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OF THE STATE OF NEW SOUTH WALES

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LEGISLATION

Online notification of the making of statutory instruments

Week beginning 21 November 2011

THE following instruments were officially notified on the NSW legislation website (www.legislation.nsw.gov.au) on the dates indicated:

Regulations and other statutory instruments

Drug and Alcohol Treatment Repeal Regulation 2011 (2011-596) — published LW 25 November 2011 Election Funding, Expenditure and Disclosures (Adjustable Amounts) Notice (2011-597) published LW 25 November 2011 Government Information (Public Access) Amendment (Adult Migrant English Service) Regulation 2011 (2011-602) — published LW 25 November 2011 Liquor Amendment (Special Licence Conditions) Regulation (No 2) 2011 (2011-598) published LW 25 November 2011

Environmental Planning Instruments

Coffs Harbour City Centre Local Environmental Plan 2011 (2011-595) — published LW 21 November 2011 State Environmental Planning Policy (Exempt and Complying Development Codes) Amendment (Miscellaneous) (No 2) 2011 (2011-600) — published LW 25 November 2011 State Environmental Planning Policy (Sydney Region Growth Centres) Amendment (Marsden Park Industrial Precinct) 2011 (2011-601) — published LW 25 November 2011 State Environmental Planning Policy Amendment (North Penrith) 2011 (2011-599) published LW 25 November 2011

Assents to Acts

ACTS OF PARLIAMENT ASSENTED TO

Legislative Assembly Office, Sydney, 28 November 2011

IT is hereby notified, for general information, that Her Excellency the Governor has, in the name and on behalf of Her Majesty, this day assented to the undermentioned Acts passed by the Legislative Assembly and Legislative Council of New South Wales in Parliament assembled, viz.:

Act No. 71, 2011 – An Act to amend the Heritage Act 1977 in relation to the Heritage Council and the listing of items on the State Heritage Register; and for other purposes. **[Heritage Amendment Bill]**.

Act No. 72, 2011 – An Act to make miscellaneous amendments to certain clubs, liquor and gaming legislation; and for other purposes. [Clubs, Liquor and Gaming Machines Legislation Amendment Bill].

RONDA MILLER, Clerk of the Legislative Assembly

Other Legislation



Notice of Final Determination

under the

Threatened Species Conservation Act 1995

The Scientific Committee established under the *Threatened Species Conservation Act 1995* has made a final determination to insert the species referred to in paragraph (a) as a critically endangered species under that Act and, as a consequence, to omit a reference to that species as a species presumed extinct and, accordingly:

(a) Schedule 1A to that Act is amended by inserting in alphabetical order in Part 1 under the heading "Plants":

Scrophulariaceae

- * Euphrasia arguta R. Br.
- (b) Schedule 1 to that Act is amended by omitting from Part 4 in the matter relating to Scrophulariaceae under the heading "Plants":
 - * Euphrasia arguta R. Br.

This Notice commences on the day on which it is published in the Gazette. Dated, this 22nd day of November 2011.

Dr Richard Major Chairperson of the Scientific Committee

Copies of final determination and reasons

Copies of the final determination and the reasons for it are available to members of the public (free of charge) as follows:

(a) on the Internet at www.environment.nsw.gov.au,

s2011-345-32.d04

Notice of Final Determination

- (b) by contacting the Scientific Committee Unit, by post C/- Office of Environment and Heritage, PO Box 1967, Hurstville BC NSW 1481, by telephone (02) 9585 6940 or by facsimile (02) 9585 6989,
- (c) in person at the Office of Environment and Heritage Information Centre, Level 14, 59–61 Goulburn St, Sydney.



Notice of Final Determination

under the

Threatened Species Conservation Act 1995

The Scientific Committee established under the *Threatened Species Conservation Act 1995* has made a final determination to insert the following species as an endangered species under that Act and, accordingly, Schedule 1 to that Act is amended by inserting in Part 1 in alphabetical order in the matter relating to Scincidae under the heading "Reptiles" (under the heading "Animals"):

*	Cyclodomorphus praealtus Shea, 1995	Alpine She-oak Skink
		OKIIK

This Notice commences on the day on which it is published in the Gazette. Dated, this 22nd day of November 2011.

Dr Richard Major Chairperson of the Scientific Committee

Copies of final determination and reasons

Copies of the final determination and the reasons for it are available to members of the public (free of charge) as follows:

- (a) on the Internet at www.environment.nsw.gov.au,
- (b) by contacting the Scientific Committee Unit, by post C/- Office of Environment and Heritage, PO Box 1967, Hurstville BC NSW 1481, by telephone (02) 9585 6940 or by facsimile (02) 9585 6989,
- (c) in person at the Office of Environment and Heritage Information Centre, Level 14, 59–61 Goulburn St, Sydney.

s2011-346-32.d03



under the

Threatened Species Conservation Act 1995

The Scientific Committee established under the *Threatened Species Conservation Act 1995* has made a determination to amend the descriptions of certain ecological communities referred to in paragraphs (a) and (b) below pursuant to section 36A (1) (b) of the Act (being amendments or omissions that are necessary or desirable to correct any minor error or omission), and, accordingly:

- (a) Part 3 of Schedule 1 is amended as follows:
 - (i) Omit the matter relating to Acacia loderi Shrublands and insert instead:

Acacia loderi Shrublands (as described in the determination of the Scientific Committee under Division 5 of Part 2)

(ii) Omit the matter relating to *Allocasuarina luehmannii* Woodland in the Riverina and Murray-Darling Depression Bioregions and insert instead:

Allocasuarina luehmannii Woodland in the Riverina and Murray-Darling Depression Bioregions (as described in the determination of the Scientific Committee under Division 5 of Part 2)

(iii) Omit the matter relating to Artesian Springs Ecological Community and insert instead:

Artesian Springs Ecological Community (as described in the determination of the Scientific Committee under Division 5 of Part 2)

s2011-327-32.d05

(iv) Omit the matter relating to Brigalow within the Brigalow Belt South, Nandewar and Darling Riverine Plains Bioregions and insert instead:

> Brigalow within the Brigalow Belt South, Nandewar and Darling Riverine Plains Bioregions (as described in the determination of the Scientific Committee under Division 5 of Part 2)

(v) Omit the matter relating to Brigalow-Gidgee woodland/shrubland in the Mulga Lands and Darling Riverine Plains Bioregions and insert instead:

Brigalow-Gidgee woodland/shrubland in the Mulga Lands and Darling Riverine Plains Bioregions (as described in the determination of the Scientific Committee under Division 5 of Part 2)

(vi) Omit the matter relating to *Cadellia pentastylis* (Ooline) community in the Nandewar and Brigalow Belt South bioregion and insert instead:

Cadellia pentastylis (Ooline) community in the Nandewar and Brigalow Belt South Bioregions (as described in the determination of the Scientific Committee under Division 5 of Part 2)

(vii) Omit the matter relating to Carbeen Open Forest community in the Darling Riverine Plains and Brigalow Belt South Bioregions and insert instead:

Carbeen Open Forest community in the Darling Riverine Plains and Brigalow Belt South Bioregions (as described in the determination of the Scientific Committee under Division 5 of Part 2)

(viii) Omit the matter relating to Coastal Cypress Pine Forest in the New South Wales North Coast Bioregion and insert instead:

Coastal Cypress Pine Forest in the New South Wales North Coast Bioregion (as described in the determination of the Scientific Committee under Division 5 of Part 2)

(ix) Omit the matter relating to Coastal Saltmarsh in the New South Wales North Coast, Sydney Basin and South East Corner Bioregions and insert instead:

> Coastal Saltmarsh in the New South Wales North Coast, Sydney Basin and South East Corner Bioregions (as described in the determination of the Scientific Committee under Division 5 of Part 2)

(x) Omit the matter relating to Fuzzy Box Woodland on alluvial soils of the South Western Slopes, Darling Riverine Plains and Brigalow Belt South Bioregions and insert instead:

Fuzzy Box Woodland on alluvial soils of the South Western Slopes, Darling Riverine Plains and Brigalow Belt South Bioregions (as described in the determination of the Scientific Committee under Division 5 of Part 2)

(xi) Omit the matter relating to *Halosarcia lylei* low open-shrubland in the Murray Darling Depression Bioregion and insert instead:

Halosarcia lylei low open-shrubland in the Murray Darling Depression Bioregion (as described in the determination of the Scientific Committee under Division 5 of Part 2)

(xii) Omit the matter relating to Howell Shrublands in the New England Tableland and Nandewar Bioregions and insert instead:

Howell Shrublands in the New England Tableland and Nandewar Bioregions (as described in the determination of the Scientific Committee under Division 5 of Part 2 published in the Gazette on 2 December 2011)

(xiii) Omit the matter relating to Hunter Lowland Redgum Forest in the Sydney Basin and New South Wales North Coast Bioregions and insert instead:

Hunter Lowland Redgum Forest in the Sydney Basin and New South Wales North Coast Bioregions (as described in the determination of the Scientific Committee under Division 5 of Part 2)

(xiv) Omit the matter relating to Littoral Rainforest in the New South Wales North Coast, Sydney Basin and South East Corner Bioregions and insert instead:

> Littoral Rainforest in the New South Wales North Coast, Sydney Basin and South East Corner Bioregions (as described in the determination of the Scientific Committee under Division 5 of Part 2)

(xv) Omit the matter relating to Lowland Grassy Woodland in the South East Corner Bioregion and insert instead:

Lowland Grassy Woodland in the South East Corner Bioregion (as described in the determination of the Scientific Committee under Division 5 of Part 2)

(xvi) Omit the matter relating to Lowland Rainforest in the NSW North Coast and Sydney Basin Bioregions and insert instead:

Lowland Rainforest in the NSW North Coast and Sydney Basin Bioregions (as described in the determination of the Scientific Committee under Division 5 of Part 2)

(xvii) Omit the matter relating to Lowland Rainforest on Floodplain in the New South Wales North Coast Bioregion and insert instead:

Lowland Rainforest on Floodplain in the New South Wales North Coast Bioregion (as described in the determination of the Scientific Committee under Division 5 of Part 2)

(xviii) Omit the matter relating to McKies Stringybark/Blackbutt Open Forest in the Nandewar and New England Tableland Bioregions and insert instead:

> McKies Stringybark/Blackbutt Open Forest in the Nandewar and New England Tableland Bioregions (as described in the determination of the Scientific Committee under Division 5 of Part 2)

(xix) Omit the matter relating to Native Vegetation on Cracking Clay Soils of the Liverpool Plains and insert instead:

Native Vegetation on Cracking Clay Soils of the Liverpool Plains (as described in the determination of the Scientific Committee under Division 5 of Part 2)

(xx) Omit the matter relating to New England Peppermint (*Eucalyptus nova-anglica*) Woodland on Basalts and Sediments in the New England Tableland Bioregion and insert instead:

New England Peppermint (*Eucalyptus nova-anglica*) Woodland on Basalts and Sediments in the New England Tableland Bioregion (as described in the determination of the Scientific Committee under Division 5 of Part 2)

- (xxi) Omit the matter relating to Semi-evergreen Vine Thicket in the Brigalow Belt South and Nandewar Bioregions and insert instead:
 - * Semi-evergreen Vine Thicket in the Brigalow Belt South and Nandewar Bioregions (as described in the determination of the Scientific Committee under Division 5 of Part 2)
- (xxii) Omit the matter relating to Sydney Turpentine-Ironbark Forest and insert instead:
 - * Sydney Turpentine-Ironbark Forest (as described in the determination of the Scientific Committee under Division 5 of Part 2)
- (xxiii) Omit the matter relating to *Themeda* grassland on seacliffs and coastal headlands in the NSW North Coast, Sydney Basin and South East Corner Bioregions and insert instead:

Themeda grassland on seacliffs and coastal headlands in the NSW North Coast, Sydney Basin and South East Corner Bioregions (as described in the determination of the Scientific Committee under Division 5 of Part 2)

(xxiv)	Omit the matter relating to Upland Wetlands of the Drainage Divide of
	the New England Tableland Bioregion and insert instead:

Upland Wetlands of the Drainage Divide of the New England Tableland Bioregion (as described in the determination of the Scientific Committee under Division 5 of Part 2)

- (xxv) Omit the matter relating to White Box Yellow Box Blakely's Red Gum Woodland and insert instead:
 - * White Box Yellow Box Blakely's Red Gum Woodland (as described in the determination of the Scientific Committee under Division 5 of Part 2)
- (xxvi) Omit the matter relating to White Gum Moist Forest in the NSW North Coast Bioregion and insert instead:

White Gum Moist Forest in the NSW North Coast Bioregion (as described in the determination of the Scientific Committee under Division 5 of Part 2)

(b) Part 2 of Schedule 1A is amended by omitting the matter relating to Marsh Club-rush Sedgeland in the Darling Riverine Plains Bioregion and inserting instead:

Marsh Club-rush Sedgeland in the Darling Riverine Plains Bioregion (as described in the determination of the Scientific Committee under Division 5 of Part 2)

This Notice commences on the day on which it is published in the Gazette. Dated, this 24th day of November 2011.

Dr Richard Major Chairperson of the Scientific Committee

Copies of determination

Copies of the determination and the reasons for it are available to members of the public (free of charge) as follows:

(a) on the Internet at www.environment.nsw.gov.au,

- (b) by contacting the Scientific Committee Unit by post C/- Office of Environment and Heritage, PO Box NSW 1967, Hurstville BC 1481, by telephone (02) 9585 6940 or by facsimile (02) 9585 6989,
- (c) in person at the Office of Environment and Heritage Information Centre, Level 14, 59–61 Goulburn St, Sydney.

DETERMINATION TO MAKE A MINOR AMENDMENT TO PART 3 OF SCHEDULE 1 OF THE THREATENED SPECIES CONSERVATION ACT

THE Scientific Committee, established by the Threatened Species Conservation Act has made a Determination to make a minor amendment to Part 3 of Schedule 1 (Endangered ecological communities) of the Act by inserting the *Acacia loderi* Shrublands (as described in the determination of the Scientific Committee under Division 5 Part 2) and as a consequence to omit reference to the *Acacia loderi* Shrublands (as described in the final determination to list the ecological community) which was published on pages 10955 to 10959 in the *NSW Government Gazette* No. 131 dated 6 October 2000. Minor amendments to the Schedules are provided for by Division 5 of Part 2 of the Act.

The Scientific Committee is of the opinion that the amendment is necessary or desirable to correct minor errors or omissions in the Determination in relation to the Thackway and Cresswell (1995) reference.

The Scientific Committee has found that:

1. The Acacia loderi Shrublands is the name given to the plant community that is dominated by the tall shrub/small tree Acacia loderi (commonly known in some parts of its range as nelia). Other tree species that may occur in association with Acacia loderi are Acacia aneura, Acacia oswaldii, Callitris gracilis, Casuarina pauper and Flindersia maculosa. The mistletoes Amyema quandang and Lysiana exocarpi frequently occur on Acacia loderi. Understorey species within the Acacia loderi Shrublands include:

1 5	5 1
Aristida contorta	Atriplex spp. (such as A. angulata, A. holocarpa, A. stipitata)
Brachyscome spp.	Dissocarpus paradoxus
Dodonaea viscosa	Enchylaena tomentosa
Enneapogon avenaceus	Eremophila maculata
Eremophila sturtii	Grevillea huegelii
Haloragis glauca	Ixiolaena tomentosa
Lotus cruentus	Lycium australe
Maireana georgei	Maireana pyramidata
Maireana sclerolaenoides	Maireana sedifolia
Myoporum deserti	Pimelea microcephala
Plantago drummondii	Ptilotus atriplicifolius
Pycnosorus pleiocephalus	Rhagodia spinescens
Rhodanthe floribunda	Sauropus trachyspermus
Sida fibulifera	Sclerolaena spp. (such as S. divaricata, S. obliquicuspis and
	S. patenticuspis)
Senna artemisioides	<i>Stipa</i> spp.
Swainsona formosa	Templetonia egena
Tetragonia tetragonioides	Teucrium racemosum
Zygophyllum simile	

- 2. The community has a naturally open structure of individual shrubs to small trees (to 8 m high) with a low, diverse understorey dominated by chenopod subshrubs, herbs and grasses. The community is often interspersed by woodlands of *Casuarina pauper* (belah), *Alectryon oleifolius* (rosewood) or *Flindersia maculosa*. Fox (1993), Pickard and Norris (1994) and Westbrooke and Miller (1995) discuss floristic composition, distribution, and structure of the *Acacia loderi* Shrublands.
- 3. The total species list of the community is considerably larger than that given in 1 (above), with many species present in only one or two sites or in very small abundance. In any particular site not all of the assemblage listed in 1 may be present. At any one time, there may only be seeds of some species present in the soil seed bank with no above-ground individuals present. This is particularly the case for the large ephemeral floral component of the community. Species composition will vary between sites depending on geographical location and local conditions. The species composition of a site will be influenced by the size of the site and by its recent disturbance history and in particular the pattern (season, magnitude) of recent rainfall.
- 4. The Acacia loderi Shrublands are known from the Broken Hill Complex, Murray-Darling Depression, Cobar Peneplain, Riverina, Mulga Lands and Darling Riverine Plains Bioregions. Bioregions are defined in Thackway and Cresswell (1995). They occur from south western New South Wales (NSW) to north western Victoria and eastern South Australia. In NSW, the community is mainly confined to south western

NSW extending east to Hillston and north to White Cliffs. The major stands of the community occur between Broken Hill, Ivanhoe and Wilcannia, while only isolated stands occur beyond these areas.

- 5. The *Acacia loderi* Shrublands are found on solonized brown and duplex soils on level to undulating plains or on calcareous red earths. Typical habitat has a rainfall range of 240mm to 280mm.
- 6. Most remnant stands of the community are located on pastoral leases although small patches occur in conservation reserves including Mungo and Kinchega National Parks.
- 7. Most current stands of *Acacia loderi* Shrublands have an understorey modified by grazing and include unpalatable natives and a range of exotic weeds. Many examples of the community exist as isolated and degraded patches. Threats to the community include clearing and a lack of regeneration of tree species through heavy grazing pressure, particularly from stock and rabbits. Although there is some limited regeneration by vegetative means (suckering) in the dominant *Acacia loderi*, most existing stands consist of old age cohorts. Even within conservation reserves such as Kinchega National Park, rabbit grazing pressure has severely limited regeneration of the community dominant *Acacia loderi* (Auld 1995) and flooding from over-filling of the Menindee Lakes has resulted in destruction of several stands of the community. A number of former stands now consist of only rings of dead trees.
- 8. In view of the fragmented nature of many stands, the widespread lack of regeneration in the dominant tree (*Acacia loderi*), the continued threat of heavy grazing pressure and further clearing, the Scientific Committee is of the opinion that *Acacia loderi* Shrublands are likely to become extinct in nature unless factors threatening its survival or evolutionary development cease to operate and that listing as an endangered ecological community is warranted.

Dr RICHARD MAJOR, Chairperson, Scientific Committee

References:

- Auld, T.D. (1995) The impact of herbivores on regeneration in four trees from arid Australia. *The Rangeland Journal* **17**, 213-227.
- Fox, M. (1993) Acacia shrublands of western New South Wales. Unpublished National Estate Programme report.
- Pickard, J. and Norris, E. H. (1994) The natural vegetation of north-western NSW: notes to accompany the 1:1000000 vegetation map sheet. *Cunninghamia* **3**, 423-465.
- Thackway R, Cresswell ID (1995) An interim biogeographic regionalisation for Australia: a framework for setting priorities in the National Reserves System Cooperative Program. (Version 4.0. Australian Nature Conservation Agency: Canberra.)
- Westbrooke, M. E. and Miller, J. D. (1995) Vegetation of Mungo National Park, western NSW. *Cunninghamia* 4, 63-81.

DETERMINATION TO MAKE A MINOR AMENDMENT TO PART 3 OF SCHEDULE 1 OF THE THREATENED SPECIES CONSERVATION ACT

THE Scientific Committee, established by the Threatened Species Conservation Act has made a Determination to make a minor amendment to Part 3 of Schedule 1 (Endangered ecological communities) of the Act by inserting the *Allocasuarina luehmannii* Woodland in the Riverina and Murray-Darling Depression bioregions (as described in the determination of the Scientific Committee under Division 5 Part 2) and as a consequence to omit reference to the *Allocasuarina luehmannii* Woodland in the Riverina and Murray-Darling Depression bioregions (as described in the final determination to list the ecological community) which was published on pages 2498 to 2504 in the *NSW Government Gazette* No. 37 dated 28 March 2008. Minor amendments to the Schedules are provided for by Division 5 of Part 2 of the Act.

The Scientific Committee is of the opinion that the amendment is necessary or desirable to correct minor errors or omissions in the Determination in relation to the Thackway and Cresswell (1995) reference.

The Scientific Committee has found that:

- 1. Allocasuarina luehmannii Woodland in the Riverina and Murray-Darling Depression bioregions is the name given to the ecological community dominated by Buloke (Allocasuarina luehmannii), sometimes with co-occurring tree species, that typically occupies patches of red-brown loamy sands with alkaline sub-soils on the alluvial plain of the Murray River and its tributaries in south-western NSW. Allocasuarina luehmannii Woodland is characterised by the assemblage of species listed in paragraph 2 and typically comprises an open tree canopy with a sparse and highly variable ground layer dominated by grasses and herbs, sometimes with scattered shrubs and/or small trees. The structure and species composition of the community varies depending on disturbance history and temporal variability in rainfall.
- 2. Allocasuarina luehmannii Woodland is characterised by the following assemblage of species:

Allocasuarina luehmannii Atriplex leptocarpa Austrodanthonia setacea Austrostipa elegantissima Callitris glaucophylla Chamaesyce drummondii Crassula colorata Enchylaena tomentosa Eucalyptus behriana Juncus subsecundus Melaleuca lanceolata Rhagodia spinescens Sida corrugata Vittadinia cuneata

Aristida contorta Austrodanthonia caespitosa Austrostipa aristiglumis Austrostipa scabra Carex inversa Convolvulus remotus Einadia nutans Enteropogon acicularis Homopholis proluta Marsilea drummondii Oxalis perennans Sclerolaena muricata Solanum esuriale Vittadinia gracilis

A large number of infrequently recorded species also characterise the community. These include:

Acacia acinacea	Acacia brachybotrya
Acacia melvillei	Acacia salicina
Alternanthera denticulata	Amyema linophyllum subsp. orientale
Aristida leptopoda	Asperula conferta
Austrostipa blackii	Austrostipa eremophila
Austrostipa nodosa	Callitris gracilis
Calotis scapigera	Chenopodium desertorum
Convolvulus erubescens	Elymus scaber
Enteropogon ramosus	Eucalyptus largiflorens
Goodenia fascicularis	Hakea tephrosperma
Juncus aridicola	Lachnagrostis filiformis
Lomandra effusa	Lythrum hyssopifolia
Maireana enchylaenoides	Maireana humillima
Paspalidium jubiflorum	Pimelea microcephala subsp. microcephala
Pittosporum angustifolium	Pseudognaphalium luteo-album
Rumex brownie	Salsola tragus
Sclerolaena brachyptera	Teucrium racemosum

Vittadinia cervicularis var. cervicularis Wahlenbergia luteola

Vittadinia dissecta

- 3. The total species list of the community is larger than that given above, with many species present in only one or two sites or in low abundance. The species composition of a site will be influenced by the size of the site, recent rainfall or drought conditions and by its disturbance (including grazing, land clearing and fire) history. The number and relative abundance of species will change with time since fire, and may also change in response to changes in fire frequency or grazing regime. At any one time, above-ground individuals of some species may be absent, but the species may be represented below ground in soil seed banks or as dormant structures such as bulbs, corms, rhizomes, rootstocks or lignotubers. The list of species given above is mainly of vascular plant species, however the community also includes microorganisms, fungi, cryptogamic plants and both vertebrate and invertebrate faunas. These components of the community are poorly documented.
- 4. Allocasuarina luehmannii Woodland is characterised by an open tree stratum. The tree layer, dominated by Allocasuarina luehmannii (Buloke) may also include Callitris glaucophylla (White Cypress Pine) or Melaleuca lanceolata (Moonbah), though usually in lower abundance than A. luehmannii. Other tree species, including Callitris gracilis (Slender Cypress Pine), Eucalyptus behriana (Bull Mallee) and Eucalyptus largiflorens (Blackbox), may also occur at some sites within the community. A scattered shrub layer is sometimes present and may include Sclerolaena muricata (Black Rolypoly), Enchylaena tomentosa (Ruby Saltbush), Maireana spp. (bluebushes) and/or Hakea tephrosperma (Hooked Needlewood). The groundcover is highly variable in structure and composition. It is typically sparse, but may be more continuous within patches or following substantial rainfall events. It comprises grasses, including species such as Austrodanthonia caespitosa (Ringed Wallaby Grass), A. setacea (Small-flowered Wallaby Grass), Austrostipa elegantissima (Feather Speargrass), A. scabra (Rough Speargrass), Enteropogon acicularis (Curly Windmill Grass) and Homopholis proluta; sedges including Carex inversa and Juncus subsecundus; and forbs including Atriplex leptocarpa (Slender-fruit Saltbush), Einadia nutans (Climbing Saltbush), Oxalis perennans, Sida corrugata (Corrugated Sida) and Vittadinia spp. The structure of the community varies depending on past and current disturbances, particularly clearing, grazing and erosion.
- 5. Allocasuarina luehmannii Woodland shares a number of species with another endangered ecological community listed under the Threatened Species Conservation Act 1995: Sandhill Pine Woodland in the Riverina, Murray-Darling Depression and NSW South Western Slopes bioregions. These two ecological communities inhabit similar soils and landforms and have similar geographic distributions. They may be distinguished on the basis of the relative abundance of their tree species and subtle differences in composition of their understorey. When tree abundance is assessed at hectare scales, A. luehmannii is the most abundant tree species in Allocasuarina luehmannii Woodland, whereas Callitris glaucophylla is the most abundant tree species in Sandhill Pine Woodland. Differences in understorey composition are likely to be obscured as a result of the history of heavy disturbance throughout both communities. Vegetation with characteristics that are intermediate between Sandhill Pine Woodland and Allocasuarina luehmannii Woodland are covered collectively under the two Determinations.
- 6. A number of vegetation surveys and mapping studies have been carried out in regions within which Allocasuarina luehmannii Woodland occurs (reviewed in Mackenzie and Keith 2007). Sluiter et al. (1997) surveyed buloke and pine woodlands in Victoria and southern New South Wales, and identified 12 species groupings from an analysis of their survey data. The majority of these were confined to Victoria, however, 'Semi-arid grassy pine – Buloke Woodland' (Group 3), 'Buloke Grassy Woodland' (Group 9) and possibly 'Semi-arid Northwest Plains Buloke Grassy Woodland' (Group 8) are referrable to Allocasuarina luehmannii Woodland in the Riverina and Murray-Darling Depression bioregions. The community also includes 'Eucalyptus largiflorens – Melaleuca lanceolata – Allocasuarina luehmannii Woodland' described in Smith and Smith's (1990) study of riparian vegetation in the Murray River valley. None of the available regional-scale vegetation mapping studies in the Riverina region (Scott 1992, Porteners 1993, Porteners et al. 1997, Roberts and Roberts 2001, Horner et al. 2002, McNellie et al. 2005) show the distribution of woodlands dominated by Buloke, ostensibly because stands of this vegetation were too small or too difficult to delineate at their respective mapping scales. However, locations of Buloke woodland surveyed by Sluiter et al. (1997) show some spatial association with broader map units from these studies pertaining to mixed woodlands on sandy soils of the alluvial plain. A recent review and classification of vegetation in western New South Wales (Benson et al. 2006) described 'Buloke - Moonbah - Blackbox open woodland on sandy rises of semi arid (warm) climate zone' (Community 20), which is referrable

to *Allocasuarina luehmannii* Woodland in the Riverina and Murray-Darling-Depression bioregions. A second assemblage, 'Semi-arid shrubby Buloke – Slender Cypress Pine woodland' (Community 22) of Benson *et al.* (2006), apparently represents an outlying form of *Allocasuarina luehmannii* Woodland in the Riverina and Murray-Darling Depression bioregions. Community 22 contains a greater diversity of understorey shrubs and occurs further west than Community 20 (Benson *et al.* 2006). *Allocasuarina luehmannii* Woodland belongs to the Riverine Sandhill Woodlands vegetation class of Keith (2004).

- 7. *Allocasuarina luehmannii* Woodland in the Riverina and Murray-Darling Depression bioregions forms part of the broader ecological community listed on Schedule 2 of the Environment Protection and Biodiversity Conservation Act 1999, known by the similar name, 'Buloke Woodlands of the Riverina and Murray Darling Depression Bioregions'. This broader community also occurs in Victoria and apparently has a larger distribution than that currently known for the community described in this Determination.
- 8. Allocasuarina luehmannii Woodland has been recorded in the southern part of the Riverina bioregion from near Urana and Mulwala in the east to the Barham district, and may extend as far west as Euston in the southern part of the Murray-Darling Depression bioregion. The community occurs in small patches within this range and is currently estimated to cover less than 500-1500 ha (Benson *et al.* 2006). It is currently known from the Balranald, Berrigan, Conargo, Corowa, Deniliquin, Murray and Wakool Local Government Areas, but may occur elsewhere in the Riverina and Murray-Darling Depression bioregions. Bioregions are defined in Thackway and Cresswell (1995).
- 9. Approximately 6 ha of *Allocasuarina luehmannii* Woodland are estimated to occur within Lake Urana and Wiesners Swamp Nature Reserves (Benson *et al.* 2006). The remainder of the community occurs on private land or on public easements. Sluiter *et al.* (1997) identified incremental roadside clearing, travelling livestock (droving) and opportunistic livestock grazing on roadside reserves, land clearing on private and leasehold land, firebreak construction, herbicide application and fertiliser drift as the main threats affecting Allocasuarina luehmannii Woodland in New South Wales.
- 10. Allocasuarina luehmannii Woodland has undergone a large reduction in its geographic distribution as a consequence of clearing for cropping and pasture improvement (Smith and Smith 1990, Sluiter et al. 1997, Benson et al. 2006). This has largely occurred within the past 170 years, a time span appropriate to the life cycle of the dominant species of the community. In many cases, remnants are confined to roadsides or other small fragments (Sluiter et al. 1997), while some stands of the community have been reduced to a few isolated trees (Scott 1992). Fragmentation of the remaining stands is likely to have resulted in a large reduction in the ecological function of the community due to the small population sizes of many constituent species, enhanced risks from environmental stochasticity, disruption to pollination and dispersal of fruits or seeds, and likely reductions in the genetic diversity of isolated populations (Young et al. 1996, Young & Clarke 2000). The geographic distribution of the community continues to decline as a consequence of small-scale clearing (Sluiter et al. 1997). 'Clearing of native vegetation' is listed as a Key Threatening Process under the Threatened Species Conservation Act 1995.
- 11. Many of the remaining stands of *Allocasuarina luehmannii* Woodland are degraded by overgrazing, which has resulted in simplification of community structure, changes in species composition, invasion of weeds and soil erosion. Overgrazing by domestic livestock and feral herbivores, including rabbits and goats, has resulted in a scarcity of woody understorey plants and a lack of regeneration of palatable trees and shrubs. Consequently, senescent trees are not replaced with new individuals and there is a prolonged trend of stand degeneration. Overgrazing also reduces structural complexity, plant species diversity and habitat suitability for vertebrate fauna of the community. The sandy-textured soils of *Allocasuarina luehmannii* Woodland are sensitive to erosion as a result of trampling by hooved animals and burrowing by rabbits. These impacts are exacerbated under drought conditions. Collectively, these processes have resulted in a large reduction in the ecological function of the community (Sluiter *et al.* 1997, Benson *et al.* 2006). 'Competition and grazing by the feral European Rabbit, *Oryctolagus cuniculus*' and 'Competition and habitat degradation by Feral Goats, *Capra hircus*' are listed as Key Threatening Processes under the Threatened Species Conservation Act 1995.
- 12. Fragmentation, grazing and small-scale physical disturbance have resulted in weed invasion throughout the distribution of *Allocasuarina luehmannii* Woodland, which continues to threaten the ecological function of the community. Principal weed species include:

Bromus diandrus	Great Brome
Bromus rubens	Red Brome

Chondrilla juncea	Skeleton weed
Cynodon dactylon	Couch
Echium plantagineum	Paterson's Curse
Hordeum glaucum	Northern Barley Grass
Hypochaeris radicata	Cat's Ear
Lactuca serriola	Prickly Lettuce
Lepidium africanum	
Lolium rigidum	Wimmera Ryegrass
Marrubium vulgare	White Horehound
Medicago minima	Woolly Burr Medic
Medicago polymorpha	Burr Medic
Romulea rosea var. australis	Onion Grass
Rumex crispus	Curled Dock
Silene apetala	
Sonchus oleraceus	Common Sowthistle
Spergularia rubra	Sandspurry
Trifolium angustifolium	Narrow-leaved Clover
Trifolium arvense	Haresfoot Clover
Trifolium pratense	Red Clover
Vulpia myuros forma megalura	Rat's Tail Fescue

'Invasion of native plant communities by exotic perennial grasses' is listed as a Key Threatening Process under the Threatened Species Conservation Act 1995.

- 13. *Allocasuarina luehmannii* Woodland in the Riverina and Murray-Darling Depression bioregions is not eligible to be listed as a critically endangered ecological community.
- 14. *Allocasuarina luehmannii* Woodland in the Riverina and Murray-Darling Depression bioregions is eligible to be listed as an endangered ecological community as, in the opinion of the Scientific Committee, it is facing a very high risk of extinction in New South Wales in the near future, as determined in accordance with the following criteria as prescribed by the Threatened Species Conservation Regulation 2002:

Clause 25

The ecological community has undergone, is observed, estimated, inferred or reasonably suspected to have undergone or is likely to undergo within a time span appropriate to the life cycle and habitat characteristics of its component species:

(b) a large reduction in geographic distribution.

Clause 27

The ecological community has undergone, is observed, estimated, inferred or reasonably suspected to have undergone or is likely to undergo within a time span appropriate to the life cycle and habitat characteristics of its component species:

(b) a large reduction in ecological function,

as indicated by any of the following:

- (d) change in community structure
- (e) change in species composition
- (f) disruption of ecological processes
- (g) invasion and establishment of exotic species
- (h) degradation of habitat
- (i) fragmentation of habitat

Dr RICHARD MAJOR, Chairperson, Scientific Committee

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DETERMINATION TO MAKE A MINOR AMENDMENT TO PART 3 OF SCHEDULE 1 OF THE THREATENED SPECIES CONSERVATION ACT

THE Scientific Committee, established by the Threatened Species Conservation Act has made a Determination to make a minor amendment to Part 3 of Schedule 1 (Endangered ecological communities) of the Act by inserting the Artesian Springs Ecological Community (as described in the determination of the Scientific Committee under Division 5 Part 2) and as a consequence to omit reference to the Artesian Springs Ecological Community (as described in the final determination to list the ecological community) which was published on pages 3684 to 3688 in the *NSW Government Gazette* No. 97 dated 15 June 2001. Minor amendments to the Schedules are provided for by Division 5 of Part 2 of the Act.

The Scientific Committee is of the opinion that the amendment is necessary or desirable to correct minor errors or omissions in the Determination in relation to the Thackway and Cresswell (1995) reference.

The Scientific Committee has found that:

- 1. The Artesian Springs Ecological Community is the name given to the ecological community that is naturally restricted to artesian springs at the southern and western margins of the Great Artesian Basin in north western NSW.
- 2. The vegetation within the community frequently consists of sedges or similar vegetation (Pickard 1992). Trees and shrubs may be adjacent to or nearby, the springs. Plant assemblages differ between springs. As the springs have been a focus for domestic and feral animals for nearly 150 years, the flora has become less specifically related to the permanent water and more typical of a heavily disturbed area (Pickard 1992). A number of exotic species also occur in the community. The Artesian Springs Ecological Community is variable as each individual spring varies in shape, water flow, topographic and geographic location. In general, the Artesian Springs are characterised by a suite of plant species generally associated with water (Pickard 1992):

Abutilon otocarpum	Acacia victoriae
Alternanthera denticulata	Alternanthera angustifolia
Atriplex spp.	Boerhavia coccinea
Calandrinia ptychosperma	Centipeda minima
Centipeda thespidioides	Chamaesyce drummondii
Chenopodium cristatum	Chenopodium melanocarpum
Chloris pectinata	Cyperus bulbosus
Cyperus difformis	Cyperus gymnocaulos
Cyperus iria	Cyperus laevigatus
Cyperus squarrosus	Dactyloctenium radulans
Diplachne fusca	Dodonaea viscosa subsp. angustissima
Einadia nutans subsp. nutans	Eragrostis spp.
Eremophila deserti	Eremophila sturtii
Eucalyptus largiflorens	Eucalyptus populnea
Geijera parviflora	Glinus lotoides
Marsilea spp.	Myoporum montanum
Oxalis sp.	Pimelea microcephala subsp. microcephala
Portulaca oleracea	Sclerolaena spp.
Sclerostegia sp.	Solanum esuriale
Sporobolus caroli	Sporobolus mitchellii
Stemodia florulenta	Swainsona spp.
Trianthema triquetra	

- 3. The total species list of the community is considerably larger than that given in 2 (above), with many species present in only one or two sites or in very small quantity. In any particular site only a small component of the assemblage listed in 2 may be present. At any one time, seeds of some species may only be present in the soil seed bank with no above-ground individuals present. The species composition of the site will be influenced by the size of the site, its disturbance history and the water status of each spring.
- 4. The ecological community is naturally rare. The springs are characterised by mounds of sediment and salts deposited as water evaporates (Ponder 1986, 1999) or may be depressions. Unique aquatic invertebrate,

vertebrate and plant communities occupy the springs. Where artesian water emerges at the surface through fault lines in the overlying rock, mounds form from salts and sediments as the water evaporates. These occur at the edges of the Great Artesian Basin. Most occur in Queensland and South Australia and a few occur in the Mulga Lands, Darling Riverine Plains and Cobar Peneplain Bioregions of New South Wales. Bioregions are defined in Thackway and Cresswell (1995).

- 5. The "community of native species dependent on natural discharge of groundwater from the Great Artesian Basin" is listed as an Endangered Ecological Community under the Commonwealth's Environment Protection and Biodiversity Act 1999.
- 6. The Artesian Springs Ecological Community is described by Pickard (1992) and by Sattler and Williams (1999) for Queensland. Approximately 45 sets of springs occur in north western NSW. Some 30 still have permanent seeps or slight flows of artesian water (Pickard 1992).
- 7. Systematic surveys of Artesian Springs fauna are limited in NSW. In Queensland and South Australia, the springs are described as supporting unique aquatic invertebrates and vertebrates. Many unique freshwater snails and fishes (desert gobies) have been collected from mound springs and have been recorded nowhere else. Many species occur in one spring only (Ponder 1986, 1999).
- 8. Flora studies at Peery Lake have found that the only known population of Schoenoplectus pungens in far western NSW occurs at Peery Lakes Springs (Bowen and Pressey 1993). The endangered species of perennial forb, *Eriocaulon carsonii* (Salt Pipewort) has been recorded at several springs at Peery Lake.
- 9. Major threats to Artesian Springs Ecological Community are trampling and grazing by stock and feral animals such as pigs, goats and rabbits, alteration of flow or unsustainable extraction of water from artesian bores reducing flows to the mound springs. A number of springs have dried in the past 100 years due to falling water pressure caused by over-extraction. This has probably caused the extinction of undescribed species of aquatic invertebrates (Ponder 1986, 1999).
- 10. The only Artesian Springs that are within a reserve are at Peery Lake in Peery National Park. However, presence in the conservation reserve will not protect the ecological community from the threat of alteration of flows as the unsustainable extraction of artesian water occurs outside the reserve, yet may influence all mound springs within the region.
- 11. In view of the above, the Scientific Committee is of the opinion that the Artesian Springs Ecological Community in New South Wales is likely to become extinct in nature unless factors threatening its survival or evolutionary development cease to operate.

Dr RICHARD MAJOR, Chairperson, Scientific Committee

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DETERMINATION TO MAKE A MINOR AMENDMENT TO PART 3 OF SCHEDULE 1 OF THE THREATENED SPECIES CONSERVATION ACT

THE Scientific Committee, established by the Threatened Species Conservation Act has made a Determination to make a minor amendment to Part 3 of Schedule 1 (Endangered ecological communities) of the Act by inserting the Brigalow within the Brigalow Belt South, Nandewar and Darling Riverine Plains Bioregions (as described in the determination of the Scientific Committee under Division 5 Part 2) and as a consequence to omit reference to the Brigalow within the Brigalow Belt South, Nandewar and Darling Riverine Plains Bioregions (as described in the final determination to list the ecological community) which was published on pages 6435 to 6439 in the *NSW Government Gazette* No. 133 dated 23 August 2002. Minor amendments to the Schedules are provided for by Division 5 of Part 2 of the Act.

The Scientific Committee is of the opinion that the amendment is necessary or desirable to correct minor errors or omissions in the Determination in relation to the Thackway and Cresswell (1995) reference.

The Scientific Committee has found that:

- 1. Brigalow, where *Acacia harpophylla* is a dominant or co-dominant species in the canopy, is found in the Brigalow Belt South Bioregion in NSW and as isolated occurrences in the Darling Riverine Plains and Nandewar Bioregions. Bioregions are defined in Thackway and Cresswell (1995). Brigalow is usually associated with heavy clay soils.
- 2. Brigalow within the Brigalow Belt South, Nandewar and Darling Riverine Plains Bioregions is characterised by the following assemblage of species.

Acacia harpophylla	Alectryon oleifolius
Amyema quandang	Apophyllum anomalum
Atriplex leptocarpa	Atriplex pseudocampanulata
Austrodanthonia bipartita	Austrostipa scabra subsp. scabra
Bracteantha bracteata	Brunoniella australis
Calandrinia eremaea	Capparis lasiantha
Capparis mitchellii	Casuarina cristata
Centipeda minima var. lanuginosa	Chloris truncata
Crassula colorata	Dodonaea viscosa subsp. spathulata
Einadia nutans	Enchylaena tomentosa
Enteropogon acicularis	Eremophila bignoniiflora
Eremophila mitchellii	Eucalyptus coolabah
Eucalyptus largiflorens	Eucalyptus melanophloia
Eucalyptus pilligaensis	Eucalyptus populnea subsp. bimbil
Geijera parviflora	Ixiolaena tomentosa
Leptochloa divaricatissima	Maireana aphylla
Muehlenbeckia florulenta	Paspalidium caespitosum
Pimelea microcephala	Pimelea pauciflora
Rhagodia spinescens	Sclerolaena bicornis
Sclerolaena birchii	Sclerolaena diacantha
Sclerolaena muricata	Sclerolaena tetracuspis
Sclerolaena tricuspis	Solanum parvifolium
Stellaria angustifolia	Tetragonia tetragonoides
Vittadinia cuneata	Zygophyllum glaucum

- 3. The total flora list for the community is considerably larger than that given above, with many species present in only one or two sites or in very small quantity. In any particular site not all of the assemblage listed above will be present. At any one time, above ground individuals of some species may be absent, but the species may be represented below ground in the soil seed bank or as dormant structures such as bulbs, corms, rhizomes, rootstock or lignotubers. The species composition of the site will be influenced by the size of the site, recent rainfall or drought conditions and by its disturbance history. The community also includes a diverse fauna, both vertebrate and invertebrate.
- 4. Brigalow can be found in the following structural forms. The closed canopy form of the community consists of stands of *Acacia harpophylla* (brigalow) found on deep gilgaied clay soils on gently undulating country, forming closed forests to 25 metres in height. The understorey is scattered and ground cover sparse.

Brigalow has a low woodland form which is typified by the dominance of *Acacia harpophylla* (brigalow), with pockets of vegetation dominated by *Casuarina cristata* (belah) and *Eucalyptus populnea* subsp. *bimbil* (poplar box). This variation seems to relate to site drainage characteristics, the belah favouring the less well drained sites and the poplar box favouring the better drained sites. The main canopy of this form of the community tends to be moderately dense with small trees, shrubs and grasses occurring as scattered individuals.

Remnants of Brigalow which have been subjected to some clearing or disturbance in the past may form closed shrublands with a single cohort of plants arising from root-suckers forming the canopy.

- 5. Brigalow in NSW has been extensively cleared for agricultural purposes and the remnants have often been thinned and modified. The original extent of the Brigalow community is not known but mapping of "Brigalow soils" in the early 1960s gives an area of potential habitat for this community in NSW of 115,300 hectares (Isbell 1962). Recent vegetation mapping of the northern wheatbelt has found that only 13,500 hectares remains of this community and that it is severely fragmented (D. Sivertsen & L. Metcalfe, pers. comm.).
- 6. Surviving remnants of Brigalow are often small linear patches along roadsides and the edges of paddocks where threats include ongoing logging for fence posts; road widening and invasion by weeds.
- 7. Brigalow ecological community is poorly represented in the existing reserve system with only one reserve, "Brigalow Park Nature Reserve", of 202 hectares containing this community.
- 8. Brigalow (*Acacia harpophylla* dominant and co-dominant) is listed as an Endangered Ecological Community under the Commonwealth's Environment Protection and Biodiversity Conservation Act 1999.
- 9. In view of the above the Scientific Committee is of the opinion that Brigalow within the Brigalow Belt South, Nandewar and Darling Riverine Plains Bioregions is likely to become extinct in nature in New South Wales unless the circumstances and factors threatening its survival or evolutionary development cease to operate.

Dr RICHARD MAJOR, Chairperson, Scientific Committee

Reference

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DETERMINATION TO MAKE A MINOR AMENDMENT TO PART 3 OF SCHEDULE 1 OF THE THREATENED SPECIES CONSERVATION ACT

THE Scientific Committee, established by the Threatened Species Conservation Act has made a Determination to make a minor amendment to Part 3 of Schedule 1 (Endangered ecological communities) of the Act by inserting the Brigalow-Gidgee woodland/shrubland in the Mulga Lands and Darling Riverine Plains Bioregions (as described in the determination of the Scientific Committee under Division 5 Part 2) and as a consequence to omit reference to the Brigalow-Gidgee woodland/shrubland in the Mulga Lands and Darling Riverine Plains Bioregions (as described in the final determination to list the ecological community) which was published on pages 1265 to 1268 in the *NSW Government Gazette* No. 42 dated 8 April 2005. Minor amendments to the Schedules are provided for by Division 5 of Part 2 of the Act.

The Scientific Committee is of the opinion that the amendment is necessary or desirable to correct minor errors or omissions in the Determination in relation to the Thackway and Cresswell (1995) reference.

The Scientific Committee has found that:

1. Brigalow-Gidgee woodland/shrubland in the Mulga Lands and Darling Riverine Plains Bioregions is the name given to the ecological community that occurs north of Bourke between the Culgoa and Warrego Rivers on soft red earths and heavy grey clays (Isbell 1962) on level to slightly undulating plains. The community is characterised by the following assemblage of species:

Acacia cambagei Acacia excelsa Acacia harpophylla Acacia stenophylla Actinobole uliginosum Alectryon oleifolium Alternanthera denticulata Amyema maidenii subsp. angustifolium Amyema miquelii Amyema miraculosum Amyema quandang var. quandang Angianthus pusillus Apophyllum anomalum Atalaya hemiglauca Atriplex crassipes Atriplex leptocarpa Atriplex lindleyi Atriplex muelleri Atriplex pseudocampanulata Atriplex semibaccata Atriplex vesicaria Boerhavia dominii Calotis cuneifolia Calotis cymbacantha Centipeda cunninghamii *Centipeda thespidioides* Chamaesyce drummondii Cheilanthes sieberi Chenopodium melanocarpum Chloris truncata *Chthonocephalus pseudevax* Craspedia chrysantha Crassula colorata Daucus glochidiatus Einadia nutans Dissocarpus paradoxa var. paradoxa Enchylaena tomentosa Eragrostis setifolia Eremocitrus glauca Eremophila deserti Eremophila glabra Eremophila maculata Eremophila mitchellii Eremophila polyclada Eremophila sturtii Eucalyptus coolabah Eucalyptus largiflorens Flindersia maculosa Geijera parviflora Gnephosis foliata Lachnagrostis filiformis Leichhardtia australis Leiocarpa panatiodes Maireana aphylla Maireana histocarpa Maireana triptera Muehlenbeckia florulenta Marsilea drummondii *Myriocephalus rhizocephalus* Nicotiana velutina Olearia pimeleoides Paspalidium jubiflorum Pimelea simplex Plantago cunninghamii Plantago turrifera Ptilotus obovatus Rhagodia spinescens Rhodanthe floribunda Rhodanthe stricta Salsola kali var. kali Santalum acuminatum Sclerolaena articulata Sclerolaena bicornis var. horrida Sclerolaena birchii Sclerolaena brachyptera Sclerolaena calcarata

Sclerolaena convexula Sclerolaena lanicuspis Sclerolaena muricata var. villosa Triptilodiscus pygmaeus Sclerolaena diacantha Sclerolaena muricata var. semiglabra Sclerolaena tricuspis

- 2. The total species list of the community is considerably larger than that given above, with many species present in only one or two sites or in low abundance. The species composition of a site will be influenced by the size of the site, recent rainfall or drought condition and by its disturbance (including fire) history. At any one time, above ground individuals of some species may be absent, but the species may be represented below ground in the soil seed banks or as dormant structures such as bulbs, corms, rhizomes, rootstocks or lignotubers. The list of species given above is of vascular plant species, the community also includes micro-organisms, fungi, cryptogamic plants and a diverse fauna, both vertebrate and invertebrate. These components of the community are poorly documented.
- 3. The structure of this ecological community ranges from woodland to shrubland and scrub depending on local conditions. The canopy is dominated by either Brigalow (*Acacia harpophylla*) or Gidgee (*Acacia cambagei*) with the other species being co-dominant or part of the shrub layer, depending on site disturbance. Large areas of the ecological community have been disturbed by previous clearing and thinning activities and may now have a greater proportion of Gidgee present, such as those mapped as Rung Plain by Wade (1992) and some of the areas mapped as Fallen Treated Timber by the Northern Floodplains Regional Planning Committee (2004a, 2004b). These areas are considered part of Brigalow-Gidgee woodland/shrubland in the Mulga Lands and Darling Riverine Plains Bioregions. Both understorey and overstorey vegetation would, under appropriate management, respond to natural regeneration where the natural soil and associated seed bank are still intact.
- 4. Brigalow-Gidgee woodland/shrubland in the Mulga Lands and Darling Riverine Plains Bioregions includes the 'Brigalow, Brigalow-Gidgee, Drainage and Rung Plains' Types of Wade (1992) and these vegetation types are almost exclusively found on the 'Myurna, Ellerslie and Ledknapper' Land Systems of Walker (1981). Brigalow-Gidgee woodland/shrubland in the Mulga Lands and Darling Riverine Plains Bioregions includes all of the 'Brigalow Vegetation Community' and part of the 'Gidgee Vegetation Community' mapped by the Northern Floodplains Regional Planning Committee (2004a, 2004b). The 'Gidgee' Type of Wade (1992) and the 'Gidgee Vegetation Community' mapped within the Darling Riverine Plains Bioregion does not form part of this ecological community (Northern Floodplains Regional Planning Committee 2004a). Brigalow-Gidgee woodland/shrubland in the Mulga Lands and Darling Riverine Plains Bioregions is part of Pickard and Norris's (1994) broader map units, '*Acacia cambagei* low open-forest' (map unit 16) and '*Acacia harpophylla* low open-forest' (map unit 17) and belongs to the 'Brigalow Clay Plain Woodland' vegetation class of Keith (2002, 2004).
- 5. Brigalow-Gidgee woodland/shrubland in the Mulga Lands and Darling Riverine Plains Bioregions has been recorded from parts of the local government areas of Bourke and Brewarrina, but may occur elsewhere in the Bioregions. Bioregions are defined in Thackway and Cresswell (1995).
- 6. Brigalow-Gidgee woodland/shrubland in the Mulga Lands and Darling Riverine Plains Bioregions community has been extensively modified with at least 79% of the estimated original 190,000 ha cleared or thinned (Wade 1992). Mapping based on satellite imagery found that about 33% of the community was classified as 'Fallen Treated Timber' (Northern Floodplains Regional Planning Committee (2004a, 2004b). Brigalow-Gidgee woodland/shrubland in the Mulga Lands and Darling Riverine Plains Bioregions is threatened by clearing and thinning, burning, grazing by stock and feral animals (Northern Floodplains Regional Planning Committee (2004a, 2004b). Clearing of native vegetation and Competition and habitat degradation by Feral Goats, *Capra hircus* are listed as Key Threatening Processes
- 7. Brigalow-Gidgee woodland/shrubland in the Mulga Lands and Darling Riverine Plains Bioregions has not been recorded from any conservation reserves.
- 8. In view of the above the Scientific Committee is of the opinion that Brigalow-Gidgee woodland/shrubland in the Mulga Lands and Darling Riverine Plains Bioregions is likely to become extinct in nature in New South Wales unless the circumstances and factors threatening its survival cease to operate.

Dr RICHARD MAJOR, Chairperson, Scientific Committee

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DETERMINATION TO MAKE A MINOR AMENDMENT TO PART 3 OF SCHEDULE 1 OF THE THREATENED SPECIES CONSERVATION ACT

THE Scientific Committee, established by the Threatened Species Conservation Act has made a Determination to make a minor amendment to Part 3 of Schedule 1 (Endangered ecological communities) of the Act by inserting the *Cadellia pentastylis* (Ooline) community in the Nandewar and Brigalow Belt South bioregions (as described in the determination of the Scientific Committee under Division 5 Part 2) and as a consequence to omit reference to the *Cadellia pentastylis* (Ooline) community in the Nandewar and Brigalow Belt South bioregion (as described in the final determination to list the ecological community) which was published on pages 7386 to 7388 in the *NSW Government Gazette* No. 132 dated 11 September 1998. Minor amendments to the Schedules are provided for by Division 5 of Part 2 of the Act.

The Scientific Committee is of the opinion that the amendment is necessary or desirable to correct minor errors or omissions in the Determination in relation to the Thackway and Cresswell (1995) reference.

The Scientific Committee has found that:

1. The *Cadellia pentastylis* community is a forest community with the canopy dominated or co-dominated by the tree *Cadellia pentastylis* (Ooline). Other canopy species include *Eucalyptus albens*, *Eucalyptus beyeriana*, *Eucalyptus chloroclada*, *Eucalyptus melanophloia*, *Eucalyptus pilligaensis*, *Eucalyptus viridis* and *Callitris glaucophylla*.

Understorey species include Alstonia constricta, Beyeria viscosa, Carissa ovata, Einadia hastata, Geijera parviflora, Notelaea microcarpa and Aristida and Stipa species.

Details of the species composition of individual stands is provided in Benson J.S. (1993) *The Biology and Management of Ooline (Cadellia pentastylis) in NSW.* Species Management Report No. 2 (NSW National Parks and Wildlife Service).

The species composition of stands varies, with stands on claystone having a more herbaceous understorey than those on sandstone or conglomerate. However, all stands are similar in having *Cadellia pentastylis* as a dominant overstorey species.

- 2. Stands of *Cadellia pentastylis* occur in northern NSW on undulating terrain on a variety of soil types, usually between 300-450 m asl. The distribution of the community falls within the Nandewar and Brigalow Belt South bioregions in the IBRA scheme. Bioregions are defined in Thackway and Cresswell (1995).
- 3. The *Cadellia* community also occurs in Queensland, where it has been extensively cleared.
- 4. *Cadellia pentastylis* is the only species in the genus and has affinities with rainforest species. The community may provide links to the more extensive rainforest cover of Australia which was present until the late Tertiary development of widespread aridity.

Cadellia pentastylis exhibits the capacity to resprout and coppice – the number of genetic individuals in some stands may be much less than the number of stems present.

Cadellia pentastylis is listed on Schedule 2 of the Threatened Species Conservation Act and is coded 3R Ca by Briggs, J.D. and Leigh, J.H. (1996) *Rare or Threatened Australian Plants* CSIRO Publications, Melbourne.

- The total area of the *Cadellia pentastylis* community in NSW is c1200 ha. in 8 major locations (locations 1 -7 in Fig.1 of Benson 1993, plus an additional location at Mosquito Creek. Location 8 in Benson's Fig. 1 is in Queensland).
- 6. At all locations there has been a substantial reduction in the area of the community over the last 200 years (see Fig. 2-8 in Benson 1993).
- 7. Stands of the community occur under a variety of tenures. Some areas are conserved in the Scrub Myrtle Flora Reserve, Gamilaraay Nature Reserve and under a voluntary conservation agreement.
- 8. Threats to the community include grazing and accompanying compaction of soil leading to poor recruitment of seedlings. The response of *Cadellia pentastylis* to fire is unknown so that impact of changed fire regimes on the community is uncertain.

Historically the major threat to the community has been from clearing, which has caused the dramatic reduction in extent of the community. Further clearing would be a major danger to the survival of the community.

Fragmentation of formerly more extensive stands, and the possibility of low genetic diversity within stands (because of the prevalence of vegetative reproduction) may pose long term threats to the survival of the community.

9. In view of 4, 5 and 7 above, the Scientific Committee is of the opinion that the *Cadellia pentastylis* community is likely to become extinct in nature in NSW unless the circumstances and factors threatening its survival or evolutionary development cease to operate.

Dr RICHARD MAJOR, Chairperson, Scientific Committee

Reference:

Thackway R, Cresswell ID (1995) An interim biogeographic regionalisation for Australia: a framework for setting priorities in the National Reserves System Cooperative Program. (Version 4.0. Australian Nature Conservation Agency: Canberra.)

DETERMINATION TO MAKE A MINOR AMENDMENT TO PART 3 OF SCHEDULE 1 OF THE THREATENED SPECIES CONSERVATION ACT

THE Scientific Committee, established by the Threatened Species Conservation Act has made a Determination to make a minor amendment to Part 3 of Schedule 1 (Endangered ecological communities) of the Act by inserting the Carbeen Open Forest community in the Darling Riverine Plains and Brigalow Belt South Bioregions (as described in the determination of the Scientific Committee under Division 5 Part 2) and as a consequence to omit reference to the Carbeen Open Forest community in the Darling Riverine Plains and Brigalow Belt South Bioregions (as described in the final determination to list the ecological community) which was published on pages 10313 to 10316 in the *NSW Government Gazette* No. 124 dated 29 October 1999. Minor amendments to the Schedules are provided for by Division 5 of Part 2 of the Act.

The Scientific Committee is of the opinion that the amendment is necessary or desirable to correct minor errors or omissions in the Determination in relation to the Thackway and Cresswell (1995) reference.

The Scientific Committee has found that:

1. Carbeen Open Forest is the name given to the plant community that is characterised by the following assemblage of species:

Abutilon oxycarpum	Acacia excelsa
Acacia salicina	Alectryon oleifolius
Allocasuarina luehmannii	Alstonia constricta
Aristida calycina	Atalaya hemiglauca
Austrostipa scabra ssp scabra	Callitris glaucophylla
Capparis mitchellii	Casuarina cristata
Chloris truncata	Corymbia dolichocarpa
Corymbia tessellaris	Crinum flaccidum
Cymbidium canaliculatum	Einadia nutans
Eremophila mitchellii	Eucalyptus camaldulensis
Eucalyptus populnea	Geijera parviflora
Panicum decompositum	Petalostigma pubescens
Rhagodia spinescens	Sclerolaena birchii

- 2. The total species list of the community is larger than that given above, with many species present only in one or two sites or in very small quantity. In any particular site not all of the assemblage listed may be present at any one time (at least above ground), seeds of more species may be present in the soil seed bank. The species composition of a site will be influenced by the size of the site and by its recent disturbance history. For a number of years after a major disturbance, dominance by a few species may occur, with gradual restoration of a more complex composition and vegetation structure over time. The balance between species will change over the fire cycle, and may also change in response to changes in fire frequency.
- 3. Carbeen Open Forest occurs on siliceous sands, earthy sands and clayey sands and is a distinctive plant community on the riverine plains of the Meehi, Gwydir, MacIntyre and Barwon Rivers and has been recorded from the Local Government Areas of Moree Plains and Walgett within the Darling Riverine Plains and Brigalow Belt South Bioregions. Bioregions are defined in Thackway and Cresswell (1995).
- 4. The structure of the community was originally open-forest but may now exist as woodland or as remnant trees.
- 5. Characteristic tree species are *Corymbia tessellaris* and *Callitris glaucophylla*, associated trees include *Corymbia dolichocarpa*, *Eucalyptus populnea*, *Eucalyptus camaldulensis*, *Casuarina cristata* and *Allocasuarina leuhmannii*.
- 6. The community is restricted in the landscape by edaphic factors. Adjacent communities either other woodland communities or grasslands on heavy clay soils are distinct. *Corymbia tessellaris* (carbeen) and *Callitris glaucophylla* (white cypress pine) are restricted to well drained sandy soils.
- 7. Carbeen Open Forest has been cleared for grazing and cropping, and is further threatened by clearing for agriculture, grazing, fire management practises, and land-forming for irrigated crops. Remaining stands of this community are typically fragmented and often isolated. Remnants are also threatened by weed invasion especially by *Cenchrus* species, *Opuntia aurantiaca*, *Opuntia stricta* and *Lycium ferrocissimum*.

- 8. Less than 500 ha of the Carbeen Open Forest Community is found within Boomi, Boomi West and Boronga Nature Reserves.
- 9. In view of the small size of existing remnants, the threat of further clearing and other known threats (listed in 7), the Scientific Committee is of the opinion that the Carbeen Open Forest in the Darling Riverine Plains and Brigalow Belt South Bioregions is likely to become extinct in nature in New South Wales unless the circumstances and factors threatening its survival or evolutionary development cease to operate.

Dr RICHARD MAJOR, Chairperson, Scientific Committee

Reference:

Thackway R, Cresswell ID (1995) An interim biogeographic regionalisation for Australia: a framework for setting priorities in the National Reserves System Cooperative Program. (Version 4.0. Australian Nature Conservation Agency: Canberra.)

DETERMINATION TO MAKE A MINOR AMENDMENT TO PART 3 OF SCHEDULE 1 OF THE THREATENED SPECIES CONSERVATION ACT

THE Scientific Committee, established by the Threatened Species Conservation Act has made a Determination to make a minor amendment to Part 3 of Schedule 1 (Endangered ecological communities) of the Act by inserting the Coastal Cypress Pine Forest in the NSW North Coast Bioregion (as described in the determination of the Scientific Committee under Division 5 Part 2) and as a consequence to omit reference to the Coastal Cypress Pine Forest in the NSW North Coast Bioregion (as described in the final determination to list the ecological community) which was published on pages 10539 to 10545 in the *NSW Government Gazette* No. 138 dated 31 October 2008. Minor amendments to the Schedules are provided for by Division 5 of Part 2 of the Act.

The Scientific Committee is of the opinion that the amendment is necessary or desirable to correct minor errors or omissions in the Determination in relation to the Thackway and Cresswell (1995) reference.

The Scientific Committee has found that:

- 1. Coastal Cypress Pine Forest in the NSW North Coast Bioregion is the name given to the ecological community dominated by Coastal Cypress Pine, *Callitris columellaris*, found typically on coastal sand plains, north from the Angourie area on the far north coast of NSW. The community is characterised by the species listed in paragraph 2, and typically has a closed to open canopy of *C. columellaris*, which may be mixed with eucalypts, wattles, banksias and/or rainforest trees, and an open to sparse understorey of shrubs, sedges and herbs. Structural forms of the community include woodland, open forest and closed forest, although the tree stratum may be very sparse, absent or comprised only of dead trees in stands affected by partial clearing, tree senescence or fire.
- 2. Coastal Cypress Pine Forest is characterised by the following assemblage of species:

51	0 0 1
Abildgaardia vaginata	Acacia aulacocarpa
Acacia disparrima subsp. disparrima	Acacia ulicifolia
Acianthus caudatus	Acianthus exsertus
Acronychia imperforata	Acrotriche aggregata
Allocasuarina littoralis	Alyxia ruscifolia
Araucaria cunninghamii	Aristida spp.
Astroloma humifusum	Austromyrtus dulcis
Baloskion tetraphyllum subsp. meiostachyum	Banksia integrifolia subsp. integrifolia
Banksia serrata	Bulboschoenus barbata
Callitris columellaris	Chiloglottis sp.
Commelina cyanea	Corymbia intermedia
Cyclophyllum longipetalum	Cymbopogon refractus var. refractus
Cyperus stradbrokensis	Dianella caerulea
Eragrostis brownii	Eucalyptus pilularis
Eucalyptus resinifera subsp. hemilampra	Eucalyptus signata
Euroschinus falcata	Halfordia kendack
Hoya australis subsp. australis	Imperata cylindrica var. major
Leptospermum polygalifolium	Leucopogon ericoides
Leucopogon leptospermoides	Leucopogon margarodes
Lomandra longifolia	Monotoca elliptica
Notelaea longifolia	Oxylobium robustum
Paspalidium distans	Persoonia stradbrokensis
Platycerium bifurcatum	Pomax umbellata
Pteridium esculentum	Pterostylis nutans
Pterostylis pedunculata	Zieria smithii

3. The total species list of the community is considerably larger than that given above, with many species present in only one or two sites or in low abundance. The species composition of a site will be influenced by the size of the site, recent rainfall or drought condition and by its disturbance (including fire) history. The number of species, and the above ground relative abundance of species will change with time since fire, and may also change in response to changes in fire regime (including changes in fire frequency). At any one time, above ground individuals of some species may be absent, but the species may be represented below ground in the soil seed banks or as dormant structures such as bulbs, corms, rhizomes, rootstocks or lignotubers. The list of species given above is of vascular plant species; the community also includes

micro-organisms, fungi, cryptogamic plants and a diverse fauna, both vertebrate and invertebrate. These components of the community are poorly documented.

- 4. Coastal Cypress Pine Forest is dominated by a dense to open canopy of *Callitris columellaris* (Coastal Cypress Pine), sometimes with Coyrmbia intermedia (Pink Bloodwood), Eucalyptus pilularis (Blackbutt), E. signata (Scribbly Gum), Acacia disparrima subsp. disparrima (Salwood), Allocasuarina littoralis (Black She-oak), Banksia integrifolia subsp. integrifolia (Coast Banksia) or B. serrata (Old Man Banksia). The typically sparse layer of shrubs may include, Acacia ulicifolia (Prickly Moses), Leucopogon ericoides (Pink Beard-heath), L. leptospermoides, Monotoca elliptica (Tree broom-heath) and juveniles of any of the canopy species. The typically sparse groundcover comprises scattered grasses, including Aristida vagans (Three-awn Speargrass), Eragrostis brownii (Brown's Lovegrass), Imperata cylindrica var. major (Blady Grass) and Paspalidium distans, graminoids such as Baloskion tetraphyllum subsp. meiostachyum (Plume Rush) and Lomandra longifolia (Spiny-headed Mat-rush) and forbs including Dianella caerulea (Blue Flax Lily) and *Pomax umbellata* or it may also contain a rich orchid flora (Moye in litt. 2008). The community may have a distinctive litter layer with patches of compressed *Callitris* branchlets, which have a characteristic chemical composition that is high in terpenes, such as limonene and pinene (Ogunwande et al. 2005). Undisturbed stands of the community may have a woodland or forest structure, with C. columellaris dominating the canopy, although larger trees, such as eucalypts may be emergent. Stands of the community that have been partially cleared in the past may be reduced to scattered trees and a few characteristic ground cover species, possibly with other native species represented in a soil seed bank. Fires may also influence the structure of the community, as the dominant tree species, C. columellaris, is generally killed when burnt. Post-fire regeneration of the community may therefore have the structure of shrubland or heathland for many years.
- 5. A number of threatened flora species have been recorded in Coastal Cypress Pine Forest or associated ecotones. These include *Acronychia littoralis* (Scented Acronychia), *Archidendron hendersonii* (White Lace Flower), *Geodorum densiflorum* (Pink Nodding Orchid, Shepherds Crook Orchid) and *Drynaria rigidula* (Basket fern).
- 6. Coastal Cypress Pine Forest typically occurs on the inland side of the coastal sandplain on low rises that represent eroded Pleistocene backbarrier dunes (Morand 1996). A few examples of the community are located on coastal bedrock hills mantled with wind-blown sand or more rarely without a sandy mantle (e.g. Landmark 1999). The community has also been recorded from Holocene sand dunes (Griffith 1999). The sandy soils are generally deep, freely draining podsols, loam or clay soils associated with basalt or, less commonly, fine-grained sedimentary rocks and similar substrates. Currently known occurrences of the community are generally within 35 km of the coast and below 100 m elevation. Mean annual rainfall varies from approximately 1000 mm up to 1800 mm across the distribution of the community.
- 7. Coastal Cypress Pine Forest is apparently restricted to the NSW North Coast bioregion. The dominant species, *C. columellaris*, extends into south-east Queensland as far north as Hervey Bay. Biantoff and Elsol (1989) record *C. columellaris* in forest on the Sunshine Coast in south-east Queensland, although it is uncertain whether this represents the same community or other communities in which *C. columellaris* is sub-dominant. However, any occurrence of the community in south-east Queensland is likely to be highly restricted. In NSW, Coastal Cypress Pine Forest is currently known from the local government areas of Tweed, Byron, Ballina, Richmond Valley and Clarence Valley, but may occur elsewhere within the bioregion. Bioregions are defined in Thackway and Cresswell (1995).
- 8. Coastal Cypress Pine Forest includes 'Coast Cypress Pine' (Forest Ecosystem 22) of NPWS (1999) and DEC (2004), 'Callitris columellaris tall open to closed forest' (F4) of Pressey and Griffith (1992), the 'Cypress Pine' unit of Landmark (1999), 'Cypress Pine Open Forest to Woodland' (313) of Kingston et al. (2004), Coast Cypress Pine on Dunes and Ridges' (Community 33) of Sherringham et al. (unpubl. data) and Coastal Cypress Pine assemblages described by Benwell (1995, 1998). Coastal Cypress Pine Forest belongs to the Coastal Dune Dry Sclerophyll Forests vegetation class of Keith (2004).
- 9. Based on detailed field inspections, the total distribution of Coastal Cypress Pine Forest covers approximately 150 ha (A. Benwell, unpubl. data), and is certainly less than 200 ha. Coastal Cypress Pine Forest is currently known from 15-20 localities, most of which are patches no larger than 10 ha. Stands of the community have been mapped in Bundjalung, Yuraygir and Broadwater National Parks (Griffith 1983, 1984, 1985) and Billinudgel Nature Reserve (Benwell 1998), accounting for about half of the total known occurrence. The remaining stands occur primarily on private land or road easements. All known

occurrences of the community are within a total extent of occurrence of $2500 - 3000 \text{ km}^2$. These estimates indicate that the community has a highly restricted distribution.

- 10. Since European settlement, and relative to the longevity of its dominant trees, which live for more than a hundred years, Coastal Cypress Pine Forest has undergone a large reduction in geographic distribution. This reduction has occurred as a result of vegetation clearing for sand mining, agriculture and coastal development. Estimates based on field observations of old remnant trees in cleared land around the remaining stands of the Coastal Cypress Pine Forest suggest that the area occupied by the community may have declined by more than 77% (A. Benwell, unpubl. data). The actual reduction in geographic distribution is likely to be larger than this estimate suggests because stands which may have been totally destroyed could not be included in the calculation. Small-scale clearing continues to threaten the community, primarily as a result of coastal development and associated upgrading of roads. For example, within the past two decades, fragmentation of the community has increased as a result of clearing for tea tree plantations, caravan parks, road construction and associated quarrying (DECC in litt., A. Benwell, pers. comm. August 2006), indicating a continuing decline in the geographic distribution of the community. The remaining area of the community is severely fragmented. The integrity and survival of small, isolated stands of the community is impaired by the small population size of its component species, enhanced risks from environmental stochasticity, disruption to pollination and dispersal of fruits or seeds, and likely reductions in the genetic diversity of isolated populations (Young et al. 1996, Young and Clarke 2000). 'Clearing of native vegetation' is listed as a Key Threatening Process under the Threatened Species Conservation Act 1995.
- 11. Other threats to Coastal Cypress Pine Forest include habitat degradation and weed invasion. Maintenance of service easements and fence construction encroaches on the edges of some stands, while trampling and rubbish dumping occurs where the community is close to towns and recreational sites. Such disturbances accelerate the invasion of weeds, which may form a dense understorey or ground layer, displacing native understorey species and inhibiting recruitment of canopy species. Principal weed species include *Asparagus aethiopicus*, *Bryophyllum delagoense*, *Chloris gayana*, *Lantana camara*, *Ochna serrulata* and *Schefflera actinophylla*. Other weed species recorded in the community include *Panicum maximum*, *Rhaphiolepis indica*, *Solanum nigrum* and *S. seaforthianum*. The invasion and establishment of exotic species in Coastal Cypress Pine Forest, results in a large reduction in the ecological function of the community. 'Invasion of native plant communities by exotic perennial grasses' and 'Invasion, establishment and spread of *Lantana camara* L. *sens. lat*)' are listed as Key Threatening Processes under the Threatened Species Conservation Act 1995.
- 12. Inappropriate fire regimes also pose a threat to Coastal Cypress Pine Forest. Undisturbed stands of the community typically have a sparse understorey and apparently do not accumulate large quantities of uncompacted litter. These attributes do not favour propagation of fires under common weather conditions. However, the dominant species, C. columellaris, may be killed by crown fires or heavy scorching of the lower trunk. Such effects have been observed in localised patches (A. Benwell, pers. comm.), as incursion of fire may be facilitated by more flammable vegetation that surrounds the small patches of the community. A recent crown fire in Bundjalung National Park killed existing seedlings, saplings and mature trees of *C. columellaris* and apparently resulted in little post-fire recruitment (S. J. Griffith, pers. comm.). Regeneration of the species appears to rely on seed that is released regularly from non-persistent cones, mainly in the summer months. Seedling recruitment is mainly seen in gaps created by small-scale disturbance (A. Benwell, pers. comm.). Given these characteristics and observations, high-frequency fires are likely to be detrimental to the persistence of the community, although infrequent fires may be necessary to create the gaps apparently required for seedling recruitment to replace senescent trees. Frequent fires are also likely to accelerate the invasion of weeds, since these species are efficient colonisers of open space where there are sources of propagules nearby. Weed invasion is likely to alter the fuel characteristics, making the community more flammable. Increasing human population pressures, such as those occurring on the NSW north coast, typically result in an increase in fire ignitions in bushland that is accessible to urban areas. 'High frequency fire resulting in disruption of life cycle processes in plants and animals and loss of vegetation structure and composition' is listed as a Key Threatening Process under the Threatened Species Conservation Act 1995.
- 13. Coastal Cypress Pine Forest in the NSW North Coast Bioregion is not eligible to be listed as a critically endangered ecological community.

14. Coastal Cypress Pine Forest in the NSW North Coast Bioregion is eligible to be listed as an Endangered Ecological Community as, in the opinion of the Scientific Committee, it is facing a very high risk of extinction in New South Wales in the near future, as determined in accordance with the following criteria as prescribed by the Threatened Species Conservation Regulation 2002:

Clause 25

The ecological community has undergone, is observed, estimated, inferred or reasonably suspected to have undergone or is likely to undergo within a time span appropriate to the life cycle and habitat characteristics of its component species:

(b) a large reduction in geographic distribution.

Clause 26

The ecological community's geographic distribution is estimated or inferred to be:

(b) highly restricted,

and the nature of its distribution makes it likely that the action of a threatening process could cause it to decline or degrade in extent or ecological function over a time span appropriate to the life cycle and habitat characteristics of the ecological community's component species.

Clause 27

The ecological community has undergone, is observed, estimated, inferred or reasonably suspected to have undergone or is likely to undergo within a time span appropriate to the life cycle and habitat characteristics of its component species:

(b) a large reduction in ecological function,

as indicated by any of the following:

- (d) change in community structure
- (g) invasion and establishment of exotic species
- (h) degradation of habitat
- (i) fragmentation of habitat

Dr RICHARD MAJOR, Chairperson, Scientific Committee

Reference:

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DETERMINATION TO MAKE A MINOR AMENDMENT TO PART 3 OF SCHEDULE 1 OF THE THREATENED SPECIES CONSERVATION ACT

THE Scientific Committee, established by the Threatened Species Conservation Act has made a Determination to make a minor amendment to Part 3 of Schedule 1 (Endangered ecological communities) of the Act by inserting the Coastal Saltmarsh in the NSW North Coast, Sydney Basin and South East Corner Bioregions (as described in the determination of the Scientific Committee under Division 5 Part 2) and as a consequence to omit reference to the Coastal Saltmarsh in the NSW North Coast, Sydney Basin and South East Corner Bioregions (as described in the final determination to list the ecological community) which was published on pages 3404 to 3408 in the *NSW Government Gazette* No. 94 dated 4 June 2004. Minor amendments to the Schedules are provided for by Division 5 of Part 2 of the Act.

The Scientific Committee is of the opinion that the amendment is necessary or desirable to correct minor errors or omissions in the Determination in relation to the Thackway and Cresswell (1995) reference.

The Scientific Committee has found that:

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- 1. Coastal Saltmarsh in the NSW North Coast, Sydney Basin and South East Corner Bioregions is the name given to the ecological community occurring in the intertidal zone on the shores of estuaries and lagoons including when they are intermittently closed along the NSW coast. Coastal saltmarsh has been recorded from sites along the NSW coast (NSW North Coast, Sydney Basin and South East Corner Bioregions). Bioregions are defined in Thackway and Cresswell (1995).
- 2. Characteristic vascular plant species of Coastal Saltmarsh are:

Baumea juncea	Isolepis nodosa
Juncus kraussii	Samolus repens
Sarcocornia quinqueflora	Selliera radicans
Sporobolus virginicus	Suaeda australis
Triglochin striata	Zoysia macrantha

- The total list of species is larger, with many species present in low abundance or at few sites. A more extensive list of species is provided by Adam *et al.* (1988). The sediment surface may support a diversity of both micro-algae and macro-algae.
- 3. Communities with similar floristic composition, but with a different fauna, are found supratidally on exposed headlands (Adam *et al.* 1988). These headland communities and those of inland saline areas are not included within this Determination of the Coastal Saltmarsh Ecological Community.
- 4. Coastal Saltmarsh in the NSW North Coast, Sydney Basin and South East Corner Bioregions provide habitat for a diverse invertebrate fauna, which includes both marine (crabs and molluscs) and terrestrial (insects and spiders) elements. During tidal flooding a number of fish species utilise saltmarsh habitats. Grazing by macropods may occur between tidal events. Some coastal saltmarshes provide important high tide roosts for migratory wading birds, and a range of other birds also utilise coastal saltmarsh as habitat. Diversity of macrofauna in mangrove forests adjacent to saltmarsh has been found to be greater than in mangroves that do not border saltmarsh (Yerman & Ross 2004)
- 5. Coastal Saltmarsh in the NSW North Coast, Sydney Basin and South East Corner Bioregions is frequently found as a zone landward of mangrove stands. Occasional scattered mature *Avicennia marina* trees occur through saltmarsh at some sites, and *Avicennia* (and less frequently *Aegiceras corniculatum*) seedlings may occur throughout saltmarsh. In brackish areas dense stands of tall reeds (*Phragmites australis, Bulboschoenus* spp., *Schoenoplectus* spp., *Typha* spp.) may occur as part of the community.
- 6. West *et al.* (1985) estimated the total area of coastal saltmarsh in NSW was approximately 5700 hectares distributed in fragmented patches mostly less than 100 hectares. Since this estimate, further reduction and fragmentation have occurred.
- 7. Species composition within Coastal Saltmarsh varies with elevation. *Sarcocornia quinqueflora* dominates at lower, and hence more frequently flooded, levels than *Sporobolus virginicus* which dominates the mid saltmarsh, while *Juncus kraussii* and *Baumea juncea* are upper saltmarsh species. There is also geographic variation, with much more extensive stands of *Sporobolus virginicus* being found in northern NSW, and conversely more extensive *Sarcocornia quinqueflora* stands in the south. Coastal Saltmarsh in southern NSW is generally more species rich than further north, with *Austrostipa stipoides, Gahnia filum, Limonium australe* and *Sclerostegia arbuscula* forming a characteristic southern suite of species. A number of other

species with restricted distribution in Coastal Saltmarsh include *Distichlis distichophylla* (endangered), *Halosarcia pergranulata* subsp. *pergranulata*, *Wilsonia backhousei* (vulnerable) and *Wilsonia rotundifolia* (endangered).

- 8. Saltmarshes are globally threatened, and many of the threatening processes identified by Adam (2002) operate in NSW including infilling, modified tidal flow, weed invasion, damage by domestic and feral animals, human disturbance, altered fire regimes and climate change.
- 9. Historically, substantial areas of saltmarsh have been infilled for roads and aerodromes and for residential, recreational, waste disposal, industrial and agricultural purposes. With increased recognition of the ecological value of saltmarshes, the threat of further large-scale reclamation is less, but smaller scale infilling still occurs (Harty and Cheng 2003).
- 10. Patterns of tidal flow have been restricted by artificial structures in many NSW saltmarshes (Williams and Watford 1997), while discharge of stormwater alters salinity regimes, increases nutrient levels and facilitates the spread of *Phragmites* and weeds.
- 11. In recent decades there has been widespread invasion of saltmarsh in southeast Australia by mangroves (Mitchell and Adam 1989, Saintilan and Williams 1999, 2000). The factors driving mangrove invasion are still unclear. The mangrove invasion limits the use of saltmarshes by birds that would normally make use of this habitat and has been a factor in their decline (Saintilan 2003, Straw 1999, 2000).
- 12. A large number of weed species occur in NSW saltmarshes (Adam 1981, Adam *et al.* 1988). In terms of change to the community structure and function, the most serious weed is *Juncus acutus*; other major weeds include *Baccharis halimifolia*, *Cortaderia selloana* and *Hydrocotyle bonariensis*. The upper saltmarsh zone may be dominated by introduced annuals or shortlived perennials, including *Parapholis incurva*, *Plantago coronopus* and *Polypogon monspeliensis*.
- 13. Damage to saltmarshes by recreational vehicles, including four wheel drives, is widespread, and deep wheel ruts persist for many years even after exclusion of vehicles. Use of BMX and mountain bikes is increasing, and even saltmarshes within conservation reserves have been seriously damaged (Adam 2002).
- 14. Grazing and trampling by domestic stock and feral herbivores occurs at a number of sites. Stock grazing has been shown to substantially change the vegetation composition and structure (Adam 1990), while on muddy substrates trampling can cause loss of plant cover and modify drainage patterns.
- 15. Saltmarshes have frequently been used for casual rubbish dumping and are at risk from waterborne pollution including oil and chemical spills, both from shipping and road accidents, and catchment runoff of nutrients and agricultural chemicals.
- 16. Upper saltmarsh stands dominated by *Juncus kraussii* and *Baumea juncea* have high flammable fuel loads. While the natural incidence of fire in saltmarshes is likely to have been low, a number of saltmarshes have been burnt in recent years. The recovery of these sites is relatively slow and the long-term impacts of burning are uncertain.
- 17. Global warming and increased relative sea level are likely to pose an increasing threat to the survival of many areas of Coastal Saltmarsh (Adam 2002, Hughes 2003).
- 18. Coastal Saltmarsh occurs in a number of conservation reserves including the Ramsar listed sites at Towra Point and Kooragang Island Nature Reserves. Reserve status, however, does not confer protection from mangrove and weed invasion, recreational vehicles, pollution, fire or sea level rise without active management.
- 19. In view of the above the Scientific Committee is of the opinion that the Coastal Saltmarsh in the NSW North Coast, Sydney Basin and South East Corner Bioregions is likely to become extinct in nature in New South Wales unless the circumstances and factors threatening its survival cease to operate.

Dr RICHARD MAJOR, Chairperson, Scientific Committee

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DETERMINATION TO MAKE A MINOR AMENDMENT TO PART 3 OF SCHEDULE 1 OF THE THREATENED SPECIES CONSERVATION ACT

The Scientific Committee, established by the Threatened Species Conservation Act has made a Determination to make a minor amendment to Part 3 of Schedule 1 (Endangered ecological communities) of the Act by inserting the Fuzzy Box Woodland on alluvial soils of the South Western Slopes, Darling Riverine Plains and Brigalow Belt South Bioregions (as described in the determination of the Scientific Committee under Division 5 Part 2) and as a consequence to omit reference to the Fuzzy Box Woodland on alluvial soils of the South Western Slopes, Darling Riverine Plains and Brigalow Belt South Bioregions (as described in the fuzzy Box Woodland on alluvial soils of the South Western Slopes, Darling Riverine Plains and Brigalow Belt South Bioregions (as described in the final determination to list the ecological community) which was published on pages 7668 to 7672 in the *NSW Government Gazette* No. 149 dated 24 September 2004. Minor amendments to the Schedules are provided for by Division 5 of Part 2 of the Act.

The Scientific Committee is of the opinion that the amendment is necessary or desirable to correct minor errors or omissions in the Determination in relation to the Thackway and Cresswell (1995) reference.

The Scientific Committee has found that:

 Fuzzy Box Woodland on alluvial soils of the South Western Slopes, Darling Riverine Plains and Brigalow Belt South Bioregions occurred mainly in the Dubbo – Narromine – Parkes – Forbes area. Within this region it is now found principally in the South Western Slopes Bioregion and also occurs in parts of the Darling Riverine Plains Bioregion and Brigalow Belt South Bioregion. Bioregions are defined in Thackway and Cresswell (1995).

Species that are characteristic of the community include:

Acacia deanei subsp. deanei	Acacia excelsa
Acacia hakeoides	Acacia implexa
Acacia penninervis var. longiracemosa	Allocasuarina luehmannii
Alternanthera nana	Aristida behriana
Aristida muricata	Aristida ramosa var. ramosa
Arthropodium minus	Atriplex leptocarpa
Atriplex semibaccata	Austrodanthonia setacea
Austrostipa aristiglumis	Austrostipa densiflora
Austrostipa elegantissima	Austrostipa ramosissima
Austrostipa scabra	Austrostipa verticillata
Austrostipa wakoolica	Boerhavia dominii
Bothriochloa decipiens	Bothriochloa macra
Brachychiton populneus subsp. populneus	Bracteantha viscosa
Bulbine bulbosa	Callitris glaucophylla
Calotis cuneifolia	Calotis scapigera
Carex appressa	Carex incomitata
Cassinia aculeata	Casuarina cristata
Centaurea melitensis	Chamaesyce drummondii
Cheilanthes austrotenuifolia	Chenopodium cristatum
Chenopodium desertorum	Chloris truncata
Convolvulus erubescens	Dactyloctenium radulans
Dendrophthoe glabrescens	Dianella longifolia var. longifolia
Dianella revoluta var. revoluta	Dichanthium sericeum
Dichondra repens	Dichopogon fimbriatus
Digitaria brownii	Digitaria divaricatissima
Dodonaea viscosa subsp. cuneata	Einadia hastata
Einadia nutans	Elymus scaber var. scaber
Enneapogon spp.	Enteropogon acicularis
Eragrostis australasica	Eragrostis parviflora
Eremophila debilis	Eriochloa procera
Eucalyptus blakelyi	Eucalyptus conica
Eucalyptus intertexta	Eucalyptus melliodora
Eucalyptus microcarpa	Eucalyptus populnea subsp. bimbil
Geijera parviflora	Glycine clandestina
Glycine latifolia	Hakea leucoptera

Juncus flavidus	Leptochloa digitata
Lomandra multiflora subsp. multiflora	Maireana enchylaenoides
Maireana humillima	Myoporum montanum
Myoporum platycarpum subsp. perbellum	Notelaea microcarpa
Notodanthonia longifolia	Orobanche cernua var. australiana
Oxalis chnoodes	Panicum decompositum
Panicum laevinode	Paspalidium albovillosum
Plantago cunninghamii	Poa labillardieri var. labillardieri
Portulaca oleracea	Ptilotus semilanatus
Rhagodia spinescens	Rostellularia adscendens subsp. adscendens var.
	pogonanthera
Sclerolaena birchii	Sclerolaena muricata var. muricata
Senna artemisioides sens. lat.	Sida corrugata
Sida petrophila	Solanum esuriale
Stackhousia monogyna	Themeda australis
Vittadina cuneata	Wahlenbergia fluminalis
Wahlenbergia luteola	Wahlenbergia victoriensis

2. Fuzzy Box Woodland on alluvial soils of the South Western Slopes, Darling Riverine Plains and Brigalow Belt South Bioregions is a woodland or open forest usually dominated by Fuzzy Box *Eucalyptus conica*, which often grows with Inland Grey Box *Eucalyptus microcarpa*, Yellow Box *Eucalyptus melliodora* or Kurrajong *Brachychiton populneus*. Buloke *Allocasuarina luehmannii* is common in places. Shrubs are generally sparse and include *Acacia deanei*, *Dodonaea viscosa*, *Geijera parviflora*, *Acacia implexa*, *Senna artemisioides* sens. lat., *Myoporum montanum* and *Cassinia aculeata*. Small shrubs include *Maireana microphylla* and *Sclerolaena muricata*. The ground cover may be dense after rain but is usually moderately dense. It comprises native forbs, including *Calotis cuneifolia*, *Sida corrugata*, *Einadia hastata*, *Dianella revoluta* and *Bracteantha viscosa*, prostrate shrubs such as *Eremophila debilis*, *Maireana enchylaenoides*, and native grasses including *Austrostipa scabra*, *Chloris truncata*, *Elymus scaber*, *Themeda australis and Austrodanthonia setacea*.

The species Fuzzy Box Eucalyptus conica is more widely distributed than this community on the western slopes of NSW and may occur in association with other eucalypt species to form other communities. Weeds may be common at disturbed sites under favourable seasonal conditions.

- 3. The total species list of the community is considerably larger than that given above, with many species present in only one or two sites or in very low abundance. The species composition of a site will be influenced by the size of the site, recent rainfall or drought conditions and by its disturbance (including fire) history. At any one time, above ground individuals of some species may be absent, but the species may be represented below ground in the soil seed banks or as dormant structures such as bulbs, corms, rhizomes, rootstocks or lignotubers. The list of species given above is of vascular plant species, the community also includes micro-organisms, fungi, cryptogamic plants and a diverse fauna, both vertebrate and invertebrate. These components of the community are poorly documented.
- 4. Fuzzy Box Woodland on alluvial soils of the South Western Slopes, Darling Riverine Plains and Brigalow Belt South bioregions occurs on brown loam or clay, alluvial or colluvial soils on prior streams and abandoned channels or slight depressions on the undulating plains or flats of the western slopes of the Great Dividing Range. This community often occurs upslope from River Red Gum communities, just above frequently inundated areas on the floodplain. It also occurs on colluvial soils on lower slopes and on valley flats (King 1998, Murphy and Lawry 1998).
- 5. Fuzzy Box Woodland on alluvial soils of the South Western Slopes, Darling Riverine Plains and Brigalow Belt South bioregions includes the 'Eucalyptus microcarpa-E. conica Association' and 'Eucalyptus pilligaensis-E. conica Association' of Biddiscombe (1963), 'Group 14 Eucalyptus conica' of Austin et al. (2000), 'Community C: Fuzzy Box Woodland' of Seddon et al. (2002) and the 'Fuzzy Box / Grey Box open-woodland on levees and alluvial flats' broad vegetation type described by Kerr and Jowett (2003). Fuzzy Box Woodland is included within 'Community P4 Box woodlands' of Sivertsen and Metcalfe (1995), 'Community P4 Poplar Box Woodlands' and 'Community P13 Grey Box Woodlands' of Metcalfe et al. (2003), and 'Map unit PNP1, PNP2, PNP3 Bimble Box Woodlands of the Plains and Map unit FLP2 Belah Tall Woodlands' of DLWC (2002), and belongs to the 'Floodplain Transition Woodlands' vegetation class of Keith (2004).

Species Conservation Act (1995).

- 6. Less than 5% of Fuzzy Box Woodland on alluvial soils of the South Western Slopes, Darling Riverine Plains and Brigalow Belt South bioregions is estimated to remain compared to pre-European times due to past clearing (Austin *et al.* 2000, Seddon *et al.* 2002). Fuzzy Box was considered a plentiful tree along the Lachlan River plains west of Forbes at the start of the 20th century (Cambage 1902). While broadscale clearing has now largely ceased in these areas, clearing of isolated paddock trees and further clearing of remnants, including regrowth, remain threats. Other symptoms of degradation prevail, including the senescence of relict plants, lack of regeneration due to grazing, lack of fire and weed invasion. Weeds may be very common at some sites. They include the forb species *Plantago lanceolata*, *Verbena bonariensis* and *Marrubium vulgare* and the grass species *Bromus diandrus*, *Vulpia myuros*, *Lolium perenne*, *Paspalum dilatatum* and *Hyparrhenia hirta*. Clearing of native vegetation and Invasion of native plant communities by exotic perennial grasses are listed as Key Threatening Processes under the Threatened
- 7. Only one small stand is currently known from a conservation reserve, at Weddin Mountains National Park near Grenfell.
- 8. In view of the above the Scientific Committee is of the opinion that Fuzzy Box Woodland on alluvial soils of the South Western Slopes, Darling Riverine Plains and Brigalow Belt South Bioregions is likely to become extinct in nature in New South Wales unless the circumstances and factors threatening its survival cease to operate.

Dr RICHARD MAJOR, Chairperson, Scientific Committee

Reference:

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DETERMINATION TO MAKE A MINOR AMENDMENT TO PART 3 OF SCHEDULE 1 OF THE THREATENED SPECIES CONSERVATION ACT

THE Scientific Committee, established by the Threatened Species Conservation Act has made a Determination to make a minor amendment to Part 3 of Schedule 1 (Endangered ecological communities) of the Act by inserting the *Halosarcia lylei* low open-shrubland in the Murray Darling Depression Bioregion (as described in the determination of the Scientific Committee under Division 5 Part 2) and as a consequence to omit reference to the *Halosarcia lylei* low open-shrubland in the Murray Darling Depression Bioregion (as described in the final determination to list the ecological community) which was published on pages 9445 to 9446 in the *NSW Government Gazette* No. 200 dated 17 December 2004. Minor amendments to the Schedules are provided for by Division 5 of Part 2 of the Act.

The Scientific Committee is of the opinion that the amendment is necessary or desirable to correct minor errors or omissions in the Determination in relation to the Thackway and Cresswell (1995) reference.

The Scientific Committee has found that:

- 1. *Halosarcia lylei* low open-shrubland in the Murray Darling Depression Bioregion is the name given to the ecological community described by Westbrooke *et al.* (1998) in their report on the vegetation of the area covered by the Scotia 1:100 000 map sheet in south-western New South Wales (NSW). The community is dominated by the chenopod shrub *H. lylei* and occurs on saline clay soils on the beds of small salt lakes and around the perimeter of larger salt lakes. Before the Westbrooke *et al.* (1998) study, both *Halosarcia lylei* low open-shrubland and its dominant species had not previously been recorded from NSW (Harden 1993).
- 2. *Halosarcia lylei* low open-shrubland in the Murray Darling Depression Bioregion was observed at most sites to be almost entirely monospecific (Westbrook *et al.* 1998), Species found in the community include:

Atriplex vesicaria Disphyma crassifolium subsp. clavellatum Halosarcia lylei Halosarcia pergranulata Osteocarpum acropterum var. deminuta

- 3. The total species list of the community varies between sites, with some species present in only one or two sites or in low abundance. The species composition of a site will be influenced by the size of the site, recent rainfall or drought condition and by its disturbance history. At any one time, above ground individuals of some species may be absent, but the species may be represented below ground in the soil seed banks or as dormant structures such as bulbs, corms, rhizomes, rootstocks or lignotubers. Although the list of species given above is of vascular plant species, the community also includes micro-organisms, fungi, cryptogamic plants and a diverse fauna, both vertebrate and invertebrate. These components of the community are poorly documented.
- 4. The *Halosarcia lylei* low open-shrubland was recorded from 14 locations within the Scotia map sheet (Westbrooke *et al.* 1998), and all locations occurred within the Wentworth and Unincorporated local government areas (within the Murray Darling Depression Bioregion). Bioregions are defined in Thackway and Cresswell (1995).
- 5. Most locations (11) occurred to the immediate north-east and south-east of Nanya Station. This community belongs to the Inland Saline Wetlands vegetation class of Keith (2004).
- 6. Westbrook et al. (1998) estimated that the *Halosarcia lylei* low open-shrubland covered less than one percent of the area of the Scotia map sheet. Further, the community is not protected within any formal reserves in south-western NSW, including Tarawi Nature Reserve, which falls entirely within the Scotia map sheet.
- 7. *Halosarcia lylei* low open-shrubland is potentially threatened by over-grazing and trampling by domestic livestock. This may become prevalent in areas where the availability of water for stock is increased through more efficient reticulation of water in previously unstocked or moderately stocked areas. Clearing of vegetation for agricultural purposes and during mineral exploration may also threaten this community. In particular, the targeting of salt lakes for sand mining is a significant threat to this community. Together with direct adverse effects on plants of trampling and mechanical destruction, disturbance may facilitate the invasion of weeds, cause erosion, disrupt cryptogamic flora and soil-dwelling invertebrates, and affect

associated vertebrate fauna e.g. Orange Chats, *Epthianura aurifrons* and White-fronted Chats, *E. albifrons*. Moreover, as a consequence of its apparent limited range and isolation, the community is vulnerable to local extinction via stochastic events.

8. In view of the above the Scientific Committee is of the opinion that the *Halosarcia lylei* low open-shrubland in the Murray Darling Depression Bioregion is likely to become extinct in nature in New South Wales unless the circumstances and factors threatening its survival cease to operate.

Dr RICHARD MAJOR, Chairperson, Scientific Committee

Reference:

Keith DA (2004) 'Ocean shores to desert dunes: the native vegetation of New South Wales and the ACT.' (NSW Department of Environment and Conservation, Sydney.)

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DETERMINATION TO MAKE A MINOR AMENDMENT TO PART 3 OF SCHEDULE 1 OF THE THREATENED SPECIES CONSERVATION ACT

THE Scientific Committee, established by the Threatened Species Conservation Act has made a Determination to make a minor amendment to Part 3 of Schedule 1 (Endangered ecological communities) of the Act by inserting the Howell Shrublands in the New England Tableland and Nandewar Bioregions (as described in the determination of the Scientific Committee under Division 5 Part 2 published in the Gazette on 2 December 2011) and as a consequence to omit reference to the Howell Shrublands in the New England Tableland and Nandewar Bioregions (as described in the determination of the Scientific Committee under Division 5 Part 2) which was published on pages 2723 to 2726 in the *NSW Government Gazette* No. 43 dated 18 April 2008. Minor amendments to the Schedules are provided for by Division 5 of Part 2 of the Act.

The Scientific Committee is of the opinion that the amendment is necessary or desirable to correct minor errors or omissions in the Determination in relation to the Thackway and Cresswell (1995) reference.

The Scientific Committee has found that:

1. The Howell Shrublands in the New England Tableland and Nandewar Bioregions is the name given to the ecological community that is characterised by the following assemblage of species:

Acacia falciformis Acacia neriifolia Acacia viscidula Actinotus helianthi Aristida vagans Austrodanthonia bipartita Babingtonia densiflora Boronia granitica Bulbostylis pyriformis Calandrinia eremaea Calytrix tetragona *Cassinia quinquefaria* Cheilanthes sieberi Chenopodium pumilio Commelina cyanea Crassula sieberiana Cryptandra amara subsp. floribunda Cymbopogon refractus Cyperus gracilis Dichopogon fimbriatus Drosera peltata Einadia hastata Eragrostis brownii *Eucalyptus dealbata* Eucalyptus prava Eulalia aurea Fimbristvlis dichotoma Glycine clandestina *Gonocarpus tetragynus* Goodenia belledifolia *Homoranthus prolixus* Hydrocotyle peduncularis Isotoma anethifolia Laxmannia compacta Leionema rotundifolium *Leptospermum brevipes* Leucopogon melaleucoides Leucopogon neo-anglicus Lomandra multiflora Micromyrtus sessilis Murdannia graminea

Acacia granitica Acacia triptera Actinotus gibbonsii Aristida jerichoensis Arthropodium milleflorum Austrodanthonia monticola Blechnum cartilagineum Brachyscome stuartii Caesia calliantha Callitris endlicheri Cassinia laevis *Centrolepis strigosa* Cheistochloa rigida Chrysocephalum semipapposum Cotula australis Cryptandra amara Cyathea australis Cyperus fulvus Dianella caerulea Digitaria breviglumis Echinopogon caespitosus Entolasia stricta Eucalyptus caleyi Eucalyptus mckieana Euchiton sphaericus Ficus rubiginosa Gahnia aspera Gonocarpus micranthus *Gonocarpus teucrioides* Hibbertia kaputarensis Hovea lanceolata Hypericum gramineum Isotoma axillaris Laxmannia gracilis Lepidosperma laterale *Leptospermum novae-angliae* Leucopogon muticus Lobelia gracilis Microlaena stipoides Monotaxis macrophylla

Notelaea microcarpa

- Olearia elliptica Opercularia hispida Oxalis chnoodes Ozothamnus obcordatus Paspalidium constrictum Patersonia sericea Persoonia cornifolia Phebalium rotundifolium *Philotheca myoporoides* subsp. *conduplicata* Plectranthus parviflorus Pleurosorus subglandulosus Poa sieberiana Pomax umbellata Portulaca bicolor Portulaca filifolia Portulaca oleracea Prostanthera nivea Pterostylis setifera Ranunculus sessiliflorus Rumex brownii Sigesbeckia orientalis Solanum cinereum Solanum opacum Solenogyne bellioides Stackhousia viminea Stypandra glauca Trachymene incisa Tripogon loliiformis Vittadinia sulcata Urtica incisa Zieria odorifera ms Wahlenbergia communis
- 2. The total species list of the community is considerably larger than that given above, with many species present in only one or two sites or in low abundance. The species composition of a site will be influenced by the size of the site, recent rainfall or drought condition and by its disturbance (including fire) history. The number of species, and the above ground relative abundance of species will change with time since fire, and may also change in response to changes in fire regime (including changes in fire frequency). At any one time, above ground individuals of some species may be absent, but the species may be represented below ground in the soil seed banks or as dormant structures such as bulbs, corms, rhizomes, rootstocks or lignotubers. The list of species given above is of vascular plant species; the community also includes micro-organisms, fungi, cryptogamic plants and a diverse fauna, both vertebrate and invertebrate. These components of the community are poorly documented.
- 3. Howell Shrublands has been recorded primarily around Copeton Dam and Goonoowigal near Inverell with a small occurrence (about 10 ha) at Warrabah. These occurrences are within the New England Tableland and Nandewar Bioregions. Bioregions are defined in Thackway and Cresswell (1995).
- 4. Howell Shrublands are dominated by low shrubs particularly *Homoranthus prolixus* and *Babingtonia densifolia*. Occasionally all shrubs may be absent giving a grassland structure or *Callitris endlicheri* and various eucalypts such as *Eucalyptus dealbata* and *Eucalyptus prava* may be present giving the appearance of a low open woodland. Howell Shrublands have been described in Hunter, J. & Clarke, P. (1998) *Cunninghamia* 5(3) :547-618.
- 5. Howell Shrublands occur on granitic outcrops and has been recorded on Gilgai Granite (undifferentiated), leucoadamellite and Tingha Granite. The area covered by granite outcrops is likely to be about 500-800 ha of which Howell Shrublands community is likely to actually cover about 100-200 ha.
- 6. Rare and threatened species in Howell Shrublands include *Homoranthus prolixus*, *Boronia granitica*, *Eucalyptus mckieana*, *Monotaxis macrophylla*, *Leionema rotundifolium* and *Acacia granitica*.
- 7. The main occurrence of the Howell Shrublands areas are not known to be conserved in any National Parks though it may possibly occur in Copeton State Recreation Area. Part of the small southern occurrence (about 2ha) is conserved in Warrabah National Park.
- 8. The most significant threat to the Howell Shrublands is grazing by goats. There are large herds throughout the area occupied by the Howell Shrublands community. Rabbits also cause substantial modification to the community. Other impacts are from sheep grazing and clearing, weed invasion, roadworks and powerline constructions. Increased mining activity and inappropriate fire regimes are potential threats.
- 9. In view the above, the Scientific Committee is of the opinion that Howell Shrublands in the New England Tableland and Nandewar Bioregions is likely to become extinct in nature unless factors threatening its survival or evolutionary development cease to operate and that listing as an endangered ecological community is warranted.

Dr RICHARD MAJOR, Chairperson, Scientific Committee

Reference:

Thackway R, Cresswell ID (1995) An interim biogeographic regionalisation for Australia: a framework for setting priorities in the National Reserves System Cooperative Program. (Version 4.0. Australian Nature Conservation Agency: Canberra.)

DETERMINATION TO MAKE A MINOR AMENDMENT TO PART 3 OF SCHEDULE 1 OF THE THREATENED SPECIES CONSERVATION ACT

THE Scientific Committee, established by the Threatened Species Conservation Act has made a Determination to make a minor amendment to Part 3 of Schedule 1 (Endangered ecological communities) of the Act by inserting the Hunter Lowland Redgum Forest in the Sydney Basin and NSW North Coast Bioregions (as described in the determination of the Scientific Committee under Division 5 Part 2) and as a consequence to omit reference to the Hunter Lowland Redgum Forest in the Sydney Basin and NSW North Coast Bioregions (as described in the final determination to list the ecological community) which was published on pages 10597 to 10601 in the *NSW Government Gazette* No. 255 dated 13 December 2002. Minor amendments to the Schedules are provided for by Division 5 of Part 2 of the Act.

The Scientific Committee is of the opinion that the amendment is necessary or desirable to correct minor errors or omissions in the Determination in relation to the Thackway and Cresswell (1995) reference.

The Scientific Committee has found that:

1. Hunter Lowland Redgum Forest in the Sydney Basin and NSW North Coast Bioregions is the name given to the ecological community found on gentle slopes arising from depressions and drainage flats on permian sediments of the Hunter Valley floor in the Sydney Basin and NSW North Coast Bioregions (*sensu* Thackway and Cresswell 1995) and characterised by the following assemblage of species:

5	, 6 6
Angophora costata	Austrodanthonia monticola
Billardiera scandens	Breynia oblongifolia
Brunoniella australis	Cheilanthes sieberi subsp. sieberi
Corymbia maculata	Cyanthillium cinereum
Cymbopogon refractus	Daviesia ulicifolia
Desmodium varians	Dichondra repens
Digitaria parviflora	Echinopogon caespitosus var. caespitosus
Entolasia stricta	Eragrostis brownii
Eragrostis leptostachya	Eucalyptus crebra
Eucalyptus moluccana	Eucalyptus punctata
Eucalyptus tereticornis	Glycine clandestina
Imperata cylindrica var. major	Jacksonia scoparia
Lagenifera stipitata	Leucopogon juniperinus
Lomandra longifolia	Lomandra multiflora subsp. multiflora
Microlaena stipoides var. stipoides	Panicum simile
Paspalidium distans	Persoonia linearis
Pomax umbellata	Pratia purpurascens
Solanum prinophyllum	Themeda australis

- 2. The total species list of the community is considerably larger than that given above, with many species present in only one or two sites or in very small quantity. The species composition of a site will be influenced by the size of the site, recent rainfall or drought condition and by its disturbance (including fire) history. The number of species, and the above ground relative abundance of species will change with time since fire, and may also change in response to changes in fire regime (including changes in fire frequency). At any one time, above ground individuals of some species may be absent, but the species may be represented below ground in the soil seed banks or as dormant structures such as bulbs, corms, rhizomes, rootstocks or lignotubers. The list of species given above is of vascular plant species, the community also includes micro-organisms, fungi, cryptogamic plants and a diverse fauna, both vertebrate and invertebrate. These components of the community are poorly documented.
- 3. Hunter Lowland Redgum Forest in the Sydney Basin and NSW North Coast Bioregions has been recorded from the local government areas of Maitland, Cessnock and Port Stephens (in the Sydney Basin Bioregion) and Muswellbrook and Singleton (in the NSW North Coast Bioregion) but may occur elsewhere in these bioregions. Bioregions are defined in Thackway and Cresswell (1995).
- 4. The Community is described and discussed in NSW NPWS (2000) as MU 19 Hunter Lowland Redgum Forest.
- 5. The Hunter Lowland Redgum Forest in the Sydney Basin and NSW North Coast Bioregions is generally an open forest with most common canopy trees species being *Eucalyptus tereticornis* and *Eucalyptus*

punctata although other frequently occurring canopy species are Angophora costata, Corymbia maculata, Eucalyptus crebra and Eucalyptus moluccana, with a number of other eucalypts being less frequently recorded. The mid stratum is characterised as open with sparse shrubs of Breynia oblongifolia, Leucopogon juniperinus, Daviesia ulicifolia and Jacksonia scoparia. There is consistently a ground layer of grasses and herbs, characterised by Microlaena stipoides var. stipoides, Cymbopogon refractus, Echinopogon caespitosus var. caespitosus, Cheilanthes sieberi subsp. sieberi and Pratia purpurascens.

- 6. Currently only a small area (less than 2% of total) of Hunter Lowland Redgum Forest in the Sydney Basin and NSW North Coast Bioregions is included in National Parks and Wildlife Service estate in the Lower Hunter (Wereketa) National Park. The majority of the remainder of the community is not on public land.
- 7. Modelling included in NSW NPWS (2000) shows that much of the pre-1750 extent of the community has been cleared. Only about 27% (less than 500 ha) of the original distribution survives and this is highly fragmented.
- 8. Although much of the clearing occurred early in European settlement, clearing still continues at a high rate. Between 1988 and 2001 approx 2380 ha were approved for clearing (advice from Department of Land and Water Conservation August 2001). In addition to clearing and fragmentation other threats include grazing, weed invasion, altered fire frequency and, locally, rubbish dumping.
- 9 In view of the above the Scientific Committee is of the opinion that the Hunter Lowland Redgum Forest in the Sydney Basin and NSW North Coast Bioregions is likely to become extinct in nature in New South Wales unless the circumstances and factors threatening its survival or evolutionary development cease to operate.

Dr RICHARD MAJOR, Chairperson, Scientific Committee

Reference:

- NSW NPWS (2000) Vegetation Survey and Mapping Lower Hunter and Central Coast Region. Report prepared for the Lower Hunter and Central Coast Regional Environment Management Strategy, Version 1.1 April 2000. 178pp
- Thackway R, Cresswell ID (1995) An interim biogeographic regionalisation for Australia: a framework for setting priorities in the National Reserves System Cooperative Program. (Version 4.0. Australian Nature Conservation Agency: Canberra.)

DETERMINATION TO MAKE A MINOR AMENDMENT TO PART 3 OF SCHEDULE 1 OF THE THREATENED SPECIES CONSERVATION ACT

THE Scientific Committee, established by the Threatened Species Conservation Act has made a Determination to make a minor amendment to Part 3 of Schedule 1 (Endangered ecological communities) of the Act by inserting the Littoral Rainforest in the NSW North Coast, Sydney Basin and South East Corner Bioregions (as described in the determination of the Scientific Committee under Division 5 Part 2) and as a consequence to omit reference to the Littoral Rainforest in the NSW North Coast, Sydney Basin and South East Corner Bioregions (as described in the final determination to list the ecological community) which was published on pages 3409 to 3416 in the *NSW Government Gazette* No. 94 dated 4 June 2004. Minor amendments to the Schedules are provided for by Division 5 of Part 2 of the Act.

The Scientific Committee is of the opinion that the amendment is necessary or desirable to correct minor errors or omissions in the Determination in relation to the Thackway and Cresswell (1995) reference.

The Scientific Committee has found that:

- 1. Littoral Rainforest in the NSW North Coast, Sydney Basin and South East Corner Bioregions is generally a closed forest, the structure and composition of which is strongly influenced by proximity to the ocean. The plant species in this ecological community are predominantly rainforest species with evergreen mesic or coriaceous leaves. Several species have compound leaves, and vines may be a major component of the canopy. These features differentiate littoral rainforest from sclerophyll forest or scrub, but while the canopy is dominated by rainforest species, scattered emergent individuals of sclerophyll species, such as *Angophora costata, Banksia integrifolia, Eucalyptus botryoides* and *E. tereticornis* occur in many stands. Littoral Rainforest in NSW is found at locations along the entire NSW Coast in the NSW North Coast Bioregion, Sydney Basin Bioregion and South East Corner Bioregion. Bioregions are defined in Thackway and Cresswell (1995). The areas mapped for inclusion in State Environmental Planning Policy 26 Littoral Rainforest are examples of the Littoral Rainforest ecological community occur at locations not mapped under SEPP 26. Some stands may be regrowth or in the process of regenerating. The Sutherland Shire Littoral Rainforest Endangered Ecological Community which was previously listed as an endangered ecological community is included within this Community.
- 2. Littoral rainforest occurs on both sand dunes and on soils derived from underlying rocks (McKinley *et al.* 1999). Stands on headlands exposed to strong wind action may take the form of dense windpruned thickets (for example the Bunga Head Rainforest illustrated by Keith & Bedward 1999 or MU5 Littoral Windshear Thicket in NPWS 2002). In more sheltered sites, and in hind dunes, the community is generally taller, although still with wind pruning on the windward side of stands. Floristically there is a high degree of similarity between stands on different substrates. Most stands of Littoral Rainforest occur within 2 km of the sea, but may occasionally be found further inland, but within reach of maritime influence.
- 3. Littoral Rainforest comprises the *Cupaniopsis anacardioides Acmena* spp. alliance of Floyd (1990). This alliance as described by Floyd includes five sub-alliances – Syzygium leuhmannii – Acmena hemilampra, Cupaniopsis anacardioides, Lophostemon confertus, Drypetes – Sarcomelicope – Cassine – Podocarpus and Acmena smithii – Ficus – Livistona – Podocarpus. The distribution of some of these sub-alliances is geographically restricted - the Syzygium luehmannii - Acmena hemilampra sub-alliance is restricted to the north coast, while the most widespread sub-alliance Acmena smithii – Ficus – Livistona – Podocarpus is the only one present on the coast south of Sydney. The Lophostemon confertus suballiance, synonymous with Forest Type 25 Headland Brush Box (Forestry Commission of NSW 1989) is restricted to exposed headlands in the North Coast Bioregion. There is considerable floristic variation between stands and in particular areas localised variants may be recognised (for example on the south coast a number of variants within the Acmena smithii – Ficus – Livistona – Podocarpus sub-alliance have been described, see Mills 1996, Mills & Jakeman 1995; Keith & Bedward 1999, NCC 1999, NPWS 2002). Small, depauperate stands may be difficult to assign to sub alliances. A number of species characteristic of Littoral Rainforest in NSW reach their southern limits at various places along the coast (for example Cupaniopsis anacardioides reaches its southern limit between Sydney and the Illawarra) but a number of temperate species are restricted to the south coast, and the total Littoral Rainforest flora declines from north to south. Characteristic species of littoral rainforest include:

Acacia binervata	+	Acmena hemilampra
Acmena smithii	+	Acronychia imperforata

Acronychia oblongifolia Alectryon coriaceus

- Aphananthe philippinensis Arthropteris tenella Asplenium australasicum Banksia integrifolia subsp. integrifolia Breynia oblongifolia
- + Calamus muelleri
- + Capparis arborea Celtis paniculata Cissus hypoglauca Claoxylon australe
- + Cordyline stricta
 Cryptocarya microneura
 Cupaniopsis anacardioides
 Dendrocnide excelsa
 Dioscorea transversa
 Diospyros pentamera
 Duboisia myoporoides
 Ehretia acuminata
- + Elattostachys nervosa Endiandra sieberi Eucalyptus tereticornis Eustrephus latifolius Ficus obligua
- + Ficus watkinsiana Geitonoplesium cymosum Glycine clandestina Guioa semiglauca
- + Jagera pseudorhus Litsea reticulata Lomandra longifolia Maclura cochinchinensis Melaleuca quinquenervia
- + Melicope vitiflora
- + Monococcus echinophorus
- Mucuna gigantea
 Notelaea longifolia
 Oplismenus imbecillis
 Pandorea pandorana
 Parsonsia straminea
 Piper novae-hollandiae
 Pittosporum multiflorum
 Platycerium bifurcatum
 Pollia crispata
 Pouteria australis
- Pouteria myrsinoides Rhodamnia rubescens Ripogonum album Sarcomelicope simplicifolia Smilax australis
- + Sophora tomentosa subsp. australis Synoum glandulosum
- Syzygium luehmannii
 Syzygium paniculatum
 Trophis scandens subsp. scandens
 Wilkiea huegeliana

- + Alpinia caerulea
- Alyxia ruscifolia
- + Archontophoenix cunninghamiana
- + Arytera divaricata
- + Baloghia marmorata
- + Beilschmiedia obtusifolia
- + Bridelia exaltata Canthium coprosmoides Cayratia clematidea Cissus antarctica Cissus sterculiifolia
- + Cordyline congesta Cryptocarya glaucescens
- + Cryptocarya triplinervis Cynanchum elegans
- + Dendrocnide photinophylla Diospyros australis Doodia aspera
- + Dysoxylum fraserianum
- + Elaeocarpus obovatus Endiandra discolor Eucalyptus botryoides Eupomatia laurina Ficus coronata Ficus rubiginosa Flagellaria indica Glochidion ferdinandi
- + Gossia bidwillii
- + Ixora beckleri
- + Lepidozamia peroffskyana Livistona australis
- + Lophostemon confertus
- + Mallotus philippensis Melicope micrococca
- + Mischocarpus pyriformis
- + Morinda jasminoides
- Myoporum acuminatum
- + Olea paniculata
- + Pandanus pedunculatus
- Pararchidendron pruinosum var. pruinosum
- + Pentaceras australis
- + Pisonia umbellifera
 Pittosporum undulatum
 Podocarpus elatus
 Polyscias elegans
 Pouteria cotinifolia var. cotinifolia
 Rapanea variabilis
- + Rhodomyrtus psidioides Ripogonum discolor Scolopia braunii Smilax glyciphylla Stephania japonica var. discolor Syzygium australe
- Syzygium oleosum + Tetrastigma nitens
- Viola banksii

Those species marked '+' are found in littoral rainforest north of Sydney, with some restricted to the north coast or in only a few sites south of the North Coast Bioregion. The other species are geographically more widespread.

Given the small size of many stands and the history of fragmentation, the number of characteristic species in any stand is likely to be smaller than this list. In addition, the total richness of stands declines with increasing latitude and a number of the species listed above are absent or rare in the south.

- 4. The total species list of the community is considerably larger than that given above, with many species present in only one or two sites or in low abundance. The species composition of a site will be influenced by the size of the site, recent rainfall or drought condition and by its disturbance (including fire) history. The list of species given above is of vascular plant species, the community also includes micro-organisms, fungi, cryptogamic plants and a diverse fauna, both vertebrate and invertebrate. These components of the community are poorly documented but the assemblage in individual stands will depend on geographic location, size of stand, degree of exposure, history of disturbance and, if previously disturbed, stage of regeneration.
- 5. Threatened species and populations for which Littoral Rainforest is known or likely habitat include:

Acronychia littoralis	Cryptocarya foetida
Archidendron hendersonii	Macadamia tetraphylla
Cynanchum elegans	Hicksbeachia pinnatifolia
Fontainea oraria	Syzygium moorei
Senna acclinis	Xylosma terrae-reginae
Syzygium paniculatum	
Amaurornis olivaceus	Bush-hen
Coracina lineata	Barred Cuckoo-shrike
Lichenostomus faciogularis	Mangrove Honeyeater
Monarchia leucotis	White-eared Monarch
Ninox strenua	Powerful Owl
Pandion haliaetus	Osprey
Ptilinopus magnificus	Wompoo Fruit-dove
Ptilinopus regina	Rose-crowned Fruit-dove
Ptilinopus superbus	Superb Fruit-dove
Tyto tenebricosa	Sooty Owl
Dasyurus maculatus	Spotted-tailed Quoll
Kerivoula papuensis	Golden-tipped Bat
Mormopterus beccarii	Beccari's Freetail-bat
Mormopterus norfolkensis	Eastern Freetail-bat
Myotis adversus	Large-footed Myotis
Nyctimene robinsoni	Eastern Tube-nosed Bat
Potorous tridactylus	Long-nosed Potoroo
Pteropus alecto	Black Flying Fox
Pteropus poliocephalus	Grey-headed Flying Fox
Syconycteris australis	Eastern Blossom Bat
Thylogale stigmarica	Red-legged Pademelon
Coeranoscincus reticulatus	Three-toed Snake-tooth Skink
Hoplocephalus bitorquatus	Pale-headed Snake
Thersites mitchellae	Mitchell's Rainforest Snail

Emu, *Dromaius novaehollandiae*, population in the NSW North Coast Bioregion and Port Stephens Local Government Area

Menippus fugitivus (Lea), a beetle population in the Sutherland Shire

Most of the species included in this list are found at only some sites or vary in occurrence and abundance. As such they are not regarded as part of the characterisation of the community. Nevertheless, they are of conservation significance and need to be considered in recovery planning.

6. Littoral Rainforest occurs in numerous, small stands and in total comprises less than 1% of the total area of rainforest in NSW. The largest known stand occurs in Iluka Nature Reserve, which is approximately 136

ha. Many, but not all, stands of Littoral Rainforest have been included in mapping for State Environmental Planning Policy 26 Littoral Rainforest, but degradation of the ecological community is still occurring.

- 7. Weed species that threaten the integrity of particular stands include Ambrosia artemisifolia, Anredera cordifolia, Arecastrum romanzoffianum, Asparagus spp., Cardiospermum grandiflorum, Chrysanthemoides monilifera, Coprosma repens, Ehrharta spp., Gloriosa superba, Ipomoea spp; Impatiens walleriana, Lantana camara, Macfadyena unguis-cati, Rivina humilis, Pennisetum clandestinim, Schefflera actinophylla, Senna septemtrionalis, Solanum mauritianum Thunbergia alata and Tradescantia fluminensis.
- 8. Other threats include loss of canopy integrity arising from salt and wind damage as a result of clearing or damage to stand margins; clearing of understorey (including for firewood collection); grazing and physical disturbance of understorey including by feral deer; inappropriate collection of a range of plant species (including, but not restricted to, epiphytes); fire, particularly fire incursion along boundaries: visitor disturbance including soil compaction, soil disturbance, erosion from foot, cycle, trail bike and 4 wheel drive tracks, introduction of pathogens, and disturbance from creation of new planned and unplanned tracks; increased visitation and resulting increased demand for and use of, visitor facilities such as walking tracks, viewing platforms, toilet blocks, picnic areas etc; dumping of garden waste causing weed infestation; car and other rubbish dumping. Loss of fauna due to predation by feral animals, road kill, loss of habitat and feeding resources, disturbance from human visitation (faunal elements are essential to the ecological functioning of littoral rainforest and loss or reduction, in pollinators and seed dispersal agents will adversely affect long term vegetation health); fragmentation resulting in loss of connectivity and possibly reduced genetic exchange between populations. For stands not protected by State Environmental Planning Policy 26, clearing and development remains a possibility. (Adam 1987, 1992; Floyd 1990; Mills 1996).
- 9. In view of the above the Scientific Committee is of the opinion that Littoral Rainforest in the NSW North Coast, Sydney Basin and South East Corner Bioregions is likely to become extinct in nature in New South Wales unless the circumstances and factors threatening its survival or evolutionary development cease to operate.

Dr RICHARD MAJOR, Chairperson, Scientific Committee

Reference:

Adam P (1987) *New South Wales rainforests. The nomination for the World Heritage List.* NPWS, Sydney. Adam P (1992) *Australian rainforests* Oxford University Press, Oxford.

- Floyd AG (1990) Australian rainforests in New South Wales. Surrey Beatty and Sons, Sydney.
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- Thackway R, Cresswell ID (1995) An interim biogeographic regionalisation for Australia: a framework for setting priorities in the National Reserves System Cooperative Program. (Version 4.0. Australian Nature Conservation Agency: Canberra.)

DETERMINATION TO MAKE A MINOR AMENDMENT TO PART 3 OF SCHEDULE 1 OF THE THREATENED SPECIES CONSERVATION ACT

THE Scientific Committee, established by the Threatened Species Conservation Act has made a Determination to make a minor amendment to Part 3 of Schedule 1 (Endangered ecological communities) of the Act by inserting the Lowland Grassy Woodland in the South East Corner bioregion (as described in the determination of the Scientific Committee under Division 5 Part 2) and as a consequence to omit reference to the Lowland Grassy Woodland in the South East Corner bioregion (as described in the final determination to list the ecological community) which was published in the *NSW Government Gazette* No. 98 dated 3 August 2007 (pages 5606 to 5609) and in the *NSW Government Gazette* No. 99 dated 10 August 2007 (pages 5627 and 5636 to 5642). Minor amendments to the Schedules are provided for by Division 5 of Part 2 of the Act.

The Scientific Committee is of the opinion that the amendment is necessary or desirable to correct minor errors or omissions in the Determination in relation to the Thackway and Cresswell (1995) reference.

The Scientific Committee has found that:

- 1. Lowland Grassy Woodland in the South East Corner bioregion is the name given to the ecological community associated with rainshadow areas of the south coast and hinterland of New South Wales. These rainshadow areas receive less rainfall than more elevated terrain that partially surrounds them, with mean annual rainfall typically in the range of 700-1100 mm. The community typically occurs in undulating terrain up to 500 m elevation on granitic substrates (e.g. adamellites, granites, granodiorites, gabbros, etc.) but may also occur on locally steep sites and on acid volcanic, alluvial and fine-grained sedimentary substrates. Lowland Grassy Woodland in the South East Corner bioregion is characterised by the assemblage of species listed in paragraph 2 and typically comprises an open tree canopy, a near-continuous groundcover dominated by grasses and herbs, sometimes with layers of shrubs and/or small trees. Undisturbed stands of the community may have a woodland or forest structure. Small trees or saplings may dominate the community in relatively high densities after partial or total clearing. The community also includes 'derived' native grasslands which result from removal of the woody strata from the woodlands and forests.
- 2. Lowland Grassy Woodland in the South East Corner bioregion is characterised by the following assemblage of species:

1	
Acacia implexa	Acacia mearnsii
Acaena agnipila	Acaena echinata
Ajuga australis	Allocasuarina littoralis
Angophora floribunda	Aristida vagans
Arthropodium milleflorum	Arthropodium species B
Asperula conferta	Austrodanthonia pilosa
Austrodanthonia racemosa var. racemosa	Austrostipa rudis
Bossiaea buxifolia	Bothriochloa macra
Brachychiton populneus subsp. populneus	Bursaria spinosa
Calotis lappulacea	Carex breviculmis
Carex inversa	Carex longebrachiata
Cassinia aculeata	Cassinia longifolia
Cassinia trinerva	Cheilanthes distans
Cheilanthes sieberi	Chenopodium carinatum
Chenopodium pumilio	Chloris truncata
Chloris ventricosa	Chrysocephalum semipapposum
Chyrsocephlum apiculatum	Clematis glycinoides var. glycinoides
Convolvulus erubescens	Cymbopogon refractus
Cynoglossum australe	Cynoglossum suaveolens
Cyperus gracilis	Desmodium brachypodum
Desmodium varians	Dianella longifolia var. longifolia
Dianella revoluta var. revoluta	Dichelachne micrantha
Dichondra spp.	Digitaria parviflora
Digitaria ramularis	Dodonaea viscosa subsp. angustifolia
Echinopogon caespitosus var. caespitosus	Echinopogon ovatus
Einadia hastata	Einadia nutans

Einadia trigonos	Elymus scaber var. scaber
Epilobium billardierianum	Eragrostis leptostachya
Eucalyptus baueriana	Eucalyptus bosistoana
Eucalyptus globoidea	Eucalyptus maidenii
Eucalyptus melliodora	Eucalyptus tereticornis
Euchiton gymnocephalus	Exocarpos cupressiformis
Galium propinquum	Geitonoplesium cymosum
Geranium solanderi var. solanderi	Glycine clandestina
<i>Glycine tabacina</i>	Hardenbergia violacea
Hydrocotyle laxiflora	Hymenanthera dentata
Hypericum gramineum	Imperata cylindrica var. major
Jacksonia scoparia	Juncus subsecundus
Lagenifiera stipitata	Lepidosperma laterale
Leucopogon juniperinus	Lomandra longifolia
Lomandra multiflora subsp. multiflora	Microlaena stipoides
Notodanthonia longifolia	Opercularia aspera
Opercularia varia	Oplismenus imbecillis
Oxalis perennans	Oxalis radicosa
Ozothamnus argophyllus	Ozothamnus diosmifolius
Panicum effusum	Pellaea falcata
Pimelea curviflora	Pittosporum undulatum
Poa labillardierei var. labillardierei	Polygala japonica
Pratia purpurascens	Rubus parvifolius
Rumex brownii	Scleranthus biflorus
Senecio hispidulus var. hispidulus	Sigesbeckia orientalis subsp. orientalis
Solanum prinophyllum	Solanum pungetium
Sorghum leiocladum	Sporobolus creber
Sporobolus elongatus	Themeda australis
Vernonia cinerea var. cinerea	Veronica calycina
Veronica plebeia	Wahlenbergia communis
Wahlenbergia gracilis	Wahlenbergia stricta subsp. stricta
Zornia dyctiocarpa var. dyctiocarpa	

- 3. The total species list of the community is larger than that given above, with many species present in only one or two sites or in low abundance. The species composition of a site will be influenced by the size of the site, recent rainfall or drought conditions and by its disturbance history (including grazing, land clearing and fire). The number and relative abundance of species will change with time since fire, and may also change in response to changes in fire frequency or grazing regime. At any one time, above-ground individuals of some species may be absent, but the species may be represented below ground in soil seed banks or as dormant structures such as bulbs, corms, rhizomes, rootstocks or lignotubers. The list of species given above is mainly of vascular plant species, however the community also includes micro-organisms, fungi, cryptogamic plants and a diverse fauna, both vertebrate and invertebrate. The mammalian and avian components of the fauna have been described by Lunney and Leary (1990) and Miles (2005). Other components of the community are poorly documented.
- 4. Lowland Grassy Woodland in the South East Corner bioregion is characterised by an overstorey that is usually dominated by *Eucalyptus tereticornis* (Forest Red Gum), often with *Eucalyptus globoidea* (White Stringybark) and/or *Angophora floribunda* (Rough-barked Apple) and other eucalypts at some sites. For example, *Eucalyptus melliodora* (Yellow Box) and *E. pauciflora* (White Sally) may be locally common within the community. These are important components of this community because they are comparatively rare on the south coast lowlands, even though both species are more widespread in other communities on the tablelands. Other tree species include *E. baueriana* (Blue Box), *E. bosistoana* (Coastal Grey Box) and *E. maidenii* (Maiden's Blue Gum), which may occur in transitional stands with adjacent communities in which they are more common, and *E. viminalis* (Ribbon Gum) associated with lower slopes adjacent to major streamlines. The understorey often includes an open stratum of small trees dominated by *Acacia mearnsii* (Black Wattle), *A. implexa* (Hickory Wattle) or *Exocarpos cupressiformis* (Native Cherry) and an open shrub stratum that commonly includes *Bursaria spinosa*, *Cassinia* spp. and/or *Ozothamnus diosmifolius*. Shrubs may attain high densities in localised areas in response to changes in grazing or fire

regimes. The grassy ground cover is dominated by *Themeda australis* (Kangaroo Grass), *Microlaena stipoides* (Weeping Grass), *Eragrostis leptostachya* (Paddock Lovegrass) and *Echinopogon ovatus* (Forest Hedgehog Grass) with forbs such as *Dichondra repens* (Kidney Weed), *Desmodium varians* (Slender Tick Trefoil), *Hydrocotyle laxiflora* (Stinking Pennywort), *Hypericum gramineum* (Small St John's Wort), *Glycine clandestina* and the fern *Cheilanthes sieberi* (Poison Rock Fern). The structure of the community varies depending on past and current disturbances, particularly clearing and grazing. Contemporary tree-dominated stands of the community are largely relics or regrowth of originally taller forests and woodlands, which are likely to have had scattered shrubs and a largely continuous grassy groundcover. At some sites, mature trees may exceed 40 m, although regrowth stands may be shorter than 10 m. After total or partial clearing, the tree canopy may remain sparse or may regrow to form dense stands of saplings and small trees, which are typically associated with a ground layer of reduced cover and diversity. Either or both of the overstorey and mid-stratum may be absent from the community. Native grasslands derived from clearing of the woodland and forest are also part of this community if they contain characteristic non-woody species listed in paragraph 2.

- 5. Lowland Grassy Woodland in the South East Corner bioregion includes: Bega Dry Grass Forest (map unit 20) and Candelo Dry Grass Forest (map unit 21) of Keith and Bedward (1999), which are listed as Endangered Ecological Communities under the Threatened Species Conservation Act 1995; those parts of South Coast Grassy Woodland (map unit 34) of Tindall et al. (2004) in the South East Corner bioregion; Bega Valley Shrub/Grass Forest (Vegetation Group 52), and those parts of Southern Escarpment Herb/Grass Dry Forest (forest ecosystem 50) and Far South Coast Forest Red Gum Grass/Herb Dry Forest/Woodland (Vegetation Group 54) that occur within the South East Corner bioregion (all as in Thomas et al. 2000 and Gellie 2005); and Far South Coast Grassy Woodland of Tozer *et al.* (2006). Lowland Grassy Woodland, in the South East Corner bioregion belongs to the Coastal Valley Grassy Woodlands vegetation class (Keith 2004) and may usually be distinguished from other assemblages in the South East Corner bioregion by the current or former dominance of *Eucalyptus tereticornis*, a grassy ground cover dominated by *Themeda australis* with *Microlaena stipoides*, and other species listed in paragraph 2. However, *E. tereticornis* is absent from some stands of the community which may include *Angophora floribunda*, *E. melliodora*, *E. pauciflora* or lack trees altogether.
- 6. Lowland Grassy Woodland in the South East Corner bioregion is currently known to occur within the Bega Valley, Eurobodalla and Palerang Local Government Areas, but may occur elsewhere in the bioregion. Bioregions are defined in Thackway and Cresswell (1995). Major occurrences are found to the west of Batemans Bay, around Moruya, in the Araluen valley, in the Cobargo Bega Candelo area, the Towamba Valley and near Tanja.
- 7. Since European settlement, and relative to the longevity of its dominant trees, which live for several hundred years, Lowland Grassy Woodland in the South East Corner bioregion has undergone a large reduction in geographic distribution due to clearing (Keith and Bedward 1999, Thomas *et al.* 2000, Tindall *et al.* 2004, Tozer *et al.* 2006). The total remaining area of Lowland Grassy Woodland in the South East Corner bioregion is estimated to be less than 15 000 ha, representing approximately 20% of its projected area at the time of European settlement (Tozer *et al.* 2006). Clearing of the community has not been evenly distributed across its range. For example, Keith and Bedward (1999) estimated that less than 10% remains of Candelo Dry Grass Forest, a map unit occurring in the western parts of the Bega and Towamba valleys, which is included within Lowland Grassy Woodland. However, mapping carried out by Keith and Bedward (1999) was at coarser resolution than more recent mapping (Tozer *et al.* 2006), and omitted a number of smaller patches of the community in this region. Almost all of the remaining area of the community occurs on private land or on public easements, where its geographic distribution is undergoing a continuing decline due to small-scale clearing. 'Clearing of native vegetation' is listed as a Key Threatening Process under the Threatened Species Conservation Act 1995.
- 8. Extensive clearing of Lowland Grassy Woodland, has resulted in fragmentation and loss of ecological connectivity. The remaining area of the community is severely fragmented, with more than 95% of mapped extant patches estimated to be less than 10 ha (Tozer *et al.* 2006). The integrity and survival of small, isolated stands is impaired by the small population size of many species, enhanced risks from environmental stochasticity, disruption to pollination and dispersal of fruits or seeds, and likely reductions in the genetic diversity of isolated populations (Young *et al.* 1996, Young and Clarke 2000). Fragmentation also results in altered fire frequencies within some patches, which may reduce the viability of some native

plant populations (Clarke 2000). Fragmentation of habitat and disruption of these ecological processes contribute to a large reduction in the ecological function of the community.

- 9. Almost all of the remaining area of Lowland Grassy Woodland is regrowth forest and woodland from past clearing activities (Miles 2005). Some of the area of the community that is now devoid of woody plant species retains a substantial suite of native grasses and herbs in the ground layer. These changes in structure and species composition contribute to a large reduction in the ecological function of the community.
- 10. Weed invasion also poses a major threat to Lowland Grassy Woodland, with introduced perennial grasses having particularly serious impacts (Miles 2002). Principal weed species include:

Thistle
Hawthorn
Cocksfoot
African Lovegrass
St John's Wort
African Boxthorn
Serrated Tussock
Kikuyu
Blackberries
Fireweed
Nightshades
Parramatta Grass
Briar rose
Clover

Several of these exotic species, particularly grasses, form a dense ground layer capable of smothering indigenous plants, reducing both reproduction and survival. The invasion and establishment of exotic species in Lowland Grassy Woodland, results in a large reduction in the ecological function of the community. 'Invasion of native plant communities by exotic perennial grasses' is listed as a Key Threatening Process under the Threatened Species Conservation Act 1995.

- 11. Moderate to heavy grazing of Lowland Grassy Woodland, by livestock and introduced rabbits results in the decline and disappearance of palatable plant species, including shrubs and herbs, and compaction and erosion of topsoil, making it difficult for a diverse native understorey to re-establish. The effects of such overgrazing may be exacerbated under drought conditions. 'Competition and grazing by the feral European Rabbit, *Oryctolagus cuniculus*' is listed as Key Threatening Processes under the Threatened Species Conservation Act 1995. Habitat degradation associated with overgrazing and erosion contributes to a large reduction in ecological function of the community.
- 12. Lowland Grassy Woodland, has undergone a very substantial loss of native mammal fauna since European settlement. This is best documented in the Bega valley, where Lunney and Leary (1988) concluded, after an examination of historical and contemporary records, that at least six native mammal species had become locally extinct, including the Wallaroo (*Macropus robustus*), the Parma Wallaby (*Macropus parma*), the red-necked Pademelon (*Thylogale thetis*), the Tasmanian Bettong (*Bettongia gaimardi*), the Eastern Quoll (*Dasyurus viverrinus*) and the Brush-tailed Phascogale (*Phascogale tapoatafa*). The loss of habitat, invasion of feral predators and hunting activities were implicated as causes of these extinctions. The disruption of ecological processes associated with loss of key fauna contributes to a large reduction in ecological function of the community.
- 13. Tall trees approximating the stature of the community prior to European settlement remain principally as isolated individuals within paddocks. These and other remnant and regrowth trees suffer episodes of elevated mortality related to drought and recurring insect attack consistent with rural tree decline (Reid and Landsberg 2000). Loss of these large trees, which provide habitat resources for a range of fauna, contributes to a large reduction in ecological function of the community.
- 14. The Scientific Committee is of the opinion that Lowland Grassy Woodland in the South East Corner Bioregion is not eligible to be listed as a critically endangered ecological community.

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- 15. Lowland Grassy Woodland in the South East Corner Bioregion is eligible to be listed as an endangered ecological community as, in the opinion of the Scientific Committee, it is facing a very high risk of extinction in New South Wales in the near future, as determined in accordance with the following criteria as prescribed by the Threatened Species Conservation Regulation 2002:

Clause 25

The ecological community has undergone, is observed, estimated, inferred or reasonably suspected to have undergone or is likely to undergo within a time span appropriate to the life cycle and habitat characteristics of its component species:

(b) a large reduction in geographic distribution.

Clause 27

The ecological community has undergone, is observed, estimated, inferred or reasonably suspected to have undergone or is likely to undergo within a time span appropriate to the life cycle and habitat characteristics of its component species:

(b) a large reduction in ecological function,

as indicated by any of the following:

- (d) change in community structure
- (e) change in species composition
- (f) disruption of ecological processes
- (g) invasion and establishment of exotic species
- (h) degradation of habitat
- (i) fragmentation of habitat

Dr RICHARD MAJOR, Chairperson, Scientific Committee

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DETERMINATION TO MAKE A MINOR AMENDMENT TO PART 3 OF SCHEDULE 1 OF THE THREATENED SPECIES CONSERVATION ACT

THE Scientific Committee, established by the Threatened Species Conservation Act has made a Determination to make a minor amendment to Part 3 of Schedule 1 (Endangered ecological communities) of the Act by inserting the Lowland Rainforest in the NSW North Coast and Sydney Basin Bioregions (as described in the determination of the Scientific Committee under Division 5 Part 2) and as a consequence to omit reference to the Lowland Rainforest in the NSW North Coast and Sydney Basin Bioregions (as described in the final determination to list the ecological community) which was published on pages 11747 to 11756 in the *NSW Government Gazette* No. 189 dated 22 December 2006. Minor amendments to the Schedules are provided for by Division 5 of Part 2 of the Act.

The Scientific Committee is of the opinion that the amendment is necessary or desirable to correct minor errors or omissions in the Determination in relation to the Thackway and Cresswell (1995) reference and to clarify the description of the ecological community.

The Scientific Committee has found that:

- 1. Lowland Rainforest in the NSW North Coast and Sydney Basin Bioregions is the name given to the ecological community of subtropical rainforest and some related, structurally complex forms of dry rainforest, excluding Littoral Rainforest in the NSW North Coast, Sydney Basin and South East Corner Bioregions and Lowland Rainforest on Floodplain in the NSW North Coast Bioregion. Lowland Rainforest may be associated with a range of high-nutrient geological substrates, notably basalts and fine-grained sedimentary rocks, on coastal plains and plateaux, footslopes and foothills. In the north of its range, Lowland Rainforest is found up to 600m above sea level, but in the Sydney Basin bioregion it is limited to elevations below 350m. Bioregions are defined in Thackway and Cresswell (1995).
- 2. Lowland Rainforest, in a relatively undisturbed state, has a closed canopy, characterised by a high diversity of trees whose leaves may be mesophyllous and encompass a wide variety of shapes and sizes. Typically, the trees form three major strata: emergents, canopy and sub-canopy which, combined with variations in crown shapes and sizes, give the canopy an irregular appearance (Floyd 1990). The trees are taxonomically diverse at the genus and family levels, and some may have buttressed roots. A range of plant growth forms are present in Lowland Rainforest, including palms, vines and vascular epiphytes. Scattered eucalypt emergents (e.g. *Eucalyptus grandis, E. saligna*) may occasionally be present. In disturbed stands of this community the canopy continuity may be broken or the canopy may be smothered by exotic vines. Although every stand of rainforest is unique in terms of its biota, Lowland Rainforest can be characterised by the following species.

Acacia irrorata	Acacia melanoxylon
Acmena smithii	Adiantum formosum
Alchornea ilicifolia	Alectryon spp.
Alphitonia excelsa	Alphitonia petrei
Alpinia caerulea	Araucaria cunninghamii
Archidendron spp.	Archontophoenix cunninghamiana
Arytera spp.	Asplenium spp.
Backhousia spp.	Brachychiton acerifolius
Brachychiton discolor	Breynia oblongifolia
Caldcluvia paniculosa	Callerya australis
Capparis arborea	Cassine australe
Castanospermum australe	Cayratia clematidea
Ceratopetalum apetalum	Choricarpia leptopetala
Cinnamomum oliveri	Cissus spp.
Citronella moorei	Claoxylon australe
Clerodendrum tomentosum	Cordyline spp.
Cyclophyllum longipetalum	<i>Daphnandra</i> spp.
Dendrocnide excelsa	Denhamia spp.
Diospyros spp.	Diploglottis australis
Doodia aspera	Doodia caudata
Doryphora sassafras	Drypetes deplanchii
Dysoxylum fraserianum	Dysoxylum muelleri

Ehretia acuminata	Elaeocarpus spp.
Elattostachys nervosa	Endiandra spp.
Euroschinus falcata	Ficus spp.
Flagellaria indica	Flindersia spp.
Gossia spp.	Guoia semiglauca
Heritiera spp.	Heritiera trifoliata
Jasminum volubile	Lastreopsis spp.
Lenwebbia prominens	Litsea australis
Litsea reticulata	Livistona australis
Lophostemon confertus	Maclura cochinchinesis
Malaisia scandens	Mallotus discolor
Mallotus philippensis	<i>Marsdenia</i> spp.
Melia azederach	Melicope spp.
Morinda jasminoides	Neolitsea australiensis
Neolitsea dealbata	Notelaea spp.
Omalanthus populifolius	Pandorea pandorana
Pararchidendron pruinosum	Parsonsia spp.
<i>Passiflora</i> spp.	Pellaea falcata
Peperomia tetraphylla	Piper novae-hollandiae
Pittosproum multiflorum	Platycerium spp.
Plectranthus spp.	Podocarpus elatus
Pollia crispata	Polyscias elegans
Pouteria australe	Pteris umbrosa
Pyrrosia spp.	<i>Rapanea</i> spp.
Rhodamnia spp.	Ripogonum spp.
Rubus spp.	Sarcomelicope simplicifolia
Schizomeria ovata	Scolopia braunii
Sloanea australis	Sloanea woolsii
Smilax australis	Sterculia quadrifida
Streblus brunonianus	Syzygium spp.
Tetrastigma nitens	Toona ciliata
Trema aspera	Tristaniopsis laurina

A number of these species, including *Acacia irrorata*, *A. melanoxylon*, *Adiantum formosum*, *Breynia oblongifolia* and *Ceratopetalum apetalum*, are locally abundant in some stands of the Lowland Rainforest, but may be more common overall in other communities.

- 3. The total species list of the community is considerably larger than that given above, with many species present only at one or two sites or in low abundance. The species composition of a site will be influenced by its physical environment (including geology and drainage), size of the site, recent rainfall or drought conditions and by its disturbance (including fire, windthrow and treefall) history. The species composition of individual stands is often unique, but the structure, physiognomy and species present permit recognition of stands as Lowland Rainforest. In addition to vascular plants the community also includes microorganisms, fungi, cryptogamic plants, and a diverse fauna, both vertebrate and invertebrate. An indication of the richness and diversity of the invertebrate fauna is provided by Williams (1993, 2002).
- 4. Lowland Rainforest belongs to the Subtropical Rainforests class of Keith (2004), although some stands may be interpreted as structurally complex assemblages within the Dry Rainforests class. Lowland Rainforest encompasses stands which fall principally within the following alliances and suballiances of Floyd (1990b):

Argyrodendron trifoliolatum alliance

- 1. Argyrodendron trifoliolatum suballiance
- 5. Castanospermum australe Dysoxylum muelleri suballiance
- 6. Archontophoenix Livistona suballiance

Dendrocnide excelsa – Ficus spp. Alliance

14. Doryphora sassafras – Daphnandra micranthus – Dendrocnide excelsa Ficus-spp. – Toona suballiance

15. Ficus spp. - Dysoxylum fraserianum - Toona - Dendrocnide suballiance

Drypetes australasica – Araucaria cunninghamii alliance

21. Araucaria cunninghamii suballiance

22. Flindersia spp. - Araucaria suballiance

(Nomenclature and numbering follows that in Floyd 1990a, Table 2 - a number of nomenclatural changes have occurred subsequently. Floyd (1990b) describes the characteristics and example stands of these suballiances in some detail.)

The inferred ecological relationships between different suballiances of rainforest have been interpreted by Floyd (1990b, see Appendix 2). While these suballiances differ floristically and in structure, individual stands of Lowland Rainforest may contain elements of more than one suballiance and the boundaries between different suballiances may intergrade. Nevertheless there are structural, habitat and floristic features which, in combination, link all the Lowland Rainforest suballiances, including the presence of emergent trees, variety of leaf and canopy shapes and sizes, the abundance and diversity of vines and vascular epiphytes, the association with nutrient-rich lithic substrates, etc. (see paragraph 2).

5. In addition to the principal suballiances listed above, Lowland Rainforest encompasses stands that display characteristics of some other suballiances. These stands occur in environments that are around the transitional limits of Lowland Rainforest with increasing altitude or maritime influence or declining moisture status or soil nutrient status (Floyd 1990b).

With increasing altitude in far northeastern NSW, the *Argyrodendron trifoliolatum* alliance is replaced by the *Argyrodendron actinophyllum* alliance (sometimes referred to as a cool subtropical rainforest). This alliance is well represented in the reserves included within the CERRA World Heritage listing. These stands are of great conservation significance but are not considered part of the Lowland Rainforest community. However, where the following suballiances occur towards their lower altitudinal limit, in conjunction with stands of any suballiance listed in paragraph 4, they are part of Lowland Rainforest.

- 7. Argyrodendron actinophyllum
- 8. Argyrodendron actinophyllum Araucaria cunninghamii
- 9. Argyrodendron actinophyllum Dysoxylum muelleri Syzygium francisii
- 10. Argyrodendron actinophyllum Dendrocnide excelsa Ficus

Lowland Rainforest, when optimally developed, has the structural and floristic form of subtropical rainforest (sensu Floyd 1990a, b), but may be interspersed with stands of dry rainforest as moisture status declines or topographic exposure increases. Stands of suballiances

- 23. Ficus–Streblus–Dendrocnide–Cassine
- 27. Choricarpia leptopetala
- 28. Backhousia sciadophora Dendrocnide– Drypetes
- 29. Backhousia myrtifolia Lophostemon confertus Tristaniopsis
- 30. Backhousia myrtifolia Acmena smithii

are part of Lowland Rainforest where they occur in transitional zones with any suballiance listed in paragraph 4.

As soil nutrient status declines, Lowland Rainforest may be replaced by warm temperate forms of rainforest. Lowland Rainforest typically occurs on relatively nutrient-rich, such as basic volcanic or finegrained sedimentary substrates, but may also occur on substrates of intermediate fertility, including acid volcanics (Floyd 1990b). Warm temperate rainforests are extensive on granites in the Washpool district and commonly occur at elevated sites on acid volcanic substrates (e.g. on the Nightcap Range) and at lowland sites on sandstones, shales and mudstones in localised gullies southward from the Sydney Basin. These stands of warm temperate rainforest are generally excluded from Lowland Rainforest. However, the following suballiances (*sensu* Floyd 1990b) within the Ceratopetalum apetalum alliance may occur on soils of intermediate fertility throughout the NSW North Coast and Sydney Basin bioregions, and are included within Lowland Rainforest where they occur in conjunction with stands of any suballiance listed in paragraph 4:

- 33. Ceratopetalum apetalum Schizomeria Argyrodendron spp. Sloanea suballiance
- 34. Ceratopetalum Diploglottis australis Acmena smithii suballiance
- 35. *Ceratopetalum Schizomeria Caldcluvia* suballiance

Where lithic substrates adjoin floodplain alluvium, Lowland Rainforest may occur in conjunction with Lowland Rainforest on Floodplain of the NSW North Coast Bioregion, listed as an Endangered Ecological Community under the Threatened Species Conservation Act 1995. Similarly, Littoral Rainforest in the NSW North Coast, Sydney Basin and South East Corner Bioregions, listed as an Endangered Ecological Community under the Threatened Species Conservation Act may replace Lowland Rainforest with increasing maritime influence. In both cases, the Determinations of these respective communities collectively encompass all transitional stands of rainforest.

- 6. There are strong latitudinal trends in the composition of Lowland Rainforest, with species diversity and structural complexity declining from north to south. The Hawkesbury River notionally marks the southern limit of Lowland Rainforest in the NSW North Coast and Sydney Basin bioregions. South of the Sydney metropolitan area, Lowland Rainforest is replaced by Illawarra Subtropical Rainforest of the Sydney Basin Bioregion, which is listed as an Endangered Ecological Community under the Threatened Species Conservation Act. Milton Ulladulla Subtropical Rainforest is a related rainforest endangered ecological community that occurs still further south in the South East Corner Bioregion.
- 7. Threatened species found in Lowland Rainforest include

Acacia bakeri Amorphospermum whitei Archidendron hendersonii Bosistoa transversa Calophanoides hygrophiloides *Choricarpa subargentea* Cryptocarya foetida Davidsonia jerseyana Desmodium acanthocladum Diploglottis campbellii Elaeocarpus williamsianus Endiandra hayseii Floydia praealta Geijera paniculata *Grammitis stenophylla* Hibbertia hexandra *Isoglossa eranthemoides* Lindsaea brachypoda Marsdenia longiloba Niemerya chartacea *Owenia cepiodora* Plectranthus nitidus Randia moorei Sarcochilus fitzgeraldii Senna acclinis Sophora fraseri Syzygium hodgkinsoniae Tarenna cameronii Tinospora tinosporoides *Typhonium* sp. aff. *brownii* Coracina lineata

Cyclopsitta diophthalma Erythrotriorchus radiatus Lophoictinia isura Meura alberti Monarcha leucotis Ninox strenua Pachycephala olivacea Acalypha eremorum *Amyema scandens* Baloghia marmorata Bulbophyllum globuliforme Cassia brewsteri var. marksiana *Clematis fawcettii Cynanchum elegans* Davidsonia johnsonii Diospyros major var. ebenus Drynaria rigidula Endiandra flovdii Endiandra muelleri subsp. bracteata *Fontainea australis* Gossia fragrantissima Grevillea hilliana *Hicksbeachia pinnatifolia* Lepiderema pulchella *Macadamia tetraphylla* Muellerina myrtifolia Ochrosia moorei Parsonsia dorrigoensis *Psilotum complanatum* Rapanea sp. 'Richmond River' (Maiden s.n. 1903) Sarcochilus weinthalii Solanum limitare Symplocos baeuerlenii Syzygium moorei Tinospora smilacina Tylophora woollsii

Barred Cuckoo-shrike Double-eyed Fig-parrot Red Goshawk Square-tailed Kite Albert's Lyrebird White-eared Monarch Powerful Owl Olive Whistler (only >500m asl)

Podargus ocellatus	Marbled Frogmouth
Ptilinopus magnificus	Wompoo Fruit-dove
Ptilinopus regina	Rose-crowned Fruit-dove
Ptilinopus superba	Superb Fruit-dove
Tyto tenebricosa	Sooty Owl
Cercartetus nanus	Eastern Pygmy-possum
Dasyurus maculatus	Spotted-tailed Quoll
Kerivoula papuensis	Golden-tipped Bat
Macropus parma	Parma Wallaby
Miniopteris australis	Little Bentwing-bat (foraging only, cave-roosting)
Miniopteris schreibersii	Common Bentwing-bat (foraging only, cave-roosting)
Myotis adversus	Large-footed Myotis
Nyctophilus bifax	Eastern Long-eared Bat
Nyctimene robinsoni	Eastern Tube-nosed Bat
Potorous tridactylus	Long-nosed Potoroo
Pteropus alecto	Black Flying-fox
Scoteanax rueppelli	Greater Broad-nosed Bat
Thylogale stigmatica	Red-legged Pademelon
Coeranoscincus reticulatus	Three-toed Snake-tooth Skink
Hoplocephalus bitorquatus	Pale-headed Snake
Hoplocephalus stephensii	Stephens' Banded Snake
Assa darlingtoni	Pouched Frog (only >300m asl)
Litoria subglandulosa	Glandular Frog (not <300m asl)
Mixophyes balbus	Stuttering Frog
Mixophyes fleayi	Fleay's Barred Frog
Mixophyes iteratus	Giant Barred Frog
Philoria kundagungan	Mountain Frog (only >100m asl)
Philoria loveridgei	Loveridge's Frog (only >100m asl)
Philoria sphagnicola	Sphagnum Frog (only >100m asl)
Pteropus poliocephalus	Greyheaded flying fox
Thersites mitchellae	a land snail
Nurus atlas	a beetle
Nurus brevis	a beetle

The list provides an indication of the diversity of the ecological community, and an indication of species whose requirements will need to be considered in preparing conservation management plans. The number of threatened species listed above are restricted to the northern parts of the ecological community (paragraph 6). Presence of species in the list is not essential for characterising a stand as being a representative of the Lowland Rainforest ecological community.

- 8. Since European settlement Lowland Rainforest has undergone a large reduction in geographic distribution (particularly its area of occupancy) due to clearing (Floyd 1990a, b). For example, Floyd (1990a) estimated the Big Scrub lowland rainforest near Lismore, originally estimated to cover 75 000 ha, had been reduced to only 300 ha (0.07%) since European settlement. Other districts as far south as Ourimbah have suffered similar losses of Lowland Rainforest. Relative to the longevity of rainforest trees, many of which live for several hundred years, these represent large reductions in the geographic distribution of the community. 'Clearing of native vegetation' is listed as a Key Threatening Process under the Threatened Species Conservation Act.
- 9. Extensive clearing of Lowland Rainforest has resulted in fragmentation and loss of ecological connectivity. The integrity and survival of small, isolated stands is impaired by the small population size of many species, enhanced risks from environmental stochasticity, disruption to pollination and dispersal of fruits or seeds, and likely reductions in the genetic diversity of isolated populations (Lott 1990, Rossetto *et al.* 2004a, b). Disruption of these ecological processes may result in a large reduction in the ecological function of the community.

10. Weed invasion also poses a major threat to Lowland Rainforest, with introduced vines and scramblers having particularly serious impacts (Floyd 1990a). Principal weed species include:

Ageratina adenophora	Crofton Weed
Ageratum riparia	
Anredera cordifolia	Madeira Vine
Asparagus asparagoides	Bridal Creeper
Cardiospermum grandiflorum	Balloon Vine
Cinnamonum camphora	Camphor Laurel
<i>Ipomeoa</i> spp.	Morning Glory spp.
Lantana camara	Lantana
Ligustrum lucidum	Large-leaved Privet
Ligustrum sinense	Small-leaved Privet
Macfaydena unguis-cati	Cat's Claw
Tradescantia fluminensis	

Many of these exotic species form dense thickets capable of smothering indigenous plants, reducing both reproduction and survival (Floyd 1990a, Harden *et al.* 2004). The invasion and establishment of exotic species in Lowland Rainforest results in a large reduction in the ecological function of the community. 'Invasion and establishment of exotic vines and scramblers' is listed as a Key Threatening Process under the Threatened Species Conservation Act.

- 11. Although the interior of large stands of Lowland Rainforest are rarely flammable, inappropriate fire regimes associated with burning off and hazard reduction pose a threat to the margins of rainforest stands and the entirety of small stands in fragmented landscapes. Repeated burning is likely to change community structure and/or species composition of stands of Lowland Rainforest, as many of its species are poorly equipped with post-fire recovery mechanisms. 'High frequency fire resulting in disruption of life cycle processes in plants and animals and loss of vegetation structure and composition' is listed as a Key Threatening Process under the Threatened Species Conservation Act.
- 12. Other common threats include grazing by livestock, potential impacts of anthropogenic climate change and impacts associated with human visitation (including soil compaction, possible spread of pathogens, clearing of understorey and inappropriate collection of plant species). In addition, the collection and trade of some rainforest invertebrates may be greater than is generally appreciated. Collectively these processes may result in degradation of Lowland Rainforest habitat, and hence a large reduction in ecological function of the community.
- 13. Some stands of Lowland Rainforest are included within the conservation estate (including components of the Central Eastern Rainforest Reserves of Australia World Heritage listing). However, not all Lowland Rainforest suballiances occur in conservation reserves and many small stands, important for connectivity and maintenance of landscape-scale ecological processes, remain outside conservation reserves.
- 14. The Scientific Committee is of the opinion that Lowland Rainforest in the NSW North Coast and Sydney Basin Bioregions is not eligible to be listed as a critically endangered ecological community.
- 15. Lowland Rainforest in the NSW North Coast and Sydney Basin Bioregions is eligible to be listed as an endangered ecological community as, in the opinion of the Scientific Committee, it is facing a very high risk of extinction in New South Wales in the near future, as determined in accordance with the following criteria as prescribed by the Threatened Species Conservation Regulation 2002:

Clause 25

The ecological community has undergone, is observed, estimated, inferred or reasonably suspected to have undergone or is likely to undergo within a time span appropriate to the life cycle and habitat characteristics of its component species:

(b) a large reduction in geographic distribution.

Clause 27

The ecological community has undergone, is observed, estimated, inferred or reasonably suspected to have undergone or is likely to undergo within a time span appropriate to the life cycle and habitat characteristics of its component species:

(b) a large reduction in ecological function,

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- as indicated by any of the following:
 - (f) disruption of ecological processes
 - (g) invasion and establishment of exotic species
 - (h) degradation of habitat
 - (i) fragmentation of habitat

Dr RICHARD MAJOR, Chairperson, Scientific Committee

Reference:

Floyd A (1990a) Australian rainforests in New South Wales. Volume 1. (Surrey Beatty and Sons: Sydney.) Floyd A (1990b) Australian rainforests in New South Wales. Volume 2. (Surrey Beatty and Sons: Sydney.)

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- Harden GJ, Fox MD, Fox BJ (2004) Monitoring and assessment of restoration of a rainforest remnant at Wingham Brush, NSW. *Austral Ecology* **29**, 489-507.
- Lott R (1990) Rainforest. Australian Heritage Commission, Canberra.
- Rossetto M, Gross CL, Jones R, Hunter J (2004a) The impact of clonality on an endangered tree (*Elaeocarpus williamsianus*) in fragmented rainforest. *Biological Conservation* **117**, 33-39.
- Rossetto M, Jones R, Hunter J (2004b) Genetic effects of rainforest fragmentation in an early successional tree (Elaeocarpus grandis). *Heredity* **93**, 610-619.
- Thackway R, Cresswell ID (1995) An interim biogeographic regionalisation for Australia: a framework for setting priorities in the National Reserves System Cooperative Program. (Version 4.0. Australian Nature Conservation Agency: Canberra.)
- Williams GA (1993) Hidden rainforests: Subtropical rainforest and their invertebrate biodiversity. (UNSW Press: Sydney)
- Williams GA (2002) A taxonomic and biogeographic review of the invertebrates of the Central Eastern Rainforest Reserves of Australia (CERRA) World Heritage Area and adjacent regions. Technical Reports of the Australian Museum 16.

DETERMINATION TO MAKE A MINOR AMENDMENT TO PART 3 OF SCHEDULE 1 OF THE THREATENED SPECIES CONSERVATION ACT

THE Scientific Committee, established by the Threatened Species Conservation Act has made a Determination to make a minor amendment to Part 3 of Schedule 1 (Endangered ecological communities) of the Act by inserting the Lowland Rainforest on Floodplain in the New South Wales North Coast bioregion (as described in the determination of the Scientific Committee under Division 5 Part 2) and as a consequence to omit reference to the Lowland Rainforest on Floodplain in the New South Wales North Coast bioregion (as described in the final determination to list the ecological community) which was published on pages 5753 to 5758 in the *NSW Government Gazette* No. 92 dated 13 August 1999. Minor amendments to the Schedules are provided for by Division 5 of Part 2 of the Act.

The Scientific Committee is of the opinion that the amendment is necessary or desirable to correct minor errors or omissions in the Determination in relation to the Thackway and Cresswell (1995) reference.

The Scientific Committee has found that:

- 1. Lowland Rainforest, in an undisturbed state, is a closed canopy forest characterised by its high species richness and structural complexity. In disturbed stands the canopy continuity may be broken or the canopy may be smothered by exotic vines.
- 2. Lowland Rainforest on floodplains covers less than 1000 hectares in NSW and remaining stands are small and isolated. Stands occur in the New South Wales North Coast bioregion. Bioregions are defined in Thackway and Cresswell (1995).
- 3. Historically, the major cause of loss of rainforest on floodplains was clearing for agriculture.
- 4. Subsequent to clearing the disturbed and exposed edges of remnant stands were vulnerable to invasion by exotic plant species; nearly all surviving remnants are subject to this threat.
- 5. The effects of clearing, fragmentation and isolation on the functional ecology of the remnant stands has been little studied, but impacts on plant regeneration (including pollination and seed dispersal) are likely. Many of the tree and shrub species are obligate outbreeders so that disruption to pollinator systems could have long term, deleterious consequences.
- 6. Other threats, although not all are experienced at all sites, include fire, grazing, rubbish dumping, clearing for competing land uses (including clearing of understorey for recreational facilities) and dissection by vehicular and foot tracks.
- 7. Although very few sites have been subject to detailed fauna survey, it is known that some sites possess an extremely rich insect fauna (documented in the case of Lansdowne Reserve by Williams GA (1993) Hidden Rainforests: subtropical rainforests and their invertebrate biodiversity. UNSW Press/Australian Museum, Sydney.) It is probable that other sites have comparable invertebrate diversity.
- 8. Although every stand of rainforest is unique in terms of biota, the similarity in structure and the presence of a core assemblage of species permit the definition of lowland floodplain rainforest as a distinct ecological community. This list of plants has been compiled to include species which are characteristic of NSW rainforest communities which occur on floodplains, although not all species occur in every stand, and individual species may be found in other communities. These include all or part of ten of Floyd's Suballiances shown in Point 10.

Araucaria cunninghamii
Arthropteris spp.
Castanospermum australe
Cryptocarya obovata
Dendrocnide excelsa
Elaeocarpus grandis
Elatostemna reticulatum
Ficus macrophylla
Ficus superba var. henneana
Flindersia schottiana
Grevillea robusta
Linospadix monostachyus
Microsorum scandens

Piper novae-hollandiae Pothos longipes Sloanea australis Streblus brunonianus Syzygium francisii Tristaniopsis laurina

Pollia crispata Randia chartacea Sloanea woollsii Syzygium australe Toona ciliata Waterhousea floribunda

- 9. The total species assemblage is much larger with many species restricted to one or a few sites or present only in very low abundance. Not all the characteristic species are present at every site.
- For particular purposes it may be appropriate to recognise categories within the lowland floodplain rainforest. The most widely used classification of rainforest types in NSW is that of Floyd, A.G. (1990) Australian Rainforests in New South Wales. Surrey Beatty and Sons, Chipping Norton. In this classification the major rainforest Suballiance within the nominated community is Suballiance 3: *Cryptocarya obovata Dendrocnide excelsa Ficus* spp. *Araucaria*. Elements of of Suballiance 1: *Heritiera trifoliata*, Suballiance 2: *Toona Flindersia*, Suballiance 4: *Elaeocarpus grandis*, Suballiance 5: *Castanospermum Dysoxylum mollissimum*, Suballiance 6: *Archontophoenix Livistona*, Suballiance 23: *Ficus-Streblus-Dendrocnide-Cassine*, Suballiance 24: *Castanospermum Grevillea robusta*, Suballiance 33: *Ceratopetalum/Schizomeria Heritiera/Sloanea* also occur. These alliances are not restricted to lowland floodplains.
- 11. In any individual stand more than one Suballiance may be represented, and separation of Suballiances may, in some instances, be difficult as complex intergradations occur.
- 12. The following vertebrate species occur in, but are not restricted to, lowland rainforest on floodplains: Birds

Ailuroedus crassirostris	Green Catbird	
Alectura lathami	Brush Turkey	
Colluricincla megarhyncha	Little Shrike-thrush	
Ptilinopus magnificus	Wompoo Fruit Dove	
Sericornis citreogularis	Yellow-throated Scrubwren	
Tregellasia capito	Pale Yellow Robin	
Mammals		
Dasyurus maculatus	Spotted-tailed Quoll	
Kerivoula papuensis	Golden-tipped Bat	
Nyctimene robinsoni	Eastern Tube-nosed Bat	
Potorous tridactylus	Long-nosed Potoroo	
Pteropus spp.	Flying-foxes	
Syconycteris australis	Eastern Blossom Bat	
Thylogale stigmatica	Red-legged Pademelon	
Thylogale thetis	Red-necked Pademelon	
Reptiles		
Hypsilurus spinipes	Southern Angle-headed Dragon	
Saiphos equalis	Three-toed Skink	

13. A number of stands of the Community are found within the formal conservation reserves in the National Parks and Wildlife Service estate listed below, however the size of individual stands is small (only a few hectares). These stands are only a small proportion of the total distribution of the Community.

Andrew Johnston Big Scrub Nature Reserve Boatharbour Nature Reserve Brunswick Heads Nature Reserve Coocumbac Island Nature Reserve Coramba Nature Reserve Hortons Creek Nature Reserve Moore Park Nature Reserve Stotts Island Nature Reserve Susan Island Nature Reserve

- 14. The small and fragmented nature of these sites places them, as with stands outside NPWS estate, at risk of loss of integrity from weed invasion and other disturbances.
- 15. In the light of 2,3,4,5,6 and 14 the Scientific Committee is of the opinion that Lowland Rainforest on Floodplain within the New South Wales North Coast bioregion is likely to become extinct in nature in New South Wales unless the circumstances and factors threatening its survival or evolutionary development cease to operate.

Dr RICHARD MAJOR, Chairperson, Scientific Committee

Reference:

Thackway R, Cresswell ID (1995) An interim biogeographic regionalisation for Australia: a framework for setting priorities in the National Reserves System Cooperative Program. (Version 4.0. Australian Nature Conservation Agency: Canberra.)

DETERMINATION TO MAKE A MINOR AMENDMENT TO PART 3 OF SCHEDULE 1 OF THE THREATENED SPECIES CONSERVATION ACT

THE Scientific Committee, established by the Threatened Species Conservation Act has made a Determination to make a minor amendment to Part 3 of Schedule 1 (Endangered ecological communities) of the Act by inserting the McKies Stringybark/Blackbutt Open Forest in the Nandewar and New England Tableland Bioregions (as described in the determination of the Scientific Committee under Division 5 Part 2) and as a consequence to omit reference to the McKies Stringybark/Blackbutt Open Forest in the Nandewar and New England Tableland Bioregions (as described in the final determination to list the ecological community) which was published on pages 591 to 594 in the *NSW Government Gazette* No. 37 dated 9 February 2001. Minor amendments to the Schedules are provided for by Division 5 of Part 2 of the Act.

The Scientific Committee is of the opinion that the amendment is necessary or desirable to correct minor errors or omissions in the Determination in relation to the Thackway and Cresswell (1995) reference.

The Scientific Committee has found that:

1. McKies Stringybark/Blackbutt Open Forest is the name given to the plant community that is characterised by the following assemblage of species:

Acacia buxifolia	Acacia filicifolia	Acacia neriifolia
Angophora floribunda	Austrodanthonia eriantha	Austrostipa rudis
Brachyloma daphnoides subsp. glabrum	Callitris endlicheri	Calotis cuneifolia
Cassinia uncata	Cheilanthes sieberi subsp. sieberi	Clematis glycinoides
Desmodium varians	Dianella revoluta	Dichondra repens
Digitaria breviglumis	Echinopogon caespitosus	Echinopogon ovatus
Eucalyptus andrewsii	Eucalyptus banksii	Eucalyptus crebra
Eucalyptus mckieana	Eucalyptus melliodora	Eucalyptus stannicola
Euchiton sphaericus	Gahnia aspera	Galium gaudichaudii
Glycine clandestina	Hardenbergia violacea	Hibbertia acicularis
Hibbertia obtusifolia	Hybanthus monopetalus	Hypericum gramineum
Imperata cylindrica	Indigofera australis	Lagenifera stipitata
Lepidosperma laterale	Leptospermum brevipes	Leucopogon biflorus
Leucopogon lanceolatus	Leucopogon muticus	Lissanthe strigosa
Melichrus urceolatus	Microlaena stipoides	Monotoca scoparia
Myoporum montanum	Olearia elliptica	Opercularia aspera
Persoonia cornifolia	Pomaderris angustifolia	Pomax umbellata
Poranthera microphylla	Pteridium esculentum	Styphelia triflora
Vernonia cinerea	Veronica calycina	Viola betonicifolia

- 2. The total species list of the community is considerably larger than that given in 1 (above), with many species present in only one or two sites or in very small quantity. In any particular site not all of the assemblage listed in 1 may be present. At any one time, seeds of some species may only be present in the soil seed bank with no above-ground individuals present. The species composition of the site will be influenced by the size of the site, local conditions (eg. topography & rainfall) and by its recent disturbance history. The number of species and the above-ground composition of species will change with time since fire, and may also change in response to changes in fire frequency.
- 3. Characteristic tree species include *Eucalyptus andrewsii*, *E. mckieana* and *Callitris endlicheri*. The community is found on lateritic soils in low lying areas on hill slopes and open depressions.
- 4. The McKies Stringybark/Blackbutt Open Forest Community has a restricted distribution occurring between Clayton Chase in the north and areas south of Gilgai. It is currently known from Inverell LGA, but may occur in Guyra and Uralla and possibly other LGAs. These areas are included in the Nandewar and New England Tableland Bioregions. Bioregions are defined in Thackway and Cresswell (1995).
- 5. The vegetation over much of the area supporting this community is severely fragmented. Many examples of the community occur on private property although small patches occur in Kings Plains National Park (J.T. Hunter 1999, Vegetation and floristics of Kings Plains National Park, Unpublished report to NSW National Parks and Wildlife Service) and on the boundary of Severn River Nature Reserve.

- 6. Many current stands of the McKies Stringybark/Blackbutt Open Forest Community exist as narrow remnants on roadsides and travelling stock routes. These remnants occur as narrow linear patches, and are subject to weed invasion and the possibility of being further reduced by road widening. Weeds occur throughout the community. Other substantial stands are fragmented as a result of fenceline and trail clearing. Clearing and fragmentation are continuing threats as a result of further subdivision, fenceline and trail work and maintenance of paddocks. Selective logging has occurred in some northern stands.
- 7. In view of the size and fragmented nature of existing remnants, the continuing threat of further fragmentation, clearing and other threatening processes, the Scientific Committee is of the opinion that the McKies Stringybark/Blackbutt Open Forest in the Nandewar and New England Tableland Bioregions is likely to become extinct in nature in New South Wales unless the circumstances and factors threatening its survival or evolutionary development cease to operate and is eligible for listing as an endangered ecological community.

Dr RICHARD MAJOR, Chairperson, Scientific Committee

Reference:

Thackway R, Cresswell ID (1995) An interim biogeographic regionalisation for Australia: a framework for setting priorities in the National Reserves System Cooperative Program. (Version 4.0. Australian Nature Conservation Agency: Canberra.)

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DETERMINATION TO MAKE A MINOR AMENDMENT TO PART 3 OF SCHEDULE 1 OF THE THREATENED SPECIES CONSERVATION ACT

THE Scientific Committee, established by the Threatened Species Conservation Act has made a Determination to make a minor amendment to Part 3 of Schedule 1 (Endangered ecological communities) of the Act by inserting the Native Vegetation on Cracking Clay Soils of the Liverpool Plains (as described in the determination of the Scientific Committee under Division 5 Part 2) and as a consequence to omit reference to the Native Vegetation on Cracking Clay Soils of the Liverpool Plains (as described in the final determination to list the ecological community) which was published on pages 8765 to 8769 in the *NSW Government Gazette* No. 161 dated 26 October 2001. Minor amendments to the Schedules are provided for by Division 5 of Part 2 of the Act.

The Scientific Committee is of the opinion that the amendment is necessary or desirable to correct minor errors or omissions in the Determination in relation to the Thackway and Cresswell (1995) reference.

The Scientific Committee has found that:

- 1. Native Vegetation on Cracking Clay Soils of the Liverpool Plains is characterised by the assemblage of species discussed in paragraphs 3 to 5. The community occurs on cracking clay soils (vertosols including soils referred to as Black Earth) and is within the Liverpool Plains Catchment. The Mooki River, Coxs Creek and their tributaries drain this catchment into the Namoi River. This catchment occurs in the Brigalow Belt South and Nandewar Bioregions. Bioregions are defined in Thackway and Cresswell (1995).
- 2. Native Vegetation on Cracking Clay Soils of the Liverpool Plains is generally grasslands which are often dominated by *Austrostipa aristiglumis*, *Dichanthium sericeum* or *Panicum queenslandicum* but can include shrubs and trees which are generally sparse but may be locally common.
- 3. Native Vegetation on Cracking Clay Soils of the Liverpool Plains is characterised by the following assemblage of species.

Acacia pendula	Angophora floribunda
Aristida leptopoda	Asperula conferta
Austrostipa aristiglumis	Austrodanthonia bipartita
Carex inversa	Cullen tenax
Daucus glochidiatus	Dichanthium sericeum
Elymus scaber var. plurinervis	Enteropogon acicularis
Eucalyptus conica	Eucalyptus melliodora
Eucalyptus populnea subsp. bimbil	Eulalia aurea
Geranium solanderi	Glycine latifolia
Haloragis heterophylla/H. aspera intergrades	Juncus subglaucus
Leptorhynchos panaetioides	Marsilea drummondii
Mentha satureioides	Neptunia gracilis
Panicum buncei	Panicum queenslandicum
Rhynchosia minima	Sclerolaena muricata
Sida trichopoda	Themeda avenacea
Vittadinia cuneata	Wahlenbergia communis

- 4. The total flora list for the community is considerably larger than that given above, with many species present in only one or two sites or in very small quantity. In any particular site not all of the assemblage listed above will be present. At any one time, seeds of some species may only be present in the soil seed bank with no above-ground individuals present. The species composition of the site will be influenced by the size of the site, recent rainfall or drought conditions and by its disturbance history. The community is an important habitat for a diverse fauna (vertebrate and invertebrates), but detailed fauna records are not available.
- 5. In wetter locations the Native Vegetation on Cracking Clay Soils of the Liverpool Plains may contain a number of species that are not common in drier areas. Such species include *Agrostis avenacea*, *Cyperus* spp., *Eleocharis* spp., *Juncus* spp., *Rumex dumosus* and *Rumex tenax*. Tree species such as *Eucalyptus melliodora*, *Eucalyptus populnea* subsp. *bimbil*, *Eucalyptus conica* and *Angophora floribunda* and shrub species such as *Acacia pendula* may be scattered to locally common in the Native Vegetation on Cracking Clay Soils of the Liverpool Plains.

- 6. Native Vegetation on Cracking Clay Soils of the Liverpool Plains is known to occur in the Coonabarabran, Gunnedah, Murrurundi, Narrabri, Parry and Quirindi Local Government Areas. This community occurs over an altitude range (above sea level) varying from 750 m in the south to 210 m in the north. Change in altitude is gradual and areas often remain waterlogged for some time after heavy rainfall or floods.
- 7. Native Vegetation on Cracking Clay Soils of the Liverpool Plains has largely been modified as a result of cropping, grazing and alteration of disturbance regimes. Salinity is also considered to be an increasing problem to this vegetation. Erosion, particularly of recently cultivated areas, following flooding results in deposition of soil over native vegetation and movement of plant propagules both native and exotic. Saline perched water tables are also left closer to the surface after removal of surface soil and this affects recolonisation of these areas by native species.
- 8. Native Vegetation on Cracking Clay Soils of the Liverpool Plains now occupies only a small proportion of its original range. Sim and Unwin (1983) reported that by 1978 approximately 85% of the Black Earth Alluvial Plains Land System of the Liverpool Plains was under cultivation and this proportion has increased further.
- 9. Most of the surviving remnants of this community are found on travelling stock routes through the plains. These may be wide but if next to roads they are often used by diverted traffic while roadworks are being carried out.
- 10. Invasion by exotic species is also a threat to this community. The most common weeds are *Ammi majus* and *Aster subulatus* but thistles, annual grasses and exotic legumes may also be locally common. A few weeds such as *Phalaris paradoxa*, *Myagrum perfoliatum* and *Scorzonera laciniata* are generally only found on clay soils, including vertosols.
- 11. Native Vegetation on Cracking Clay Soils of the Liverpool Plains is not known to be conserved in any area managed by the National Parks and Wildlife Service.
- 12. In view of the small area of most existing remnants, and the threat of further clearing, disturbance and degradation, the Scientific Committee is of the opinion that Native Vegetation on Cracking Clay Soils of the Liverpool Plains is likely to become extinct in nature in NSW unless factors threatening its survival or evolutionary development cease to operate.

Dr RICHARD MAJOR, Chairperson, Scientific Committee

Reference:

- Sim, I & Unwin, N. (1983) The natural grasslands of the Liverpool Plains New South Wales. Report based on research by J.A. Duggin and P.N. Allison. Department of Environment and Planning, Sydney.
- Thackway R, Cresswell ID (1995) An interim biogeographic regionalisation for Australia: a framework for setting priorities in the National Reserves System Cooperative Program. (Version 4.0. Australian Nature Conservation Agency: Canberra.)

LEGISLATION

DETERMINATION TO MAKE A MINOR AMENDMENT TO PART 3 OF SCHEDULE 1 OF THE THREATENED SPECIES CONSERVATION ACT

THE Scientific Committee, established by the Threatened Species Conservation Act has made a Determination to make a minor amendment to Part 3 of Schedule 1 (Endangered ecological communities) of the Act by inserting the New England Peppermint (*Eucalyptus nova-anglica*) Woodland on Basalts and Sediments in the New England Tableland Bioregion (as described in the determination of the Scientific Committee under Division 5 Part 2) and as a consequence to omit reference to the New England Peppermint (*Eucalyptus nova-anglica*) Woodland on Basalts and Sediments in the New England Tableland Bioregion (as described in the final determination to list the ecological community) which was published on pages 10395 to 10398 in the *NSW Government Gazette* No. 178 dated 7 November 2003. Minor amendments to the Schedules are provided for by Division 5 of Part 2 of the Act.

The Scientific Committee is of the opinion that the amendment is necessary or desirable to correct minor errors or omissions in the Determination in relation to the Thackway and Cresswell (1995) reference.

The Scientific Committee has found that:

- 1. New England Peppermint (*Eucalyptus nova-anglica*) Woodland on Basalts and Sediments in the New England Tableland Bioregion is the name given to the ecological community characterised by the species assemblage listed in paragraph 2. In NSW all sites are within the New England Tableland Bioregion. Bioregions are defined in Thackway and Cresswell (1995).
- 2. New England Peppermint (*Eucalyptus nova-anglica*) Woodland on Basalts and Sediments in the New England Tableland Bioregion is characterised by the following assemblage of species:

Acaena ovina	Acaena novae-zelandiae
Ammobium alatum	Aristida jerichoensis var. subspinulifera
Asperula conferta	Austrodanthonia racemosa var. racemosa
Bothriochloa macra	Bulbine bulbosa
Carex inversa	Cassinia quinquefaria
Chrysocephalum apiculatum	Craspedia variabilis
Crassula sieberiana	Cymbonotus lawsonianus
Cymbopogon refractus	Desmodium varians
Dichelachne micrantha	Dichondra repens
Dichopogon fimbriatus	Drosera peltata
Echinopogon mckiei	Einadia nutans
Elymus scaber	Epilobium billardierianum subsp. cinereum
Eucalyptus blakelyi	Eucalyptus dalrympleana subsp. heptantha
Eucalyptus nova-anglica	Euchiton gymnocephalus
Geranium solanderi	Glycine clandestina
Gonocarpus micranthus	Gonocarpus tetragynus
Haloragis heterophylla	Hibbertia cistoidea
Hybanthus monopetalus	Hydrocotyle laxiflora
Hypericum gramineum	Hypoxis hygrometrica var. splendida
Juncus filicaulis	Juncus subsecundus
Juncus usitatus	Kunzea parviflora
Lachnagrostis aemula	Lachnagrostis filiformis
Leptorhynchos squamatus subsp. A	Lespedeza juncea subsp. sericea
Leucopogon fraseri	Lissanthe strigosa
Lomandra multiflora subsp. multiflora	Luzula densiflora
Melichrus urceolatus	Mentha satureioides
Microlaena stipoides var. stipoides	Olearia viscidula
Opercularia aspera	Oxalis exilis
Oxalis perennans	Oxalis radicosa
Phyllanthus virgatus	Pimelea curviflora var. divergens
Pimelea glauca	Plantago gaudichaudii
Plantago hispida	Poa labillardieri
Poa sieberiana	Poranthera microphylla
Pteridium esculentum	Pultenaea microphylla

Rhodanthe anthemoides	Rubus parvifolius
Rumex brownii	Schoenus apogon
Scleranthus biflorus	Solenogyne dominii
Sorghum leiocladum	Sporobolus creber
Stackhousia monogyna	Stellaria angustifolia
Stylidium graminifolium	Swainsona parviflora
Themeda australis	Veronica calycina
Veronica plebeia	Viola betonicifolia
Vittadinia cuneata	Vittadinia muelleri
Wahlenbergia communis	Wahlenbergia planiflora var. longipila
Wahlenbergia planiflora var. planiflora	Wahlenbergia queenslandica
Wahlenbergia stricta subsp. stricta	

- 3 The total species list of the community is considerably larger than that given above, with many species present in only one or two sites or in very small quantity. The species composition of a site will be influenced by the size of the site, recent rainfall or drought condition and by its disturbance (including fire) history. The number of species, and the above ground relative abundance of species will change with time since fire, and may also change in response to changes in fire regime (including changes in fire frequency). At any one time, above ground individuals of some species may be absent, but the species may be represented below ground in the soil seed banks or as dormant structures such as bulbs, corms, rhizomes, rootstocks or lignotubers. The list of species given above is of vascular plant species; the community also includes micro-organisms, fungi, cryptogamic plants and a diverse fauna, both vertebrate and invertebrate. These components of the community are poorly documented.
- 4 New England Peppermint (*Eucalyptus nova-anglica*) Woodland on Basalts and Sediments in the New England Tableland Bioregion is dominated by trees of *Eucalyptus nova-anglica* and occasionally *E. dalrympleana* subsp. *heptantha*, usually 8-20 metres tall. There are few shrubs present, and none listed as common. Ground cover is usually dense with *Asperula conferta*, *Poa sieberiana*, *Themeda australis*, *Juncus filicaulis*, *Dichondra repens*, *Carex inversa*, *Rumex brownii*, *Acaena ovina* and *Desmodium varians* common. There is some variation in the structure due to different stages of regrowth after clearing or dieback.
- 5 New England Peppermint (*Eucalyptus nova-anglica*) Woodland on Basalts and Sediments in the New England Tableland Bioregion occurs primarily in valley flats subject to cold air drainage. The valley flats are composed of basaltic soils, fine-grained sedimentary and acid volcanic substrates with poorly drained loam-clay soils.
- 6 New England Peppermint (*Eucalyptus nova-anglica*) Woodland on Basalts and Sediments in the New England Tableland Bioregion is described in Benson and Ashby (2000) who list species to provide a guide to identification of the community. Care should be taken in the application and interpretation of indicator plant species because of sampling limitations, the reduction in species diversity in degraded sites, the fact that some species may only be present at a site at some times as a soil seed bank or as dormant bud or tubers.
- 7 New England Peppermint (*Eucalyptus nova-anglica*) Woodland on Basalts and Sediments in the New England Tableland Bioregion is or has been known to occur in the Dumaresq, Guyra, Inverell, Severn and Tenterfield Local Government Areas, but may occur elsewhere in the New England Tableland Bioregion.
- 8 Disturbed New England Peppermint (*Eucalyptus nova-anglica*) Woodland on Basalts and Sediments in the New England Tableland Bioregion remnants are considered to form part of the community including where the vegetation would respond to assisted natural regeneration, such as where the natural soil and associated seedbank is still at least partially intact.
- 9 New England Peppermint (*Eucalyptus nova-anglica*) Woodland on Basalts and Sediments in the New England Tableland Bioregion has been cleared for grazing and agricultural development. For example within the Guyra mapsheet, 2300ha (approx. 11%) of the original distribution remains (Benson and Ashby 2000) and much of this is in poor condition.
- 10 Less than 3% of the remaining area of New England Peppermint (*Eucalyptus nova-anglica*) Woodland on Basalts and Sediments in the New England Tableland Bioregion is thought to occur within conservation

reserves. Reserves containing the community include Bolivia Hill, Boorolong, Mount Duval, Yina and Imbota Nature Reserves and Warra National Park.

- 11 Much of the remaining area of New England Peppermint (*Eucalyptus nova-anglica*) Woodland on Basalts and Sediments in the New England Tableland Bioregion has been disturbed by clearing, pasture improvement, grazing and dieback. Continuing threats include further clearing of remnants, grazing of the understorey, dieback, pasture improvement and weed invasion.
- 12 In view of the above the Scientific Committee is of the opinion that New England Peppermint (*Eucalyptus nova-anglica*) Woodland on Basalts and Sediments in the New England Tableland Bioregion is likely to become extinct in nature in New South Wales unless the circumstances and factors threatening its survival cease to operate.

Dr RICHARD MAJOR, Chairperson, Scientific Committee

Reference:

- Benson JS, Ashby EM (2000) Vegetation of the Guyra 1:100 000 map sheet New England Bioregion, New South Wales. *Cunninghamia* **6**, 747-872.
- Thackway R, Cresswell ID (1995) An interim biogeographic regionalisation for Australia: a framework for setting priorities in the National Reserves System Cooperative Program. (Version 4.0. Australian Nature Conservation Agency: Canberra.)

LEGISLATION

DETERMINATION TO MAKE A MINOR AMENDMENT TO PART 3 OF SCHEDULE 1 OF THE THREATENED SPECIES CONSERVATION ACT

THE Scientific Committee, established by the Threatened Species Conservation Act has made a Determination to make a minor amendment to Part 3 of Schedule 1 (Endangered ecological communities) of the Act by inserting the Semi-evergreen Vine Thicket in the Brigalow Belt South and Nandewar Bioregions (as described in the determination of the Scientific Committee under Division 5 Part 2) and as a consequence to omit reference to the Semi-evergreen Vine Thicket in the Brigalow Belt South and Nandewar Bioregions (as described in the final determination to list the ecological community) which was published on pages 12385 to 12388 in the *NSW Government Gazette* No. 144 dated 24 December 1999. Minor amendments to the Schedules are provided for by Division 5 of Part 2 of the Act.

The Scientific Committee is of the opinion that the amendment is necessary or desirable to correct minor errors or omissions in the Determination in relation to the Thackway and Cresswell (1995) reference.

The Scientific Committee has found that:

- 1. The ecological community known as Semi-evergreen Vine Thicket is a form of dry rainforest which in New South Wales is found in the Brigalow Belt South and Nandewar Bioregions. Bioregions are defined in Thackway and Cresswell (1995).
- 2. The Community is made up of vines, deciduous (and/or facultatively deciduous) tree species that have affinities with species from subtropical rainforest. Characteristic canopy dominants are *Cassine australis* var. *angustifolia*, *Geijera parvifolia* and *Notelaea microcarpa* var. *microcarpa*, but with emergents typical of the surrounding woodlands (Eucalyptus albens, Eucalyptus melanophloia and *Callitris glaucophylla*).

Other characteristic species include:

Alectryon subdentatus	Dodonaea viscosa var. angustifolia
Alstonia constricta	Indigofera brevidens
Aristida ramosa	Pandorea pandorana
Beyeria viscosa	Parsonsia eucalyptophylla
Boerhavia dominii	Phyllanthus subcrenulatus
Canthium oleifolium	Pimelea neo-anglica
Carissa ovata	Spartothamnella juncea
Cheilanthes sieberi ssp. sieberi	Thellungia advena
Dichondra repens	-

Rare species in New South Wales found in Semi-evergreen Vine Thicket include:

Acacia harpophylla	Planchonella cotinifolia var. pubescens
Isotropis foliosa	Triodia scariosa ssp. scariosa

A detailed account of the community is provided by Benson, J.S., Dick, R. and Zubovic, A. 1996 Semievergreen vine thicket vegetation at Derra Derra Ridge, Bingara, New South Wales Cunninghamia Vol. 4(3): 497 - 510.

3. Semi-evergreen Vine Thicket is found on sites on deep loamy, high nutrient soils derived from basalt or other volcanic rocks, which are relatively less fire prone than surrounding areas, with average annual rainfall of 750mm.

The distribution of Semi-evergreen Vine Thicket is a reflection of fire history, soil nutrient status and climate. Before European settlement Semi-evergreen Vine Thicket would have had a relatively restricted distribution in New South Wales.

- 4. Since European settlement substantial areas of Semi-evergreen Vine Thicket have been cleared for grazing and cropping. Clearing has continued in recent years. Benson *et al* (1996) suggest that grazing in remaining stands may adversely affect regeneration of the community.
- 5. Semi-evergreen Vine Thicket in New South Wales is now very limited in total area and number of stands. One stand occurs at Planchonella Hill Nature Reserve.

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- 6. In view of 3, 4, and 5 above the Scientific Committee is of the opinion that Semi-evergreen Vine Thicket is likely to become extinct in nature in New South Wales unless the circumstances and factors threatening its survival or evolutionary development cease to operate.

Dr RICHARD MAJOR, Chairperson, Scientific Committee

Reference:

Thackway R, Cresswell ID (1995) An interim biogeographic regionalisation for Australia: a framework for setting priorities in the National Reserves System Cooperative Program. (Version 4.0. Australian Nature Conservation Agency: Canberra.)

DETERMINATION TO MAKE A MINOR AMENDMENT TO PART 3 OF SCHEDULE 1 OF THE THREATENED SPECIES CONSERVATION ACT

THE Scientific Committee, established by the Threatened Species Conservation Act has made a Determination to make a minor amendment to Part 3 of Schedule 1 (Endangered ecological communities) of the Act by inserting the Sydney Turpentine-Ironbark Forest (as described in the determination of the Scientific Committee under Division 5 Part 2) and as a consequence to omit reference to the Sydney Turpentine-Ironbark Forest (as described in the final determination to list the ecological community) which was published on pages 8231 to 8235 in the *NSW Government Gazette* No. 148 dated 16 October 1998. Minor amendments to the Schedules are provided for by Division 5 of Part 2 of the Act.

The Scientific Committee is of the opinion that the amendment is necessary or desirable to correct minor errors or omissions in the Determination in relation to the Thackway and Cresswell (1995) reference.

The Scientific Committee has found that:

1. The Sydney Turpentine-Ironbark Forest (STIF) is the name given to the plant community that is characterised by the following assemblage of species:

Acacia decurrens	Acacia falcata	Acacia implexa
Acacia longifolia	Acacia myrtifolia	Acacia parramattensis
Allocasuarina torulosa	Angophora costata	Angophora floribunda
Aristida vagans	Billardiera scandens	Breynia oblongifolia
Bursaria spinosa	Centella asiatica	Cheilanthes sieberi
Clematis aristata	Clematis glycinoides	Clerodendrum tomentosum
Commelina cyanea	Corymbia gummifera	Daviesia ulicifolia
Dianella caerulea	Dichelachne rara	Dichondra repens
Dodonaea triquetra	Echinopogon caespitosus	Elaeocarpus reticulatus
Entolasia marginata	Entolasia stricta	Eucalyptus acmenoides
Eucalyptus globoidea	Eucalyptus paniculata	Eucalyptus resinifera
Exocarpos cupressiformis	Glycine clandestina	Goodenea hederacea
Goodenia heterophylla	Hardenbergia violacea	Imperata cylindrica
Indigofera australis	Kennedia rubicunda	Kunzea ambigua
Lepidosperma laterale	Leucopogon juniperinus	Lomandra longifolia
Melaleuca decora	Microlaena stipoides	Notelaea longifolia
Oplismenus aemulus	Oxalis exilis	Ozothamnus diosmifolius
Pandorea pandorana	Panicum simile	Pittosporum revolutum
Pittosporum undulatum	Poa affinis	Polyscias sambucifolius
Pomax umbellata	Poranthera microphylla	Pratia purpurascens
Pseuderanthemum variabile	Rapanea variabilis	Rubus parvifolius
Smilax glyciphylla	Stipa pubescens	Syncarpia glomulifera
Themeda australis	Tylophora barbata	Veronica plebeia
Zieria smithii		-

- 2. The total species list of the community is considerably larger than that given in 1 (above), with many species present in only one or two sites or in very small quantity. In any particular site not all of the assemblage listed in 1 may be present. At any one time, seeds of some species may only be present in the soil seed bank with no above-ground individuals present. The species composition of the site will be influenced by the size of the site and by its recent disturbance history. The number of species and the above-ground composition of species will change with time since fire, and may also change in response to changes in fire frequency.
- 3. The structure of the community was originally forest, but may now exist as woodland or as remnant trees.
- 4. Characteristic tree species in the STIF are Syncarpia glomulifera, Eucalyptus globoidea, Eucalyptus resinifera, Eucalyptus paniculata, Angophora costata and Angophora floribunda.
- 5. Species composition varies between sites depending on geographical location and local conditions (e.g. topography, rainfall, exposure).
- 6. STIF occurs within the local government areas Ashfield, Auburn, Canterbury, Concord, Drummoyne, Leichhardt, Marrickville, Bankstown, Ryde, Hunters Hill, Baulkham Hills, Ku-ring-gai, Hornsby,

Parramatta, Bankstown, Rockdale, Kogarah, Hurstville, Sutherland. The area is within the County of Cumberland and entirely within the Sydney Basin Bioregion. Bioregions are defined in Thackway and Cresswell (1995).

- 7. In many of these LGAs particularly in the inner western suburbs, only remnant trees may remain. These may have particular ecological and genetic significance and may be important sources of propagation material for use in rehabilitation projects.
- 8. STIF typically occurs on areas with clay soils derived from Wianamatta Shale or shale layers within Hawkesbury Sandstone.
- 9. Occurrences of STIF may occur on plateaus and hillsides and on the margins of shale cappings over sandstone.
- 10. STIF is referred to in Benson & Howell 1990 and in UBBS (1997). It includes vegetation described as map unit 90 of Benson (1992) and Benson & Howell (1994).
- 11. STIF provides habitat for a number of plant species recognised as being of regional conservation significance in UBBS (1997). These include:

Acacia stricta	Arthropodum milleflorum	Brachychiton populneus
Chloris truncata	Danthonia linkii	Danthonia racemosa
Daviesia genistifolia	Einadia nutans	Einadia polygonoides
Einadia trigonos	Elymus scaber	Glycine microphylla
Lasiopetalum parviflorum	Lepidosperma gunnii	Leucopogon juniperinus
Marsdenia viridiflora	Omalanthus stillingifolius	Opercularia hispida
Paspalidium criniforme	Platylobium formosum	Pomaderris lanigera
Senecio hispidulus	Sporobolus creber	<i>Stipa rudis</i> subsp. <i>nervosa</i>

- 12. STIF has an understorey that may be either grassy and herbaceous or of a shrubby nature. STIF can have a dense understorey in areas that have not been burnt for an extended period of time.
- 13. Adjacent communities on sandstone soils are generally part of the Sydney Sandstone Complex (see Benson & Howell 1990).
- 14. It is estimated that only 0.5 % of the original area of STIF exists in the form of a number of remnants.
- 15. Only small areas of STIF are presently included in conservation reserves.
- 16. Large areas of STIF have been cleared for agriculture and urban development. Remnants are small and scattered. Identified threats include: clearing, physical damage from recreational activities, rubbish dumping, grazing, mowing, weed invasion.
- 17. In view of the small size of existing remnants, the threat of further clearing and other known threats, the Scientific Committee is of the opinion that Sydney Turpentine-Ironbark Forest in the Sydney Basin Bioregion is likely to become extinct in nature unless the circumstances and factors threatening its survival or evolutionary development cease to operate and that listing as an endangered community is warranted.

Dr RICHARD MAJOR, Chairperson, Scientific Committee

Reference:

- UBBS (1997) Urban Bushland Biodiversity Survey (NSW National Park and Wildlife Service: Hurstville).Benson, D. & Howell, J. (1990) Taken for granted: the bushland of Sydney and its suburbs. (Kangaroo Press: Kenthurst).
- Benson, D. (1992) The natural vegetation of the Penrith 1:100 000 map sheet. Cunninghamia 2(4):541-596.
- Benson, D. & Howell, J. (1994) The natural vegetation of the Sydney 1:100 000 map sheet. *Cunninghamia* 3(4):677-722.
- Thackway R, Cresswell ID (1995) An interim biogeographic regionalisation for Australia: a framework for setting priorities in the National Reserves System Cooperative Program. (Version 4.0. Australian Nature Conservation Agency: Canberra.)

DETERMINATION TO MAKE A MINOR AMENDMENT TO PART 3 OF SCHEDULE 1 OF THE THREATENED SPECIES CONSERVATION ACT

THE Scientific Committee, established by the Threatened Species Conservation Act has made a Determination to make a minor amendment to Part 3 of Schedule 1 (Endangered ecological communities) of the Act by inserting the *Themeda* grassland on seacliffs and coastal headlands in the NSW North Coast, Sydney Basin and South East Corner Bioregions (as described in the determination of the Scientific Committee under Division 5 Part 2) and as a consequence to omit reference to the *Themeda* grassland on seacliffs and coastal headlands in the NSW North Coast, Sydney Basin and South East Corner Bioregions (as described in the determination of the Scientific Committee under Division 5 Part 2) and as a consequence to omit reference to the *Themeda* grassland on seacliffs and coastal headlands in the NSW North Coast, Sydney Basin and South East Corner Bioregions (as described in the final determination to list the ecological community) which was published in the *NSW Government Gazette* No. 129 dated 21 October 2005 (pages 8874 and 8917 to 8919) and in the *NSW Government Gazette* No. 137 dated 4 November 2005 (pages 9321 to 9323). Minor amendments to the Schedules are provided for by Division 5 of Part 2 of the Act.

The Scientific Committee is of the opinion that the amendment is necessary or desirable to correct minor errors or omissions in the Determination in relation to the Thackway and Cresswell (1995) reference.

The Scientific Committee has found that:

- Themeda grassland on seacliffs and coastal headlands in NSW is an ecological community described by Adam et al. (1989). The community is found in the NSW North Coast, Sydney Basin and South East Corner Bioregions, on seacliffs and coastal headlands. Bioregions are defined in Thackway and Cresswell (1995). The structure of the community is typically closed tussock grassland, but may be open shrubland or open heath with a grassy matrix between the shrubs. The community belongs to the Maritime Grasslands vegetation class of Keith (2004).
- 2. The community is characterised by the following assemblage of species.

Acacia sophorae	Banksia integrifolia subsp. integrifolia
Commelina cyanea	Glycine clandestina
Glycine microphylla	Hibbertia scandens
Isolepis nodosa	Kennedia rubicunda
Lepidosperma spp.	Leptospermum laevigatum
Lomandra longifolia	Monotoca elliptica
Opercularia aspera	Pimelea linifolia
Poranthera microphylla	Sporobolus virginicus
Themeda australis	Viola banksii
Westringia fruticosa	

- 3. The total species list of the community is considerably larger than that given above, with many species present at only one or two sites or in low abundance. The species composition of the site will be influenced by the size of the site, recent rainfall and drought conditions and by its disturbance history (including fire, grazing and land clearing). At any one time, above ground individuals of some species may be absent, but the species may be represented below ground in soil seed banks or as dormant structures such as bulbs, corms, rhizomes, rootstocks or lignotubers. The list of species given above is of the vascular plant species, the community also includes micro-organisms, fungi, cryptogamic plants and a diverse flora. These components of the community are poorly documented.
- 4. Themeda australis is the dominant species in the community. Themeda australis is an extremely widespread species, but in this community may have a distinctive appearance, being prostrate and having glaucous leaves. These features are retained in cultivation and the form is believed to be genetically distinct (SWL Jacobs, pers. comm.). Scattered shrubs occur in many stands, most frequently Pimelea linifolia, Banksia integrifolia and Westringia fruticosa. These and other woody species often have dwarf growth forms. Although a number of woody species are listed as part of the community, these are usually sparsely distributed and may be absent from some stands. Tussocks of Poa poiformis may be found in some stands of the community, but Poa poiformis-dominated tussock grassland is generally found lower on cliffs (closer to the sea and more exposed to spray) and on steeper slopes.
- 5. A number of threatened species occur in some stands of the community, including *Diuris* sp. aff. *chrysantha*, *Pultenaea maritima*, *Rutidosus heterogama*, *Thesium australe* (Cohn 2004) and *Zieria prostrata* (Hogbin 2001). The endangered population of the low growing form of *Zieria smithii* at Diggers Head is found in this community. The community is the major habitat for a number of other species, including *Chamaecrista maritima*, *Plectranthus cremnus* and *Stackhousia spathulata*. The presence of threatened species is a

matter which will need to be addressed, on a stand by stand basis in management plans, but the presence of threatened species is not required for definition of the community.

- 6. The community is found on a range of substrates, although stands on sandstone are infrequent and small. Larger stands are found on old sand dunes above cliffs, as for example at Cape Banks and Henry Head in Botany Bay National Park (Adam *et al.* 1989), and on basalt headlands, as for example at Damerals Head in Moonee Beach National Park. Occurrences of the community in northern NSW are discussed by Griffith *et al.* (2003).
- 7. Individual stands of the community are often very small, a few square metres, but at some sites larger stands of up to several hectares or tens of hectares occur. Overall, the community therefore has a highly restricted geographic distribution comprising small, but widely scattered patches.
- 8. Themeda grassland on seacliffs and coastal headlands has been affected by pasture improvement to accommodate livestock grazing to varying degrees throughout its range (e.g. in the Coffs Harbour and Shellharbour-Kiama districts). More recently, the distribution has been depleted by coastal development. While some stands are protected from further land use change, a major threat to the community is posed by invasion by shrubs, both introduced species such as *Chrysanthemoides monilifera* and *Lantana camara*, and native species including *Acacia sophorae*, *Banksia integrifolia* and *Westringia fruticosa*. Although native shrubs are a feature of the community, invasion and conversion to dense shrubland has occurred at a number of sites in recent years and this may threaten the persistence of grassland elements in the community. This may reflect changed fire regimes and reduced grazing pressure (including by rabbits). A further major threat is associated with recreational use, with weed invasion and erosion occurring adjacent to footpaths and from use of off-road vehicles. Collectively, these processes may result in a large reduction of the ecological function of the community.
- 9. In view of the highly restricted distribution, small patch size and ongoing threats to the community, the Scientific Committee is of the opinion that *Themeda* grassland on seacliffs and coastal headlands in the NSW North Coast, Sydney Basin and South East Corner Bioregions is likely to become extinct in nature in New South Wales unless the circumstances and factors threatening its survival cease to operate.

Dr RICHARD MAJOR, Chairperson, Scientific Committee

Reference:

- Adam P, Stricker P, Wiecek BM, Anderson DJ (1989) The vegetation of seacliffs and headlands in New South Wales, Australia. *Australian Journal of Ecology* **14**, 515-547.
- Cohn JS (2004) Effects of slashing and burning on *Thesium australe* R Brown (Santalaceae) in Coastal grasslands of NSW. Proceedings of the Linnean Society of New South Wales **125**, 57-65.
- Griffith SJ, Bale C, Adam P, Wilson R (2003) Wallum and related vegetation on the NSW North Coast: description and phytosociological analysis. *Cunninghamia* **8**, 202-252.
- Hogbin PM (2001) Conservation outcomes arising form research into the population genetics, taxonomy and reproductive ecology of the endangered plant *Zieria prostrata* PhD, the Australian National University, Australia.
- Keith DA (2004) 'Ocean shores to desert dunes: The native vegetation of New South Wales and the ACT.' NSW Department of Environment and Conservation. Sydney.
- Thackway R, Cresswell ID (1995) An interim biogeographic regionalisation for Australia: a framework for setting priorities in the National Reserves System Cooperative Program. (Version 4.0. Australian Nature Conservation Agency: Canberra.)

DETERMINATION TO MAKE A MINOR AMENDMENT TO PART 3 OF SCHEDULE 1 OF THE THREATENED SPECIES CONSERVATION ACT

THE Scientific Committee, established by the Threatened Species Conservation Act has made a Determination to make a minor amendment to Part 3 of Schedule 1 (Endangered ecological communities) of the Act by inserting the Upland Wetlands of the Drainage Divide of the New England Tableland Bioregion (as described in the determination of the Scientific Committee under Division 5 Part 2) and as a consequence to omit reference to the Upland Wetlands of the Drainage Divide of the New England Tableland Bioregion (as described in the final determination to list the ecological community) which was published on pages 4924 to 4929 in the NSW Government Gazette No. 106 dated 28 June 2002. Minor amendments to the Schedules are provided for by Division 5 of Part 2 of the Act

The Scientific Committee is of the opinion that the amendment is necessary or desirable to correct minor errors or omissions in the Determination in relation to the Thackway and Cresswell (1995) reference.

The Scientific Committee has found that:

- 1. Upland Wetlands of the Drainage Divide of the New England Tableland Bioregion is the name given to the ecological community in shallow-temporary to near-permanent wetlands naturally restricted to the higher altitudes (above about 900m) associated with the Great Dividing Range in northern NSW. This ecological community is currently known to occur in the Local Government Areas of Tenterfield, Guyra, Severn, Dumaresq and Uralla but may occur elsewhere in the Bioregion. Bioregions are defined in Thackway and Cresswell (1995).
- 2. These wetlands have small local catchments and can also be called watershed wetlands (Haworth 1994). They are in the upper parts of both North Coast (Clarence, Macleay and Hastings Rivers) and Murray Darling catchments generally above 900m above sea level and are not connected to rivers by floodplains. The wetlands are found on a range of geological formations, although they are most common on landscapes associated with Tertiary basalt flows (Pressey and Harris 1988; Bell 2000; Haworth 1994). They are geographically restricted to the drainage divide of northern NSW.
- 3. Vegetation within the ecological community frequently consists of sedges, rushes and aquatic plants in a closed to mid-dense sedgeland, herbland or grassland community on the shores of open water or extending across shallow or dry wetland beds as described by Benson and Ashby (2000) and Bell (2000). Plant assemblages differ between wetlands and within a wetland over time depending on the water regime (Brock 1998). Upland Wetlands of the Drainage Divide of the New England Tableland Bioregion are characterised by some of the following assemblage of aquatic species when the wetlands contain water. At times when wetlands are dry, species may only be represented in the seed bank.

Agrostis avenacea subsp. avenacea	Juncus australis
Aldrovanda vesiculosa	Juncus filicaulis
Amphibromus nervosus	Juncus holoschoenus
Amphibromus sinuatus	Juncus vaginatus
Azolla filiculoides var. rubra	Lemna trisulca
Brachyscome radicans	Lilaeopsis polyantha
Carex gaudichaudiana	Limosella australis
Carex inversa	Lipocarpha microcephala
Carex tereticaulis	Microtis unifolia
Centipeda minima var. minima	Myriophyllum lophatum
Chara australis	Myriophyllum variifolium
Chara fibrosa	Najas tenuifolia
Chara muelleri	Neopaxa australasica
Crassula helmsii	Nitella cristata
Cyperus sanguinolentus	Nitella sonderi
Cyperus sphaeroideus	Nitella tasmanica
Elatine gratioloides	Nymphoides geminata
Eleocharis dietrichiana	Nymphoides montana
Eleocharis gracilis	Oplismenus aemulus
Eleocharis pusilla	Panicum obseptum
Eleocharis sphacelata	Paspalum distichum
Eleocharis acuta	Persicaria hydropiper

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Enilopium hillandionianum subsp. hudronhilum	Pausiagnia langthifalia
<i>Epilobium billardierianum</i> subsp. <i>hydrophilum</i>	Persicaria lapathifolia
Eragrostis benthamii	Persicaria prostrata
Eriocaulon scariosum	Phragmites australis
Euchiton involucratus	Potamogeton crispus
Glyceria australis	Potamogeton tricarinatus
Glyceria latispicea	Pseudognaphalium luteoalbum
Gonocarpus micranthus	Ranunculus inundatus
Haloragis heterophylla	Ranunculus lappaceus
Helichrysum scorpioides	Ricciocarpus natans
Hemarthria uncinata	Schoenus apogon
Hydrocotyle peduncularis	Spiranthes sinensis subsp. australis
Hydrocotyle tripartita	Spirodela punctata
Hypericum japonicum	Stellaria angustifolia
Isoetes drummondii	Typha domingensis
Isolepis cernua	Utricularia australis
Isolepis fluitans	Utricularia dichotoma
Isotoma fluviatilis subsp. borealis	Viola betonicifolia

- 4. The total plant species list is considerably larger than the list given in 3 (above) with many species present in one or two sites or in small patches. In any particular wetland site only a subset of the species listed may be present. At any one time while a particular wetland is flooded 10-30 species may be found whereas over time the species list for that wetland may be considerably larger. At any one time when the wetland is flooded or dry, many species may only be present as seeds in the soil seed bank only, with no above ground individuals present. The species composition of a site will be influenced by the size of the site and recent flooding and drying patterns. The nature and timing of wetting and drying causes a dynamic vegetation, from open water bodies with submerged vegetation and vegetated margins to wetlands with central vegetation beds, to completely vegetated wetlands, to completely dry wetlands.
- 5. These wetlands are important habitat for a diverse vertebrate and invertebrate fauna although much of the invertebrate fauna is not as fully assessed. Water birds, frogs, turtles and eels are common inhabitants when the wetlands are flooded. Some of these wetlands are sites of significance for the migratory Latham's Snipe (Gallinago hardwickii) which is listed under the international treaties, the Japan-Australia Migratory Bird Agreement and the China-Australia Migratory Bird Agreement.
- 6. Most of these wetlands are naturally temporary, some are near-permanent and dry only once in 20 years; others are seasonal and dry and rewet annually; while others are intermittent and wet and dry on unpredictable aseasonal patterns (Boulton and Brock 1999). Together these wetting and drying patterns provide a mosaic of habitats in space and time across the landscape (Brock and Jarman 2000).
- 7. It is estimated that over 70% of sites formerly occupied by the community have been lost through draining or damming since European settlement (Bell 2000; Benson and Ashby 2000; Brock *et al.* 1999) and most of the 55 remaining wetlands have been severely modified by change in water regime.
- 8. Major ongoing threats to Upland Wetlands of the Drainage Divide of the New England Tableland Bioregion of New South Wales are alteration of water regimes to make these wetlands more predictably flooded or dry (Brock *et al.*1999). Such alterations have been made intentionally by draining or damming or unintentionally through sedimentation from catchment erosion as a result of soil surface crust damage from stock hooves or clearing of catchment vegetation (Gale *et al.* 1995; Haworth 1994; Haworth *et al.* 1999). Stock trampling and grazing within a wetland can be a threat if stocking rates are high and invasion by introduced plants and animals (e.g. Gambusia *Gambusia holbrooki*, Goldfish *Carassius auratus* and Jointed Rush *Juncus articulatus*) can also alter the community structure and its biodiversity.
- 9. Only three Upland Wetlands are fully or partially within conservation reserves namely, Billy Bung and Little Llangothlin in the Little Llangothlin Nature Reserve (which is listed as a Ramsar Wetland of International Importance) and part of Mother of Ducks Lagoon in the Mother of Ducks Lagoon Nature Reserve. Other wetlands are on freehold or crown land. However presence in a conservation reserve has not protected the ecological community from damage by alteration of water levels as many of the water regime changes and sedimentation from catchment erosion occurred before becoming a reserve.

10. In view of the above, the Scientific Committee is of the opinion that the Upland Wetlands of the Drainage Divide of the New England Tableland Bioregion of New South Wales is likely to become extinct in nature in NSW unless factors threatening its survival or evolutionary development cease to operate and that listing as an endangered ecological community is warranted.

Dr RICHARD MAJOR, Chairperson, Scientific Committee

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DETERMINATION TO MAKE A MINOR AMENDMENT TO PART 3 OF SCHEDULE 1 OF THE THREATENED SPECIES CONSERVATION ACT

THE Scientific Committee, established by the Threatened Species Conservation Act has made a Determination to make a minor amendment to Part 3 of Schedule 1 (Endangered ecological communities) of the Act by inserting the White Box Yellow Box Blakely's Red Gum Woodland (as described in the determination of the Scientific Committee under Division 5 Part 2) and as a consequence to omit reference to the White Box Yellow Box Blakely's Red Gum Woodland (as described in the final determination to list the ecological community) which was published on pages 1648 to 1655 in the *NSW Government Gazette* No. 59 dated 15 March 2002. Minor amendments to the Schedules are provided for by Division 5 of Part 2 of the Act.

The Scientific Committee is of the opinion that the amendment is necessary or desirable to correct minor errors or omissions in the Determination in relation to the Thackway and Cresswell (1995) reference.

The Scientific Committee has found that:

- 1. White Box Yellow Box Blakely's Red Gum Woodland is the name given to the ecological community characterised by the assemblage of species listed in paragraph 3. White Box Yellow Box Blakely's Red Gum Woodland is found on relatively fertile soils on the tablelands and western slopes of NSW and generally occurs between the 400 and 800 mm isohyets extending from the western slopes, at an altitude of c. 170m to c. 1200 m, on the northern tablelands (Beadle 1981). The community occurs within the NSW North Coast, New England Tableland, Nandewar, Brigalow Belt South, Sydney Basin, South Eastern Highlands and NSW South Western Slopes Bioregions. Bioregions are defined in Thackway and Cresswell (1995).
- 2. White Box Yellow Box Blakely's Red Gum Woodland includes those woodlands where the characteristic tree species include one or more of the following species in varying proportions and combinations *Eucalyptus albens* (White Box), *Eucalyptus melliodora* (Yellow Box) or *Eucalyptus blakelyi* (Blakely's Red Gum). Grass and herbaceous species generally characterise the ground layer. In some locations, the tree overstorey may be absent as a result of past clearing or thinning and at these locations only an understorey may be present. Shrubs are generally sparse or absent, though they may be locally common.
- 3. White Box Yellow Box Blakely's Red Gum Woodland is characterised by the following assemblage of species.

Acacia buxifolia	Acacia implexa
Acacia paradoxa	Allocasuarina verticillata
Alectryon oleifolius	Aristida behriana
Aristida ramosa	Asperula conferta
Atalaya hemiglauca	Austrodanthonia auriculata
Austrodanthonia bipartita	Austrodanthonia racemosa
Austrodanthonia richardsonii	Austrostipa aristiglumis
Austrostipa blackii	Austrostipa nodosa
Austrostipa scabra	Bothriochla macra
Brachychiton populneus	Brachyloma daphnoides
Bracteantha viscosa	Brunoniella australis
Bulbine bulbosa	Bursaria spinosa
Callitris endlicheri	Callitris glaucophylla
Capparis mitchellii	Cassinia longifolia
Cassinia quinquefaria	Cheilanthes sieberi
Chloris trucata	Chloris ventricosa
Chrysocephalum apiculatum	Cymbopogon refractus
Dianella longifolia	Dianella revoluta
Dichanthium sericeum	Dichelachne micrantha
Dichelacne sciurea	Diuris dendrobioides
Dodonaea viscosa	Echinopogon caespitosus
Ehretia membranifolia	Elymus scaber
Eremophila mitchellii	Eucalyptus blakelyi
Eucalyptus albens	Eucalyptus conica
Eucalyptus bridgesiana	Eucalyptus melliodora
Eucalyptus goniocalyx	Eucalyptus nortonii

Eucalyptus microcarpa	Exocarpos cupressiformis
Eulalia aurea	Geranium solanderi
Geijera parviflora	Glycine tabacina
Glycine clandestina	Gonocarpus elatus
Glycine tomentella	Hibbertia linearis
Goodenia pinnatifida	Hypericum gramineum
Hibbertia obtusifolia	Jasminum lineare
Jacksonia scoparia	Leptorhynchos squamatus
Jasminum suavissimum	Lomandra filiformis
Lissanthe strigosa	Microseris lanceolata
Melichrus urceolatus	Olearia elliptica
Notelaea microcarpa	Oxalis perennans
Olearia viscidula	Panicum queenslandicum
Pandorea pandorana	Pimelea curviflora
Parsonsia eucalyptophylla	Plantago gaudichaudii
Plantago debilis	Poa sieberiana
Poa labillardieri	Rumex brownii
Rostellularia adscendens	Sorghum leiocladum
Sida corrugata	Stackhousia viminea
	8

The total flora and fauna species list for the community is considerably larger than that given above, with many species present in only some sites or in very small quantity. In any particular site not all of the assemblage listed above may be present. At any one time, seeds of some species may only be present in the soil seed bank with no above-ground individuals present. The species composition of the site will be influenced by the size of the site, recent rainfall or drought conditions, its disturbance history and geographic and topographic location. The community is an important habitat for a diverse fauna (vertebrates and invertebrates), but detailed records are not available from most stands and the invertebrate fauna is poorly known.

- 4. Woodlands with *Eucalyptus albens* are most common on the undulating country of the slopes region while *Eucalyptus blakelyi* and *Eucalyptus melliodora* predominate in grassy woodlands on the tablelands. Drier woodland areas dominated by *Eucalyptus albens* often form mosaics with areas dominated by Eucalyptus blakelyi and Eucalyptus melliodora occurring in more moist situations, while areas subject to waterlogging may be treeless. E microcarpa is often found in association with E. melliodora and E. albens on the south western slopes. Woodlands including Eucalyptus crebra, Eucalyptus dawsonii and Eucalyptus moluccana (and intergrades with Eucalyptus albens), for example in the Merriwa plateau, Goulburn River National Park and western Wollemi National Park, are also included. Intergrades between *Eucalyptus blakelyi* and *Eucalyptus tereticornis* may also occur here.
- 5. Latitudinal and climatic gradients in the patterns of species present are found across the range of the community (eg. see Prober 1996 for variation in White Box). This is reflected in a gradual change in herb and grass species from northern to southern NSW (eg. Prober 1996). Within White Box Yellow Box Blakely's Red Gum Woodland, species such as Rostellularia adscendens, Chloris ventricosa, Austrodanthonia racemosa, Brunoniella australis, Cymbopogon refractus, Swainsona galegifolia, Notelaea microcarpa, Stackhousia viminea, Olearia elliptica, Jasminum suavissimum, Plantago gaudichaudii, Dichanthium sericeum, Plantago debilis and Wahlenbergia communis are generally more restricted to more northern areas (eg. Prober 1996). Some other species in White Box Yellow Box Blakely's Red Gum Woodland were generally restricted to southern areas. These include Gonocarpus elatus, Austrostipa blackii, Aristida behriana, Bracteantha viscosa, Austrodanthonia auriculata and Austrostipa nodosa (Prober 1996).
- 6. White Box Yellow Box Blakely's Red Gum Woodland includes vegetation described as *Eucalyptus* albens alliance and E. melliodora / E. blakelyi alliance in Beadle (1981), the Eucalyptus albens alliance in Moore (1953a,b), the grassy white box woodlands of Prober and Thiele (1993,1995) and Prober (1996) and the Grassy white box woodland of the Commonwealth Environmental Protection and Biodiversity

Conservation Act 1999. In the southern tablelands and parts of the southwest slopes, White Box Yellow Box Blakely's Red Gum Woodland are described in Thomas *et al.* (2000).

- 7. Related communities are the *Eucalyptus microcarpa*, *Eucalyptus pilligaensis* Grey Box/ *Eucalyptus populnea* Poplar Box communities of the western slopes and plains and the *Eucalyptus moluccana*, Grey Box, communities of the Clarence, lower Hunter Valley and Western Sydney. These are not covered by this Determination. Similarly the natural temperate grasslands and the *Eucalyptus pauciflora* grassy woodlands of the cooler parts of the southern tablelands are not covered by this Determination.
- 8. White Box Yellow Box Blakely's Red Gum Woodland has been drastically reduced in area and highly fragmented because of clearance for cropping and pasture improvement. Austin et al. (2000) found the community had been reduced to less than 1% of its pre-European extent in the Central Lachlan region. Comparable degrees of reduction have been documented for NSW south western slopes and southern Tablelands (estimated <4% remaining, Thomas et. al. 2000), and for the Holbrook area (estimated <7% remaining, Gibbons and Boak (2000). Gibbons and Boak (2000) found remnants of woodlands dominated by Eucalyptus albens, E. melliodora and E. blakelyi were severely fragmented. Further remnants of the community are degraded as a consequence of their disturbance history. Some remnants of these communities survive with the trees partly of wholly removed by post European activities, and conversely, often remnants of these communities survive with these tree species largely intact but with the shrub or ground layers degraded to varying degrees through grazing or pasture modification. Remnants are subject to varying degrees of threat that jeopardise their viability. These threats include: further clearing (for cropping, pasture improvement or other development); deterioration of remnant condition (caused by firewood cutting, increased livestock grazing, weed invasion, inappropriate fire regimes, soil disturbance and increased nutrient loads); degradation of the landscape in which remnants occur (including soil acidification, salinity, and loss of connectivity between remnants).
- 9. The understorey may be highly modified by grazing history and disturbance. A number of native species appear not to tolerate grazing by domestic stock and are confined to the least disturbed remnants (*Dianella revoluta*, *Diuris dendrobioides*, *Microseris lanceolata*, *Pimelea curviflora*, *Templetonia stenophylla* (Prober & Thiele 1995). Dominant pasture species typically change from *Themeda australis*, *Austrostipa aristiglumis* and *Poa* spp. to *Austrostipa falcata*, *Austrodanthonia* spp. and *Bothriochla macra* as grazing intensity increases (Moore 1953a). This may reflect differences in palatability of these species and their ability to tolerate grazing pressure. Light grazing and burning may also be a problem and lead to *Aristida ramosa* dominance (Lodge & Whalley 1989).
- 10. The condition of remnants ranges from relatively good to highly degraded, such as paddock remnants with weedy understories and only a few hardy natives left. A number of less degraded remnants have survived in Travelling Stock Routes, cemeteries and reserves, although because of past and present management practices understorey species composition may differ between the two land uses. Some remnants of the community may consist of only an intact overstorey or an intact understorey, but may still have high conservation value due to the flora and fauna they support. Other sites may be important faunal habitat, have significant occurrences of particular species, form part of corridors or have the potential for recovery. The conservation value of remnants may be independent of remnant size.
- 11. Disturbed remnants are still considered to form part of the community including remnants where the vegetation, either understorey, overstorey or both, would, under appropriate management, respond to assisted natural regeneration, such as where the natural soil and associated seed bank are still at least partially intact.
- 12. The community is poorly represented in conservation reserves. There are small occurrences of White Box Yellow Box Blakely's Red Gum Woodland in Border Ranges National Park, Goobang National Park, Goulburn River National Park, Manobalai Nature Reserve, Mt Kaputar National Park, Oxley Wild Rivers National Park, Queanbeyan Nature Reserve, Towari National Park, Warrumbungle National Park, Wingen Maid Nature Reserve and Wollemi National Park. The community also occurs in the following State Recreation Areas, Copeton State Recreation Area, Lake Glenbawn State Recreation Area and Lake Keepit State Recreation Area.
- 13. Fauna species of conservation significance found in some stands of White Box Yellow Box Blakely's Red Gum Woodland include:

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Aprasia parapulchella
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Pink-tailed Legless Lizard

Durking anallaring	Bush Stone-curlew
Burhinus grallarius	
Cacatua leadbeateri	Major Mitchell's Cockatoo
Climacteris picumnus victoriae	Brown Treecreeper
Dasyurus maculatus	Spotted-tailed Quoll
Delma impar	Striped Legless Lizard
Grantiella picta	Painted Honeyeater
Hoplocephalus bitorquatus	Pale-headed Snake
Lathamus discolor	Swift Parrot
Lophoictinia isura	Square-tailed Kite
Melanodryas cucullata cucullata	Hooded Robin
Melithreptus gularis gularis	Black-chinned Honeyeater
Neophema pulchella	Turquoise Parrot
Ninox connivens	Barking Owl
Petaurus norfolcensis	Squirrel Glider
Phascolarctos cinereus	Koala
Polytelis swainsonii	Superb Parrot
Pomatostomus temporalis temporalis	Grey-crowned Babbler
Pyrrholaemus sagittata	Speckled Warbler
Saccolaimus flaviventris	Yellow-bellied Sheathtail-bat
Stagonopleura guttata	Diamond Firetail
Synemon plana	Golden Sun Moth
Tyto novaehollandiae	Masked Owl
Varanus rosenbergi	Rosenberg's Goanna
Xanthomyza phrygia	Regent Honeyeater

A number of plant species of conservation significance are likely to occur in White Box Yellow Box Blakely's Red Gum Woodland

Ammobium craspedioides Bothriochloa biloba Dichanthium setosum Discaria pubescens Diuris spp. Prasophyllum petilum Pterostylis spp. Rutidosis leptorhynchoides Swainsona spp.

A number of key threatening processes also occur in White Box Yellow Box Blakely's Red Gum Woodland. These include: Clearing of native vegetation, Predation by the European Red Fox *Vulpes vulpes*, Predation by the Feral Cat, *Felis catus*.

14. In view of the small size of existing remnants, and the threat of further clearing, disturbance and degradation, the Scientific Committee is of the opinion that White Box Yellow Box Blakely's Red Gum Woodland is likely to become extinct in nature in New South Wales unless the circumstances and factors threatening its survival or evolutionary development cease to operate and that listing as an endangered ecological community is warranted.

Dr RICHARD MAJOR, Chairperson, Scientific Committee

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DETERMINATION TO MAKE A MINOR AMENDMENT TO PART 3 OF SCHEDULE 1 OF THE THREATENED SPECIES CONSERVATION ACT

THE Scientific Committee, established by the Threatened Species Conservation Act has made a Determination to make a minor amendment to Part 3 of Schedule 1 (Endangered ecological communities) of the Act by inserting the White Gum Moist Forest in the NSW North Coast Bioregion (as described in the determination of the Scientific Committee under Division 5 Part 2) and as a consequence to omit reference to the White Gum Moist Forest in the NSW North Coast Bioregion (as described in the determination of the Scientific Committee under Division 5 Part 2) and as a consequence to omit reference to the White Gum Moist Forest in the NSW North Coast Bioregion (as described in the final determination to list the ecological community) which was published on pages 6582 to 6589 in the *NSW Government Gazette* No. 82 dated 4 July 2008. Minor amendments to the Schedules are provided for by Division 5 of Part 2 of the Act.

The Scientific Committee is of the opinion that the amendment is necessary or desirable to correct minor errors or omissions in the Determination in relation to the Thackway and Cresswell (1995) reference.

The Scientific Committee has found that:

- 1. White Gum Moist Forest in the NSW North Coast Bioregion is the name given to the ecological community dominated by White Gum, *Eucalyptus dunnii*, either in pure stands or with *E. saligna*, *E. microcorys* and/or *Lophostemon confertus*. The community is characterised by the species listed in paragraph 2, and at maturity typically has a tall open canopy of eucalypts with a structurally complex understorey of rainforest trees and shrubs, vines, palms and ferns. Structural characteristics of the community may vary, depending on the intensity and characteristics of past disturbances including fire, logging, insect attack and partial clearing.
- 2. White Gum Moist Forest is characterised by the following assemblage of species:

Acacia maidenii	Acacia melanoxylon
Acmena smithii	Acronychia oblongifolia
Adiantum formosum	Alectryon subcinereus
Alocasia brisbanensis	Alpinia caerulea
Archontophoenix cunninghamiana	Asplenium australasicum
Breynia oblongifolia	Cayratia clematidea
Cissus antarctica	Cissus hypoglauca
Cordyline petiolaris	Croton verreauxii
Cryptocarya glaucescens	Cryptocarya microneura
Daphnandra micrantha	Dendrocnide excelsa
Dendrocnide photinophylla	Derris involuta
Dioscorea transversa	Diospyros australis
Diploglottis australis	Doodia aspera
Dysoxylum fraserianum	Embelia australianua
Eucalyptus dunnii	Eucalyptus microcorys
Eucalyptus saligna	Eupomatia laurina
Euroschinus falcata var. falcata	Ficus coronata
Geitonoplesium cymosum	Guoia semiglauca
Hibiscus heterophyllus subsp. heterophyllus	Imperata cylindrica var. major
Lastreopsis decomposita	Lastreopsis microsora subsp. microsora
Lomandra longifolia	Lophostemon confertus
Maclura cochinchinensis	Mallotus philippensis
Melia azedarach	Melicope micrococca
Morinda jasminoides	Neolitsea australiensis
Neolitsea dealbata	Omalanthus populifolius
Pandorea pandorana	Pittosporum multiflorum
Pollia crispata	Polyscias elegans
Psychotria loniceroides	Pteridium esculentum
Rapanea variabilis	Rhodamnia rubescens
Rubus moluccanus var. trilobus	Rubus rosifolius
Smilax australis	Solanum stelligerum
Stephania japonica var. discolor	Synoum glandulosum subsp. glandulosum
Tetrastigma nitens	Wikstroemia indica
Zehneria cunninghamii	

- 3. The total species list of the community is considerably larger than that given above, with many species present in only one or two sites or in low abundance. The species composition of a site will be influenced by the size of the site, recent rainfall or drought condition and by its disturbance (including fire) history. The number of species, and the above ground relative abundance of species will change with time since fire, and may also change in response to changes in fire regime (including changes in fire frequency). At any one time, above ground individuals of some species may be absent, but the species may be represented below ground in the soil seed banks or as dormant structures such as bulbs, corms, rhizomes, rootstocks or lignotubers. The list of species given above is of vascular plant species; the community also includes micro-organisms, fungi, cryptogamic plants and a diverse fauna, both vertebrate and invertebrate. These components of the community are poorly documented.
- 4. White Gum Moist Forest is dominated by an open tree canopy of *Eucalyptus dunnii* (White Gum), sometimes with Eucalyptus saligna (Sydney Blue Gum), E. microcorys (Tallowwood) and/or Lophostemon confertus (Brush Box). The understorey typically includes a diverse and prominent stratum of rainforest trees and shrubs including Acmena smithii (Lilli pilli), Acronychia oblongifolia (Common Acronychia), Cordyline petiolaris (Coast Banksia), Croton verreauxii (Green Cascarilla), Cryptocarya microneura (Murrogun), Diploglottis australis (Native Tamarind), Eupomatia laurina (Bolwarra), Guoia semiglauca, Maclura cochinchinensis (Cockspur Thorn), Pittosporum multiflorum (Orange Thorn), Polyscias elegans (Celery Wood) and Rubus rosifolius (Rose-leaf Bramble). Vines, including Cissus antarctica (Water Vine), C. hypoglauca (Giant Water Vine), Geitonoplesium cymosum (Scrambling Lily) and Smilax australis (Sarsaparilla), commonly grow over and amongst the understorey shrubs and trees. The groundcover comprises: ferns, including Adiantum formosum (Giant Maidenhar), Doodia aspera (Rasp Fern) and Lastreopsis spp. (Shield Ferns); herbs, including Dioscorea transversa (Native Yam) and Alpinia caerulea (Native Ginger); and graminoids including Imperata cylindrica var. major (Blady Grass) and Lomandra longifolia (Spiny-headed Matrush). Mature stands of the community are typically tall open-forest or open-forest with a structurally complex, multi-stratum understorey, while regrowth stands or recently disturbed stands may take on the structure of low closed forest or scrub or may have simplified understorey structure, depending on the nature of the disturbance and the time elapsed since.
- 5. A number of threatened fauna species use habitat resources associated with White Gum Moist Forest. These include the following:

nese merude the following.		
Litoria brevipalmata Litoria subglandulosa Mixophyes balbus Mixophyes fleayi Philoria kundagungan Philoria richmondensis	Green-thighed Frog Glandular Frog Stuttering Barred Frog Fleay's Barred Frog Mountain Frog	Vulnerable Vulnerable Endangered Endangered Endangered Endangered
Hoplocephalus stephensii	Stephens' Banded Snake	Vulnerable
Calyptorhynchus banksii Calyptorhynchus lathami Coracina lineata Cyclopsitta diophthalma coxeni Menura alberti Ninox strenua Podargus ocellatus Ptilinopus magnificus Ptilinopus regina Ptilinopus superbus Tyto tenebricosa	Red-tailed Black-cockatoo Glossy Black-cockatoo Barred Cuckoo-shrike Double-eyed Fig-parrot Albert's Lyrebird Powerful Owl Marbled Frogmouth Wompoo Fruit-dove Rose-crowned Fruit-dove Superb Fruit-dove Sooty Owl	Vulnerable Vulnerable Endangered Vulnerable Vulnerable Vulnerable Vulnerable Vulnerable Vulnerable Vulnerable
Cercartetus nanus Dasyurus maculatus Falsistrellus tasmaniensis Kerivoula papuensis Macropus parma Miniopterus australis Mormopterus beccarii Myotis adversus	Eastern Pygmy-possum Spotted-tailed Quoll Eastern False Pipistrelle Golden-tipped Bat Parma Wallaby Little Bentwing-bat Beccari's Freetail-bat Large-footed Myotis	Vulnerable Vulnerable Vulnerable Vulnerable Vulnerable Vulnerable Vulnerable

Petaurus australis	Yellow-bellied Glider	Vulnerable
Phascogale tapoatafa	Brush-tailed Phascogale	Vulnerable
Phascolarctos cinereus	Koala	Vulnerable
Pteropus poliocephalus	Grey-headed Flying-fox	Vulnerable
Scoteanax rueppellii	Greater Broad-nosed Bat	Vulnerable
Thylogale stigmatica	Red-legged Pademelon	Vulnerable

- 6. White Gum Moist Forest typically occurs on the escarpment slopes and foothills of the north-east NSW, most commonly between 400 and 650 m elevation, where mean annual rainfall exceeds approximately 1000 mm and has a summer maximum (DEC 2007). Soils that support the community are relatively fertile and derived from basalt or fine-grained sediments or colluvium or alluvium influenced by the presence of these substrates upslope or upstream. The community is typically found in gullies and on lower slopes, but has been recorded on upper slopes and basalt ridges (Binns 1995). It occurs less commonly on west-facing slopes than on other aspects.
- 7. White Gum Moist Forest occurs in the NSW North Coast bioregion, as well as adjacent regions in southeast Queensland. In NSW, White Gum Moist Forest is currently known from the local government areas of Clarence Valley, Coffs Harbour, Kyogle and Tenterfield, but may occur elsewhere within the bioregion. Bioregions are defined in Thackway and Cresswell (1995). In addition to these areas, suitable habitat for the community is predicted to occur within the local government areas of Bellingen, Glen Innes – Severn and Richmond Valley (DEC 2007).
- White Gum Moist Forest includes 'Dunn's White Gum' (Forest Type 51) of Baur (1989), habitat of *Eucalyptus dunnii* described by Bension and Hager (1993), '*Eucalyptus dunnii*' (Floristic Group 73) of NPWS (1995), '*Eucalyptus dunnii*' (Community URBov 8) of Binns (1995) and 'Dunn's White Gum Community' (Forest Ecosystem 45) of NPWS (1999) and DEC (2004). White Gum Moist Forest belongs to the North Coast Wet Sclerophyll Forests vegetation class of Keith (2004).
- 9. All known records of White Gum Moist Forest occur within two disjunct areas: one in the upper northern reaches of the Richmond River catchment; and the other in the north-eastern foothills of the Dorrigo plateau. Together, these areas comprise a total extent of occurrence of less than 2500 km². The area of suitable habitat within this distribution is estimated to be approximately 1700 km², of which approximately 120 km² was assessed as 'high quality' habitat (DEC 2007). A map of forest ecosystems in north-eastern NSW (NPWS 1999), shows less than 1000 ha of 'Dunn's White Gum Community' (Ecosystem 45) throughout the range of *Eucalyptus dunnii* in NSW, suggesting that less than 1% of modelled suitable habitat is occupied by the community (DEC 2007). Based on available mapping and site records, and using a grid scale of 4 km² (as recommended by IUCN 2006, White Gum Moist Forest is estimated to occupy an area of about 600 km². These estimates indicate that the community has a moderately to highly restricted distribution.
- 10. Since European settlement, and relative to the longevity of its dominant trees, which live for several hundred years, White Gum Moist Forest has undergone a moderate to large reduction in geographic distribution. Estimates of reduction in the distribution of the community vary from 33% (NPWS 1999) to 50% (Wall 2005). However, the extent of the community prior to clearing may have been under-estimated (DEC 2007), suggesting that reductions have been larger than currently estimated. Isolated remnant trees along Duck, Koreelah, Lindsay, Boomi and Beaury creeks are indicative of a previously more extensive occurrence of the community, prior to land clearing (DEC 2007). White Gum Moist Forest continues to be threatened by clearing, particularly where it occurs on fertile soils in valleys and on river flats that are suitable for agriculture and plantation forestry. Approximately one-third of the remaining suitable habitat occurs on private land, the majority of which has been assessed as high- or medium-capability rural land (DEC 2007). 'Clearing of native vegetation' is listed as a Key Threatening Process under the Threatened Species Conservation Act 1995.
- 11. White Gum Moist Forest has undergone changes in structure, including loss of hollow-bearing trees, as a consequence of timber harvesting. Its dominant tree species are valuable commercial timber species and much of the community is currently in a state of regrowth after past logging activity. Benson and Hager (1993) estimated that less than 10% of the *E. dunnii* forest they surveyed was in an 'old growth' state and that 87% of the trees they sampled had a diameter at breast height of less than 0.5 m. Logging operations continue in stands of the community on state forest and private land, which account for approximately two-thirds of the remaining suitable habitat (DEC 2007). For example, recent logging of the community

TION68872007). Loss of hollow-bearing trees, which provide

has been reported in Beaury State Forest (DEC 2007). Loss of hollow-bearing trees, which provide important fauna habitat, and other structural changes associated with timber harvesting are indicative of a large reduction in ecological function of the community. 'Loss of hollow-bearing trees' is listed as a Key Threatening Process under the Threatened Species Conservation Act 1995.

- 12. White Gum Moist Forest is threatened by forest eucalypt dieback associated with over-abundant Bell Miners and psyllids (Wardell-Johnson *et al.* 2006, DEC 2007). This complex process is associated with substantial changes in community composition and structure, including the defoliation and eventual death of canopy eucalypts, increased densities of mid-stratum plant species and decline in diversity of small forest birds. Forest dieback affects White Gum Moist Forest across all land tenures, including stands that are now included within Mt Clunie and Yabbra National Parks. Areas of low, moderate and severe forest dieback have been mapped within suitable habitat for White Gum Moist Forest (DEC 2007). A field inspection in November 2006 recorded defoliation of upper stratum trees associated with a dominance of Bell Miners in local bird communities in eight of 16 sites inspected (DEC 2007). The impacts of forest eucalypt dieback are indicative of a large reduction in ecological function of the community.
- 13. White Gum Moist Forest is also potentially threatened by grazing and inappropriate fire regimes. Cattle grazing is practiced in large areas of freehold and leasehold eucalypt forest in north-east NSW, including White Gum Moist Forest. Frequent burning of the understorey is carried out as part of forest management for both cattle production and timber production. Benson & Hager (1993) were able to distinguish the species composition of White Gum Moist Forest sites that appeared to be unburnt for more than 30 years from those that appeared to have been burnt more regularly. The less frequently burnt sites were richer in fire-sensitive rainforest species than the latter, while recently logged and burnt sites had the lowest species diversity (Benson & Hager 1993). More generally, frequent burning and grazing are associated with changes in the structure, diversity and composition of a range of eucalypt forest communities in northern NSW (York 1999, 2000, Andrew *et al.* 2000, Henderson and Keith 2002, Harris *et al.* 2003, York and Tarnawski 2004, Tasker and Bradstock 2006). 'High frequency fire resulting in disruption of life cycle processes in plants and animals and loss of vegetation structure and composition' is listed as a Key Threatening Process under the Threatened Species Conservation Act 1995.
- 14. Clearing activity, forest dieback, grazing, frequent burning and other disturbances accelerate the invasion of weeds into White Gum Moist Forest. Principal weed species include *Lantana camara*, *Ochna serrulata* and *Senna septemtrionalis*. *Lantana camara* was recorded in 40% of 43 documented sites of White Gum Moist Forest, and dominated the mid stratum at most of these sites. Infestations of this species have been implicated in forest eucalypt dieback (Wardell-Johnson *et al.* 2006). The invasion and establishment of exotic species in White Gum Moist Forest results in a large reduction in the ecological function of the community. 'Invasion, establishment and spread of *Lantana camara*' is listed as a Key Threatening Process under the Threatened Species Conservation Act 1995.
- 15. *Eucalyptus dunnii* is grown in commercial timber plantations in northern NSW. Until relatively recently, these plantations were grown from seed that was harvested from wild populations, however, an increasing proportion of seed is now produced from controlled breeding stock in seed orchards. The level of gene flow from plantation stock into wild populations is currently unknown, as is the impact of genetic contamination from controlled breeding stock on fitness and genetic diversity of wild populations.
- 16. Limited examples of the community are have been mapped and recorded from Koreelah, Mt Clunie, Richmond Range, Tooloom, Toonumbar and Yabbra National Parks, Captains Creek and Hortons Creek Nature Reserves. Small stands may also occur within Border Ranges, Chaelundi and Mt Nothofagus National Parks. The remaining stands occur primarily on private land or state forest.
- 17. White Gum Moist Forest in the NSW North Coast Bioregion is not eligible to be listed as a critically endangered ecological community.
- 18. White Gum Moist Forest in the NSW North Coast Bioregion is eligible to be listed as an endangered ecological community as, in the opinion of the Scientific Committee, it is facing a very high risk of extinction in New South Wales in the near future, as determined in accordance with the following criteria as prescribed by the Threatened Species Conservation Regulation 2002:

Clause 26

The ecological community's geographic distribution is estimated or inferred to be:

(b) highly restricted,

and the nature of its distribution makes it likely that the action of a threatening process could cause it to decline or degrade in extent or ecological function over a time span appropriate to the life cycle and habitat characteristics of the ecological community's component species.

Clause 27

The ecological community has undergone, is observed, estimated, inferred or reasonably suspected to have undergone or is likely to undergo within a time span appropriate to the life cycle and habitat characteristics of its component species:

(b) a large reduction in ecological function,

as indicated by any of the following:

- (d) change in community structure
- (e) change in species composition
- (f) disruption of ecological processes
- (g) invasion and establishment of exotic species
- (h) degradation of habitat

Dr RICHARD MAJOR, Chairperson, Scientific Committee

Reference:

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- York A, Tarnawski J (2004) Impacts of grazing and burning on terrestrial invertebrate assemblages in dry eucalypt forests of north-eastern New South Wales: Implications for biodiversity conservation. Pp. 845-859 in: 'Conservation of Australia's Forest Fauna' (Ed. D Lunney). Second edition. Royal Zoological Society of NSW, Mosman.

DETERMINATION TO MAKE A MINOR AMENDMENT TO PART 3 OF SCHEDULE 1 OF THE THREATENED SPECIES CONSERVATION ACT

THE Scientific Committee, established by the Threatened Species Conservation Act has made a Determination to make a minor amendment to Part 2 of Schedule 1A (Critically endangered ecological communities) of the Act by inserting the Marsh Club-rush sedgeland in the Darling Riverine Plains Bioregion (as described in the determination of the Scientific Committee under Division 5 Part 2) and as a consequence to omit reference to the Marsh Club-rush sedgeland in the Darling Riverine Plains Bioregion (as described in the final determination to list the ecological community) which was published on pages 4628 to 4629 and 4634 to 4635 in the *NSW Government Gazette* No. 117 dated 24 September 2010. Minor amendments to the Schedules are provided for by Division 5 of Part 2 of the Act.

The Scientific Committee is of the opinion that the amendment is necessary or desirable to correct minor errors or omissions in the Determination in relation to the Thackway and Cresswell (1995) reference.

The Scientific Committee has found that:

- 1. Marsh Club-rush sedgeland in the Darling Riverine Plains Bioregion is the name given to the ecological community characterised by the species assemblage listed in paragraph 2. The community typically forms dense stands to 2 m high in which trees are absent but structural characteristics of the community may vary, depending on the intensity and characteristics of past disturbances including grazing, fire and alteration of flow regimes.
- 2. Marsh Club-rush sedgeland in the Darling Riverine Plains Bioregion is characterised by the following assemblage of species:

Bolboschoenus fluviatilis	Carex appressa
Eleocharis plana	Lachnagrostis filiformis
Paspalum distichum	Ranunculus undosus

- 3. The total species list of the community is larger than that given above, with some species present in only one or two sites or in low abundance. The species composition of a site will be influenced by the size of the site, recent rainfall or drought condition and by its disturbance history. The number of species, and the above ground relative abundance of species will change with time since flooding, and may also change in response to changes in flow regime (including changes in flooding frequency, depth and duration). At any one time, above ground individuals of some species may be absent, but the species may be represented below ground in the soil seed banks or as dormant structures such as bulbs, corms, rhizomes, rootstocks or lignotubers. The list of species given above is of vascular plant species; the community also includes micro-organisms, fungi, cryptogamic plants and a diverse fauna, both vertebrate and invertebrate. These components of the community are poorly documented.
- 4. Marsh Club-rush sedgeland is dominated by the Marsh Club-rush Bolboschoenus fluviatilis which forms dense stands up to 2 m tall with an understorey including Carex appressa (Tussock Sedge), Eleocharis plana (Ribbed Spike Rush), Lachnagrostis filiformis (Blown Grass), Paspalum distichum (Water Couch) and Ranunculus undosus (Swamp Buttercup) (Bowen et al. 2008). The ecological community is distinguished from other surrounding ecological communities by a combination of lack of trees and dominance of Bolboschoenus fluviatilis (Marsh Club-rush), generally over 40% of the vegetation cover is dominated by this species. Surrounding communities may include Eucalyptus coolibah (Coolibah) and E. largiflorens (Blackbox) woodlands, shrublands of Acacia stenophylla (River Coobah) and Muehlenbeckia florulenta (Lignum) or treeless communities dominated by Paspalum distichum (Water Couch), Eleocharis plana (Spike Rush), Juncus aridicola (Tussock Rush) or Phragmites australis (Common reed). Bolboschoenus fluviatilis is is widespread in NSW and may occur as a component species in these surrounding communities and in a range of other wetland locations.
- 5. Marsh Club-rush sedgeland is associated with grey clay soils usually with a surface layer of organic matter several centimetres thick. The community has been described by Benson (2008) as ID 205 Marsh Club-rush very tall sedgeland of inland watercourses.
- 6. Marsh Club-rush sedgeland has been recorded in the Gwydir wetlands but may occur elsewhere in the Darling Riverine Plains Bioregion. Bioregions are defined in Thackway and Cresswell (1995).
- 7. Marsh Club-rush sedgeland has a very highly restricted geographic distribution and an estimated area of occupancy of 8 km² based on 2 x 2 km grid cells, the scale of assessment recommended for species by IUCN (2008).

- 8. Floodplain wetland communities have undergone significant changes to their hydrological regimes as a result of river regulation (Kingsford 2000). The construction of large dams to utilise unpredictable river flows and facilitate the expansion of irrigated agriculture has altered the frequency, size and duration of floods, often reducing the connectivity between rivers and their floodplains (Boulton & Brock 1999). Within the Gwydir wetlands the cycles of floodplain wetting and drying have a major influence on the productivity of Marsh Club-rush sedgeland and the maintenance of flow regimes into these wetlands is essential for sustaining vegetation condition (Wilson *et al.* 2008). However, since regulation of flows to the Gwydir Wetlands began in 1972 and the development of Copeton Dam in 1976, there has been a decrease in available flows to the wetlands (Bowen & Simpson 2009; B Southern *in litt* 2010). A large proportion of the water that historically reached the wetlands of the Lower Gwydir Watercourse is now diverted for various purposes, such as irrigation and stock and domestic use. Bowen and Simpson (2009) note that the Lower Gwydir Wetlands have only received managed environmental releases and waters from a few larger floods in 1984, 1996, 1998, 2000, 2001 and 2004. 'Alteration to the natural flow regimes of rivers and streams and their floodplains and wetlands' is listed as a Key Threatening Process under the Threatened Species Conservation Act 1995.
- 9. Analysis of the distribution of the Marsh Club-rush sedgeland community in the Gwydir wetlands by Bowen et al. (2008) showed a decrease in geographic distribution from 317 ha in 1996 to 132 ha in 2005. Bowen and Simpson (2009) estimated an area of occupancy of 181 ha in 2008 which represents only 9% of the 1974 extent of the Marsh Club-rush sedgeland community. This indicates a very large reduction in the community's geographic distribution over the past 35 years, a time span appropriate to the life cycle and habitat characteristics of this community's component species. This magnitude of decline is consistent with local observations since the 1950s (B Southern *in litt.* 2010).
- 10. Grazing by livestock and changes to patterns of wetland inundation may accelerate the invasion of weeds into Marsh Club-rush sedgeland. Comparisons of grazed and ungrazed exclosure plots in the Gwydir wetlands showed lower cover of *Bolboschoenus fluviatilis* and increased abundance of *Cirsium vulgare* (Thistle) at grazed sites, indicating a significant change in both community structure and composition (Wilson *et al.* 2008). Similarly, Taylor and Ganf (2005) have highlighted the likely correlation between reduced grass canopy cover via grazing and proliferation of the floodplain weed, *Phyla canescens* (Lippia), in the northern Murray-Darling Basin. Particularly within the Gwydir wetlands, Bowen *et al.* (2008) have noted that Lippia invasion is one of the most important factors contributing to the overall loss of wetland vegetation.
- 11. Marsh Club-rush sedgeland in the Darling Riverine Plains Bioregion is eligible to be listed as a Critically Endangered Ecological Community as, in the opinion of the Scientific Committee, it is facing an extremely high risk of extinction in New South Wales in the immediate future, as determined in accordance with the following criteria as prescribed by the Threatened Species Conservation Regulation 2002:

Clause 25

The ecological community has undergone, is observed, estimated, inferred or reasonably suspected to have undergone or is likely to undergo within a time span appropriate to the life cycle and habitat characteristics of its component species:

(a) a very large reduction in geographic distribution.

Clause 26

The ecological community's geographic distribution is estimated or inferred to be:

(a) very highly restricted,

and the nature of its distribution makes it likely that the action of a threatening process could cause it to decline or degrade in extent or ecological function over a time span appropriate to the life cycle and habitat characteristics of the ecological community's component species.

Clause 27

The ecological community has undergone, is observed, estimated, inferred or reasonably suspected to have undergone or is likely to undergo within a time span appropriate to the life cycle and habitat characteristics of its component species:

(a) a very large reduction in ecological function,

- (d) change in community structure,
- (e) change in species composition,
- (f) disruption of ecological processes,
- (g) invasion and establishment of exotic species,
- (h) degradation of habitat,
- (i) fragmentation of habitat.

Dr RICHARD MAJOR, Chairperson, Scientific Committee

Reference:

- Benson JS (2008) New South Wales Vegetation Classification and Assessment: Part 2 Plant communities in the NSW South-western Slopes Bioregion and update of NSW Western Plains plant communities. Version 2 of the NSWVCA database. Cunninghamia 10, 599-673.
- Boulton AJ, Brock MA (1999) 'Australian freshwater ecology: processes and management.' (Gleneagles Publishing: Adelaide)
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- Thackway R, Cresswell ID (1995) An interim biogeographic regionalisation for Australia: a framework for setting priorities in the National Reserves System Cooperative Program. (Version 4.0. Australian Nature Conservation Agency: Canberra.)
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OFFICIAL NOTICES Appointments

ABORIGINAL LAND RIGHTS ACT 1983

NOTICE

I, the Honourable VICTOR DOMINELLO, M.P., Minister for Aboriginal Affairs, following consent by the New South Wales Aboriginal Land Council (NSWALC), do, by this notice pursuant to section 231 (2) of the Aboriginal Land Rights Act 1983 (the Act) extend the appointment of Mr Andrew BOWCHER as administrator to the Wilcannia Local Aboriginal Land Council for a period of six (6) calendar months, from 26 November 2011 to 25 May 2012. During the period of his appointment, the administrator will have all of the functions of the Wilcannia Local Aboriginal Land Council and any other duties as specified by the instrument of appointment. The administrator's remuneration and expenses are not to exceed \$90 000 excluding GST without the prior approval of NSWALC. The administrator's remuneration may include fees payable for the services of other personnel within the administrator's firm who provide services as agents of the administrator.

Signed and sealed this 24th day of November 2011.

VICTOR DOMINELLO, M.P., Minister for Aboriginal Affairs

GOD SAVE THE QUEEN!

ABORIGINAL LAND RIGHTS ACT 1983

NOTICE

I, the Honourable VICTOR DOMINELLO, M.P., Minister for Aboriginal Affairs, following consent by the New South Wales Aboriginal Land Council (NSWALC), do, by this notice pursuant to section 231 (2) of the Aboriginal Land Rights Act 1983 (the Act) extend the appointment of Mr Andrew BOWCHER as Administrator to the Wellington Local Aboriginal Land Council for a period of six (6) calendar months, from 2 December 2011 to 1 June 2012. During the period of his appointment, the Administrator will have all of the functions of the Wellington Local Aboriginal Land Council and any other duties as specified by the instrument of appointment. The Administrator's remuneration and expenses are not to exceed \$60 000 excluding GST without the prior approval of NSWALC. The Administrator's remuneration may include fees payable for the services of other personnel within the Administrator's firm who provide services as agents of the Administrator.

Signed and sealed this 24th day of November 2011.

VICTOR DOMINELLO, M.P., Minister for Aboriginal Affairs

GOD SAVE THE QUEEN!

ABORIGINAL LAND RIGHTS ACT 1983

NOTICE

I, the Honourable VICTOR DOMINELLO, M.P., Minister for Aboriginal Affairs, following consent by the New South Wales Aboriginal Land Council (NSWALC), do, by this notice pursuant to section 231 (2) of the Aboriginal Land Rights Act 1983 (the Act) extend the appointment of Mr Bill MURPHY as administrator to the Cowra Local Aboriginal Land Council for a period of six (6) calendar months, from 1 December 2011 to 31 May 2012. During the period of his appointment, the administrator will have all of the functions of the Cowra Local Aboriginal Land Council and any other duties as specified by the instrument of appointment. The administrator's remuneration and expenses are not to exceed \$60 000 excluding GST without the prior approval of NSWALC. The administrator's remuneration may include fees payable for the services of other personnel within the administrator's firm who provide services as agents of the administrator.

Signed and sealed this 28th day of November 2011.

VICTOR DOMINELLO, M.P., Minister for Aboriginal Affairs

GOD SAVE THE QUEEN!

CRIMES (ADMINISTRATION OF SENTENCES) ACT 1999

Serious Offenders Review Council Appointment of Deputy Chairperson

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 appointment of His Honour Acting Judge Luigi LAMPRATI, SC, as a judicial member and Deputy Chairperson of the Serious Offenders Review Council for a period of three (3) years dating on and from 23 November 2011 until 22 November 2014.

GREG SMITH, M.P., Attorney General and Minister for Justice

WATER MANAGEMENT ACT 2000

Appointment

HER Excellency the Governor, with the advice of the Executive Council and in pursuance of Clauses 5 and 22 of Schedule 5 to the Water Management Act 2000, appoint Mrs Lilliane BRADY and Mr Peter YENCH to the Cobar Water Board for a period of 5 years commencing 23 November 2011.

KATRINA HODGKINSON, M.P., Minister for Primary Industries

Roads and Maritime Services

ROAD TRANSPORT (GENERAL) ACT 2005

Notice under the Road Transport (Mass, Loading and Access) Regulation 2005

I, PETER DUNCAN, Chief Executive of the Roads and Maritime Services, pursuant to Clause 20 of the Road Transport (Mass, Loading and Access) Regulation 2005, hereby amend the Class 2 B-Double Notice 2010, as published in the *New South Wales Government Gazette* No. 108 on 27 August 2010, at pages 4033 to 4284, as set out in the Schedule of this Notice.

PETER DUNCAN, Chief Executive, Roads and Maritime Services

SCHEDULE

1. Citation

This Notice may be cited as the Roads and Maritime Services Class 2 B-Double (Amendment) Notice No. 7/2011.

2. Commencement

This Notice takes effect on and from the date of publication in the New South Wales Government Gazette.

3. Effect

This Notice remains in force up to and including 1 September 2015 unless it is repealed earlier.

4. Amendment

Delete the following routes from the table at Appendix 1, under the heading Part 6 – Southern Region.

Туре	Road No.	Road Name	Starting Point	Finishing Point	Conditions
25.	51.	Kings Highway, Queanbeyan.	MR52 Yass Road, Queanbeyan.	MR52 Lanyon Drive, Queanbeyan.	Queanbeyan Heavy Vehicle Bypass route must be used outside the hours below.
					Travel permitted only during the following hours:
					Monday-Wednesday 6:00pm to 8:00am.
					Thursday 10:00pm to 8:00am.
					Friday-Saturday 7:00pm to 8:00am.
					Sunday 6:00pm to 8:00am.

2 December 2011

OFFICIAL NOTICES

mser	insert the following foutes into the table at Appendix 1, under the heading Part 6 – Southern Region.					
Туре	Road No	Road Name	Starting Point	Finishing Point	Conditions	
25.	51.	Kings Highway, Queanbeyan.	MR52 Yass Road, Queanbeyan.	MR52 Lanyon Drive, Queanbeyan.	Travel permitted only during the following hours:	
					Monday to Wednesday midnight to 8am and 6pm to midnight.	
					Thursday midnight to 8am and 10pm to midnight.	
					Friday and Saturday midnight to 8am and 7pm to midnight.	
					Sunday midnight to 8am and midday to midnight.	
					Note: That Queanbeyan Heavy Vehicle Bypass route (Aurora Avenue, Faunce Street, Thurralilly Street) is an alternative	
					route.	

Insert the following routes into the table at Appendix 1, under the heading Part 6 – Southern Region.

OFFICIAL NOTICES

ROAD TRANSPORT (GENERAL) ACT 2005

Notice under Clause 20 of the Road Transport (Mass, Loading and Access) Regulation 2005

BALLINA 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.

Dated: 30 November 2011.

PAUL HICKEY, General Manager, Ballina Shire Council (by delegation from the Minister for Roads)

SCHEDULE

1. Citation

This Notice may be cited as Ballina Shire Council 25 Metre B-Double Route Notice No. 2/2011.

2. Commencement

This Notice takes effect on date of gazettal.

3. Effect

This Notice remains in force until 1st September 2015 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

Туре	Road No.	Road Name	Starting Point	Finishing Point
25.		Tamarind Drive Ballina.	Cumbalum Interchange.	Kerr Street.
25.		Kerr Street, Ballina.	Tamarind Drive/Kerr Street Intersection.	River Drive.
25.		River Street, Ballina.	River Street/Kerr Street Intersection.	Pacific Highway Fishery Creek Bridge.
25.	SH10.	Pacific Highway, Ballina.	Pacific Highway Fishery Creek Bridge.	Teven Road Interchange West.

OFFICIAL NOTICES

ROAD TRANSPORT (GENERAL) ACT 2005

Notice under Clause 20 of the Road Transport (Mass, Loading and Access) Regulation 2005

BALLINA 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.

Dated: 30 November 2011.

PAUL HICKEY, General Manager, Ballina Shire Council (by delegation from the Minister for Roads)

SCHEDULE

1. Citation

This Notice may be cited as Ballina Shire Council 25 Metre B-Double Route Notice No. 1/2011.

2. Commencement

This Notice takes effect on date of gazettal.

3. Effect

This Notice remains in force until 1st September 2015 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

Туре	Road No.	Road Name	Starting Point	Finishing Point
25.	SH16.	Bruxner Highway, Alstonville.	Eastern tie in for Alstonville Bypass Interchange.	Teven Road.
25.	SH16.	Ballina Road, Alstonville.	Teven Road/Ballina Road Intersection.	Green Street/Main Street Intersection.
25.		Main Street, Alstonville.	Green Street/Main Street Intersection.	Main Street/Bugden Avenue Intersection.
25.	SH16.	Bugden Avenue, Alstonville.	Bugden Avenue/Main Street Intersection.	Maguires Creek Bridge.
25.	SH16.	Bruxner Highway, Wollongbar.	Maguires Creek Bridge.	Kays Lane.
25.	SH16.	Lismore Road, Wollongbar.	Lismore Road/Kays Lane Intersection.	Sneaths Road.

OFFICIAL NOTICES

ROAD TRANSPORT (GENERAL) ACT 2005

Notice Under Clause 20 the Road Transport (Mass, Loading and Access) Regulation 2005

NARRABRI 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 Road Train Vehicles may be used subject to any requirements or conditions set out in the Schedule.

Date: 21 November 2011.

PHIL MARSHALL, General Manager, Narrabri Shire Council (by delegation from the Minister for Roads)

SCHEDULE

1. Citation

This Notice may be cited as Narrabri Shire Council Road Train Vehicle route Notice No. 2/2011.

2. Commencement

This Notice takes effect on the date of publication in the New South Wales Government Gazette.

3. Effect

This Notice remains in force until 30 September 2015 unless it is amended or repealed earlier.

4. Application

This Notice applies to those Road Train vehicles which comply with Schedule 1 of the Road Transport (Mass, Loading and Access) Regulation 2010 and Schedule 2 of the Road Transport (Vehicle Registration) Regulation 2007.

5. Routes

Туре	Road No.	Road Name	Starting Point	Finishing Point	Conditions
RT	002	Berrigal Road, Bellata	Newell Highway, Bellata	Narrabri/Moree Shire boundary	

ROADS ACT 1993

Order - Sections 46, 49, 54 and 67

Greater Hume Shire Council area

Dedication of Land as Public Road and Declaration as Controlled Access Road of part of the Hume Highway at Mullengandra

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 and the main road described in Schedule 4 under;
- 4. declare that access to the said controlled access road is restricted; and
- 5. specify in Schedule 5 under, the points along the controlled access way at which access may be gained to or from other public roads.

HON DUNCAN GAY MLC MINISTER FOR ROADS AND PORTS

SCHEDULE 1

ALL those pieces or parcels of land situated in the Greater Hume Shire Council area, Parish of Mullengandra and County of Goulburn shown as:

Lot 74 Deposited Plan 1132620; and

Lots 29, 30, 31 and 33 Deposited Plan 1132237.

The above Lots comprise the whole of the land in the correspondingly numbered certificates of title and are all shown on RMS Plan 0002 186 AC 4020.

SCHEDULE 2

ALL those pieces or parcels of land situated in the Greater Hume Shire Council area, Parishes of Woomargama and Mullengandra and County of Goulburn shown as:

Lots 18, 19 and 20 Deposited Plan 1127000;

Lots 52 and 53 Deposited Plan 1156500;

Lots 30 to 34 and 36 to 39 inclusive Deposited Plan 1130152;

Lots 60 to 69 inclusive and 72 Deposited Plan 1132620; and

Lots 34 to 38 inclusive, 40, 41, 42, 44 and 45 Deposited Plan 1132237.

The above Lots comprise the whole of the land in the correspondingly numbered certificates of title and are shown on RMS Plan 0002 186 AC 4020.

SCHEDULE 3

ALL those pieces or parcels of public road situated in the Greater Hume Shire Council area, Parishes of Woomargama and Mullengandra and County of Goulburn shown as:

Lots 14, 17 and 22 Deposited Plan 1127000;

Lots 35 and 40 Deposited Plan 1130152;

Lot 1 Deposited Plan 185667;

Lot 1 Deposited Plan 522824;

Lots 71 and 73 Deposited Plan 1132620;

Lot 6 Deposited Plan 827582;

Lots 1, 2 and 3 Deposited Plan 232062;

Lots 1 and 2 Deposited Plan 186060;

Lots 39, 43 and 47 Deposited Plan 1132237;

Lots 1 and 2 Deposited Plan 211815; and

Lot 6 Deposited Plan 543465.

The above Lots are shown on RMS Plan 0002 186 AC 4020.

SCHEDULE 4

ALL those pieces or parcels of public road situated in the Greater Hume Shire Council area, Parishes of Woomargama and Mullengandra and County of Goulburn shown as:

Lot 54 Deposited Plan 1156500;

Lot 21 Deposited Plan 1127000;

Lot 29 Deposited Plan 1130152;

Lot 70 Deposited Plan 1132620; and

Lot 46 Deposited Plan 1132237.

The above Lots are shown on RMS Plan 0002 186 AC 4020.

SCHEDULE 5

Between the points A and B;

between the points C and D;

between the points E and F; and

between the points G and H, all shown on RMS Plan 0002 186 AC 4020.

(RMS Papers 2/202.153)

Department of Trade and Investment, Regional Infrastructure and Services

NOTICE is given that the following applications have been received:

EXPLORATION LICENCE APPLICATIONS

(T11-0340)

No. 4424, DEXON RESOURCES NO. 6 PTY LTD (ACN 154 144 877), area of 2 units, for Group 1, dated 8 November 2011. (Sydney Mining Division).

(T11-0369)

No. 4445, STANDARD IRON PTY LTD (ACN 131 971 438), area of 116 units, for Group 1, dated 24 November 2011. (Orange Mining Division).

MINING LEASE APPLICATION

(11-5284)

No. 414, CUMNOCK NO. 1 COLLIERY PTY LIMITED (ACN 051 932 122) and ICRA CUMNOCK PTY LTD (ACN 129 006 819), area of about 2666.2 hectares, to mine for coal, dated 15 November 2011. (Singleton Mining Division).

CHRIS HARTCHER, M.P., Minister for Resources and Energy

NOTICE is given that the following applications for renewal have been received:

(06-3036)

Exploration Licence No. 2984, CLIMAX AUSTRALIA PTY LIMITED (ACN 002 164 598), area of 16 units. Application for renewal received 28 November 2011.

(09-7554)

Exploration Licence No. 4459, CENTRAL WEST GOLD NL (ACN 003 078 591), area of 1 units. Application for renewal received 23 November 2011.

(T98-1222)

Exploration Licence No. 5583, TRIAUSMIN LIMITED (ACN 062 002 475), area of 57 units. Application for renewal received 28 November 2011.

(07-0315)

Exploration Licence No. 6948, FORGE MINERALS PTY LTD (ACN 121 258 713), area of 16 units. Application for renewal received 24 November 2011.

(07-0334)

Exploration Licence No. 6952, EASTERN IRON LIMITED (ACN 126 678 037), area of 69 units. Application for renewal received 25 November 2011.

(07-0335)

Exploration Licence No. 6953, EASTERN IRON LIMITED (ACN 126 678 037), area of 64 units. Application for renewal received 25 November 2011.

(07-0336)

Exploration Licence No. 6954, PLATSEARCH NL (ACN 003 254 395) and EASTERN IRON LIMITED (ACN 126 678 037), area of 100 units. Application for renewal received 25 November 2011.

(07-0337)

Exploration Licence No. 6956, PLATSEARCH NL (ACN 003 254 395) and EASTERN IRON LIMITED (ACN 126 678 037), area of 76 units. Application for renewal received 25 November 2011.

(07-0338)

Exploration Licence No. 6957, EASTERN IRON LIMITED (ACN 126 678 037), area of 73 units. Application for renewal received 25 November 2011.

(07-0339)

Exploration Licence No. 6958, EASTERN IRON LIMITED (ACN 126 678 037), area of 65 units. Application for renewal received 25 November 2011.

(07-0340)

Exploration Licence No. 6959, EASTERN IRON LIMITED (ACN 126 678 037), area of 48 units. Application for renewal received 25 November 2011.

(07-0341)

Exploration Licence No. 6960, EASTERN IRON LIMITED (ACN 126 678 037), area of 71 units. Application for renewal received 20 November 2011.

(07-0342)

Exploration Licence No. 6961, EASTERN IRON LIMITED (ACN 126 678 037), area of 89 units. Application for renewal received 25 November 2011.

(07-0343)

Exploration Licence No. 6962, EASTERN IRON LIMITED (ACN 126 678 037), area of 52 units. Application for renewal received 25 November 2011.

(T07-0449)

Exploration Licence No. 6990, IRONBARK ZINC LIMITED (ACN 118 751 027), area of 12 units. Application for renewal received 23 November 2011.

(09-2097)

Exploration Licence No. 7422, WERRIS CREEK COAL PTY LIMITED, area of 31 hectares. Application for renewal received 24 November 2011.

(T09-0070)

Exploration Licence No. 7423, FORTIUS MINES PTY LTD (ACN 140 151 917), area of 62 units. Application for renewal received 25 November 2011.

(T09-0113)

Exploration Licence No. 7426, OAKLAND RESOURCES LIMITED (ACN 137 606 476), area of 33 units. Application for renewal received 23 November 2011.

(T09-0156)

Exploration Licence No. 7427, OAKLAND RESOURCES LIMITED (ACN 137 606 476), area of 50 units. Application for renewal received 23 November 2011.

(11-6180)

Consolidated Coal Lease No. 775 (Act 1973), CONSTRUCTION, FORESTRY, MINING, & ENERGY UNION, area of 2257 hectares. Application for renewal received 29 November 2011.

(T90-0359)

Mining Lease No. 1247 (Act 1973), NORTH MINING LIMITED (ACN 000 081 434), SC MINERAL RESOURCES PTY LTD (ACN 058 323 372) and SUMITOMO METAL MINING OCEANIA PTY LTD (ACN 059 761 125), area of 1629.6 hectares. Application for renewal received 23 November 2011.

(T94-0683)

Mining Lease No. 1367 (Act 1992), NORTH MINING LIMITED (ACN 000 081 434), SC MINERAL RESOURCES PTY LTD (ACN 058 323 372) and SUMITOMO METAL MINING OCEANIA PTY LTD (ACN 059 761 125), area of 826.2 hectares. Application for renewal received 23 November 2011.

CHRIS HARTCHER, M.P., Minister for Resources and Energy

RENEWAL OF CERTAIN AUTHORITIES

NOTICE is given that the following authorities have been renewed:

(06-4209)

Exploration Licence No. 6757, PANGAEA MINERALS PTY LIMITED (ACN 120 631 316), County of Fitzgerald, Map Sheet (7536, 7537), area of 9 units, for a further term until 18 April 2013. Renewal effective on and from 22 November 2011.

(T08-0214)

Exploration Licence No. 7255, WHITE ROCK (NEW ENGLAND) PTY LIMITED (ACN 145 026 268), Counties of Clarke, Hardinge and Sandon, Map Sheet (9237), area of 23 units, for a further term until 2 December 2012. Renewal effective on and from 22 November 2011.

(T09-0032)

Exploration Licence No. 7356, PEEL MINING LIMITED (ACN 119 343 734), County of Westmoreland, Map Sheet (8929), area of 5 units, for a further term until 24 June 2013. Renewal effective on and from 28 November 2011.

(T09-0053)

Exploration Licence No. 7358, AWATI RESOURCES PTY LTD (ACN 106 020 419), County of Tongowoko, Map Sheet (7239, 7339), area of 50 units, for a further term until 2 July 2013. Renewal effective on and from 22 November 2011.

CHRIS HARTCHER, M.P., Minister for Resources and Energy

CANCELLATION OF AUTHORITIES AT REQUEST OF HOLDERS

NOTICE is given that the following authorities have been cancelled:

(T10-0088)

Exploration Licence No. 7607, GEOMEX NATURAL RESOURCES PTY LTD (ACN 139 714 284), County of Culgoa, Map Sheet (8139), area of 100 units. Cancellation took effect on 25 November 2011.

(T10-0090)

Exploration Licence No. 7609, GEOMEX NATURAL RESOURCES PTY LTD (ACN 139 714 284), County of Culgoa, Map Sheet (8239), area of 100 units. Cancellation took effect on 25 November 2011.

(T10-0091)

Exploration Licence No. 7610, GEOMEX NATURAL RESOURCES PTY LTD (ACN 139 714 284), County of Culgoa, Map Sheet (8239), area of 98 units. Cancellation took effect on 25 November 2011.

(T10-0092)

Exploration Licence No. 7611, GEOMEX NATURAL RESOURCES PTY LTD (ACN 139 714 284), County of Culgoa and County of Narran, Map Sheet (8239), area of 71 units. Cancellation took effect on 25 November 2011.

> CHRIS HARTCHER, M.P., Minister for Resources and Energy

PRIMARY INDUSTRIES

FISHERIES MANAGEMENT ACT 1994

FISHERIES MANAGEMENT (AQUACULTURE) REGULATION 2007

Clause 39 (4) - Notice of Aquaculture Lease Renewal

THE Minister has renewed the following Class 1 Aquaculture Leases:

OL80/129 within the estuary of Port Stephens, having an area of 0.2228 hectares to G MOFFAT & SON PTY LTD of Swan Bay, for a term of 15 years expiring on 4 February 2026.

OL82/041 within the estuary of the Manning River, having an area of 0.6080 hectares to CLIFT OYSTERS PTY LTD of Tuncurry, for a term of 15 years expiring on 6 September 2026.

OL80/055 within the estuary of the Crookhaven River, having an area of 1.8876 hectares to the Estate of the Late Raymond PRENDERGAST of Newcastle, for a term of 15 years expiring on 21 July 2026.

OL66/091 within the estuary of the Hastings River, having an area of 0.4067 hectares to Eric WADE of Lake Cathie, for a term of 15 years expiring on 25 April 2026.

OL67/004 within the estuary of Wallis Lake, having an area of 0.1649 hectares to MS VERDICH & SONS PTY LTD of Forster, for a term of 15 years expiring on 27 December 2026.

OL80/014 within the estuary of the Tweed River, having an area of 1.6402 hectares to MS VERDICH & SONS PTY LTD of Forster, for a term of 15 years expiring on 8 November 2026.

OL94/001 within the estuary of the Macleay River, having an area of 0.3744 hectares to ADFLOW PTY LIMITED of Banora Point, for a term of 15 years expiring on 31 July 2026.

OL80/155 within the estuary of Wapengo Lake, having an area of 0.0821 hectares to Christopher POTTER and Debbie-Anne McALLISTER of Tathra, for a term of 15 years expiring on 22 October 2026.

OL86/027 within the estuary of Wallis Lake, having an area of 1.4630 hectares to Graham James Moore BARCLAY of Forster, for a term of 15 years expiring on 31 August 2026.

BILL TALBOT, Director, Aquaculture, Conservation and Marine Parks, Fisheries Division, Department of Primary Industries

FISHERIES MANAGEMENT ACT 1994

Notification Under Section 8 - Fishing Closure

Pacific Oyster Control

I, GEOFF ALLAN, Acting Executive Director, Fisheries NSW, with the delegated authority of the Minister for Primary Industries and the Director-General of the Department of Trade and Investment, Regional Infrastructure and Services pursuant to section 227 and 228 of the Fisheries Management Act 1994 ("the Act") and pursuant to section 8 of the Act, do by this notification prohibit the taking of oysters (of any species) by any person, from all estuarine waters of NSW

which are used for the purposes of oyster cultivation or from any other waters where oysters exist, unless the removal and relocation of such oysters complies with the provisions set out in the Schedules to this notification.

This fishing closure will be effective for a period of two (2) years from 4 December 2011, unless sooner amended or revoked.

In this notification:

- 1. The term 'sticks' includes sticks of timber and all other materials in use as substitutes for timber sticks.
- 2. The term 'caught sticks' includes sticks and the individual components for all other materials used for the purpose of catching natural oyster settlement.
- 3. The term 'nail-out sticks' includes sticks that have been placed on an oyster lease in a single horizontal layer.
- 4. The term 'depot sticks' includes all caught sticks that are older than 12 months other than nail-out sticks.
- 5. The term 'stick culture' includes sticks, caught sticks, nail-out sticks and depot sticks.
- 6. The term 'container' includes all methods used to hold oysters other than by stick or tray.
- 7. The terms 'movements of oysters', and 'oyster consignments' do not include those consignments destined for direct sale for human consumption (i.e. packaged, purified, market grade oysters, consigned to a wholesaler or retailer). Nor do these terms include those consignments being moved within an estuary unless otherwise specified.
- 8. The term 'random inspection' is defined as an inspection of an oyster lease, or oysters held for the purpose of relaying, undertaken by a Fisheries Officer at the discretion of a Supervising Fisheries Officer.
- 9. The taking of oysters (of any species) by any person from all NSW waters is also subject to the provisions of the Fishing Closure QX Disease and Quarantine Order QX Disease established under Section 183 of the Fisheries Management Act 1994, due to the presence of a declared disease (Marteiliosis).

SCHEDULE 1

Pacific Oyster Management Plan

Pacific oysters (Crassostrea gigas) are a declared a noxious fish in all waters within the State of New South Wales, other than the waters of Port Stephens and its tributaries, under the Fisheries Management Act 1994 (Schedule 6C of the Act).

This schedule outlines a management plan to control the spread of Pacific oysters. For the purposes of this management plan, oyster-producing estuaries have been divided into eleven (11) Zones as specified below. This management plan also applies to all shellfish hatcheries, unless otherwise specified.

- Zone 1. Tweed River, Richmond River and Clarence River.
- Zone 2. Brunswick River.
- Zone 3. Sandon River, Wooli River, Bellinger River, Kalang River.
- Zone 4. Macleay River and Nambucca River.

- Zone 5. Hastings River.
- Zone 6. Camden Haven River, Manning River.
- Zone 7. Wallis Lake.
- Zone 8. Port Stephens and its tributaries.
- Zone 9. Hunter River, Brisbane Waters and Hawkesbury River.
- Zone 10. Georges River.
- Zone 11. Crookhaven River, Shoalhaven River, Clyde River, Moruya River, Tuross Lake, Wagonga Inlet, Lake Wapengo, Bermagui River, Merimbula Lake, Pambula Lake, Wonboyn Lake and all other oyster producing estuaries in NSW south of the Georges River.

The provisions of this management plan are as follows:

- 1. Each oyster grower in Zones 1, 2, 3, 4, 5 and 6, must notify the local Fisheries Officer immediately of any occurrences of the Pacific oyster on their leases.
- 2. Inspection criteria for oyster leases in each estuary are prescribed in Schedule 2. If these criteria are exceeded, the noxious fish provisions (section 213) of the Act may be applied to the permit holder or the leaseholder concerned.
- 3. All movements of oysters between estuaries must be recorded in an Oyster Shipment Log Book as described in Schedule 3.
- 4. Inspection criteria for inter-estuarine movements of oysters are prescribed in Schedule 4. If the number of Pacific oysters in a consignment exceed these criteria, the consignment will not be permitted to move, or if detected by random inspection in transit the consignment will be required to be returned to the estuary of origin.
- 5. Movements of oysters from Zone 8 (Port Stephens and its tributaries) will be restricted to culled single oysters larger than a ten (10) cent piece. No movement of stick culture will be permitted from Port Stephens or its tributaries to any other estuary.
- 6. No movements of oysters are permitted from the Tweed River, Richmond River and Clarence River (Zone 1), the Brunswick River (Zone 2), and the Georges River (Zone 10) to estuaries in any other Zone.
- 7. No movements of oysters are permitted into Zone 2 and Zone 3 estuaries.
- 8. No movements of oysters are permitted into Zone 4 from estuaries south of the Manning River (Zone 6).
- 9. No movement of stick culture is permitted into the Hastings River (Zone 5).
- 10. No oysters may be removed from a lease subject to a noxious fish order, and placed on any other lease, unless the oysters are first inspected by a Fisheries Officer and comply with the inspection criteria prescribed in Schedule 4.
- 11. No oysters are to be placed on a lease, subject to a noxious fish order, without the prior agreement of the local Fisheries Officer.
- 12. No movements of oyster spat and/or larvae are permitted from any hatchery unless the shipment complies with a Shellfish Hatchery Protocol – Production and Movement of Spat approved by the Director, Aquaculture Conservation and Marine Parks.

- 13. All other movements of oysters will be permitted.
- 14. Where oysters are required to be inspected, they must be presented for inspection in a suitable condition, on clean trays. The oysters and trays must be cleaned of mud, algae or encrusting organisms. Where oysters are to be moved in bins, the oysters must be presented for inspection on trays.
- 15. Treatment of oysters to remove Pacific oysters will be a matter for individual growers. Treatment used must kill Pacific oysters to an extent that will result in compliance with the criteria in Schedules 2 and 4.

SCHEDULE 2

Inspection Criteria for Oyster Leases

- 1. Lease inspections may be carried out by a Fisheries Officer or other person authorised by the Director-General, Department of Trade and Investment, Regional Infrastructure and Services.
- 2. The following Zone criteria apply to the inspection of oyster leases:

Zones 1, 2, 3, 4, 5 and 6

Tweed River, Richmond River, Clarence River, Brunswick River, Wooli River, Bellinger River, Kalang River, Sandon River, Macleay River, Hastings River, Nambucca River, Camden Haven River, Manning River.

Leases with caught sticks: Not more than one identifiable Pacific oyster per 100 sticks permitted. Leases with depot sticks: Not more than one (1) identifiable Pacific oyster per 100 sticks permitted.

Leases with nail-out sticks: Not more than one (1) identifiable Pacific oyster per 100 sticks permitted.

All other leases: Not more than one (1) identifiable Pacific oyster on any three (3) trays up to 1.8 metres (6 feet) in length or on any two (2) trays over 1.8 metres (6 feet) in length, permitted. Where other containers are used, not more than one (1) identifiable Pacific oyster per 1,800 oysters, permitted.

Zone 7. Wallis Lake

Leases with caught sticks: Not more than three (3) identifiable Pacific oyster per 100 sticks, permitted.

Leases with depot sticks: Not more than three (3) identifiable Pacific oyster per 100 sticks, permitted.

Leases with nail-out sticks: Not more than one (1) identifiable Pacific oyster per 100 sticks, permitted.

All other leases: Not more than one (1) identifiable Pacific oyster on any three (3) trays up to 1.8 metres (6 feet) in length or on any two (2) tray over 1.8 metres (6 feet) in length, permitted. Where other containers are used, not more than one (1) identifiable Pacific oyster per 1,800 oysters, permitted.

Zone 8. Port Stephens and tributaries

No limits specified on the number of Pacific oysters permitted on leases.

Zone 9. Hunter River, Brisbane Waters, Hawkesbury River

Leases with caught sticks: Not more than four (4) identifiable Pacific oyster per 100 sticks, permitted.

Leases with depot sticks: Not more than four (4) identifiable Pacific oyster per 100 sticks, permitted.

Leases with nail-out sticks: Not more than four (4) identifiable Pacific oyster per 100 sticks, permitted.

All other leases: Not more than one (1) identifiable Pacific oyster on any two (2) tray (irrespective of length), permitted. Where other containers are used, not more than one (1) identifiable Pacific oyster per 600 oysters, permitted.

Zones 10 and 11

Georges River, Crookhaven River, Shoalhaven River, Clyde River, Moruya River, Wagonga Inlet, Wapengo Lagoon, Bermagui River, Merimbula Lake, Pambula Lake, Wonboyn Lake and all other oyster producing estuaries in NSW south of the Georges River.

Leases with caught sticks: Not more than five (5) identifiable Pacific oyster per 100 sticks, permitted.

Leases with depot sticks: Not more than five (5) identifiable Pacific oyster per 100 sticks, permitted.

Leases with nail-out sticks: Not more than five (5) identifiable Pacific oyster per 100 sticks, permitted.

All other leases: Not more than one (1) identifiable Pacific oyster on any one (1) tray (irrespective of length), permitted. Where other containers are used, not more than one (1) identifiable Pacific oyster per 600 oysters, permitted.

3. Where an oyster lease inspection in Zones 7, 9, 10 and 11, indicates more than one (1) identifiable Pacific oyster per 100 sticks, or per any two (2) trays (irrespective of length), or where other containers are used, more than one (1) identifiable Pacific oyster per 1,800 oysters, the permit holder or the leaseholder concerned must comply with the directions of the Supervising Fisheries Officer regarding the removal of Pacific oysters from the lease. Where the permit holder or the leaseholder concerned fails to comply with the directions of the Supervising Fisheries Officer, the noxious fish provisions of the Act may be applied to the permit holder or the leaseholder concerned.

SCHEDULE 3

Oyster Shipment Log Book System

All movements of oysters, other than those within an estuary or those destined for direct sale for human consumption, are subject to the Oyster Shipment Log Book system. Oyster Shipment Log Books are available on application from the Department of Trade and Investment, Regional Infrastructure and Services Aquaculture Administration Unit, Locked Bag 1, Nelson Bay NSW 2315.

- 1. Details of all shipments of oysters, other than those within an estuary or those destined for direct sale for human consumption must be recorded in an Oyster Shipment Log Book prior to shipment.
- 2. Prior to the shipment of a consignment of oysters between estuaries, the shipping permit holder must contact the local District Fisheries Office (not less than 2 days prior to shipment) and identify the shipper, the nature of the shipment, its destination and the Oyster Shipment Logbook shipment permit number (top right hand corner). Where an inspection is deemed to be required, the Fisheries Office will contact the shipping permit holder within 24 hours to confirm the inspection.

- 3. Prior to shipment or inspection, the shipping permit holder must record on all four (4) quadruplicate copies of the Oyster Shipment Log Book sheets, details of the destination (including inter-State), quantity (bag equivalents) and form (trays, sticks etc.) of oysters to be shipped.
- 4. When an inspection is deemed to be required, the inspecting Fisheries Officer must sign all four quadruplicate copies of the Oyster Shipment Log Book sheets and clearly state in writing on the sheets whether or not the consignment passed inspection. The inspecting Fisheries Officer is to retain the pink copy (copy 2) for the consignment. A record of all shipment notifications and shipment inspections (pink copy 2) will be retained by the local District Fisheries Office.
- 5. If the consignment passes inspection, it must be kept isolated from all other oysters and shipped within 48 hours of the inspection taking place.
- 6. Where a shipment has passed inspection, the local Fisheries Office must notify the receiving District Fisheries Office of the shipment details within 24 hours of the inspection.
- 7. For each shipment, the completed original white copy (copy 1) of the Oyster Shipment Log Book sheets, must accompany the shipment and be retained by the receiving permit holder.
- 8. Fisheries Officers may examine consignments at random in transit, or prior to the oysters being placed in the water, to ensure that log book details match the consignment. Where notification has not been given, or there is no accompanying log book sheet, in accordance with Schedule 3 (7) of this closure, or if the consignment is in breach of the QX Disease Closure or any other oyster Closure established under the Fisheries Management Act 1994, the consignment may be detained and/or seized.
- 9. It is the responsibility of the permit holder on who's permit the receiving lease appears, to notify the receiving District Fisheries Office within 7 days of the arrival of the oysters (or subject to prior arrangement made with the Fisheries Officer), of details of the shipment, including, where the oysters have been placed (on which lease and where on that lease).
- 10. The Oyster Shipment Log Book, or an original white copy (copy 1) of the Oyster Shipment Log Book that has accompanied a shipment, must be made available to a Fisheries Officer for inspection on demand.
- 11. The holder of an Oyster Shipment Log Book must at the end of each month in which a shipment has occurred, forward all blue copies (copy 3) for those shipments to the Department of Trade and Investment, Regional Infrastructure and Services Aquaculture Management Branch at the address specified above.

SCHEDULE 4

Inspection Criteria for Oyster Consignments

1. Inspections may be carried out by a Fisheries Officer or other person authorised by the Director-General, NSW Department of Trade and Investment, Regional Infrastructure and Services.

- 2. No inspections are required for consignments moving into Port Stephens.
- 3. The Inspection Criteria for other oyster consignments are as follows:

Consignments into estuaries in Zones 1, 4, 5 and 6:

Tweed River, Richmond River, Clarence River, Macleay River, Hastings River, Nambucca River, Camden Haven River, Manning River.

Consignments of caught sticks, depot sticks and nailout sticks (where permitted): Not more than one (1) identifiable Pacific oyster per any 300 sticks.

All other consignments: Not more than one (1) identifiable Pacific oyster in any nine (9) trays up to 1.8 metres (6 feet) in length or on any six (6) trays over 1.8 metres (6 feet) in length. Where other containers are used, not more than one (1) Pacific oyster per 5,400 oysters.

Consignments into estuaries in Zones 7, 8, 9, 10 and 11:

Wallis Lake, Hunter River, Brisbane Waters, Hawkesbury River, Georges River, Crookhaven River, Shoalhaven River, Clyde River, Moruya River, Wagonga Inlet, Wapengo Lagoon, Bermagui River, Merimbula Lake, Pambula Lake, Wonboyn Lake and all other oyster producing estuaries in NSW south of the Georges River.

Consignments of caught sticks, depot sticks and nail-out sticks: Not more than one (1) identifiable Pacific oyster per any 100 sticks.

All other consignments: Not more than one (1) identifiable Pacific oyster in any bag or in any three (3) trays up to 1.8 metres (6 feet) in length or on any two (2) trays over 1.8 metres (6 feet) in length. Where other containers are used, not more than one (1) Pacific oyster per 1,800 oysters.

Consignments of oyster spat and/or larvae from Hatcheries:

Shipments from hatcheries are subject to the movement criteria for the Zone for which the shipment is destined. All shipments of oyster spat and/or larvae must comply with a Shellfish Hatchery Protocol – Production and Movement of Hatchery Spat approved by the Director, Aquaculture Conservation and Marine Parks.

Consignments within an estuary:

Movements of oysters wholly within an estuary are not subject to inspection. However, the leaseholder must take all reasonable action to ensure that the relayed oysters comply with the criteria for movement within the Zone.

- 4. Where an inspection is required, 20% of the consignment will be inspected unless otherwise specified.
- 5. The frequency of inspections for oyster consignments are as follows:

Consignments from hatcheries: Random consignments of oyster spat and/or oyster larvae originating from hatcheries will be subject to inspection at the receiving estuary in accordance with the provisions of a Shellfish Hatchery Protocol – Production and Movement of Spat approved by the Director, Aquaculture Conservation and Marine Parks.

All other consignments: Shipments of oyster stock may be inspected when being moved between estuaries. All shipments may be subject to random inspection.

Sending estuary Zone	Receiving estuary Zone	Inspection Requirement
1	1	No inspection required.
2	1	No inspection required.
3	1, 4, 5, 6, 7, 8, 9, 10,11	No inspection required.
4	1, 4, 5, 6, 7, 8, 9, 10, 11	No inspection required.
5	1, 4, 6, 7, 8, 9, 10, 11	All shipments may be subject to random inspection.
6	1, 4, 5, 6, 7, 8, 9, 10, 11	All shipments may be subject to random inspection.
7	1, 5, 6, 7, 8, 9, 10, 11	All shipments may be subject to random inspection.
8	1, 5, 6, 7, 8, 9, 10, 11	All shipments may be subject to random inspection.
9	1, 5, 6, 7, 8, 9, 10, 11	All shipments may be subject to random inspection.
10	_	No shipments to any other estuary permitted.
11	1, 5, 6, 7, 8, 9, 10, 11	All shipments may be subject to random inspection.

Dated this 29th day of November 2011.

GEOFF ALLAN, Acting Executive Director, Fisheries NSW, Department of Primary Industries (an office within the Department of Trade and Investment, Regional Infrastructure and Services)

MINING ACT 1992

Instrument of Appointment of Inspector

I, BRAD MULLARD, Executive Director Mineral Resources, Department of Trade and Investment, Regional Infrastructure and Services, pursuant to section 361 of the Mining Act 1992, appoint Clinton Troy Bennett as an inspector for the purpose of that Act.

Dated this 21st day of October 2011.

BRAD MULLARD, Executive Director Mineral Resources Department of Trade and Investment, Regional Infrastructure and Services (under delegation)

LANDS

ARMIDALE CROWN LANDS OFFICE 108 Faulkner Street (PO Box 199A), Armidale NSW 2350 Phone: (02) 6770 3100 Fax (02) 6772 8782

ROADS ACT 1993

ORDER

Transfer of Crown Roads 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.

KATRINA HODGKINSON, M.P., Minister for Primary Industries

SCHEDULE 1

Parish –Inverell; County –Gough; Land District – Inverell; L.G.A. – Inverell

Crown road known as Cunninghams Lane, 20.115 wide and var. at Inverell, as shown by solid black shading on the diagram hereunder.



SCHEDULE 2 Roads Authority: Inverell Shire Council. File No.: 11/05051. W.494866. Councils Reference: 28.10.SR 208 GB:rjm.

DUBBO CROWN LANDS OFFICE 45 Wingewarra Street (PO Box 1840), Dubbo NSW 2830 Phone: (02) 6883 3300 Fax: (02) 6884 2067

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.

KATRINA HODGKINSON, M.P., Minister for Primary Industries

SCHEDULE

Column 1

Land District: Walgett.

Column 2 The part being Lot 62, DP No. 820720, Parish Walgett, County Baradine, of an area

Local Government Area: Walgett Shire Council. Locality: Parish Walgett, of 2.106 hectares. County Baradine. Reserve No.: 750313. Public Purpose: Future public requirements. Notified: 29 June 2007. Lot 16, DP No. 750313, Parish Walgett, County Baradine. Lot 7305, DP No. 1154691, Parish Walgett, County Baradine. Lot 7304, DP No. 1154691, Parish Walgett, County Baradine. Lot 2, section 19, DP No. 759036, Parish Walgett, County Baradine. Lot 200, DP No. 1085161, Parish Walgett, County Baradine. Lot 7019, DP No. 1027303#, Parish Walgett, County Baradine. Lot 1, section 40, DP No. 759036, Parish Walgett, County Baradine. Lot 7, section 39, DP No. 759036, Parish Walgett, County Baradine. Lot 12, section 46, DP No. 759036, Parish Walgett, County Baradine. Lot 6, section 46, DP No. 759036, Parish Walgett, County Baradine. Lot 15, section 46, DP No. 759036, Parish Walgett, County Baradine. Lot 16, section 46, DP No. 759036, Parish Walgett, County Baradine. Lot 18, section 46, DP No. 759036, Parish Walgett, County Baradine. Lot 1, section 8, DP No. 759036, Parish Walgett, County Baradine. Lot 2, section 21, DP No. 759036, Parish Walgett, County Baradine. Lot 7023, DP No. 1056231#, Parish Walgett, County Baradine. Lot 7024, DP No. 1056231#, Parish Walgett, County Baradine.

Lot 1, section 19, DP No. 759036, Parish Walgett, County Baradine.

Lot 9, section 21, DP No. 759036,

Parish Walgett, County Baradine.

Lot 3, section 21, DP No. 759036,

Parish Walgett, County Baradine.

Column 1

Lot 7025, DP No. 1056254#, Parish Walgett, County Baradine. Lot 8, section 21, DP No. 759036, Parish Walgett, County Baradine. Lot 7026, DP No. 1056254#, Parish Walgett, County Baradine. Lot 4, section 21, DP No. 759036, Parish Walgett, County Baradine. Lot 7027, DP No. 1056252#, Parish Walgett, County Baradine. Lot 7, section 21, DP No. 759036, Parish Walgett, County Baradine. Lot 7028, DP No. 1056252#, Parish Walgett, County Baradine. Lot 5, section 21, DP No. 759036, Parish Walgett, County Baradine. Lot 6, section 21, DP No. 759036, Parish Walgett, County Baradine. Lot 67, DP No. 825345, Parish Walgett, County Baradine. Lot 13, section 46, DP No. 759036, Parish Walgett, County Baradine. Lot 19, section 46, DP No. 759036, Parish Walgett, County Baradine. Lot 33, DP No. 750313, Parish Walgett, County Baradine. Lot 62, DP No. 820720, Parish Walgett, County Baradine. Lot 7020, DP No. 94854#, Parish Walgett, County Baradine.

File No.: DB81 R 157.

Disclaimer: Please note that the above Lot numbers marked # are for Departmental use only.

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.

> KATRINA HODGKINSON, M.P., Minister for Primary Industries

> > Column 3

SCHEDULE

Column 1 Warrumbungle Shire Council.

Column 2 Mendooran Recreation Reserve Trust.

Reserve No.: 1591. Public Purpose: Public recreation. Notified: 19 November 1883. File No.: DB81 R 90.

For a term commencing the date of this notice.

Column 2

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, 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.

KATRINA HODGKINSON, M.P., Minister for Primary Industries

SCHEDULE 1

Column 1	Column 2	Column 3
Donald James	Cobboco	Reserve No.: 69082.
CAMPION	Recreation	Public Purpose: Public hall
(new member).	Reserve and	and public recreation.
	Public Hall Trust.	Notified: 8 March 1940.
		File No.: DB81 R 226.

Term of Office

For a term commencing this day and expiring 28 February 2014.

GOULBURN OFFICE 159 Auburn Street (PO Box 748), Goulburn NSW 2580 Phone: (02) 4824 3700 Fax: (02) 4822 4287

OFFICIAL NOTICES

REVOCATION OF RESERVATION OF CROWN LAND

PURSUANT to section 112 of the Crown Lands Act 1884, 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.

KATRINA HODGKINSON, M.P., Minister for Primary Industries

SCHEDULE

Column 1

Column 2

Land District: Crookwell. Local Government Area: Upper Lachlan Shire Council. Locality: Crooked Corner. Reserve No.: 39747. Public Purpose: Preservation of growth of timber. Notified: 7 October 1905. File No.: GB05 R 1. The whole being Lots 83, 86, 58, 89, 97 and part 87, DP 753028; Lot 7004, DP 1026901 and Lot 7301, DP 1142788, Parish Gillindich, County Georgiana, of an area of about 1799 hectares.

ORDER – AUTHORISATION OF ADDITIONAL PURPOSE UNDER SECTION 121A

PURSUANT to section 121A of the Crown Lands Act 1989, I authorise by this Order, the purpose specified in Column 1 to be an additional purpose to the declared purpose of the reserves specified opposite thereto in Column 2 of the Schedule.

KATRINA HODGKINSON, M.P., Minister for Primary Industries

SCHEDULE

Column 1 Community purposes. *Column 2* Reserve No.: 35559. Public Purpose: Public recreation. Notified: 10 January 1903. File No.: 09/11407.

GRAFTON OFFICE 76 Victoria Street (PO Box 272), Grafton NSW 2460 Phone: (02) 6640 3400 Fax: (02) 6642 5375

DISSOLUTION OF RESERVE TRUST

PURSUANT to section 92(3) of the Crown Lands Act 1989, the reserve trust specified in Column 1 of the Schedule hereunder, which was established in respect of the reserve specified opposite thereto in Column 2 of the Schedule, is dissolved.

KATRINA HODGKINSON, M.P., Minister for Primary Industries

SCHEDULE

Column 1 Kyogle Recreation Area (R.69556) Reserve Trust. Column 2 Reserve No.: 69556. Public Purpose: Public recreation. Notified: 27 September 1940. File No.: 10/15360.

APPOINTMENT OF RESERVE TRUST AS TRUSTEE OF A RESERVE

PURSUANT to section 92(1) of the Crown Lands Act 1989, the reserve trust specified in Column 1 of the Schedule hereunder, is appointed as trustee of the reserve specified opposite thereto in Column 2 of the Schedule.

> KATRINA HODGKINSON, M.P., Minister for Primary Industries

SCHEDULE

Column 1

Gateway to the Rainforest Reserves Trust.

Column 2 Reserve No.: 69556. Public Purpose: Public recreation. Notified: 27 September 1940. File No.: 10/15360.

ERRATUM

Land District – Casino; Council – Kyogle Shire Council

THE notification appearing in the *New South Wales Government Gazette* of 4 September 1992, Folio 6568, under the heading "Appointment of Trust Board Members" of Reserve 83448 for public recreation, notified 22 September 1961, under Column 2 in the Schedule remove "Tunglebung Public Recreation Reserve" and insert in lieu "Tunglebung Public Recreation Reserve Trust".

File No.: GF86 R 43.

KATRINA HODGKINSON, M.P., Minister for Primary Industries

ERRATUM

Land District – Casino; Council – Kyogle Shire Council

THE notification appearing in the *New South Wales Government Gazette* of 16 October 2009, Folios 5418 and 5419, under the heading "Assignment of Corporate Name of Reserve Trust" remove "Tunglebung Public Recreation Reserve Trust" from Column 1 and "Reserve No.: 86448. For public recreation. Notified: 22 September 1961." from Column 2 of the Schedule.

File No.: GF86 R 43.

KATRINA HODGKINSON, M.P., Minister for Primary Industries

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.

> KATRINA HODGKINSON, M.P., Minister for Primary Industries

Description

Land District – Murwillumbah; L.G.A. – Tweed

Road Closed: Lot 1, DP 1170685 at Zara, Parish Murwillumbah, County Rous.

File No.: 07/3121.

Schedule

On closing, the land within Lot 1, DP 1170685 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

REVOCATION FOR RESERVATION OF CROWN LAND

PURSUANT to section 90 (1) 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.

KATRINA HODGKINSON, M.P., Minister for Primary Industries

SCHEDULE

Column 1

Land District: Scone. Local Government Area: Upper Hunter. Locality: Aberdeen. Reserve No.: 82639. Public Purpose: From sale for night soil depot. Notified: 24 June 1960. File No.: 11/02690. *Column 2* The part being within Lot 134, DP 752485, Parish Russell, County Durham. Area: 1.619 hectares.

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 Schedule hereunder.

> KATRINA HODGKINSON, M.P., Minister for Primary Industries

Description

Parish – Russell; County – Durham; Land District – Scone; L.G.A. – Upper Hunter

Road Closed: Lots 1, DP 1168564 at Aberdeen.

File No.: 11/02690.

Schedule

On closing, the land within Lot 1, DP 1168564 remains vested in the State of New South Wales as Crown Land.

NEWCASTLE OFFICE 437 Hunter Street, Newcastle NSW 2300 (PO Box 2185, Dangar NSW 2309 Phone: (02) 4925 4104 Fax: (02) 4925 3517

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 Schedule hereunder.

> KATRINA HODGKINSON, M.P., Minister for Primary Industries

Description

Parish – Gosford; County – Northumberland; Land District – Gosford; L.G.A. – Gosford

Road Closed: Lot 1, DP 1167556 subject to easement for gas main, easement for electricity and other purposes and Right of Carriageway created in Deposited Plan 1167556 (not being land under the Real Property Act).

File No.: 09/00760.

Schedule

On closing, the land within Lot 1, DP 1167556 remains vested in the State of New South Wales as Crown Land.

NOWRA OFFICE 5 O'Keefe Avenue (PO Box 309), Nowra NSW 2541 Phone: (02) 4428 9100 Fax: (02) 4421 2172

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 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.

> KATRINA HODGKINSON, M.P., Minister for Primary Industries

Description

Parish – Boorowa; County – King; Land District – Boorowa; Local Government Area – Boorowa

Road Closed: Lots 1 and 2, DP 1168010 at Boorowa.

File No.: GB07 H 332.

Schedule

On closing, the land within Lots 1 and 2, DP 1168010 remains vested in the State of New South Wales as Crown Land.

Description

Parish – Nowra; County – St Vincent; Land District – Nowra; Local Government Area – Shoalhaven

Road Closed: Lot 1, DP 1170000 subject to an easement for Underground Cables created by DP 1170000 at Nowra.

File No.: 10/18983.

Schedule

On closing, the land remains vested in Shoalhaven City Council as "operational land".

Council's Reference: (3743E).

ORANGE OFFICE 92 Kite Street (PO Box 2146), Orange NSW 2800 Phone: (02) 6391 4300 Fax: (02) 6362 3896

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.

KATRINA HODGKINSON, M.P., Minister for Primary Industries

SCHEDULE

Column 1Column 2Land District: Blayney.Reserve No.: 1033888.Local Government Area:Public Purpose: PublicOberon Council.recreation.Locality: Burraga.recreation.Lot 8, section 18, DP 758196,Parish Jeremy, County Georgiana.Lot 7, section 18, DP 758196,Parish Jeremy, County Georgiana.Lot 7, section 18, DP 758196,Parish Jeremy, County Georgiana.Area: About 1982 square metres.File No.: 11/13101.

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.

KATRINA HODGKINSON, M.P., Minister for Primary Industries

SCHEDULE

Column 1 Burraga Agricultural Reserve Trust. Column 2 Reserve No.: 1033888. Public Purpose: Public recreation. Notified: This day. File No.: 11/13101.

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.

KATRINA HODGKINSON, M.P., Minister for Primary Industries

SCHEDULE

Column 1 Burraga Ag – Bureau Inc. *Column 3* Reserve No.: 1033888. Public Purpose: Public recreation. Notified: This day. File No.: 11/13101.

For a term commencing this day.

Column 2

Agricultural

Reserve Trust.

Burraga

NOTIFICATION OF THE 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 Schedule hereunder.

> KATRINA HODGKINSON, M.P., Minister for Primary Industries

Description

Parish – Barton; County – Ashburham; Land District – Orange

Road Closed: Lots 1 and 2, DP 1075530.

File No.: 07/5267.

Schedule

On closing the land within Lots 1 and 2, DP 1075530 remains vested in Cabonne Shire Council as operational land for the purposes of the Local Government Act 1993.

Council Reference: 29.0008.27.

DISSOLUTION OF RESERVE TRUST

PURSUANT to section 92(3) of the Crown Lands Act 1989, the reserve trust specified in Column 1 of the Schedule hereunder, which was established in respect of the reserve specified opposite thereto in Column 2 of the Schedule, is dissolved.

KATRINA HODGKINSON, M.P., Minister for Primary Industries

SCHEDULE

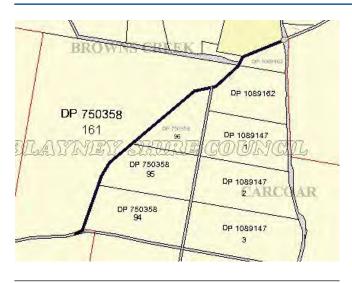
Column 1 Rylstone Racecourse (R81125) Reserve Trust. Column 2 Reserve No.: 81125. Public Purpose: Public recreation and racecourse. Notified: 3 October 1958. File No.: OE80 R 212.

ERRATUM

IN the notice appearing in the *New South Wales Government Gazette* of 23 September 2011, Folio 5589, under the heading, "Roads Act 1993"; "Transfer of a Crown Road to Council", concerning the transfer of roads to Blayney Shire Council the description of the transfer of Halls road is amended as follows:

That part of Halls road commencing from the intersection with the Gap road at the north eastern tip of Lot 1, Deposited Plan 1089162, to a point 45metres southwest of the south western corner of Lot 94, Deposited Plan 750358.

KATRINA HODGKINSON, M.P., Minister for Primary Industries



ERRATUM

IN the notice appearing in the *New South Wales Government Gazette* of the 26th August 2011, Folio 5298, under the heading "Appointment of Corporation to Manage Reserve Trust" in relation to Reserve No. 5895 for water supply and camping, notified 7th April 1888 and Reserve No. 1001056 for public recreation, environmental protection and heritage purposes, notified 27th February 1998, the name of the corporation specified in Column 1 of the SCHEDULE should be altered to "Lands Administration Ministerial Corporation".

File No.: OE99 R 1.

KATRINA HODGKINSON, M.P., Minister for Primary Industries

ROADS ACT 1993

ORDER

Transfer of Crown Road to 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 roads.

KATRINA HODGKINSON, M.P., Minister for Primary Industries

SCHEDULE 1

Parish – Derale; County – Phillip; Land District – Mudgee

Road through and north of Lot 421, DP 580798, shown in black as per diagram below.



SCHEDULE 2 Roads Authority: Mid-Western Regional Council. Crown Lands Reference: 11/10880. Council Reference: DA0197-2008.

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, 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.

> KATRINA HODGKINSON, M.P., Minister for Primary Industries

SCHEDULE

Column 1Column 2Joanne CatherineManduramaRICHARDSONPublic Hall(new member).Reserve Trust.

Column 3 Reserve No.: 190109. Public Purpose: Community purposes. Notified: 6 August 1993. File No.: OE92 R 18.

Term of Office

For a term commencing this day and expiring 25 February 2014.

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

REVOCATION OF RESERVATION OF CROWN LAND

PURSUANT to section 90(1) 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.

KATRINA HODGKINSON, M.P., Minister for Primary Industries

SCHEDULE

Column 1

Column 2

Land District: Taree. Council: Great Lakes. Parish: Tuncurry. County: Gloucester. Location: Tuncurry. Reserve No.: 753207. Purpose: Future public requirements. Date of Notification: 29 June 2007. File No.: 08/1579-07. Part Reserve 753207 comprising the whole of Lots 1 to 26, DP 1168372.

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.

KATRINA HODGKINSON, M.P., Minister for Primary Industries

Description

Locality – Tambar Springs; Land District – Gunnedah; L.G.A. – Warrumbungle and Gunnedah

Road Closed: Lot 1 in Deposited Plan 1170485, Parish Urangera, County Pottinger.

File No.: 08/2265.

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

APPOINTMENT OF TRUST BOARD MEMBERS

PURSUANT to section 93 of the Crown Lands Act 1989, the persons whose name is specified in Column 1 of the Schedule hereunder, is appointed for the term of office specified, as a member 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.

KATRINA HODGKINSON, M.P., Minister for Primary Industries

SCHEDULE

Column 1	Column 2	Column 3
Alexander William ARCHINAL. Geoffrey John KING.	Mount George Recreation Reserve Trust.	Reserve No.: 98140. Public Purpose: Public recreation. Notified: 24 April 1986. File No.: TE80 R 55

Term of Office

For a term commencing 2 December 2011 and expiring on 9 October 2016.

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 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.

> KATRINA HODGKINSON, M.P., Minister for Primary Industries

Description

Parish – Cooney; County – Harden; Land District – Cootamundra; L.G.A. – Cootamundra

Lots 1-3, DP 1170439 at Cootamundra.

File No.: WA05 H 158.

Schedule

On closing, the land within Lots 1-3, DP 1170439 remains vested in the State of New South Wales as Crown Land.

Description

Parish – Pulletop; County – Mitchell; Land District – Wagga Wagga; L.G.A. – Wagga Wagga

Lots 1-2, DP 1167564 at Pulletop.

File No.: 07/5557.

Schedule

On closing, the land within Lots 1-2, DP 1167564 remains vested in the State of New South Wales as Crown Land.

Description

Parish – Tumbarumba; County – Selwyn; Land District – Tumbarumba; L.G.A. – Tumbarumba

Lot 1, DP 1170595 at Tumbarumba.

File No.: WA06 H 3.

Schedule

On closing, the land within Lot 1, DP 1170595 remains vested in the State of New South Wales as Crown Land.

CORRECTION OF DEFECTIVE INSTRUMENT

IN the *New South Wales Government Gazette* dated 18 November 2011, under the heading "Notification of Closing of a Road" relating to the closure of a road at Borambola and Tarcutta, please amend the Parish name by deleting "Tarcutta" and inserting instead "Tarcutta and Yaven". Also amend the LGA name by deleting "Wagga Wagga" and inserting instead "Wagga Wagga and Gundagai". Also amend the File No. by deleting "WA06135" and inserting instead "WA06 H 135".

File No.: WA06 H 135.

WESTERN REGION OFFICE 45 Wingewarra Street (PO Box 1840), Dubbo NSW 2830 Phone: (02) 6883 5400 Fax: (02) 6884 2967

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.

KATRINA HODGKINSON, M.P., Minister for Primary Industries

SCHEDULE

Column 1

Pooncarie Public Recreation (R87037) Reserve Trust.

Column 2 Reserve No.: 87037. Public Purpose: Public recreation. Notified: 10 January 1969. File No.: 11/13120.

ALTERATION OF PURPOSE/CONDITIONS OF A WESTERN LANDS LEASE

IT is hereby notified that in pursuance of the provisions of section 18J, Western Lands Act 1901, the purpose and conditions of the undermentioned Western Lands Lease have been altered as shown.

> KATRINA HODGKINSON, M.P., Minister for Primary Industries

Administrative District – Hillston North; Shire – Carrathool; Parish of Uranaway; County of Blaxland

The purpose/conditions of Western Lands Lease 5467, being the land contained within Folio Identifier 3215/765420 have been altered from "Grazing" to "Grazing and Cultivation (Irrigated & Dryland)" effective from 25 November 2011.

As a consequence of the alteration of purpose and conditions rent will be assessed annually in line with the Western Lands Act 1901 and Regulations.

The conditions previously annexed to Western Lands Lease 5467 have been revoked and the following conditions have been annexed thereto.

CONDITIONS AND RESERVATIONS ATTACHED TO WESTERN LANDS LEASE No. 5467

- (1) In the conditions annexed to the lease, the expression "the Minister" means the Minister administering the Western Lands Act 1901, and any power, authority, duty or function conferred or imposed upon the Minister by or under those conditions may be exercised or performed either by the Minister or by such officers of the Land and Property Management Authority as the Minister may from time to time approve.
- (2) In these conditions and reservations the expression "the Commissioner" means the Commissioner charged with the administration of the Western Lands Act 1901 ("the Act") in accordance with section 4(2) of the Act.

- (3) (a) For the purposes of this clause the term Lessor shall include Her Majesty the Queen Her Heirs and Successors the Minister and the agents servants employees and contractors of the Lessor Her Majesty Her Majesty's Heirs and Successors and the Minister.
 - (b) The lessee covenants with the Lessor to indemnify and keep indemnified the Lessor from and against all claims for injury loss or damage suffered by any person or body using or being in or upon the Premises or any adjoining land or premises of the Lessor arising out of the Holder's use of the Premises and against all liabilities for costs charges and expenses incurred by the Lessor in respect of the claim of any such person or body except to the extent that any such claims and demands arise wholly from any negligence or wilful act or omission on the part of the Lessor.
 - (c) The indemnity contained in this clause applies notwithstanding that this Lease authorised or required the lessee to undertake or perform the activity giving rise to any claim for injury loss or damage.
 - (d) The lessee expressly agrees that the obligations of the Holder under this clause shall continue after the expiration or sooner determination of this Lease in respect of any act deed matter or thing occurring before such expiration or determination.
- (4) The rent of the lease shall be assessed in accordance with Part 6 of the Western Lands Act 1901.
- (5) The rent shall be due and payable annually in advance on 1 July in each year.
- (6) (a) "GST" means any tax on goods and/or services, including any value-added tax, broad-based consumption tax or other similar tax introduced in Australia.

"GST law" includes any Act, order, ruling or regulation, which imposes or otherwise deals with the administration or imposition of a GST in Australia.

- (b) Notwithstanding any other provision of this Agreement:
 - (i) If a GST applies to any supply made by either party under or in connection with this Agreement, the consideration provided or to be provided for that supply will be increased by an amount equal to the GST liability properly incurred by the party making the supply.
 - (ii) If the imposition of a GST or any subsequent change in the GST law is accompanied by or undertaken in connection with the abolition of or reduction in any existing taxes, duties or statutory charges (in this clause "taxes"), the consideration payable by the recipient of the supply made under this Agreement will be reduced by the actual costs of the party making the supply that are reduced directly or indirectly as a consequence of the abolition of or reduction in taxes.

- (7) The lessee must pay all rates and taxes assessed on or in respect of the land leased during the currency of the lease.
- (8) The lessee must hold and use the land leased bona fide for the lessee's own exclusive benefit and must not transfer, convey or assign the land or any portion thereof without having first obtained the written consent of the Minister.
- (9) The lessee must not enter into a sublease of the land leased unless the sublease specifies the purpose for which the land may be used under the sublease, and it is a purpose which is consistent with the purpose for which the land may be used under this lease.
- (10) If the lessee enters into a sublease of the land leased, the lessee must notify the Commissioner of the granting of the sublease within 28 days after it is granted.
- (11) The land leased must be used only for the purpose of Grazing and Cultivation (Irrigated & Dryland).
- (12) The lessee must maintain and keep in reasonable repair all improvements on the land leased during the currency of the lease and shall permit the Minister or the Commissioner or any person authorised by the Minister or the Commissioner at all times to enter upon and examine the whole or any part of the land leased and the buildings or other improvements thereon.
- (13) All minerals within the meaning of the Mining Act 1992, and all other metals, gemstones and semiprecious stones, which may be in, under or upon the land leased are reserved to the Crown and the lessee shall permit any person duly authorised in that behalf to enter upon the land leased and search, work, win and remove all or any minerals, metals, gemstones and semiprecious stones in, under or upon the land leased.
- (14) Mining operations may be carried on, upon and in the lands below the land leased and upon and in the lands adjoining the land leased and the lands below those lands and metals and minerals may be removed therefrom and the Crown and any lessee or lessees under any Mining Act or Acts shall not be subject to any proceedings by way of injunction or otherwise in respect of or be liable for any damage occasioned by the letting down, subsidence or lateral movement of the land leased or any part thereof or otherwise by reason of the following acts and matters, that is to say, by reason of the Crown or any person on behalf of the Crown or any lessee or lessees, having worked now or hereafter working any mines or having carried on or now or hereafter carrying on mining operations or having searched for, worked, won or removed or now or hereafter searching for, working, winning or removing any metals or minerals under, in or from the lands lying beneath the land leased or any part thereof, or on, in, under or from any other lands situated laterally to the land leased or any part thereof or the lands lying beneath those lands, and whether on or below the surface of those other lands and by reason of those acts and matters or in the course thereof the Crown reserves the liberty and authority for the Crown, any person on behalf of the Crown and any lessee or lessees from time to time to let down without payment of any compensation any part of the land leased or of the surface thereof.

- (15) The lessee must comply with the provisions of the Local Government Act 1993, and of the ordinances made thereunder.
- (16) The lessee must comply with the provisions of the Water Management Act 2000 and any regulations made in pursuance of that Act.
- (17) The lessee must not erect or permit any person to erect any buildings or extend any existing buildings on the land leased except to the satisfaction of the Commissioner.
- (18) The lessee must ensure that the land leased is kept in a neat and tidy condition to the satisfaction of the Commissioner and not permit refuse to accumulate on the land.
- (19) Upon termination or forfeiture of the lease the Commissioner may direct that the former lessee remove any structure or material from the land at his own cost and without compensation. Where such a direction has been given the former lessee must leave the land in a clean and tidy condition free from rubbish and debris.
- (20) The lessee must, within 1 year from the date of commencement of the lease or such further period as the Commissioner may allow, enclose the land leased, either separately or conjointly with other lands held in the same interest, with a suitable fence to the satisfaction of the Commissioner.
- (21) The lessee must not obstruct or interfere with any reserves, roads or tracks on the land leased, or the lawful use thereof by any person.
- (22) The lessee must erect gates on roads within the land leased when and where directed by the Commissioner for public use and must maintain those gates together with approaches thereto in good order to the satisfaction of the Commissioner.
- (23) The right is reserved to the public of free access to, and passage along, the bank of any watercourse adjoining the land leased and the lessee must not obstruct access or passage by any member of the public to or along the bank.
- (24) Any part of a reserve for travelling stock, camping or water supply within the land leased must, during the whole currency of the lease, be open to the use of bona fide travellers, travelling stock, teamsters and carriers without interference or annoyance by the lessee and the lessee must post in a conspicuous place on the reserve a notice board indicating for public information the purpose of such reserve and, in fencing the land leased, the lessee must provide gates and other facilities for the entrance and exit of travelling stock, teamsters and others. The notice board, gates and facilities must be erected and maintained to the satisfaction of the Commissioner. The lessee must not overstock, wholly or in part, the areas leased within the reserve, the decision as to overstocking resting with the Commissioner.
- (25) The Crown shall not be responsible to the lessee or the lessee's successors in title for provision of access to the land leased.
- (26) The lessee must comply with the provisions of the Native Vegetation Act 2003 and any regulations made in pursuance of that Act.

- (27) The lessee must comply with requirements of section 18DA of the Western Lands Act 1901 which provides that except in circumstances referred to in subsection (3) of that section, cultivation of the land leased or occupied may not be carried out unless the written consent of the Authority has first been obtained and any condition to which the consent is subject under sub section (6) is complied with.
- (28) Notwithstanding any other condition annexed to the lease, the lessee must, in removing timber for the purpose of building, fencing or firewood, comply with the routine agricultural management activities listed in the Native Vegetation Act 2003.
- (29) The lessee must not interfere with the timber on any of the land leased which is within a State forest, timber reserve or flora reserve unless authorisation has been obtained under the provisions of the Forestry Act 1916 and must not prevent any person or persons duly authorised in that behalf from taking timber on the land leased. The lessee shall not have any property right in the timber on the land leased and must not ringbark, kill, destroy or permit the killing or destruction of any timber unless authorised under the Forestry Act 1916 or unless approval has been issued in accordance with the Native Vegetation Act 2003, but the lessee may take such timber as the lessee may reasonably require for use on the land leased, or on any contiguous land held in the same interest, for building, fencing or firewood.
- (30) The lessee must undertake any fuel management and/ or provision of fire trail access in accordance with fire mitigation measures to the satisfaction of the NSW Rural Fire Service.
- (31) The lessee must, as the Commissioner may from time to time direct, foster and cultivate on the land leased such edible shrubs and plants as the Commissioner may consider can be advantageously and successfully cultivated.
- (32) Whenever so directed by the Commissioner, the lessee must, on such part or parts of the land leased as shall be specified in the direction, carry out agricultural practices, or refrain from agricultural practices, of such types and for such periods as the Commissioner may in the direction specify.
- (33) The lessee must not overstock, or permit or allow to be overstocked, the land leased and the decision of the Commissioner as to what constitutes overstocking shall be final and the lessee must comply with any directions of the Commissioner to prevent or discontinue overstocking.
- (34) The lessee must, if the Commissioner so directs, prevent the use by stock of any part of the land leased for such periods as the Commissioner considers necessary to permit of the natural reseeding and regeneration of vegetation and, for that purpose, the lessee must erect within the time appointed by the Commissioner such fencing as the Commissioner may consider necessary
- (35) The lessee must furnish such returns and statements as the Commissioner may from time to time require on any matter connected with the land leased or any other land (whether within or outside the Western Division) in which the lessee has an interest.

- (36) The lessee must, within such time as may be specified by the Commissioner take such steps and measures as the Commissioner shall direct to destroy vermin and such animals and weeds as may, under any Act, from time to time be declared (by declaration covering the land leased) noxious in the Gazette and must keep the land free of such vermin and noxious animals and weeds during the currency of the lease to the satisfaction of the Commissioner.
- (37) The lessee must not remove or permit any person to remove gravel, stone, clay, shells or other material for the purpose of sale from the land leased unless the lessee or the person is the holder of a quarry license under regulations made under the Crown Lands Act 1989 or, in respect of land in a State forest, unless the lessee or the person is the holder of a forest materials licence under the Forestry Act 1916, and has obtained the special authority of the Minister to operate on the land, but the lessee may, with the approval of the Commissioner, take from the land such gravel, stone, clay, shells or other material for building and other purposes upon the land as may be required by the lessee.
- (38) The lessee must ensure that cultivation and associated activities do not interfere with any road formation within the allowable area.
- (39) The lessee must ensure there is no cultivation within at least 30 metres of the Western Division Road 107.
- (40) The lessee must ensure incised drainage lines, other than man made structures which carry water after storms are left uncultivated in the channels and for a distance of at least 20 metres on either side of the banks of the channels, except when the Commissioner specifies otherwise.
- (41)The lessee must consider the requirements of the National Parks and Wildlife Act 1974 with regard to Aboriginal sites and relics which are extremely vulnerable to many kinds of agricultural development. Under Section 90 it is an offence to damage or destroy relics without prior consent of the Director-General of the Department of Environment, Climate Change and Water. If any Aboriginal archaeological relics or sites are found in the cultivation areas, the cultivation must cease until the lessee has notified the NSW Office of Environment and Heritage of the existence of the site. Contact details are: The Manager, Cultural Heritage Unit, NSW Office of Environment and Heritage, 58-62 Wingewarra St, Dubbo NSW 2830 (Phone: 02 68835324).
- (42) The lessee must establish windbreaks at his/her own expense as may be ordered by Commissioner to provide adequate protection of the soil.
- (43) The lessee must ensure stubble is retained on the soil surface and shall not be burnt, except with the approval of the Commissioner or his delegate. Where such approval is granted, stubble burning is to be carried out as per requirements of the NSW Rural Fire Services.
- (44) The lessee must undertake any appropriate measures, at his/her own expense, ordered by the Commissioner to rehabilitate any degraded cultivated areas.
- (45) Disposal of tail water into creeks and rivers is controlled by the Department of Environment, Climate Change and Water under the Protection of the Environment Act 2003. Before disposing of any tail water or water

which may be contaminated with fertiliser, herbicide or pesticide, the lessee must contact the NSW Office of Environment and Heritage.

- (46) The lessee must ensure that no tail water or drainage water run-off will escape or discharge into or onto adjoining lands by any means including surface or sub-surface drains or pipes.
- (47) The lessee must ensure that sandhills and other soils with a surface texture of loamy sand or coarser are left uncultivated unless specifically approved by the commissioner.
- (48) The lessee must ensure land within 60 metres of any texture contrast or duplex soil area remains uncultivated except in accordance with a plan approved by the Commissioner. Texture contrast (or duplex) soils are soil types which have a sandy to loamy topsoil abruptly overlying a clay subsoil and are prone to scalding (producing claypans and hummocks).
- (49) The lessee must ensure areas with a slope greater than 2% remain uncultivated until any soil conservation measures documented in a plan approved by the Commissioner have been implemented at the lessee' expense.
- (50) The lessee must ensure that Cultivation and cropping do not alter the natural flood regime or obstruct the reasonable passage of floodwaters. Crops are not to be protected by levees.
- (51) The lessee must only conduct Dryland Cultivation of 101 ha shown hatched on the attached diagram and Irrigated Cultivation of 220 ha shown cross-hatched on the diagram hereunder. Cultivation outside this area will only be allowable with the written consent of the Commissioner or Minister.
- (52) Cultivation is permitted over the whole area covered by this Consent unless the Commissioner has required that specific areas remain uncultivated.
- (53) The cultivation area partly covers Travelling Stock Reserve (TSR) 618. The lessee must make suitable arrangements with the relevant Livestock Health and Pest Authorities prior to commencement of any development. If suitable arrangements cannot be made with the Livestock Health and Pest Authorities, the matter will be determined by the Western Lands Commissioner.



ALTERATION OF PURPOSE/CONDITIONS OF A WESTERN LANDS LEASE

IT is hereby notified that in pursuance of the provisions of section 18J, Western Lands Act 1901, the purpose and conditions of the undermentioned Western Lands Lease have been altered as shown.

> KATRINA HODGKINSON, M.P., Minister for Primary Industries

Administrative District – Hillston North; Shire – Carrathool; Parish of Torcobil; County of Blaxland

The purpose/conditions of Western Lands Lease 4535, being the land contained within Folio Identifiers 2362/764325 and 2364/764327 respectively have been altered from "Grazing" to "Grazing and Cultivation (Dryland)" effective from 24 November 2011.

As a consequence of the alteration of purpose and conditions rent will be assessed annually in line with the Western Lands Act 1901 and Regulations.

The conditions previously annexed to Western Lands Lease 4535 have been revoked and the following conditions have been annexed thereto.

CONDITIONS AND RESERVATIONS ATTACHED TO WESTERN LANDS LEASE No. 4535

- (1) In the conditions annexed to the lease, the expression "the Minister" means the Minister administering the Western Lands Act 1901, and any power, authority, duty or function conferred or imposed upon the Minister by or under those conditions may be exercised or performed either by the Minister or by such officers of the Land and Property Management Authority as the Minister may from time to time approve.
- (2) In these conditions and reservations the expression "the Commissioner" means the Commissioner charged with the administration of the Western Lands Act 1901 ("the Act") in accordance with section 4(2) of the Act.
- (3) (a) For the purposes of this clause the term Lessor shall include Her Majesty the Queen Her Heirs and Successors the Minister and the agents servants employees and contractors of the Lessor Her Majesty Her Majesty's Heirs and Successors and the Minister.
 - (b) The lessee covenants with the Lessor to indemnify and keep indemnified the Lessor from and against all claims for injury loss or damage suffered by any person or body using or being in or upon the Premises or any adjoining land or premises of the Lessor arising out of the Holder's use of the Premises and against all liabilities for costs charges and expenses incurred by the Lessor in respect of the claim of any such person or body except to the extent that any such claims and demands arise wholly from any negligence or wilful act or omission on the part of the Lessor.
 - (c) The indemnity contained in this clause applies notwithstanding that this Lease authorised or required the lessee to undertake or perform the activity giving rise to any claim for injury loss or damage.

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- (d) The lessee expressly agrees that the obligations of the Holder under this clause shall continue after the expiration or sooner determination of this Lease in respect of any act deed matter or thing occurring before such expiration or determination.
- (4) The rent of the lease shall be assessed in accordance with Part 6 of the Western Lands Act 1901.
- (5) The rent shall be due and payable annually in advance on 1 July in each year.
- (6) (a) "GST" means any tax on goods and/or services, including any value-added tax, broad-based consumption tax or other similar tax introduced in Australia.

"GST law" includes any Act, order, ruling or regulation, which imposes or otherwise deals with the administration or imposition of a GST in Australia.

- (b) Notwithstanding any other provision of this Agreement:
 - (i) If a GST applies to any supply made by either party under or in connection with this Agreement, the consideration provided or to be provided for that supply will be increased by an amount equal to the GST liability properly incurred by the party making the supply.
 - (ii) If the imposition of a GST or any subsequent change in the GST law is accompanied by or undertaken in connection with the abolition of or reduction in any existing taxes, duties or statutory charges (in this clause "taxes"), the consideration payable by the recipient of the supply made under this Agreement will be reduced by the actual costs of the party making the supply that are reduced directly or indirectly as a consequence of the abolition of or reduction in taxes.
- (7) The Lessee will advise the Lessor of the name, address and telephone number of the Lessee's company secretary, that person being a person nominated as a representative of the company in respect of any dealings to be had with the company. The Lessee agrees to advise the Lessor of any changes in these details.
- (8) Any change in the shareholding of the Lessee's company which alters its effective control of the lease from that previously known to the Commissioner shall be deemed an assignment by the Lessee.
- (9) Where any notice or other communication is required to be served or given or which may be convenient to be served or given under or in connection with this lease it shall be sufficiently executed if it is signed by the company secretary.
- (10) A copy of the company's annual financial balance sheet or other financial statement which gives a true and fair view of the company's state of affairs as at the end of each financial year is to be submitted to the Minister upon request.
- (11) The lessee must pay all rates and taxes assessed on or in respect of the land leased during the currency of the lease.

- (12) The lessee must hold and use the land leased bona fide for the lessee's own exclusive benefit and must not transfer, convey or assign the land or any portion thereof without having first obtained the written consent of the Minister.
- (13) The lessee must not enter into a sublease of the land leased unless the sublease specifies the purpose for which the land may be used under the sublease, and it is a purpose which is consistent with the purpose for which the land may be used under this lease.
- (14) If the lessee enters into a sublease of the land leased, the lessee must notify the Commissioner of the granting of the sublease within 28 days after it is granted.
- (15) The land leased must be used only for the purpose of Grazing and Cultivation (Dryland).
- (16) The lessee must maintain and keep in reasonable repair all improvements on the land leased during the currency of the lease and shall permit the Minister or the Commissioner or any person authorised by the Minister or the Commissioner at all times to enter upon and examine the whole or any part of the land leased and the buildings or other improvements thereon.
- (17) The lessee must not erect or permit any person to erect any buildings or extend any existing buildings on the land leased except to the satisfaction of the Commissioner.
- (18) The lessee must ensure that the land leased is kept in a neat and tidy condition to the satisfaction of the Commissioner and not permit refuse to accumulate on the land.
- (19) Upon termination or forfeiture of the lease the Commissioner may direct that the former lessee remove any structure or material from the land at his own cost and without compensation. Where such a direction has been given the former lessee must leave the land in a clean and tidy condition free from rubbish and debris.
- (20) The lessee must, within 1 year from the date of commencement of the lease or such further period as the Commissioner may allow, enclose the land leased, either separately or conjointly with other lands held in the same interest, with a suitable fence to the satisfaction of the Commissioner.
- (21) The lessee must not obstruct or interfere with any reserves, roads or tracks on the land leased, or the lawful use thereof by any person.
- (22) The lessee must erect gates on roads within the land leased when and where directed by the Commissioner for public use and must maintain those gates together with approaches thereto in good order to the satisfaction of the Commissioner.
- (23) The right is reserved to the public of free access to, and passage along the bank of any watercourse adjoining the land leased and the lessee must not obstruct access or passage by any member of the public to or along the bank.
- (24) Any part of a reserve for travelling stock, camping or water supply within the land leased must, during the whole currency of the lease, be open to the use of bona fide travellers, travelling stock, teamsters and carriers without interference or annoyance by the

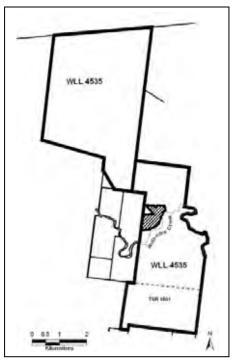
lessee and the lessee must post in a conspicuous place on the reserve a notice board indicating for public information the purpose of such reserve and, in fencing the land leased, the lessee must provide gates and other facilities for the entrance and exit of travelling stock, teamsters and others. The notice board, gates and facilities must be erected and maintained to the satisfaction of the Commissioner. The lessee must not overstock, wholly or in part, the areas leased within the reserve, the decision as to overstocking resting with the Commissioner.

- (25) The Crown shall not be responsible to the lessee or the lessee's successors in title for provision of access to the land leased.
- (26) The lessee must comply with requirements of section 18DA of the Western Lands Act 1901 which provides that except in circumstances referred to in subsection (3) of that section, cultivation of the land leased or occupied may not be carried out unless the written consent of the Authority has first been obtained and any condition to which the consent is subject under sub section (6) is complied with.
- (27) Notwithstanding any other condition annexed to the lease, the lessee must, in removing timber for the purpose of building, fencing or firewood, comply with the routine agricultural management activities listed in the Native Vegetation Act 2003.
- (28) The lessee must, as the Commissioner may from time to time direct, foster and cultivate on the land leased such edible shrubs and plants as the Commissioner may consider can be advantageously and successfully cultivated.
- (29) Whenever so directed by the Commissioner, the lessee must, on such part or parts of the land leased as shall be specified in the direction, carry out agricultural practices, or refrain from agricultural practices, of such types and for such periods as the Commissioner may in the direction specify.
- (30) The lessee must not overstock, or permit or allow to be overstocked, the land leased and the decision of the Commissioner as to what constitutes overstocking shall be final and the lessee must comply with any directions of the Commissioner to prevent or discontinue overstocking.
- (31) The lessee must, if the Commissioner so directs, prevent the use by stock of any part of the land leased for such periods as the Commissioner considers necessary to permit of the natural reseeding and regeneration of vegetation and, for that purpose, the lessee must erect within the time appointed by the Commissioner such fencing as the Commissioner may consider necessary
- (32) The lessee must furnish such returns and statements as the Commissioner may from time to time require on any matter connected with the land leased or any other land (whether within or outside the Western Division) in which the lessee has an interest.
- (33) The lessee must, within such time as may be specified by the Commissioner take such steps and measures as the Commissioner shall direct to destroy vermin and such animals and weeds as may, under any Act, from time to time be declared (by declaration covering the land leased) noxious in the Gazette and must keep the

land free of such vermin and noxious animals and weeds during the currency of the lease to the satisfaction of the Commissioner.

- (34) The lessee must not remove or permit any person to remove gravel, stone, clay, shells or other material for the purpose of sale from the land leased unless the lessee or the person is the holder of a quarry license under regulations made under the Crown Lands Act 1989 or, in respect of land in a State forest, unless the lessee or the person is the holder of a forest materials licence under the Forestry Act 1916, and has obtained the special authority of the Minister to operate on the land, but the lessee may, with the approval of the Commissioner, take from the land such gravel, stone, clay, shells or other material for building and other purposes upon the land as may be required by the lessee.
- (35) The lessee must ensure that cultivation and associated activities do not interfere with any road formation within the allowable area.
- (36) Access tracks to the area to be cultivated must be arranged in such a manner as to minimise the disturbance of any land surfaces within the areas required to be left uncultivated to comply with the conditions of this consent.
- (37) The lessee must ensure incised drainage lines, other than man-made structures which carry water after storms are left uncultivated in the channels and for a distance of at least 20 metres on either side of the banks of the channels, except when the Commissioner specifies otherwise.
- (38) The lessee must establish windbreaks at his/her own expense as may be ordered by Commissioner to provide adequate protection of the soil.
- (39) The lessee must ensure stubble is retained on the soil surface and shall not be burnt, except with the approval of the Commissioner or his delegate. Where such approval is granted, stubble burning is to be carried out as per requirements of the NSW Rural Fire Services.
- (40) The lessee must undertake any appropriate measures, at his/her own expense, ordered by the Commissioner to rehabilitate any degraded cultivated areas.
- (41) The lessee must ensure that sandhills and other soils with a surface texture of loamy sand or coarser are left uncultivated unless specifically approved by the commissioner.
- (42) The lessee must ensure land within 60 metres of any texture contrast or duplex soil area remains uncultivated except in accordance with a plan approved by the Commissioner. Texture contrast (or duplex) soils are soil types which have a sandy to loamy topsoil abruptly overlying a clay subsoil and are prone to scalding (producing claypans and hummocks).
- (43) The lessee must ensure areas with a slope greater than 2% remain uncultivated until any soil conservation measures documented in a plan approved by the Commissioner have been implemented at the lessee' expense.
- (44) The lessee must ensure that Cultivation and cropping do not alter the natural flood regime or obstruct the reasonable passage of floodwaters. Crops are not to be protected by levees.

- (45) The lessee must only conduct Dryland Cultivation of 51 ha shown hatched on the attached diagram hereunder. Cultivation is permitted over the whole area shown hatched unless the commissioner has required that specific areas remain uncultivated.
- (46) The lessee must ensure that no cultivation or ancillary works associated with any cultivation are undertaken within 30 metres, on the landward side, of the bank of Willandra Creek. The creek buffer area must not be disturbed by the use of any implements or used for the purposes of any silo, temporary grain storage, machinery shed or other installations or works of any kind.



ALTERATION OF PURPOSE/CONDITIONS OF A WESTERN LANDS LEASE

IT is hereby notified that in pursuance of the provisions of section 18J, Western Lands Act 1901, the purpose and conditions of the undermentioned Western Lands Lease have been altered as shown.

> KATRINA HODGKINSON, M.P., Minister for Primary Industries

Administrative District – Wilcannia; Shire – Central Darling; Parish of Wambah; County of Livingstone

The purpose/conditions of Western Lands Lease 13368, being the land contained within Folio Identifier 96/725389 respectively have been altered from "Residence" to "Residence and Cultivation (Irrigated)" effective from 30 November 2011.

As a consequence of the alteration of purpose and conditions rent will be assessed annually in line with the Western Lands Act 1901 and Regulations.

The conditions previously annexed to Western Lands Lease 13368 have been revoked and the following conditions have been annexed thereto.

CONDITIONS AND RESERVATIONS ATTACHED TO WESTERN LANDS LEASE No. 13368

- (1) In the conditions annexed to the lease, the expression "the Minister" means the Minister administering the Western Lands Act 1901, and any power, authority, duty or function conferred or imposed upon the Minister by or under those conditions may be exercised or performed either by the Minister or by such officers of the Department of Primary Industries as the Minister may from time to time approve.
- (2) In these conditions and reservations the expression "the Commissioner" means the Commissioner charged with the administration of the Western Lands Act 1901 ("the Act") in accordance with section 4(2) of the Act.
- (3) (a) For the purposes of this clause the term Lessor shall include Her Majesty the Queen Her Heirs and Successors the Minister and the agents servants employees and contractors of the Lessor Her Majesty Her Majesty's Heirs and Successors and the Minister.
 - (b) The lessee covenants with the Lessor to indemnify and keep indemnified the Lessor from and against all claims for injury loss or damage suffered by any person or body using or being in or upon the Premises or any adjoining land or premises of the Lessor arising out of the Holder's use of the Premises and against all liabilities for costs charges and expenses incurred by the Lessor in respect of the claim of any such person or body except to the extent that any such claims and demands arise wholly from any negligence or wilful act or omission on the part of the Lessor.
 - (c) The indemnity contained in this clause applies notwithstanding that this Lease authorised or required the lessee to undertake or perform the activity giving rise to any claim for injury loss or damage.
 - (d) The lessee expressly agrees that the obligations of the Holder under this clause shall continue after the expiration or sooner determination of this Lease in respect of any act deed matter or thing occurring before such expiration or determination.
- (4) The rent of the lease shall be assessed in accordance with Part 6 of the Western Lands Act 1901.
- (5) The rent shall be due and payable annually in advance on 1 July in each year.
- (6) (a) "GST" means any tax on goods and/or services, including any value-added tax, broad-based consumption tax or other similar tax introduced in Australia.

"GST law" includes any Act, order, ruling or regulation, which imposes or otherwise deals with the administration or imposition of a GST in Australia.

- (b) Notwithstanding any other provision of this Agreement:
 - (i) If a GST applies to any supply made by either party under or in connection with this Agreement, the consideration provided or to be provided for that supply will be increased by an amount equal to the GST liability properly incurred by the party making the supply.

- (ii) If the imposition of a GST or any subsequent change in the GST law is accompanied by or undertaken in connection with the abolition of or reduction in any existing taxes, duties or statutory charges (in this clause "taxes"), the consideration payable by the recipient of the supply made under this Agreement will be reduced by the actual costs of the party making the supply that are reduced directly or indirectly as a consequence of the abolition of or reduction in taxes.
- (7) The lessee must pay all rates and taxes assessed on or in respect of the land leased during the currency of the lease.
- (8) The lessee must hold and use the land leased bona fide for the lessee's own exclusive benefit and must not transfer, convey or assign the land or any portion thereof without having first obtained the written consent of the Minister.
- (9) The lessee must not enter into a sublease of the land leased unless the sublease specifies the purpose for which the land may be used under the sublease, and it is a purpose which is consistent with the purpose for which the land may be used under this lease.
- (10) If the lessee enters into a sublease of the land leased, the lessee must notify the Commissioner of the granting of the sublease within 28 days after it is granted.
- (11) The land leased must be used only for the purpose of Residence & Cultivation (Irrigated).
- (12) The lessee must maintain and keep in reasonable repair all improvements on the land leased during the currency of the lease and shall permit the Minister or the Commissioner or any person authorised by the Minister or the Commissioner at all times to enter upon and examine the whole or any part of the land leased and the buildings or other improvements thereon.
- (13) The lessee must not remove or permit any person to remove gravel, stone, clay, shells or other material for the purpose of sale from the land leased unless the lessee or the person is the holder of a quarry license under regulations made under the Crown Lands Act 1989 or, in respect of land in a State forest, unless the lessee or the person is the holder of a forest materials licence under the Forestry Act 1916, and has obtained the special authority of the Minister to operate on the land, but the lessee may, with the approval of the Commissioner, take from the land such gravel, stone, clay, shells or other material for building and other purposes upon the land as may be required by the lessee.
- (14) The lessee must not erect or permit any person to erect any buildings or extend any existing buildings on the land leased except to the satisfaction of the Commissioner.
- (15) The lessee must ensure that the land leased is kept in a neat and tidy condition to the satisfaction of the Commissioner and not permit refuse to accumulate on the land.
- (16) Upon termination or forfeiture of the lease the Commissioner may direct that the former lessee remove any structure or material from the land at his own cost

and without compensation. Where such a direction has been given the former lessee must leave the land in a clean and tidy condition free from rubbish and debris.

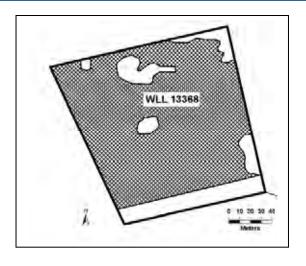
- (17) The lessee must, within 1 year from the date of commencement of the lease or such further period as the Commissioner may allow, enclose the land leased, either separately or conjointly with other lands held in the same interest, with a suitable fence to the satisfaction of the Commissioner.
- (18) The lessee must not obstruct or interfere with any reserves, roads or tracks on the land leased, or the lawful use thereof by any person.
- (19) The lessee must erect gates on roads within the land leased when and where directed by the Commissioner for public use and must maintain those gates together with approaches thereto in good order to the satisfaction of the Commissioner.
- (20) The right is reserved to the public of free access to, and passage along the bank of any watercourse adjoining the land leased and the lessee must not obstruct access or passage by any member of the public to or along the bank.
- (21) The Crown shall not be responsible to the lessee or the lessee's successors in title for provision of access to the land leased.
- (22) The lessee must comply with requirements of section 18DA of the Western Lands Act 1901 which provides that except in circumstances referred to in subsection (3) of that section, cultivation of the land leased or occupied may not be carried out unless the written consent of the Authority has first been obtained and any condition to which the consent is subject under sub section (6) is complied with.
- (23) The lessee must, as the Commissioner may from time to time direct, foster and cultivate on the land leased such edible shrubs and plants as the Commissioner may consider can be advantageously and successfully cultivated.
- (24) Whenever so directed by the Commissioner, the lessee must, on such part or parts of the land leased as shall be specified in the direction, carry out agricultural practices, or refrain from agricultural practices, of such types and for such periods as the Commissioner may in the direction specify.
- (25) The lessee must, if the Commissioner so directs, prevent the use by stock of any part of the land leased for such periods as the Commissioner considers necessary to permit of the natural reseeding and regeneration of vegetation and, for that purpose, the lessee must erect within the time appointed by the Commissioner such fencing as the Commissioner may consider necessary.
- (26) The lessee must furnish such returns and statements as the Commissioner may from time to time require on any matter connected with the land leased or any other land (whether within or outside the Western Division) in which the lessee has an interest.
- (27) The lessee must, within such time as may be specified by the Commissioner take such steps and measures as the Commissioner shall direct to destroy vermin and

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OFFICIAL NOTICES

such animals and weeds as may, under any Act, from time to time be declared (by declaration covering the land leased) noxious in the Gazette and must keep the land free of such vermin and noxious animals and weeds during the currency of the lease to the satisfaction of the Commissioner.

- (28) The lessee must ensure that cultivation and associated activities do not interfere with any road formation within the allowable area.
- (29) Access tracks to the area to be cultivated must be arranged in such a manner as to minimise the disturbance of any land surfaces within the areas required to be left uncultivated to comply with the conditions of this consent.
- (30) The lessee must ensure incised drainage lines, other than manmade structures which carry water after storms are left uncultivated in the channels and for a distance of at least 20 metres on either side of the banks of the channels, except when the Commissioner specifies otherwise.
- (31) The lessee must establish windbreaks at his/her own expense as may be ordered by Commissioner to provide adequate protection of the soil.
- (32) The lessee must undertake any fuel management and/ or provision of fire trail access in accordance with fire mitigation measures to the satisfaction of the NSW Rural Fire Service.
- (33) The lessee must undertake any appropriate measures, at his/her own expense, ordered by the Commissioner to rehabilitate any degraded cultivated areas.
- (34) The lessee must ensure stubble is retained on the soil surface and must not be burnt, except with the approval of the Commissioner or his delegate. Where such approval is granted, stubble burning is to be carried out as per requirements of the NSW Rural Fire Service.
- (35) The lessee must ensure that sand hills and other soils with a surface texture of loamy sand or coarser are left uncultivated unless specifically approved by the commissioner.
- (36) The lessee must ensure that cultivation and cropping do not alter the natural flood regime or obstruct the reasonable passage of floodwaters. Crops are not to be protected by levees.
- (37) The lessee must ensure that no tail water or drainage water run-off will escape or discharge into or onto adjoining lands by any means including surface or sub-surface drains or pipes.
- (38) The lessee must only cultivate an area of 1.95 ha shown cross-hatched on the diagram hereunder. Cultivation is permitted over the whole areas shown cross-hatched, unless the Commissioner has required that specific areas remain uncultivated.



ALTERATION OF CONDITIONS OF A WESTERN LANDS LEASE

IT is hereby notified that in pursuance of the provisions of section 18J Western Lands Act 1901, the conditions of the undermentioned Western Lands Lease have been altered as shown.

KATRINA HODGKINSON, M.P., Minister for Primary Industries

Administrative District – Broken Hill; Unincorporated Area, County – Mootwingee

The conditions of Western Lands Leases 4431, 6602, 6603 and 6604, being the lands contained within Folio Identifiers 2069/763988, 3784/766197, 3785/766198 and 3786/766199, have been altered effective from 30 November 2011, by the inclusion of the special conditions following.

SPECIAL CONDITIONS ATTACHED TO WESTERN LANDS LEASES 6602 AND 6603

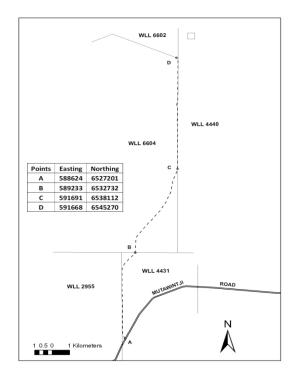
- 1. The holders of Western Lands Leases 6602 and 6603, and every person authorised by them may:
 - (a) by any reasonable means pass across Western Lands Leases 4431 and 6604, but only within the site of the established track shown on the diagram hereunder, to get to or from Western Lands Leases 6602 and 6603, and
 - (b) do anything reasonably necessary for that purpose, including:
 - · entering the affected leases, and
 - taking anything on to the affected leases, and
 - carrying out work within the site of this track, such as constructing, placing, repairing or maintaining trafficable surfaces, driveways or structures.
- 2. In exercising those powers, the holders of Western Lands Leases 6602 and 6603 must:
 - (a) ensure all work is done properly, and
 - (b) cause as little inconvenience as is practicable to the lessee and any occupier of the affected leases, and
 - (c) cause as little damage as is practicable to the affected leases and any improvement on it, and
 - (d) restore the affected leases as nearly as is practicable to its former condition, and
 - (e) make good any collateral damage.

- 3. (a) in the event of any dispute arising between the lessee and holders of Western Lands Leases 4431 and 6604 regarding the special conditions the matter in dispute shall be determined by the Local Land Board, and
 - (b) special conditions may only be removed with the consent of the holders of Western Lands Leases 6602, 6603, 4431 and 6604.

SPECIAL CONDITIONS ATTACHED TO WESTERN LANDS LEASES 4431 AND 6604

- 1. The holders of Western Lands Leases 6602 and 6603, and every person authorised by them may:
 - (a) by any reasonable means pass across Western Lands Leases 4431 and 6604, but only within the site of the established track shown on the diagram hereunder, to get to or from Western Lands Leases 6602 and 6603, and
 - (b) do anything reasonably necessary for that purpose, including:
 - · entering the affected leases, and
 - taking anything on to the affected leases, and
 - carrying out work within the site of this track, such as constructing, placing, repairing or maintaining trafficable surfaces, driveways or structures.
- 2. In exercising those powers, the holders of Western Lands Leases 6602 and 6603 must:
 - (a) ensure all work is done properly, and
 - (b) cause as little inconvenience as is practicable to the lessee and any occupier of the affected leases, and
 - (c) cause as little damage as is practicable to the affected leases and any improvement on it, and
 - (d) restore the affected leases as nearly as is practicable to its former condition, and
 - (e) make good any collateral damage.

- 3. (a) in the event of any dispute arising between the lessee and holders of Western Lands Leases 6602 and 6603 regarding the special conditions the matter in dispute shall be determined by the Local Land Board, and
 - (b) special conditions may only be removed with the consent of the holders of Western Lands Leases 6602, 6603, 4431 and 6604.



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WATER

WATER ACT 1912

AN application for an approval under section 167 (1) of Part 8 of the Water Act 1912, as amended, has been received as follows:

MERRAN PARK PASTORAL PTY LTD and Alison Ruth VALLENCE for levees (existing) on the Merran Creek on Lots 33 and 34, DP 823000, Parish Gonn, County Wakool and Lot 1, DP1109037, Parish of Nunnagoyt, County of Wakool, for the prevention of innundation of land by floodwaters (Reference: 50CW805734).

Any enquiries should be directed to (03) 5898 3936.

Written objections from any local occupier or statutory authority, specifying grounds and how their interests are affected, must be lodged with the NSW Office of Water, PO Box 205, Deniliquin NSW 2710, within 28 days of the date of this publication.

> LINDSAY HOLDEN, Senior Licensing Officer

WATER ACT 1912

AN application for a licence under section 20 of Part 2 of the Water Act 1912, being within a proclaimed (declared) local area under section 5 (4) of the said Act, has been received as follows:

ALICE SPRINGS PASTORAL CO PTY LTD and PLATANUS PTY LIMITED for three pumps on the Murrumbidgee River, Lot 2, DP 614863, Parish Caddigat, County Wallace and Lots 15 and 17, DP 750538, an earthen dam with diversion pipe on Long Corner Creek, Parish of Duncan, County of Beresford, for stock and domestic purposes and the supply of water for the irrigation (amalgamation of Authority 40SA5643 and Licence 40SL45155 – existing works – no change in entitlements). (Reference: 40SA5646). (GA1822217).

Any inquiries should be directed to (02) 6953 0700.

Written objections, from any local occupier or statutory authority specifying grounds and how their interests are affected must be lodged with the NSW Office of Water, PO Box 156, Leeton NSW 2705, within the 28 days of this publication.

> S. F. WEBB, Licensing Manager

WATER ACT 1912

APPLICATIONS for a licence under section 10 of Part 2 of the Water Act 1912, as amended, has been received as follows:

KO-VEDA HOLIDAY PARK ESTATE LIMITED for two (2) existing bywash dams (total capacity 40.0 megalitres) and a pump (not located on a watercourse) on Lot 1300, DP 1114932, Parish of Cornelia, County of Cumberland, for the conservation of water and water supply for industrial (caravan park) and recreation (landscaping) purposes (new licence) (Dams in excess of MHRDC – not subject to the amended 2003 Hawkesbury/Nepean Embargo). (Reference: 10SL057135). (GA1822221). Edouard and Lauren Mardi WEHBE for two (2) proposed bywash dams (total capacities 20.0 megalitres) and two (2) pumps on an unnamed watercourse (2nd order) on Lot 3, DP 1057505, Parish of Mummel, County of Argyle, for the conservation of water and irrigation of 40.0 hectares (rye grass, lucerne) (new licence) (Dam in excess of MHRDC – not subject to the amended 2003 Hawkesbury/Nepean Embargo). (Reference: 10SL057081). (GA1822222).

Bryan Ibrahim and Sousane DOKMAK for four (4) proposed bywash dams (total capacities of 23.0 megalitres) and four (4) pumps on an unnamed watercourse (2nd order) and off-creek on Lot 12, DP 878014, Parish of Breadalbane, County of Argyle, for the conservation of water and irrigation of 47.0 hectares (orchard, lucerne, apricots) (new licence) (Dams in excess of MHRDC – not subject to the amended 2003 Hawkesbury/Nepean Embargo). (Reference: 10SL057129). (GA1822222).

Any inquiries should be directed to (02) 8838 7531.

Written objections, from any local occupier or statutory authority, specifying grounds and how their interests are affected, must be lodged with the NSW Office of Water, PO Box 3720, Parramatta NSW 2124, within 28 days of this publication.

> WAYNE CONNERS, Senior Licensing Officer

WATER MANAGEMENT ACT 2000

Erratum

THIS notice which was published in *New South Wales Government Gazette* No. 111 on 18 November 2011, at page 6628, contained an error and is republished in full hereunder. The gazettal date remains 18 November 2011.

WATER MANAGEMENT ACT 2000

Order under Section 130

Section 130 (2)

Inclusion of Land in Murray Irrigation's Area of Operations

PURSUANT to section 130 (2) of the Water Management Act, I, DAVID HARRISS, having delegated authority from the Minister for Primary Industries, do, by this Order, include the land listed in Schedule 1 within the area of operations of Murray Irrigation Limited.

This Order takes effect on the date that the Order is published in the *New South Wales Government Gazette*.

Signed at Albury, this 10th day of November 2011.

DAVID HARRISS, Commissioner, NSW Office of Water, Signed for the Minister for Primary Industries (by delegation)

SCHEDULE 1

 Lot 293, DP 1082253; Lot 6, DP 253119; Lots 36, 37, 67, 68, 69, 100, 102, 103 and 104, DP 752276; Lot 39, DP 664392 and Lot 39, DP 1095327, Parish of Boomanoomana, County of Denison.

2 December 2011

- Lots 89, 93, 94, 95, 96, 97, 98, 99, 114 and 115, DP 752276; Lots 1 and 2, DP 186984; Lots 1 and 2, DP 186969, Parish of Boomanoomana, County of Denison.
- 3. Lots 48 and 71, DP 752278, Parish of Carlyle, County of Denison.
- 4. Lot 95, DP 752278, Parish of Carlyle, County of Denison.
- 5. Lot 51, DP 752278, Parish of Carlyle, County of Denison.
- 6. Lot 97, DP 752300 and Lot 2, DP 1093866, Parish of Wahgunyah, County of Denison.
- 7. Lot 1, DP 1093866, Parish of Wahgunyah, County of Denison.
- 8. Lot 7002, DP 752276, Parish of Boomanoomana, County of Denison.
- Lots 28, 32, 33, 34, 35, 36, 37, 40, 42, 43, 44, 45, 46, 64 and 65, DP 752278; Lot 91, DP 668616; Lots 11, 14, 15, 16 and 19, DP 134653; Lot 11, DP 134510; Lots 1, 2 and 3, DP 928050; Lot 1, DP 1103226 and Lots 38 and 39, DP 1108798, Parish of Carlyle, County of Denison; Lot 13, DP 752286, Parish of Kilnyana, County of Denison.
- 10. Lot 1, DP 129017, Lots 23 and 24, DP 752278, Lot 1, DP 254687 and Lot 1, DP 534119, Parish of Carlyle, County of Denison.
- 11. Lots 11, 12, 13 and 14, DP 752278, Parish of Carlyle, County of Denison.

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Other Notices

APPRENTICESHIP AND TRAINEESHIP ACT 2001

NOTICE is given that the Commissioner for Vocational Training has made a Vocational Training Order for the recognised traineeship vocation of Security Operations under section 6 of the Apprenticeship and Traineeship Act 2001.

The Orders specify a number of matters relating to the required training for these vocations, including the term/s of training, probationary period/s, and course/s of study to be undertaken.

The Order will take effect from the date of publication in the *NSW Government Gazette*.

A copy of the Order may be inspected at any State Training Services Regional Office of the Department of Education and Communities or on the Internet at https://www.training.nsw. gov.au/cib_vto/cibs/cib_520.html

APPRENTICESHIP AND TRAINEESHIP ACT 2001

NOTICE is given that the Commissioner for Vocational Training has made Vocational Training Orders for the recognised trade vocations of:

- Advanced Engineering
- Boat Building Trade
- Engineering (Electrical/Electronic)
- Engineering (Fabrication)
- Engineering (Mechanical)
- Higher Engineering Trade
- Jewellery (Manufacturing and Repairing) Trade
- Locksmithing Trade
- Shipwright Trade
- Watch and Clock Service and Repair,

under section 6 of the Apprenticeship and Traineeship Act 2001.

The Orders specify a number of matters relating to the required training for these vocations, including the term/s of training, probationary period/s, and course/s of study to be undertaken.

The Orders will take effect from the date of publication in the *NSW Government Gazette*.

Copies of the Orders may be inspected at any State Training Services Regional Office of the Department of Education and Communities or on the Internet at https:// www.training.nsw.gov.au/cib_vto/cibs/cib_521.html

APPRENTICESHIP AND TRAINEESHIP ACT 2001

NOTICE is given that the Commissioner for Vocational Training has made Vocational Training Orders for the recognised traineeship vocations of:

- Mining Emergency Response and Rescue
- Mining Exploration
- Mining Resource Processing
- Mining Small Mining Operations
- Mining Surface Mining
- Mining Underground Coal Mining

• Mining – Underground Metalliferous,

under section 6 of the Apprenticeship and Traineeship Act 2001.

The Orders specify a number of matters relating to the required training for these vocations, including the term/s of training, probationary period/s, and course/s of study to be undertaken.

The Orders will take effect from the date of publication in the *NSW Government Gazette*.

Copies of the Orders may be inspected at any State Training Services Regional Office of the Department of Education and Communities or on the Internet at https:// www.training.nsw.gov.au/cib_vto/cibs/cib_519.html

APPRENTICESHIP AND TRAINEESHIP ACT 2001

NOTICE is given that the Commissioner for Vocational Training has made Vocational Training Orders for the recognised trade vocations of:

- Telecommunications Broadband and Wireless Networks Technology
- Telecommunications Networks Technology,
- and the traineeship vocations of:
 - Telecommunications
 - Telecommunications Broadband and Wireless
 Networks
 - Telecommunications Cabling
 - Telecommunications Digital Reception Technology
 - Telecommunications Network Engineering
 - Telecommunications Network Planning
 - Telecommunications Optical Networks
 - Telecommunications Technology,

under section 6 of the Apprenticeship and Traineeship Act 2001.

The Orders specify a number of matters relating to the required training for these vocations, including the term/s of training, probationary period/s, and course/s of study to be undertaken.

The Orders will take effect from the date of publication in the NSW Government Gazette.

Copies of the Orders may be inspected at any State Training Services Regional Office of the Department of Education and Communities or on the Internet at https:// www.training.nsw.gov.au/cib_vto/cibs/cib_518.html

ASSOCIATIONS INCORPORATION ACT 2009

Cancellation of Incorporation Pursuant to Section 76

TAKE notice that the incorporation of the following associations is cancelled by this notice pursuant to section 76 of the Associations Incorporation Act 2009.

Cancellation is effective as at the date of gazettal.

Jesus Rock of All Ages Christian Ministries Incorporated – Inc9884137 Murrurundi Tennis Club Inc - Y1698637

- N.S.W. Railway Signalling Museum Incorporated Y2933606
- Narrandera Rugby League Football Club Inc Y0865115
- National Coalition for Gun Control Incorporated Y2087913
- New Millenium Seniors Inc Inc9875599
- New South Wales Junior Hockey Association Inc Y0025318
- New South Wales Pilot Vehicle Drivers Association Inc – Y1200717
- New South Wales Trade Efficiency Association (NSWTEA) Incorporated – Y2596740
- Nimmitabel Chainsaw Racing Club Incorporated Inc1513702
- No Limit Sports Association Incorporated Inc9876623
- North Newcastle Schoolboys Junior Rugby League Club Incorporated – Inc9876128
- North West Bonsai and Saikei Association Incorporated – Y2030121
- North West Sustainable Grazing Systems Incorporated - Y2815319
- Northern Emu Producers of New South Wales Incorporated – Inc9874365
- Northern Rivers Over 30's Singles Club Incorporated - Y2887334
- NSW Matraville Chinese Community Languages Centre Incorporated – Inc9875582
- Omega Educational Ministries Incorporated Y2486014
- Orpheus Productions Incorporated Inc9876390
- Oyster Bay Precinct Resident's Association Incorporated – Inc9874549
- P.S.P. Penrith Streetwork Project Incorporated Y2061939
- Parkes Rifle Club Incorporated Y2620144
- Peel Namoi Junction Landcare Rivercare Group Incorporated – Y2675501
- Pembrooke Progress and Public Hall Association Incorporated – Y1705530
- Penrith Off Road Club Incorporated Y1652818
- Persian Ethnic School Incorporated Y2780703
- Pesach Retreat Incorporated Inc9875811
- Philippines Australia Foundation Inc Inc9875584
- Phoenix Theatre Productions Inc Y0486124
- Plastamasta Franchise Advisory Council Incorporated - Inc9874359
- Platypus Landcare Incorporated Inc9875694
- Punjabi Hawks Incorporated Inc9892838
- Queanbeyan Hockey Club Inc Y1008017
- Schofields Cricket Club Inc Y1215208
- Scone Endurance and Trail Riding Association Inc Y0765218
- Shalom Presbyterian Church Incorporated Y2652322

- Shoalhaven Farm Irrigators Incorporated Inc9876052
- Sinopolese Association (Maria SS. Di Tutte Le Grazie) (Maria SS. Addolorata) Sydney Incorporated – Inc9876654
- Sistajive Women's Music Festival Incorporated Inc9874757
- Skate 2000 Skate Club (S2SC) Incorporated Inc9875762
- Zonta Club of Dubbo Area Incorporated Y2112608
- Dated 29th day of November 2011.

ROBYNE LUNNEY, Delegate of the Commissioner, NSW Fair Trading, Department of Finance & Services, Department of Health, New South Wales

ASSOCIATIONS INCORPORATION ACT 2009

Reinstatement of Cancelled Association Pursuant to Section 84

TAKE notice that the incorporation of NEWCASTLE OLYMPIC SOCCER FOOTBALL CLUB INC (Y0935612) cancelled on 29 August 2008 is reinstated pursuant to section 84 of the Associations Incorporation Act 2009.

Dated this 29th day of November 2011.

ROBYNE LUNNEY, A/Manager, Case Management, Registry of Co-operatives & Associations, NSW Fair Trading, Department of Finance & Services

ASSOCIATIONS INCORPORATION ACT 2009

Cancellation of Incorporation Pursuant to Section 76

TAKE notice that the incorporation of the following associations are cancelled by this notice pursuant to section 76 of the Associations Incorporation Act 2009.

Cancellation is effective as at the date of gazettal.

- ANSUA Coffs Harbour Inc Y0106122
- Sangam World Cup Sports Association Incorporated Inc9880622
- Shoalhaven Landowners Association Inc Y1214701
- Philippine Australian Marching Band and Talents Organisation (PAMBATO) Incorporated – Y2686837
- Kiwi Golf Club National Association Incorporated Y2596642

Dated this 30th day of November 2011.

ROBYNE LUNNEY, Delegate of the Commissioner, NSW Fair Trading, Department of Finance & Services Cancellation of Registration Pursuant to Section 80

TAKE notice that PORT STEPHENS COMMUNITY CARE LIMITED (Inc9875500) became registered under the Corporations Act 2001 as PORT STEPHENS COMMUNITY CARE LIMITED (ACN 147 672 839) a public company limited by guarantee on the first day of February 2011 and accordingly its registration under the Associations Incorporation Act 2009 is cancelled as of that date.

Dated: 29 November 2011.

ANNETTE ROBINSON, NSW Fair Trading

ASSOCIATIONS INCORPORATION ACT 2009

Cancellation of Registration Pursuant to Section 80

TAKE notice that ATTENDANT CARE INDUSTRY ASSOCIATION OF NSW INCORPORATED (Inc9883086) became registered under the Corporations Act 2001 as ATTENDANT CARE INDUSTRY ASSOCIATION (AUSTRALIA) LIMITED (ACN 153 423 799), a public company limited by guarantee on the eighteenth day of October 2011 and accordingly its registration under the Associations Incorporation Act 2009 is cancelled as of that date.

Dated: 29 November 2011.

ANNETTE ROBINSON, NSW Fair Trading

DANGEROUS GOODS (ROAD AND RAIL TRANSPORT) ACT 2008

Exemption Order No. 015/11

I, TONY ROBINSON, Director, Specialist Services Group, Work Health and Safety Division, WorkCover Authority of New South Wales, pursuant to Clause 42 of the Dangerous Goods (Road and Rail Transport) Act 2008 (the Act), make the exemption.

Dated this 26th day of September 2011.

TONY ROBINSON, Director, Specialist Services Group, Work Health and Safety Division, WorkCover Authority of New South Wales

Explanatory Note

Clause 42 of the Dangerous Goods (Road and Rail Transport) Act 2008 provides the regulatory authority may grant an exemption by order in writing, to exempt a person from a specified provision of the Dangerous Goods (Road and Rail Transport) Regulation 2009 (the Regulation). This order exempts Alpha Chemicals Pty Ltd from the requirements under Clause 46 (1) (a) of the Regulation, subject to certain conditions as detailed in Schedule 1.

Dangerous Goods (Road and Rail Transport) Regulation 2009 Exemption Order No. 015/11

1. Name of Order

This order is the Dangerous Goods (Road and Rail Transport) Regulation 2009: Exemption Order No. 015/11.

2. Commencement

This Order commences on the 26th day of September 2011 and has effect for a period of 5 years from that date unless otherwise revoked.

- 3. Exemption
- (a) Alpha Chemicals Pty Ltd (18 Inman Road Cromer NSW, ABN 29 001 174 741) and their consignors, packers, loaders, prime contractors, and drivers are exempt from the requirement under Clause 46 (1) (a) of the Dangerous Goods (Road and Rail Transport) Regulation 2009 for approval of packages used to transport dangerous goods.

SCHEDULE 1

The granting of the above exemption is subject to the following conditions:

- (a) This exemption applies to a 1200 kg maximum permissible gross mass (MPGM) Intermediate Bulk Container (IBC) of 300 grade carbon steel construction sealed by a 3" cast iron plug with Teflon sealant tape, as described and tested according to test report 5600 issued by Falcon Test Engineers on 8 June 2011.
- (b) This exemption applies to land transport of elemental mercury (being UN 2809 a dangerous good of Class 8) from the Orica site at Botany NSW to the Alpha Chemicals site at Cromer NSW and does not apply to any transport operation outside NSW.
- (c) Each packaging must be labelled in accordance with the ADG Code, with the exception that an approval number is not required.
- (d) A copy of this exemption must be carried with the shipping documentation for any consignment to which this exemption applies, and must be shown to any Authorised Officer or Police Officer when so requested.
- (e) Except as detailed in the above exemption, all road and rail transport operations are to be in accordance with the requirements of the Dangerous Goods (Road and Rail Transport) Act 2008. The Act requires compliance with the ADG Code and the Regulations.

Dated this 26th day of September 2011.

TONY ROBINSON, Director, Specialist Services Group, WorkCover New South Wales

HEALTH ADMINISTRATION ACT 1982

LAND ACQUISITION (JUST TERMS COMPENSATION) ACT 1991

Notice of Compulsory Acquisition of Land for Health Purposes

PURSUANT to section 10 of the Health Administration Act 1982 and section 19 (1) of the Land Acquisition (Just Terms Compensation) Act 1991, the Health Administration Corporation by its delegate declares, with the approval of Her Excellency the Governor, that all the land and interests therein described in the Schedule attached are acquired by compulsory process under the provisions of the Land Acquisition (Just Terms Compensation) Act 1991 for the purposes of the Health Administration Act 1982.

Signed at Sydney, this 29th day of November 2011.

DAVID GATES, Chief Procurement Officer, Department of Health, a duly authorised delegate of the Health Administration Corporation

SCHEDULE

All that piece or parcel of Crown land situated in the Tweed Local Government Area, Parish of Cudgen, County of Rous, being Lot 535, Deposited Plan 48641.

LORD HOWE ISLAND ACT 1953

2012 Lord Howe Island Board Election

Election Notice

PURSUANT to section 9A (b) of the Lord Howe Island Act 1953 No. 39, the Electoral Commissioner for New South Wales shall conduct an election for the purpose of determining the Islanders to be appointed to the Lord Howe Island Board pursuant to section 4 (3) (a) of the Act.

Nominations:

Nominations are hereby invited to fill four (4) positions on the Board.

To be eligible for nomination, each candidate must be an Islander as defined in the Lord Howe Island Act and be enrolled as an elector for the election.

A candidate at an election shall be nominated by at least 2 persons (other than the candidate) who –

- (a) are enrolled as electors for the election; and
- (b) have not, by that nomination and any other previous nomination in respect of the election, nominated more candidates than there are persons to be elected, i.e. four (4) persons.

Nomination Forms, as prescribed, are available from Mr Stephen Wills, Deputy Returning Officer, Lord Howe Island Board Election, c.o. Lord Howe Island Board Office, Lord Howe Island or Mario Saliba, Returning Officer, NSW Electoral Commission, Level 25, 201 Kent Street, Sydney (PO Box 693, Grosvenor Place NSW 1220), telephone (02) 9290 5923 or (02) 9290 5941.

Lodgement of Nominations:

Lodgement of a correctly completed nomination form, by the specified time, is the responsibility of the candidate.

Nomination forms can only be lodged with the Returning Officer, NSW Electoral Commission:

- by hand: Level 25, 201 Kent Street, Sydney; or
- by post: PO Box 693, Grosvenor Place NSW 1220; or
- by fax: (02) 9290 5291.

Nominations must be received by the Returning Officer, NSW Electoral Commission Sydney before NOON, FRIDAY, 20 JANUARY 2012. Any defect in a nomination must be rectified by the candidate prior to the close of nominations at Noon, Friday, 20 January 2012. A candidate may only withdraw a nomination in writing so as to be received by the Returning Officer prior to the close of nominations.

Should the election be contested, a draw to determine the order of candidates' names on the ballot paper will be conducted at 2:00 pm, Friday, 20 January 2012 at the office of the Deputy Returning Officer. Candidates or their representatives are invited to witness the draw.

Voting:

If more than the required number of nominations is received, a poll will be held between the hours of: 8:00 am to 6:00 pm ON THURSDAY, 9 FEBRUARY 2012.

> MARIO SALIBA, Returning Officer, NSW Electoral Commission

POISONS AND THERAPEUTIC GOODS ACT 1966

Order Under Clause 175 (1), Poisons and Therapeutic Goods Regulation 2008

Withdrawal of Drug Authority

IN accordance with the provisions of clause 175 (1) of the Poisons and Therapeutic Goods Regulation 2008 an Order has been made on Dr Paul Michael SAUNDERS, MED0001196089, of 5 Birdwood Street, New Lambton 2305, prohibiting him until further notice, as a medical practitioner from supplying or having possession of drugs of addiction as authorised by clause 101 of the Regulation and issuing a prescription for a drug of addiction as authorised by clause 77 of the Regulation.

This order is to take effect on and from 23 November 2011.

Sydney, 16 November 2011.

Dr MARY FOLEY, Director-General, Ministry of Health, New South Wales

POISONS AND THERAPEUTIC GOODS ACT 1966

Order Under Clause 175 (1), Poisons and Therapeutic Goods Regulation 2008

Withdrawal of Drug Authority

IN accordance with the provisions of clause 175 (1) of the Poisons and Therapeutic Goods Regulation 2008 an Order has been made on Leonard Bruce VOCKINS, NMW0001249149 of 328 Garnet Street, Broken Hill NSW 2880 prohibiting him, until further notice, as a nurse from having possession of and supplying drugs of addiction as authorised by clauses 101 and 103 of the Regulation.

This order is to take effect on and from 16 November 2011.

Sydney, 15 November 2011.

Dr MARY FOLEY, Director-General, Ministry of Health, New South Wales

SYDNEY WATER ACT 1994 LAND ACQUISITION (JUST TERMS COMPENSATION) Act 1991

Notice of Compulsory Acquisition of Easements at Tempe, Kyeemagh and Arncliffe

SYDNEY WATER CORPORATION ABN 49 776 225 038 declares, with the approval of Her Excellency, the Governor, that the interests in the land described in Schedules 1, 2, 3, 4 and 5 of this notice are acquired by compulsory process under the provisions of the Land Acquisition (Just Terms Compensation) Act 1991 for the purpose of the Sydney Water Act 1994. In so far as any Native Title rights and interest may exist over any of the land described in Schedules 1, 2, 3, 4 and 5 the "non-extinguishment principle" as defined in section 238 of the Native Title Act 1993 (Cth), applies to the acquisitions.

Dated at Parramatta, this 24th day of November 2011.

Signed for Sydney Water Corporation by its Attorneys: MARK ROWLEY and ROBERT EDWARD SEYMOUR who hereby state at the time of executing this instrument have no notice of the revocation of the Power of Attorney Registered No. 606. Book 4541 under the Authority of which this instrument has been executed.

SCHEDULE 1

A Stratum Easement for Water Supply Purposes more fully described in Clauses 1 to 4 inclusive and Schedule 3 of Memorandum AG277407 filed at Land and Property Information, over that piece or parcel of land in the Local Government Area of Marrickville, Parish of Petersham, County of Cumberland, being part of Lot 7021 in DP 1059864 shown on DP 1155181 as "(A) PROPOSED STRATUM EASEMENT FOR WATER SUPPLY PURPOSES 6 WIDE (35.2m²)"

An Easement for Water Supply Purposes more fully described in Clauses 1 to 4 inclusive and Schedule 4 of Memorandum AG277407 filed at Land and Property Information, over that piece or parcel of land in the Local Government Area of Marrickville, Parish of Petersham, County of Cumberland, being part of Lot 7021 in DP 1059864 shown on DP 1155181 as "(B) PROPOSED EASEMENT FOR WATER SUPPLY PURPOSES 8 WIDE (TRENCHED EASEMENT) (2143m²)"

An Easement for Water Supply Purposes more fully described in Clauses 1 to 4 inclusive and Schedule 4 of Memorandum AG277407 filed at Land and Property Information, over that piece or parcel of land in the Local Government Area of Marrickville, Parish of Petersham, County of Cumberland, being part of Lot 7022 in DP 1059864 shown on DP 1155181 as "(B) PROPOSED EASEMENT FOR WATER SUPPLY PURPOSES 8 WIDE (TRENCHED EASEMENT) (2143m²)"

An Easement for Water Supply Purposes more fully described in Clauses 1 to 4 inclusive and Schedule 2 of Memorandum AG277407 filed at Land and Property Information, over that piece or parcel of land in the Local Government Area of Marrickville, Parish of Petersham, County of Cumberland, being part of Lot 7022 in DP 1059864 shown on DP 1155181 as "(C) PROPOSED EASEMENT FOR WATER SUPPLY PURPOSES 9 WIDE (MOUNDED TRAFFICABLE & ROAD CROSSING EASEMENT) (610.7m²)" An Easement for Water Supply Purposes more fully described in Clauses 1 to 4 inclusive and Schedule 1 of Memorandum AG277407 filed at Land and Property Information, over that piece or parcel of land in the Local Government Area of Marrickville, Parish of Petersham, County of Cumberland, being part of Lot 7022 in DP 1059864 shown on DP 1155181 as "(D) PROPOSED EASEMENT FOR WATER SUPPLY PURPOSES 8 WIDE (SUPPORTED NON TRAFFICABLE EASEMENT) (288.7m²)"

[Sydney Water reference: 2010/14521F]

SCHEDULE 2

A Substratum Easement for Water Supply Purposes more fully described in Clauses 1 to 4 inclusive and Schedule 3 of Memorandum AG277407 filed at Land and Property Information, over that piece or parcel of land in the Local Government Area of Rockdale, Parish of St George, County of Cumberland, being part of Lot 7 in DP 1050923 shown on DP 1153483 as "(A) PROPOSED SUBSTRATUM EASEMENT FOR WATER SUPPLY PURPOSES 6 WIDE (272.6 m²) AND 6 HIGH"

[Sydney Water reference: 2010/10807F]

SCHEDULE 3

An Easement for Water Supply Purposes more fully described in Clauses 1 to 4 inclusive and Schedule 4 of Memorandum AG277407 filed at Land and Property Information, over that piece or parcel of land in the Local Government Area of Rockdale, Parish of St George, County of Cumberland, being part of Lot 7082 in DP 1026875 shown on DP 1153494 as "(A) PROPOSED EASEMENT FOR WATER SUPPLY PURPOSES TRENCHED SECTION 8 WIDE"

A Substratum Easement for Water Supply Purposes more fully described in Clauses 1 to 4 inclusive and Schedule 3 of Memorandum AG277407 filed at Land and Property Information, over that piece or parcel of land in the Local Government Area of Rockdale, Parish of St George, County of Cumberland, being part of Lot 7082 in DP 1026875 shown on DP 1153494 as "(B) PROPOSED SUBSTRATUM EASEMENT FOR WATER SUPPLY PURPOSES"

An Easement for Cathodic Protection Anode Bed more fully described in Clauses 1 to 4 inclusive and Schedule 4 of Memorandum AG277407 filed at Land and Property Information, over that piece or parcel of land in the Local Government Area of Rockdale, Parish of St George, County of Cumberland, being part of Lot 7082 in DP 1026875 shown on DP 1161087 as "(A) PROPOSED EASEMENT FOR CATHODIC PROTECTION ANODE BED 3 WIDE (69m²)"

An Easement for Cathodic Protection Cable Conduits more fully described in Clauses 1 to 4 inclusive and Schedule 4 of Memorandum AG277407 filed at Land and Property Information, over that piece or parcel of land in the Local Government Area of Rockdale, Parish of St George, County of Cumberland, being part of Lot 7082 in DP 1026875 shown on DP 1161087 as "(B) PROPOSED EASEMENT FOR CATHODIC PROTECTION CABLE CONDUITS 1 WIDE (278m²)"

[Sydney Water reference: 2010/11384F]

SCHEDULE 4

A Stratum Easement for Water Supply Purposes more fully described in Clauses 1 to 4 inclusive and Schedule 3 of Memorandum AG277407 filed at Land and Property Information, over that piece or parcel of land in the Local Government Area of Marrickville and being part of Cooks River shown on DP 1153485 as "(A) PROPOSED EASEMENT FOR WATER SUPPLY PURPOSES 6 WIDE AND 6 HIGH"

[Sydney Water reference: 2010/10806F]

SCHEDULE 5

A Substratum Easement for Water Supply Purposes more fully described in Clauses 1 to 4 inclusive and Schedule 3 of Memorandum AG277407 filed at Land and Property Information, over that piece or parcel of land in the Local Government Area of Rockdale, Parish of St George, County of Cumberland, being part of Lot 6 in DP 1050923 shown on DP 1152704 as "(A) PROPOSED SUBSTRATUM EASEMENT FOR WATER SUPPLY PURPOSES (MICRO TUNNELLED) 6 WIDE (174m²)"

An Easement for Water Supply Purposes more fully described in Clauses 1 to 4 inclusive and Schedule 4 of Memorandum AG277407 filed at Land and Property Information, over that piece or parcel of land in the Local Government Area of Rockdale, Parish of St George, County of Cumberland, being part of Lot 6 in DP 1050923 shown on DP 1152704 as "(B) PROPOSED EASEMENT FOR WATER SUPPLY PURPOSES (TRENCHED) 8 WIDE & VAR. WIDTH (1407m²)"

An Easement for Water Supply Purposes more fully described in Clauses 1 to 4 inclusive and Schedule 2 of Memorandum AG277407 filed at Land and Property Information, over those pieces or parcels of land in the Local Government Area of Rockdale, Parish of St George, County of Cumberland, being part of Lot 6 in DP 1050923 shown on DP 1152704 as "(C) PROPOSED EASEMENT FOR WATER SUPPLY PURPOSES (MOUNDED TRAFFICABLE) 9 WIDE & VAR.WIDTH (1170m²)"

An Easement for Water Supply Purposes more fully described in Clauses 1 to 4 inclusive and Schedule 2 of Memorandum AG277407 filed at Land and Property Information, over that piece or parcel of land in the Local Government Area of Rockdale, Parish of St George, County of Cumberland, being part of Lot 6 in DP 1050923 shown on DP 1152704 as "(D) PROPOSED EASEMENT FOR WATER SUPPLY PURPOSES (SUPPORTED – TRAFFICABLE) 8 WIDE (128m²)"

An Easement for Water Supply Purposes more fully described in Clauses 1 to 4 inclusive and Schedule 1 of Memorandum AG277407 filed at Land and Property Information, over that piece or parcel of land in the Local Government Area of Rockdale, Parish of St George, County of Cumberland, being part of Lot 6 in DP 1050923 shown on DP 1152704 as "(E) PROPOSED EASEMENT FOR WATER SUPPLY PURPOSES (SUPPORTED) 8 WIDE (91m²)"

[Sydney Water reference: 2008/32377F]

NSW SERVICE MEDALLIAN

THE following were the recipients of the NSW Service Medallian presented on 2 November 2011:

Name	Employer at commencement of service	Date commenced	Nominating Department
Mr Arthur ADAMS	Housing Commission of NSW	19 April 1971	Department of Human Services, Housing NSW
Mrs Carol BATHIS	Department of Conservation	21 January 1971	Department of Premier and Cabinet – Parliamentary Counsel's Office
Mr Geoffrey BAXTER	Water Conservation and Irrigation Commission	6 April 1970	Department of Services, Technology & Administration
Mr Michael BRIDGE	NSW Police Force	25 January 1971	Department of Family & Community Services – NSW Businesslink
Mr Peter BUTLER	Department of the Attorney General and Justice	21 January 1971	Department of Justice and Attorney General
Mr David CLARK	Department of Railways	1970	WorkCover Authority
Mr Michael CORRIGAN	Department of Railways	25 January 1971	Department of Human Services, Housing NSW
Mr Roy CRADDOCK	Electricity Commission of NSW	9 February 1970	Department of Services, Technology & Administration
Mr Brodie DRUETT	Department of Main Roads	16 February 1971	Department of Human Services, Housing NSW
Mr Brian FENN	Department of the Attorney General and Justice	18 January 1971	Department of Justice and Attorney General
Mr Peter FITZPATRICK	Department of the Attorney General and Justice	25 January 2971	Department of Justice and Attorney General
Ms Linda GOSLING	Department of Public Works	15 February 1971	Department of Human Services, Housing NSW
Mr Robert GREEN	Department of Agriculture	20 December 1965	Department of Services, Technology & Administration
Mr Stephen GREEN	Department of Public Works	2 April 1970	Department of Services, Technology & Administration
Mr Russell GROVE	Legislative Assembly	15 February 1971	Department of the Legislative Assembly
Mr Rodney HALE	Department of Public Works	17 February 1969	Department of Services, Technology & Administration
Mr Ross HANNAH	NSW Police Force	26 June 1963	Department of Justice and Attorney General – Corrective Services NSW
Mr Raymond HART	Department of Main Roads	8 February 1971	Department of Human Services, Housing NSW
Mr Mario HERISSON	Housing Commission of NSW	5 January 1971	Department of Human Services, Housing NSW
Mr Graham HOLLEY	Department of Youth, Ethnic and Community Affairs	1971	Department of Human Services, Housing NSW
Mr Christopher HOOPPELL	Department of Public Works	13 December 1965	Department of Services, Technology & Administration
Mr Maurice HORSFALL	Housing Commission of NSW	30 January 1968	Department of Human Services, Housing NSW
Mr Roger HYMAN	Department of Lands	4 January 1963	Office of the Director of Public Prosecutions

Name	Employer at commencement of service	Date commenced	Nominating Department
Mr Ian McCREA	Valuer General NSW	2 February 1971	Department of Family & Community Services – NSW Businesslink
Mr Paul McGRATH	Department of the Attorney General and Justice	2 February 1970	Department of Justice and Attorney General
Mr Graham McMAHON	Department of Railways	29 April 1963	Fire and Rescue NSW
Mr Paul MYERS	Corporate Affairs Commission	16 February 1970	Department of Services, Technology & Administration
Mr Stephen NICHOLS	Soil Conservation Service	15 February 1971	Department of Environment, Climate Change & Water
Mr Peter NICHOLSON	NSW Police Force	21 December 1970	NSW Police Force
Mr Stephen NIEUWENDYK	Housing Commission of NSW	January 1971	Department of Family & Community Services – NSW Businesslink
Mrs Lorraine POOLE	NSW Government Stores Department	22 February 1965	Department of Services, Technology & Administration
Mr Christopher RAWLINGS	Public Trustee	28 February 1969	Department of Justice and Attorney General
Mr Scott RENWICK	Department of Public Works	6 July 1970	Department of Environment, Climate Change & Water
Mr Peter REYNOLDS	Registrar General's Department	12 February 1968	Department of Environment, Climate Change & Water
Mr Peter RYAN	Department of Corrective Services	5 February 1968	Department of Services, Technology & Administration
Mr Paul SMITH	Department of the Attorney General and Justice	18 January 1971	Department of Justice and Attorney General
Mr William SMITH	Water Conservation and Irrigation Commission	22 February 1961	Department of Services, Technology & Administration
Mr William STRACHAN	Department of Public Works	17 February 1969	Department of Services, Technology & Administration
Mr David SUPRAIN	Department of Lands	20 January 1969	Department of Human Services, Housing NSW
Ms Christine TURNER	Department of Mineral Resources	2 November 1970	Department of Services, Technology & Administration
Mr Brian WADDINGTON	NSW Treasury	30 January 1968	NSW Treasury – Office of Financial Management
Mr Garry WALDEN	Department of Public Works	6 April 1967	Department of Services, Technology & Administration
Mr Warren WALKER	Department of Education and Training	14 September 1971	TAFE NSW
Mr Allan WALL	Department of Public Works	31 March 1969	Department of Services, Technology & Administration
Mr Leslie WRIGLEY	NSW Public Service Board	15 January 1968	Department of Services, Technology & Administration
Miss Robyn YOUNG	Registrar General's Department	September 1966	Department of Premier and Cabinet, Office of Environment and Heritage
Mr Joseph ZIVKOVIC	Department of Public Works	5 January 1970	WorkCover Authority

PUBLIC LOTTERIES ACT 1996

KENO – APPROVAL OF RULES

I, The Honourable GEORGE SOURIS, M.P., Minister for Tourism, Major Events, Hospitality and Racing and Minister for the Arts, being the Minister administering the Public Lotteries Act 1996 (hereinafter referred to as "the Act") pursuant to section 23 (1) of the Act DO HEREBY APPROVE the Rules annexed to this instrument for the conduct of Games of Keno by the joint licensees ClubKENO Holdings Pty Limited and Keno (NSW) Pty Ltd effective from the date of gazettal.

Dated this 25th day of November 2011.

The Honourable GEORGE SOURIS, M.P.,

Minister for Tourism, Major Events, Hospitality and Racing and Minister for the Arts

KENO RULES

1. General

These Rules govern the playing of Keno and are effective on and from 2 December 2011.

Subject to the Act and these Rules, the Game of Keno is the exclusive responsibility of the Licensees and the Venues.

2. Definitions

- (a) In these Rules unless inconsistent with the context:
 - (i) "Act" means the Public Lotteries Act 1996, as that Act may be amended from time to time, and any regulations made thereunder;
 - (ii) "Approved" means approved in writing by the Minister and "Approval" has a corresponding meaning;
 - (iii) "Backup Site" means the site at which the computer system which acts as a backup to the Central Site Computer is located;
 - (iv) "Bonus Prize" means an Approved prize offered to Subscribers to a Game of Keno over and above those prizes indicated on any Schedule of Prizes;
 - (v) "Box" or "Boxed" means an option on the "Quinella Place", "Quinella", "Exact Quinella", "Trio",
 "Trifecta", "Quartet", "Five Up" and "Superfecta" bet types in a game of Keno Racing that allows a Subscriber to forecast the result of the game by combining their selected Rows into all possible combinations on one Entry. A Subscription is payable in respect of each combination;
 - (vi) "Casino Licensee" means a holder of a licence granted under section 18 of the Casino Control Act 1992;
 - (vii) "Cash Game" means a game in which an approved Bonus Prize is offered.
 - (viii) "Category", and references to a game being of a particular "Category", means a Category listed in a table in the licence held by the Licensees, which governs the apportionment of each Subscription for each game, including the Commission and the Keno Prize Fund Contribution. Each type of game is allocated a Category under these Rules;
 - (ix) "Central Site" means the site at which the Central Site Computer is operative and in direct control of the computing of the Game of Keno;
 - (x) "Central Site Computer" means the computer system that is used to process, store and display the Game of Keno;
 - (xi) "Chip" means a chip issued by a Casino Licensee under the Casino Control Act 1992;
 - (xii) "Club" means a club holding a certificate of registration under the Registered Clubs Act 1976.

(xiii) "Column" or "Columns" means the 12 numbers in 1 column of the Keno Roulette Grid whereby: Column 1 means the numbers: 1, 4, 7, 10, 13, 16, 19, 22, 25, 28, 31 and 34, Column 2 means the numbers: 2, 5, 8, 11, 14, 17, 20, 23, 26, 29, 32 and 35 and Column 3 means the numbers: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33 and 36;

- (xiv) "Combination" means a combination of 1 to 10, 15, 20 and 40 Spots selected by the Subscriber from the 80 available numbers, where each Combination is taken to be a separate Game played by the Subscriber;
- (xv) "Combination Bet" means an advanced form of Entry whereby a Subscriber may play 2 or more different Combinations in the same game on the same Entry.
 The Subscriber (or in the case of a Standard Superplay, the Central Site Computer) selects the Spots and creates non-intersecting groups of those Spots ("Groups") on the one Entry. A Group may comprise of a minimum one Spot only. A Spot may not form (and will not be counted as forming) part of more than one Group. All Spots forming part of a particular Group will be identified on the Receipt Ticket by the same alpha or alpha numeric character, which character will be different from the characters allocated to the Spots comprising other Groups.
 The Combinations are formed by combining all the Spots in a Group or by combining all the Spots in a Group with all the Spots in another Group.

in a Group with all the Spots in another Group or Groups. The Subscriber must nominate the types of Combinations (except in the case of a Superplay, in which case the types of Combinations are preprogrammed), the amount to be wagered for each Combination and the number of games to be played.

	A Subscriber may (but need not) nominate all types of Combinations capable of being formed using the Groups selected ("All Combinations Bet"). For each type of Combination, the Subscriber must play the maximum number of Combinations which can be played using the Groups selected. This maximum number is as calculated by the Central Site Computer and specified on the Receipt Ticket;
(xvi)	"Combo Bet" has the same meaning as Combination Bet;
(xvii)	"Commission" means an amount paid to a Venue by Subscribers, in the Venue's own right (and not as agent of the Licensees), and which:
	(A) the Venue is entitled to deduct and retain from the Gross Subscription which the Venue receives from the Subscriber and deals with as agent of the Subscriber, pursuant to Rule 7 (f); or
	(B) the Operating Company is directed by the Subscriber to pay to the Venue, on behalf of the Subscriber, from the face value of a Prepaid Voucher, in accordance with the terms of the Prepaid Voucher and Rule 9B (a); or
	(C) the Venue is entitled to deduct and retain from the amount received from a Subscriber for the purchase of a Gift Voucher, in accordance with Rule 9A (b).
(xviii)	"Corner" or "Corners" means a square of 4 adjacent numbers in the Keno Roulette Grid;
(xix)	"Crossed Cheque" means a cheque crossed as referred to in section 53 of the Cheques Act 1986 of the Commonwealth;
(xx)	"Customer Session" means the period of time when a Subscriber either: (i) makes an Entry in a Game of Keno; or

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- (ii) checks a Receipt Ticket; or
- (iii) cancels an Entry in a Game of Keno
- to that time when the End Customer Terminal key is activated;
- (xxi) "Customised Superplay" means a form of Combination Bet where the types of Combinations, the Groups and the Spots forming part of each Group applicable to that Combination Bet have been previously programmed for a particular Venue to accommodate particular Subscribers at that Venue and made available by that Venue from time to time;
- (xxii) "Delayed Start Entry" means an Entry for a game which is not open at the time the Receipt Ticket for that Entry is issued;
- (xxiii) "Delayed Start Game" means an Approved game in which Delayed Start Entries are permitted;
- (xxiv) "Drawing", "Draw" or "Drawn" means the random selection by a Draw Device of 20 winning numbers;
- (xxv) "Draw Device" means a device Approved for conducting a Draw being an electronically operated device which selects at random and one at a time from a set of one to eighty numbers, the 20 winning numbers, in each Game of Keno;
- (xxvi) "Entry" means an entry referred to in Rule 7;
- (xxvii) "Entry Form" means an Approved form that may be completed by a person wishing to enter a Game of Keno;
- (xxviii) "Game of Keno" means the competition styled "Club Keno" or "Star Keno" conducted under the Act and "Keno", "Keno game" and "game" shall have the same meaning;
- (xxix) "Game Results Inquiry" means a request from a Subscriber to display on a Terminal or to display on and print from a Terminal the results of a game or games;
- (xxx) "Gift Voucher" means an Approved document issued by a Venue which is the acknowledgment of the payment of money by a Subscriber and which entitles the holder (whether the initial Subscriber or another) to enter a particular type of Game of Keno;
- (xxxi) "Group" has the meaning given in Rule 2 (a) (xiv);
- (xxxii) "Gross Subscription" means (subject to Rule 11 regarding cancellation of Entries) the amount prescribed by the Minister to be paid by a Subscriber for entry to a Game of Keno, and includes the amount of Commission received and retained by a Venue pursuant to Rule 7 (f), and also includes the face value of Gift Vouchers, Prepaid Vouchers and Subscription Chips which have been used as Subscriptions for Games of Keno, and the applicable amount of the face value of SST Receipts that is used as Subscriptions for Games of Keno;
- (xxxiii) "Heads or Tails?" means the form of the Game of Keno, being a Category Q game, which may be played separately to other forms of the Game of Keno, the object of which is to forecast the distribution of the Drawn numbers. In this form of game, a Subscriber attempts to forecast the result of a single Game of Keno as being one of "Heads", "Tails" or "Evens" as described following:
 - (a) The result of a game is "Heads" when 11 or more of the 20 numbers Drawn in that Game of Keno are numbers in the range 1 to 40 inclusive;
 - (b) The result of a game is "Tails" when 11 or more of the 20 numbers Drawn in that Game of Keno are numbers in the range 41 to 80 inclusive;
 - (c) The result of a game is "Evens" when ten (10) of the 20 numbers Drawn in that Game of Keno are numbers in the range 1 to 40 inclusive and ten (10) of the 20 numbers Drawn in the same Game of Keno are numbers in the range 41 to 80 inclusive;

If the Subscriber correctly forecasts the result of that game, then, subject to these Rules, a prize will be payable calculated in accordance with Rule 18 (c);

- (xxxiv) "Hotel" means the holder of an hotelier's licence under the Liquor Act 1982 (NSW) or an Hotel Licence under the Liquor Act 2007 but not being a general bar licence;
- (xxxv) "Inspector" means a person appointed by the Minister as an inspector under section 69 of the Act to undertake functions associated with the conduct of the Game of Keno;
- (xxxvi) "Jackpot" means the Regular Keno Jackpot and Keno Racing Jackpot;
- (xxxvii) "Jackpot Fill" means the sum described as the Jackpot Fill (if any) in Rule 18;
- (xxxviii) "Jackpot Growth" means (as the case may be):
 - (a) for the Regular Keno Jackpot, the amount accrued at any given time in respect of the relevant Game of Keno as provided for in Rule 10 (b); and
 - (b) for the Keno Racing Jackpot, the amount accrued at any given time in respect of the relevant Game of Keno as provided for in Rule 10 (c);
- (xxxix) "Keno Bonus" means the form of the Game of Keno, being a Category I game, which may only be played in conjunction with certain other forms of the Game of Keno as determined by the Operating Company (except Keno Racing), by which:
 - (a) the Subscription for the Game of Keno it is played in conjunction with is multiplied by the Multiplier for the sole purpose of determining the prize payable on that Game of Keno in accordance with the Schedule of Prizes; and
 - (b) where Keno Bonus is played in conjunction with a Regular Keno Jackpot, the Keno Bonus Jackpot Prize is payable on winning a Regular Keno Jackpot game;
- (xl) "Keno Bonus Jackpot Prize" means the prize offered in respect of a Keno Bonus game played by a Subscriber in conjunction with Regular Keno Jackpot where a Regular Keno Jackpot Prize is payable and the Multiplier is either 2, 3, 4, 5 or 10.;
- (xli) "Keno Day" means the period between the start of Keno trading and the close of Keno trading, identified by the calendar day on which that period commenced;
- (xlii) "Keno Grid" means the standard layout of the range of the numbers 1 to 80 on a Standard Game Entry Form;
- (xliii) "Keno Player Card" or "KPC" means an Approved card or device issued by the Operating Company to a successful applicant. An applicant can store their favourite numbers on the KPC and use the KPC to enter a Game of Keno.
- (xliv) "Keno Prize Fund" means the account established for payment of prizes that receives from Net Subscriptions an amount equal to the Keno Prize Fund Contributions;
- (xlv) "Keno Prize Fund Contribution" means:
 - (a) for Heads or Tails? and Keno Roulette, being Category Q games an amount equal to 80% of Subscriptions; and
 - (b) for Regular Keno, Keno Racing, Lucky Last and Keno Bonus, all being Category I games an amount equal to 75% of Subscriptions;
- (xlvi) "Keno to Go" means a Multi-Game Entry for not less than 50 games;
- (xlvii) "Keno Racing" means the form of the Game of Keno, being a Category I game, which may be played separately to other forms of the Game of Keno, the object of which is to forecast the distribution of the Drawn numbers across the Rows of the Keno Grid in each game. In this form of the Game of Keno, a Subscriber attempts to forecast which Row shall be "First", "Second", "Third", "Fourth", "Fifth" or "Sixth" as described following:
 - (a) "First" is the Row that has the most amount of Drawn numbers at the end of the Game of Keno;
 - (b) "Second" is the Row that has the second most amount of Drawn numbers at the end of the Game of Keno;
 - (c) "Third" is the Row that has the third most amount of Drawn numbers at the end of the Game of Keno;
 - (d) "Fourth" is the Row that has the fourth most amount of Drawn numbers at the end of the Game of Keno;
 - (e) "Fifth" is the Row that has the fifth most amount of Drawn numbers at the end of the Game of Keno;
 - (f) "Sixth" is the Row that has the sixth most amount of Drawn numbers at the end of the Game of Keno;

Where two or more Rows have the same amount of Drawn numbers at the end of the Game of Keno, the Row that achieved that amount of Drawn numbers earliest in time in the Game of Keno shall be placed ahead of the other Row or Rows and so on until an order is achieved. (In the event that two or more Rows each have no Drawn numbers at the end of the Game of Keno, each of these Rows shall be deemed to finish equal in the next available place in that Game).

In this form of Game of Keno, a Subscriber may select one or more bet types in attempting to forecast the order of the Rows. These bet types are described as follows:

- (a) "Win", where a Subscriber attempts to forecast which Row shall be "First";
- (b) "Place", where a Subscriber attempts to forecast that a selected Row shall be either "First", "Second" or "Third";
- (c) "Quinella Place", where a Subscriber attempts to forecast any two Rows that shall be "First", "Second" or "Third" irrespective of their order;
- (d) "Quinella", where a Subscriber attempts to forecast which two Rows shall be "First" and "Second" irrespective of their order;
- (e) An "Exact Quinella", where a Subscriber attempts to forecast which two Rows shall be "First" and "Second" in the correct order;
- (f) A "Trio", where a Subscriber attempts to forecast which three Rows shall be "First", "Second" and "Third" irrespective of their order;
- (g) A "Trifecta", where a Subscriber attempts to forecast which three Rows shall be "First", "Second" and "Third" in the correct order;
- (h) A "Quartet", where a Subscriber attempts to forecast which four Rows shall be "First", "Second", "Third" and "Fourth" in the correct order;
- (i) A "Five Up", where a Subscriber attempts to forecast which five Rows shall be "First", "Second", "Third", "Fourth" and "Fifth" in the correct order; and
- (j) A "Superfecta", where a Subscriber attempts to forecast which six Rows shall be "First", "Second", "Third", "Fourth", "Fifth" and "Sixth" in the correct order.

If the Subscriber correctly forecasts the result of that game, then, subject to these Rules, a prize shall be payable calculated in accordance with Rule 18 (d);

- (xlviii) "Keno Racing Jackpot" means the form of the Game of Keno Racing, the object of which is to correctly forecast either the first four Rows in the correct order ("Quartet"), the first five Rows in the correct order ('Five Up") or the first six Rows in the correct order ("Superfecta");
- (xlix) "Keno Racing Jackpot Prize" means the prize offered in respect of an Entry in a Keno Racing Jackpot which correctly forecasts either the first four rows in the correct order ("Quartet"), the first five rows in the correct order ("Five Up") or the first six rows in the correct order ("Superfecta");
 - "Keno Roulette" means the form of the Game of Keno, being a Category Q game, which may be played separately to other forms of the Game of Keno, the object of which is to forecast the Keno Roulette Number. In this form of the game, a Subscriber may select one or more bet types in attempting to forecast the result of a single game. These bet types are described as follows:
 - (a) "Straight Up" means a type of bet where a Subscriber attempts to forecast that the Keno Roulette Number will be a single selected number in the range 1 to 36, 0 or 00 in the Keno Roulette Grid;
 - (b) "Pairs" means a type of bet where a Subscriber attempts to forecast that the Keno Roulette Number will be one of a selected Pair of numbers in the Keno Roulette Grid;
 - (c) "Rows" means a type of bet where a Subscriber attempts to forecast that the Keno Roulette Number willl be one of a single selected Row of numbers in the Keno Roulette Grid;
 - (d) "Corners" means a type of bet where a Subscriber attempts to forecast that the Keno Roulette Number will be one of a selected Corner of numbers in the Keno Roulette Grid;
 - (e) "Columns" means a type of bet where a Subscriber attempts to forecast that the Keno Roulette Number will be one of a selected single Column of numbers in the Keno Roulette Grid;
 - (f) "Six-Line" means a type of bet where a Subscriber attempts to forecast that the Keno Roulette Number willl be one of any six numerically consecutive numbers (the first of which must commence in the 1st Column) in the Keno Roulette Grid;
 - (g) "Dozens" means a type of bet where a Subscriber attempts to forecast that the Keno Roulette Number will be one of a selected dozen of numbers, being between either 1 – 12 inclusive, 13 – 24 inclusive or 25 – 36 inclusive;
 - (h) "Low or High" means a type of bet where a Subscriber attempts to forecast that the Keno Roulette Number will be one of a "low" number (being any of numbers 1 – 18 inclusive) or a "high" number (being any of numbers 19 – 36 inclusive);
 - (i) "Red or Black" means a type of bet where a Subscriber attempts to forecast that the Keno Roulette Number will be either "red" (being any numbers of 1, 3, 5, 7, 9, 12, 14, 16, 18, 19, 21, 23, 25, 27, 30, 32, 34 or 36) or "black" (being any numbers of 2, 4, 6, 8, 10, 11, 13, 15, 17, 20, 22, 24, 26, 28, 29, 31, 33 or 35);
 - (j) "Odd or Even" means a type of bet where a Subscriber attempts to forecast that the Keno Roulette Number will be either an "odd" number (being any of numbers 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 33 or 35) or an "even" number (being any of numbers 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34 or 36);

If the Subscriber correctly forecasts the result of that game, then, subject to these Rules, a prize will be payable calculated in accordance with Rule 18 (e);

(1)

(li) "Keno Roulette Grid" means the standard layout of the range of numbers 0, 00 and 1 to 36 on a Roulette Game Entry Form; (lii) "Keno Roulette Number" means the winning number (first "number" Drawn) in a Game of Keno Roulette. The Keno Roulette Number is one of 1 to 36, "0" or "00". For the purposes of clarification, "0" and "00" are different Keno Roulette Numbers. The Keno roulette Number will be derived from the first number Drawn in each game. Should the first number Drawn not represent a Keno Roulette Number, the second number Drawn is used and so on until a Keno Roulette Number has been derived. The Keno Roulette Number is determined as follows: Drawn numbers 1 to 36 represent Keno Roulette Numbers 1 to 36 respectively; Drawn numbers 41 to 76 represent Keno Roulette Numbers 1 to 36 respectively; Drawn numbers 37 and 77 represent keno Roulette Number "0"; Drawn numbers 38 and 78 represent Keno Roulette Number "00"; Drawn numbers 39, 40, 79 and 80 do not represent a Keno Roulette Number and the next number Drawn will be used. "Keno Runner" means a person authorised by a Venue to collect Subscriptions directly from the (liii) Subscriber; (liv) "Key Employee" has the meaning assigned to "key employee" by Section 4 of the Act; (lv)"Kwikpik" means the form of Entry whereby: (a) a Subscriber nominates the Subscription for each game, the number of Spots and the number of games and the Terminal selects the Spots; or (b) in Keno Racing, a Subscriber nominates the bet type, the Subscription and, where applicable, whether the bet shall be Boxed and the Terminal selects the Rows; or (c) in Keno Roulette, a Subscriber nominates the bet type, the number of selections to be made, the Subscription and the Terminal selects the Straight Ups, Pairs, Rows, Corners, Columns, Six Line, Dozens, Low or High, Red or Black and Odds or Evens as applicable; or (d) in Heads or Tails? Prepick and Let it Run, a Subscriber nominates the bet type, the number of games, the Subscription and the Terminal selects the Heads, Tails or Evens selection for each game. More than one Kwikpik (a Multipik) can be played on a single ticket. (lvi) "Let it Run" means the form of Prepick in which, subject to Rule 9 (c) and 9 (l), if the Subscriber correctly forecasts the result of the first game in a chosen series, the amount of the prize as specified in Rule 18 (c) on that game is carried over as the Subscription for the next game in the series and in which this procedure continues until such time as the series of games is complete or the Subscriber incorrectly forecasts one of the game results in the series or the Subscriber cancels the ticket; "Licensees" means Clubkeno Holdings Pty Limited ABN 51 002 821 570 and Jupiters Gaming (NSW) (lvii) Pty Limited ABN 16 003 992 327; (lviii) "Lucky Last" means the form of the Game of Keno, being a Category I game, which may only be played in conjunction with certain other forms of the Game of Keno as determined by the Licensees (except Heads or Tails?, Keno Racing and Keno Roulette), the object of which is to match a selected number against the last number Drawn in that game; (lix) "Major Prize" means a prize of more than \$1,000 won in a Game of Keno but does not include that part of the prize comprising the Jackpot Fill, Jackpot Growth or Keno Bonus Jackpot Prize (if any); "Minister" means the Minister for the time being administering the Act or the Minister's duly appointed (lx)representative, delegate or replacement; (lxi) "Multi-Game" means the form of Entry whereby a Subscriber enters a number of games; (lxii) "Multipik" means when more than one Kwikpik is played on a single ticket "Multiplier" means the multiplier that applies to the cumulative total of the twenty numbers Drawn (lxiii) from numbers between 1 and 80 where: (a) the multiplier of 1x is assigned to the cumulative totals set out in Part A of the schedule; (b) the multiplier of 2x is assigned to the cumulative totals set out in Part B of the schedule; (c) the multiplier of 3x is assigned to the cumulative totals set out in Part C of the schedule; (d) the multiplier of 4x is assigned to the cumulative totals set out in Part D of the schedule; (e) the multiplier of 5x is assigned to the cumulative totals set out in Part E of the schedule; and (f) the multiplier of 10x is assigned to the cumulative totals set out in Part F of the schedule; (lxiv) "Net Subscription" means the amount which the Venues hold and deal with as agent of the Licensees in accordance with Rule 7 (h), being the Gross Subscription less the Commission including that part of the face value of a Gift Voucher, Prepaid Voucher or a Subscription Chip or an SST Receipt which has been used as a Subscription, remaining after payment of the Venue's Commission in accordance with Rule 9A (b), Rule 9B (a) or Rule 9C (c), as the case may be; (lxv)"Operating Company" means Jupiters Gaming (NSW) Pty Limited ABN 16 003 992 327;

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	(lxvi)	"Pair" or "Pairs" means a range of 2 vertically or horizontally adjacent num Grid;	bers in the Keno Roulette	
	(lxvii)	"Parlay" means the form of Entry whereby a Subscriber, subject to Rule 15 (d), chooses to subscribe all or part of the Total Prize Money instead of collecting the Total Prize Money;		
	(lxviii)	"Premises" means the premises owned or occupied by a Venue, at which a Venue is permitted to accep Entries and Subscriptions for Games of Keno pursuant to these Rules, and in respect of a Casino License means the area or areas defined or redefined as the boundaries of the casino pursuant to section 19 o the Casino Control Act 1992;		
	(lxix)	"Prepaid Voucher" means an Approved document issued by the Operating Company or a Venue, which is an acknowledgment of the payment of money (whether by the Operating Company or a Venue) and which operates as a direction to the Operating Company to pay an amount on behalf of the holder, and entitles the holder to enter a particular type of Game of Keno;		
	(lxx)	"Prepick" means the form of Heads or Tails? in which a Subscriber can vary or Evens over a series of up to five (5) consecutive games of Heads or Tails		
	(lxxi)	"Print Pay Ticket" means a ticket issued by a Terminal detailing all games of by an Entry;	entered and all prizes won	
	(lxxii)	"Pro rating" means the proportional reduction in value of all Major Prizes, B Approved prizes, in a Game of Keno so that the aggregate value of those pr		
	(lxxiii)	"Quick Pick" has the same meaning as Kwikpik;		
	(lxxiv)	"Receipt Ticket" means the serial numbered ticket issued by a Terminal particulars of an Entry;	on which is recorded the	
	(lxxv)	"Regular Keno" means the form of Game of Keno, being a Category I game 1 to 10, 15, 20 or 40 numbers, from the set: 1 to 80, the object being to match those numbers against the 20 winning numbers Drawn in each game	ch (or in some cases not to	
	(lxxvi)	"Regular Keno Jackpot" means the form of the Game of Keno the object of v (7), eight (8), nine (9) or ten (10) spots selected, as the case may be, against th in that game;		
	(lxxvii)	"Regular Keno Jackpot Prize" means the prize offered in respect of a Reg played by a Subscriber which matches all Spots selected against the 20 with that game.		
	(lxxviii)	"Replay" means the form of Entry whereby a Subscriber submits a Receip instructions for any particular of the Entry which varies from the particular Ticket;		
	(lxxix)	"Roulette Game Entry Form" means an Approved form that may be complet play Keno Roulette;	ted by a person wishing to	
	 (lxxx) "Row" or "Rows" means a range of 3 numbers in one row of the Keno Roulette Grid whereby: Row 1 means the range 1 to 3 inclusive, Row 2 means the range 4 to 6 inclusive, Row 3 means the range 7 to 9 inclusive, Row 4 means the range 10 to 12 inclusive, Row 5 means the range 13 to 15 inclusive, Row 6 means the range 16 to 18 inclusive, Row 7 means the range 19 to 21 inclusive, Row 8 means the range 22 to 24 inclusive; Row 9 means the range 25 to 27 inclusive; Row 10 means the range 31 to 33 inclusive; 		lette Grid whereby:	
	(lxxxi)	Row 12 means the range 34 to 36 inclusive; "Self Service Terminal" or "SST" means a Subscriber operated Terminal that the option of purchasing Entries (such Entries may be purchased independer a person submitting their Keno Player Card), checking and redeeming Recei- using SST Receipts.	ntly or in conjunction with	
	(lxxxii)	"Schedule of Prizes" means the lists of prizes specified in Rule 18;		
	(lxxxiii)	"Senior Writer" means the person authorised by a Venue to be in control of the Premises of that Venue;	f the operation of Keno at	
	(lxxxiv)	"Set Bet" has the same meaning as Superplay;		
	(lxxxv)	"Spot" means an integer selected from the range of 1 to 80;		
	(lxxxvi)	"SST Receipt" means a ticket issued by a Terminal which is an acknowledg make an Entry, give change from an Entry or pay out winnings that a Subscr face value of cash and/or tender for payment of a Subscription for a Game of	iber may redeem up to the	

- (lxxxvii) "Standard Game Entry Form" means the Approved form that may be completed by a person wishing to play Regular Keno;
- (lxxxviii) "Standard Superplay" means a form of Combination Bet where the number of Groups, the size of each Group and the types of Combinations applicable to that Combination Bet have been pre-programmed into the Central Site Computer by the Operating Company and made available to Subscribers generally from time to time, the details for which are set out in the officially sanctioned brochures displayed or available for inspection at any Venue. The Central Site Computer selects the Spots forming part of each Combination;
- (lxxxix) "Standout" means an option on the "Quinella Place", "Quinella", "Exact Quinella", "Trio", "Trifecta", "Quartet", "Five Up" and "Superfecta" bet types in a game of Keno Racing that allows a Subscriber to nominate a particular Row or Rows that will finish "First" or "Second", in the case of a "Quinella" or "Exact Quinella"; "First", "Second" or "Third" in the case of a "Quinella Place"; "Trio" or "Trifecta"; "First", "Second", "Third" or "Fourth" in the case of a "Quartet"; "First, "Second", "Third" or "Fourth" in the case of a "Quartet"; "First, "Second", "Third", "Fourth" or "Fifth in the case of a "Five Up"; "First", "Second", "Third", "Fourth", "Fifth" or "Sixth" in the case of a "Superfecta" and to forecast the results of the game by combining these selections with other selected Rows to fill the other placing(s). A Subscription is payable in respect of each combination;
- (xc) "Subscriber" means:
 - (i) a person who subscribes to the Game of Keno by way of Entry; and
 - (ii) where the context permits in, and for the purposes of, Rules 9A, 9B and 9D a person who purchases a Gift Voucher, a person who receives a Prepaid Voucher or a person who receives a SST Receipt; and
 - (iii) where, in its absolute discretion, the Operating Company thinks it appropriate, includes a person who bears or submits a Receipt Ticket; and
 - (iv) where any person defined in sub paragraph (i), (ii) or (iii) is under a legal incapacity or has died, includes the legal personal representative of such person;
- (xci) "Subscription" means a Gross Subscription unless otherwise stated in these Rules;
- (xcii) "Subscription Chip" means a Chip used by a Subscriber either for entry to a Game of Keno or for the purchase of a Gift Voucher;
- (xciii) "Superplay" means the form of Entry whereby a Subscriber nominates:
 - (a) a Standard Superplay; or
 - (b) a Customised Superplay.

In both cases the Subscriber nominates the amount to be wagered for each Combination and the number of games;

- (xciv) "Supervisor" means a person appointed by the Operating Company to supervise the operation of Keno games;
- (xcv) "Terminal" means an Approved device for either:
 - (i) the processing of Entries, the issuing of Receipt Tickets or SST Receipts and the processing of claims; or
 - (ii) the processing of Entries and the issuing of Receipt Tickets or SST Receipts;
- (xcvi) "Total Prize Money" means the total amount of money payable to a person, as a result of the person winning money in respect of a Customer Session in a Game of Keno (whether or not that Customer Session relates to one or more than one, game or Entry in the Game of Keno);
- (xcvii) "Unclaimed Prize" means a prize that remains unclaimed for a period of 12 months after the date on which the Game of Keno to which the prize relates was conducted or an SST Receipt that has not been redeemed in full for cash or tendered by way of Subscription in a Game of Keno within 12 months of its date of issue;
- (xcviii) "Unclaimed Prize Claim Form" means the document to be completed by a Subscriber in the event that:
 - (i) a Receipt Ticket or SST Receipt is lost or mutilated; or
 - (ii) a Receipt Ticket's or SST Receipt's record is no longer resident on magnetic media on the Central Site Computer;
- (xcix) "Venue" means a Club, a Casino Licensee or a Hotel, appointed by the Licensees to accept Subscriptions for games of keno, and refers to the Venue acting in its own right or as agent of the Licensees or of the Subscriber, as the context requires.
- (c) "Verbal Entry" means the form of Entry which may be effected by the issue of verbal instructions by a person wishing to enter a Game of Keno and the issue of a Receipt Ticket (such verbal instructions may be issued independently or in conjunction with a person submitting their Keno Player Card);
- (ci) "With the Field" means an option on the "Quinella Place", "Quinella", "Exact Quinella", "Trio", "Trifecta", "Quartet", "Five Up" and "Superfecta" bet types in a game of Keno Racing that allows a Subscriber to combine their selected Rows with all the remaining Rows in the Keno Grid. A Subscription is payable in respect of each combination;
- (cii) "Writer" means a person authorised by a Venue to operate a Terminal at the Premises of that Venue.

- (b) In these Rules unless inconsistent with the context:
 - (i) a reference to the singular shall include the plural, and vice versa;
 - (ii) a reference to a person shall include an organisation of persons whether incorporated or unincorporated;
 - (iii) except in relation to a Delayed Start Entry a reference to a number of games shall be taken to mean a number of consecutive games commencing with the game which is open at the time the Receipt Ticket for that Entry is issued;
 - (iv) headings are for convenient reference only and have no effect in limiting or extending the language of the provisions to which they refer;
 - (v) all references to sums of money are references to Australian dollars.

3. Application of these Rules

- (a) These Rules are to be read subject to the Act and shall apply to every Game of Keno. If there is any inconsistency between the Act and these Rules, the Act will prevail to the extent of any inconsistency.
- (b) These Rules shall be binding on all Subscribers and by making an Entry in a Game of Keno, purchasing a Gift Voucher or accepting a Prepaid Voucher, Subscribers agree to be bound by these Rules.

4. Object

The object of the Game of Keno, known as Regular Keno, is to select from 1 to 10, 15, 20 or 40 numbers, from the set: 1 to 80 and to match (or in some games not to match) those numbers against the 20 winning numbers Drawn in each game. A number of other forms of the Game of Keno also exist. These may be varied or discontinued and other forms of the Game of Keno may be introduced by the Operating Company from time to time.

5. Eligibility for Inclusion in a Game of Keno

In order to be eligible for inclusion in a Game of Keno, a Receipt Ticket, the details of which must be recorded and be resident on magnetic media at the Central Site, must be issued to the Subscriber.

5A. Ineligibility of Certain Persons to Enter a Game of Keno

- (a) A Key Employee, an Inspector or an employee of the Licensees must not enter a Game of Keno.
- (b) An employee of a Venue during such time as that employee is in any way engaged in the operation of a Game of Keno must not enter a Game of Keno.
- (c) No person under the age of 18 years shall be permitted to enter a Game of Keno, whether personally, through another person, by mail, by using a Self Service Terminal, by electronic means or otherwise.
- (d) No person may make an Entry on behalf of a person under the age of 18 years.

6. Key Staff

(a) Operating Company

A Supervisor must be present at all times while the game is in progress at the Central Site or at the Backup Site where a Draw Device is operative and the Supervisor is responsible for ensuring that the game is conducted in accordance with these Rules.

(b) Venue

A Senior Writer must be present at the Premises at all times while the game is in progress at those Premises and the Senior Writer is responsible for ensuring that the game is conducted in accordance with these Rules.

6A. Responsibility of Venue

- (a) A Venue that is a Club must at all times ensure that Games of Keno conducted on its Premises are conducted in accordance with the Registered Clubs Act 1976 and regulations made under that Act the Public Lotteries Act 1996 and these Rules.
- (b) A Venue that is a Casino Licensee must at all times ensure that Games of Keno conducted on its Premises are conducted in accordance with the Casino Control Act 1992 and regulations made under that Act the Public Lotteries Act 1996 and these Rules.
- (c) A Venue that is a Hotel must at all times ensure that Games of Keno conducted on its Premises are conducted in a manner that does not contravene the Liquor Act 1982 and regulations made under that Act the Liquor Act 2007 and regulations made under that Act the Public Lotteries Act 1996 and these Rules.

7. Entry and Entry Forms

- (a) Entry in a Game of Keno may only be made through a Venue in accordance with these Rules.
- (b) Entry in a Game of Keno, not being a Delayed Start Game, may only be made:
 - (i) either:
 - (a) by way of an Entry Form;
 - (b) by way of Self Service Terminal;
 - (c) by Replay; or

- (d) by way of Verbal Entry (including in conjunction with a KPC), in relation to:
 - (i) Lucky Last;
 - (ii) Heads or Tails?;
 - (iii) Keno Racing;
 - (iv) Keno Roulette;
 - (v) Parlay;
 - (vi) Kwikpik;
 - (vii) Superplay; or
 - (viii) Keno Bonus;

and

- (ii) by payment of the appropriate Subscription.
- (c) A Subscriber to a game of Heads or Tails? may only make one selection (ie. "Heads" or "Tails" or "Evens") per Game per Entry.
- (d) A Subscriber to a game of Keno Racing or Keno Roulette may make more than 1 selection per Entry.
- (e) Subject to Rule 9A relating to Gift Vouchers, Rule 9B relating to Prepaid Vouchers, Rule 9C relating to Subscription Chips, and Rule 9D relating to SST Receipts, each Gross Subscription must be paid by a Subscriber to a Venue (or to a Keno Runner on behalf of a Venue) and the Venue will hold the Gross Subscription as agent of the Subscriber until the Entry is completed.
- (f) Subject to Rule 9A relating to Gift Vouchers, Rule 9B relating to Prepaid Vouchers and Rule 9D relating to SST Receipts, a Subscriber must pay a Commission to the Venue in consideration for the Venue acting as agent of the Subscriber, and for that purpose authorises the Venue to retain from the Gross Subscription received from the Subscriber an amount calculated as:
 - [Gross Subscription Keno Prize Fund Contribution] x 44%,

by way of Commission, after the Entry is completed.

- (g) After a Subscriber has completed an Entry Form, an Entry by way of Self Service Terminal, a Replay or a Verbal Entry and the Gross Subscription has been received by the Venue, the Venue, on behalf of the Licensees, will deliver a Receipt Ticket to the Subscriber. A separate Receipt Ticket will be issued in respect of a Delayed Start Entry. The Entry is completed by the delivery of the Receipt Ticket and the Venue is taken to have discharged its duty as agent to the Subscriber by the delivery of the Receipt Ticket in accordance with this Rule.
- (h) Subject to Rule 9A relating to Gift Vouchers, Rule 9B relating to Prepaid Vouchers, Rule 9C relating to Subscription Chips and Rule 9D relating to SST Receipts, once the Entry is completed the Venue will be entitled to apply the Commission to its own account and will hold the Net Subscription as agent for and on behalf of the Licensees.
- (i) All marks appearing on an Entry Form shall be taken to have been made exclusively by the Subscriber and it is the responsibility of the Subscriber to ensure that the particulars recorded on a Receipt Ticket are identical to those submitted by the Subscriber either by way of an Entry From, Verbal Entry or Entry by way of Self Service Terminal.
- (j) If the particulars recorded on a Receipt Ticket are inconsistent with the particulars resident on magnetic media at the Central Site, the latter shall prevail to the exclusion of the former and shall determine what prize, if any, a Subscriber is entitled to claim.
- (k) Except in relation to a Delayed Start Game, an Entry will be for the game which is open at the time the Receipt Ticket for that Entry is issued. A Delayed Start Entry will be for the next Delayed Start Game.
- (1) Instructions printed on an Entry Form and available on the Self Service Terminal are to be read and construed as part of these Rules except that, in the event of any inconsistency, the latter shall prevail to the exclusion of the former.
- (m) An Entry Form shall be returned to the Subscriber on request.
- (n) Where a Subscriber enters a Game of Keno as the trustee, representative or nominee of another person, the Licensees, the Venue and every other person shall be taken not to have knowledge or to be on notice, whether actual or constructive, of any such arrangement and the transaction will be taken to have been conducted solely with the Subscriber.
- (o) Upon presentation of a Receipt Ticket a Subscriber may on the Keno Day on which that Receipt Ticket was issued but after the payment of any prize won by the Entry of which that Receipt Ticket is evidence request a Print Pay Ticket. A Subscriber shall be taken to have requested in accordance with this Rule a Print Pay Ticket in respect of each Entry effected by a Keno Runner on that Subscriber's behalf.
- (p) Upon presentation of a SST Receipt a Subscriber may on the Keno Day on which that SST Receipt was issued but after the payment of any payout of the SST Receipt, request a Print Pay Ticket.
- (q) No person may promote or take part in the formation of a syndicate for fee or reward for the purpose of making an Entry in a Game of Keno, except a Venue as authorised by the Operating Company.

(r) No person may advertise by any means that he or she or some other person will accept money for a share in an Entry in a Game of Keno, except as provided by Rule 7 (q).

8. Keno Runners

- (a) A Keno Runner may operate from anywhere within the Premises of the Venue which has authorised the Keno Runner.
- (b) The Keno Runner must return to the Subscriber all original Receipt Tickets, Entry Forms and Print Pay Tickets.
- (c) Any dispute between a Keno Runner and a Subscriber shall be brought to the attention of the Senior Writer.
- (d) A Keno Runner will not be responsible for the placement of Entries in any particular Game of Keno but will use best endeavours to place the Entry in the next available game. Acceptance of Subscriptions does not constitute an official Entry until such time as a Receipt Ticket has been issued.

9. Subscriptions

- (a) Acceptable forms of payment of a Subscription include:
 - (i) the tender of cash;
 - (ii) the tender of a Gift Voucher or Prepaid Voucher, in accordance with its terms;
 - (iii) the tender of a Subscription Chip, but only to a Casino Licensee;
 - (iv) the tender of a SST Receipt;
 - (v) Parlay;
 - (vi) any combination of the above.
- (b) No form of credit betting will be allowed.
- (c) Except as provided in Rule 9 (d) (k) inclusive the minimum Subscription for a game shall be \$1 and Subscriptions may increment in multiples of \$1 per game up to a maximum of \$9,999 for each Entry, except for an Entry by means of a Self Service Terminal, the maximum Subscription for which shall be \$250.
- (d) The aggregate of the Subscriptions payable for games comprising a Keno to Go Entry and Keno Bonus, played in conjunction with all Games of Keno on a Keno to Go Entry shall be discounted by an amount equivalent to the Subscription payable in respect of 1 game played by a Subscriber for every 50 games played by a Subscriber to be played in respect of that Entry. Where a Keno to Go Entry is cancelled in accordance with Rule 11, the amount of any refund shall be reduced by an amount equal to the total amount by which the aggregate of the Subscriptions paid in respect of that Entry was discounted pursuant to this Rule 9 (d).
- (e) The minimum Subscription payable in respect of a Combination Bet Entry (excluding a Jackpot Entry) shall be:
 - (i) Where not less than 4 and not more than 19 Combinations are played \$0.50 per Combination;
 - (ii) Where not less than 20 and not more than 49 Combinations are played \$0.20 per Combination;
 - (iii) Where not less than 50 Combinations are played \$0.10 per Combination.
- (f) Subscriptions in respect of Combination Bet Entries where not less than 4 Combinations are played may increment in multiples of \$0.10 per Combination.
- (g) A Subscription tendered in respect of a Delayed Start Entry must be for the same amount as the Subscription tendered in respect of Entry in the game which is open at the time the Delayed Start Entry is effected.
- (h) The minimum Subscription for a game of Heads or Tails? played by a Subscriber (including Prepick and Let it Run) shall be \$1. Subscriptions may increment in multiples of \$1 per game played by a Subscriber (provided that all games played by a Subscriber on an Entry must increment by the same amount) up to a maximum of \$500 per game played by a Subscriber (excluding Let it Run where the maximum allowable Subscription for the first game played by a Subscriber which is the subject of the Entry shall be \$500 per Entry). In relation to the second and subsequent Games which are the subject of a Let it Run Entry, the maximum allowable Subscription specified in Rule 9 (c) shall not apply but eligibility for entry in the next Game of Keno shall be subject to the aggregate Subscription limits set out in Rule 9 (j).
- (i) The minimum Subscription in respect of a game of Keno Racing shall be \$0.50 per each bet made subject to a minimum aggregate Subscription per game of Keno Racing of \$1.
- (j) Notwithstanding any Rule to the contrary, the aggregate of the Subscriptions that may be bet on one of the results of a game of Heads or Tails? in any one Game of Keno between the opening and closure of that game shall not exceed:
 - (i) for all Subscriptions placed on the result of Heads, \$500,000;
 - (ii) for all Subscriptions placed on the result of Tails, \$500,000;
 - (iii) for all Subscriptions placed on the result of Evens, \$170,000.

In the event that the prize in respect of any Let it Run game played by a Subscriber would, but for this Rule, result in the total Subscriptions for the next game exceeding the above limits, the Entry on the next game played by that Subscriber will not be accepted and the prize in respect of the previous game will be paid to that Subscriber. (k) The minimum Subscription in respect of a selection of Keno Roulette will be as per the following table. Increments must in in multiples of \$1.00

Bet Type	Keno Roulette Minimum Subscription per selection
Straight Up	\$1.00
Pair	\$1.00
Row	\$1.00
Corner	\$1.00
Six Line	\$1.00
Column	\$2.00
Dozens	\$2.00
Low or High	\$5.00
Red or Black	\$5.00
Odd or Even	\$5.00

- (1) The Subscription paid for Keno Bonus must be equivalent to the Subscription paid for the game it is played in conjunction with.
- (m) In circumstances where Keno Bonus is being played in conjunction with Let it Run, the amount of the prize that is carried over as the Subscription for the next game in the series shall be applied as follows:
 - (i) 50% of the prize as Subscription for Keno Bonus; and
 - (ii) 50% of the prize as Subscription for the game Keno Bonus is being played in conjunction with.
- (n) If the number of games of Keno Bonus being played on an Entry is less than the number of other Games of Keno being played on the Entry, Keno Bonus will be played in conjunction with the first and following games of Keno.
- (o) Subject to Rule 9A relating to Gift Vouchers, Rule 9B relating to Prepaid Vouchers, Rule 9C relating to Subscription Chips and Rule 9D relating to SST Receipts, Subscriptions will be received by a Venue as follows:
 - (i) until the Entry is completed the Venue will hold the Gross Subscription as agent of the Subscriber pursuant to Rule 7 (e);
 - (ii) once the Entry is completed, the Venue will:
 - (a) retain and hold that part of the Gross Subscription which constitutes the Commission in its own right (and not as agent of the Licensees); and
 - (b) hold the Net Subscriptions, being the balance of the Gross Subscription on behalf and as agent of the Licensees,
 - in accordance with Rule 7 (h).

9A. Gift Vouchers

- (a) A Subscriber must pay to a Venue, for the issue of a Gift Voucher, an amount equal to the face value of the Gift Voucher or present to a Casino Licensee a Subscription Chip with the face value equal to the face value of a Gift Voucher.
- (b) A Subscriber must pay a Commission to the Venue in respect of the issue of the Gift Voucher, and for that purpose, the Subscriber authorises the Venue to retain a proportion of the face value of the Gift Voucher received from the Subscriber calculated as:

[Face Value of the Gift Voucher – Keno Prize Fund Contribution for the Category of game able to be played with that Gift Voucher] x 44%,

by way of Commission.

- (c) A Gift Voucher must be presented by way of Subscription in a Game of Keno within 12 months of the date of purchase or such shorter period as may be notified at the time of purchase.
- (d) Where payment of a Subscription for a Game of Keno is made by the tender of a Gift Voucher in accordance with Rule 9 (a) (ii), the Venue will hold the Gift Voucher, as agent of the Subscriber until the Entry is completed.
- (e) Once the Entry is completed and the Receipt Ticket delivered to the Subscriber, the Venue will have discharged its duty as agent to the Subscriber.
- (f) Notwithstanding Rule 7 (f), the Venue is not entitled to charge the Subscriber any Commission for acting as agent of the Subscriber in accordance with Rule 9A (d).

9B. Prepaid Vouchers

(a) A Venue is entitled to charge a Commission for the issue of a Prepaid Voucher or for the delivery (by the Venue) of a Prepaid Voucher issued by the Operating Company, and for that purpose, under the terms of the Prepaid Voucher, the Subscriber will be taken to direct the Operating Company to apply a proportion of the face value of the Prepaid Voucher calculated as:

[Face Value of Prepaid Voucher – Keno Prize Fund Contribution for the Category of game able to be played with that Prepaid Voucher] x 44%,

in payment to the Venue, on behalf of the Subscriber, of the Commission charged by the Venue for the issue or delivery of the Prepaid Voucher.

- (b) A Prepaid Voucher must be presented by way of Subscription in a Game of Keno within 7 days of the date of issue or such shorter period as may be notified at the time of issue or delivery to the Subscriber.
- (c) Where payment of a Subscription for a Game of Keno is made by the tender of a Prepaid Voucher in accordance with Rule 9 (a) (ii), the Venue will hold the Prepaid Voucher, as agent of the Subscriber until the Entry is completed.
- (d) Once the Entry is completed and the Receipt Ticket delivered to the Subscriber, the Venue will have discharged its duty as agent to the Subscriber.
- (e) Notwithstanding Rule 7 (f), the Venue is not entitled to charge the Subscriber any Commission for acting as agent of the Subscriber in accordance with Rule 9B (c).

9C. Subscription Chips

The provisions of this Rule 9C apply to a Casino Licensee only:

- (a) A Subscriber must pay to a Casino Licensee, for the issue of a Subscription Chip, an amount equal to the face value of the Subscription Chip.
- (b) Where payment of a Subscription for a Game of Keno is made by the tender of a Subscription Chip in accordance with Rule 9 (a) (iii), a Casino Licensee will hold the Subscription Chip as agent of the Subscriber until the Entry is completed.
- (c) Once the Entry is completed and the Receipt Ticket delivered to the Subscriber, a Casino Licensee will have discharged its duty as agent of the Subscriber and will be entitled to retain from the face value of the Subscription Chip an amount equal to the Commission which a Casino Licensee is entitled to charge under Rule 7 (f), and will hold the amount representing the balance of the face value of the Subscription Chip as a Net Subscription on behalf and as agent of the Licensees.

9D. SST Receipts

- (a) A SST Receipt must be redeemed in full either for cash or tendered by way of Subscription in a Game of Keno within 12 months of the date of issue, and thereafter becomes an Unclaimed Prize.
- (b) Where payment of a Subscription for a Game of Keno is made by the tender of a SST Receipt in accordance with Rule 9 (a) (iv), the Venue will hold the SST Receipt, as agent of the Subscriber until the Entry is completed.
- (c) Once the Entry is completed and the Receipt Ticket delivered to the Subscriber, the Venue will have discharged its duty as agent to the Subscriber and will be entitled to retain from the face value of the SST Receipt an amount equal to the Commission which a Venue is entitled to charge under Rule 7 (f), and will hold the amount representing the balance of the face value of the SST Receipt as a Net Subscription on behalf and as agent of the Licensees.
- (d) Notwithstanding Rule 7 (f), the Venue is not entitled to charge the Subscriber any Commission for acting as agent of the Subscriber in accordance with Rule 9D (b).

10. Jackpot

- (a) No Regular Keno Jackpot Prize, Keno Bonus Jackpot Prize or Keno Racing Jackpot Prize greater than or equal to \$10,000 will be paid until verified by the Inspector and the Supervisor.
- (b) An amount equivalent to 10% of Gross Subscriptions in a Regular Keno Jackpot will be allocated from Net Subscriptions on that Regular Keno Jackpot to the Regular Keno Jackpot Prize available for that Regular Keno Jackpot.
- (c) The following amounts will be allocated from Net Subscriptions on the Keno Racing Jackpot to the Keno Racing Jackpot Prize available for that Keno Racing Jackpot:
 - (i) in respect of a "Quartet" Keno Racing Jackpot, an amount equivalent to 10% of Gross Subscriptions;
 - (ii) in respect of the "Five Up" Keno Racing Jackpot, an amount equivalent to 10% of Gross Subscriptions; and
 - (iii) in respect of the "Superfecta" Keno Racing Jackpot, an amount equivalent to 4% of Gross Subscriptions.
- (d) The Jackpot Fill and Jackpot Growth component of the Regular Keno Jackpot Prize, Keno Bonus Jackpot Prize and Keno Racing Jackpot Prize is fixed and payable in respect of the first \$1.00 of the Subscription paid for a game played by a Subscriber to which that prize relates irrespective of the amount actually subscribed and does not increase proportionately to the amount of the Subscription.

- (e) The amount of the Regular Keno Jackpot Prize and Keno Racing Jackpot Prize will be the sum of:
 - (i) the Subscription paid in respect of the game multiplied by the prize (with respect to a Quartet Keno Racing Jackpot Prize as defined in Rule 18 (d)) or Major Prize (as the case may be);
 - (ii) the Jackpot Fill (if any); and
 - (iii) the Jackpot Growth for the relevant game.

10A.Bonus Prizes

- (a) The Operating Company may allocate Approved sums from the Prize Fund to be used for Bonus Prizes at Approved times of the day and Approved days of the week. Games in which Bonus Prizes are available are or may be referred to as 'Cash Games'.
- (b) Subject to Rule 10A (c) a Bonus Prize shall be won by the game played by a Subscriber or Entry (as the case may be) which first meets Approved requirements for that Bonus Prize.
- (c) Where in the Game of Keno in which the Approved requirements for a Bonus Prize are first met, and more than one game played by a Subscriber or Entry (as the case may be) meets those requirements the Bonus Prize shall be shared among those games or Entries (as the case may be) in accordance with Rule 19 (f).
- (d) The word "Bonus" may be printed on Receipt Tickets. The presence of the word "Bonus" on a Receipt Ticket does not necessarily indicate that an Entry is eligible to win a Bonus Prize. The absence of the word "Bonus" from a Receipt Ticket does not necessarily indicate that the Entry is ineligible to win a Bonus Prize.
- (e) Combination Bet Entries, Superplay Entries, Lucky Last Entries, Heads or Tails? (including Prepick and Let it Run) Entries, Keno Racing Entries and Keno Roulette Entries are ineligible to win a Bonus Prize.

11. Cancellations

- (a) An Entry may be cancelled only:
 - (i) at the Premises of the Venue at which the Entry was accepted;
 - (ii) on the Keno Day on which the Entry was accepted; and
 - (iii) during the displayed trading hours of those Premises.
- (b) Subject to Rule 11 (a) and Rule 11 (c), an Entry may be cancelled at any time prior to the closure of the game to which that Entry relates or prior to the Drawing of the first number in the game to which that Entry relates, whichever occurs first.
- (c) A Multi-Game Entry may not be cancelled in respect of those games in which a number has been Drawn. A Multi-Game Entry of more than 200 games may not be cancelled after the first number in the 201st game has been Drawn.
- (d) Subject to Rule 11 (e), if an Entry is cancelled in accordance with these Rules, the Venue will refund to the Subscriber in cash (or, in the case of a Casino Licensee only, cash and/or Chips to an equivalent value) the Commission which relates to that Entry and, on behalf of the Licensees, the Net Subscription in relation to that Entry, and the Gross Subscription in respect of the cancelled Entry will be reduced by the refunded amount for the purposes of these Rules.
- (e) If an Entry is cancelled in accordance with these Rules and a Gift Voucher or Prepaid Voucher was tendered for the Subscription for the Entry, the Venue will return the Gift Voucher or Prepaid Voucher to the Subscriber, or, if some Games of Keno have been Drawn, return to the Subscriber a replacement Gift Voucher or Prepaid Voucher with a face value equal to the Subscription payable for the cancelled Games of Keno. The Venue is not entitled to receive any Commission in respect of the issue of a replacement Gift Voucher or Prepaid Voucher. The Gross Subscription in respect of the cancelled Entry will be reduced by the value of the replacement Gift Voucher or Prepaid Voucher for the purposes of these Rules.

12. The Draw

- (a) The drawing of the winning numbers must:
 - (i) take place:
 - (a) by means of a Draw Device;
 - (b) at the Central Site, the Premises of a Venue, the Backup Site or other Approved site;
 - (c) if the Draw takes place at the Premises of a Venue in an area open at that time to those persons who would normally have access to those Premises;
 - (d) if the Draw takes place at any other Approved site in an area open to the public during Approved hours; and
 - (e) in a manner which enables it to be witnessed by an Inspector; and
 - (ii) be captured on an Approved medium.
- (b) The Operating Company will determine when a game opens and closes.
- (c) The Draw will be carried out as soon as practicable after the close of the game. Each Game of Keno will be identified during the Keno Day on which it is played by a number from 0 to 999 and thereafter by the relevant Keno Day and that number.

- (d) If an incorrect number is displayed as having been Drawn the final number will flash until the incorrect number has been removed and the correct number displayed.
- (e) If a Draw Device malfunctions, the Draw will continue in accordance with Approved procedures.

13. Display of Winning Numbers

Subject to these Rules the winning numbers of the most recently completed Game of Keno and the Multiplier will be displayed at the Premises of a Venue during the Venue's displayed trading hours. The winning numbers and the Multiplier will also be available by a Game Results Inquiry.

14. Winning Entries

- (a) Notwithstanding any other Rule, a winning game played by a Subscriber will be one where the number(s) selected for that game match the number(s) Drawn and resident on magnetic media at the Central Site as the winning number(s) for that Game of Keno in such a way as to entitle the Subscriber to a prize in accordance with the applicable Schedule of Prizes, to a Bonus Prize or to an additional Approved prize.
- (b) Subject to Rule 17, a prize may only be claimed by submitting a Receipt Ticket.
- (c) A prize will only be payable where the particulars recorded on the Receipt Ticket submitted indicate that the game played by a Subscriber is a winning game and those particulars correspond with the particulars resident on magnetic media at the Central Site.
- (d) A Receipt Ticket submitted in respect of a successful claim or a SST Receipt redeemed for cash or a Subscription will not be returned to the Subscriber.
- (e) A Game of Keno may include an additional Approved prize or prizes.

15. Payouts

Payment of Prizes

- (a) Regardless of the amount of a Subscription, the maximum liability in respect of:
 - (i) a Regular Keno Jackpot Prize, and Keno Racing Jackpot Prize will be the amount showing as the Regular Keno Jackpot Prize, and Keno Racing Jackpot Prize at that time resident on magnetic media at the Central Site, reduced (if required) in accordance with Rule 19 and increased (if required) in relation to the prize (with respect to a Quartet Keno Racing Jackpot Prize as defined in Rule 18 (d)) or Major Prize (as the case may be) having regard to the amount of the Subscription and the Multiplier (if relevant).
- (b) Subject to Rule 15 (f), where a win requires the issue of a cheque drawn on the Prize Fund or a cheque drawn on a Venue, the details of the payee must be provided by the Subscriber.
- (c) Public personal anonymity will be at Subscriber request, made to an employee of the Operating Company or Venue at the time the win is confirmed. The Subscriber acknowledges that the Licensees may publish or cause to be published the name of the Venue, and/or geographic location at which the Subscription was accepted, and the amount of the prize. A Subscriber may at any time revoke a request for anonymity.
- (d) Subject to Rules 16, 17 and 20, a claim for the payment of a prize may be made at the Premises of any Venue up to twelve months after the Keno Day on which the game in respect of which the prize is claimed was Drawn.
 - (i) For payouts under \$10,000, the first \$2,000 of the Total Prize Money, subject to the limit specified by that Venue, may be paid in cash or by way of a SST Receipt (or, in the case of a Casino Licensee, cash and/or Chips). Amounts over \$2,000 of the Total Prize Money will be paid by means of a Crossed Cheque payable to the claimant or if the claimant requests, by means of electronic funds transfer to an account nominated by the claimant.
 - (ii) Prizes of \$10,000 and over will be paid by means of a Crossed Cheque payable to the claimant drawn on the Prize Fund. Subject to the limit specified by that Venue, the first \$2,000 of the Total Prize Money may be paid in cash (or, in the case of a Casino Licensee, cash and/or chips).
- (e) Payouts resulting from an Unclaimed Prize Claim Form will be paid by cheque drawn on the Prize Fund.
- (f) Any cheques issued in payment or part payment of a payout will be crossed and marked "Not Negotiable" and payable to "Account Payee Only" and will be drawn in favour of the Subscriber.
- (g) Payouts to Subscribers known to be under legal incapacity or disability or to those Subscribers who are known to have died before receiving any or all of a particular payout shall be made in accordance with the laws of New South Wales.
- (h) Prizes won in a Delayed Start Game will be paid no sooner than the Keno Day following the Keno Day on which that Delayed Start Game was Drawn.
- (i) Where a payout is calculated to be an amount which is an exact multiple of \$0.10 that prize will be payable. Where a prize is calculated to be an amount which is not an exact multiple of \$0.10 the prize payable will be the nearest amount below the calculated prize which is an exact multiple of \$0.10.

16. Unclaimed SST Receipts or Prizes

- (a) If a Subscriber has been notified of an Unclaimed Prize through their Keno Player Card registration, to claim their prize they must attend the venue and submit their Receipt Ticket or SST Receipt. If they are unable to present their Receipt Ticket or SST Receipt, the Subscriber must submit details of that ticket or receipt, via an Unclaimed Prize Form, to the Central Site.
- (b) Details of prizes, including SST Receipts, will remain accessible from magnetic media on the Central Site Computer for up to 12 calendar months after the Keno Day to which they relate. After this period payouts may be made only after submission of an Unclaimed Prize Claim Form forwarded by the Subscriber to the Operating Company.
- (c) All correspondence to a Subscriber relevant to an Unclaimed Prize or unclaimed SST Receipt shall bear the signature of a representative of the Operating Company and following review by the Inspector will issue to the Subscriber. In the event of a dispute, the decision of the Inspector will be final.

17. Lost or Mutilated Receipt Tickets, SST Receipts and Vouchers

- (a) If a Receipt Ticket or SST Receipt, submitted by a Subscriber for processing, is unable to be read by a Terminal or the Writer or the Receipt Ticket has been lost, a claim for payment may be made by the submission of an Unclaimed Prize Claim Form.
- (b) If the details given by the Subscriber satisfy the Operating Company and Inspector that a win has occurred, the prize will be paid in accordance with Rule 15.
- (c) If a Gift Voucher or Prepaid Voucher, submitted by a person for processing, including a Gift Voucher presented for refund in accordance with Rule 17(d), is unable to be validated by a Terminal or a Writer or has expired or been lost, a claim for a refund of the face value of the Gift Voucher or Prepaid Voucher may not be made.
- (d) If, having purchased a Gift Voucher, a Subscriber does not agree to the conditions of purchase described in Rule 17 (c), a refund of the face value of the Gift Voucher can be made. This refund can only be made by returning the Gift Voucher to the same Venue from which the Gift Voucher was purchased and on the same day as the Gift Voucher was purchased.

18. Schedules of Prizes

(a) The following Approved Schedule of Prizes applies to all Games of Keno other than Lucky Last, Heads or Tails?, Keno Racing, Keno Roulette, and Keno Bonus where it is played in conjunction with Lucky Last, Heads or Tails?, Keno Racing or Keno Roulette. Prizes are based on a Subscription of \$1 and are expressed in multiples of \$1:

Number of Spots Matched	Number of Spots Selected				
	1	2	3	4	5
0					
1	3				
2		12	1	1	
3			44	4	2
4				120	14
5					640

Number of Spots Matched	Number of Spots Selected				
	6	7	8	9	10
0					
3	1	1			
4	5	3	2	1	1
5	80	12	7	5	2
6	1,800	125	60	20	6
7		\$5,000 plus Keno Bonus Jackpot Prize of \$7,000 (if payable) plus Jackpot Growth	675	210	50

OFFICIAL NOTICES

Number of Spots Matched	Number of Spots Selected	
8	\$25,000 plus 2, Keno Bonus Jackpot Prize of \$38,000 (if payable) plus Jackpot Growth	500 580
9	Keno Jackp of \$18 payab	000 plus 10,000 Bonus ot Prize 0,000 (if le) plus t Growth
10		\$250,000 plus Jackpot Fill of \$750,000 plus Keno Bonus Jackpot Prize of \$2,900,000 (if payable) plus Jackpot Growth

Number of Spots Matched	Number of Spots selected		
	15	20	40
0		100	250,000
1		10	25,000
2		2	2,200
3			200
4			35
5	1		7
6	2		2
7	4		1
8	20	2	
9	50	7	
10	250	20	
11	2,000	100	
12	12,000	450	
13	50,000	1,200	1
14	100,000	5,000	2
15	250,000	10,000	7
16		15,000	35
17		25,000	200
18		50,000	2,200
19		100,000	25,000
20		250,000	250,000

(b) The following Approved Schedule of Prizes applies only to games of Lucky Last and Keno Bonus (where it is played in conjunction with a game of Lucky Last). Prizes are based on a Subscription of \$1 and are expressed in multiples of \$1:

Number of Spots selected	Lucky Last Prize
1	60
2	30
3	20
4	15
5	12
6	10
7	8.50
8	7.50
9	6.50
10	6
15	4
20	3
40	1.5

(c) The following Approved Schedule of Prizes applies only to games of Heads or Tails? and Keno Bonus (where it is played in conjunction with a game of Heads or Tails?). Prizes are based on a Subscription of \$1 and are expressed in multiples of \$1:

Selections	Result	Heads or Tails? Prize
Heads	Heads	2
Tails	Tails	2
Evens	Evens	4

(d) The following Approved Schedule of Prizes applies only to games of Keno Racing. Prizes are based on a Subscription of \$1 and are expressed in multiples of \$1:

Bet Type	Keno Racing Prize
Win	6
Place	2
Quinella Place	7
Quinella	21
Exact Quinella	42
Trio	42
Trifecta	252
Quartet	
First correct	1
First 2 correct	3
First 3 correct	10
All 4 correct	800 plus Jackpot Growth

Bet Type	Keno Racing Prize				
Five Up					
First correct	1				
First 2 correct	3				
First 3 correct	10				
First 4 correct	60				
All 5 correct	3,000 plus Jackpot Growth				
Superfecta					
First correct	1				
First 2 correct	3				
First 3 correct	10				
First 4 correct	60				
First 5 correct	100				
All 6 correct	10,000 plus Jackpot Growth				

(e) The following Approved Schedule of Prizes applies only to games of Keno Roulette, and Keno Bonus where it is played in conjunction with a game of Keno Roulette. Prizes are based on minimum Subscription:

Bet Type	Minimum Subscription	Keno Roulette Prize
Straight Up	\$1.00	\$30.50
Pair	\$1.00	\$15.30
Row	\$1.00	\$10.20
Corner	\$1.00	\$7.60
Six Line	\$1.00	\$5.10
Column	\$2.00	\$5.00
Dozens	\$2.00	\$5.00
Low or High	\$5.00	\$8.50
Red or Black	\$5.00	\$8.50
Odd or Even	\$5.00	\$8.50

19. Pro-rating and Sharing of Prizes

- (a) The maximum aggregate liability for all Major Prizes in any one Game of Keno, excluding Bonus Prizes and additional Approved prizes, shall be \$3,000,000. Where except for this Rule 19 (a) the total amount of such Major Prizes would exceed \$3,000,000 Pro-rating shall apply.
- (b) Subject to Rule 19 (c) where Pro-rating applies the amount payable in respect of each Major Prize affected shall be as follows:

Amount payable = $X \div Y \ge 3,000,000$

where

- X = the amount which except for this Rule would have been payable in respect of the game played by a Subscriber.
- Y = the total prize amount which, except for this Rule, would have been payable in respect of all Major Prizes for a Game of Keno.
- (c) Notwithstanding the application of Pro-rating no Major Prize will be reduced to a value less than \$1,000.
- (d) Where there is more than one Regular Keno Jackpot or Keno Racing Jackpot winner, the Jackpot Growth and Jackpot Fill will be shared among those Regular Keno Jackpot or Keno Racing Jackpot winners in the same proportion that the amount of the Subscription (disregarding Keno Bonus) paid by each winner on the winning combination of Spots bears to the total amount of the Subscriptions (disregarding Keno Bonus) paid by all winners on the winning combination of Spots.

- (e) Where there is more than one Keno Bonus Jackpot Prize winner, the Keno Bonus Jackpot Prize will be shared amongst those Keno Bonus Jackpot Prize winners in the same proportion that the amount of the Subscriptions (disregarding Keno Bonus) paid by each winner on the winning combination of Spots bears to the total amount of the Subscription (disregarding Keno Bonus) paid by all winner on the winning combination of Spots.
- (f) Where there is more than one Bonus Prize winner, the Bonus Prize will be shared among those Bonus Prize winners in proportion to the amount of the Subscription paid by each winner on the winning combination of Spots.

20. Limitation of Liability

- (a) Without limitation to the following provisions of this Rule 20, the Licensees shall have no responsibility or liability to a Subscriber until an Entry is validly made and a Receipt Ticket is delivered to that Subscriber.
- (b) The Licensees shall have no responsibility or liability to a Subscriber or to any other person by reason of the loss or destruction for any reason or from any cause of a Receipt Ticket beyond the amount of the Net Subscription paid in respect of the Receipt Ticket unless, at the discretion of the Licensees, the criteria as set out in Rules 16 and 17 are met.
- (c) The Licensees shall have no responsibility or liability to pay a Subscriber who claims a prize and is unable to submit a Receipt Ticket. The Licensees shall have discharged all liability in relation to payment of a prize by making payment to a person who has submitted a prize winning Receipt Ticket. The official record of payment shall be the image resident on magnetic media at the Central Site.
- (d) The Licensees and each of their employees shall have no liability or responsibility to a Subscriber beyond the Net Subscription paid in respect of a Receipt Ticket or any other person, in respect of:
 - (i) any negligence, omission, delay or failure whatsoever on the part of any person in the carrying out or performance of any duty, function or discretion conferred or contemplated by the Rules in or about the conduct of the Game of Keno; and
 - (ii) without prejudice to the generality of Rule 20 (d) (i) hereof, any negligence, omission, delay or failure in relation to:
 - (i) the payment of prizes;
 - (ii) the processing and issue of a Receipt Ticket following acceptance of an Entry Form, Replay Verbal Entry instructions or Entry by way of Self Service Terminal;
 - (iii) the processing of a prize winning Receipt Ticket or the redeeming of a SST Receipt;
 - (iv) the inclusion of an Entry in a particular Game of Keno received by way of an Entry Form, Replay, Verbal Entry instructions or Entry by way of Self Service Terminal.
- (e) Each and every Venue shall have no responsibility or liability to a Subscriber or to any other person by reason of the loss or destruction for any reason or from any cause of a SST Receipt or a Receipt Ticket beyond the amount of the Commission paid in respect of the Receipt Ticket or a SST Receipt.
- (f) Each and every Venue and every employee of a Venue shall have no liability or responsibility to a Subscriber beyond the Commission paid by the Subscriber in respect of the relevant game or any person for or in respect of:
 - (i) any negligence, omission, delay or failure whatsoever on the part of any person in the carrying out or performance of any duty, function or discretion conferred or contemplated by the Rules in or about the conduct of any Game of Keno; and
 - (ii) without prejudice to the generality of Rule 20 (f) (i) hereof, any negligence, omission, delay or failure in relation to:
 - (i) the payment of payouts;
 - (ii) the processing and issue of a Receipt Ticket following acceptance of an Entry Form, Replay, Verbal Entry instructions or Entry by way of Self Service Terminal;
 - (iii) the processing of a prize winning Receipt Ticket or the redeeming of a SST Receipt;
 - (iv) the inclusion of an Entry in any particular Game of Keno received by way of an Entry Form, Replay, Verbal Entry instructions or Entry by way of Self Service Terminal.
- (g) The Licensees and every Venue, and each employee of the Licensees or a Venue, shall have no liability or responsibility to a Subscriber or any person for or in respect of any failure, disruption or malfunction of equipment used in the conduct of Games of Keno whether at the Central Site or at the Premises of a Venue or any other location, electrical power, telecommunications links or magnetic media at the Central Site.
- (h) The Licensees and every Venue, and each employee of the Licensees or a Venue, shall have no liability or responsibility for any consequence of interference with or interruption to any Game of Keno due to fire, storm, flood, riot, civil commotion, strike, failure or disruption of electrical power supply or telecommunications or other cause not within the reasonable control of such person.
- (i) The State of New South Wales, the Crown in right of that State, the Government of that State, the Minister, an Inspector, their successors and the employees and agents and every one of them shall have as ample protection from liability in respect of their acts and omissions (whether arising from or contributed to, by negligence or otherwise)

and the acts, omissions and contingencies the subject of Rules 20 (a) to 20 (i) inclusive as those protected by the said Rules.

21. Disqualifications

- (a) Notwithstanding that a Receipt Ticket or SST Receipt may have been issued, Entry in the Game of Keno may be disqualified and no claim shall be entered in respect of it if the Licensees are of the opinion that it should be disqualified.
- (b) The reasons for disqualification by the Licensees may include but are not limited to:
 - (i) tender of insufficient Subscription or if the form of Subscription is not acceptable;
 - (ii) the Subscriber has defaulted in payment of any previous fee;
 - (iii) reasonable suspicion of fraud or attempted fraud (whether computer related or otherwise);
 - (iv) a Receipt Ticket or SST Receipt failing any security tests run at the Central Site;
 - (v) reasonable suspicion of unauthorised use of a Terminal;
 - (vi) reasonable suspicion that the Subscriber is ineligible to enter a game under Rule 5A or Rule 7 (a); or
 - (vii) any other breach of the Rules which in the opinion of the Licensees justifies disqualification.
- (c) An Entry which has been disqualified in accordance with this Rule 21 may, in the absolute discretion of the Licensees, and with Approval, be reinstated.
- (d) Without limiting the operation of Rule 20, the liability of the Licensees to a Subscriber who has an Entry disqualified and reinstated under this Rule 21 will be limited to the amount of any prize won by that reinstated Entry.

22. Amendment

- (a) These Rules may only be amended, added to or repealed, in whole or in part, at any time by the Licensees with Approval.
- (b) Any amendment, addition or repeal will be effective on the date on which it is published in the New South Wales Government Gazette or such later date as is specified in the *New South Wales Government Gazette*.
- (c) The Licensees shall have no responsibility to a Subscriber or any person for or in respect of any change to the Rules.

SCHEDULE

Part A - 1 x Multiplier

											•								- · ·
211	212	213	214	216	219	222	223	225	226	228	229	231	233	235	237	239	241	242	244
245	247	249	251	252	254	255	258	260	261	263	264	266	269	271	273	276	278	280	281
283	285	287	288	290	291	293	295	296	298	300	301	303	304	307	308	311	313	315	316
318	321	322	324	326	328	330	332	334	335	337	338	342	344	345	348	350	352	353	355
356	358	359	367	370	373	375	378	380	382	385	389	390	393	395	397	407	411	412	416
422	424	426	428	430	433	434	437	440	442	444	445	447	450	452	454	456	458	462	464
467	469	471	472	474	477	479	481	482	483	484	486	488	489	490	491	494	496	498	499
501	503	505	507	511	516	519	521	523	525	528	530	532	534	536	537	538	540	541	543
545	546	547	549	552	554	555	556	557	559	561	562	564	566	568	570	573	575	577	579
581	583	584	587	589	591	593	595	598	600	607	609	611	613	615	616	618	620	623	626
628	630	632	633	635	640	642	643	645	647	649	651	653	655	656	657	658	664	666	669
671	673	674	676	677	678	681	682	686	691	692	693	694	695	697	698	706	708	709	710
711	712	713	715	717	718	719	721	722	723	725	727	728	730	732	733	736	737	741	743
746	747	751	759	762	765	767	768	773	778	783	785	786	788	789	792	793	797	800	802
805	807	808	812	813	815	818	820	823	827	828	831	832	834	835	837	842	847	852	853
855	858	861	869	873	874	877	879	883	884	887	888	890	892	893	895	897	898	899	901
902	903	905	907	908	909	910	911	912	914	922	923	925	926	927	928	929	934	938	939
942	943	944	946	947	949	951	954	956	962	963	964	965	967	969	971	973	975	977	978
980	985	987	988	990	992	994	997	1000	1002	1004	1005	1007	1009	1011	1013	1020	1022	1025	1027
1029	1031	1033	1036	1037	1039	1041	1043	1045	1047	1050	1052	1054	1056	1058	1059	1061	1063	1064	1065
1066	1068	1071	1073	1074	1075	1077	1079	1080	1082	1083	1084	1086	1088	1090	1092	1095	1097	1099	1101
1143	1146	1148	1149	1151	1153	1156	1158	1162	1164	1166	1168	1170	1173	1175	1176	1178	1180	1183	1186
1187		1192	-	-															
		1253	-						-	-	-			-					-
		1296																	
-	-	1332								-						-	-		
		1369						-	-										
		1406				1370	1370	1317	1501	1505	1505	1507	1507	1371	1374	1374	1373	1371	1570
1401	1-0-	1400	1407	1400	1407														

OFFICIAL NOTICES

	Part B – 2 x Multiplier																		
215	218	221	230	234	248	270	277	317	320	327	333	360	362	365	372	374	377	379	381
383	386	388	392	398	404	406	414	420	425	427	429	436	443	449	453	461	466	473	487
492	508	510	513	527	531	542	558	567	571	580	585	588	596	601	604	610	634	641	644
659	660	661	663	668	672	680	683	685	687	690	696	701	703	714	724	731	735	738	742
749	752	755	756	760	764	766	771	775	776	777	780	781	784	795	798	801	803	806	810
814	817	819	822	825	836	839	840	843	844	845	849	854	856	860	864	865	868	871	878
882	885	889	896	906	917	919	924	930	933	935	937	940	948	952	957	959	960	961	976
976	979	986	1010	1016	1019	1024	1032	1035	1040	1049	1053	1062	1078	1089	1093	1107	1110	1112	1128
1133	1147	1154	1159	1167	1171	1177	1184	1191	1193	1195	1200	1206	1214	1216	1222	1228	1232	1234	1237
1241	1243	1246	1248	1255	1258	1260	1287	1293	1300	1303	1343	1350	1372	1386	1390	1399	1402	1405	

Part C – 3 x Multiplier 217 227 996 1001 1003 1006 1008 1012 1014 1015 1018 1023 1026 1028 1030 1034 1038 1042 1044 1046 1048 1051 1055 1057 1060 1067 1069 1070 1072 1076 1081 1085 1087 1091 1094 1096 1098 1100 1102 1103 1105 1108 1111 1114 1116 1118 1120 1123 1125 1127 1135 1140 1142 1144 1145 1150 1152 1155 1157 1161 1165 1169 1172 1174 1179 1181 1182 1185 1188 1199 1203 1210 1211 1212 1218 1224 1229 1236 1249 1251 1252 1256 1257 1259 1263 1269 1273 1274 1279 1281 1284 1291 1297 1301 1306 1308 1310 1311 1314 1315 1318 1321 1323 1326 1328 1331 1334 1336 1338 1341 1345 1348 1353 1358 1361 1364 1367 1370 1377 1382 1388 1393 1403

Part D – 4 x Multiplier 210 240 340 343 354 376 400 423 599 622 758 769 772 782 790 830 838 848 851 862 998 1021 1197 1220 1244 1266 1277 1280 1380 1410

Part E – 5 x Multiplier 387 394 399 401 403 405 413 418 419 431 457 460 915 921 932 984 999 1106 1160 1163 1189 1201 1202 1207 1215 1217 1219 1221 1226 1233 1254 1271 1295 1346 1355 1363 1384 1400

Part F - 10 x Multiplier

224 246 268 331 415 603 684 936 1017 1205 1289 1352 1374 1396

PRIVATE ADVERTISEMENTS

COUNCIL NOTICES

BURWOOD COUNCIL

Environmental Planning and Assessment Act 1993

Tree Preservation Order

NOTICE is hereby given under authority conferred by the Environmental Planning and Assessment Act 1993 and pursuant to the Burwood Planning Scheme Ordinance (as amended 12 September 2007), Burwood Council resolved to adopt a new Tree Preservation Order policy on 18 October 2011, as per minute number 212/11.

Copies of the Tree Preservation Order are available on the Council website www.burwood.nsw.gov.au, by email council@burwood.nsw.gov.au or by phone (02) 9911 9911. M. McMAHON, General Manager, Burwood Council, PO Box 240, Burwood NSW 1805. [6217]

CAMPBELLTOWN CITY COUNCIL

Roads Act 1993, Section 162 Roads Regulation 2008

Notification of the Naming of a Road

NOTICE is hereby given in accordance with Clause 9 of the Roads Regulation 2008, that Campbelltown City Council has approved the name Wylarah Close for the new cul-desac created by the subdivision of Lot 757 in DP 787316, Heritage Way, Glen Alpine. PAUL TOSI, General Manager, Campbelltown City Council, PO Box 57, Campbelltown NSW 2560. [6218]

THE COUNCIL OF THE CITY OF SYDNEY

Roads Act 1993 - Section 10

Dedication of Land as Public Road

PURSUANT to section 10 of the Roads Act 1993, The Council of the City of Sydney hereby dedicates the land in the Schedule below as public road. MONICA BARONE, Chief Executive Officer, The Council of the City of Sydney, GPO Box 1591, Sydney NSW 2001.

SCHEDULE

All those pieces or parcels of land situated in the Council of the City of Sydney area, Parishes of Alexandria, County of Cumberland, shown as Lot 210 and 211 in Deposited Plan 1061965, 19A and 20A Gadigal Avenue, Waterloo respectively. [6219]

GLOUCESTER SHIRE COUNCIL

Roads Act 1993, Part 10

Dedication of Land as Public Road

GLOUCESTER SHIRE COUNCIL hereby gives notice, pursuant to Part 10 of the Roads Act 1993, that the Land detailed in the Schedule hereto is formally dedicated as public road. A. YOUNG, General Manager, Gloucester Shire Council, PO Box 11, Gloucester NSW 2422.

SCHEDULE

All the land situated near Gloucester, in the Parish of Avon, County of Gloucester, shown in the Plan R30703-1603, transferred to Gloucester Shire Council by agreement on 26 June 1908. Excluding those roads previously closed and granted prior to the date of this Notification. [6220]

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

- Matilda Crescent, Wagga Wagga: From Bakers Lane, southeast for a distance of 173.2 metres and east for a distance of 270.4 metres.
- Scarbrough Way, Wagga Wagga: From Matilda Crescent, northeast for a distance of 562.2 metres.
- Justinian Way, Wagga Wagga: From Scarborough Way, southeast for a distance of 80.5 metres.
- Drawing No.: 1-3194. July 2011, Governor's Hill.
- 181 Hammond Avenue, Wagga Wagga: From Gillard Road, east for a distance of 40 metres.
- Drawing No.: 1-2507-1. August 2011.
- Houtman Street, Wagga Wagga: Western side of Houtman, from Hydrant, south for a distance of 176.7 metres. Eastern side of Houtman, from Hydrant, south for a distance of 118 metres.
- Drawing No.: 1-3192-1. September 2011.

Rurals

Uranquinty Town: Back Lane: From Bridge Street to Ben Street, for a distance of 120 metres.

Drawing No.: 3-233-3. July 2011.

Wilson Street, The Rock: Wilson Street: From Mixer Street to Ford Street, for a distance of 224 metres.

Drawing No.: 3-232-1. August 2011.

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. J. HALEY, General Manager, Riverina Water County Council, PO Box 456, Wagga Wagga NSW 2650. [6221]

TWEED SHIRE COUNCIL

Roads Act 1993, Section 10

Dedication of Land as Public Road

NOTICE is hereby given that the Tweed Shire Council dedicates the land described hereunder as public road pursuant to section 10 of the Roads Act 1993. MIKE RAYNER, General Manager, Tweed Shire Council, PO Box 816, Murwillumbah NSW 2484.

SCHEDULE

Lots 25 and 26, DP 872317.

[6222]

WALCHA COUNCIL

Naming of Roads

NOTICE is hereby given that, pursuant to section 162 of the Roads Act 1993, Walcha Council has named or renamed the roads described hereunder:

Description/Locality	Road Name				
The road that intersects the Oxley Highway 27.34 kilometres east of Walcha (intersection GPS Latitude 31 07 10s, Longitude 151 48 32e) and travels south for a distance of 320 metres leading to the properties 'Middlebank' and 'Nemonaville', Walcha.	Tiara Road.				
The road that intersects Bukeiro Road 1.9 kilometres (intersection GPS Latitude 30 59 22s, Longitude 151 53 5e) and travels east for a distance of 2.4 kilometres to the boundary between 'Argyll' and 'Kanagra Vale', Walcha.	Riverside Road.				
The road that intersects Thunderbolts Way 49.09 kilometres (intersection GPS Latitude 31 23 20s, Longitude 151 34 55e) and travels east for a distance of 2.77 kilometres finishing at the boundary of 'Ngulin Nature Reserve' and the property 'Gula', Riamukka.	Hell Hole Road.				

The above road names have been advertised and no objections to the proposed name have been received during the prescribed 28 day period. JACK O'HARA, General Manager, Walcha Council, PO Box 2, Walcha NSW 2354. [6223]

ESTATE NOTICES

NOTICE of intended distribution of estate. – Any person having any claim upon the estate of ERIKA KALS, late of Taren Point, in the State of New South Wales (formerly of Broadbeach Waters, Queensland), widow, who died on 17 August 2011, must send particulars of his claim to the executor, c.o. HPL Lawyers, PO Box 705, Freshwater NSW 2096, within one (1) calendar month from publication of this notice. After that time the executor may distribute the assets of the estate having regard only to the claims of which at the time of distribution she has notice. Probate was granted in New South Wales to Noelene Melba Selberg on 18 November 2011. HPL LAWYERS, Level 1, 17 Albert Street (PO Box 705), Freshwater NSW 2096, tel.: (02) 9905 9500. [6224]

NOTICE of intended distribution of estate. - Any person having any claim upon the estate of THELMA VICTORIA LEUNG, late of South Hurstville, in the State of New South Wales, retired chef, who died on 15 August 2010, must send particulars of his claim to the administrator, Billy Leung, c.o. Newnhams Solicitors, 233 Castlereagh Street, Sydney NSW 2000, within one (1) calendar month from publication of this notice. After that time the administrator may distribute the assets of the estate having regard only to the claims of which at the time of distribution she has notice. Letters of Administration were granted in New South Wales on 26 October 2011. NEWNHAMS SOLICITORS, Level 7, 233 Castlereagh Street, Sydney NSW 2000 (PO Box 21087, World Square NSW 2002), (DX 11495, Sydney Downtown), tel.: (02) 9264 7788. Reference: BLM:JH:6729. [6225]

NOTICE of intended distribution of estate. - Any person having any claim upon the estate of MARGARET ELLEN AINSLIE (in the will called Margaret Ellen Cottee), late of Mosman, in the State of New South Wales, retired court reporter, who died on 26 July 2011, must send particulars of his claim to the executrices, Ann Margaret Ainslie-Wallace (in the will called Anne Margaret Wallace) and Elizabeth Mary Ainslie, c.o. Newnhams Solicitors, 233 Castlereagh Street, Sydney NSW 2000, within one (1) calendar month from publication of this notice. After that time the executrices may distribute the assets of the estate having regard only to the claims of which at the time of distribution the executrices have notice. Probate was granted in New South Wales on 16 November 2011. NEWNHAMS SOLICITORS, Level 7, 233 Castlereagh Street, Sydney NSW 2000 (PO Box 21087, World Square NSW 2002), (DX 11495, Sydney Downtown), tel.: (02) 9264 7788. Reference: BLM:JH:6967. [6226]

NOTICE of intended distribution of estate. - Any person having any claim upon the estate of ALBERT ERNEST PRESTON, late of Wentworthville, in the State of New South Wales, who died on 26 December 1983, must send particulars of his claim to the administrators, Susan Jennifer Landon, Stephen Grant Preston and Bradley Erle Preston, c.o. Newnhams Solicitors, 233 Castlereagh Street, Sydney NSW 2000, within one (1) calendar month from publication of this notice. After that time the administrator may distribute the assets of the estate having regard only to the claims of which at the time of distribution the administrators have notice. Letters of Administration with the will annexed were granted in New South Wales on 14 November 2011. NEWNHAMS SOLICITORS, Level 7, 233 Castlereagh Street, Sydney NSW 2000 (PO Box 21087, World Square NSW 2002), (DX 11495, Sydney Downtown), tel.: (02) 9264 7788. Reference: BLM:JH:6947. [6227]

QUEANBEYAN CITY COUNCIL

Sale of Land for Overdue Rates

Local Government Act 1993

NOTICE is hereby given to the persons named hereunder that the Council of the City of Queanbeyan has resolved in pursuance of Section 713 of the Local Government Act 1993 to sell the land described hereunder (of which the persons named appear to be the owners or in which they appear to have an interest) and on which the amount of rates and charges states in each as at 1st December 2011 is due:

Owner or person having an interest in the land	Description of the Land (Lot, Section Deposit Plan and Street address	Amount of rates & charges overdue for more than 5 years	Interest accrued on amount in Column (c)	Amount of all other rates & charges due and in arrears	Interest accrued on amount in column (e)	Total
(a)	(b)	(c)	(d)	(e)	(f)	(g)
William Robert BLUNDELL, Jacqueline BLUNDELL	Lot 25, Sec B, DP 7255, 141 Collett Street Queanbeyan	\$1,241.57	\$282.43	\$9,693.93	\$2,497.68	\$13,715.61
Dejvid CELESKI, Perpetual Limited	Lot 3, SP 23121, 3/8 Halea Street, Karabar	\$1,373.81	\$241.02	\$6,264.27	\$1,636.13	\$9,515.23
Marina ANTOSKA, ANZ Banking Group Ltd, Vincent Francis Stanizzo	Lot 129, DP 731130, 34 Hakea Street, Karabar	\$3,494.97	\$823.63	\$10,843.90	\$3,254.77	\$18,417.27
Bruce Kenneth HARTAS, Kathryn Marjorie HARTAS, ANZ Banking Group Ltd	Lot 99, DP 775666, 21 Walker Street, Jerrabomberra	\$883.38	\$21.11	\$10,124.79	\$2,121.68	\$13,150.96
Home Provident Association Limited	Lots 660-663, DP 15222; Lots 665-670, DP 15764, 74C Capitol Avenue, Queanbeyan East	\$516.16	\$4.63	\$2,137.64	\$189.02	\$2,847.45
Frank Ces FILARDO	Lot 87, DP 238556, 6 Cassia Crescent, Karabar	\$935.16	\$65.00	\$10,431.90	\$2,266.31	\$13,698.37

In default of payment to the Council of the amount stated in column (g) above and any other rates (including extra charges) becoming due and payable after publication of this notice, or any arrangement satisfactory to the Council for payment of such rates being entered into by the rateable person before the time fixed for the sale, the said land will be offered for sale by Public Auction at Queanbeyan City Council Chambers, Crawford Street, Queanbeyan on Saturday 17 March 2012, commencing at 10.00 am. GARY CHAPMAN, General Manager, Queanbeyan City Council, PO Box 90, Queanbeyan NSW 2620, tel.: (02) 6285 6000. [6228]

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NEW SOUTH WALES GOVERNMENT GAZETTE No. 117