared primarily to produce wood pulp for the manufacture of reconstituted products including paper and panel board.
Recovery plan	As defined in the *Threatened Species Conservation Act 1995*.
Recruitment tree	A tree capable of developing hollows to provide habitat for wildlife and which comes from the next smaller cohort than habitat trees.
Riparian exclusion zones	Those areas within the distances specified for 'Drainage feature' as listed in Table F where forest operations are not permitted, unless otherwise allowed by this Code.
Road	Any route used for vehicular access to, and the transport of logs from, the point of loading (log landing) within the forest area.
Road prism	That part of the road from the inflexion point at the toe of the fill batter to the inflexion point at the top edge of the cut batter. Where there is no cut or fill batter as part of the road, the road prism is to be taken from the outside edge of the table drain on either side of the road.
Rocky outcrops and cliffs	A 'rocky outcrop' has an area of 0.2 hectares or larger, where 70% or more of the surface is composed of exposed boulders of more than 0.6 of a metre in diameter. 'Cliff' means a rocky slope steeper than 70 degrees and more than three metres high.
Rollover bank	A crossbank constructed with a smooth cross-section and gentle batters, which is well-compacted to provide permanent vehicular trafficability.
Roost trees	Trees with nests or roosts of any species of raptor, including powerful owls, barking owls, sooty owls and masked owls, and trees which support maternity bat roosts.
Sawlog	Log of a species suitable for processing through a sawmill into solid timber products.

Silvicultural operations	The activities associated with the management of trees within a forest for the purpose of meeting sustainable long-term productivity objectives, including thinning, single tree selection and creation of canopy openings.
Single tree selection	A harvesting operation where the trees harvested are either single trees or small groups of trees. For the purposes of this Code, single tree selection operations will not create canopy openings.
Snig track	A track used by snigging or skidding equipment.
Spoon drain	A drain with a semi-circular cross-section, which has no associated ridge of soil. Its capacity is solely defined by the excavated channel dimensions.
Stand height	Mean height of the dominant trees in the stand. Measurement of stand height must conform to methods described in approved guidelines.
Stocking level	A measure of the frequency of occurrence of tree stems assessed as being capable of growing to canopy level. Measurement of stocking levels must conform with methods described in approved guidelines.
Thinning	A silvicultural practice where some trees are removed in order to increase the growth rates of retained trees.
Timber products	Commercial timber products removed from or felled within the forest, including sawlogs, veneer logs, poles, girders, piles and pulp logs.
Veneer log	High quality logs that are rotary peeled or sliced to produce sheets of veneer.
Walkover techniques	Timber extraction or snigging without removing or unduly disturbing the existing natural groundcover, i.e. where no snig track construction involving soil disturbance is required.
Wet summer	Summer with above average rainfall persisting through the summer period.
Wetland	Includes any shallow body of water (such as a marsh, billabong, swamp or sedgeland) that is: • inundated cyclically, intermittently or permanently with water, and • vegetated with wetland plant communities.

C

Private Native Forestry Code of Practice

Private Native Forestry Code of Practice for the River Red Gum Forests

Department of **Environment & Climate Change** NSW

Published by:
Department of Environment and Climate Change NSW
59–61 Goulburn Street, Sydney
PO Box A290, Sydney South 1232
Ph: (02) 9995 5000 (switchboard)
Ph: 131 555 (environment information and publications requests)
Ph: 1300 361 967 (national parks information and publications requests)
Fax: (02) 9995 5999
TTY: (02) 9211 4723
Email: info@environment.nsw.gov.au
Website: www.environment.nsw.gov.au

DECC 2008/38
ISBN 978 1 74122 720 8
February 2008
Printed on recycled paper

Contents

Introduction

The object of this Private Native Forestry Code of Practice (the 'Code') is to ensure the supply of timber products from privately owned forests at a regular rate that can be maintained indefinitely for present and future generations, while at the same time maintaining non-wood values at or above target levels considered necessary by society for the prevention of environmental harm and the provision of environmental services for the common good.

'River Red Gum Forests' means forests dominated by *Eucalyptus camaldulensis,* being forests that are consistent with the description of Forest Type 199 (River Red Gum) set out in the document called *State Forests of NSW, Research Note 17*.

Assessment of broadscale clearing for private native forestry

Under the Code, broadscale clearing for the purpose of private native forestry improves or maintains environmental outcomes if:

- it complies with the requirements of this Code
- any area cleared in accordance with the Code is allowed to regenerate and is not subsequently cleared except where otherwise permitted by this Code.

Note – A landowner may seek development consent to undertake private native forestry (PNF) outside the provisions of the Code under the *Native Vegetation Act 2003* (NV Act).

Minor variation of Code

If, when preparing a Forest Operation Plan under the Code, the projected impact on the net harvestable area is greater than 10%, a landholder can request an accredited expert to examine the Forest Operation Plan and determine if it is appropriate to modify the environmental prescriptions of the Code in a specified manner.

A private native forestry Property Vegetation Plan (PVP) may modify in a specified manner the environmental prescriptions of the Code if an accredited officer is satisfied that:

(1) the variation of the environmental prescriptions is minor

(2) the proposed clearing will improve or maintain environmental outcomes

(3) strict adherence to the Code is in the particular case unreasonable and unnecessary.

The Code

1. Property Vegetation Plans

(1) Before any forestry operations commence on private land, a Property Vegetation Plan (PVP) under the NV Act must be approved by the Minister for Climate Change, Environment and Water.

(2) Forest operations under an approved PVP must be conducted in accordance with all provisions of this Code.

(3) For the purpose of preparing a PVP, the Department of Environment and Climate Change (DECC) will provide available digital information of landscape features (as identified in Table A) and any drainage features (as identified in Table C).

2 Forest operation planning and management

2.1 Forest Operation Plan

(1) A Forest Operation Plan must be prepared before forest operations commence.

(2) A Forest Operation Plan must be in an approved form and consistent with the provisions of this Code and the requirements of the Listed Species Ecological Prescriptions for River Red Gum Forests, which are set out in the Appendix to this Code.

(3) The landowner and anyone else carrying out forest operations must read, sign and date the Forest Operation Plan.

(4) A copy of the Forest Operation Plan must be available on-site when forest operations are occurring.

(5) A Forest Operation Plan must contain the following:

(a) A map (or maps) showing:

(i) the location and boundaries of the area in which harvesting or other forest operations will occur

(ii) recorded locations of any populations or endangered ecological communities listed under the schedules of the *Threatened Species Conservation Act 1995* and species in the Listed Species Ecological Prescriptions for River Red Gum Forests, which are set out in the Appendix to this Code

(iii) the location of landscape features as listed in Table A and drainage features as listed in Table C

(iv) the indicative location of existing and proposed roads and drainage feature crossings

(v) the indicative location of log landings and portable mill sites.

(b) A written component that provides:

(i) details of ownership of the land

(ii) a description of the forest (including its disturbance history and current condition)

(iii) the estimated stand height and basal area for each stand in the area

(iv) details of forest access, including any necessary construction, upgrading or maintenance of forest roads and perennial stream crossings

(v) details of harvesting and/or other proposed forest operations

(vi) details of flora and fauna management actions

(vii) details of tree marking activities (where applicable)

(viii) details of activities to promote regeneration

(ix) details of relevant silvicultural treatments that may be carried out as part of the Forest Operation Plan.

(6) The landowner may amend the Forest Operation Plan at any time, except for matters referred to in clause 2.1(5)(b)(iii). Any amendments to either the map or the written component must be noted on the Forest Operation Plan.

(7) The landowner must retain each Forest Operation Plan, including any amendments, for the life of the PVP or for three years after completion of the harvesting operations for which it was prepared, whichever is the later date.

(8) The landowner must provide the Forest Operation Plan, including any amendments, to an authorised officer from the Department of Environment and Climate Change if requested to do so.

2.2 Reporting

(1) The landowner must lodge a report to the Department of Environment and Climate Change by 31 March each year if:

(a) forest operations have been carried out on the land to which the PVP applies in the previous calendar year, or

(b) if in the current calendar year:

(i) it is intended to carry out forest operations in the next 12 months, or

(ii) forest operations have been carried out.

(2) If forest operations have been carried out on the land to which the PVP applies in the previous calendar year, the report must specify:

(a) the approximate volumes of the timber products harvested

(b) the approximate number of hectares on which forest operations occurred

(c) the silvicultural treatments that were applied during that period.

3 Silvicultural operations

3.1 Single tree selection and thinning

(1) Single tree selection and thinning operations must not reduce the stand basal area below 12 square metres per hectare (m^2/ha). Ideally, single tree selection and thinning should aim to space trees according to the formula ¼ diameter at breast height over bark (cm)*100.

(2) The **minimum** stand basal areas are to be calculated in accordance with the *Silvicultural Guidelines for the Code of Practice for Private Native Forestry* prepared by the Department of Environment and Climate Change and available at www.environment.nsw.gov.au/pnf.

Note: This provision:

(1) uses stand basal area as a simple tool to determine disturbance thresholds

(2) establishes harvesting limits to both maintain forest biodiversity values and manage forests while considering appropriate silvicultural practices.

3.2 Australian Group Selection

(1) Harvest operations that result in canopy openings must conform with the following requirements:

(a) the sum of canopy openings must at no time exceed 20% of the net harvestable area

(b) the maximum width of a canopy opening must not exceed twice the stand height

(c) the minimum distance between canopy openings must not be less than twice the stand height.

(2) A **canopy opening** is an area greater than 0.1 hectares in size, measured between canopy perimeters, where any vegetation remaining within the opening is less than one-half of the stand height.

Note: For the purposes of selecting an appropriate silvicultural management regime, reference should be made to the *Silvicultural Guidelines for the Codes of Practice for Private Native Forestry* prepared by the Department of Environment and Climate Change and available at www.environment.nsw.gov.au/pnf.

3.3 Regeneration and stocking

(1) As determined by the percentage of stocked plots, a minimum stand stocking of 60%, within canopy openings and 70% elsewhere in the forest, must be achieved within 36 months of a regeneration event.

(2) In this clause, **regeneration event** is the second period of inundation following a harvesting or thinning operation.

(3) A harvesting operation must not occur in a previously harvested area until stocking levels meet the minimum stocked plot requirements in clause 3.3(1).

(4) The percentage of stocked plots is to be measured in accordance with the method for measuring plots for sampling and measuring stocking found in the Department of Environment and Climate Change's *Private Native Forestry Codes of Practice Guideline No. 1: Guidelines for assessing regeneration and stocking* available at www.environment,nsw.gov.au/pnf.

(5) A landowner must comply with any requirements of the Director General of DECC for the purpose of regenerating or re-establishing the forest, if the minimum percentage of stocked plots has not been reached within 36 months following a regeneration event.

Note:

Stocking is a measure of the occurrence and distribution of trees of any age throughout the forest. The simplest way to assess whether a forest is adequately stocked is to sample the level of stocking by measuring a number of plots. Plots will be found to be either stocked or unstocked. The percentage of stocked plots reflects the adequacy of stocking within the forest. Where stocking is found to be inadequate, regeneration will be required to meet the stocking requirements.

4. Protection of the environment

4.1 Protection of landscape features of environmental and cultural significance

(1) Forest operations in and adjacent to specified landscape features must comply with the requirements in Table A.

(2) Old growth will be identified according to the protocol approved by the Minister for Climate Change, Environment and Water available at www.environment.nsw.gov.au/pnf.

Table A: Requirements for protecting landscape features

Landscape feature	Operational conditions
Endangered ecological communities listed in the *Threatened Species Conservation Act 1995* at the date the private native forestry PVP is approved by the Minister	Forest operations may only occur in endangered ecological communities as part of an approved Ecological Harvesting Plan approved by the Director General of the Department of Environment and Climate Change, except that existing roads may be maintained.
Endangered populations listed in the *Threatened Species Conservation Act 1995* at the date the private native forestry PVP is approved by the Minister	Forest operations must not result in any harm to an animal that is part of an endangered population, or result in the picking of any plant that is part of an endangered population, except that existing roads may be maintained.
Vulnerable ecological communities listed in the *Threatened Species Conservation Act 1995* at the date the private native forestry PVP is approved by the Minister	Forest operations must not occur in vulnerable ecological communities, except that existing roads may be maintained.
Old growth forest	Forest operations must not occur within old growth forest, except that existing roads may be maintained.
Wetlands	Forest operations must not occur in any wetland other than wetlands that comprise a River Red Gum broad forest type or within 20 metres of any wetland, except that existing roads may be maintained.
Disused mineshafts (excluding open pits less than 3 metres deep)	Forest operations must not occur within 10 metres of disused mineshafts, except that existing roads may be maintained.
Aboriginal object or place as defined in the *National Parks and Wildlife Act 1974*	Forest operations must not occur: • within 50 metres of a known burial site • within 20 metres of an Aboriginal scarred or carved tree • within 10 metres of a known Aboriginal object or place (this requirement does not apply to Aboriginal objects or places that may lawfully be destroyed).
Areas containing items identified as heritage items in an environmental planning instrument	Forest operations must not occur within 10 metres of a listed heritage site.

4.2 Protection of habitat and biodiversity

(1) Habitat trees must be retained in accordance with Table B.

(2) Hollow bearing trees, recruitment trees, food resource trees, roost trees and nest trees are defined as habitat trees retained for the purposes of this Code.

(3) An individual tree may satisfy more than one condition in the tree retention standards (see Table B), if it has the appropriate characteristics.

(4) Retained habitat trees should, where possible, represent the range of species in mature and late mature growth stages.

(5) Habitat trees should, where possible, be evenly distributed throughout the area of harvesting operations and within the net logging area. Preference should be given to trees with well developed spreading crowns and minimal butt damage.

(6) For the purpose of this clause:

(a) A **hollow bearing tree** is a dominant or co-dominant living tree, where the trunk or limbs contain hollows, holes or cavities. Such hollows may not always be visible from the ground but may be apparent from the presence of deformities such as protuberances or broken limbs, or places where the head of the tree has broken off. If there are more than the minimum required number of habitat trees, preference shall be given to the largest. Trees that pose a health or safety risk may be removed and, where possible, substituted with other hollow bearing trees, and if not possible, by recruitment trees.

(b) **Dead standing** trees cannot be counted as hollow bearing trees.

(c) A **recruitment tree** is a large vigorous tree capable of developing hollows to provide habitat for wildlife. Preference must be given to trees from the next cohort to that of retained hollow bearing trees.

(d) **Roost, nest** and **food resource trees** are defined as:

(i) trees with nests or roosts of any species of raptor including barking owls

(ii) trees which support maternity bat roosts

(iii) trees with recent V-notch incisions or other incisions made by a squirrel glider. Recent incisions are incisions less than two-years-old as evidenced by the fact the incision has not closed.

(iv) River Red Gum broad forest type trees with a diameter at breast height over bark of 125 centimetres or larger

(v) trees containing nests of colonial-nesting water birds (groups of stick-nests).

Table B: Minimum standards for tree retention

Trees that must be retained
• 5 hollow bearing trees per hectare, within 20–50 metres of any permanent watercourse, water bodies or major wetlands, must be retained. • 2 hollow bearing trees per hectare in all other areas must be retained. • One recruitment tree from the next cohort must be retained for every hollow bearing tree retained. • Where the total number of hollow bearing trees is less than 10 trees per hectare within 20–50 metres of any permanent water course, water bodies or major wetlands or 4 per hectare elsewhere, additional recruitment trees must be retained to bring the total number of trees retained up to 10 and 4 per hectare, respectively. • Additional recruitment trees above the number kept for the hollow bearing trees can be kept within the riparian buffer zone. • All roost, nest or food resource trees must be retained. • Clumps of habitat trees must be retained in River Red Gum broad forests where they constitute rookeries for water bird species such as herons, cormorants, spoonbills and egrets.

4.3 Minimising damage to retained trees and native vegetation

(1) As far as practicable, forestry operations must not damage protected trees.

(2) Without detracting from subclause (1):

(a) debris must not be heaped around protected trees

(b) machinery operations must not harm protected trees

(c) directional felling techniques must be employed to avoid (as far as is practicable) damage to protected trees.

(3) In this clause **protected trees** are defined as:

(a) trees required to be retained under clause 4.2

(b) plants of the genus *Xanthorrhoea* (grass trees), genus *Allocasuarina* (forest oak) (except bull oak (*Allocasuarina luehmannii*)), and genus *Banksia*

(c) *Acacia salicina* (Cooba), *Exocarpos strictus* (dwarf cherry) and *Eucalyptus microcarpa* (grey box)

(d) other trees that are required to be retained by this Code.

4.4 Drainage feature protection

(1) Forest operations must not occur in riparian exclusion zones, other than in accordance with this clause, and except where otherwise allowed by this Code. For the purpose of this clause, riparian exclusion zones are defined as those areas within the distances specified for 'Drainage feature' as listed in Table C.

Table C: Riparian exclusion and riparian buffer zones

Drainage feature	Riparian exclusion zone distance from drainage feature	Riparian buffer zone distance beyond exclusion zone
Any drainage feature with an incised channel	5 metres	Nil
Prescribed Streams	20 metres	25 metres

(2) Riparian buffer zones extend from the boundary of the riparian exclusion zone outwards away from the drainage feature for the distance specified in Table C. Limited forest operations may occur within riparian buffer zones subject to the following limitations:

(a) machinery using walkover techniques may extract logs from any area within a riparian buffer zone

(b) all hollow bearing trees are retained

(c) only 30% of the pre-harvest basal area can be removed in any ten-year period and the minimum basal area limit of 12 m^2/ha is maintained within the riparian buffer zone

(d) felling is directed away from the drainage line/riparian exclusion zone

(e) any furrows resulting from log removal are treated to prevent concentration of water flow

(f) clearing and disturbance within the riparian buffer zone is minimised.

(3) The distance specified in Table C must be measured from the mean water level of the Prescribed Stream and away from the stream. For other drainage features with an incised channel, the distance must be measured away from the edge of the incised channel.

(4) Where harvesting is occurring adjacent to riparian buffer zones, all tree felling should employ directional felling to minimise as far as practicable disturbance to vegetation within the riparian buffer zone.

(5) Where a tree cannot be felled into the area outside the riparian buffer zone using directional felling, it may be felled into the riparian buffer zone provided that not more than 6 trees within any distance of 200 metres along the boundary of the riparian buffer zone enter the riparian buffer zone.

(6) Where a tree is felled into the riparian buffer zone, the crown must not be removed from the riparian buffer zone.

(7) If a tree is accidentally felled into a riparian exclusion zone, it may be removed from that zone if it contains a saleable log, provided that the crown is cut off the log at the boundary of the exclusion zone and left where it has fallen, and that the log may be recovered without any machinery operating on the ground within the riparian exclusion zone. Such removal must result in minimal disturbance to the bed and banks of the drainage feature.

(8) Trees may be felled within unmapped drainage depressions, and machinery may enter unmapped drainage depressions. However disturbance must be minimised by:

(a) using walkover techniques wherever possible

(b) preventing skewing of machinery tracks as much as possible

(c) operating with the blade up at all times (except during crossing construction)

(d) not snigging along drainage depressions.

(9) New roads may be constructed and old roads re-opened within riparian buffer and exclusion zones provided that:

(a) the road is identified on the Forest Operation Plan

(b) the road prism crosses the riparian zones at right angles or as close to right angles as is practicable

(c) clearing and disturbance within the exclusion zone is minimised

(d) any other necessary permits have been obtained.

(10) Machinery must not operate in drainage depressions or flood runners when the soil is saturated.

(11) Australian Group Selection logging systems must not be used within:

(a) any riparian exclusion zone

(b) any riparian buffer zone.

5. Construction and maintenance of forest infrastructure

5.1 Construction and maintenance of roads

(1) Clearing of native vegetation for the purpose of roads, drainage structures, log landings, mill sites, snig tracks or extraction tracks must not occur except in accordance with this Code, and the clearing must be limited to the minimum extent necessary.

(2) Construction of new roads and drainage feature crossings should be minimised as far as practicable, consistent with the requirements for management, harvesting and fire control in the Property Vegetation Plan area.

(3) As far as practicable, roads must be located to facilitate outfall drainage.

(4) Clearing for road construction must be to the minimum extent necessary.

(5) Trees and other debris must not be stacked in landscape features referred to in Table A or riparian exclusion zones or riparian buffer zones referred to in Table C.

(6) Roads must be maintained according to Table D.

(7) Roads must be maintained to ensure that road surfaces remain stable and drainage systems and sediment controls remain functional.

(8) Soil exposure on road verges must be kept to a minimum.

(9) Roads that are not required for ongoing property management must be stabilised and allowed to revegetate.

(10) Haulage must not be undertaken over any section of road where the surface has broken down, as evidenced by ruttings more than 150 millimetres deep, for any distance exceeding 20 metres.

(11) Haulage on natural surface roads must cease when there is runoff from the road surface, except for trucks that have already been loaded or partially loaded. These trucks can travel to their intended destination.

(12) Where existing roads are overgrown and require re-opening, the clearing width must be minimised to the extent required to make the road trafficable.

(13) As far as practicable, grass cover must be maintained and disturbance to existing drainage structures minimised.

(14) Blading-off of roads must not occur.

Table D: Maximum distance that water may travel along road surfaces, table drains and snig tracks

Road or snig track grade (degrees)	Maximum distance (metres)
0 to ≤ 1	250
> 1 to ≤ 2	200
> 2 to ≤ 3	150
> 3 to ≤ 4	125
> 4 to ≤ 5	100
> 5 to ≤ 6	90
> 6 to ≤ 7	80
> 7 to ≤ 8	70
> 8 to ≤ 9	65
> 9 to ≤ 10	60

5.1.1 Road drainage

(1) All reasonable steps must be taken to minimise soil erosion from roads. Accordingly, at least one of the following measures must be adopted, as appropriate in the circumstances:

(a) maintain vegetative cover (that is, plant material, living or dead) that protects the soil surface from erosion

(b) establish a grass cover using a sterile seed or native grass seed, where available

(c) crossfall-drain the road or track with outfall or infall drainage or by shaping the road to a crown so water drains to both of its sides

(d) construct drainage structures to convey water away from the road formation (for example, cross drains, mitre drains or relief culverts).

(2) Drainage structures must be established on a road if concentrated water flow on the road surface or table drains is likely to occur for distances exceeding the relevant spacing, as shown in Table D.

(3) Earth windrows resulting from road construction and upgrading operations must be removed from the shoulders of all roads unless they are specifically constructed to prevent erosion of fill batters or where infall drainage is used.

(4) Earth windrows from road maintenance must be cut through at regular intervals to ensure that water flow on road surfaces does not exceed the distances specified in Table D.

(5) Rollover banks must have a minimum effective bank height of 15 centimetres (consolidated). Spoon drains must have a minimum effective depth of 15 centimetres.

(6) Drainage structures must divert water onto a stable surface and kept free of debris that may impede flow of water.

5.1.2 Roads crossing drainage features

(1) Drainage feature crossings must be stable causeways, culverts or bridges. Existing gully stuffers may be used if they are stable, but new crossings of these types must not be constructed.

(2) Crossings must be designed, constructed and maintained to minimise disturbance to the passage of fish and other aquatic fauna. They must be located and constructed to cause minimum disturbance to stream banks, stream beds and natural flows. The base of the crossing must be made of erosion-resistant material such as rock, concrete or heavy timber and must conform to the natural level of the stream bed.

(3) Crossings must be constructed as close as practicable to right angles to the water flow unless an angled approach reduces soil and ground disturbance.

(4) Disturbance to the bed and banks of the drainage feature during crossing construction or maintenance must be minimised. Disturbed areas must be reshaped and stabilised as soon as possible following crossing construction or maintenance.

(5) Any approaches to a crossing over a drainage line must be drained, using a drainage structure, within 5 to 30 metres of the crossing. (Where this is impracticable, a drainage structure must be constructed as near as practicable to the crossing.)

(6) Permanent drainage crossing structures must be designed to convey a 1-in-5-year storm event and withstand a 1-in-10-year storm event. Bridges must be designed and constructed so the natural stream flow is not restricted and erosion is minimised.

(7) The surface of any crossing and the approaches on both sides of it must be made of stable material that is unlikely to be displaced during normal use of the crossing or approach.

(8) Causeways must be constructed of stable, non-soil material such as crushed gravel, rock, bitumen, concrete, logs, or other stable material that is unlikely to produce water turbidity.

(9) Construction equipment must minimise disturbance or damage to the watercourse bed and banks. Fill and construction material must not be placed into watercourses, and surplus fill must be located outside the drainage feature exclusion zone. Stream banks and bridge embankments must be protected to minimise erosion.

(10) Soil stabilisation must be undertaken in all areas disturbed by crossing construction, upgrading or maintenance.

5.2 Log landings, portable mill sites and snig tracks

(1) Wherever practicable, log landings and portable mill sites must be located in flood runners or drainage depressions.

(2) Log landings and portable mill sites must be no larger than the minimum size necessary for efficient operations.

(3) Log landings and portable mill sites must be located and constructed as far as practicable to allow effective drainage during harvesting operations.

(4) Log landings and portable mill sites must not be located nearer than 10 metres to an exclusion zone or riparian buffer zone.

(5) Runoff from log landings and portable mill sites must not be directly discharged into a drainage feature.

(6) Vegetation and debris from log landings and portable mill sites must not be deposited in an exclusion zone, buffer zone or flood runner.

(7) Woody waste and debris on log landings and portable mill sites must not be stacked against retained trees.

(8) Bark accumulated on log landings and sawdust on mill sites must be progressively dispersed away from the site during harvesting operations to prevent significant accumulations.

(9) On completion of operations, log landings and portable mill sites must be drained and reshaped to safely disperse runoff onto surrounding vegetation.

5.2.1 Snig tracks and extraction tracks

(1) Snig track or extraction track construction must be minimised, and as far as practicable, walkover extraction must be used, and slash retained on snig and extraction tracks.

(2) Soil disturbance and exposure on snig and extraction tracks must be minimised.

(3) Old snig tracks or extraction tracks must not be used if they are incised and cannot be drained.

(4) In re-opening old snig tracks and extraction tracks, the use of blades should be restricted to the removal of obstructions such as understorey vegetation, logs/tree heads and surface rock, and to ensuring that the track is adequately drained.

(5) Snig tracks and extraction tracks must not encroach on exclusion zones or riparian buffer zones except designated crossings and where permitted by other code conditions.

(6) Blading off of snig tracks and extraction tracks must not occur.

(7) Snig tracks and extraction tracks must be located and constructed to ensure that water flow along the track surface does not exceed the distances specified in Table D. This could be achieved by one or a combination of the following techniques:

(a) retain existing groundcover using walkover techniques

(b) retain or cover the track surface with slash and harvesting debris

(c) construct or maintain the track with outfall drainage

(d) construct track drainage structures.

(8) On completion of operations, the following measures must be implemented where practicable: snig tracks and extraction tracks must be reshaped; all earth windrows, wheel ruts, and log furrows must be removed; and recoverable topsoil must be spread back over the track.

(9) Crossbanks must be constructed to have a minimum effective height of 35 centimetres unconsolidated, or 25 centimetres consolidated, and as a guide should not be greater than 50 centimetres in height.

(10) Crossbanks must not be constructed of bark or woody debris.

5.2.2 Snig track and extraction track crossings on drainage

(1) The location of log landings and snig/extraction tracks must be planned to minimise the number of crossings required.

(2) Snig track and extraction track crossings must be stable causeways (including natural surface causeways), culverts or bridges. Existing gully stuffers may only be used if they are stable. New crossings of this type must not be constructed.

(3) Machinery must not cross a drainage feature which is running water or when the soil is saturated, unless by means of a stable crossing.

(4) Approaches to crossings must be as close as possible to right angles to the flow of water.

(5) A crossbank must be installed on each approach, between 5 and 20 metres from the drainage feature crossing. The distance must be measured from the top of the bank of the incised channel. The drainage structure must divert water onto a stable surface. If such a surface is not available, sediment control measures must be used to prevent sediment entering the drainage feature.

(6) Disturbance to the bed and banks of the drainage feature must be minimised, and any spoil must be removed from the drainage feature.

(7) All areas disturbed during crossing construction and use, including approaches, must be rehabilitated following completion of use. Rehabilitation includes the reshaping of the crossing to conform as closely as possible to the original ground surface. If groundcover is not likely to recover naturally, sowing with a suitable sterile seed or endemic native seed/fertiliser mix must be undertaken to establish effective groundcover.

5.2.3 Wet weather limitations for snigging, log landing and portable mill operations

(1) Harvesting operations must not occur when:

(a) there is runoff from the snig track surface, or

(b) soils are saturated, or

(c) soil is rutted to a depth of more than 200 millimetres below the track surface over a 20-metre section or longer.

(2) Forwarders, excavators and truck-mounted loaders may be used as stationary loaders when there is runoff from the log landing.

(3) All other machinery on the log landing must remain stationary when there is runoff from the log landing surface, unless the log landing is constructed of gravel or other stable material.

Appendix:
Listed species ecological prescriptions

Introduction

These prescriptions must be applied within the forest operations area where there is a **known record** or **site evidence** of a threatened species. A known record is a sighting or record of the species in the NSW Wildlife Atlas available at www.wildlifeatlas.nationalparks.nsw.gov.au. Site evidence is a sign a species has visited or regularly uses a site, and includes observations of, for example, faecal pellets or scats, chewed seed cones or a nest, or evidence that the site has been used as a latrine.

A list of threatened species under the *Threatened Species Conservation Act 1995* and species profiles for each species can be viewed on the Department of Environment and Climate Change (DECC) website at www.threatenedspecies.environment.nsw.gov.au.

The prescriptions set out below assist in the protection of threatened species and include:

(1) additional widths to stream exclusion zones

(2) exclusion zones around locations of threatened species records

(3) additional tree retention requirements around locations of threatened species records.

Exclusion zones and buffer zones requiring additional tree retention requirements must be applied within the Property Vegetation Plan (PVP) area subject to the Forest Operation Plan.

Wildlife Atlas records that trigger these prescriptions are those less than 20 years old which have a reliability level of 1 to 5. Records in an adjoining protected area of public land (for example, in State Forests or National Parks) can be ignored if it can be demonstrated that the species has been protected and the conditions of the relevant Threatened Species Licence or Integrated Forestry Operation Agreement have been met.

Some species prescriptions vary according to the region in which they occur. Unless otherwise stated, the regions referred to in the prescriptions are based on the catchments administered by Catchment Management Authorities (CMAs) shown in Figure 1.

General conditions

For all threatened species prescriptions, the following applies:

- Where a retained eucalypt tree (as required by these prescriptions) also meets the requirements of a habitat tree, the eucalypt tree may be counted as a habitat tree.
- Where other exclusion zones form part of the habitat area required for threatened species prescriptions, the exclusion zones may count towards the area of habitat required to be retained.
- Buffer and exclusion zones are to be marked in the field where they adjoin the area, subject to forest operations. This marking has to be visible while forestry operations are occurring.

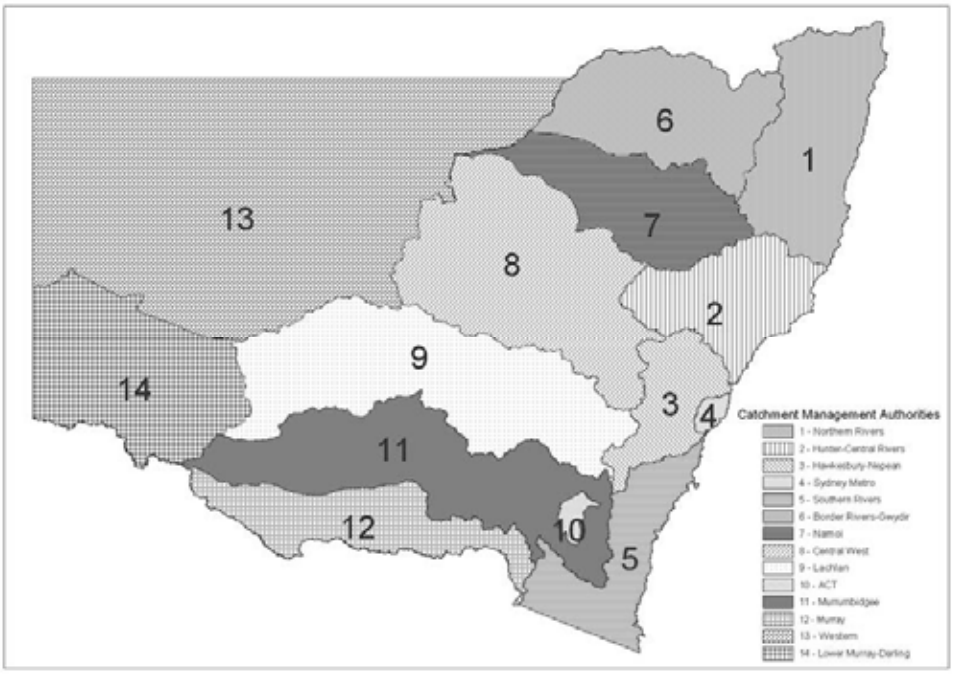


Figure 1: Catchment Management Authority (CMA) areas where prescriptions for some threatened species may vary

Further information about individual threatened species may be sourced from DECC. The DECC website provides species profiles and additional information. Visit www.environment.nsw.gov.au and www.threatenedspecies.environment.nsw.gov.au.

Mammals

Squirrel glider (*Petaurus norfolcensis*)

CMAs for application of prescription
Border Rivers–Gwydir, Central West, Lachlan, Murray, Murrumbidgee and Namoi

Prescription
Where there is a squirrel glider record in an area of forest operations or within 125 metres of the boundary of the area of forest operations (unless specified otherwise in this condition), the following must apply:

(a) A buffer zone with a 250-metre radius (about 20 hectares) must be identified, centred on the location of the record or records.

(b) Within this buffer zone, the following additional prescriptions must be implemented:

  (i) A minimum of 15 trees per 2 hectares with visible hollows must be retained where available.

  (ii) A recruitment tree must be retained for each hollow bearing tree retained. Where the total number of hollow bearing trees and recruitment trees is less than 30 trees per 2 hectares, additional recruitment trees must be retained to bring the number up to 30 trees per 2 hectares.

  (iii) Disturbance to understorey trees and shrubs (particularly banksias and acacias), ground logs, rocks and litter must be minimised.

(c) Where there are records of dens or roosts, these must be contained within buffer zones encompassing suitable habitat.

(d) Where there are more than two squirrel glider records closer than 250 metres apart within the forest operation area, advice on the location of the buffer area must be sought from DECC before commencing forest operations.

Additional information
Squirrel glider habitat is generally dry eucalypt forest and woodland. In coastal areas, potential habitat is blackbutt, bloodwood and ironbark forest with a heathy understorey. In the absence of these forest types, areas of mature or old growth forest must be retained.

Koala (*Phascolarctos cinereus*)

CMAs for application of prescription
Border Rivers–Gwydir, Central West, Lachlan, Murray, Murrumbidgee and Namoi

Note: Koala populations are generally sparse or of low density in the South Coast, Central and Southern Tablelands and Western Koala Management Areas (Koala Management Areas 3, 5, 6 and 7; see Figure 2) and, as a result, scats are rarely encountered. Therefore, recording of any scat or a sighting of a koala in these areas should be considered significant.

Prescription

(a) Forest operations are not permitted within any area identified as 'core koala habitat' within the meaning of *State Environmental Planning Policy No. 44 – Koala Habitat Protection*.

(b) In Koala Management Areas 5, 6 and 7, any tree containing a koala or one or more koala faecal pellets must be retained and an exclusion zone of 50 metres implemented around each retained tree.

(c) Where there is a record of a koala within an area of forest operations or within 500 metres of an area of forest operations or a koala faecal pellet (scat) is found beneath the canopy of any primary or secondary koala food tree (see Table E), the following must apply:

  (i) A minimum of 10 primary koala food trees and 5 secondary koala food trees must be retained per hectare of net harvesting area (not including other exclusion or buffer zones), where available.

  (ii) These trees should preferably be spread evenly across the net harvesting area, have leafy, broad crowns and be in a range of size classes with a minimum of 30 centimetres diameter at breast height over bark.

  (iii) Damage to retained trees must be minimised by directional felling techniques.

  (iv) Post-harvest burns must minimise damage to the trunks and foliage of retained trees.

Additional information
Generally, koala habitat comprises eucalypt forest and woodland containing primary and secondary food trees (see Table E). Koala droppings (faecal pellets or scats) are relatively distinctive, being cylindrical and pit-shaped. Colour varies between green–yellow to yellow–brown. Scats can remain under trees on or within the leaf litter for periods of several weeks to months. For further information on the identification of koala pellets or scats, contact DECC or refer to the DECC website – www.environment.nsw.gov.au.

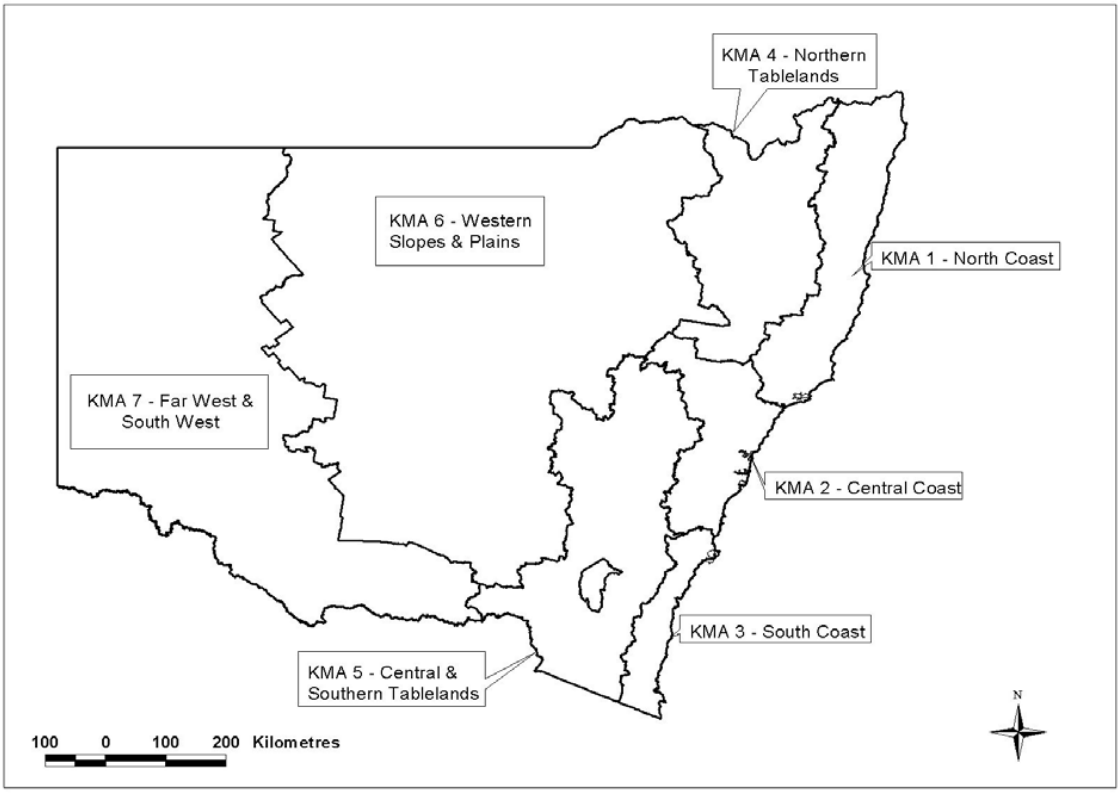


Figure 2: Koala Management Areas in NSW (from Draft State Koala Recovery Plan)

Table E: Primary and secondary koala food trees for each Koala Management Area in the River Red Gum forests

Koala food free species		Koala Management Area		
Common name	**Scientific name**	**5**	**6**	**7**
Primary tree species				
River red gum	*E. camaldulensis*		X	X
Coolabah	*E. coolabah*		X	X
Ribbon gum	*E. viminalis*	X		
Secondary tree species				
White box	*E. albens*	X	X	
Eurabbie	*E. bicostata*	X		
Blakely's red gum	*E. blakelyi*	X	X	X
Apple-topped box	*E. bridgesiana*	X	X	
Broad-leaved sally	*E. camphora*	X		
Dirty gum	*E. chloroclada*		X	
Argyle apple	*E. cinerea*	X		
Fuzzy box	*E. conica*		X	
Mountain gum	*E. dalrympleana*	X		
Tumbledown gum	*E. dealbata*	X	X	
Dwyer's red gum	*E. dwyeri*		X	
Bundy	*E. goniocalyx*	X		
Black box	*E. largiflorens*		X	X
Maiden's gum	*E. maidenii*	X		
Brittle gum	*E. mannifera*	X		
Yellow box	*E. melliodora*	X	X	X

Western grey box	*E. microcarpa*		X	X
Mallee red gum	*E. nandewarica*		X	
Large-flowered bundy	*E. nortonii*	X		
Snow gum	*E. pauciflora*	X		
Pilliga box	*E. pilligaensis*		X	
Red box	*E. polyanthemos*	X	X	
Bimble box	*E. populnea*		X	X
Orange gum	*E. prava*		X	
n/a	*E. vicina*		X	
n/a	*E. volcanica*		X	

Large-footed myotis (*Myotis adversus*)

CMAs for application of prescription
Border Rivers–Gwydir, Central West, Lachlan, Murray and Murrumbidgee

Prescription
Where there is a record of large-footed myotis in an area of forest operations or within 100 metres of the boundary of the area of forest operations, the following must apply:

(a) An exclusion zone with a 30-metre radius must be implemented on all dams and permanent water bodies. Permanent water bodies include lakes, lagoons or any other permanent collection of still water that is not impounded by an artificial structure. The exclusion zone must be measured from the top of the high bank of the permanent water body.

(b) An exclusion zone with a 30-metre radius must be implemented on all permanent streams within 100 metres of the location of the record.

(c) The width of exclusion zones must be measured from the top of the bank of the incised channel or, where there is no defined bank, from the edge of the channel.

Additional information
Large-footed myotis generally roost in groups of 10–15 close to water in caves, mine shafts, hollow bearing trees, stormwater channels, buildings, under bridges and in dense foliage. They forage over streams and pools, catching insects and small fish by raking their feet across the water's surface.

Birds

Masked owl (*Tyto novaehollandiae*) and barking owl (*Ninox connivens*)

CMAs for application of prescription
Border Rivers–Gwydir, Central West, Lachlan, Lower Murray–Darling, Murray, Murrumbidgee and Namoi

Prescription
Nest trees (trees with hollows containing a nest of a masked or barking owl) must be retained and protected by a 60-metre exclusion zone.

Roost trees (trees where a masked or barking owl has been observed roosting or signs of roosting are observed) must be retained and protected by a 50-metre exclusion zone.

Where there is a record within the area of forest operations or within 500 metres of the area of forest operations for the masked owl or 250 metres for the barking owl, the following prescriptions apply:

(a) Buffer zones with a1000-metre radius (about 300 hectares) for the masked owl and 500-metre radius (about 78 hectares) for the barking owl must be identified centred on the location of the record or records. The radius of the buffer zone must be measured from the location of the record. Where there is more than one record, the radius of the buffer zone must be measured from a point equidistant from most records, where possible.

(b) Within this buffer zone, the following additional prescriptions must be implemented:

  (i) A minimum of 15 trees per 2 hectares with visible hollows must be retained where available.

  (ii) A recruitment tree must be retained for each hollow bearing tree retained. Where the total number of hollow bearing trees and recruitment trees is less than 30 trees per 2 hectares, additional recruitment trees must be retained to bring the number up to 30 trees per 2 hectares.

  (iii) Disturbance to understorey trees and shrubs, ground logs, and rocks and litter must be minimised.

(c) Where there are records of nests or roosts, these must be contained within buffer zones encompassing suitable habitat.

(d) Where there are more than two owl records consecutively less than 1000 metres apart but collectively spreading over an area greater than 1000 metres in any direction, advice on the location of the buffer area must be sought from DECC.

Swift parrot (*Lathamus discolor*)

CMAs for application of prescription
Border Rivers–Gwydir, Central West, Lachlan, Lower Murray–Darling, Murray, Murrumbidgee and Namoi

Prescription
Where there is a record of a swift parrot in an area of forest operations, the following must apply:

(a) At least ten eucalypt feed trees must be retained within every two hectares of the net harvest area. These must be marked for retention. Where retained eucalypt feed trees also meet the requirements of habitat or recruitment trees, the retained eucalypt feed trees can be counted as habitat or recruitment trees.

(b) Where a swift parrot is observed feeding, the tree in which it is feeding must be retained.

Additional information
Swift parrots migrate to the Australian south-east mainland between March and October. On the mainland, they occur where eucalypts are flowering profusely or where there are abundant lerps (from sap-sucking bugs). Favoured feed trees include winter-flowering species such as swamp mahogany (*Eucalyptus robusta*), spotted gum (*Corymbia maculata*), red bloodwood (*C. gummifera*), mugga ironbark (*E. sideroxylon*) and white box (*E. albens*). Commonly used lerp-infested trees include grey box (*E. microcarpa*), grey box (*E. moluccana*) and blackbutt (*E. pilularis*).

Regent parrot (*Polytelis anthopeplus monarchoides*)

CMAs for application of prescription
Lower Murray–Darling and Murray

Prescription
There should be no harvesting of mallee within the areas shown on Figure 3:

(a) within 20 kilometres of the Lower Wakool River defined as downstream of the junction of the Edward and Wakool Rivers, with the eastern boundary line being drawn perpendicular to the river at that point

(b) within 20 kilometres of the Murray River.

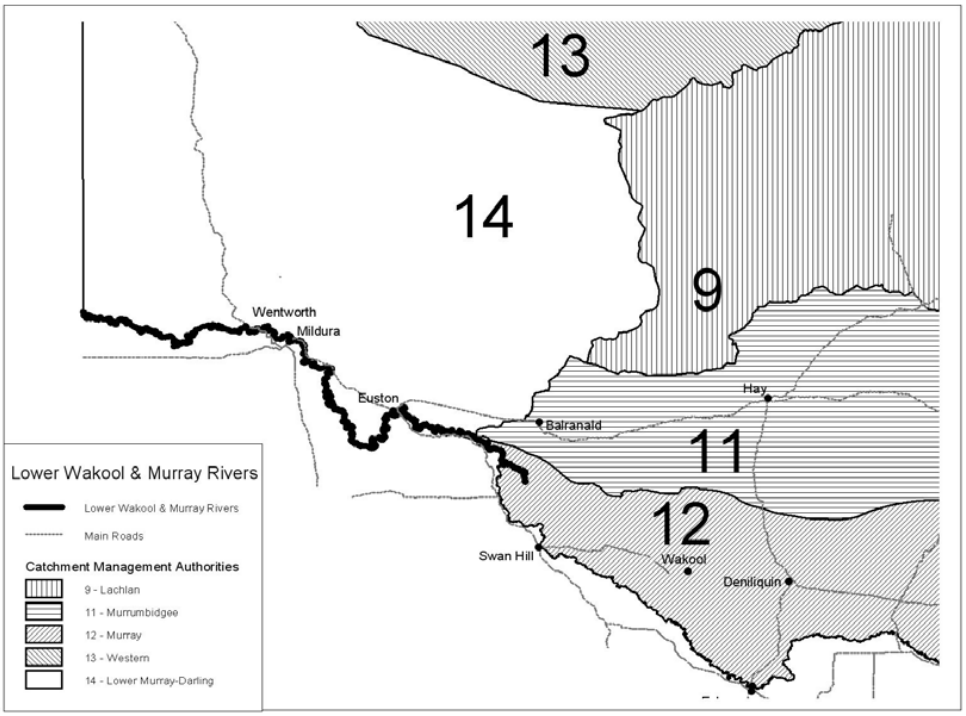


Figure 3: Area of application of regent parrot prescription

Mallee within this zone can only be harvested by obtaining development consent under the *Native Vegetation Act 2003* for non-Crown Timbered Lands.

Bush stone-curlew (*Burhinus grallarius*)

CMAs for application of prescription
All

Prescription
No forest operations are permitted within a 50-metre radius of all bush stone-curlew ground nests.

Additional information
Bush stone-curlew nests are found in areas of dry, grassy open forest or woodland and are a small scrape on bare ground, often near a bush or tree or beside a fallen limb. Eggs are stone coloured, blotched dark brown and grey. Nesting season is August through to January.

Red-tailed black-cockatoo (*Calyptorhynchus banksii)*

CMAs for application of prescription
Border Rivers–Gwydir, Central West, Lower Murray–Darling, Namoi and Western

Prescription
No forest operations are permitted within a 50-metre radius of all red-tailed black-cockatoo nests.

Additional information
Red-tailed black-cockatoos nest in tree hollows usually in larger, mature trees. Nest locations are indicative of where a bird is seen entering a hollow. Nesting season is from March to August.
Red-tailed black-cockatoos are found in a wide variety of habitats. In coastal north-east NSW they have been recorded in dry open forest and areas of mixed rainforest/eucalypt forest.

Osprey (*Pandion haliaetus*)

CMAs for application of prescription
All except for Lower Murray–Darling and Western

Prescription
No forest operations are permitted within a 100-metre radius of all osprey nests.

Additional information
Ospreys have a large stick nest (up to 2 metres wide) usually in tall, dead or occasionally live trees, often in an exposed position close to lakes, rivers or the ocean. Nesting season is from June to October.

Square-tailed kite (*Lophoictinia isura*)

CMAs for application of prescription
All

Prescription
No forest operations are permitted within a 100-metre radius of all square-tailed kite nests.

Additional information
Square-tailed kites have a large stick nest usually between 60 and 100 centimetres in diameter, and some 12–26 metres above the ground, generally in a eucalypt. Nesting season is from July to November.

Turquoise parrot (*Neophema pulchella*)

CMAs for application of prescription
All except for Lower Murray–Darling and Western

Prescription
No forest operations are permitted within a 30-metre radius of all turquoise parrot nests.

Additional information
Turquoise parrots occur mainly west of the escarpment on the tablelands and western slopes, but are occasionally found more widely through most of eastern NSW, in open woodlands, dry sclerophyll forest and adjacent grasslands. Nests range from 1–20 metres above the ground. They are in hollows in small trees, often dead eucalypts, or in holes or stumps, fence posts or even logs lying on the ground. Nesting season is from August to December and from April to May.

Threatened flora – specific prescriptions

Table F: Conditions applying to flora species

(Note: Numbers in first column relate to conditions listed below this table.)

Condition	Scientific name	Common name	Catchment Management Authority
H	*Amphibromus fluitans*	Floating swamp wallaby-grass	Murray, Murrumbidgee

H. Damage to individuals avoided

Damage to individuals of the species to which this condition applies should be avoided to the greatest extent practicable.

Glossary

Expressions that are defined in the *Native Vegetation Act 2003* and Native Vegetation Regulation 2005 have the same meanings in this Code as the meanings given to them in that Act and Regulation unless they are otherwise defined in this Code. All other expressions are defined as in this glossary.

Accidentally felled	A tree is accidentally felled into any area of land only if it is apparent that techniques of directional felling were used in an attempt to fell the tree away from the area. Despite the above, a tree is not accidentally felled into an area if the person responsible knew or could reasonably have been expected to know that the tree would fall into the area.
Australian Group Selection	A silvicultural technique that creates canopy openings for the purpose of stimulating regeneration in certain forest types.
Batter	An earth slope formed from fill material (fill batter) or cut into the natural hillside (cut batter) during road construction.
Clumps of habitat trees forming rookeries for waterbirds	A group of adjoining trees, together with a 20-metre surrounding buffer, in which there are multiple stick nests comprising the breeding rookeries of colonial waterbirds such as herons, cormorants, spoonbills or egrets. Nests usually comprise platforms of sticks, often near each other. They are usually found in trees in or near water bodies such as swamps. Such breeding rookeries can contain hundreds of nests and birds, and are often revisited annually.
Diameter at breast height over bark (dbhob)	The diameter of a tree measured at 1.3 metres above the ground. Measurements are made over the bark and horizontal to the trunk.
Directional felling	The felling of a tree so it falls in a pre-determined direction
Drainage depression	A shallow depression with smoothly concave cross-section that conveys runoff only during or immediately after periods of heavy rainfall.
Drainage feature	A drainage depression, drainage line, river or watercourse.
Drainage line	A channel down which surface water naturally concentrates and flows. Drainage lines exhibit one or more of the following features which distinguish them from drainage depressions: • evidence of active erosion or deposition, e.g. gravel, pebble, rock, sand bed, scour hole or nick point • an incised channel more than 30 centimetres deep with clearly defined bed and banks • a permanent flow.
Drainage structure	A structure designed to convey water away from a road, track or area of soil disturbance.
Earth windrow	A mound of soil material or gravel on the edge of a road or snig track formed by the spillage from the edge of a blade or similar machine during earthmoving operations.
Ecological logging regime	The use of logging (commercial and non-commercial) to rehabilitate or regenerate an ecological community. The primary goal is ecological improvements and commercial logging provides an economic incentive for the forest owner to undertake the works. Also known as ecological

	silvicultural logging.
Exclusion zone	Means an area of land (within a specified distance of landscape features identified in Tables A or C) where forest operations are prohibited, unless otherwise allowed under this Code.
Extraction track	A track constructed for use by forwarding machinery.
Flood runner	A natural depression that carries the initial flood flows before complete inundation occurs.
Food resource trees	Trees with recent V-notch incisions or other incisions made by a yellow-bellied glider or squirrel glider. Recent incisions are incisions less than two years old as evidenced by the fact the incision has not closed.
Forest operations	All clearing resulting from activities associated with forest management, including harvesting operations, construction and maintenance of roads and tracks, and prescribed burning for regeneration.
Girders	High quality logs used in a round or flat-faced form to support a deck such as a bridge or wharf or as large end section, heart-free, sawn timber suitable for heavy construction.
Gross forest area	The total area of forest defined in a Property Vegetation Plan.
Gully stuffer	A drainage feature crossing formed by filling the drainage feature with trees, debris, spoil, soil, rock or other material to the level of the road or track.
Habitat tree	A tree retained for habitat purposes under this Code.
Harvesting operations	Harvesting operations include: • timber felling, snigging and extraction • construction and maintenance of log landings, snig tracks and extraction tracks.
Incised channel	A channel more than 30 centimetres deep with clearly defined bed and banks.
Inundation	Flooding of the forested area by water overflowing the banks of a river.
Log landing	An area (usually cleared) where timber products are assembled for processing and sorting before being loaded onto a truck.
Machinery exclusion zone	Land within 10 metres of the top edge of the bank of any unmapped drainage line.
Nest trees	• Trees with nests or roosts of any species of raptor, including powerful owls, barking owls, sooty owls and masked owls. • Trees with nests of colonial-nesting water birds (groups of stick-nests).
Net harvestable area	The area under the private native forestry PVP where harvesting is permitted in accordance with the Code.
Old growth	Ecologically mature forest where the effects of disturbance are now negligible. This includes an area of forest greater than 5 hectares where: • the overstorey is in late to over-mature growth stage with the presence of relatively large old trees (many containing hollows and often with the presence of dieback or dead branches in the crown) • the age (growth) structure of the stand measured as relative crown cover consists of less than 10% of regeneration and advance growth, and more than 10% of late to over-mature (senescent) growth • the effects of unnatural disturbance are now negligible. Old growth woodlands west of the Great Dividing Range, while comprising a characteristic canopy of late to over-mature trees (many with hollows), may

	comprise a woodland structure with less diverse or often shrubby understorey and a groundcover of grasses and herbs.
Portable mill site	A site where a portable mill (easily movable milling equipment) operates.
Posts	Term generally used to describe posts in round or split form used for fencing.
Prescribed Stream	Stream listed in the Major Rivers database of the Assessment Methodology database - Department of Environment and Climate Change webpage.
Protected trees	Trees required to be retained under clause 4.3(3): • plants of the *Xanthorrhoea* (grass trees), *Allocasuarina* (forest oak) (except bull oak (*Allocasuarina luehmannii*)) and genus *Banksia* • for the River Red Gum Forests, *Acacia salicina* (cooba), *Exocarpos strictus* (dwarf cherry) and *Eucalyptus microcarpa* (grey box) • other trees that are required to be retained by this Code.
Pulp logs	Logs cut and prepared primarily to produce wood pulp for the manufacture of reconstituted products including paper and panel board.
Rainfall erosivity	A measure of the ability of rainfall to cause erosion at any location. It is directly related to the likelihood of high intensity storms and can be used to predict times of the year when erosion risk is greatest.
Recovery plan	As defined in the *Threatened Species Conservation Act 1995*.
Recruitment tree	A tree capable of developing hollows to provide habitat for wildlife and which comes from the next smaller cohort than habitat trees.
River Red Gum Forests	A forest dominated by *Eucalyptus camaldulensis* consistent with description of Forest Type 199 (River Red Gum) in State Forests of NSW, Research Note 17.
Riparian exclusion zones	Those areas within the distances specified for 'Drainage feature' as listed in Table C where forest operations are not permitted, unless otherwise allowed by this Code.
Road	Any route used for vehicular access to, and the transport of logs from, the point of loading (log landing) within the forest area.
Road prism	That part of the road from the inflexion point at the toe of the fill batter to the inflexion point at the top edge of the cut batter. Where there is no cut or fill batter as part of the road, the road prism is to be taken from the outside edge of the table drain on either side of the road.
Rollover bank	A crossbank constructed with a smooth cross section and gentle batters, which is well-compacted to provide permanent vehicular trafficability.
Roost trees	Trees with nests or roosts of any species of raptor including powerful owls, barking owls, sooty owls and masked owls, and trees which support maternity bat roosts.
Sawlog	Log of a species suitable for processing through a sawmill into solid timber products.
Silvicultural operations	The activities associated with the management of trees within a forest for the purpose of meeting sustainable long-term productivity objectives, including thinning, single tree selection and creation of canopy openings.
Single tree selection	A harvesting operation where the trees harvested are either single trees or small groups of trees. For the purposes of this Code, single tree selection operations will not create canopy openings.
Snig track	A track used by snigging or skidding equipment.
Spoon drain	A drain with a semi-circular cross-section, which has no associated ridge of soil. Its capacity is solely defined by the excavated channel dimensions.

Stand height	Mean height of the dominant trees in the stand. Measurement of stand height must conform to methods described in approved guidelines.
Stocking level	A measure of the frequency of occurrence of tree stems assessed as being capable of growing to canopy level. Measurement of stocking levels must conform with methods described in approved guidelines.
Thinning	A silvicultural practice where some trees are removed in order to increase the growth rates of retained trees.
Timber products	Commercial timber products removed from or felled within the forest, including sawlogs, veneer logs, poles, girders, piles and pulp logs.
Veneer log	High quality logs that are rotary peeled or sliced to produce sheets of veneer.
Walkover techniques	Timber extraction or snigging without removing or unduly disturbing the existing natural groundcover, i.e. where no snig track construction involving soil disturbance is required.
Wetland	Includes any shallow body of water (such as a marsh, billabong, swamp or sedgeland) that is: • inundated cyclically, intermittently or permanently with water, and • vegetated with wetland plant communities.

D

Private Native Forestry Code of Practice

Private Native Forestry Code of Practice for Cypress and Western Hardwood Forests

Department of **Environment & Climate Change** NSW

Published by:
Department of Environment and Climate Change NSW
59–61 Goulburn Street, Sydney
PO Box A290, Sydney South 1232
Ph: (02) 9995 5000 (switchboard)
Ph: 131 555 (environment information and publications requests)
Ph: 1300 361 967 (national parks information and publications requests)
Fax: (02) 9995 5999
TTY: (02) 9211 4723
Email: info@environment.nsw.gov.au
Website: www.environment.nsw.gov.au

DECC 2008/39
ISBN 978 1 74122 721 5
February 2008
Printed on recycled paper

Contents

Tables and figures

Introduction

The object of this Private Native Forestry Code of Practice (the 'Code') is to ensure the supply of timber products from privately owned forests at a regular rate that can be maintained indefinitely for present and future generations, while at the same time maintaining non-wood values at or above target levels considered necessary by society for the prevention of environmental harm and the provision of environmental services for the common good.

'Cypress Forests' mean forests dominated by white cypress pine (*Callitris glaucophylla*), being forests in which at least 80% of the stand basal area comprises trees of that species.

'Western Hardwood Forests' mean forests that are consistent with the description of any of the Forest Types 99, 103, 104, 124, 171–178, 180–185, 203–210 and 213 set out in the document called *State Forests of NSW Research Note 17*.

Assessment of broadscale clearing for private native forestry

Under the Code, broadscale clearing for the purpose of private native forestry improves or maintains environmental outcomes if:

- it complies with the requirements of this Code
- any area cleared in accordance with the Code is allowed to regenerate and is not subsequently cleared except where otherwise permitted by this Code.

Note: A landowner may seek development consent to undertake private native forestry (PNF) outside the provisions of the Code under the *Native Vegetation Act 2003* (NV Act).

Minor variation of Code

If, when preparing a Forest Operation Plan under the Code, the projected impact on the net harvestable area is greater than 10%, a landholder can request an accredited expert to examine the Forest Operation Plan and determine if it is appropriate to modify the environmental prescriptions of the Code in a specified manner.

A private native forestry Property Vegetation Plan (PVP) may modify in a specified manner the environmental prescriptions of the Code if an accredited officer is satisfied that:

(1) the variation of the environmental prescriptions is minor

(2) the proposed clearing will improve or maintain environmental outcomes

(3) strict adherence to the Code is in the particular case unreasonable and unnecessary.

The Code

1. Property Vegetation Plans

(1) Before any forestry operations commence on private land, a Property Vegetation Plan (PVP) under the NV Act must be approved by the Minister for Climate Change, Environment and Water.

(2) Forest operations under an approved PVP must be conducted in accordance with all provisions of this Code.

(3) For the purpose of preparing a PVP, the Department of Environment and Climate Change (DECC) will provide available digital information of landscape features (as identified in Table C) and any drainage features (as identified in Table F).

2. Forest operation planning and management

2.1 Forest Operation Plan

(1) A Forest Operation Plan must be prepared before forest operations commence.

(2) A Forest Operation Plan must be in an approved form and consistent with the provisions of this Code and the requirements of the Listed Species Ecological Prescriptions for Cypress and Western Hardwood Forests, which are set out in the Appendix to this Code.

(3) The landowner and anyone else carrying out forest operations must read, sign and date the Forest Operation Plan.

(4) A copy of the Forest Operation Plan must be available on-site when forest operations are occurring.

(5) A Forest Operation Plan must contain the following:

- (a) A map (or maps) showing:
  - (i) the location and boundaries of the area in which harvesting or other forest operations will occur
  - (ii) recorded locations of any populations or endangered ecological communities listed under the schedules of the *Threatened Species Conservation Act 1995* and species in the Listed Species Ecological Prescriptions for Cypress and Western Hardwood Forests, which are set out in the Appendix to this Code
  - (iii) the location of landscape features as listed in Table C and drainage features as listed in Table F
  - (iv) the indicative location of existing and proposed roads and drainage feature crossings
  - (v) the indicative location of log landings and portable mill sites
  - (vi) the classification of the forest area into either Western Hardwood forest type, Cypress broad forest type or mixed forest types.
- (b) A written component that provides:
  - (i) details of ownership of the land
  - (ii) a description of the broad forest types (including overstorey species composition, disturbance history and current condition of the forest)
  - (iii) the estimated stand height and basal area for each broad forest type

(iv) details of forest access, including any necessary construction, upgrading or maintenance of forest roads and drainage feature crossings

(v) details of harvesting and/or other proposed forest operations

(vi) details of flora and fauna management actions

(vii) details of tree marking activities (where applicable)

(viii) details of activities to promote regeneration

(ix) details of relevant silvicultural treatments that may be carried out as part of the Forest Operation Plan.

(6) The landowner may amend the Forest Operation Plan at any time, except for matters referred to in clause 2.1(5)(b)(iii). Any amendments to either the map or the written component must be noted on the Forest Operation Plan.

(7) The landowner must retain each Forest Operation Plan, including any amendments, for the life of the PVP or for three years after completion of the harvesting operations for which it was prepared, whichever is the later date.

(8) The landowner must provide the Forest Operation Plan, including any amendments, to an authorised officer from the Department of Environment and Climate Change if requested to do so.

2.2 Reporting

(1) The landowner must lodge a report to the Department of Environment and Climate Change by 31 March each year if:

(a) forest operations have been carried out on the land to which the PVP applies in the previous calendar year, or

(b) if in the current calendar year:

(i) it is intended to carry out forest operations in the next 12 months, or

(ii) forest operations have been carried out.

(2) If forest operations have been carried out on the land to which the PVP applies in the previous calendar year, the report must specify:

(a) the approximate volumes of the timber products harvested

(b) the approximate number of hectares on which forest operations occurred

(c) the silvicultural treatments that were applied during that period.

3. Silvicultural operations

3.1 Cypress pine

3.1.1 Non-commercial thinning

(1) Non-commercial thinning may be applied to regrowth which is usually about 4–6 metres tall. It is essential to free regeneration that is in a state of 'lock-up'. Stands should be thinned to a spacing of about 6 metres x 6 metres (280 stems/hectare).

(2) The stems to be retained should be:

- the largest and tallest stems
- the straightest stems
- stems with smaller limbs
- stems without double leaders or bends in the upper crown
- stems that have not been damaged.

3.1.2 Commercial thinning

(1) Commercial thinning may be undertaken when trees spaced 6 metres apart have reached a commercial size. Residual basal area should be about 6–8 square metres per hectare. Non-commercial trees that are not required for habitat retention may be felled to waste to achieve this basal area.

(2) The largest stems (in height and diameter) with the best form (straightest) should be selected for retention.

3.1.3 Oldest age class harvest (release operation)

(1) Final harvesting of the largest age class may be undertaken when there is a regenerating age class about 4–6 metres high beneath the overstorey.

(2) All trees in the older age class not required for habitat retention may be removed.

(3) Damage to the younger age class should be minimised as far as practicable.

3.2 Western hardwoods

(1) Single tree selection and thinning operations must not reduce the stand basal area below the limits specified in Table A.

(2) The **minimum** stand basal areas in Table A are to be calculated in accordance with the *Silvicultural Guidelines for the Code of Practice for Private Native Forestry.*

Table A: Minimum stand basal areas for single tree selection and thinning operations

Broad forest type	Stand height (< 25 metres)	Stand height (≥ 25 metres)
Cypress	6 m^2/ha	6 m^2/ha
Western Hardwood	8 m^2/ha	12 m^2/ha

Note: For the purposes of selecting an appropriate silvicultural management regime, reference should be made to the *Silvicultural Guidelines for the Code of Practice for Private Native Forestry* prepared by Department of Environment and Climate Change available at www.environment.nsw.gov.au/pnf.

Note: This provision:

- uses stand basal area as a simple tool to determine disturbance thresholds
- establishes harvesting limits to both maintain forest biodiversity values and manage forests while considering appropriate silvicultural practices.

3.3 Regeneration and stocking

(1) A landowner must ensure that the minimum stand stocking (as determined by the percentage of stocked plots specified in Table B) has been reached within 36 months of a regeneration event.

(2) In this clause, **regeneration event** is:

(a) a harvesting or thinning operation for Western Hardwoods, or

(b) the second successive wet summer following a harvesting or thinning operation for Cypress Pine Forests.

(3) A harvesting operation must not occur in a previously harvested area until stocking levels meet the minimum stocked plot requirements in Table B.

(4) The percentage of stocked plots is to be measured in accordance with the method for measuring plots for sampling and measuring stocking found in the Department of Environment and Climate Change's *Private Native Forestry Code of Pratice Guideline No. 1: Guidelines for assessing regeneration and stocking*, available at www.environment.nsw.gov.au/pnf.

(5) A landowner must comply with any requirements of the Director General of DECC for the purpose of regenerating or re-establishing the forest, if the minimum percentage of stocked plots has not been reached within 36 months of a regeneration event.

Table B: Minimum percentage of stocked plots

Broad forest type	Minimum percentage of stocked plots
Cypress	80%
Western Hardwood	55%

Note:
Stocking is a measure of the occurrence and distribution of trees of any age throughout the forest. The simplest way to assess whether a forest is adequately stocked is to sample the level of stocking by measuring a number of plots. Plots will be found to be either stocked or unstocked. The percentage of stocked plots reflects the adequacy of stocking within the forest. Where stocking is found to be inadequate, regeneration will be required to meet the stocking requirements.

4. Protection of the environment

4.1 Protection of landscape features of environmental and cultural significance

(1) Forest operations in and adjacent to specified landscape features must comply with the requirements in Table C.

(2) Old growth will be identified according to the protocol approved by the Minister for Environment, Climate Change and Water, available at www.environment.nsw.gov.au/pnf.

Table C: Requirements for protecting landscape features

Landscape feature	Operational conditions
Endangered ecological communities listed in the *Threatened Species Conservation Act 1995* at the date the private native forestry PVP is approved by the Minister	Forest operations may only occur in endangered ecological communities as part of an approved Ecological Harvesting Plan approved by the Director General of the Department of Environment and Climate Change, except that existing roads may be maintained.
Endangered populations listed in the *Threatened Species Conservation Act 1995* at the date the private native forestry PVP is approved by the Minister	Forest operations must not result in any harm to an animal that is part of an endangered population, or result in the picking of any plant that is part of an endangered population, except that existing roads may be maintained.
Vulnerable ecological communities listed in the *Threatened Species Conservation Act 1995* at the date the private native forestry PVP is approved by the Minister	Forest operations must not occur in vulnerable ecological communities, except that existing roads may be maintained.

Old growth forest	Forest operations must not occur within old growth forest, except that existing roads may be maintained.
Wetlands	Forest operations must not occur in any wetland or within 20 metres of any wetland, except that existing roads may be maintained.
Heathland	Forest operations must not occur in any heathland or within 20 metres of heathland, except that existing roads may be maintained.
Rocky outcrops	Forest operations must not occur on any rocky outcrop or within 20 metres of a rocky outcrop, except that: • existing roads may be maintained • existing snig tracks may be used.
Cliffs, caves, tunnels and disused mineshafts (excluding open pits less than 3 metres deep)	Forest operations must not occur within 10 metres of cliffs, caves, tunnels or disused mineshafts, except that: • existing roads may be maintained.
Aboriginal object or place as defined in the *National Parks and Wildlife Act 1974*	Forest operations must not occur: • within 50 metres of a known burial siten Aboriginal scarred or carved tree. • within 20 metres of an Aboriginal scarred or carved tree • within 10 metres of a known Aboriginal object or place (this requirement does not apply to Aboriginal objects or places that may lawfully be destroyed).
Areas containing items identified as heritage items in an environmental planning instrument	Forest operations must not occur within 10 metres of a listed heritage site.
Areas of existing mass movement	Harvesting operations which create canopy openings must not occur within the area. Harvesting machinery must not enter the area. Existing roads may be maintained. New roads must not be constructed.
Dispersible and highly erodible soils	Existing roads may be maintained. Drainage feature crossings must be armoured with erosion-resistant material. Road batters and table drains must be stabilised using erosion-resistant material, vegetation or slash. Log landings must be stabilised using erosion-resistant material, vegetation or slash at the completion of forestry operations. Measures must be taken to immediately stabilise any erosion of roads or snig tracks.

4.2 Protection of habitat and biodiversity

(1) Habitat trees must be retained in accordance with Table D.

(2) Hollow bearing trees, recruitment trees, food resource trees, roost trees and nest trees are defined as habitat trees retained for the purposes of this Code.

(3) An individual tree may satisfy more than one condition in the tree retention standards (see Table D), if it has the appropriate characteristics.

(4) Retained habitat trees should, where possible, represent the range of species in mature and late mature growth stages.

(5) Habitat trees should, where possible, be evenly distributed throughout the area of harvesting operations and within the net logging area. Preference shall be given to trees with well developed spreading crowns and minimal butt damage.

(6) For the purpose of this clause:

(a) A **hollow bearing tree** is a dominant or co-dominant living tree, where the trunk or limbs contain hollows, holes or cavities. Such hollows may not always be visible from the ground but may be apparent from the presence of deformities such as protuberances or broken limbs, or places where the head of the tree has broken off. If there are more than the minimum required number of habitat trees, preference should be given to the largest. Trees posing a health or safety risk may be removed and, where possible, substituted with other hollow bearing trees, and if not possible, by recruitment trees.

(b) **Dead standing** trees cannot be counted as hollow bearing trees.

(c) A **feed tree** is a tree that provides a source of nectar or other food for wildlife and is listed in Table E.

(d) A **recruitment tree** is a large vigorous tree capable of developing hollows to provide habitat for wildlife. Preference must be given to trees from the next cohort to that of retained hollow bearing trees.

(e) an **Old Grey** is a late-mature/over-mature cypress tree that has regenerated before the 1890s, has bark that is bleached to a characteristic light grey colour, and is weathered to a smoother surface texture than is typical of younger trees.

(f) **Roost, nest** and **food resource trees** are defined as:

(i) trees with nests or roosts of any species of raptor, including powerful owls, barking owls and masked owls

(ii) trees which support maternity bat roosts

(iii) trees with recent V-notch incisions or other incisions made by a yellow-bellied glider or squirrel glider. Recent incisions are incisions less than two-years-old as evidenced by the fact the incision has not closed.

Table D: Minimum standards for tree retention

Broad forest types	Trees that must be retained
Cypress	• All Old Greys, and 2 hollow-bearing eucalypt trees per hectare, where available. • One recruitment tree of the same species from the next cohort must be retained for every Old Grey and hollow-bearing tree retained. • Where the total Old Grey and cypress recruitment trees are less than 5 trees per hectare, additional recruitment trees must be retained to bring the number up to 5 per hectare. • Where the total hollow bearing eucalypt and eucalypt recruitment trees are less than 4 trees per hectare, additional recruitment trees must be retained to bring the number up to 4 per hectare. • All roost, nest or food resource trees.
Western Hardwood	• All Old Greys. • 20 mature healthy eucalypt trees, from the oldest age classes per 5 hectares. Preference must be given to hollow bearing trees where available. • One recruitment tree must be retained for every hollow bearing tree retained up to a maximum of 10 recruitment

Broad forest types	Trees that must be retained
	trees per 5 hectares. Retained recruitment trees can be counted towards meeting the 20 mature healthy trees per 5 hectares. • All roost, nest or food resource trees.

Table E: Feed trees

CMAs: Border Rivers–Gwydir, Namoi	
Forest red gum – *Eucalyptus tereticornis*	Red stringybark – *E. macrorhyncha*
Narrow-leaved ironbark – *E. crebra*	White box – *E. albens*
Ferguson's ironbark – *E. fergusonii*	Yellow box – *E. melliodora*
Caley's ironbark – *E. caleyi*	Fuzzy box – *E. conica*
Grey ironbark – *E. paniculata*	Grey box – *E. molucanna*
Mugga ironbark – *E. sideroxylon*	Bloodwood species – *Corymbia* spp.
Red ironbark - *E. fibrosa*	
CMAs: Central West, Lachlan, Murrumbidgee, Murray, Lower Murray–Darling and Western	
Grey ironbark – *E. paniculata*	White stringybark – *E. globoidea*
Eurabbie – *E. bicostata*	Red stringybark – *E. macrorhyncha*
Forest red gum – *E. tereticornis*	

4.3 Minimising damage to retained trees and native vegetation

(1) As far as practicable, forestry operations must not damage protected trees.

(2) Without detracting from subclause (1):

(a) debris must not be heaped around protected trees

(b) machinery operations must not harm protected trees

(c) directional felling techniques must be employed to avoid (as far as is practicable) damage to protected trees.

(3) In this clause **protected trees** are defined as:

(a) trees required to be retained under clause 4.2

(b) plants of the genus *Xanthorrhoea* (grass trees), genus *Allocasuarina* (forest oak) (except bull oak (*Allocasuarina luehmannii*)), and genus *Banksia*

(c) other trees that are required to be retained by this Code.

4.4 Drainage feature protection

(1) Forest operations must not occur in riparian exclusion zones, other than in accordance with this clause, and except where otherwise allowed by this Code. For the purpose of this clause, riparian exclusion zones are defined as those areas within the distances specified for 'Drainage feature' as listed in Table F.

(2) For the purposes of Table F, stream order is determined according to the Strahler System, using the largest scale topographic map available for that area, and as published by the NSW Government.

(3) The distance specified in Table F must be measured from the top edge of each bank and away from the incised channel or, where there is no defined bank, from the edge of the channel of each specified drainage feature.

Table F: Riparian exclusion zones

Drainage feature	Riparian exclusion zone distance from drainage feature
Mapped first-order streams	10 metres
Mapped second-order streams	20 metres
Mapped third-order streams	30 metres
Mapped fourth-order streams	40 metres
Mapped fifth-order and higher streams	50 metres

(4) Where harvesting is occurring adjacent to riparian exclusion zones, all tree felling should employ directional felling to minimise as far as practicable disturbance to vegetation within the riparian exclusion zone.

(5) Where a tree cannot be felled into the area outside the riparian exclusion zone using directional felling, it may fall into the riparian exclusion zone provided that not more than 6 trees within any distance of 200 metres along the boundary of the riparian exclusion zone enter the riparian exclusion zone.

(6) Where a tree is felled into the riparian exclusion zone, the crown must not be removed from the riparian exclusion zone and the machinery used to retrieve the log must not enter the riparian exclusion zone.

(7) Rubber-tyred machinery using walkover techniques may operate in machinery exclusion zones. All other machinery must not enter unless allowed to by this Code.

(8) In this clause, machinery exclusion zones are areas within 10 metres of the top edge of the bank of any unmapped drainage line.

(9) Trees may be felled within machinery exclusion zones provided:

(a) felling is directed away from the drainage line

(b) any furrows resulting from log removal are treated to prevent concentration of water flow

(c) groundcover (including grasses, herbs and forest litter) is retained or artificially reinstated, similar to the surrounding area.

(10) Harvesting machinery must not enter riparian exclusion zones or machinery exclusion zones other than in accordance with this clause, and clauses 4.4(7), 4.4(11) and 5.

(11) New roads may be constructed and old roads re-opened within riparian exclusion zones and machinery exclusion zones provided that:

(a) the road is identified on the Forest Operation Plan

(b) the road prism crosses the riparian zones at right angles or as close to right angles as is practicable

(c) clearing and disturbance within the exclusion zone is minimised

(d) any other necessary permits have been obtained**.**

(12) Trees may be felled within unmapped drainage depressions, and machinery may enter unmapped drainage depressions. However disturbance must be minimised by:

(a) using walkover techniques wherever possible

(b) preventing skewing of machinery tracks as much as possible

(c) operating with the blade up at all times (except during crossing construction)

(d) not snigging along drainage depressions.

(13) Machinery must not operate in drainage depressions when the soil is saturated.

5. Construction and maintenance of forest infrastructure

5.1 Construction and maintenance of roads

(1) Clearing of native vegetation for the purpose of roads, drainage structures, log landings, mill sites, snig tracks or extraction tracks must not occur except in accordance with this Code, and the clearing must be limited to the minimum extent necessary.

(2) Construction of new roads and drainage feature crossings should be minimised as far as practicable, consistent with the requirements for management, harvesting and fire control in the Property Vegetation Plan area.

(3) As far as practicable, roads must be located on ridgetops or just off the crest of the ridge to facilitate outfall drainage.

(4) Clearing for road construction must be to the minimum extent necessary and should not be more than 3 metres from the outside edges of batters or table drains. If it is necessary to clear a wider area, a minimum of 70% groundcover must be established on all the cleared area beyond the road formation within one month of the date of construction.

(5) Trees and other debris must not be stacked in landscape features referred to in Table C or riparian exclusion zones referred to in Table F.

(6) Any fill batter must be stabilised and tree stumps or other woody debris must not be used to provide fill for road construction.

(7) New roads must be constructed, upgraded and maintained with a maximum grade of 10 degrees. The maximum grade may be increased to 15 degrees where it would result in an improved environmental outcome or to avoid difficult ground conditions. The Forest Operation Plan must be noted.

(8) Roads must be maintained according to Table G.

(9) Roads must be maintained and monitored to ensure that road surfaces remain stable and drainage systems and sediment controls remain functional.

(10) Soil exposure on road verges must be kept to a minimum.

(11) Roads that are not required for ongoing property management must be stabilised, drained and allowed to revegetate.

(12) Haulage must not be undertaken over any section of road where the surface has broken down, as evidenced by rutting greater than 150 millimetres deep for any distance exceeding 20 metres.

(13) Haulage on natural surface roads must cease when there is runoff from the road surface, except for trucks that have already been loaded or partially loaded. These trucks can travel to their intended destination.

(14) Where existing roads are overgrown and require re-opening, the clearing width must be minimised to the extent required to make the road suitable for traffic.

(15) As far as practicable, grass cover must be maintained and disturbance to existing drainage structures must be minimised.

(16) Blading-off of roads must not occur.

(17) Sections of new roads may be constructed on ground slopes exceeding 25 degrees only if:

(a) there is no practical alternate route available, and

(b) the sections are designed by a suitably qualified person using currently acceptable engineering standards to ensure stability.

Table G: Maximum distance that water may travel along road surfaces, table drains, snig and extraction tracks

Road grade (degrees)	Maximum distance (metres)
0 to ≤ 3	175
> 3 to ≤ 5	100
> 5 to ≤ 8	80
> 8 to ≤ 10	60
> 10 to ≤ 15	40
> 15 to ≤ 20	25
> 20 to ≤ 25	20

5.1.1 Road drainage

(1) All reasonable steps must be taken to minimise soil erosion from roads. Accordingly, at least one of the following measures must be adopted, as appropriate in the circumstances:

(a) maintain vegetative cover (that is, plant material, living or dead) that protects the soil surface from erosion

(b) establish a grass cover using a sterile seed or native grass seed, where available

(c) crossfall-drain the road or track with outfall or infall drainage (preferably with the outward or inward slope being between 4% and 6%) or by shaping the road to a crown so water drains to both of its sides

(d) construct drainage structures to convey water away from the road formation (for example, cross drains, mitre drains or relief culverts).

(2) Any drainage structure must be designed to convey the peak flow from a 1-in-5-year storm event.

(3) Drainage structures must be established on a road if concentrated water flow on the road surface or table drains is likely to occur for distances exceeding the relevant spacing, as shown in Table G.

(4) Earth windrows resulting from road construction and upgrading operations must be removed from the shoulders of all roads unless they are specifically constructed to prevent erosion of fill batters or where infall drainage is used.

(5) Earth windrows from road maintenance must be cut through at regular intervals to ensure that water flow on road surfaces does not exceed the distances specified in Table G.

(6) Rollover banks must have a minimum effective bank height of 15 centimetres (consolidated). Spoon drains must have a minimum effective depth of 15 centimetres.

(7) Drainage structures must divert water onto a stable surface and must be kept free of debris that may impede flow of water.

(8) A drop-down structure and dissipater must be installed where drains divert water over an exposed fill batter more than 1 metre high.

5.1.2 Roads crossing drainage features

(1) Drainage feature crossings must be stable causeways, culverts or bridges. Existing gully stuffers may be used if they are stable, but new crossings of these types must not be constructed.

(2) Crossings must be designed, constructed and maintained to minimise disturbance to the passage of fish and other aquatic fauna. They must be located and constructed to cause minimum disturbance to stream banks, stream beds and natural flows. The base of the crossing must be made of erosion-resistant material such as rock, concrete or heavy timber and must conform to the natural level of the stream bed.

(3) Crossings must be constructed as close as practicable to right angles to the water flow unless an angled approach reduces soil and ground disturbance.

(4) Disturbance to the bed and banks of the drainage feature during crossing construction or maintenance must be minimised. Disturbed areas must be reshaped and stabilised as soon as possible following crossing construction or maintenance.

(5) Any approaches to a crossing over a drainage line must be drained, using a drainage structure, within 5 to 40 metres of the crossing. (Where this is impracticable, a drainage structure must be constructed as near as practicable to the crossing.)

(6) Permanent drainage crossing structures must be designed to convey a 1-in-5-year storm event and withstand a 1-in-10-year storm event. Bridges must be designed and constructed so the natural stream flow is not restricted and erosion is minimised.

(7) The surface of any crossing and the approaches on both sides of it must be made of stable material that is unlikely to be displaced during normal use of the crossing or approach, or by any flood up to and including peak flow of a 1-in-10-year storm event.

(8) Causeways must be constructed of stable, non-soil material such as crushed gravel, rock, bitumen, concrete, logs or other stable material that is unlikely to produce water turbidity.

(9) Construction equipment must minimise disturbance or damage to the watercourse bed and banks. Fill and construction material must not be placed into watercourses, and surplus fill must be located outside the drainage feature exclusion zone. Stream banks and bridge embankments must be protected to minimise erosion.

(10) Soil stabilisation must be undertaken in all areas disturbed by construction, upgrading or maintenance, within 40 metres of either side of the crossing. These areas do not include the road surface, road drainage structures or cut batters.

5.2 Log landings, portable mill sites and snig tracks

(1) Wherever practicable, log landings and portable mill sites must be located on ridge-tops or spurs.

(2) Log landings and portable mill sites must be no larger than the minimum size necessary for efficient operations.

(3) If topsoil is removed, it must be stockpiled and respread at completion of harvesting operations.

(4) Log landings and portable mill sites must be located and constructed as far as practicable to allow effective crossfall drainage during harvesting operations.

(5) Log landings and portable mill sites must not be located nearer than 40 metres where possible but a least 10 metres from a riparian exclusion zone.

(6) Runoff from log landings and portable mill sites must not be directly discharged into a drainage feature.

(7) Vegetation and debris from log landings and portable mill sites must not be deposited in an exclusion zone.

(8) Woody waste and debris on log landings and portable mill sites must not be stacked against retained trees.

(9) Bark accumulated on log landings, and sawdust on mill sites, must be progressively dispersed away from the site during harvesting operations to prevent significant accumulations.

(10) On completion of operations, log landings and portable mill sites must be drained and reshaped to safely disperse runoff onto surrounding vegetation, and topsoil must be respread evenly over the landing.

5.2.1 Snig tracks and extraction tracks

(1) Snig track or extraction track construction must be minimised and, as far as practicable, walkover extraction must be used and slash retained on snig and extraction tracks.

(2) Soil disturbance and exposure on snig and extraction tracks must be minimised.

(3) As far as practicable, snig tracks from previous operations must be used.

(4) Old snig tracks or extraction tracks must not be used if they are incised and cannot be drained.

(5) In re-opening old snig tracks and extraction tracks, the use of blades should be restricted to the removal of obstructions such as understorey vegetation, logs/tree heads and surface rock, and ensuring that the track is adequately drained.

(6) Wherever practicable, snigging and timber extraction must be uphill.

(7) Snig tracks and extraction tracks must be located where they can be drained effectively, and should be located where there is sufficient natural crossfall to remove runoff from the track surface.

(8) Snig tracks and extraction tracks must not encroach on riparian exclusion zones except at designated crossings.

(9) Blading-off of snig tracks and extraction tracks must not occur.

(10) The grade of snig tracks must not exceed 25 degrees.

(11) Where downhill snigging is necessary, snig tracks and extraction tracks must enter the log landing from beside or below. Where this is not possible, a drainage structure must be installed at the entrance to the log landing at the end of each day's operations.

(12) Drainage must be effected as soon as practicable at the completion of operations on each extraction track or snig track, and in any event within two days, unless the soil is saturated.

(13) Temporary drainage must be installed on any snig or extraction track that will not be used for five days or more.

(14) Track drainage structures must be located, constructed and maintained to divert water onto a stable surface which can handle concentrated water flow, and which provides for efficient sediment trapping.

(15) Snig tracks and extraction tracks must be located and constructed to ensure that water running along the track surface does not flow for longer than the distances specified in Table G. This could be achieved by one of the following techniques or a combination:

(a) retain the existing groundcover using walkover techniques

(b) retain or cover the track surface with slash and harvesting debris

(c) construct outfall drainage or maintain the track's outfall drainage

(d) construct track drainage structures.

(16) Upon completion of operations, the following measures must be implemented:

(a) where practicable, snig tracks and extraction tracks must be reshaped, all earth windrows, wheel ruts and log furrows removed, and recoverable topsoil spread back over the track; and

(b) crossfall drainage must be reinstated on snig tracks or, where this is not sufficient to divert runoff from the track, crossbanks must be installed consistent with the spacings in Table G.

(17) Crossbanks must be constructed to have a minimum effective height of 35 centimetres unconsolidated, or 25 centimetres consolidated, and as a guide should not be greater than 50 centimetres in height.

(18) Crossbanks must not be constructed of bark or woody debris.

5.2.2 Snig track and extraction track crossings on drainage features

(1) The location of log landings and snig/extraction tracks must be planned to minimise the number of crossings required.

(2) Snig track and extraction track crossings must be stable causeways (including natural surface causeways), culverts or bridges. Existing gully stuffers may only be used if they are stable. New crossings of this type must not be constructed.

(3) Machinery must not cross a drainage feature which is running water or when the soil is saturated, unless by means of a stable crossing.

(4) Approaches to crossings must be as close as possible to right angles to the flow of water.

(5) A crossbank must be installed on each approach, between 5 and 40 metres from the drainage feature crossing. The distance must be measured from the top of the bank of the incised channel or, where there is no defined bank, from the edge of the channel or centre of the depression. The drainage structure must divert water onto a stable surface. If such a surface is not available, sediment control measures must be used to prevent sediment entering the drainage feature.

(6) Disturbance to the bed and banks of the drainage feature must be minimised, and any spoil must be removed from the drainage feature.

(7) All areas disturbed during crossing construction and use, including approaches, must be rehabilitated following completion of use. Rehabilitation includes the reshaping of the crossing to conform as closely as possible to the original ground surface. If groundcover is not likely to recover naturally, sowing with a suitable sterile seed or endemic native seed/fertiliser mix must be undertaken to establish effective groundcover.

5.2.3 Wet weather limitations for snigging, log landing and portable mill operations

(1) Harvesting operations must not occur when:

(a) there is runoff from the snig track surface, or

(b) soils are saturated, or

(c) soil is rutted to a depth of more than 200 millimetres below the track surface over a 20-metre section or longer.

(2) Forwarders, excavators and truck-mounted loaders may be used as stationary loaders when there is runoff from the log landing.

(3) All other machinery on the log landing must remain stationary when there is runoff from the log landing surface, unless the log landing is constructed of gravel or other stable material.

Appendix:
Listed species ecological prescriptions

Introduction

These prescriptions must be applied within the forest operations area where there is a **known record** or **site evidence** of a threatened species. A known record is a sighting or record of the species in the NSW Wildlife Atlas, available at www.wildlifeatlas.nationalparks.nsw.gov.au. Site evidence is a sign a species has visited or regularly uses a site, and includes observations of, for example, faecal pellets or scats, chewed seed cones or a nest, or evidence that the site has been used as a latrine.

A list of threatened species under the *Threatened Species Conservation Act 1995* and species profiles for each species can be viewed on the Department of Environment and Climate Change (DECC) website at www.threatenedspecies.environment.nsw.gov.au.

The prescriptions set out below assist in the protection of threatened species, and include:

(1) additional widths to stream exclusion zones

(2) exclusion zones around locations of threatened species records

(3) additional tree retention requirements around locations of threatened species records.

Exclusion zones and buffer zones requiring additional tree retention requirements must be applied within the Property Vegetation Plan (PVP) area subject to the Forest Operation Plan.

Wildlife Atlas records that trigger these prescriptions are those less than 20 years old which have a reliability level of 1 to 5. Records in an adjoining protected area of public land (for example, in State Forests or National Parks) can be ignored if it can be demonstrated that the species has been protected and the conditions of the relevant Threatened Species Licence or Integrated Forestry Operation Agreement have been met.

Some species prescriptions vary according to the region in which they occur. Unless otherwise stated, the regions referred to in the prescriptions are based on the catchments administered by Catchment Management Authorities (CMAs) shown in Figure 1.

General conditions

For all threatened species prescriptions, the following applies:

- Where a retained eucalypt tree (as required by these prescriptions) also meets the requirements of a habitat tree, the eucalypt tree may be counted as a habitat tree.
- Where other exclusion zones form part of the habitat area required for threatened species prescriptions, the exclusion zones may count towards the area of habitat required to be retained.
- Buffer and exclusion zones are to be marked in the field where they adjoin the area, subject to forest operations. This marking has to be visible while forestry operations are occurring.

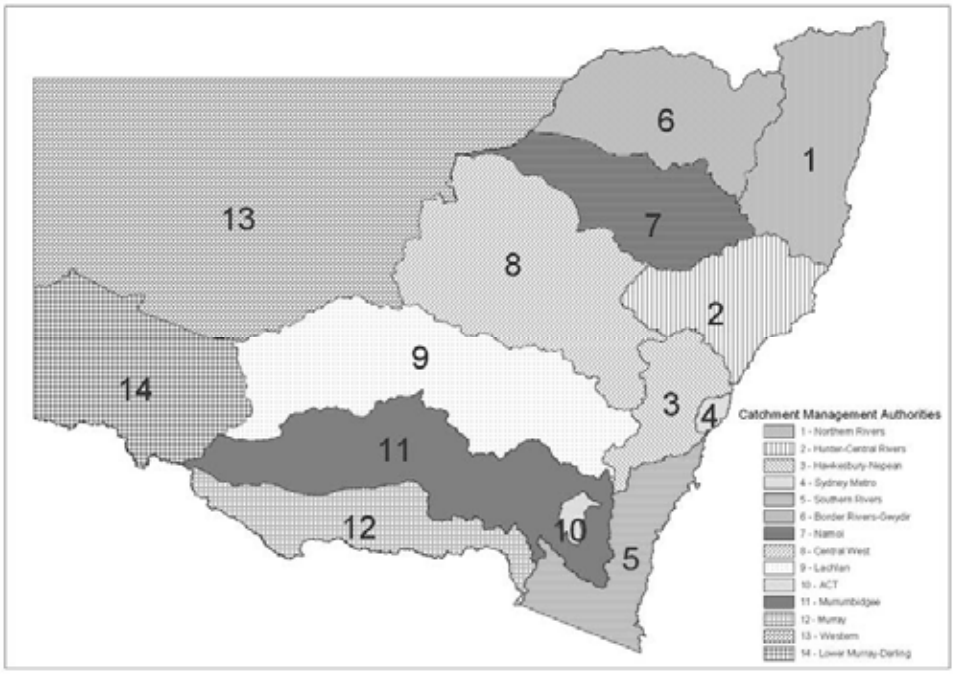


Figure 1: Catchment Management Authority (CMA) areas where prescriptions for some threatened species may vary

Mammals

Black-striped wallaby (*Macropus dorsalis*)

CMAs for application of prescription
Border Rivers–Gwydir and Namoi

Prescription
Where there is a black-striped wallaby record within the area of forest operations, the following must apply:

(a) A buffer zone with a 500-metre radius (about 78 hectares) must be identified, centred on the location of the record.

(b) Within this buffer zone, the following additional prescriptions must be implemented:

(i) Only single-tree selection and thinning operations can occur (i.e. no canopy openings).

(ii) No post-harvesting burning can occur.

(iii) Disturbance to understorey trees and shrubs, ground logs, rocks and litter must be minimised.

Additional information
Potential black-striped wallaby habitat is characterised by dense woody or shrubby vegetation within three metres of the ground. This dense vegetation must occur near a more open, grassy area to provide suitable feeding habitat.
Habitat is common on north-west slopes associated with dense vegetation, including brigalow, ooline and semi-evergreen vine thicket.
On the north coast, habitat is often associated with dry rainforest but can also be moist eucalypt forest with a rainforest understorey or a dense shrub layer.

Brush-tailed phascogale (*Phascogale tapoatafa*)

CMAs for application of prescription
Border Rivers–Gwydir, Central West, Lachlan, Murray and Murrumbidgee

Prescription
Where there is a brush-tailed phascogale record within the area of forest operations, the following must apply:

(a) A buffer zone with a 500-metre radius (about 78 hectares) must be identified, centred on the location of the record.

(b) Within this buffer zone, the following additional prescriptions must be implemented:

  (i) A minimum of 15 trees per 2 hectares with visible hollows must be retained where available.

  (ii) A recruitment tree must be retained for each hollow bearing tree retained. Where the total number of hollow bearing trees and recruitment trees is less than 30 trees per 2 hectares, additional recruitment trees must be retained to bring the number up to 30 trees per 2 hectares.

  (iii) Disturbance to understorey trees and shrubs, ground logs, rocks and litter must be minimised.

  (iv) Trees to be retained as above should be late-mature, over-mature or senescent rough barked trees where available.

(c) Where there are records of den or roost sites, these must be contained within the buffer zones and these trees be protected.

Additional information
Potential brush-tailed phascogale habitat is dry sclerophyll open forest or woodland with a generally open understorey, preferably containing large trees with rough bark and hollows to provide optimal foraging and denning habitat

Eastern pygmy-possum (*Cercartetus nanus*)

CMAs for application of prescription

Border Rivers–Gwydir, Central West, Lachlan, Murray, Murrumbidgee and Namoi

Prescription
Where there is an eastern pygmy-possum record within the area of forest operations, the following must apply:

(a) An exclusion zone with a 50-metre radius (about 0.8 hectares) must be identified, centred on the location of the record, with no forest operations or removal of understorey plants permitted.

(b) Within a 100-metre radius (about 3.5 hectares) of the exclusion zone, a buffer zone must be identified within which the following additional prescriptions must be implemented:

  (i) Only single-tree selection and thinning operations can occur (i.e. no canopy openings).

  (ii) No post-harvest burning is permitted.

  (iii) A minimum of 26 trees with visible hollows must be retained where available.

  (iv) Disturbance to understorey trees and shrubs (particularly banksias, bottlebrush and acacias), ground logs, rocks and litter must be minimised.

Additional information
Potential eastern pygmy-possum habitat is found in a broad range of habitats including rainforest, sclerophyll (including box–ironbark) forest, woodland and heath. In most areas, woodlands and heath appear to be preferred, except in north-eastern NSW where they are most frequently encountered in rainforest

Spotted-tailed quoll (*Dasyurus maculatus*)

CMAs for application of prescription
Border Rivers–Gwydir, Central West, Lachlan, Lower Murray–Darling, Murray, Murrumbidgee and Namoi

Prescription
Where there is a record of a spotted-tailed quoll den site, maternal den or latrine site within the area of forest operations, the following must apply:

(a) An exclusion zone with a 200-metre radius (about 12.5 hectares), centred on the location of the record must be implemented around a spotted-tailed quoll maternal den site or latrine site. This exclusion area must be linked to the riparian exclusion zone where practicable.

(b) An exclusion zone with a 100-metre radius (about 3.5 hectares), centred on the location of the record must be implemented around spotted-tailed quoll permanent den sites. This exclusion area must be linked to the riparian exclusion zone where practicable.

(c) Areas of riparian exclusion and protection zone must not be counted towards exclusion zones for the spotted-tailed quoll.

Squirrel glider (*Petaurus norfolcensis*)

CMAs for application of prescription
Border Rivers–Gwydir, Central West, Lachlan, Murray, Murrumbidgee and Namoi

Prescription
Where there is a squirrel glider record in an area of forest operations or within 125 metres of the boundary of the area of forest operations (unless specified otherwise in this condition), the following must apply:

(a) A buffer zone with a 250-metre radius (about 20 hectares) must be identified, centred on the location of the record or records.

(b) Within this buffer zone, the following additional prescriptions must be implemented:

  (i) A minimum of 15 trees per 2 hectares with visible hollows must be retained where available.

  (ii) A recruitment tree must be retained for each hollow bearing tree retained. Where the total number of hollow bearing trees and recruitment trees is less than 30 trees per 2 hectares, additional recruitment trees must be retained to bring the number up to 30 trees per 2 hectares.

  (iii) Disturbance to understorey trees and shrubs (particularly banksias and acacias), ground logs, rocks and litter must be minimised.

(c) Where there are records of dens or roosts, these must be contained within buffer zones encompassing suitable habitat.

(d) Where there are more than two squirrel glider records closer than 250 metres apart within the forest operation area, advice on the location of the buffer area must be sought from DECC before commencing forest operations.

Additional information
Squirrel glider habitat is generally dry eucalypt forest and woodland. In coastal areas, potential habitat is blackbutt, bloodwood and ironbark forest with a heathy understorey. In the absence of these forest types, areas of mature or old growth forest must be retained.

Yellow-bellied glider (*Petaurus australis*)

CMAs for application of prescription
Border Rivers–Gwydir, Central West, Lachlan, Murray, Murrumbidgee and Namoi

Prescription

(a) An exclusion zone with a 50-metre radius must be implemented around trees used as dens by yellow-bellied gliders (trees with moderate to large hollows).

(b) All yellow-bellied glider sap feed trees must be retained and marked for retention. A sap feed tree is a tree with recent V-notch incisions or other incisions made by a yellow-bellied glider. Recent incisions are incisions less than two years old as proven by the incision not having closed.

(c) Within a 100-metre radius of each retained yellow-bellied glider sap feed tree, observation or den site record, 15 feed trees must be retained (not counting existing yellow-bellied glider sap feed trees). The 15 retained feed trees must have good crown development and should have minimal butt damage and should not be suppressed. Mature and late mature trees must be retained as feed trees where these are available.

(d) The feed trees retained as above must be of the same species as the identified sap feed tree or identified den tree, or should be trees that shed their bark in long strips, e.g. species from blue, flooded, grey, red and white gum groups.

(e) The retained feed trees must be marked for retention.

Additional information
Yellow-bellied gliders occur in tall mature eucalypt forest, generally in areas with high rainfall and nutrient-rich soils. Forest type preferences vary with latitude and elevation –mixed coastal forests to dry escarpment forests in the north, and moist coastal gullies and creek flats to tall montane forests in the south. The gliders feed primarily on plant and insect exudates, including nectar, sap, honeydew and manna with pollen and insects providing protein. They extract sap by incising or biting into the trunks and branches of favoured food trees, often leaving a distinctive 'V'-shaped scar.

Koala (*Phascolarctos cinereus*)

CMAs for application of prescription
Border Rivers–Gwydir, Central West, Lachlan, Murray, Murrumbidgee and Namoi

Note: Koala populations are generally sparse or of low density in the Western Koala Management Areas (Koala Management Areas 6 and 7; see Figure 2) and, as a result, scats are rarely encountered. Therefore, recording of any scat or a sighting of a koala in these areas should be considered significant.

Prescription

(a) Forest operations are not permitted within any area identified as 'core koala habitat' within the meaning of *State Environmental Planning Policy No. 44 – Koala Habitat Protection*.

(b) In Koala Management Areas 5, 6 and 7, any tree containing a koala or one or more koala faecal pellets must be retained and an exclusion zone of 50 metres must be implemented around each retained tree.

(c) Where there is a record of a koala within an area of forest operations or within 500 metres of an area of forest operations or a koala faecal pellet (scat) is found beneath the canopy of any primary or secondary koala food tree (see Table H), the following must apply:

(i) A minimum of 10 primary koala food trees and 5 secondary koala food trees must be retained per hectare of net harvesting area (not including other exclusion or buffer zones), where available.

(ii) These trees should preferably be spread evenly across the net harvesting area, have leafy, broad crowns and be in a range of size classes with a minimum of 30 centimetres diameter at breast height over bark.

(iii) Damage to retained trees must be minimised by directional felling techniques.

(iv) Post-harvest burns must minimise damage to the trunks and foliage of retained trees.

Additional information
Generally, koala habitat comprises eucalypt forest and woodland containing primary and secondary food trees (see Table H). Koala droppings (faecal pellets or scats) are relatively distinctive, being cylindrical and pit-shaped. Colour varies between green–yellow to yellow–brown. Scats can remain under trees on or within the leaf litter for periods of several weeks to months. For further information on the identification of koala pellets or scats, contact DECC or refer to the DECC website – www.environment.nsw.gov.au.

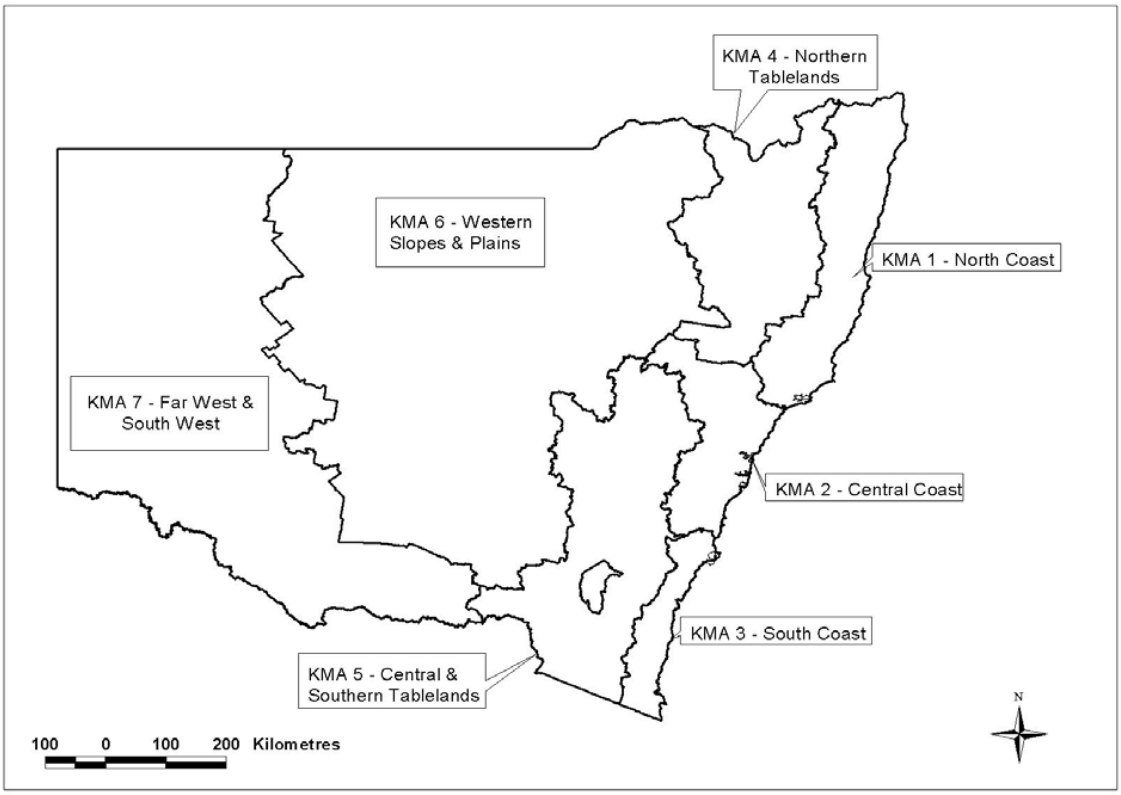


Figure 2: Koala Management Areas in NSW (from Draft State Koala Recovery Plan)

Table H: Primary and secondary koala food trees for Koala Management Areas in the Cypress and Western Hardwood forests

Koala food tree species		Koala Management Area			
Common name	**Scientific name**	**4**	**5**	**6**	**7**
Primary tree species					
Cabbage gum	*E. amplifolia*	X			
River red gum	*E. camaldulensis*			X	X
Coolabah	*E. coolabah*			X	X
Forest red gum	*E. tereticornis*	X			
Ribbon gum	*E. viminalis*	X	X		
Secondary tree species					
Narrow-leaved peppermint	*E. acaciiformis*	X			
White box	*E. albens*	X	X	X	
Tenterfield woolybutt	*E. banksii*	X			
Eurabble	*E. bicostata*	X	X		
Blakely's red gum	*E. blakelyi*	X	X	X	X
Apple-topped box	*E. bridgesiana*	X	X	X	
Broad-leaved sally	*E. camphora*	X	X		
Dirty gum	*E. chloroclada*			X	
Argyle apple	*E. cinerea*		X		
Fuzzy box	*E. conica*	X		X	
Mountain gum	*E. dalrympleana*	X	X		
Tumbledown gum	*E. dealbata*	X	X	X	
Dwyer's red gum	*E. dwyeri*	X		X	
Bundy	*E. goniocalyx*	X	X		
n/a	*E. interstans*	X			
Black box	*E. largiflorens*			X	X
Maiden's gum	*E. maidenii*		X		
Moonbi apple box	*E. malacoxylon*	X			
Brittle gum	*E. mannifera*	X	X		
Yellow box	*E. melliodora*	X	X	X	X
Brittle gum	*E. michaeliana*	X			
Western grey box	*E. microcarpa*			X	X
Grey box	*E. moluccana*	X			
Mallee red gum	*E. nandewarica*			X	
Narrow-leaved black peppermint	*E. nicholllii*	X			
Large-flowered bundy	*E. nortonii*	X	X		
Mountain mahogany	*E. notabilis*	X			
New England peppermint	*E. nova-anglica*	X			
Snow gum	*E. pauciflora*	X	X		
Pilliga box	*E. pilligaensis*			X	
Red box	*E. polyanthemos*	X	X	X	
Bimble box	*E. populnea*			X	X
Orange gum	*E. prava*	X		X	
Brittle gum	*E. praecox*	X			
White-topped box	*E. quadrangulata*	X			
n/a	*E. retinens*	X			
Candlebark	*E. rubida*	X			
n/a	*E. vicina*			X	
n/a	*E. volcanica*	X		X	

Grey-headed flying-fox (*Pteropus poliocephalus*) and black flying-fox (*Pteropus alecto*) camps

CMAs for application of prescription
Border Rivers–Gwydir, Central West and Namoi

Prescription
Forest operations and any associated activities must be excluded within a flying-fox camp, and within a 50-metre exclusion zone around any camp which contains grey-headed or black flying-foxes.

Additional information
Flying-foxes congregate (roost) in large numbers known as 'camps'. These areas are typically within 20 kilometres of known food sources, and camp localities vary over different seasons, depending on regional food availability. Camps are often located in riparian vegetation such as rainforest remnants, swamp forest (paperbarks) or casuarina forests. They are often used annually. Camps are extremely important for day-time roosting and socialising and are used as maternity sites for rearing young.

Large-footed myotis (*Myotis adversus*)

CMAs for application of prescription
Border Rivers–Gwydir, Central West, Lachlan, Murray and Murrumbidgee

Prescription
Where there is a record of large-footed myotis in an area of forest operations or within 100 metres of the boundary of the area of forest operations, the following must apply:

(a) An exclusion zone with a 30-metre radius must be implemented on all dams and permanent water bodies. Permanent water bodies include lakes, lagoons or any other permanent collection of still water that is not impounded by an artificial structure. The exclusion zone must be measured from the top of the high bank of the permanent water body.

(b) An exclusion zone with a 30-metre radius must be implemented on all permanent streams within 100 metres of the location of the record.

(c) The width of exclusion zones must be measured from the top of the bank of the incised channel or, where there is no defined bank, from the edge of the channel.

Additional information
Large-footed myotis generally roost in groups of 10–15 close to water in caves, mine shafts, hollow bearing trees, stormwater channels, buildings, under bridges and in dense foliage. They forage over streams and pools, catching insects and small fish by raking their feet across the water's surface.

Reptiles

Broad-headed snake (*Hoplocephalus bungaroides*)

CMAs for application of prescription
Central West

Prescription
Where there is a broad-headed snake record in the area of forest operations, the following must apply:

(a) A buffer zone with a 100-metre radius (about 3 hectares) must be identified, centred on the location of the record.

(b) Within this buffer zone, the following additional prescriptions must be implemented:

(i) A minimum of 26 trees with visible hollows with openings greater than 10 centimetres must be retained where available.

(ii) Disturbance to understorey trees and shrubs, ground logs and, in particular, rock outcrops and ledges must be minimised.

Additional information
Potential habitat for the broad-headed snake is largely confined to Triassic sandstones, including the Hawkesbury, Narellan and Shoalhaven formations, on the coast and in the ranges in an area within approximately 250 kilometres of Sydney.
The snake shelters in rock crevices and under flat sandstone rocks on exposed cliff edges during autumn, winter and spring, and shelters in hollows in large trees within 200 metres of escarpments in summer.

Rosenberg's goanna (*Varanus rosenbergi*)

CMAs for application of prescription
Central West, Lachlan, Murray and Murrumbidgee

Prescription
Where there is a Rosenberg's goanna record in the area of forest operations, the following must apply:

(a) A buffer zone with a 200-metre radius (about 12.5 hectares) must be identified, centred on the location of the record.

(b) Within this buffer zone, the following additional prescriptions must be implemented:

(i) All termite mounds must be protected from any disturbance.

(ii) Disturbance to understorey trees and shrubs and, in particular, ground logs and rock outcrops and ledges must be minimised

(iii) No post-harvesting burning is permitted.

Additional information
Rosenberg's goanna occurs on Sydney sandstone in Wollemi National Park north-west of Sydney, in the Goulburn and ACT regions and near Cooma in the south. There are records from the south-west slopes near Khancoban and the Tooma River. It is found in heath, open forest and woodland. This species nests in termite mounds, which are a critical component of its habitat.

Pale-headed snake (*Hoplocephalus bitorquatus*)

CMAs for application of prescription
Border Rivers–Gwydir, Central West and Namoi

Prescription
Where there is a record of the pale-headed snake in an area of forest operations or within 300 metres of the boundary of the area of forest operations, the following must apply:

(a) An exclusion zone with at least a 100-metre radius must be implemented around the location of the record.

(b) If forest operations are being conducted during the months of May, June, July, August or September, an additional 200 metre-wide buffer zone must be implemented around the exclusion zone. Within this buffer zone, the following must apply:

(i) A minimum of 26 trees with visible hollows with openings greater than 10 centimetres must be retained where available.

(ii) All stags must be retained where it is safe to do so.

(iii) During forest operations, the potential for damage to these trees must be minimised by utilising techniques of directional felling.

Additional information
Distribution: The snake has a patchy distribution from north-eastern NSW to north Queensland. It is found in NSW on both sides of the Great Dividing Ranges as far south as Tuggerah.
Macrohabitat: The snake is mainly found in dry eucalypt forests and woodlands and occasionally in rainforest or moist eucalypt forest.
Microhabitat: The snake shelters during the day between loose bark and tree trunks, or in hollow trunks and limbs of dead trees, especially near watercourses.

Birds

Powerful owl (*Ninox strenua*), masked owl (*Tyto novaehollandiae*) and barking owl (*Ninox connivens*)

CMAs for application of prescription
Border Rivers–Gwydir, Central West, Lachlan, Lower Murray–Darling, Murray, Murrumbidgee and Namoi

Prescription
Nest trees (trees with hollows containing a nest of a powerful, masked or barking owl) must be retained and protected by a 60-metre exclusion zone.

Roost trees (trees where a powerful, masked or barking owl have been observed roosting or signs of roosting are observed) must be retained and protected by a 50-metre exclusion zone.

Where there is a record within the area of forest operations or within 500 metres of the area of forest operations for the powerful owl or masked owl or 250 metres for barking owl, the following prescriptions apply:

(a) Buffer zones with a 1000-metre radius (about 300 hectares) for the powerful owl or masked owl and 500-metre radius (about 78 hectares) for the barking owl must be identified, centred on the location of the record or records. The radius of the buffer zone must be measured from the location of the record. Where there is more than one record, the radius of the buffer zone must be measured from a point equidistant from most records, where possible.

(b) Within this buffer zone, the following additional prescriptions must be implemented:

(i) A minimum of 15 trees per 2 hectares with visible hollows must be retained where available.

(ii) A recruitment tree must be retained for each hollow bearing tree retained. Where the total number of hollow bearing trees and recruitment trees is less than 30 trees per 2 hectares, additional recruitment trees must be retained to bring the number up to 30 trees per 2 hectares.

(iii) Disturbance to understorey trees and shrubs, ground logs, and rocks and litter must be minimised.

(c) Where there are records of nests or roosts, these must be contained within buffer zones encompassing suitable habitat.

(d) Where there are more than two owl records consecutively less than 1000 metres apart but collectively spreading over an area greater than 1000 metres in any direction, advice on the location of the buffer area must be sought from DECC.

Additional information
Potential owl habitat comprises rainforest; wet and dry sclerophyll forest, and woodland.

Regent honeyeater (*Xanthomyza phrygia*)

CMAs for application of prescription
Border Rivers–Gwydir, Central West, Lachlan, Lower Murray–Darling, Murray, Murrumbidgee and Namoi

Prescription
Where there is a record of a regent honeyeater in an area of forest operations, the following must apply:

(a) At least ten eucalypt feed trees (refer to Table E) must be retained within every two hectares of the net harvest area. These must be marked for retention. Where retained eucalypt feed trees also meet the requirements of habitat or recruitment trees, the retained eucalypt feed trees can be counted as habitat or recruitment trees.

(b) Where a regent honeyeater is observed feeding, the tree in which it is feeding must be retained.

(c) Trees containing regent honeyeater nests must be retained, with a 20-metre radius exclusion zone around them.

Additional information
This species inhabits dry open forest and woodland, particularly box–ironbark woodland and riparian forests of river she-oak. Regent honeyeaters inhabit woodlands that support a significantly high abundance and species richness of bird species. These woodlands have many mature trees and mistletoes and high canopy cover. The bird also forages in winter-flowering coastal swamp mahogany and spotted gum forests on the central coast and the upper north coast. Birds are also occasionally seen on the south coast.

Swift parrot (*Lathamus discolor*)

CMAs for application of prescription
Border Rivers–Gwydir, Central West, Lachlan, Lower Murray–Darling, Murray, Murrumbidgee, and Namoi

Prescription
Where there is a record of a swift parrot in an area of forest operations, the following must apply:

(a) At least ten eucalypt feed trees (refer to Table E) must be retained within every two hectares of the net harvest area. These must be marked for retention. Where retained eucalypt feed trees also meet the requirements of habitat or recruitment trees, the retained eucalypt feed trees can be counted as habitat or recruitment trees.

(b) Where a swift parrot is observed feeding, the tree in which it is feeding must be retained.

Additional information
Swift parrots migrate to the Australian south-east mainland between March and October. On the mainland, they occur where eucalypts are flowering profusely or where there are abundant lerps (from sap-sucking bugs). Favoured feed trees include winter-flowering species such as swamp mahogany (*Eucalyptus robusta*), spotted gum (*Corymbia maculata*), red bloodwood (*C. gummifera*), mugga ironbark (*E. sideroxylon*) and white box (*E. albens*). Commonly used lerp-infested trees include grey box (*E. microcarpa*), grey box (*E. moluccana*) and blackbutt (*E. pilularis*)

Regent parrot (*Polytelis anthopeplus monarchoides*)

CMAs for application of prescription
Lower Murray–Darling and Murray

Prescription
There should be no harvesting of mallee within the areas shown on Figure 3:

(a) within 20 kilometres of the Lower Wakool River defined as downstream of the junction of the Edward and Wakool Rivers, with the eastern boundary line being drawn perpendicular to the river at that point

(b) within 20 kilometres of the Murray River.

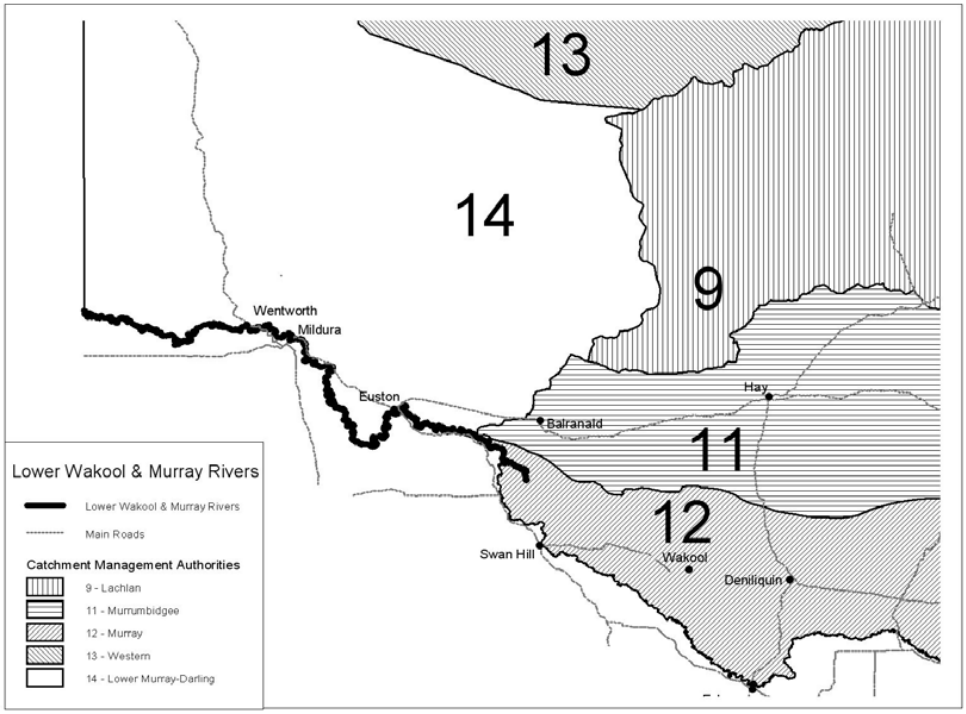


Figure 3: Area of application of regent parrot prescription

Mallee within this zone can only be harvested by obtaining development consent under the *Native Vegetation Act 2003* for non-Crown Timbered Lands.

Black-eared miner (*Manorina flavigula melanotis*)

CMAs for application of prescription
Lower Murray–Darling

Prescription
High conservation value mallee must not be harvested. High conservation mallee is defined as mallee with:

(a) stems higher than 20 centimetres measured 20 centimetres above the ground

(b) stems with hollows, cracks or fissures more than 5 centimetres wide

(c) stems on dune crests.

Malleefowl (*Leipoa ocellata*)

CMAs for application of prescription
Central West, Lachlan, Lower Murray–Darling, Murrumbidgee, Namoi and Western

Prescription
There must be no forest operations within a 100-metre radius exclusion zone around all malleefowl ground nests.

Additonal information
Malleefowl nests comprise large mounds of ground litter (dry leaves, twigs and bark) covered with sand and dirt. They may be 2–5 metres wide and up to 1.5 metres high. Egg-laying occurs from September to April.

Bush stone-curlew (*Burhinus grallarius*)

CMAs for application of prescription
All

Prescription
No forest operations are permitted within a 50-metre radius of all bush stone-curlew ground nests.

Additional information
Bush stone-curlew nests are found in areas of dry, grassy open forest or woodland and are a small scrape on bare ground, often near a bush or tree or beside a fallen limb. Eggs are stone coloured, blotched dark brown and grey. Nesting season is August through to January.

Glossy black-cockatoo (*Calyptorhynchus lathami*)

CMAs for application of prescription
All except for Lower Murray–Darling

Prescription

(a) There must be a 50-metre radius exclusion zone around all glossy black-cockatoo nests, within which no forest operations may occur.

(b) Within a 200-metre radius of any location of a glossy black-cockatoo record, damage to stands of she-oaks (*Allocasuarina* and *Casuarina* spp.) containing trees more than 3 metres in height and seed cones, is to be minimised.

(c) Any she-oaks with evidence of foraging by glossy black-cockatoos (i.e. chewed seed cones under the tree) are to be protected.

Additional information
Glossy black-cockatoos nest in tree hollows usually in larger, mature trees. Nest locations are indicative of where a glossy black-cockatoo is seen entering a hollow. Nesting season is from March to August.
The presence of she-oaks (*Allocasuarina* and *Casuarina* spp.*)* is a key indicator of likely feeding habitat. Mature trees with hollows are required for nesting.

Red-tailed black-cockatoo (*Calyptorhynchus banksii*)

CMAs for application of prescription
Border Rivers–Gwydir, Central West, Lower Murray–Darling, Namoi and Western

Prescription
No forest operations are permitted within a 50-metre radius of all red-tailed black-cockatoo nests.

Additional information
Red-tailed black-cockatoos nest in tree hollows usually in larger, mature trees. Nest locations are indicative of where a bird is seen entering a hollow. Nesting season is from March to August.
Red-tailed black-cockatoos are found in a wide variety of habitats. In coastal north-east NSW they have been recorded in dry open forest and areas of mixed rainforest/eucalypt forest.

Osprey (*Pandion haliaetus*)

CMAs for application of prescription
All except for Lower Murray–Darling and Western

Prescription
No forest operations are permitted within a 100-metre radius of all osprey nests.

Additional information
Ospreys have a large stick nest (up to 2 metres wide) usually in tall, dead or occasionally live trees, often in an exposed position close to lakes, rivers or the ocean. Nesting season is from June to October.

Square-tailed kite (*Lophoictinia isura*)

CMAs for application of prescription
All

Prescription
No forest operations are permitted within a 100-metre radius of all square-tailed kite nests.

Additional information
Square-tailed kites have a large stick nest usually between 60 and 100 centimetres in diameter, and some 12–26 metres above the ground, generally in a eucalypt. Nesting season is from July to November.

Turquoise parrot (*Neophema pulchella*)

CMAs for application of prescription
All except for Lower Murray–Darling and Western

Prescription
No forest operations are permitted within a 30-metre radius of all turquoise parrot nests.

Additional information
Turquoise parrots occur mainly west of the escarpment on the tablelands and western slopes, but are occasionally found more widely through most of eastern NSW, in open woodlands, dry sclerophyll forest and adjacent grasslands. Nests range from 1–20 metres above the ground. They are in hollows in small trees, often dead eucalypts, or in holes or stumps, fence posts or even logs lying on the ground. Nesting season is from August to December and from April to May.

Threatened flora – specific prescriptions

Table I: Conditions applying to flora species

(**Note**: Numbers in first column relate to conditions listed below this table.)

Condition	Scientific name	Common name	Catchment Management Authority
A	*Bertya* sp. *Cobar–Coolabah*	Coolabah bertya	Namoi, Western
B	*Boronia granitica*	Granite boronia	Border Rivers–Gwydir
A	*Cadellia pentastylis*	Ooline	Border Rivers–Gwydir, Namoi
H	*Cymbidium canaliculatum* (Protected Native Plant Schedule 13 NP&W Act)	Tiger orchid	Border Rivers–Gwydir, Namoi, Western
H	*Dichanthium setosum*	Bluegrass	Border Rivers–Gwydir, Namoi
D	*Eucalyptus caleyi* subsp. *ovendenii*	Ovenden's ironbark	Border Rivers–Gwydir
E	*Goodenia macbarronii*	McBarron's goodenia	Border Rivers–Gwydir, Central West, Lachlan, Murray, Namoi, Western
B	*Picris evae*	Hawkweed	Border Rivers–Gwydir
H	*Pilularia novae-hollandiae*	Austral pillwort	Lachlan, Murray, Murrumbidgee
B	*Pomaderris queenslandica*	Scant pomaderris	Border Rivers–Gwydir, Central West, Namoi
B	*Rutidosis heterogama*	Heath wrinklewort	Border Rivers–Gwydir,
G	*Thesium australe*	Austral toadflax	Border Rivers–Gwydir, Murray, Murrumbidgee, Namoi

A. Threatened flora: 50-metre exclusion zone, all individuals

Where there is a record of a species to which this condition applies:

(a) An exclusion zone with at least a 50-metre radius must be implemented around all individuals.

(b) An exclusion zone at least 50 metres wide must be implemented around all groups of individuals. A group is defined as more than one individual located less than 20 metres apart.

B. Threatened and protected flora: 20-metre exclusion zones, all individuals

Where there is a record of a species to which this condition applies:

(a) An exclusion zone with at least a 20-metre radius must be implemented around all individuals.

(b) An exclusion zone at least 20 metres wide must be implemented around all groups of individuals. A group is defined as more than one individual located less than 20 metres apart.

D. Threatened and protected flora: 20-metre exclusion zone, 90% of individuals

Where there is a record of a species to which this condition applies:

(a) An exclusion zone or exclusion zones at least 20 metres wide must be implemented around 90% of individuals.

(b) The exclusion zone or exclusion zones must include areas where the density of individuals is greatest.

Note: Where there are few individuals within the forest operations area and the individuals are widely dispersed within the area, an exclusion zone with at least a 20-metre radius must be implemented around at least 90% of individuals. Where there are a large number of individuals within the forest operations area and they occur in groups, the exclusion zone or exclusion zones may be positioned around the group or groups. A group is defined as more than one individual, located less than 20 metres apart.

E. Threatened and protected flora: protection of 90% of individuals

Where there is a record of a species to which this condition applies:

(a) A minimum of 90% of individuals must be protected from specified forestry activities. During forest operations, the potential for damage to these plants must be minimised by the use of directional felling techniques.

Note: Where there are few individuals within the forest operations area and the individuals are widely dispersed within the area, at least 90% of individuals must be protected from specified forestry activities. Where there are a large number of individuals within the forest operations area and they occur in groups, the group or groups should be protected**.** A group is defined as more than one individual located less than 20 metres apart.

G. Exclusion of specified forestry activities from 100% of individuals and no buffer

Individuals of the threatened species or protected native plants to which this condition applies must not be picked in the course of carrying out specified forestry activities.

H. Damage to individuals avoided

Damage to individuals of the species to which this condition applies should be avoided to the greatest extent practicable.

Glossary

Expressions that are defined in the *Native Vegetation Act 2003* and Native Vegetation Regulation 2005 have the same meanings in this Code as the meanings given to them in that Act and Regulation, unless they are otherwise defined in this Code. All other expressions are defined as in this glossary.

Accidentally felled	A tree is accidentally felled into any area of land only if it is apparent that techniques of directional felling were used in an attempt to fell the tree away from the area. Despite the above, a tree is not accidentally felled into an area if the person responsible knew or could reasonably have been expected to know that the tree would fall into the area.
Australian Group Selection	A silvicultural technique that creates canopy openings for the purpose of stimulating regeneration in certain forest types.
Batter	An earth slope formed from fill material (fill batter) or cut into the natural hillside (cut batter) during road construction.
Diameter at breast height over bark (dbhob)	The diameter of a tree measured at 1.3 metres above the ground. Measurements are made over the bark and horizontal to the trunk.
Directional felling	The felling of a tree so it falls in a pre-determined direction.
Dispersible soil	A structurally unstable soil which readily disperses into its constituent particles (clay, silt, sand) in water.
Drainage depression	A shallow depression with smoothly concave cross-section that conveys runoff only during or immediately after periods of heavy rainfall.
Drainage feature	A drainage depression, drainage line, river or watercourse.
Drainage line	A channel down which surface water naturally concentrates and flows. Drainage lines exhibit one or more of the following features which distinguish them from drainage depressions: • evidence of active erosion or deposition, e.g. gravel, pebble, rock, sand bed, scour hole or nick point • an incised channel more than 30 centimetres deep with clearly defined bed and banks • a permanent flow.
Drainage structure	A structure designed to convey water away from a road, track or area of soil disturbance.
Earth windrow	A mound of soil material or gravel on the edge of a road or snig track formed by the spillage from the edge of a blade or similar machine during earthmoving operations.
Ecological logging regime	The use of logging (commercial and non-commercial) to rehabilitate or regenerate an ecological community. The primary goal is ecological improvements and commercial logging provides an economic incentive for the forest owner to undertake the works. Also known as ecological silvicultural logging.
Exclusion zone	Means an area of land (within a specified distance of landscape features identified in Tables C or F) where forest operations are prohibited, unless otherwise allowed under this Code.

Extraction track	A track constructed for use by forwarding machinery.
Food resource trees	Trees with recent V-notch incisions or other incisions made by a yellow-bellied glider or squirrel glider. Recent incisions are incisions less than two years old as evidenced by the fact the incision has not closed.
Forest operations	All clearing resulting from activities associated with forest management including harvesting operations, construction and maintenance of roads and tracks, and prescribed burning for regeneration.
Girders	High quality logs used in a round or flat faced form to support a deck such as a bridge or wharf or as large end section, heart-free, sawn timber suitable for heavy construction.
Gross forest area	The total area of forest defined in a Property Vegetation Plan.
Gully stuffer	A drainage feature crossing formed by filling the drainage feature with trees, debris, spoil, soil, rock or other material to the level of the road or track.
Habitat tree	A tree retained for habitat purposes under this Code.
Harvesting operations	Harvesting operations include: • timber felling, snigging and extraction • construction and maintenance of log landings, snig tracks and extraction tracks.
Heathland	Areas dominated (covers more than 50% of the area) by shrubs generally less than 2 metres tall at maturity.
Highly erodible soil	A soil where the particles are readily detached and transported by erosive forces. The presence of these soils may be identified by evidence of existing erosion (gully or rill erosion), or by commonly known problem soil types, e.g. some coarse-grained granites.
Incised channel	A channel more than 30 centimetres deep with clearly defined bed and banks.
Inundation	Flooding of the forested area by water overflowing the banks of a river.
Log landing	An area (usually cleared) where timber products are assembled for processing and sorting before being loaded onto a truck.
Machinery exclusion zone	Land within 10 metres of the top edge of the bank of any unmapped drainage line.
Mass movement	The downslope movement of greater than 10 cubic metres of soil, where gravity is the primary force or where no transporting medium such as wind, flowing water or ice is involved.
Nest trees	• Trees with nests or roosts of any species of raptor, including powerful owls, barking owls, sooty owls and masked owls. • Trees with nests of colonial-nesting water birds (groups of stick-nests).
Net harvestable area	The area under the private native forestry PVP where harvesting is permitted in accordance with the Code.
Old grey	A late-mature/over-mature cypress tree that regenerated before the 1890s and which has bark that is bleached to a characteristic light grey colour and that is weathered to a smoother surface texture than is typical of younger trees.

Old growth	Ecologically mature forest where the effects of disturbance are now negligible. This includes an area of forest greater than 5 hectares where: • the overstorey is in late to over-mature growth stage with the presence of relatively large old trees (many containing hollows and often with the presence of dieback or dead branches in the crown) • the age (growth) structure of the stand measured as relative crown cover consists of less than 10% of regeneration and advance growth and more than 10% of late to over-mature (senescent) growth • the effects of unnatural disturbance are now negligible. Old growth woodlands west of the Great Dividing Range, while comprising a characteristic canopy of late to over-mature trees (many with hollows), may comprise a woodland structure with less diverse or often shrubby understorey and a groundcover of grasses and herbs.
Portable mill site	A site where a portable mill (easily movable milling equipment) operates.
Posts	Term generally used to describe posts in round or split form used for fencing.
Prescribed Stream	Stream listed in the Major Rivers database of the Assessment Methodology database Department of Environment and Climate Change webpage.
Protected trees	Trees required to be retained under clause 4.3(3): • trees required to be retained under section 4.2 • plants of the genus *Xanthorrhoea* (grass trees), genus *Allocasuarina* (forest oak) and genus *Banksia* • other trees that are required to be retained by this Code.
Pulp logs	Logs cut and prepared primarily to produce wood pulp for the manufacture of reconstituted products including paper and panel board.
Recovery plan	As defined in the *Threatened Species Conservation Act 1995*.
Recruitment tree	A tree capable of developing hollows to provide habitat for wildlife and which comes from the next smaller cohort than habitat trees.
Riparian exclusion zones	Those areas within the distances specified for 'Drainage feature' as listed in Table F where forest operations are not permitted, unless otherwise allowed by this Code.
Road	Any route used for vehicular access to, and the transport of logs from, the point of loading (log landing) within the forest area.
Road prism	That part of the road from the inflexion point at the toe of the fill batter to the inflexion point at the top edge of the cut batter. Where there is no cut or fill batter as part of the road, the road prism is to be taken from the outside edge of the table drain on either side of the road.
Rocky outcrops and cliffs	A 'rocky outcrop' has an area of 0.2 hectares or larger, where 70% or more of the surface is composed of exposed boulders of more than 0.6 of a metre in diameter. 'Cliff' means a rocky slope steeper than 70 degrees and more than three metres high.
Rollover bank	A crossbank constructed with a smooth cross-section and gentle batters, which is well-compacted to provide permanent vehicular trafficability.
Roost trees	Trees with nests or roosts of any species of raptor, including powerful owls, barking owls, sooty owls and masked owls, and trees which support maternity bat roosts.
Sawlog	Log of a species suitable for processing through a sawmill into solid timber products.

Silvicultural operations	The activities associated with the management of trees within a forest for the purpose of meeting sustainable long-term productivity objectives, including thinning, single tree selection and creation of canopy openings.
Single tree selection	A harvesting operation where the trees harvested are either single trees or small groups of trees. For the purposes of this Code, single tree selection operations will not create canopy openings.
Snig track	A track used by snigging or skidding equipment.
Spoon drain	A drain with a semi-circular cross-section, which has no associated ridge of soil. Its capacity is solely defined by the excavated channel dimensions.
Stand height	Mean height of the dominant trees in the stand. Measurement of stand height must conform to methods described in approved guidelines.
Stocking level	A measure of the frequency of occurrence of tree stems assessed as being capable of growing to canopy level. Measurement of stocking levels must conform with methods described in approved guidelines.
Thinning	A silvicultural practice where some trees are removed in order to increase the growth rates of retained trees.
Timber products	Commercial timber products removed from or felled within the forest, including sawlogs, veneer logs, poles, girders, piles and pulp logs.
Veneer log	High quality logs that are rotary peeled or sliced to produce sheets of veneer.
Walkover techniques	Timber extraction or snigging without removing or unduly disturbing the existing natural groundcover, i.e. where no snig track construction involving soil disturbance is required.
Wet summer	Summer with above average rainfall persisting through the summer period.
Wetland	Includes any shallow body of water (such as a marsh, billabong, swamp or sedgeland) that is: • inundated cyclically, intermittently or permanently with water, and • vegetated with wetland plant communities.

OFFICIAL NOTICES

Appointments

CRIMES (ADMINISTRATION OF SENTENCES) ACT 1999

State Parole Authority

Re-appointment of Community Member

HER Excellency the Governor, with the advice of the Executive Council and pursuant to the provisions of the Crimes (Administration of Sentences) Act 1999, has approved the re-appointment of John Joseph WHELAN, OAM, as a community member of the State Parole Authority for a period of three (3) years dating on and from 20 March 2008 until 19 March 2011.

JOHN HATZISTERGOS, M.P.,
Minister for Justice

Department of Lands

ARMIDALE OFFICE
108 Faulkner Street (PO Box 199A), Armidale NSW 2350
Phone: (02) 6772 5488 Fax (02) 6771 5348

ROADS ACT 1993

ORDER

Transfer of a Crown road to a Council

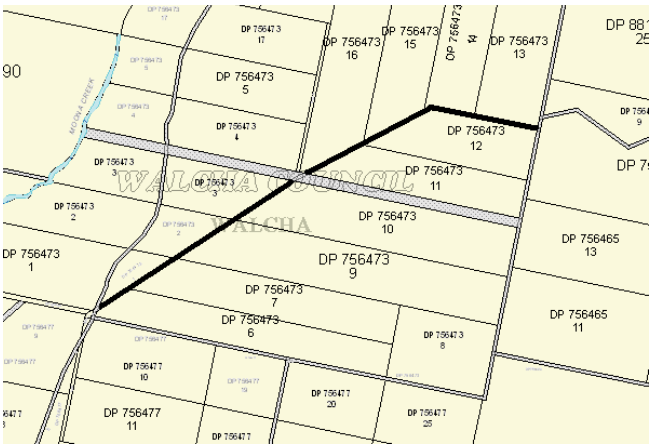
IN pursuance of the provisions of Section 151, Roads Act 1993, the Crown public roads specified in each schedule 1 are transferred to the Roads Authority specified in the corresponding schedule 2 hereunder, as from the date of publication of this notice and as from that date, the roads specified in each schedule 1, cease to be Crown public roads.

TONY KELLY, M.L.C.,
Minister for Lands.

SCHEDULE 1

Parish – Ella; County – Vernon
Land District – Walcha; L.G.A. – Walcha

The Crown road 20.115 metres wide as shown by solid black shading on the diagram hereunder.



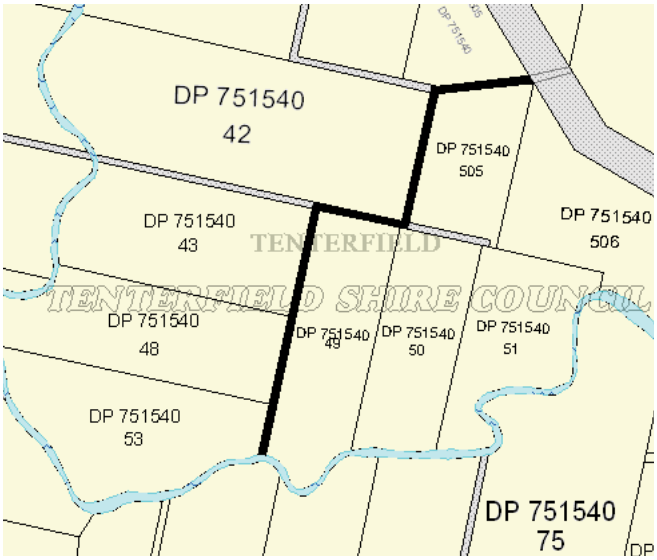
SCHEDULE 2

Roads Authority: Walcha Council. File No.: AE07 H 18 : W404933. Councils Reference: Gareth Kelly.

SCHEDULE 1

Parish – Tenterfield; County – Clive
Land District – Tenterfield; L.G.A. – Tenterfield

The Crown road 20.115 metres wide off Scrub Road as shown by solid black shading on the diagram hereunder.



SCHEDULE 2

Roads Authority: Tenterfield Shire Council. File No.: AE 07 H 18 : W404934. Councils Reference: (CM 734/07) Brian Turner.

DUBBO OFFICE
142 Brisbane Street (PO Box 865), Dubbo NSW 2830
Phone: (02) 6883 3300 Fax: (02) 6882 6920

NOTICE PLACING RESERVE UNDER CONTROL OF RURAL LANDS PROTECTION BOARD

IN pursuance of the provisions of section 85, Rural Lands Protection Act 1998, the reserve specified hereunder is placed under the control of the Rural Lands Protection Board for the Rural Lands Protection District as from the date of this notification.

TONY KELLY, M.L.C.,
Minister for Lands

DESCRIPTION

Land District: Walgett
Local Government Area: Walgett
Rural Lands Protection District: Walgett
Parish: Pagan
County: Denham
Reserve: 45512 for travelling stock, notified 20 July 1910.
File No.: DB93H579.

ROADS ACT 1993

Erratum

THE two Roads Act 1993 orders for transfer of a Crown Road to a Council which were published in the Government Gaztte of the 7 September 2007, folio 6962, Gazette No. 116 were published under the wrong section heading.

The notices appeared under the "Wagga Wagga Office" of the Lands Department they should have appeared under the "Dubbo Office" of the Lands Department. This erratum now amends that error and the Gazettal date remains 7 September 2007.

GOULBURN OFFICE
159 Auburn Street (PO Box 748), Goulburn NSW 2580
Phone: (02) 4824 3700 Fax: (02) 4822 4287

ADDITION TO RESERVED CROWN LAND

PURSUANT to section 88 of the Crown Lands Act 1989, the Crown land specified in Column 1 of the Schedule hereunder is added to the reserved land specified opposite thereto in Column 2 of the Schedule.

TONY KELLY, M.L.C.,
Minister for Lands

SCHEDULE

Column 1	*Column 2*
Land District: Yass Local Government Area: Yass Valley Council Locality: Yass, King (Parish, County) Lot Pt1, DP 754149, Parish Yass, County King Area: About 7000m^2 File Reference: GB01 H 203 KW	Reserve No. 754149 Public Purpose: Future Public Requirements Notified: 29 June 2007

APPOINTMENT OF TRUST BOARD MEMBERS

PURSUANT to section 93 of the Crown Lands Act 1989, the persons whose names are specified in Column 1 of the Schedules hereunder, are appointed for the terms of office specified in that Column, as members of the trust board for the reserve trust specified opposite thereto in Column 2, which has been established and appointed as trustee of the reserve referred to opposite thereto in Column 3 of the Schedules.

TONY KELLY, M.L.C.,
Minister for Lands

SCHEDULE 1

Column 1	*Column 2*	*Column 3*
The person for the time being holding the office of President, Goulburn Rifle Club Inc. (ex-officio member), David Frederick BARNETT (new member), Gretchen ALT-COOPER (re-appointment), Brett Anthony COLLINS (re-appointment), Ian Ross GORDON (re-appointment), Ron GIMBERT (re-appointment), Ronald Kevin GARDNER (re-appointment), Joye McCULLEN (re-appointment). For a term commencing the date of this notice and expiring 7 February 2013.	Goulburn Rifle Range Reserve Trust.	Reserve No.: 42683. Public Purpose: Rifle Range. Notified: 29 April 1908 File No.: GB86 R 11/2.

SCHEDULE 2

Column 1	*Column 2*	*Column 3*
Sean McNULTY (new member), Jennifer Ann McNULTY (re-appointment), Carl Anthony WISE (re-appointment), Helen WISE (re-appointment). For a term commencing 21 March 2008 and expiring 20 March 2013.	Tallong Public Hall and Recreation Trust.	Reserve No.: 88933. Public Purpose: Public recreation and public hall. Notified: 15 June 1973. File No.: GB91 R 56/2.

ADDITION TO RESERVED CROWN LAND

PURSUANT to section 88 of the Crown Lands Act 1989, the Crown land specified in Column 1 of the Schedule hereunder is added to the reserved land specified opposite thereto in Column 2 of the Schedule.

TONY KELLY, M.L.C.,
Minister for Lands

SCHEDULE

Column 1	*Column 2*
Land District: Goulburn Local Government Area: Goulburn Mulwaree Council Locality: Cullulla, Argyle (Parish, County) Lot 171, DP 750012, Parish Cullulla, County Argyle Lot 172, DP 750012, Parish Cullulla, County Argyle Area: 4.047ha File Reference: GB90 H 196 KW	Reserve No. 750012 Public Purpose: Future public requirements Notified: 29 June 2007

NOTIFICATION OF CLOSING OF A ROAD

IN pursuance of the provisions of the Roads Act 1993, the road hereunder described is closed and the land comprised therein ceases to be public road and the rights of passage and access that previously existed in relation to the road are extinguished. Upon closing, title to the land, comprising the former public road, vests in the body specified in the Schedule hereunder.

TONY KELLY, M.L.C.,
Minister for Lands

SCHEDULE 1

Description

Parish – Big Badja and Good Good; County – Beresford; Land District – Cooma; L.G.A. – Cooma-Monaro

Lots 1 to 9, DP 1120083 (not being land under the Real Property Act). File No.: GB05 H 75:JK.

Note: On closing, the title for the land in Lots 1 to 9, DP 1120083 remains vested in the State of New South Wales as Crown Land.

SCHEDULE 2

Description

Parish – Holland; County – Beresford;
Land District – Cooma;
L.G.A. – Cooma-Monaro Shire Council

Lot 6, DP 1120414 (not being land under the Real Property Act). File No.: GB98 H 419.BA.

Note: On closing, the title for the land in Lot 6, DP 1120414 remains vested in Cooma-Monaro Shire Council as operational land.

In accordance with section 44 of the Roads Act 1993, the Crown consents to the land in Lot 6, DP 1120414 being vested in the Cooma-Monaro Shire Council as operational land, to be given by the Council as compensation for other land acquired by the Council for the purpose of the Roads Act.

ADDITION TO RESERVED CROWN LAND

PURSUANT to section 88 of the Crown Lands Act 1989, the Crown land specified in Column 1 of the Schedule hereunder is added to the reserved land specified opposite thereto in Column 2 of the Schedule.

TONY KELLY, M.L.C.,
Minister for Lands

SCHEDULE

Column 1	*Column 2*
Land District: Cooma Local Government Area: Cooma-Monaro Shire Council Locality: Kydra, Beresford (Parish, County) Lot 143, DP 725483, Parish Kydra, County Beresford Area: 2.05ha File Reference: GB99 H 275 KW	Reserve No. 750547 Public Purpose: Future public requirements Notified: 29 June 2007

GRAFTON OFFICE
76 Victoria Street (Locked Bag 10), Grafton NSW 2460
Phone: (02) 6640 3400 Fax: (02) 6642 5375

APPOINTMENT OF TRUST BOARD MEMBERS

PURSUANT to section 93 of the Crown Lands Act 1989, the persons whose names are specified in Column 1 of the Schedule hereunder are appointed, for the terms of office specified in that Column, as members of the trust board for the reserve trust specified opposite thereto in Column 2, which has been established and appointed as trustee of the reserve referred to opposite thereto in Column 3 of the Schedule.

TONY KELLY, M.L.C.,
Minister for Lands

SCHEDULE

Column 1	*Column 2*	*Column 3*
John Delos WILLIAMS (new member)	Byrangery Grass (R140088) Reserve Trust	Reserve No. 140088 Public Purpose: Environmental Protection Notified: 13 April 1995 File Reference: GF95 R 35

For a term commencing the date of this notice and expiring 25 July 2012.

ERRATUM

IN the notice appearing in the *New South Wales Government Gazette* No. 182, Folio 9624, dated 14 December 2007, under the heading "Notification of Closing of Road", in the Schedule, replace "755711" with "1120435".

TONY KELLY, M.L.C.,
Minister for Lands

NOTIFICATION OF CLOSING OF ROAD

IN pursuance of the provisions of the Roads Act 1993, the road hereunder described is closed and the land comprised therein ceases to be a public road and the rights of passage and access that previously existed in relation to the road are extinguished. On road closing, title to the land comprising the former public road vests in the body specified in the Schedule hereunder.

TONY KELLY, M.L.C.,
Minister for Lands

Description

Land District – Grafton; L.G.A. – Clarence Valley

Road Closed: Lot 1, DP 1119791 at Braunstone, Parish Lanitza, County Clarence. File No.: GF05 H 68.

SCHEDULE

On closing, the land within Lot 1, DP 1119791 remains vested in the State of New South Wales as Crown Land.

MAITLAND OFFICE

Corner Newcastle Road and Banks Street (PO Box 6), East Maitland NSW 2323
Phone: (02) 4937 9300 Fax: (02) 4934 2252

ADDITION TO RESERVED CROWN LAND

PURSUANT to section 88 of the Crown Lands Act 1989, the Crown land specified in Column 1 of the Schedule hereunder is added to the reserved land specified opposite thereto in Column 2 of the Schedule.

TONY KELLY, M.L.C.,
Minister for Lands

SCHEDULE

Column 1	*Column 2*
Land District: Newcastle Local Government Area: Port Stephens Council Locality: Anna Bay Lot 46, DP 753204, Parish Tomaree, County Gloucester; Lot 130, DP 753204, Parish Tomaree, County Gloucester; Lot 131, DP 753204, Parish Tomaree, County Gloucester; Lot 132, DP 753204, Parish Tomaree, County Gloucester; Lot 312, DP 753204, Parish Tomaree, County Gloucester; Lot 367, DP 753204, Parish Tomaree, County Gloucester; Area: 34.15ha File Reference: 07/4394/1	Reserve No. 79662 Public Purpose: Protection From Sand Drift Notified: 14 June 1957 Lot 56, DP 753204, Parish Tomaree, County Gloucester New Area: 42.44ha

Notes: The part of R1011788 notified 7 July 2006 that applies to these land parcels is not auto revoked by this notification. Lot 312, DP753204 was also notified as R 1014489 for Tourist Facilities and Services on this date and co-exists with this reserve.

APPOINTMENT OF CORPORATION TO MANAGE RESERVE TRUST

PURSUANT to section 95 of the Crown Lands Act 1989, the corporation specified in Column 1 of the Schedule hereunder is appointed to manage the affairs of the reserve trust specified opposite thereto in Column 2, which is trustee of the reserve referred to in Column 3 of the Schedule.

TONY KELLY, M.L.C.,
Minister for Lands

SCHEDULE

Column 1	*Column 2*	*Column 3*
Lands Administration Ministerial Corporation	Anna Bay Tourist Facilities and Services (R1014489) Reserve Trust	Reserve No. 1014489 Public Purpose: Tourist Facilities and Services Notified: This day File Reference: 07/4394/1

For a term commencing the date of this notice

APPOINTMENT OF CORPORATION TO MANAGE RESERVE TRUST

PURSUANT to section 95 of the Crown Lands Act 1989, the corporation specified in Column 1 of the Schedule hereunder is appointed to manage the affairs of the reserve trust specified opposite thereto in Column 2, which is trustee of the reserve referred to in Column 3 of the Schedule.

TONY KELLY, M.L.C.,
Minister for Lands

SCHEDULE

Column 1	*Column 2*	*Column 3*
Lands Administration Ministerial Corporation	Anna Bay Protection From Sand Drift (R79662) Reserve Trust	Reserve No. 79662 Public Purpose: Protection From Sand Drift Notified: 14 June 1957 File Reference: 07/4394/1

For a term commencing the date of this notice

ESTABLISHMENT OF RESERVE TRUST

PURSUANT to section 92 (1) of the Crown Lands Act 1989, the reserve trust specified in Column 1 of the Schedule hereunder is established under the name stated in that Column and is appointed as trustee of the reserve specified opposite thereto in Column 2 of the Schedule.

TONY KELLY, M.L.C.,
Minister for Lands

SCHEDULE

Column 1	*Column 2*
Anna Bay Tourist Facilities and Services (R1014489) Reserve Trust	Reserve No. 1014489 Public Purpose: Tourist Facilities and Services Notified: This day File Reference: 07/4394/1

ESTABLISHMENT OF RESERVE TRUST

PURSUANT to section 92 (1) of the Crown Lands Act 1989, the reserve trust specified in Column 1 of the Schedule hereunder is established under the name stated in that Column and is appointed as trustee of the reserve specified opposite thereto in Column 2 of the Schedule.

TONY KELLY, M.L.C.,
Minister for Lands

SCHEDULE

Column 1	*Column 2*
Anna Bay Protection From Sand Drift (R79662) Reserve Trust	Reserve No. 79662 Public Purpose: Protection From Sand Drift Notified: 14 June 1957 File Reference: 07/4394/1

RESERVATION OF CROWN LAND

PURSUANT to section 87 of the Crown Lands Act 1989, the Crown land specified in Column 1 of the schedule hereunder is reserved as specified opposite thereto in Column 2 of the Schedule.

Column 1	*Column 2*
Land District: Newcastle Local Government Area: Port Stephens Council Locality: Anna Bay Lot 312, DP 753204, Parish Tomaree, County Gloucester; Area: About 3.29ha File Reference: 07/4394/1 Facilities and Services	Reserve No. 1014489 Public Purpose: Tourist

Notes: This reservation does not auto revoke part R1011788 notified 7 July 2006, this reservation also co-exists with R79662 for Protection from Sand Drift for which an addition was also notified on this day.

REVOCATION OF RESERVATION OF CROWN LAND

PURSUANT to section 90 of the Crown Lands Act 1989, the reservation of Crown Land specified in Column 1 of the Schedule hereunder, is revoked to the extent specified opposite thereto in Column 2 of the Schedule.

TONY KELLY, M.L.C.,
Minister for Lands

SCHEDULE

Column 1	*Column 2*
Land District: Maitland. Local Government Area: Cessnock City Council. Locality: Wollombi. Reserve No.: 55782. Public Purpose: Public school purposes. Notified: 10 November 1922. File No.: MD86 H 117/2.	The whole being Lot 178, DP 723300, Parish Corrabare, County Northumberland, of an area of 6374 square metres.

Note: To reopen Lot 178, DP 723300 as a Crown public road.

NOTIFICATION UNDER SECTION 12 OF THE ROADS ACT 1993 TO DEDICATE CROWN LAND TO BE A PUBLIC ROAD

IN pursuance of the provisions of the Roads Act 1993, the land hereunder described, is hereby opened as a Crown public road.

TONY KELLY, M.L.C.,
Minister for Lands

Description

Village – Wollombi; Parish – Corrabare
County – Northumberland; Land District – Maitland
Local Government Area – Cessnock

Lot 178, DP 723300 dedicated as a Crown public road.

Title and Area Affected: Reserve No. 55782 for public school purposes revoked by *New South Wales Government Gazette* notice this day. File No.: MD86 H 117.

Note: Folio Identifier 178/723300 has not issued. Area affected being 6374 square metres.

MOREE OFFICE
Frome Street (PO Box 388), Moree NSW 2400
Phone: (02) 6752 5055 Fax: (02) 6752 1707

CROWN LANDS ACT 1989

Declaration of Land to be Crown Land

PURSUANT to section 138 of the Crown Lands Act, 1989, the land described in the Schedule hereunder is hereby declared to be Crown land within the meaning of that Act.

TONY KELLY, M.L.C.,
Minister for Lands

SCHEDULE

Land District – Bingara;
Local Government Area – Gwydir;
Parish – Hall; County – Murchison

Lots 1, 2 and 3 in Deposited Plan 1108710 of 16.87 hectares being land in folios 1, 2 and 3/1108710 held in the name of Northern Slopes Rural Lands Protection Board.

File No.: ME97H95.

ORANGE OFFICE
92 Kite Street (PO Box 2146), Orange NSW 2800
Phone: (02) 6391 4300 Fax: (02) 6362 3896

APPOINTMENT OF TRUST BOARD MEMBERS

PURSUANT to section 93 of the Crown Lands Act 1989, the persons whose names are specified in Column 1 of the Schedule hereunder are appointed, for the terms of office specified in that Column, as members of the trust board for the reserve trust specified opposite thereto in Column 2, which has been established and appointed as trustee of the reserve referred to opposite thereto in Column 3 of the Schedule.

TONY KELLY, M.L.C.,
Minister for Lands

SCHEDULE

Column 1	*Column 2*	*Column 3*
Ross Garth Fragar (new member) Jeffrey Neil Pillidge OE80R300/2 (re-appointment) Malcolm Charles Lang (re-appointment) Gregory John Monaghan (new member) Ian Mileham Litchfield (re-appointment) John Frederic Lowe (re-appointment) For a term commencing 21 March 2008 and expiring 20 March 2013.	Lowther War Memorial Reserve Trust	Reserve No. 700016 Public Purpose: Heritage Purposes Notified: 21 February 1997 File Reference:

ERRATUM

IN the notice appearing in the *Government Gazette* of 18 January 2008, Folio 91 under the heading "Notification of Closing of Public Road", delete from the Schedule Lot 213, DP 1115901 and replace with Lot 214, DP 1115901. File No.: OE06 H 387.

TONY KELLY, M.L.C.,
Minister for Lands

NOTIFICATION OF CLOSING OF PUBLIC ROAD

IN pursuance of the provisions of the Roads Act 1993, the road hereunder described is closed and the land comprised therein ceases to be a public road and the rights of passage and access that previously existed in relation to the road are extinguished. On road closing, title to the land comprising the former public road vests in the body specified in the Schedules hereunder.

TONY KELLY, M.L.C.,
Minister for Lands

Description

Parish – Wongajong; County – Forbes;
Land District – Forbes; Shire – Forbes

Road Closed: Lot 9 and Lot 10 in Deposited Plan 1120576. File No.: OE07 H 151.

Note: On closing, title to the land comprised in Lot 9 and Lot 10 remains vest in the Crown as Crown Land.

Description

Parish – Errol; County – Bathurst;
Land District – Blayney; Shire – Blayney

Road Closed: Lot 1 in Deposited Plan 1120808. File No.: OE05 H 286.

Note: On closing, title to the land comprised in Lot 1 remains vest in the Crown as Crown Land.

SYDNEY METROPOLITAN OFFICE
Level 12, Macquarie Tower, 10 Valentine Avenue, Parramatta 2150
(PO Box 3935, Parramatta NSW 2124)
Phone: (02) 8836 5300 Fax: (02) 8836 5365

ASSIGNMENT OF NAME TO A RESERVE TRUST

PURSUANT to paragraph 4 (3) of the Schedule 8 of the Crown Lands Act 1989 the name specified in Column 1 of the Schedule is assigned to the reserve trust constituted as trustee for the reserve specified in Column 2 of the Schedule.

TONY KELLY, M.L.C.,
Minister for Lands

SCHEDULE

Column 1	*Column 2*
Leete Park (D500160) Reserve Trust	Dedication No. 500160 at Coogee dedicated for the purpose of Public Recreation on 8 August 1924. File No.: 07/6135

NOTIFICATION OF CLOSING OF ROAD

IN pursuance of the provisions of the Roads Act 1993, the road hereunder specified is closed and the road ceases to be public road and the rights of passage and access that previously existed in relation to the road are extinguished.

TONY KELLY, M.L.C.,
Minister for Lands

Description

Land District – Picton; L.G.A. – Campbelltown

Lot 1, DP 1120981 at Eagle Vale, Parish St Peters (Sheet 1), County Cumberland. File No.: MN06H275

Notes: (1) On closing, title for the land in lot 1 remains vested in Campbelltown City Council as operational land.

(2) The road is closed subject to the easement for underground electricity cables 5 wide, overland floodway 5 wide, Telstra services 5 wide and easement to drain water 5 wide as shown in DP 1120981.

TAMWORTH OFFICE
25-27 Fitzroy Street (PO Box 535), Tamworth NSW 2340
Phone: (02) 6764 5100 Fax: (02) 6766 3805

NOTIFICATION OF CLOSING OF A ROAD

IN pursuance to the provisions of the Roads Act 1993, the road hereunder specified is closed and the land comprised therein ceases to be a public road and the rights of passage and access that previously existed in relation to the road are extinguished.

TONY KELLY, M.L.C.,
Minister for Lands

Description

Locality – North Tamworth; Land District – Tamworth; L.G.A. – Tamworth Regional

Roads Closed: Lot 2 in Deposited Plan 1118938, Parish Tamworth, County Inglis. File No.: TH06 H 116.

Note: On closing, title to the land comprised in Lot 2 will remain vested in the State of New South Wales as Crown Land.

Description

Locality – Watsons Creek; Land District – Tamworth; L.G.A. – Tamworth Regional

Roads Closed: Lots 1 and 2 in Deposited Plan 1118843, Parish Hall, County Darling. File No.: TH04 H 313.

Note: On closing title to the land comprised in Lots 1 and 2 will remain vested in the State of New South Wales as Crown Land.

Description

Locality – Hallsville; Land District – Tamworth; L.G.A. – Tamworth Regional

Roads Closed: Lot 1 in Deposited Plan 1118198, Parish Woolomol, County Inglis. File No.: TH05 H 193.

Note: On closing, title to the land comprised in Lot 1 will remain vested in the State of New South Wales as Crown Land.

TAREE OFFICE
98 Victoria Street (PO Box 440), Taree NSW 2430
Phone: (02) 6591 3500 Fax: (02) 6552 2816

NOTIFICATION OF CLOSING OF PUBLIC ROAD

IN pursuance of the provisions of the Roads Act 1993, the road hereunder described is closed and the land comprised therein ceases to be a public road and the rights of passage and access that previously existed in relation to the road are extinguished.

TONY KELLY, M.L.C.,
Minister for Lands

Description

Land District – Port Macquarie;
Local Government Area – Port Macquarie-Hastings

Road Closed: Lot 1, DP 1122266 at Kings Creek, Parish of Burrawan, County of Macquarie. File No.: TE05 H 144.

Note: On closing, the land within Lot 1 is vested in the State of New South Wales as Crown Land.

Lot 1 is subject to right of carriageway 4 wide for occasional management and emergency access purposes.

Description

Land District – Taree;
Local Government Area – Greater Taree City Council

Road Closed: Lot 2, DP 1110597 at Belbora, Parish of Belbora, County of Gloucester. File No.: 07/1607.

Notes: (1) On closing, the land within Lot 2 remains vested in Council as operational land for the purposes of the Local Government Act 1993. Council's reference: 07/14873.

(2) The road is closed subject to the easement for transmission line of variable width as designated in plan with AD535073.

ADDITION TO RESERVED CROWN LAND

PURSUANT to section 88 of the Crown Lands Act 1989, the Crown Land specified in Column 1 of the Schedule hereunder, is added to the reserve specified opposite thereto in Column 2 of the Schedule.

TONY KELLY, M.L.C.,
Minister for Lands

SCHEDULE

Column 1	*Column 2*
Land District: Port Macquarie. Local Government Area: Port Macquarie-Hastings Council. Parish: Macquarie. County: Macquarie. Locality: Port Macquarie. Lot 7083, DP 1101646; Lot 7084, DP 1105463. Area: 13 hectares. File No.: TE06 R 11.	Reserve No.: 1011488. Public Purpose: Future public requirements. Notified: 7 April 2006.

Note: The affected part of Reserve 754444 for future public requirements is revoked as from this date.

APPOINTMENT OF ADMINISTRATOR TO MANAGE A RESERVE TRUST

PURSUANT to section 117, Crown Lands Act 1989, the person specified in Column 1 of the Schedule hereunder, is appointed as administrator for the term also specified thereunder, of the reserve trust specified opposite thereto in Column 2, which is trustee of the reserve referred to in Column 3 of the Schedule.

TONY KELLY, M.L.C.,
Minister for Lands

SCHEDULE

Column 1	*Column 2*	*Column 3*
Janet HAYES.	Kempsey Showground Trust.	Reserve No.: 610019. Public Purpose: Showground. Notified: 7 October 1884. File No.: TE80 R 216.

For a term commencing 1 February 2008 and expiring 31 January 2010.

ASSIGNMENT OF NAME TO A RESERVE TRUST

PURSUANT to Clause 4 (3) of Schedule 8 to the Crown Lands Act 1989, the name specified in Column 1 of the Schedule hereunder, is assigned to the reserve trust constituted as trustee of the reserve specified opposite thereto in Column 2 of the Schedule.

TONY KELLY, M.L.C.,
Minister for Lands

SCHEDULE

Column 1	*Column 2*
Gordon Street Public Recreation Reserve (R87715) Trust.	Reserve No.: 87715. Public Purpose: Public recreation. Notified: 10 April 1970. Parish: Macquarie. County: Macquarie. File No.: 08/0730.

ROADS ACT 1993

ORDER

Transfer of Crown Public Road to a Council

IN pursuant of the provisions of section 151, Roads Act 1993, the Crown public road specified in Schedule 1 is transferred to the Roads Authority specified in Schedule 2 hereunder, as from the date of publication of this notice and as from that date, the road specified in Schedule 1 cease to be Crown public road.

TONY KELLY, M.L.C.,
Minister for Lands

SCHEDULE 1

County – Raleigh; Land District – Kempsey;
Local Government Area – Nambucca Shire Council

Crown public road being part of Barnetts Road at Gumma being road south Lot 4, DP 127678; Lot 33, DP 755539; Lots 3 and 2, DP 876141 and south and east Lot 91, DP 755539, Parish Congarinni.

SCHEDULE 2

Roads Authority: Nambucca Shire Council. File No.: TE04 H 93.

REMOVAL FROM OFFICE OF A MEMBER OF A TRUST BOARD

PURSUANT to Clause 6(4) of Schedule 3 of the Crown Lands Act 1989, the persons whose name is specified in Schedule 1 hereunder, is removed from the office of member of the trust board managing the affairs of the reserve trust specified in Schedule 2, which reserve trust is trustee of the reserve referred to in Schedule 3.

TONY KELLY, M.L.C.,
Minister for Lands

SCHEDULE 1

The person for the time being holding the office of President, Central North Coast National Agricultural Society Ltd (ex-officio member); Manager, Community Services and Lifestyle, Kempsey Shire Council (ex-officio member); and individuals Rodney Alex BAKER, Gabriella BRIE and Diana WOODWARD are removed as at 31 January 2008.

SCHEDULE 2

Kempsey Showground Trust.

SCHEDULE 3

Dedication No.: 610019.
Public Purpose: Showground.
Notified: 7 October 1884.
File No.: TE80 R 216.

NOTIFICATION OF CLOSING OF PUBLIC ROAD

IN pursuance of the provisions of the Roads Act 1993, the road hereunder described is closed and the land comprised therein ceases to be a public road and the rights of passage and access that previously existed in relation to the road are extinguished.

TONY KELLY, M.L.C.,
Minister for Lands

Description

Land District – Taree
Local Government Area – Great Lakes

Road closed: Lot 1, DP1122335 at Coolongolook. Parish of Curreeki, County of Gloucester. File No. TE06H 41

On closing, the land within lot 1 remains vested in the State of New South Wales as Crown land.

Note: A 'right of carriageway' 20 wide is created by the registration of DP 1122335.

WAGGA WAGGA OFFICE

Corner Johnston and Tarcutta Streets (PO Box 60), Wagga Wagga NSW 2650
Phone: (02) 6937 2700 Fax: (02) 6921 1851

NOTIFICATION OF CLOSING OF A ROAD

IN pursuance of the provisions of the Roads Act 1993, the road hereunder specified is closed, the road ceases to be a public road and the rights of passage and access that previously existed in relation to the road are extinguished.

TONY KELLY, M.L.C.,
Minister for Lands

Description

Parish – Buraja; County – Hume;
|Land District – Corowa; Shire – Corowa

Road Closed: Lot 1 in DP 1119993 at Hopefield. File No.: WA03 H 230.

Note: On closing, the land within Lot 1 in DP 1119993 remains vested in the State of New South Wales as Crown Land.

Description

Parish – Burrumbuttock; County – Hume;
Land District – Albury; Shire – Greater Hume

Road Closed: Lot 1 in DP 1118807 at Burrumbuttock. File No.: WA05 H 103.

Note: On closing, the land within Lot 1 in DP 1118807 remains vested in the State of New South Wales as Crown Land.

Description

Parish – Temora; County – Bland;
Land District – Temora; Shire – Temora

Roads Closed: Lots 1 and 2 in DP 1120096 at Narraburra. File No.: WA05 H 244.

Note: On closing, the land within Lot 1 and 2 in DP 1120096 remains vested in the State of New South Wales as Crown land.

Description

Parish – Derry; County – Bourke;
Land District – Wagga Wagga; Shire – Coolamon

Road Closed: Lot 1 in DP 1118805 at Ganmain. File No.: WA05 H 58.

Note: On closing, the land within Lot 1 in DP 1118805 remains vested in the State of New South Wales as Crown Land.

Description

Parish – Howlong; County – Hume;
Land District – Corowa; Shire – Corowa

Road Closed: Lot 1 in DP 1119724 at Howlong. File No.: WA05 H 199.

Note: On closing, the land within Lot 1 in DP 1119724 remains vested in the State of New South Wales as Crown Land.

Description

Parish – North Wagga Wagga; County – Clarendon;
Land District – Wagga Wagga; City – Wagga Wagga

Road Closed: Lot 1 in DP 1119375 at North Wagga Wagga. File No.: WA05 H 470.

Note: On closing, the land within Lot 1 in DP 1119375 remains vested in the State of New South Wales as Crown Land.

ROADS ACT 1993

ORDER

Transfer of Crown Road to a Council

IN pursuance of the provisions of section 151, Roads Act 1993, the Crown public roads specified in Schedule 1 are transferred to the Roads Authority specified in Schedule 2 hereunder, as from the date of publication of this notice and as from that date, the roads specified in Schedule 1 cease to be Crown public road.

TONY KELLY, M.L.C.,
Minister for Lands

SCHEDULE 1

Parish – Mulwala; County – Denison;
Land District – Corowa; Shire – Corowa

Crown public road 30.175 wide described as the road on the western boundary of Lot 1, DP 789194.

SCHEDULE 2

Roads Authority: Corowa Shire Council. File No.: 07/5489.

CORRECTION OF DEFECTIVE INSTRUMENT

IN the *New South Wales Government Gazette* dated 25 January 2008 (Folio 179), under the heading "Notification of Closing of a Road" relating to the closure of a road at Jugiong please insert "(Folio 94)". File No.: WA06 H 99.

WESTERN REGION OFFICE
45 Wingewarra Street (PO Box 1840), Dubbo NSW 2830
Phone: (02) 6883 3000 Fax: (02) 6883 3099

ADDITION TO RESERVED CROWN LAND

PURSUANT to section 88 of the Crown Lands Act 1989, the Crown land specified in Column 1 of the Schedule hereunder is added to the reserved land specified opposite thereto in Column 2 of the Schedule.

TONY KELLY, M.L.C.,
Minister for Lands

SCHEDULE

Column 1	*Column 2*
Land District: Walgett North Local Government Area: Walgett Shire Council Locality: Lightning Ridge Lot Pt 1, DP 1100315, Parish Wallangulla, County Finch Area: 165m^2 File Reference: WL86 R 103/1	Reserve No. 96985 Public Purpose: Parking Public Recreation Notified: 30 September 1983 Lot Pt 1, DP 1100315, Parish Wallangulla, County Finch New Area: 5765m^2

Notes: This addition revokes that part of Reserve 97330 formerly over Lot 1, DP 1100315

SCHEDULE

Column 1	*Column 2*
Land District: Walgett North Local Government Area: Walgett Shire Council Locality: Lightning Ridge Lot Pt 2, DP 1100315, Parish Wallangulla, County Finch Area: 1.075ha File Ref.: WL86 R 103/1	Reserve No. 230053 Public Purpose: Caravan and Camping Park Notified: 2 February 1990 Lot Pt 2, DP 1100315, Parish Wallangulla, County Finch Lot 4, DP 1100315, Parish Wallangulla, County Finch Lot Pt 5, DP 1100315, Parish Wallangulla, County Finch New Area: 3.616ha

Notes: This addition revokes that part of Reserve 97330 formerly over Lot 2, DP 1100315

REVOCATION OF RESERVATION OF CROWN LAND

PURSUANT to section 90 of the Crown Lands Act 1989, the reservation of Crown Land specified in Column 1 of the Schedule hereunder, is revoked to the extent specified opposite thereto in Column 2 of the Schedule.

TONY KELLY, M.L.C.,
Minister for Lands

SCHEDULE

Column 1	*Column 2*
Land District: Broken Hill\ Council: Broken Hill City Parish: Picton County: Yancowinna Location: Broken Hill Reserve: 1013830 Purpose: For future public requirements Date of notification: 29 June 2007 File: WL95 H 178	Part of Reserve 1013830 (formally Part Reserve 1011448) comprising the whole of Lot 2, DP 1119598

Department of Primary Industries

FISHERIES MANAGEMENT ACT 1994

FISHERIES MANAGEMENT (AQUACULTURE) REGULATION 2007

Notice of Receipt of Application for Aquaculture Lease

Notification under Section 163 (7) of the Fisheries Management Act 1994, and Clause 33 of the Fisheries Management (Aquaculture) Regulation 2007

AL07/002 within the estuary of the Hawkesbury River, having an area of 3.4464 hectares to Peter O'Sullivan of Mooney Mooney NSW, for a term of 15 years expiring on 14 January 2023.

Clause 39 (4) – Notice of Aquaculture Lease Renewal

The Minister has renewed the following class 1 Aquaculture Leases:

OL77/048 within the estuary of Wagonga Inlet having an area 0.5321 hectares to James Croucher of Narooma, NSW, for a term of 15 years expiring on 07 October 2022.

OL77/116 within the estuary of Wallis Lake, having an area 0.9213 hectares to Bertram Kenney of Tuncurry, NSW, for a term of 15 years expiring on 19 August 2022.

OL76/014 within the estuary of the Macleay River, having an area 2.2148 hectares to Thomas Lange of Arakoon NSW, for a term of 15 years expiring on 3 August 2022.

OL61/117 within the estuary of Wallis Lake, having an area 0.1196 hectares to Polson Oysters Pty Ltd, of Oxley Island, NSW, for a term of 15 years expiring on 4 September 2022

OL62/111 within the estuary of the Manning River, having an area 0.3750 hectares to Polson Oysters Pty Ltd, of Oxley Island, NSW, for a term of 15 years expiring on 26 June 2022.

OL77/079 within the estuary of the Manning River, having an area 1.9173 hectares to Polson Oysters Pty Ltd, of Oxley Island, NSW, for a term of 15 years expiring on 22 April 2022.

OL74/027 within the estuary of Burrill Lake, having an area of 1.0984 hectares to Taras Rizniak of Ulladulla, NSW, for a term of 15 years expiring on 23 October 2022.

OL76/049 within the estuary of Lake Conjola, having an area of 0.8433 hectares to Taras Rizniak of Ulladulla, NSW, for a term of 15 years expiring on 23 October 2022.

OL76/105 within the estuary of Tuross Lake, having an area of 1.5464 hectares to Glenn Andrew Jones of Tuross Head, NSW, for a term of 15 years expiring on 21 June 2022.

OL89/054 within the estuary of Port Stephens, having an area 0.6847 hectares to Michael O'Connor, Leon Post and Kim Post, of Karuah, NSW, for a term of 15 years expiring on 10 April 2021.

BILL TALBOT,
Director,
Fisheries Conservation and Aquaculture Branch
Agriculture, Fisheries and Regional Relations Division
NSW Department of Primary Industries

ERRATUM

I, Bill Talbot, Director, Fisheries Conservation & Aquaculture, do by this notification, withdraw the notification which appeared on page 7662 of the *NSW Government Gazette* on 5 October 2007 regarding the granting of aquaculture lease OL70/372 and advise that the previous status of cancelled has been reinstated for the said lease, subject to relevant provisions of the above Act.

BILL TALBOT,
Director,
Fisheries Conservation and Aquaculture Branch
Agriculture, Fisheries and Regional Relations Division
NSW Department of Primary Industries

MINERAL RESOURCES

NOTICE is given that the following applications have been received:

EXPLORATION LICENCE APPLICATIONS

(T07-0548)

No. 3411, GOLD AND COPPER RESOURCES PTY LIMITED (ACN 124 534 863), area of 1 unit, for Group 1, dated 21 December 2007. (Orange Mining Division).

(T08-0035)

No. 3435, SILVER MINES LIMITED (ACN 107 452 942), area of 23 units, for Group 1, dated 31 January 2008. (Armidale Mining Division).

(T08-0036)

No. 3436, TARONGA MINES LIMITED (ACN 126 854 288), area of 5 units, for Group 1, dated 1 February 2008. (Inverell Mining Division).

(T08-0037)

No. 3437, ROBERT PATRICK HEWETT, area of 4 units, for Group 1 and Group 6, dated 1 February 2008. (Singleton Mining Division).

(T08-0038)

No. 3438, GRADIENT ENERGY AUSTRALIA PTY LTD (ACN 128 437 507), area of 439 units, for Group 8, dated 4 February 2008. (Singleton Mining Division).

(T08-0039)

No. 3439, ALLIANCE (NSW) PTY LTD, area of 8 units, for Group 1, dated 5 February 2008. (Broken Hill Mining Division).

(T08-0040)

No. 3440, ST BARBARA LIMITED (ACN 009 165 066), area of 100 units, for Group 1, dated 5 February 2008. (Orange Mining Division).

MINING LEASE APPLICATION

(T08-0004)

No. 314, RESOURCE PACIFIC LIMITED (ACN 106 177 708), area of about 65.8 hectares, for the purpose of any road, railway, tramway, bridge or jetty, dated 31 January 2008. (Singleton Mining Division).

IAN MACDONALD, M.L.C.,
Minister for Mineral Resources.

NOTICE is given that the following applications have been granted:

EXPLORATION LICENCE APPLICATIONS

(07-243)

No. 3140, now Exploration Licence No. 7046, STANDARD MINES PTY LTD (ACN 125 577 451), Counties of Menindee and Windeyer, Map Sheet (7132), area of 204 units, for Group 1, dated 25 January 2008, for a term until 25 January 2010.

(07-254)

No. 3151, now Exploration Licence No. 7047, STANDARD MINES PTY LTD (ACN 125 577 451), Counties of Young and Yungnulgra, Map Sheet (7535), area of 9 units, for Group 1, dated 25 January 2008, for a term until 25 January 2010.

(07-268)

No. 3165, now Exploration Licence No. 7048, STANDARD MINES PTY LTD (ACN 125 577 451), Counties of Barrona and Landsborough, Map Sheet (7837), area of 32 units, for Group 1, dated 25 January 2008, for a term until 25 January 2010.

(07-269)

No. 3166, now Exploration Licence No. 7049, STANDARD MINES PTY LTD (ACN 125 577 451), County of Tongowoko, Map Sheet (7339), area of 43 units, for Group 1, dated 25 January 2008, for a term until 25 January 2010.

IAN MACDONALD, M.L.C.,
Minister for Mineral Resources.

NOTICE is given that the following applications have been withdrawn:

MINING LEASE APPLICATIONS

(T08-0002)

Orange No. 312, MOOLARBEN COAL MINES PTY LIMITED (ACN 108 601 672), Parish of Moolarben, County of Phillip; and Parish of Wilpinjong, County of Phillip, (8833-2-N). Withdrawal took effect on 25 January 2008.

(T08-0003)

Orange No. 313, MOOLARBEN COAL MINES PTY LIMITED (ACN 108 601 672), Parish of Moolarben, County of Phillip, (8833-2-N, 8833-3-N). Withdrawal took effect on 25 January 2008.

IAN MACDONALD, M.L.C.,
Minister for Mineral Resources.

NOTICE is given that the following applications for renewal have been received:

(C92-0624)

Petroleum Exploration Licence No. 238, EASTERN STAR GAS LIMITED (ACN 094 269 780), area of 121 blocks. Application for renewal received 25 June 2007.

(T87-0419)

Exploration Licence No. 4192, NEWNES KAOLIN PTY LTD (ACN 065 564 794), area of 3 units. Application for renewal received 1 February 2008.

(T01-0199)

Exploration Licence No. 5928, WALLARAH MINERALS PTY LTD (ACN 002 503 399), area of 5 units. Application for renewal received 30 January 2008.

(T03-0856)

Exploration Licence No. 6190, VIDORO PTY LTD (ACN 094 217 482), area of 15 units. Application for renewal received 4 February 2008.

(04-544)

Exploration Licence No. 6372, CHALLENGER MINES LTD (ACN 090 166 528), area of 41 units. Application for renewal received 1 February 2008.

(05-200)

Exploration Licence No. 6509, AUZEX RESOURCES LIMITED (ACN 106 444 606), area of 23 units. Application for renewal received 26 January 2008.

(05-267)

Exploration Licence No. 6513, MINOTAUR OPERATIONS PTY LTD (ACN 108 925 284), area of 8 units. Application for renewal received 5 February 2008.

(05-303)

Exploration Licence No. 6518, GOLDEN CROSS OPERATIONS PTY. LTD. (ACN 050 212 827), area of 139 units. Application for renewal received 1 February 2008.

(05-289)

Exploration Licence No. 6519, ZEDEX MINERALS LIMITED (ACN 107 523 428), area of 11 units. Application for renewal received 4 February 2008.

(08-922)

Consolidated Coal Lease No. 743 (Act 1973), WAMBO COAL PTY LIMITED (ACN 000 668 057), area of 3000 hectares. Application for renewal received 21 January 2008.

(08-844)

Mining Lease No. 1195 (Act 1973), ADE ENVIRONMENTAL PTY LTD (ACN 111 779 232), area of 1.89 hectares. Application for renewal received 24 January 2008.

(08-924)

Mining Lease No. 1402 (Act 1992), WAMBO COAL PTY LIMITED (ACN 000 668 057), area of 352 hectares. Application for renewal received 21 January 2008.

IAN MACDONALD, M.L.C.,
Minister for Mineral Resources.

RENEWAL OF CERTAIN AUTHORITIES

NOTICE is given that the following authorities have been renewed:

(C93-0338)

Petroleum Exploration Licence No. 8, EASTERN STAR GAS LIMITED (ACN 094 269 780), area of 76 blocks, for a further term until 24 June 2009. Renewal effective on and from 5 November 2007.

(C01-0006)

Petroleum Exploration Licence No. 437, PANGAEA OIL & GAS PTY LIMITED (ACN 068 812 171), area of 105 blocks, for a further term until 6 May 2010. Renewal effective on and from 7 December 2007.

(06-3543)

Exploration Licence No. 2033, CLIMAX AUSTRALIA PTY LIMITED (ACN 002 164 598), County of Bathurst, Map Sheet (8630, 8730), area of 42 units, for a further term until 6 July 2009. Renewal effective on and from 1 February 2008.

(T92-0204)

Exploration Licence No. 4459, CENTRAL WEST GOLD NL (ACN 003 078 591), County of Gough, Map Sheet (9239), area of 1 units, for a further term until 3 December 2009. Renewal effective on and from 31 January 2008.

(T98-1223)

Exploration Licence No. 5652, TRI ORIGIN MINERALS LTD (ACN 062 002 475), Counties of Argyle and Murray, Map Sheet (8827), area of 5 units, for a further term until 5 December 2009. Renewal effective on and from 1 February 2008.

(T07-7935)

Exploration Licence No. 5654, CAPITAL MINING LIMITED (ACN 104 551 171), County of Wellesley, Map Sheet (8723), area of 15 units, for a further term until 13 December 2009. Renewal effective on and from 31 January 2008.

IAN MACDONALD, M.L.C.,
Minister for Mineral Resources.

TRANSFERS

(05-2321)

Petroleum Exploration Licence No. 285 formerly held by LUCAS ENERGY PTY LIMITED (ACN 092 684 010) and MOLOPO AUSTRALIA LIMITED (ACN 003 152 154) has been transferred to LUCAS ENERGY PTY LIMITED (ACN 092 684 010) and MOLOPO (GLOUCESTER) N.L. (ACN 075 137 218). The transfer was registered on 19 November 2007.

(C93-0338)

Petroleum Exploration Licence No. 8 formerly held by EASTERN STAR GAS LIMITED (ACN 094 269 780) has been transferred to ORION PETROLEUM LIMITED (ACN 125 394 667). The transfer was registered on 7 December 2007.

(04-1597)

Petroleum Exploration Licence No. 422 formerly held by EASTERN STAR GAS LIMITED (ACN 094 269 780) has been transferred to ORION PETROLEUM LIMITED (ACN 125 394 667). The transfer was registered on 7 December 2007.

(04-2941)

Petroleum Exploration Licence No. 424 formerly held by EASTERN STAR GAS LIMITED (ACN 094 269 780) has been transferred to ORION PETROLEUM LIMITED (ACN 125 394 667). The transfer was registered on 7 December 2007.

(04-4803)

Petroleum Exploration Licence No. 455 formerly held by EASTERN STAR GAS LIMITED (ACN 094 269 780) has been transferred to ORION PETROLEUM LIMITED (ACN 125 394 667). The transfer was registered on 7 December 2007.

(06-0027)

Petroleum Exploration Licence No. 450 formerly held by GUNNEDAH GAS PTY LTD (ACN 115 880 772) has been transferred to GUNNEDAH GAS PTY LTD (ACN 115 880 772) and SANTOS QNT PTY LTD (ACN 083 077 196). The transfer was registered on 17 December 2007.

(06-4647)

Petroleum Exploration Licence No. 452 formerly held by GUNNEDAH GAS PTY LTD (ACN 115 880 772) has been transferred to GUNNEDAH GAS PTY LTD (ACN 115 880 772) and SANTOS QNT PTY LTD (ACN 083 077 196). The transfer was registered on 17 December 2007.

(06-4888)

Petroleum Exploration Licence No. 427 formerly held by COMET RIDGE LTD (ACN 106 092 577) has been transferred to COMET RIDGE LTD (ACN 106 092 577) and EASTERN STAR GAS LIMITED (ACN 094 269 780). The transfer was registered on 21 December 2007.

(04-2339)

Petroleum Exploration Licence No. 428 formerly held by COMET RIDGE LTD (ACN 106 092 577) and DAVIDSON PROSPECTING PTY LTD (ACN 060 258 031) has been transferred to COMET RIDGE LTD (ACN 106 092 577), DAVIDSON PROSPECTING PTY LTD (ACN 060 258 031) and EASTERN STAR GAS LIMITED (ACN 094 269 780). The transfer was registered on 21 December 2007.

(06-4888)

Petroleum Exploration Licence No. 427 formerly held by COMET RIDGE LTD (ACN 106 092 577) and EASTERN STAR GAS LIMITED (ACN 094 269 780) has been transferred to COMET RIDGE LTD (ACN 106 092 577) and ORION PETROLEUM LIMITED (ACN 125 394 667). The transfer was registered on 24 December 2007.

(04-2339)

Petroleum Exploration Licence No. 428 formerly held by COMET RIDGE LTD (ACN 106 092 577), DAVIDSON PROSPECTING PTY LTD (ACN 060 258 031) and EASTERN STAR GAS LIMITED (ACN 094 269 780) has been transferred to COMET RIDGE LTD (ACN 106 092 577), DAVIDSON PROSPECTING PTY LTD (ACN 060 258 031) and ORION PETROLEUM LIMITED (ACN 125 394 667). The transfer was registered on 24 December 2007.

(05-201)

Exploration Licence No. 6455, formerly held by COLUMBINE RESOURCES PTY LTD (ACN 110 711 656) has been transferred to LUCKNOW GOLD LTD (ACN 123 714 910). The transfer was registered on 1 February 2008.

(06-4114)

Exploration Licence No. 6671, formerly held by PLATSEARCH NL (ACN 003 254 395) has been transferred to EASTERN IRON LIMITED (ACN 126 678 037) AND PLATSEARCH NL (ACN 003 254 395). The transfer was registered on 31 January 2008.

IAN MACDONALD, M.L.C.,
Minister for Mineral Resources.

CATTLE TICK MINISTERIAL ADVISORY COMMITTEE

Appointment of Members and Chairperson

I, IAN MACDONALD, M.L.C., Minister for Primary Industries, appoint the persons named in column A of the Schedule below as the position described in column B for the period in column C to the Cattle Tick Ministerial Advisory Committee.

SCHEDULE

Column A	*Column B*	*Column C*
Nicholas Henry KEATINGE	Chairperson	4 years
Terrance James TOOHEY	Member	4 years
Jessica Fleur TONGE	Member	4 years
Malcolm Charles REID	Member	2 years
John David WILLEY	Member	2 years
Patricia Anne HOLT	Member	2 years

Dated this 20th day of December 2007.

IAN MACDONALD, M.L.C.,
Minister for Primary Industries

EXHIBITED ANIMALS PROTECTION ACT 1986

Appointment of Member
Exhibited Animals Advisory Committee

I, IAN MACDONALD, M.L.C., Minister for Primary Industries, pursuant to section 6 (4) (c) of the Exhibited Animals Protection Act 1986, appoint Linda CRAWLEY to the Exhibited Animals Advisory Committee, for a three year term of office commencing on the date of this appointment.

Dated this 7th day of January 2007.

IAN MACDONALD, M.L.C.,
Minister for Primary Industries

NOXIOUS WEEDS ACT 1993

Appointment of Member
to Noxious Weeds Advisory Committee

I, IAN MACDONALD, M.L.C., Minister for Primary Industries, pursuant to section 58 of the Noxious Weeds Act 1993 ("the Act"),have determined that Mrs Judith RAWLING be appointed to the Noxious Weeds Advisory Committee as a community representative, for a term expiring on 30 October 2009.

Dated this 17th day of December 2007.

IAN MACDONALD, M.L.C.,
Minister for Primary Industries

RURAL ASSISTANCE ACT 1989

Appointment of Acting Chief Executive
NSW Rural Assistance Authority

I, IAN MACDONALD, M.L.C., Minister for Primary Industries, pursuant to Clause 3 of Schedule 2 to the Rural Assistance Act 1989 appoint Mr Stephen Griffith as Acting Chief Executive of the New South Wales Rural Assistance Authority from 15 February 2008 until 25 February 2008 inclusive.

Dated this 13th day of January 2008.

IAN MACDONALD, M.L.C.,
Minister for Primary Industries

STOCK DISEASES ACT 1923

Notification No. 1807

Footrot Protected and Protected (Control) Areas – Sheep

I, IAN MACDONALD, M.L.C., Minister for Primary Industries, pursuant to sections 3 (2) and 11A of the Stock Diseases Act 1923 ("the Act"):

(a) revoke Stock Diseases Notification No. 1801 published in the Special Supplement of *Government Gazette* No. 67, of 19 May 2006, pages 3158-3159, and any Notification revived as a result of this revocation;

(b) declare the lands described in Schedule A to be protected areas as regards the disease footrot in sheep (those lands are referred to as "Footrot Protected Areas", and are represented generally on the map titled "NSW Footrot Areas November 2007");

(c) declare the lands described in Schedule B to be protected (control) areas as regards the disease footrot in sheep (those lands are referred to as "Footrot Protected (Control) Areas", and are represented generally on the map titled "NSW Footrot Areas November 2007");

(d) prohibit a person from moving sheep into any protected area or protected (control) area referred to in paragraphs (b) and (c), unless:

(i) the sheep are moved in accordance with a permit under section 7 (6) of the Act; or

(ii) the sheep are moved in accordance with an order under section 8 (1) (b) of the Act; or

(iii) all the requirements of section 20C (3) of the Act have been satisfied; or

(iv) the sheep are infected with footrot but are being moved to a feedlot that:

- transports all of its stock directly to slaughter; and
- has been authorised in writing by the Director-General as a feedlot to which infected stock may be moved; or

(v) the sheep are not infected with footrot and one or more of the following conditions are satisfied:

- the sheep are transported in a vehicle from any protected area referred to in paragraph (b) directly to any other protected area referred to in paragraph (b);
- the sheep are transported in a vehicle from any protected (control) area referred to in paragraph (c) directly to any other protected (control) area referred to in paragraph (c);
- the sheep are accompanied by a completed Owner/Vendor Declaration of Footrot Freedom form, as approved by the Executive Director, Biosecurity, Compliance and Mine Safety ("the declaration"), and that declaration is given to the person to whom the sheep are delivered;

(e) declare that, unless otherwise specified, in this Notification, a reference to a Rural Lands Protection District includes all land in that District, and a reference to a Division or part of a Division of a Rural Lands Protection District includes all land in that Division or part of a Division, as defined in the Rural Lands Protection Act 1998.

SCHEDULE A

NSW Footrot Protected Areas – Sheep

North East Footrot Protected Area

The Rural Lands Protection Districts of Casino, Grafton, Kempsey and Tweed/Lismore.

New England Footrot Protected Area

The Armidale Rural Lands Protection District and Divisions A, B, C, D, I, and J of the Northern New England Rural Lands Protection District.

North West Footrot Protected Area

The Rural Lands Protection Districts of Moree, Narrabri, Northern Slopes and Tamworth.

Orana Footrot Protected Area

The Rural Lands Protection Districts of Coonabarabran, Coonamble, Dubbo, Mudgee/Merriwa, Nyngan and Walgett

Central West Footrot Protected Area

The Rural Lands Protection Districts of Condobolin, Forbes, Molong, Young and Division A of the Central Tablelands Rural Lands Protection District.

Hunter Footrot Protected Area

The Rural Lands Protection Districts of Gloucester, Hunter and Maitland.

South East Footrot Protected Area

The Rural Lands Protection Districts of Bombala, Braidwood, Cooma, Goulburn, Moss Vale, South Coast and Yass.

Riverina Footrot Protected Area

The Rural Lands Protection Districts of Hay, Riverina, Narrandera, Murray and Wagga Wagga, and Division A, and the parts of Divisions C and D that are within the Kosciuszko National Park, of the Gundagai Rural Lands Protection District, and the part of Division F that is within the Kosciuszko National Park, of the Hume Rural Lands Protection District.

Western Division Footrot Protected Area

The Rural Lands Protection Districts of Balranald, Bourke, Brewarrina, Broken Hill, Cobar, Hillston, Milparinka, Wanaaring, Wentworth and Wilcannia.

SCHEDULE B

NSW Footrot Protected (Control) Areas – Sheep

New England Footrot Protected (Control) Area

Divisions E, F, G and H of the Northern New England Rural Lands Protection District.

Central West Footrot Protected (Control) Area

Divisions B, C, D, E, F, G and H of the Central Tablelands Rural Lands Protection District.

Riverina Footrot Protected (Control) Area

Division B, and the parts of Divisions C and D that are not within the Kosciuszko National Park, of the Gundagai Rural Lands Protection District, and Divisions A, B, C, D, E, G and H, and the part of Division F that is not within the Kosciuszko National Park, of the Hume Rural Lands Protection District.

Notes

It is an offence under section 20H (1) (a) of the Act to contravene a provision of this Notification.

Maximum penalty for such an offence is $11,000.

A Protected (Control) Area is an area with a moderate prevalence of a disease (section 11A (1A) of the Act). This is different to a Protected area, where there is a lower prevalence of a disease (section 11A (1B) of the Act).

A map of the Protected Areas and the Protected (Control) Areas with respect to footrot in sheep and goats is published on the NSW Department of Primary Industries internet website at http://www.dpi.nsw.gov.au/agriculture/livestock/sheep/health/footrot/map.

A person who receives a completed Owner/Vendor Declaration of Footrot Freedom form is advised to retain it as evidence of compliance with this Notification.

Notification No. 1807 is the NSW Department of Primary Industries' reference.

For further information, contact the NSW Department of Primary Industries on (02) 63913248.

Dated this 28th day of December 2007.

IAN MACDONALD, M.L.C.,
Minister for Primary Industries

STOCK DISEASES ACT 1923

Notification No. 1808

Footrot Protected and Protected (Control) Areas – Goats

I, IAN MACDONALD, M.L.C., Minister for Primary Industries, pursuant to sections 3 (2) and 11A of the Stock Diseases Act 1923 ("the Act"):

(a) revoke Stock Diseases Notification No. 1802 published in the Special Supplement of *Government Gazette* No. 67, of 19 May 2006, pages 3159 - 3161, and any Notification revived as a result of this revocation;

(b) declare the lands described in Schedule A to be protected areas as regards the disease footrot in goats (those lands are referred to as "Footrot Protected Areas", and are represented generally on the map titled "NSW Footrot Areas November 2007");

(c) declare the lands described in Schedule B to be protected (control) areas as regards the disease footrot in goats (those lands are referred to as "Footrot Protected (Control) Areas", and are represented generally on the map titled "NSW Footrot Areas November 2007");

(d) prohibit a person from moving goats into any protected area or protected (control) area referred to in paragraphs(b) and (c), unless:

(i) the goats are moved in accordance with a permit under section 7 (6) of the Act; or

(ii) the goats are moved in accordance with an order under section 8 (1) (b) of the Act; or

(iii) all the requirements of section 20C (3) of the Act have been satisfied; or

(iv) the goats are infected with footrot but are being moved to a feedlot that:

- transports all of its stock directly to slaughter; and

- has been authorised in writing by the Director-General as a feedlot to which infected stock may be moved; or

(v) the goats are not infected with footrot and one or more of the following conditions are satisfied:

- the goats are transported in a vehicle from any protected area referred to in paragraph (b) directly to any other protected area referred to in paragraph (b);
- the goats are transported in a vehicle from any protected (control) area referred to in paragraph (c) directly to any other protected (control) area referred to in paragraph (c);
- the goats are accompanied by a completed Owner/Vendor Declaration of Footrot Freedom form, as approved by the Executive Director, Biosecurity, Compliance and Mine Safety ("the declaration"), and that declaration is given to the person to whom the goats are delivered;

(e) declare that, unless otherwise specified, in this Notification, a reference to a Rural Lands Protection District includes all land in that district, and a reference to a Division or part of a Division of a Rural Lands Protection District includes all land in that Division or part of a Division. Rural Lands Protection Districts are established under the Rural Lands Protection Act 1998.

SCHEDULE A

NSW Footrot Protected Areas – Goats

North East Footrot Protected Area

The Rural Lands Protection Districts of Casino, Grafton, Kempsey and Tweed/Lismore.

New England Footrot Protected Area

The Armidale Rural Lands Protection District and Divisions A, B, C, D, I, and J of the Northern New England Rural Lands Protection District.

North West Footrot Protected Area

The Rural Lands Protection Districts of Moree, Narrabri, Northern Slopes and Tamworth.

Orana Footrot Protected Area

The Rural Lands Protection Districts of Coonabarabran, Coonamble, Dubbo, Mudgee/Merriwa, Nyngan and Walgett

Central West Footrot Protected Area

The Rural Lands Protection Districts of Condobolin, Forbes, Molong, Young and Division A of the Central Tablelands Rural Lands Protection District.

Hunter Footrot Protected Area

The Rural Lands Protection Districts of Gloucester, Hunter and Maitland.

South East Footrot Protected Area

The Rural Lands Protection Districts of Bombala, Braidwood, Cooma, Goulburn, Moss Vale, South Coast and Yass.

Riverina Footrot Protected Area

The Rural Lands Protection Districts of Hay, Riverina, Narrandera, Murray and Wagga Wagga, and Division A, and the parts of Divisions C and D that are within the Kosciuszko National Park, of the Gundagai Rural Lands Protection District, and the part of Division F that is within the Kosciuszko National Park, of the Hume Rural Lands Protection District.

Western Division Footrot Protected Area

The Rural Lands Protection Districts of Balranald, Bourke, Brewarrina, Broken Hill, Cobar, Hillston, Milparinka, Wanaaring, Wentworth and Wilcannia.

SCHEDULE B

NSW Footrot Protected (Control) Areas – Goats

New England Footrot Protected (Control) Area

Divisions E, F, G and H of the Northern New England Rural Lands Protection District.

Central West Footrot Protected (Control) Area

Divisions B, C, D, E, F, G and H of the Central Tablelands Rural Lands Protection District.

Riverina Footrot Protected (Control) Area

Division B, and the parts of Divisions C and D that are not within the Kosciuszko National Park, of the Gundagai Rural Lands Protection District, and Divisions A, B, C, D, E, G and H, and the part of Division F that is not within the Kosciuszko National Park, of the Hume Rural Lands Protection District.

Notes

It is an offence under section 20H (1) (a) of the Act to contravene a provision of this Notification.

Maximum penalty for such an offence is $11,000.

A Protected (Control) Area is an area with a moderate prevalence of a disease (section 11A (1A) of the Act). This is different to a Protected area, where there is a lower prevalence of a disease (section 11A (1B) of the Act).

A map of the Protected Areas and the Protected (Control) Areas with respect to footrot in sheep and goats is published on the NSW Department of Primary Industries internet website at http://www.dpi.nsw.gov.au/agriculture/livestock/sheep/health/footrot/map.

A person who receives a completed Owner/Vendor Declaration of Footrot Freedom form is advised to retain it as evidence of compliance with this Notification.

Notification No. 1808 is the NSW Department of Primary Industries' reference.

For further information, contact the NSW Department of Primary Industries on (02) 6391 3248.

Dated this 28th day of December 2007.

IAN MACDONALD, M.L.C.,
Minister for Primary Industries

OCCUPATIONAL HEALTH AND SAFETY ACT 2000

Occupational Health and Safety Regulation 2001

Use of Plant - Design Registration Requirements in Coal Workplaces Exemption Order No 079541

I, GORDON DAVID JERVIS, Senior Inspector of Mechanical Engineering under the *Coal Mine Health and Safety Act 2002*, with the delegated authority of the Director-General pursuant to section 137A(2) of the *Occupational Health and Safety Act 2000* (the Act) and pursuant to clause 348 of the *Occupational Health and Safety Regulation 2001* (the Regulation), hereby make the Exemption Order specified in the Schedule below.

Words and expressions used in this Order have the same meaning as those used in the Act and the Regulation.

This Exemption Order has effect from the date of publication in the Government Gazette until 30 December 2009.

SCHEDULE – Order 079541

1.0 Exemptions

Subject to the conditions and for the period specified in clause 2.0, this Order exempts employers and self-employed persons at coal workplaces from complying with the requirements of clause 136(1) (as applied by clause 9(13) of Schedule 4A) of the Regulation in relation to plant of a type specified in clause 2.0.

2.0 Application, conditions and duration of exemptions

2.1 This exemption only applies to braking systems (used in underground transport in an underground mine at a coal workplace) on 913 load haul dump (LHD) mobile plant in compliance with previous approval number MDA DEV 13, file M84/6176 as amended.

2.2 Each braking system must comply with all applicable conditions of approval as specified in MDA DEV 13 as amended.

2.3 Each braking system must be operated, maintained and repaired in accordance with the recommendations of Sandvik Mining and Construction Tomago Pty Ltd (Sandvik) or as otherwise recommended and documented in writing by a competent person in accordance with clauses 128, 136 and 137 of the Regulation.

2.4 Without limiting the requirements of clause 2.3, each braking system must be serviced in accordance with the Sandvik 913 LHD service schedule requirements (as specified in Table 1).

Table 1 – Sandvik service schedule requirements

913 LHD - Service Schedule	Minimum Sandvik requirements
10 hours or daily	JSEA 913 1.01
50 hours or weekly	JSEA 913 1.05
250 hours or monthly	JSEA 913 1.06
500 hours or 3 monthly	JSEA 913 1.07

1000 hours or 6 monthly	JSEA 913 1.08
2000 hours or 12 monthly	JSEA 913 1.10
3000 hours or 18 monthly	JSEA 913 1.11
5000 hours or 30 monthly	JSEA 913 1.10

2.5 913 LHD mobile plant fitted with 'LCB' (liquid cooled brake) type braking systems must not be used on any grade in excess of 1:7 (14.3%) unless;

2.5.1 being used for a specific application, and

2.5.2 Sandvik confirm in writing the specific 913 LHD is 'safe to use' on the specified grade for the specific application, and

2.5.3 any requirements for safe use specified by Sandvik are complied with.

2.6 913 LHD mobile plant fitted with pressure released (POSI-STOP) type braking systems must not be used on any grade in excess of 1:4 (25%).

2.7 On or before the 30 September 2009 each braking system must comply with;

2.7.1 all applicable approval documents (as specified in Table 2), and

2.7.2 all applicable Sandvik Technical Bulletins (as specified in Table 3), and

2.7.3 All actions arising from the Sandvik risk assessment RA0011 (as specified in Table 4)

Table 2 – Applicable approval documents

Approval Document	Description of Changes to Braking System	LCB Brake System	Posi-Stop Brake System
Supplementary Approval MDA DEV 13/2, (File 07/0496, dated 22nd December 2006)	Use of 913 LHD with 14T Gravel Trailer	Applicable	Not Applicable
Supplementary Approval MDA DEV 13/1, (File X84/6176, 06/2569, dated 31st March 2006)	Changes to 'Posi-Stop' brake system: • Addition of secondary brake dump valve • Alterations to the transmission isolate valve and pilot line • Change to the service brake valve • Optional auto brake valve to apply the brakes when the engine safety circuit shuts down the DES. 'LCB' brake system: Alterations to the transmission isolate valve and pilot line • Change to the park brake dump valve • Change to the park brake valve • Fitting a spring applied transmission mounted park brake (Jarvie Park brake)	Applicable	Applicable
Supplementary Approval MDA DEV 13 Issue M5013-5, (File M84/6176, dated 12th January 1997)	Substitute roller door interlock valve Automatic brake delay of less than 1.4 seconds	Applicable	Applicable
Supplementary Approval MDA DEV 13, (File M84/6176, dated 4th August 1995)	Use of a park brake door interlock system and automatic brakes	Applicable	Applicable
Supplementary Approval MDA	Existing axles with Clark "Posi-Stop" axles	Not	Applicable

Approval Document	Description of Changes to Braking System	LCB Brake System	Posi-Stop Brake System
DEV 13, File M84/6176, dated 24th October 1994	incorporating fail-safe brakes.	Applicable	
Notice of Approval MDA DEV 13, File M.84-6176, dated 14th February 1985.	Type Approval for 913 Load Haul Dump	Applicable	Applicable

Table 3 – Applicable Sandvik Technical Bulletins

Technical Bulletin	Date	Description	LCB Brake System	Posi-Stop Brake System
0701	17-Jan-07	Spring applied park brake on 913 failure to hold	Applicable	Not Applicable
0630	30-Oct-06	Transmission Isolate Valve setting for 913 LHD's	Applicable	Not Applicable
0626	21-Sep-06	Brake and Steering Pressure Filter	Applicable	Applicable
0613	28-Jun-06	Transport Braking System Approval for 913 LHD	Applicable	Applicable
0603	15-Feb-06	Transmission isolate valve, park brake dump valve, secondary brake dump valve (2)	Applicable	Applicable
0514	23-Sep-05	Transmission isolate valve, park brake dump valve, secondary brake dump valve	Applicable	Applicable
0501	15-Feb-05	913 Park Brake Failure to Operate	Applicable	Not Applicable
0211	06-Dec-02	913 Park Brake Failure to Operate (4)	Applicable	Not Applicable
0210	15-Nov-02	913 Park Brake Failure to Operate (3)	Applicable	Not Applicable
0109	02-Aug-01	913 Runaway due to Park Brake Failure to Operate (2)	Applicable	Not Applicable
0107	02-Aug-01	913 Runaway due to Park Brake Failure to Operate	Applicable	Not Applicable
9701	30-Jan-97	Hydraulic Park Brake Valve A2U900-594285	Applicable	Applicable
9504	20-Jul-95	Park Brake / Door Interlock excluding m/c's w / Posi-Stop brakes and m/c's with man riding hydraulics	Applicable	Not Applicable

Table 4 – Actions arising from the Sandvik risk assessment RA0011

Description of action	LCB Brake System	Posi-Stop Brake System
Second return tank line	Applicable	Applicable
Braking nameplate	Applicable	Applicable
In-service braking requirements	Applicable	Applicable
In-service brake test procedure	Applicable	Applicable
TB9701 re mounting of park brake valve	Applicable	Applicable
TB0211, TB0701 regarding park brake inspection and maintenance	Applicable	Not Applicable
TB0630 regarding setting of transmission isolate valve	Applicable	Not Applicable

2.8 Each braking system must be inspected, tested and maintained by competent people with appropriate training, qualifications, experience and knowledge of the risk controls on the braking system.

2.9 The Coal Operator must ensure that the Underground Transport Management Plan (under the *Coal Mine Health and Safety Regulation 2006*) incorporates provisions to ensure site operational parameters do not exceed safe operational parameters of the braking system.

2.10 The Mechanical Engineering Management Plan (under the *Coal Mine Health and Safety Regulation 2006*) must provide for systems for the safe use of the each braking system when in use at a coal workplace.

2.11 The exemptions made by this Order only have effect until (and including) 30 December 2009.

2.12 A copy of this exemption order must be held at the coal workplace where the specified braking system is being used and must be;

2.12.1 given to all persons employed at the coal workplace in accordance with any consultation arrangements, and

2.12.2 displayed on an employee notice board for a period of 28 days, and

2.12.3 kept is a plant safety file for each 913 LHD

Note:

After expiry of this exemption, the normal requirements for registration with the relevant entity will apply.

Dated this 5th day of February 2008.

GORDON DAVID JERVIS
Senior Inspector of Mechanical Engineering
Department of Primary Industries

Roads and Traffic Authority

ROAD TRANSPORT (GENERAL) ACT 2005

Notice under Clause 20 the Road Transport (Mass, Loading and Access) Regulation 2005

SHOALHAVEN CITY COUNCIL, in pursuance of Division 4 of Part 2 of the Road Transport (Mass, Loading, Access) Regulation 2005, by this Notice, specify the routes and areas on or in which 25 metre B-Doubles may be used subject to any requirements or conditions set out in the Schedule.

RUSSELL PIGG,
General Manager,
Shoalhaven City Council
(by delegation from the Minister for Roads)
18 January 2008

SCHEDULE

1. Citation

This Notice may be cited as Shoalhaven City Council 25 Metre B-Double route Notice No. 1/2008.

2. Commencement

This Notice takes effect on the date of gazettal.

3. Effect

This Notice remains in force until 30 September 2010 unless it is amended or repealed earlier.

4. Application

This Notice applies to those 25 metre B-Double vehicles which comply with Schedule 1 of the Road Transport (Mass, Loading and Access) Regulation 2005 and Schedule 2 of the Road Transport (Vehicle Registration) Regulation 2007.

5. Routes

Type	*Road No.*	*Road Name*	*Starting Point*	*Finishing Point*	*Conditions*
25		Cumberland Avenue, South Nowra	Tom Thumb Avenue	Driveway exit of Borg Manufacturing Pty Ltd	Extension of existing route
25		Trim Street, South Nowra	Norfolk Avenue	Cumberland Avenue	
25		Norfolk Avenue, South Nowra	Tom Thumb Avenue	Trim Street	Extension of existing route

ROAD TRANSPORT (GENERAL) ACT 2005

Notice under Clause 20 the Road Transport (Mass, Loading and Access) Regulation 2005

SHOALHAVEN CITY COUNCIL, in pursuance of Division 4 of Part 2 of the Road Transport (Mass, Loading, Access) Regulation 2005, by this Notice, specify the routes and areas on or in which 19 metre B-Doubles may be used subject to any requirements or conditions set out in the Schedule.

RUSSELL PIGG,
General Manager,
Shoalhaven City Council
(by delegation from the Minister for Roads)
18 January 2008

SCHEDULE

1. Citation

This Notice may be cited as Shoalhaven City Council 19 Metre B-Double route Notice No. 01/2008.

2. Commencement

This Notice takes effect on the date of gazettal.

3. Effect

This Notice remains in force until 30 September 2010 unless it is amended or repealed earlier.

4. Application

This Notice applies to those 19 metre B-Double vehicles where gross weight exceeds 50 tonnes which comply with Schedule 1 of the Road Transport (Mass, Loading and Access) Regulation 2005 and Schedule 2 of the Road Transport (Vehicle Registration) Regulation 2007.

5. Routes

Type	*Road No.*	*Road Name*	*Starting Point*	*Finishing Point*	*Conditions*
19		Yalwal Road, South Nowra	George Evans Road	Longreach Road	To be reassessed January 2009
19		Longreach Road, Longreach	Yalwal Road	Wogamia Road	To be reassessed January 2009
19		Wogamia Road, Longreach	Longreach Road	Soilco Pty Ltd	To be reassessed January 2009

ROAD TRANSPORT (GENERAL) ACT 2005

Notice under Clause 20 the Road Transport (Mass, Loading and Access) Regulation 2005

CABONNE SHIRE COUNCIL, in pursuance of Division 4 of Part 2 of the Road Transport (Mass, Loading, Access) Regulation 2005, by this Notice, specify the routes and areas on or in which 25 metre B-Doubles may be used subject to any requirements or conditions set out in the Schedule.

General Manager
Cabonne Shire Council
(by delegation from the Minister for Roads)
6 February 2008

SCHEDULE

1. Citation

This Notice may be cited as the Cabonne Shire Council 25 Metre B-Double route Notice No. 1/2008

2. Commencement

This Notice takes effect on date of gazettal.

3. Effect

This Notice remains in force until 30 September 2010 unless it is amended or repealed earlier.

4. Application

This Notice applies to those 25 metre B-Double vehicles which comply with Schedule 1 of the Road Transport (Mass, Loading and Access) Regulation 2005 and Schedule 2 of the Road Transport (Vehicle Registration) Regulation 2007.

5. Routes

Type	*Road No.*	*Road Name*	*Starting Point*	*Finishing Point*	*Conditions*
25	210	Paytens Bridge Road, Cabonne Shire	Entry to Gundamain Feedlot	Property entrance 100 metres north of Paytens Bridge	80 kph speed limit applies for B-Doubles

ROADS ACT 1993

Order – Sections 46, 49, 54 and 67

Gundagai Shire Council Area

Declaration as a Controlled Access Road of part of the Hume Highway at Tumblong

I, the Minister for Roads, pursuant to Sections 46, 49, 54 and 67 of the Roads Act, 1993, by this order -

1. dedicate as public road the land described in Schedules 1 and 2 under;

2. declare to be a main road the said public road described in Schedule 2 and the public road described in Schedule 3 under;

3. declare to be a controlled access road the said main road described in Schedules 2 and 3;

4. declare that access to the said controlled access road is restricted; and

5. specify in Schedule 4 under, the points along the controlled access road at which access may be gained to or from other public roads.

HON ERIC ROOZENDAAL MLC
MINISTER FOR ROADS

SCHEDULE 1

ALL those pieces or parcels of land situated in the Gundagai Shire Council area, Parish of Bangus and County of Wynyard shown as:

Lot 1 Deposited Plan 625471; and

Lots 22 to 26 inclusive, Deposited Plan 260149.

The above Lots are all shown on RTA Plan 0002 178 AC 4007.

SCHEDULE 2

ALL those pieces or parcels of land situated in the Gundagai Shire Council area, Parish of Bangus and County of Wynyard, shown as:

Lots 12 to 17 inclusive, Deposited Plan 260152;

Lot 51 Deposited Plan 629688;

Lots 6 to 9 inclusive, Deposited Plan 260150;

Lots 22 to 32 inclusive, Deposited Plan 260151; and

Lots 14 to 21 inclusive, Deposited Plan 260149.

The above Lots are all shown on RTA Plan 0002 178 AC 4007.

SCHEDULE 3

ALL those pieces or parcels of public road situated in the Gundagai Shire Council area, Parish of Bangus and County of Wynyard, shown as:

Lots 18 and 19 Deposited Plan 260152;

Lot 10 Deposited Plan 260150;

Lot 33 Deposited Plan 260151; and

Lots 27 and 28 Deposited Plan 260149.

The above Lots are all shown on RTA Plan 0002 178 AC 4007.

SCHEDULE 4

Between the points A and B;

between the points C and D; and

between the points E and F, all shown on RTA Plan 0002 178 AC 4007.

(RTA Papers 2/178.1192)

ROADS ACT 1993

Notice of Dedication of Land as Public Road
at Halcombe Hill in the Upper Hunter Shire Council area

THE Roads and Traffic Authority of New South Wales, by its delegate, dedicates the land described in the schedule below as public road under section 10 of the Roads Act 1993.

T D Craig
Manager, Compulsory Acquisition & Road Dedication
Roads and Traffic Authority of New South Wales

SCHEDULE

ALL those pieces or parcels of land situated in the Upper Hunter Shire Council area, Parish of Strathearn and County of Brisbane, shown as Lots 12 to 21 inclusive Deposited Plan 1094398.

(RTA Papers: 9/399.112)

ROADS ACT 1993

LAND ACQUISITION (JUST TERMS COMPENSATION) ACT 1991

Notice of Compulsory Acquisition of Land at Hazelbrook in the Blue Mountains City Council area

The Roads and Traffic Authority of New South Wales by its delegate declares, with the approval of Her Excellency the Governor, that the land described in the schedule below is acquired by compulsory process under the provisions of the Land Acquisition (Just Terms Compensation) Act 1991 for the purposes of the Roads Act 1993.

T D Craig
Manager, Compulsory Acquisition & Road Dedication
Roads and Traffic Authority of New South Wales

SCHEDULE

ALL that piece or parcel of land situated in the Blue Mountains City Council area, Parish of Woodford and County of Cook, shown as Lot 48 Deposited Plan 1090398, being part of the land in Certificate of Title 4/16018.

The land is said to be in the possession of Maxwell Major Dyhrberg and Suzanne May Dyhrberg (registered proprietors) and Commonwealth Bank of Australia (mortgagee).

(RTA Papers: FPP 7M3410; RO 5/44.12390)

ROADS ACT 1993

Order – Section 257

ERRATUM

THE Roads and Traffic Authority of New South Wales, by this order under Section 257 of the Roads Act 1993, corrects an error in the notice published in Government Gazette NO 12 of 1 February 2008 on page 458 under the heading "Notice of Dedication of Land as Public Road at Curl Curl, Forestville, Narrabeen, Belrose and Terrey Hills in the Warringah Council area" by:

deleting from the schedule of the said notice the following land description;

Description of Land					Title
4 ¾ perches	shown on DP 436037				C.T. Vol. 6310 Fol. 48
		Lot 1		DP 383705	C.T. Vol. 5431 Fol. 215

and inserting in lieu thereof the land description below;

Description of Land					Title
4 ¾ perches	shown on DP 436037				C.T. Vol. 5431 Fol. 215
		Lot 1		DP 383705	C.T. Vol. 6106 Fol. 27

T D Craig
Manager, Compulsory Acquisition and Road Dedication
Roads and Traffic Authority of New South Wales

(RTA Papers: FPP 8M129; RO 479.11056)

Department of Water and Energy

PIPELINES ACT 1967

Notification of Vesting of Easements

Kooragang Island Nitric Acid Export Pipeline

Pipeline Licence No. 31

I, IAN MICHAEL MACDONALD, Minister for Energy, pursuant to the provisions of sections 21 and 61 of the Pipelines Act 1967, hereby declare that the easements over the lands described in Schedule 1 hereto are vested in Orica Australia Pty Ltd (ABN 99 004 117 828) for the purposes of and incidental to the construction and operation of a pipeline subject to the restrictions as to user set out in Schedule 2 hereto.

Dated this thirty-first day of January 2008.

IAN MACDONALD, M.L.C.,
Minister for Energy

SCHEDULE 1

Lands Affected by Easements for Pipeline

All those pieces or parcels of land described as "Pipeline Easement" on the Deposited Plan 1108923 lodged and registered at the Sydney office of Land and Property Information NSW.

SCHEDULE 2

Restrictions as to User

Without affecting the generality of any requirement imposed by the Pipelines Act 1967 or regulations thereunder, the owner or occupier of the land over which there is an easement for pipeline must not use the land except in accordance with the restrictions detailed in the easement for pipeline registered on the title to the land.

PIPELINES ACT 1967

Instrument of Grant of Pipeline Licence

Licence No. 31

ORICA AUSTRALIA PTY LIMITED (ABN 99 004 117 828), having its registered office at 1, Nicholson Street, East Melbourne Victoria 3002 and having been granted a permit under section 8 of the Pipelines Act 1967 (hereinafter called "the Act") on 30 March 2005, has applied in accordance with the provisions of section 12 of the Pipelines Act 1967 (hereinafter called "the Act") and Pipeline Regulation 2005 (hereinafter called "the Regulation") for a Licence to operate a pipeline to convey Nitric Acid between Orica Kooragang Island Plant and the Newcastle Ports Corporation Kooragang Island Wharf K2 (hereinafter called Licence No. 31), and has agreed at Annexure A to accept the Licence and the provisions and conditions attached thereto.

This application complies with the provisions of the Act and Regulation and therefore I, Ian Macdonald, M.L.C., Minister for Energy, do grant Licence No. 31 effective from my signing of this Licence.

The lands affected by the pipeline licence area are indicated on Deposited Plan No. 1108923 including associated instruments, lodged and registered at the Sydney office of Land and Property Information NSW.

This Licence is granted subject to the requirements of and conditions set forth in Annexure B.

Signed at Sydney, New South Wales this thirty-first day of January 2008.

IAN MACDONALD, M.L.C.,
Minister for Energy

Other Notices

ANTI-DISCRIMINATION ACT 1977

Exemption Order

UNDER the provisions of section126 of the Anti Discrimination Act 1977 (NSW), and on the recommendation of the Anti Discrimination Board, but for the purposes only of meeting the Applicants' legal obligations pursuant to Manufacturing Licence Agreements and Technical Assistance Agreements, as defined in the United States International Traffic in Arms Regulations and Export Administration Regulations ("the US Regulations"), the Applicants are granted an exemption from the provisions of sections 7, 8, 9, 10, 51 and 52 of the Anti Discrimination Act 1977 to the extent necessary to permit the Applicants to:

(a) ask present and future employees and contractors to advise their exact citizenship (including any dual citizenship) and/or residency status under Australian law.

(b) require present and future employees and contractors to wear a Boeing secure badge which distinguishes between employees and contractors on the basis of whether they are employed by US, Australian or Canadian entities and on the basis of their citizenship (including any dual citizenship) and/or residency status under Australian law (but which does not otherwise reveal or store information about any employee's race, colour, nationality, descent, or ethnic, ethno-religious or national origin).

(c) restrict access to controlled technology and the performance of particular roles in the Applicant's organisations connected with the use of controlled technology to particular members of the Applicant's workforce, based on their citizenship or residency status under Australian law.

This Exemption Order does not extend to any other identification, collection, storage or use of information in relation to any employee in respect of that employee's race, colour, nationality, descent or ethnic, ethno-religious or national origin.

Except to the extent expressly provided herein, this Exemption Order does not excuse, or purport to excuse, the Applicants from complying with their obligations pursuant to the Anti-Discrimination Act 1977 (NSW) or any other legislation or at common law.

The Applicants are required, prior to taking any action permitted by this Exemption Order, to provide all employees, and prospective employees with:

(i) Express notice that they may be adversely affected by this exemption if they are not an Australian national or if they hold dual nationality;

(ii) A reasonable explanation in plain English of the nature of any adverse effects of such action to them;

(iii) The Applicants shall provide to current employees and prospective employees (at the time of recruitment) and contractors, information about how they can apply for Australian citizenship or renounce under Australian law any other citizenship they may hold, and a reasonable opportunity to take such steps;

(iv) The Applicants are required to produce comprehensive anti-discrimination policies governing all aspects of the work and workforce, including management, and with particular regard to race discrimination;

(v) The Applicants are required to establish a concise and comprehensive dispute resolution and grievance procedure to receive, investigate and resolve discrimination complaints and grievances and, in particular, those relating to race;

(vi) The Applicants are required to ensure that all members of the workforce, including management, undertake education and training in anti-discrimination, particularly race discrimination, on an ongoing and regular basis;

(vii) The Applicants are required to fully inform the workforce, including management, of their rights under the Anti Discrimination Act 1977 (NSW) and, in particular (but not limited to) the complaints procedure under the Anti-Discrimination Act and to ensure that all members of the workforce, including management, are aware of the rights of aggrieved persons to take their complaints to the Anti-Discrimination Board and through the Administrative Decisions Tribunal;

(viii) The Applicants are required to fully inform the workforce, including management, of their rights under the Racial Discrimination Act 1975 (Cth).

The Applicants are required to inform the Anti-Discrimination Board, every six months from the date of this Exemption Order, over the one year period specified in the order, of:

- the steps they have taken to comply with the above conditions; and
- the number of employees affected by this Exemption Order, the nature of the effects of the Exemption Order, and the steps taken to redress any adverse effects on employees; and
- implementation and compliance generally with the terms of this Exemption Order.

The applicants are required to take all reasonable steps to ensure that any employees adversely affected by this exemption order, retain employment with the applicants, and do not suffer a reduction in wages, salary or opportunity for advancement.

Where prospective employees adversely affected by this Exemption Order would otherwise have been acceptable to the Applicants as employees, the Applicants are required to consider and, if feasible implement, reasonable and practicable alternatives to rejection, such as employment in other work or obtaining the necessary approvals under the US Regulations.

In this exemption order:

(a) the expression "the Applicants" means Boeing Australia Holdings Pty Ltd and any related entity as defined under section 9 of the Corporations Act; and

(b) the expression "controlled technology" means any technical data, defence service, defence article, technology or software which is the subject of export controls under the US Regulations.

This exemption is for a period of one year.

Dated this 1st day of February 2008.

JOHN HATZISTERGOS, M.P.,
Attorney General

APRENTICESHIP AND TRAINEESHIP ACT 2001

NOTICE is given of the making of a Vocational Training Order for the recognised traineeship vocation of Meat Processing.

The Order specifies a number of matters in relation to the required training for this vocation, including the term/s of training, competency outcomes and course/s of study to be undertaken.

The Order will take effect from the date of publication in the Gazette.

A copy of the Order may be inspected at any State Training Centre of the Department of Education and Training or on the Internet at http://apprenticeship.det.nsw.edu.au

---

APRENTICESHIP AND TRAINEESHIP ACT 2001

NOTICE is given of establishing a new Vocational Training Order for the recognised trade vocation of Advanced Engineering.

The Order specifies a number of matters in relation to the required training for this vocation, including the term/s of training, competency outcomes and course/s of study to be undertaken.

The Order will take effect from the date of publication in the Gazette.

A copy of the Order may be inspected at any State Training Centre of the Department of Education and Training or on the Internet at http://apprenticeship.det.nsw.edu.au

---

APRENTICESHIP AND TRAINEESHIP ACT 2001

NOTICE is given of establishing a new Vocational Training Order for the recognised traineeship vocation of Applied Fashion and Design Technology.

The Order specifies a number of matters in relation to the required training for this vocation, including the term/s of training, competency outcomes and course/s of study to be undertaken.

The Order will take effect from the date of publication in the Gazette.

A copy of the Order may be inspected at any State Training Centre of the Department of Education and Training or on the Internet at http://apprenticeship.det.nsw.edu.au

APRENTICESHIP AND TRAINEESHIP ACT 2001

NOTICE is given of the making of a Vocational Training Order for the recognised Trade vocation of Meat Processing.

The Order specifies a number of matters in relation to the required training for this vocation, including the term/s of training, competency outcomes and course/s of study to be undertaken.

The Order will take effect from the date of publication in the Gazette.

A copy of the Order may be inspected at any State Training Centre of the Department of Education and Training or on the Internet at http://apprenticeship.det.nsw.edu.au

---

BANKS AND BANK HOLIDAYS ACT 1912

Notice

I, JOHN DELLA BOSCA, Minister for Industrial Relations, in pursuance of section 19 (5) of the Banks and Bank Holidays Act 1912, in that it has been made to appear to me that circumstances relating to the incidence of equine influenza in New South Wales resulting in the cancellation of the Walcha Cup have arisen so as to make it impractical that my appointment of the afternoon of Friday, 15 February 2008, as a public half-holiday in the Walcha Council area should be observed, do, by this my notice, cancel that appointment.

Dated at Sydney, this 5th day of February 2008.

JOHN DELLA BOSCA, M.L.C.,
Minister for Industrial Relations

DISTRICT COURT ACT 1973

District Court of New South Wales

Direction

PURSUANT to section 173 of the District Court Act 1973, I direct that the District Court shall sit in its criminal jurisdiction at the place and time shown as follows:

Dubbo	10.00am	24 March 2008 (3 weeks)
Dubbo at Orange	10.00am	28 April 2008 (3 weeks)
Dubbo at Orange	10.00am	16 June 2008 (3 weeks) In lieu of 2 June 2008 (3 weeks)

Dated this 31st day of January 2008.

R. O. BLANCH,
Chief Judge

DISTRICT COURT ACT 1973

District Court of New South Wales

Direction

PURSUANT to section 32 of the District Court Act 1973, I direct that the District Court shall sit in its civil jurisdiction at the place and time shown as follows:

Dubbo	10.00am	14 April 2008 (2 weeks)

Dated this 31st day of January 2008.

R. O. BLANCH,
Chief Judge

FOOD ACT 2003

THE NSW Food Authority advises a conviction under the Food Act 2003 relating to the handling or sale of food made against OBO Trading Pty Ltd trading as OBO Fresh Chicken at shop 10-11 Ashfield Mall, Ashfield. The defendant was charged with selling chicken mince that contained the preservative sulphur dioxide. The Food Standards Code regulates the use of food additives and there in not specific permission for additives to be used in fresh meat products. The penalty imposed under the Act was $8,500 for breach of section 21 (2) and $3,470.30 professional costs awarded to the Authority. This notice is made after statutory time for appeal has elapsed.

NSW Food Authority,
PO Box 6682,
Silverwater NSW 1811

GEOGRAPHICAL NAMES ACT 1966

Notice of Proposal to Amend the Address Locality Boundary between McDougalls Hill and Gowrie within the Singleton Council Area

PURSUANT to the provisions of section 8 of the Geographical Names Act 1966, the Geographical Names Board hereby notifies that it proposes to amend the boundary between the address localities of McDougalls Hill and Gowrie within the Singleton Local Government Area as shown on map GNB3803-1-A.

Map GNB3803-1-A may be viewed at Singleton Council Administration Offices, Queen Street, Singleton and the office of the Geographical Names Board, Land and Property Information, 346 Panorama Avenue, Bathurst NSW 2795.

Details of this proposal may also be viewed and submissions lodged on the Geographical Names Board's internet site at www.gnb.nsw.gov.au. Any person wishing to make comment upon this proposal may, prior to Friday 7 March 2008, write to the Secretary of the Board with that comment.

WARWICK WATKINS,
Chairperson

Geographical Names Board
PO Box 143
Bathurst NSW 2795

GEOGRAPHICAL NAMES ACT 1966

Notice of Proposal to Amend Address Locality Boundary between Merrylands / Guildford and Granville / South Granville within the Parramatta City Council Area

PURSUANT to the provisions of section 8 of the Geographical Names Act 1966, the Geographical Names Board hereby notifies that it proposes to amend the boundary between the address localities of Merrylands / Guildford and Granville / South Granville in the City of Parramatta Local Government Area as shown on map GNB3483-2-A.

Map GNB3483-2-A may be viewed at Parramatta City Council Offices, Parramatta Library, Granville Branch, Guilford Branch and the office of the Geographical Names Board, Land and Property Information, 346 Panorama Avenue, Bathurst NSW 2795.

Details of this proposal may also be viewed and submissions lodged on the Geographical Names Board's internet site at www.gnb.nsw.gov.au. Any person wishing to make comment upon this proposal may, prior to Wednesday 12 March 2008, write to the Secretary of the Board with that comment.

WARWICK WATKINS,
Chairperson

Geographical Names Board
PO Box 143
Bathurst NSW 2795

LOCAL GOVERNMENT ACT 1993

Proclamation

M BASHIR, Governor

I, Professor Marie Bashir AC, CVO, Governor of the State of New South Wales, with the advice of the Executive Council, and in pursuance of section 397 of the Local Government Act 1993, do hereby amend any Proclamations in force constituting or varying the constitution of the Upper Hunter County Council as constituted under the said Act by varying the constitution of the Upper Hunter County Council in the manner described in the Schedule to this Proclamation.

Signed and sealed at Sydney, this 23rd day of January 2008.

By Her Excellency's Command,

The Hon PAUL LYNCH, M.P.,
Minister for Local Government

GOD SAVE THE QUEEN!

SCHEDULE

(1) The number of members to be elected by the Upper Hunter Shire Council to the Upper Hunter County Council governing body is to be increased from 2 to 3 members effective from the date of this Proclamation.

(2) The new member from the Upper Hunter County Council will be elected by the Upper Hunter Shire Council as soon as practicable after the date of this Proclamation.

(3) The new member's term of office is from the date of their election to the Upper Hunter County Council to the date appointed for the next ordinary election of the Upper Hunter County Council or until the office is otherwise vacated.

PESTICIDES ACT 1999

Pesticides Regulation 1995

Notice of Final Pesticide Use Notification Plans

IN accordance with the provisions of the Pesticides Regulation 1995, NSW Sport and Recreation's Pesticide Notification Plans have now been finalized and published for public viewing. The plans apply to all lands controlled by NSW Sport and Recreation, including 11 Sport and Recreation Centres and three Western Sydney Olympic Venues. The plans can be found on display at Reception, Sports House, Ground Floor, 6A Figtree Drive, Sydney Olympic Park NSW 2127.

Electronic copies of the plans can also be found on our website at www.dsr.nsw.gov.au

For more information please call Kevin Flynn, Properties Division (02) 4730 0000.

RURAL FIRES ACT 1997

PURSUANT to Section 82 of the Rural Fires Act 1997 as amended, the Commissioner of the NSW Rural Fire Service, following consultation with the local stakeholders, declares the following Local Bush Fire Danger Period Variation:

Area of Variation: Cudgegong FCC Incorporating: Mid-Western Regional Council

The Local Bush Fire Danger period has been revoked for the period 1 March until 31 March 2008.

During this period permits pursuant to Section 87 of the Rural Fires Act 1997 as amended will not be required for the lighting of fire for the purposes of land clearance or fire breaks.

SHANE FITZSIMMONS, AFSM,
Commissioner

SPORTING INJURIES INSURANCE ACT 1978

Order of Declaration under Section 5

IN pursuance of section 5 of the Sporting Injuries Insurance Act 1978, I declare by this order the

Australian Soccer Referees Federation (NSW Division) Incorporated.

to be a sporting organisation, for the purposes of the provisions of the Act in respect of the activity of Soccer.

Sporting Injuries Committee
Sydney, 7 January 2008.

MURRAY McLACHLAN,
Deputy Chairperson

THREATENED SPECIES CONSERVATION ACT 1995

Department of Environment and Climate Change

Notice under Section 67 (1) of approval of the *Pimelea spicata* Recovery Plan

I hereby give notice of the approval of the *Pimelea spicata* Recovery Plan.

TOM CELEBREZZE,
A/Manager, Biodiversity Conservation
Climate Change and Environment Protection Group

The *Pimelea spicata* Recovery Plan can be viewed on the following website: www.environment.nsw.gov.au

TENDERS

Department of Commerce

SUPPLIES AND SERVICES FOR THE PUBLIC SERVICE

Information in relation to the Department of Commerce proposed, current and awarded tenders is available on:

http://www.tenders.nsw.gov.au

PRIVATE ADVERTISEMENTS

COUNCIL NOTICES

CENTRAL DARLING SHIRE COUNCIL

Local Government Act 1993

Land Acquisition (Just Terms Compensation) Act 1991

Notice of Compulsory Acquisition of Land

CENTRAL DARLING SHIRE COUNCIL declares with the approval of His Excellency the Lieutenant Governor, that the land described in the Schedule below excluding only those mines or deposits of minerals in the land expressly reserved to the Crown, is acquired by compulsory process in accordance with the provisions of the Land Acquisition (Just Terms Compensation) Act 1991 for the purpose of a cemetery.

Dated at Wilcannia this 23rd day of January 2008.

T. HAZELL,
Acting General Manager

SCHEDULE

Lot 1, DP 1114450. [3751]

COFFS HARBOUR CITY COUNCIL

Roads Act 1993

Land Acquisition (Just Terms Compensation) Act 1991

Notice of Compulsory Acquisition of Land

COFFS HARBOUR CITY COUNCIL declares, with the approval of Her Excellency the Governor, that the landS described in the Schedule below, excluding any mines or deposits of minerals in the land, ARE acquired by compulsory process in accordance with the provisions of the Land Acquisition (Just Terms Compensation) Act 1991, for the purpose of a public road. Dated at Coffs Harbour this 1st day of February 2008. JASON GORDON, Acting General Manager, Coffs Harbour City Council, Locked Bag 155, Coffs Harbour NSW 2450.

SCHEDULE

Lot 10, DP 1106887; Lot 1, DP 1106917; Lot 2, DP 1106917. [3752]

COFFS HARBOUR CITY COUNCIL

Naming of Roads

NOTICE is hereby given that Coffs Harbour City Council, in pursuance of Section 162 of the Roads Act 1993, has named roads as follows:

Location	*New name*
New road off Estuary Drive, Moonee Beach	Seachange Crescent

STEPHEN SAWTELL, General Manager, Coffs Harbour City Council, Locked Bag 155, Coffs Harbour NSW 2450. [3753]

LIVERPOOL CITY COUNCIL

Roads Act 1993, Section 16 (2)

Notice of Dedication of Land as Public Road

NOTICE is hereby given by the Council of the City of Liverpool that in pursuance of section 16 (2) of the Roads Act 1993, the land as described in the Schedule below is hereby dedicated as public road.

Dated at Liverpool this 22nd day of January 2008. PHIL TOLHURST, General Manager, Liverpool City Council, 1 Hoxton Park Road, Liverpool NSW 2170.

SCHEDULE

Land 20.115 metres wide being part of the residue of Certificate of Title Vol. 738, Fol. 185 situated abutting the northern boundary of Lot 19, DP 725739. [3754]

LIVERPOOL CITY COUNCIL

Roads Act 1993, Section 10

NOTICE is hereby given that Liverpool City Council dedicates the land described in the Schedule below as public road under section 10 of the Roads Act 1993. General Manager, Liverpool City Council, Locked Bag 8064, Liverpool BC NSW 1871.

SCHEDULE

All that piece or parcel of land known as Lot 71 in DP 1076104 in Liverpool City Council, Parish of Minto, County of Cumberland and as described in Folio Identifier 71/1076104. [3755]

MAITLAND CITY COUNCIL

Naming of Public Roads

NOTICE is hereby given that Maitland City Council, in pursuance of section 162 of the Roads Act 1993 and Part 2 of The Roads (General) Regulation 2000, has approved the following new road names for gazettal:

Deposited Plan/s	*Location*	*Road Name*
DP 1113277 & DP 591149	Rutherford	Niven Parade
DP 1113277 & DP 591149	Rutherford	Fonda Avenue
DP 1113277 & DP 591149	Rutherford	Sellers Avenue
DP 591149	Rutherford	Bergman Way
DP 591149	Rutherford	Cagney Road
DP 591149	Rutherford	Hayworth Street
DP 1113277	Rutherford	Marlowe Avenue
DP 1113277	Rutherford	Dietrich Close
DP 1113277	Rutherford	Monroe Cove

The above road names were authorised by resolution of the Council on 29 January 2008. DAVID EVANS, General Manager, Maitland City Council, High Street (PO Box 220), Maitland NSW 2320. [3756]

MAITLAND CITY COUNCIL

Naming of Public Roads

NOTICE is hereby given that Maitland City Council, in pursuance of section 162 of the Roads Act 1993 and Part 2 of the Roads (General) Regulation 2000, has approved the following new road names for gazettal:

Deposited Plan	*Location*	*Road Name*
DP 1062820	Rutherford	Bramble Close
DP 1062820	Rutherford	Upfold Crescent

The above road names have been advertised and notified. No objections to the proposed names have been received during the prescribed 28 day period. DAVID EVANS, General Manager, Maitland City Council, High Street (PO Box 220), Maitland NSW 2320. [3757]

PORT MACQUARIE-HASTINGS COUNCIL

Roads Act 1993, Section 10

Dedication of Land as Public Road

NOTICE is hereby given that pursuant to section 10 of the Roads Act 1993, the Port Macquarie-Hastings Council dedicates the land owned by it as described in the Schedule below as public road. BERNARD SMITH, General Manager, Port Macquarie-Hastings Council, corner Lord and Burrawan Streets, Port Macquarie NSW 2444.

SCHEDULE

All that parcel of land described as Lot 3, Deposited Plan 1086187, Parish and County Macquarie, being situated adjoining 26 Ocean Drive, Port Macquarie.

All that parcel of land described as Lot 2, Deposited Plan 1108369, Parish Camden Haven, County Macquarie, being situated adjoining 121 Diamond Head Road, Dunbogan.

All that parcel of land described as Lot 3, Deposited Plan 1094444, Parish and County Macquarie, being situated adjoining 553 Major Innes Road, Port Macquarie.

All that parcel of land described as Lot 5, Deposited Plan 1119462, Parish and County Macquarie, being part of Ocean Drive, Port Macquarie known as "The Ring Road". [3758]

RIVERINA WATER COUNTY COUNCIL

Local Government Act 1993, Section 553

Extension of Watermains

NOTICE is hereby given pursuant to section 553 of the Local Government Act 1993, that Riverina Water County Council's water mains have been extended to service the lands described hereunder:

Wagga Wagga

Sunshine Grove Stage 3 – Mima Street: from Warambee Street, northeast for a distance of 260 metres to Bindarri Avenue. Bindarri Avenue: from Mima Street, southeast for a distance of 36 metres. Carinya Street: from Mima Street, south for a distance of 172 metres to Warambee Street. Warambee Street: from Lot 73, east for a distance of 150 metres to Carinya Sstreet.

Drawing No.: 1-3101 Jun 2007

Tatton Stage 8 & 9 – Brindabella Drive: from hydrant in front of Lot 909, south for a distance of 335 metres. Spencer Place: from Brindabella Drive, west for a distance of 72 metres. Buller Place: from Brinbabella Drive, northwest for a distance of 142 metres. Tanami Street: from Brindabella Drive, east for a distance of 182 metres to Stirling Boulevarde. Hamersley Place: from Tanami Street, south for a distance of 203 metres. Barrington Street: from Stirling Boulevard, east for a distance of 275 metres, then north for a distance of 125 metres. Wellington Avenue: from hydrant in front of Lot 20, south for a distance of 52 metres to Barrington Street.

Drawing No.: 1-3109 and 1-3045 Oct 2007

Laurel Road – Laurel Road: from east boundary of Lot 5, east for a distance of 215 metres.

Drawing No.: 1-1948 Aug 2007

Edward Street West – Moorong Street: across road from east to west, for a distance of 157 metres, then south for a distance of 91 metres to Edward Street. Edward Street: from Moorong Street, west for a distance of 680 metres to Scott Street. Scott Street: from Edward Street, north for a distance of 218 metres.

Drawing No.: 1-3100 Sep 2007

Ashfords Road – Ashfords Road: from hydrant in front of Lot 1, south for a distance of 450 metres.

Drawing No.: 1-2240 Sep 2007

Redbank Road – Veronica Place: from Redbank Road, east for a distance of 257 metres.

Drawing No.: 1-3113 Dec 2007

Rural

Henty – Sweetwater Development – Rosler Street: from Railway Parade under railway, for a distance of 65 metres. Rosler Street: From stop valve in front of Lot 13, south across street for a distance of 16.5 metres, then west for a distance of 375 metres. Allan Street: from corner of Rosler Street, north for a distance of 95 metres to lane.

Drawing No.: 3-1358 Aug 2007

The Rock North – The Rock to Collingullie Road: from southern boundary of Lot 90, north for a distance of 3773 metres. Humphries Lane: from The Rock to Collingullie Road, west for a distance of 1840 metres, then north for a distance of 565 metres, then west again for a distance of 2914 metres to Boyds Road. Boyds Road: from Humphries Lane, north for a distance of 1390 metres.

Drawing No.: 3-232 Aug 2007

Holbrook – Culcairn Road: New road: from stop valve in front of Lot 969, south for a distance of 183 metres.

Drawing No.: 3-461 Dec 2007

Holbrook – Wallace Street: from eastern boundary of Lot 214, west for a distance of 274 metres to unnamed road then north for a distance of 96 metres to Lot 291.

Drawing No.: 3-461 Nov 2007

Lockhart – Day Street: from lane between Reid and Federal Streets, south for a distance of 822 metres.

Drawing No.: 3-256 Nov 2007

Ladysmith – Mona Vale road: from Tumbarumba Road, west for a distance of 370 metres.

Drawing No.: 3-3114 Nov 2000

The owners of all lands within the prescribed distance will be liable for water supply charges as from the expiration of twenty-one (21 days) after the publication of this notice, or the date of connection of the properties to the water main, whichever is the earlier date. G. W. PIEPER, General Manager, Riverina Water County Council, PO Box 456, Wagga Wagga NSW 2650. [3759]

PARKES SHIRE COUNCIL

Roads Act 1993, Section 162.1

Naming of Public Roads

Lee Street

NOTICE is hereby given that in accordance with section 162.1 of the Roads Act 1993, as amended, Parkes Shire Council have named the roads shown hereunder:

Location	*Name*
Road between the eastern end of Woodward Street and Medlyn Street Parkes (separating Lots 320 and 330, DP 750152).	Lee Street

No objections to the proposed names were received within the prescribed period of time. A. McCORMACK, General Manager, Parkes Shire Council, PO Box 337, Parkes NSW 2870. [3760]

SHELLHARBOUR CITY COUNCIL

Roads Act 1993, Section 162

Naming of Public Roads

UNDER section 162 of the Roads Act 1993, Shellharbour City Council has named the following roads:

Location	*Name*
Shell Cove	Barnbougle Mews
	Brookwater Crescent
	Capricorn Way
	Coolum Parkway
	Ellerston Parkway
	Huntingdale Close
	Joondalup Parkway
	Kooralbyn Place
	Lakelands Close
	Ranfurlie Parkway
	Seatemple Way
	Vines Avenue

Authorised by resolution of the Council on Tuesday, 4 December 2007. BRIAN A. WEIR, General Manager, Shellharbour City Council, PO Box 155, Shellharbour City Centre NSW 2529. [3761]

SUTHERLAND SHIRE COUNCIL

Local Government Act 1993, Section 50

Notice of Vesting of Drainage Reserve in Council

NOTICE is hereby given that in accordance with section 50 (4) of the Local Government Act 1993, the land described in the Schedule below is vested in Sutherland Shire Council. JOHN RAYNER, General Manager, Sutherland Shire Council, 4-20 Eton Stree, Sutherland NSW 2232.

SCHEDULE

Lot 31, DP 11987; Lot 201, Sec B, DP 12157; Lot 202, Sec B, DP 12157; Lot 203, Sec B, DP 12157; Lot 43, DP 14918; Lot 54, DP 16933; Lot 28, DP 25322; Lot D, DP 416671 [3762]

TENTERFIELD SHIRE COUNCIL

Local Government Act 1993, Section 553

Extension of Sewer mains

NOTICE is given in accordance with section 553 of the Local Government Act 1993 by Tenterfield Shire Council that sewer mains have been extended as described in the accompanying Schedule in Tenterfield. Properties located within the prescribed distance and are capable of being connected to the new sewer mains will be liable for the annual sewerage charge. Land which is not connected to these mains shall become liable for the sewerage local rate after sixty (60) days from the date of this notice. Land connected before the expiration of the sixty (60) days shall be liable for the local rate from the date of connection. A separate notice will be issued to affected property owners within 60 days of this notice confirming this notification.

SCHEDULE 1 – PELHAM STREET

From existing main at the north eastern corner of Lot 3, DP 609012, for a distance of 22.9 metres along the eastern boundary of Lot 2, DP 1109569 and to the south eastern corner of Lot 1, DP 1109569.

SCHEDULE 2 – PELHAM STREET

From existing main at the western side of Lot 1, DP 999300, along Pelham Street road reserve to the south eastern corner of Lot 2, DP 745645.

SCHEDULE 3 – DOUGLAS STREET

From existing main at north eastern corner of Lot 3, DP 1090883, for a distance of 43.7 metres along the eastern boundary of Lot 3, DP 1090883 and then in a westerly direction for a distance of 41.9 metres to the south east corner of Lot 1, DP 109883.

SCHEDULE 4 – ROUSE STREET

From existing main at northern boundary of Lot 32, DP 1077092 in a south westerly direction to Lot 31, DP 107092 traversing Lot 32, DP 1077092.

SCHEDULE 5 – RILEY STREET

From existing main at the south western corner of the intersection of Riley and Pelham Streets in a westerly direction for a distance of 149.1 metres within the Riley Street road reserve.

SCHEDULE 6 – RILEY STREET

From existing main within the Riley Street road reserve at the north west corner of Lot 1, DP 1103532, to the north eastern corner of Lot 2, DP 813205.

SCHEDULE 7 – RILEY STREET

From existing main at the north eastern corner of Lot 2, DP 1098288 in a westerly direction to the north eastern corner of Lot 4, DP 1098288.

SCHEDULE 8 – MOUNT LINDESAY ROAD

From existing main at the north western corner of the intersection of Cowper Street and Mount Lindesay Road in an easterly direction for a distance of 46.8 metres traversing the Mount Lindesay Road and then in a north easterly direction for a distance of 118.1 metres within the Mount Lindesay road reserve.

SCHEDULE 9 – WOOD STREET

From existing main at the south west corner of Lot 51, DP 107730 in an easterly direction for a distance of 151.3 metres to the north western boundary of Lot 3, Section 3, DP 57797 and then in a southerly direction to the south west corner of Lot 3, Section 3, DP 57797 and then in an easterly direction to the Wood Street road reserve.

SCHEDULE 10 – WOOD STREET

From existing main within the Wood Street road reserve in a northerly direction for a distance of 47.6 metres in the Wood Street road reserve then south for a distance of 67.9 metres within the Cowper Street road reserve.

SCHEDULE 11 – COWPER STREET

From existing main within the Cowper Street road reserve in an easterly direction for a distance of 170 metres and then in a southerly direction for a distance of 111.8 metres to the south west corner of Lot 5, DP 1116643.

SCHEDULE 12 – DOUGLAS STREET

From existing main within the Bulwer Street road reserve located on the south western corner of Lot 2, DP 573805 in a southerly direction for a distance of 29.9 metres to the intersection of Douglas and Bulwer Streets then easterly for a distance of 54.7 metres, traversing Douglas Street for a distance of 13 metres and then easterly for a distance of 130.7 metres.

SCHEDULE 13 – PELHAM STREET.

From existing main at the north eastern corner of Lot 3, DP 849606 in a westerly direction for a distance of 220 metres and then in a southerly direction for a distance of 60 metres to the north east corner of Lot 4, DP 1098288.

DAVID MITCHELL, Acting General Manager, Tenterfield Shire Council, PO Box 214, Tenterfield NSW 2372. [3763]

TENTERFIELD SHIRE COUNCIL

Local Government Act 1993, Section 553

Extension of Watermains

NOTICE is given in accordance with section 553 of the Local Government Act 1993 by Tenterfield Shire Council that water mains have been extended as described in the accompanying Schedule in Tenterfield. Properties located within the prescribed distance of the new water mains will be liable for the water supply service availability charge as from the expiration of twenty-one (21) days after the publication of this notice or the date of connection of the property to the watermain, whichever is earlier. A separate notice will be issued to affected property owners within 21 days of this notice confirming this notification.

SCHEDULE 1 – DRUMMOND STREET

From existing main within the Mount Lindesay Road reserve located at the north eastern corner of Drummond Street and Mount Lindesay Road intersection in an easterly direction for a distance of 125.5 metres to the south western corner of Lot 2, DP 521112 within the Drummond Street road reserve.

SCHEDULE 2 – EAST STREET

From existing main within the Cowper Street road reserve located at the north eastern corner of the intersection of East and Cowper Streets in a southerly direction for a distance of 131 metres within the East Street road reserve.

SCHEDULE 3 – WESTERN STREET

From existing main within the Cowper Street road reserve located on the north western boundary of Lot 1, DP 868480 in a southerly direction for a distance of 422.1 metres within the Western Street road reserve.

SCHEDULE 4 – DOUGLAS STREET

From existing main within the Bulwer Street road reserve located on the north eastern corner of the intersection of Douglas and Bulwer Streets in an easterly direction within the Douglas Street road reserve connecting to the existing main in Wood Street.

SCHEDULE 5 – EAST STREET

From existing main within the East Street road reserve located on the north eastern side of Lot 2, DP 830127 in a southerly direction for a distance of 75.7 metres in East Street and then along the Clive Street road reserve in a westerly direction for a distance of 188.2 metres connecting to the existing water main.

SCHEDULE 6 – EAST STREET

From existing main within the East Street road reserve located on the south western corner of Lot 4, DP 1064351 in a northerly direction for a distance of 370.5 metres then along the southern side of High Street road reserve for a distance of 121.6 metres connecting to the existing main in the High Street road reserve.

SCHEDULE 7 – RILEY STREET

From existing main within the Riley Street road reserve located on the south eastern corner of Lot 8, DP 868480 in an easterly direction for a distance of 265 metres within the Riley Street road reserve.

DAVID MITCHELL, Acting General Manager, Tenterfield Shire Council, PO Box 214, Tenterfield NSW 2372. [3764]

TWEED SHIRE COUNCIL

Roads Act 1993

Renaming of Public Road

NOTICE is hereby given that the Tweed Shire Council, in pursuance of Section 162 of the Roads Act 1993, has renamed the road reserve which runs west from the intersection of Skyline Drive and Stott Street, previously knows as Stott Street as:

Skyline Drive

Authorised by resolution of the Council on 22 January 2007, General Manager, Tweed Shire Council, Civic Centre, Tumbulgum Road, Murwillumbah NSW 2484. [3765]

ESTATE NOTICES

NOTICE of intended distribution of estate. – Any person having any claim upon the estate of HENDRINA CATHERINE DE WAAL late of Umina in the State of New South Wales, retired, who died on 14 November 2007 must send particulars of his claim to the executrix, Hendrina Christina Collison, care of Peninsula Law, Solicitors, 36A George Street, Woy Woy within one (1) calendar month from publication of this notice. After that time the assets may be conveyed and distributed, having regard only to the claims of which at the time of distribution she has notice. Probate was granted in New South Wales on 29 January 2008. PENINSULA LAW, Solicitors, 36A George Street, Woy Woy NSW 2256 (DX 8806, Woy Woy), tel.: (02) 4343 3000. [3766]

NOTICE of intended distribution of estate. – Any person having any claim upon the estate of BARRY PATRICK LOWE late of Empire Bay in the State of New South Wales, retired, who died on 28 August 2007 must send particulars of his claim to the executors, Stephen Gregory Lowe and Karen Ann Bloomfield, care of Peninsula Law, Solicitors, 36A George Street, Woy Woy within one (1) calendar month from publication of this notice. After that time the assets may be conveyed and distributed, having regard only to the claims of which at the time of distribution they have notice. Probate was granted in New South Wales on 7 January 2008. PENINSULA LAW, Solicitors, 36A George Street, Woy Woy NSW 2256 (DX 8806, Woy Woy), tel.: (02) 4343 3000. [3767]

COMPANY NOTICES

NOTICE of dissolution of partnership. – ALL WAXED UP. – Notice is hereby given that the partnership previously subsisting between Stephanie Stone and Leanne Young carrying on business as All Waxed Up was dissolved on 21 January 2008 and Stephanie Stone continues in practice from the premises at Suite 2, 2 Ocean Grove Avenue, Cronulla, under the name All Waxed Up. WATKINS TAPSELL, Solicitors, 161 Oak Road, Kirrawee NSW 2232 (DX 4512 Sutherland), tel: (02) 9521 6000. Reference 59072:RUG:LZD:rao. [3768]

NOTICE of final general meeting. – ROWTED PTY LIMITED (in voluntary liquidation) ACN 000 174 121. – In accordance with section 509 of the Corporations Act notice is hereby given that the final general meeting of the abovenamed company will be held at Level 2, 131 Clarence Street, Sydney NSW 2000 on 12 March 2008 at 11:30 am, for the purpose of having laid before it by the liquidator an account showing how the winding up has been conducted and the manner in which the assets of the company have been distributed and a hearing of an explanation of the account by the liquidator and to authorise the liquidator to destroy all books and records of the company on completion of all duties. Dated 5 February 2008. F. MacDONALD and K. B. RAYMOND, Liquidators, c.o. K. B. Raymond and Co., 2/131 Clarence Street, Sydney NSW 2000. [3769]

OTHER NOTICES

PUBLIC NOTICE

Proposed termination of Strata Plan 20295 being property situated at 45 and 45A Grasmere Road, Cremorne New South Wales

Notice to send in claims

NOTICE is given of an intention to apply to the Registrar-General for an order terminating the above Strata Scheme and the consequent winding up of the Owners Corporation pursuant to section 51A of the Strata Titles (Freehold Development) Act 1973.

Any person having any claim against the Owners Corporation of the above Strata Scheme, or any estate or interest in or claim against any of the lots comprised in the Strata Plan, is required on or before 1 March 2008 to send particulars of the estate or claim to Roderick Holdings Pty Limited c/- Gadens Lawyers, 77 Castlereagh Street, Sydney NSW 2000 (Attention: Sarkis Khoury). [3770]

ISSN 0155-6320

Authorised to be printed
DENIS H. HELM, Government Printer.