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NEW SOUTH WALES

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LEGISLATION

Proclamations



New South Wales

Proclamation

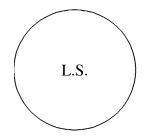
under the

National Parks and Wildlife (Adjustment of Areas) Act 2005 No 27

MARIE BASHIR, Governor

I, Professor Marie Bashir AC, Governor of the State of New South Wales, with the advice of the Executive Council, and in pursuance of section 2 of the *National Parks and Wildlife (Adjustment of Areas) Act 2005*, do, by this my Proclamation, appoint 22 July 2005 as the day on which that Act commences. Signed and sealed at Sydney, this 20th day of July 2005.

By Her Excellency's Command,



BOB DEBUS, M.P., Minister for the Environment

GOD SAVE THE QUEEN!



Proclamation

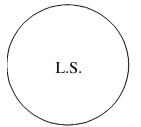
under the

National Parks and Wildlife (Further Adjustment of Areas) Act 2005 No 60

MARIE BASHIR, Governor

I, Professor Marie Bashir AC, Governor of the State of New South Wales, with the advice of the Executive Council, and in pursuance of section 2 of the *National Parks and Wildlife (Further Adjustment of Areas) Act 2005*, do, by this my Proclamation, appoint 22 July 2005 as the day on which that Act commences. Signed and sealed at Sydney, this 20th day of July 2005.

By Her Excellency's Command,



BOB DEBUS, M.P., Minister for the Environment

GOD SAVE THE QUEEN!

s05-379-12.p01

Regulations



New South Wales

Passenger Transport (Taxi-cab Services) Amendment (Wheelchair Accessibility) Regulation 2005

under the

Passenger Transport Act 1990

Her Excellency the Governor, with the advice of the Executive Council, has made the following Regulation under the *Passenger Transport Act 1990*.

JOHN WATKINS, M.P.,

Minister for Transport

Explanatory note

The object of this Regulation is to require the accredited operator of a wheelchair accessible taxi-cab to ensure that the taxi-cab:

- (a) is fitted with a hoist, or is equipped with a ramp, that allows safe access to the taxi-cab by a person using a wheelchair, and
- (b) carries wheelchair restraints that enable wheelchairs to be safely and securely attached to the taxi-cab.

A failure to comply with these requirements is an offence (maximum penalty: \$4,400). This offence is also prescribed as a penalty notice offence (prescribed penalty: \$400). A failure to ensure compliance with the requirements at the time of an inspection of the taxi-cab in accordance with certain provisions of the *Passenger Transport Act 1990* is also an offence (maximum penalty: \$550) and allows a non-compliance notice to be affixed to the taxi-cab. This Regulation is made under the *Passenger Transport Act 1990*, including sections 32K, 59 and 63 (the general regulation-making power).

s05-305-16.p01

Clause 1 Passenger Transport (Taxi-cab Services) Amendment (Wheelchair Accessibility) Regulation 2005

Passenger Transport (Taxi-cab Services) Amendment (Wheelchair Accessibility) Regulation 2005

under the

Passenger Transport Act 1990

1 Name of Regulation

This Regulation is the Passenger Transport (Taxi-cab Services) Amendment (Wheelchair Accessibility) Regulation 2005.

2 Commencement

This Regulation commences on 1 August 2005.

3 Amendment of Passenger Transport (Taxi-cab Services) Regulation 2001

The *Passenger Transport (Taxi-cab Services)* Regulation 2001 is amended as set out in Schedule 1.

Passenger Transport (Taxi-cab Services) Amendment (Wheelchair Accessibility) Regulation 2005

Amendments

Schedule 1

Schedule 1 Amendments

(Clause 3)

[1] Clause 8 Wheelchair accessible taxi-cabs

Insert at the end of clause 8 (c):

, and

- (d) is fitted with a hoist, or is equipped with a ramp (at all times), that allows safe access to the taxi-cab by a person using a wheelchair, and
- (e) carries wheelchair restraints (at all times) that enable the maximum number of occupied wheelchairs that the taxi-cab is capable of conveying to be safely and securely attached to the taxi-cab.

[2] Clause 24 Stand-by taxi-cabs

Omit "clause 8 (a)-(c)" from clause 24 (5). Insert instead "clause 8 (a)-(e)".

[3] Clause 25 Taxi-cabs to comply with on-road standards when inspected

Insert before paragraph (a):

- (aa) if the taxi-cab is a wheelchair accessible taxi-cab:
 - (i) the taxi-cab is fitted with a hoist or is equipped with a ramp as required by clause 8 (d), and
 - (ii) the taxi-cab carries wheelchair restraints as required by clause 8 (e), and

[4] Schedule 2 Penalty notice offences

Insert in appropriate order in Part 2, in columns 1 and 2, respectively:

Clause 8 (d)	\$400

Clause 8 (e) \$400



Public Lotteries Amendment (Contracts) Regulation 2005

under the

Public Lotteries Act 1996

Her Excellency the Governor, with the advice of the Executive Council, has made the following Regulation under the *Public Lotteries Act 1996*.

GRANT McBRIDE, M.P.,

Minister for Gaming and Racing

Explanatory note

The object of this Regulation is to prescribe classes of contracts that are to be included within the definition of an *exempt contract* for the purposes of section 62 of the *Public Lotteries Act 1996*. Exempt contracts are excluded from the operation of the provisions of that Act that relate to controlled contracts. Those provisions give the Minister for Gaming and Racing the power to investigate, and require the termination of, contracts in certain circumstances.

This Regulation is made under the *Public Lotteries Act 1996*, including sections 62 and 83 (the general regulation-making power).

s05-120-16.p01

Clause 1 Public Lotteries Amendment (Contracts) Regulation 2005

Public Lotteries Amendment (Contracts) Regulation 2005

under the

Public Lotteries Act 1996

1 Name of Regulation

This Regulation is the *Public Lotteries Amendment (Contracts)* Regulation 2005.

2 Amendment of Public Lotteries Regulation 2002

The *Public Lotteries Regulation 2002* is amended as set out in Schedule 1.

Public Lotteries Amendment (Contracts) Regulation 2005

Amendment

Schedule 1

(Clause 2)

Schedule 1 Amendment

Clause 17

Omit the clause. Insert instead:

17 Exempt contracts

- (1) The following contracts, or classes of contracts, are prescribed for the purposes of paragraph (b) of the definition of *exempt contract* in section 62 of the Act:
 - (a) a contract of employment,
 - (b) a contract relating to the supply or maintenance of gaming, security or surveillance equipment,
 - (c) a contract relating to the supply to a licensee or agent of gas, water or electricity, or postal or telecommunications services,
 - (d) a contract relating to the supply of legal, accounting, financial, corporate or property advisory services to a licensee or agent,
 - (e) a contract relating to the supply of share registry services to a licensee or agent,
 - (f) a contract relating to the supply of airline services to a licensee or agent,
 - (g) a contract of insurance and a contract relating to the supply of insurance to, or the procurement of insurance for, a licensee or agent,
 - (h) a contract relating to the supply of off-site parking for the premises used or to be used by a licensee or agent in connection with the conduct of a public lottery,
 - (i) a contract relating to the supply of ticketing agency services to a licensee or agent,
 - (j) a contract relating to the supply of superannuation services for the benefit of employees of a licensee or agent,
 - (k) a contract relating to the supply of banking or financial services to a licensee or agent,
 - (l) a contract relating to the provision of membership services by an industry representative body to a licensee or agent,
 - (m) a contract relating to the provision of marketing, advertising or promotional goods or services to a licensee or agent.

Public Lotteries Amendment (Contracts) Regulation 2005

Aı	mendm	ent
(2)		ite subclause (1), the following contracts, or classes of acts, are not exempt contracts:
	(a)	2 or more contracts for the supply of goods and services by the same supplier during any 12 month period if the aggregate amount payable under the contracts is \$550,000 or more,
	(b)	a contract relating to the supply of gaming equipment if the amount payable under the contract is \$11,000 or more,
	(c)	a contract relating to the maintenance of gaming equipment if the amount payable under the contract is \$11,000 or more,
	(d)	a contract relating to the supply or maintenance of security or surveillance equipment if the amount payable under the contract is \$110,000 or more.
(3)		is clause, <i>gaming equipment</i> has the same meaning as it has e <i>Casino Control Act 1992</i> .
	(2)	 contr (a) (b) (c) (d) (3) In this



Road Transport (Safety and Traffic Management) (Road Rules) Amendment (Security Indicators) Regulation 2005

under the

Road Transport (Safety and Traffic Management) Act 1999

Her Excellency the Governor, with the advice of the Executive Council, has made the following Regulation under the *Road Transport (Safety and Traffic Management) Act 1999.*

MICHAEL COSTA, M.L.C., Minister for Roads

Explanatory note

The object of this Regulation is to amend the requirements in the *Road Transport (Safety and Traffic Management) (Road Rules) Regulation 1999* for security indicators recorded on images taken by approved traffic lane camera devices. This amendment will make the requirements for such security indicators similar to the requirements for security indicators recorded on images taken by speed cameras.

This Regulation is made under the *Road Transport (Safety and Traffic Management) Act 1999*, including sections 57B and 71 (the general regulation-making power).

s05-308-12.p02

Clause 1 Road Transport (Safety and Traffic Management) (Road Rules) Amendment (Security Indicators) Regulation 2005

Road Transport (Safety and Traffic Management) (Road Rules) Amendment (Security Indicators) Regulation 2005

under the

Road Transport (Safety and Traffic Management) Act 1999

1 Name of Regulation

This Regulation is the Road Transport (Safety and Traffic Management) (Road Rules) Amendment (Security Indicators) Regulation 2005.

2 Amendment of Road Transport (Safety and Traffic Management) (Road Rules) Regulation 1999

The Road Transport (Safety and Traffic Management) (Road Rules) Regulation 1999 is amended as set out in Schedule 1.

Road Transport (Safety and Traffic Management) (Road Rules) Amendment (Security Indicators) Regulation 2005

Amendment

Schedule 1

(Clause 2)

Schedule 1 Amendment

Clause 156B

Omit the clause. Insert instead:

156B Security indicators: section 57B (2) (b) of Act

- (1) For the purposes of section 57B (2) (b) of the Act, a series of 32 characters produced by an MD5 algorithm is prescribed as a security indicator.
- (2) For the purposes of this clause, *character* includes a letter, number or symbol.



Sydney Harbour Foreshore Authority Amendment Regulation 2005

under the

Sydney Harbour Foreshore Authority Act 1998

Her Excellency the Governor, with the advice of the Executive Council, has made the following Regulation under the *Sydney Harbour Foreshore Authority Act 1998*.

CRAIG KNOWLES, M.P.,

Minister for Infrastructure and Planning

Explanatory note

The objects of this Regulation are:

- (a) to amend Schedule 1 to the *Sydney Harbour Foreshore Authority Act 1998* to update the area described as the foreshore area for the purposes of that Act, and
- (b) to amend the Sydney Harbour Foreshore Authority Regulation 1999:
 - (i) to include the former Maritime Services Building at The Rocks, which is currently occupied by the Museum of Contemporary Art, as core land for the purposes of the Act, and
 - (ii) to provide for offences under the Regulation to be penalty notice offences.

This Regulation is made under the *Sydney Harbour Foreshore Authority Act 1998*, including sections 6, 43A, 45 and 46 (the general regulation-making power).

s05-092-25.p01

Clause 1 Sydney Harbour Foreshore Authority Amendment Regulation 2005

Sydney Harbour Foreshore Authority Amendment Regulation 2005

under the

Sydney Harbour Foreshore Authority Act 1998

1 Name of Regulation

This Regulation is the Sydney Harbour Foreshore Authority Amendment Regulation 2005.

2 Amendment of Sydney Harbour Foreshore Authority Act 1998

The Sydney Harbour Foreshore Authority Act 1998 is amended as set out in Schedule 1.

3 Amendment of Sydney Harbour Foreshore Authority Regulation 1999

The Sydney Harbour Foreshore Authority Regulation 1999 is amended as set out in Schedule 2.

Sydney Harbour Foreshore Authority Amendment Regulation 2005

Amendment of Sydney Harbour Foreshore Authority Act 1998

Schedule 1 Amendment of Sydney Harbour Foreshore Authority Act 1998

(Clause 2)

Schedule 1

Schedule 1

Omit the Schedule. Insert instead:

Schedule 1 Foreshore area

(Section 5)

The area bounded by a heavy black line drawn on the map marked "Sydney Harbour Foreshore Authority—Foreshore Area—Amendment No 4", Plan number GIS04251A, dated 14 April 2005, copies of which are deposited in the offices of the Authority and the Department of Infrastructure, Planning and Natural Resources.

Sydney Harbour Foreshore Authority Amendment Regulation 2005

Schedule 2 Amendment of Sydney Harbour Foreshore Authority Regulation 1999

Schedule 2 Amendment of Sydney Harbour Foreshore Authority Regulation 1999

(Clause 3)

[1] Clause 16 Declaration of core land: section 6 (e) of the Act

Insert at the end of the clause:

Land at The Rocks, Circular Quay that is bordered by George Street, Argyle Street and First Fleet Park, comprising Lots 20–22, DP 787906.

[2] Clause 17 and Schedule 1

Insert after clause 16:

17 Penalty notice offences and penalties

For the purposes of section 43A of the Act:

- (a) each offence created by a provision specified in Column 1 of Schedule 1 is an offence for which a penalty notice may be served, and
- (b) the penalty prescribed for each such offence is the amount specified opposite the provision in Column 2 of that Schedule.

Schedule 1 Penalty notice offences

(Clause 17)

Column 1	Column 2	
Offence	Penalty	
Clause 4 (1) (a)–(o), (q), (r), (t) and (u)	\$220	
Clause 4 (1) (p) and (s)	\$440	
Clause 5 (2)	\$220	
Clause 6 (3)	\$220	
Clause 7 (2)	\$220	
Clause 9 (2)	\$70	
Clause 10 (1)	\$220	
Clause 11 (2)	\$110	

Sydney Harbour Foreshore Authority Amendment Regulation 2005

Amendment of Sydney Harbour Foreshore Authority Regulation 1999	Schedule 2
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Column 1	Column 2 Penalty	
Offence		
Clause 11C (1)	\$220	
Clause 11D	\$110	
Clause 11E	\$220	
Clause 11F (2)	\$220	
Clause 11G (a)	\$110	
Clause 11G (b) and (d)–(f)	\$220	
Clause 11G (c)	\$440	
Clause 11H (a), (b) and (e)	\$110	
Clause 11H (c) and (d)	\$220	
Clause 11I (3) and (4)	\$220	
Clause 11J (1)	\$220	
Clause 12 (2) (a) and (b)	\$220	
Clause 13 (1) (a)–(c)	\$220	
Clause 14 (3)	\$220	

Orders



New South Wales

Order

under the

Local Courts Act 1982

MARIE BASHIR, Governor

I, Professor Marie Bashir AC, Governor of the State of New South Wales, with the advice of the Executive Council, and in pursuance of section 6 of the *Local Courts Act 1982*, do, by this my Order, abolish the following Local Courts:

- (a) Bowral Local Court, being the Local Court established by Order published in the Gazette on 28 February 1890,
- (b) Redfern Local Court, being the Local Court established by Order published in the Gazette on 20 September 1881.

Dated, this 20th day of July 2005.

By Her Excellency's Command,

BOB DEBUS, M.P., Attorney General

Explanatory Note

The object of this Order is to abolish the Local Courts at Bowral and Redfern as those courts closed on 13 May 2005 and 20 May 2005 and their records were transferred to Moss Vale Local Court and the Local Court at the Downing Centre, respectively.

s05-370-04.p01



Order

under the

Road Transport (Safety and Traffic Management) Act 1999

MARIE BASHIR, Governor

I, Professor Marie Bashir AC, Governor of the State of New South Wales, with the advice of the Executive Council, and in pursuance of section 57A of the *Road Transport (Safety and Traffic Management) Act 1999 (the Act)*, do, by this my Order, approve the system comprising a Redflex camera, and Redflex Express, configured in bus priority mode as a type of device designed to photograph a vehicle that is driven in a traffic lane on a road or a road related area and to record on any such photograph the matters referred to in the definition of *approved traffic lane camera device* in section 57A of the Act. Dated, this 20th day of July 2005.

aled, this 20th day of July 2005.

By Her Excellency's Command,

MICHAEL COSTA, M.L.C., Minister for Roads

Explanatory note

Section 57B of the *Road Transport (Safety and Traffic Management) Act 1999* allows the use of approved traffic lane camera devices to detect certain offences of driving in traffic lanes dedicated primarily for the use of public transport. The operation of that section requires the Governor's approval of a type of device for the purpose of the definition of *approved traffic lane camera device* in section 57A of that Act. The object of this Order is to approve a type of device for that purpose.

This Order is made under section 57A of the Road Transport (Safety and Traffic Management) Act 1999.

s05-313-12.p01

Other Legislation



New South Wales

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 under the heading "Muridae" (under the headings "Animals", "Vertebrates" and "Mammals"):

Pseudomys delicatulus (Gould, 1842)

Delicate Mouse

Dated, this 9th day of July 2005.

Dr Lesley Hughes 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.nationalparks.nsw.gov.au,
- (b) by contacting the Scientific Committee Support Unit, by post C/- Department of Environment and Conservation, PO Box 1967, Hurstville, 2220, by telephone (02) 9585 6940 or by facsimile (02) 9585 6606,
- (c) in person at the Department of Environment and Conservation Information Centre, Level 14, 59-61 Goulburn St, Sydney.

s05-340-18.p01



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 a vulnerable species under that Act and, accordingly, Schedule 2 to that Act is amended by inserting under the heading "Cacatuidae" (under the headings "Animals", "Vertebrates" and "Birds"):

Callocephalon fimbriatum (Grant, 1803) Gang-gang Cockatoo

Dated, this 9th day of July 2005.

Dr Lesley Hughes 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.nationalparks.nsw.gov.au,
- (b) by contacting the Scientific Committee Support Unit, by post C/- Department of Environment and Conservation, PO Box 1967, Hurstville, 2220, by telephone (02) 9585 6940 or by facsimile (02) 9585 6606,
- (c) in person at the Department of Environment and Conservation Information Centre, Level 14, 59-61 Goulburn St, Sydney.

s05-341-18.p01

ERRATUM

THE Notices of Final Determination under the Threatened Species Conservation Act 1995 which appeared in the *Government Gazette* on 15 July 2005, No. 90, pages 3732 to 3744 contained printing errors. The NSW Scientific Committee sections on pages 3733 to 3739 and 3741 to 3744 had missing text down the right hand margins. This erratum amends those errors and the documents are republished in full. Gazettal date remains 15 July 2005.



New South Wales

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 ecological community as an endangered ecological community under that Act and, accordingly, Schedule 1 to that Act is amended by inserting in Part 3 in alphabetical order:

Myall Woodland in the Darling Riverine Plains, Brigalow Belt South, Cobar Peneplain, Murray-Darling Depression, Riverina and NSW South Western Slopes bioregions (as described in the final determination of the Scientific Committee to list the ecological community)

Dated, this 27th day of June 2005.

Dr Lesley Hughes 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.nationalparks.nsw.gov.au,
- (b) by contacting the Scientific Committee Support Unit, by post C/- Department of Environment and Conservation, PO Box 1967, Hurstville, 2220, by telephone (02) 9585 6940 or by facsimile (02) 9585 6606,
- (c) in person at the Department of Environment and Conservation Information Centre, Level 14, 59–61 Goulburn St, Sydney.

s05-271-04.p01

3799

NSW SCIENTIFIC COMMITTEE

Final Determination

The Scientific Committee, established by the Threatened Species Conservation Act, has made a Final Determination to list Myall Woodland in the Darling Riverine Plains, Brigalow Belt South, Cobar Peneplain, Murray-Darling Depression, Riverina and NSW South western Slopes bioregions as an ENDANGERED ECOLOGICAL COMMUNITY on Part 3 of Schedule 1 of the Act. The listing of Endangered Ecological Communities is provided for by Part 2 of the Act.

The Scientific Committee has found that:

1. Myall Woodland in the Darling Riverine Plains, Brigalow Belt South, Cobar Peneplain, Murray-Darling Depression, Riverina and NSW South western Slopes bioregions is the name given to the ecological community that is scattered across the eastern parts of alluvial plains of the Murray-Darling river system. Typically, the ecological community occurs on red-brown earths and heavy textured grey and brown alluvial soils within a climatic belt receiving between 375 and 500 mm mean annual rainfall. The structure of the community varies from low woodland and low open woodland to low sparse woodland or open shrubland, depending on site quality and disturbance history. The tree layer grows up to a height of about 10 metres and invariably includes Acacia pendula (Weeping Myall or Boree) as one of the dominant species or the only tree species present. The understorey includes an open layer of chenopod shrubs and other woody plant species and an open to continuous groundcover of grasses and herbs. The structure and composition of the community varies, particularly with latitude, as chenopod shrubs are more prominent south of the Lachlan River district, while other woody species and summer grasses are more common further north. In some areas the shrub stratum may have been reduced or eliminated by clearing or heavy grazing.

The community is characterised by the following assemblage of species:

Acacia homalophylla Acacia oswaldii Acacia pendula Acacia victoriae Alectryon oleifolius Alternanthera denticulata Amaranthus macrocarpus Amyema quandang Apophyllum anomalum Arthropodium minus Asperula conferta Astrebla lappacea Astrebla pectinata Atalaya hemiglauca Atriplex leptocarpa Atriplex nummularia Atriplex semibaccata Atriplex spinibractea Austrodanthonia caespitosa Austrodanthonia setacea Austrostipa aristiglumis Austrostipa scabra Boerhavia dominii Brachvscome lineariloba Calocephalus sonderi Calotis hispidula Calotis scabiosifolia *Capparis lasiantha Capparis mitchellii* Casuarina cristata *Centipeda cunninghamii* Chloris truncata Chrysocephalum apiculatum Convolvulus erubescens

Dactyloctenium radulans	Daucus glochidiatus
Dichanthium sericeum	Diplachne fusca
Einadia nutans	Enchylaena tomentosa
Enteropogon acicularis	Eragrostis parviflora
Eremophila bignoniiflora	Eremophila maculata
<i>Eriochloa</i> sp.	Exocarpos aphyllus
Goodenia glauca	Goodenia pusilliflora
Homopholis proluta	Hypoxis pusilla
Iseilema membranaceum	Isoetopsis graminifolia
Ixiolaena leptolepis	Maireana aphylla
Maireana ciliata	Maireana decalvans
Maireana excavata	Maireana pentagona
Marsilea drummondii	Myoporum montanum
Myriocephalus rhizocephalus	Nitraria billardierei
Oxalis perennans	Panicum decompositum
Plantago varia [complex]	Poa fordeana
Portulaca oleracea	Rhagodia spinescens
Rhodanthe corymbiflora	Rhodanthe floribunda
Rhodanthe pygmaea	Salsola kali
Sclerolaena brachyptera	Sclerolaena muricata
Sclerolaena stelligera	Sida corrugata
Sida trichopoda	Solanum esuriale
Sporobolus caroli	Swainsona procumbens
Teucrium racemosum	Tribulus terrestris
Triptilodiscus pygmaeus	Vittadinia cuneata

- 2. 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 low abundance. The species composition of the site will be influenced by the size of the site, recent rainfall or drought conditions and by its disturbance (including fire, grazing, flooding and land clearing) history. The number and relative abundance of species will change with time since fire, flooding or significant rainfall, and may also change in response to changes in grazing regimes. 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. Myall Woodland in the Darling Riverine Plains, Brigalow Belt South, Cobar Peneplain, Murray-Darling Depression, Riverina and NSW South western Slopes bioregions is known from parts of the Local Government Areas of Berrigan, Bland, Bogan, Carrathool, Conargo, Coolamon, Coonamble, Corowa, Forbes, Gilgandra, Griffith, Gwydir, Inverell, Jerilderee, Lachlan, Leeton, Lockhart, Moree Plains, Murray, Murrumbidgee, Narrabri, Narranderra, Narromine, Parkes, Urana, Wagga Wagga and Warren, and but may occur elsewhere in these bioregions. Bioregions are defined in Thackway and Creswell (1995).

- 4. Myall Woodland in the Darling Riverine Plains, Brigalow Belt South, Cobar Peneplain, Murray-Darling Depression, Riverina and NSW South western Slopes bioregions has an open to sparse tree canopy up to 10 metres tall dominated by Acacia pendula (Myall or Boree), which may occur in pure stands, particularly south of the mid-Lachlan River district, or in combination with other trees such as Casuarina cristata, Acacia homalophylla (Yarran), A. oswaldii (Miljee), Alectryon oleifolius (Rosewood), Apophyllum anomalum (Warrior bush) and Capparis spp. The mistletoe, Amyema quandang, is common on the branches of Acacia pendula throughout. The shrub layer varies substantially with latitude and grazing history (Beadle 1948), and may be virtually absent in some stands. Atriplex nummularia (Old man saltbush) was historically one of the dominant understorey shrubs in the south, but is now uncommon in the community (Moore 1953). Other chenopod shrubs, such as Atriplex semibaccata (Creeping saltbush), Enchylaena tomentosa (Ruby saltbush), Maireana aphylla (Cotton bush), M. decalvens (Black cotton bush), M. excavata, M. pentagona (Hairy bluebush), Rhagodia spinescens (Thorny saltbush) and Sclerolaena muricata (Black rolypoly), are among the most frequent shrubs in the understorey of Myall Woodland south of the mid Lachlan district. Further north, non-chenopod shrubs, such as Eremophila maculata (Spotted fuchsia), Apophyllum anomalum (Warrior bush) and Atalaya hemiglauca (Whitewood) become more prominent components of the community, although some chenopods may still be common. The ground layer includes a diversity of grasses and forbs, and varies in cover depending on grazing regime and occurrence of recent rain. Chloris truncata (Windmill grass), Einadia nutans (Climbing saltbush), Enteropogon acicularis (Curly windmill grass), Rhodanthe corymbiflora (Small white sunray), Solanum esuriale (Quena) and Sporobolus caroli (Fairy grass), are frequent throughout the range of the community. Astrebla spp. (Mitchell grasses), Austrostipa aristiglumis (Plains grass), Dichanthium sericeum (Queensland bluegrass) and Panicum decompositum (Native millet) frequently occur in Myall Woodland north from the mid-Lachlan River district, while Austrodanthonia spp. (White-top or Wallaby grasses), Austrostipa scabra (Rough speargrass), and herbs such as Chrysocephalum apiculatum (Common everlasting), Goodenia pusilliflora, Myriocephalus rhizocephalus (Woolly-heads) and Swainsona spp. (Bladder peas), are more prominent in the south.
- 5. A number of vegetation surveys and mapping studies have been conducted across the range of Myall Woodland in the Darling Riverine Plains, Brigalow Belt South, Cobar Peneplain, Murray-Darling Depression, Riverina and NSW South western Slopes bioregions. In western New South Wales, the community includes the 'Acacia pendula' Associes' of Beadle (1948). On the Moree floodplain, the community includes Map unit 7 'Myall/Rosewood Woodlands on Elevated Floodplain' of White (2000) and Map unit 4(b) 'Myall woodlands' of DLWC (2002a). In the Lachlan-Macquarie district of central NSW, the community includes the 'Acacia pendula-Atriplex nummularia Alliance' of Biddiscombe (1963), Map unit R5 'Myall Woodlands' of Sivertsen and Metcalfe (1995) and Metcalfe et al. (2003), Floristic Groups '65 Eremophila mitchellii/Acacia oswaldii/A. pendula', '66 Outlier Acacia homalophylla', '67 Sclerolaena muricata/Acacia pendula' and '68 Acacia pendula' of Austin et al. (2000), Map units ALP3 'Acacia woodlands of the stagnant alluvial plains: Acacia pendula' and ALP4 'Acacia woodlands of the stagnant alluvial plains: Acacia homalophylla' of DLWC (2002b), and Broad Vegetation Type 5 'Myall open-woodland on loamy-clay plains' of Kerr et al. (2003). In the Riverina district, the community includes the 'Acacia pendula-Atriplex nummularia alliance' of Moore (1953), Map unit 25 'Acacia pendula woodland' of Porteners (1993), Map Unit 4a 'Open Boree Woodland/Grassland' of Roberts and Roberts (2001), Broad Vegetation Type 6

'Boree woodland' of Miles (2001), Map unit 12 '*Acacia pendula* with an herbaceous understorey' of DLWC (2002c) and 'Parna Plains Grassland and Woodland' of White *et al.* (2002). Myall Woodland belongs to the 'Riverine Plain Woodlands' vegetation class of Keith (2004).

- Myall Woodland in the Darling Riverine Plains, Brigalow Belt South, Cobar Peneplain, 6. Murray-Darling Depression, Riverina and NSW South western Slopes bioregions has been substantially reduced and modified by clearing and grazing over the past 160 years. The extent of Myall Woodland has not been mapped across its entire range. However, Riverine Plain Woodlands (which include Myall Woodland), are currently estimated to cover 1000-2000 km², representing less than 30% of the original extent of this broadly defined vegetation class (Keith 2004). Compared to this combined estimate, the remaining area of Myall Woodland is likely to be smaller and is likely to represent much less than 30% of its original range. In the Moree district, White (2001) estimated that 91 km² of Myall/Rosewood Woodlands on Elevated Floodplain remained, representing 8.5% of its estimated pre-clearing distribution. In the lower Macquarie-Castlereagh region, Kerr et al. (2003) estimated that 93% of Myall open woodland had been cleared, leaving less than 300 km² extant. In the Riverina, NSW NPWS (2003) estimated that 94% of Myall Woodland had been cleared, leaving approximately 780 km². In the Murray valley, which partly overlaps the Riverina region, Miles (2001) estimated that 190 km² of Boree Woodland remained, representing only 4% of the pre-clearing distribution.
- 7. In many areas of the Riverina, Myall Woodland has been eliminated and replaced by a grassland of Chloris, Austrodanthonia and Austrostipa, that lacks the woody components of the original woodland vegetation (Beadle 1948, Moore 1953, Porteners 1993, Benson et al. 1997, Keith 2004). In some areas, Acacia pendula persists as small, scattered individuals suppressed by grazing. Moore (1953) had considerable difficulty in finding any stands that had not been considerably modified by grazing or clearing, but established the formerly extensive distribution of Myall Woodland in the Riverina from accounts in historical journals and land surveys. Beadle (1948) and Moore (1953) both interviewed local farmers who described a major decline in dominant woody species, particularly Acacia pendula and Atriplex nummularia, during droughts of the late nineteenth century when trees were cut for emergency fodder and there was sustained overgrazing by sheep and rabbits. There was also a substantial trade in Myall as firewood (Williams 1962). High levels of grazing also led to the replacement of tall perennial tussock grasses with short perennial grasses and unpalatable annual herbs (Beadle 1948), as well as introduction of exotic herbs and grasses such as *Bromus* spp., *Erodium* spp., Lepidium africanum, Medicago spp., Sisymbrium spp. and Trifolium spp. Introduced shrubs, notably Lycium ferocissimum (African boxthorn) have also invaded some areas occupied by the community. Extant remnants of Myall Woodland are therefore in various states of modification that reflect their history of tree removal and grazing.
- 8. Myall Woodland in the Darling Riverine Plains, Brigalow Belt South, Cobar Peneplain, Murray-Darling Depression, Riverina and NSW South western Slopes bioregions continues to be threatened by clearing and fragmentation associated with cropping, overgrazing by feral and domestic animals, pest outbreaks and weed invasion. In the northern Wheatbelt, for example, the remaining area of Myall Woodland declined by 10% between 1985 and 2000, and more than 90% of the remaining area was in patches less than 10 km² (Cox *et al.* 2001). Clearing of native vegetation is listed as a Key Threatening Process under the Threatened Species Conservation Act (1995).

- 9. The dominant species in Myall Woodland, *Acacia pendula*, is subject to herbivory by the processionary caterpillar *Ochrogaster lunifer* (Bag-shelter moth) (NSW Dept. of Agriculture 1960). These caterpillars may cause complete defoliation of the trees. Cunningham *et al.* (1981) state that "the severity of defoliation varies from year to year, as does the tree's reaction. Those stripped of their leaves take a considerable time to recover and in some instances at least, death of the tree occurs as a direct result of catepillar attacks." The impacts of *O. lunifer* are a particular concern to landholders in districts where remnants of Myall Woodland have survived past clearing pressures and where stocking rates are maintained at low levels with the aim of conserving the community.
- 10. Only a small area of Myall Woodland in the Darling Riverine Plains, Brigalow Belt South, Cobar Peneplain, Murray-Darling Depression, Riverina and NSW South western Slopes bioregions is represented within existing conservation reserves. In the Riverina district, Oolambeyan National Park contains approximately 700 hectares in varying states of recovery, and a further 10 hectares are found in Lake Urana Nature Reserve. Outside the Riverina district, less than 5 ha of Myall Woodland is represented in Macquarie Marshes Nature Reserve.
- 11. In view of the above the Scientific Committee is of the opinion that Myall Woodland in the Darling Riverine Plains, Brigalow Belt South, Cobar Peneplain, Murray-Darling Depression, Riverina and NSW South western Slopes 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 Lesley Hughes Chairperson Scientific Committee

References

- Austin MP, Cawsey EM, Baker BL, Yialeloglou MM, Grice DJ, Briggs SV (2000) Predicted vegetation cover in the Central Lachlan region. CSIRO Division of Wildlife and Ecology, Canberra.
- Beadle NCW (1948) Vegetation and pastures of western New South Wales. Soil Conservation Service, Sydney.
- Benson JB, Porteners M, Ashby E (1997) The native grasslands of the Riverine Plain, New South Wales. *Cunninghamia* **5**, 1-48.
- Biddiscombe EF (1963) A vegetation survey in the Macquarie region, New South Wales. *Division of Plant Industry Technical paper No. 18*, CSIRO, Melbourne.

- Cox SJ, Sivertsen DP, Bedward M (2001) Clearing of native woody vegetation in the New South Wales northern wheatbelt: extent, rate of loss and implications for biodiversity conservation. *Cunninghamia* 7, 101-55.
- Cunningham GM, Mulham WE, Milthorpe PL, Leigh JH (1981) 'Plants of western New South Wales.' New South Wales Government Printing Office, Sydney.
- DLWC (2002a) Native Vegetation map report: Abridged version. No: 3. Bellata, Gravesend, Horton and Boggabri 1:100 00 Map Sheets., New South Wales Department of Land and Water Conservation, Parramatta
- DLWC (2002b) Native Vegetation map report: abridged version. No. 1 Bogan Gate, Boona Mount, Condobolin, Dandaloo, Tottenhan and Tullamore 1:100 000 map sheet, DLWC, Parramatta.
- DLWC (2002c) Native Vegetation map report: abridged version. No. 2 Oxley, One Tree, Gunbar, Dry Lake, Hay, Moggumbill 1:100 000 map sheet, New South Wales Department of Land and Water Conservation, Parramatta.
- 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.
- Kerr M, Jowett M, Robson D (2003) Reconstructed Distribution and Extent of Native Vegetation within the Lower Macquarie-Castlereagh Region. NSW National Parks and Wildlife Service, Dubbo.
- Metcalfe L, Sivertsen DP, Tindale DR, Ryan KM (2003) Natural Vegetation of the New South Wales Wheat Belt: Cobar, Nyngan, Gilgandra, Nymagee, Narromine and Dubbo 1:250 000 vegetation sheets. *Cunninghamia* **8**, 253-284.
- Miles C (2001) NSW Murray Catchment: biodiversity action plan. Nature Conservation Working Group Inc., Albury.
- Moore CWE (1953) The vegetation of the south-eastern Riverina, New South Wales 1: the disclimax communities. *Australian Journal of Botany* **1**, 548-567.
- NSW Department of Agriculture (1960) Insect Pest Leaflet No. 93 (2nd edition) Government Printer.
- NSW NPWS (2003) 'Acceleration of the implementation of the outcomes of bioregional assessment projects Riverina and Cobar Peneplain Bioregions.' NSW National Parks and Wildlife Service, Sydney.
- Portners MF (1993) The natural vegetation of the Hay Plain, Booligal-Hay and Deniliquin-Bendigo 1:250,000 maps. *Cunninghamia* **3**, 1-122.
- Roberts I, Roberts J (2001) Plains Wanderer *Pedionmus torquartus* habitat mapping including woody vegetation and other landscape features, Riverina Plains NSW. Unpublished report to NSW National Parks and Wildlife Service, Dubbo.

- Sivertsen D and Metcalfe L (1995) Natural vegetation of the southern wheat-belt (Forbes and Cargelligo 1:250 000 map sheets. *Cunninghamia* **4**,103-128.
- Thackway R, Creswell ID (1995) (eds) 'An interim biogeographic regionalisation of Australia: a framework for establishing the national system of reserves.' Australian Nature Conservation Agency, Canberra.
- Williams OB (1962) The Riverina and its Pastoral Industry, 1860-1869. In A.Barnard (Ed), *The Simple Fleece. Studies in the Australian Wool Industry*. Melbourne University Press, Melbourne.
- White, M (2001) Pre-clearing vegetation mapping of the Moree Shire. NSW National Parks and Wildlife Service, Dubbo.
- White M, Muir AM, Webster R (2002) 'The reconstructed distribution of indigenous vegetation types across the NSW Riverina.' Report to the NSW National Parks and Wildlife Service, 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 ecological community as an endangered ecological community under that Act and, accordingly, Schedule 1 to that Act is amended by inserting in Part 3 in alphabetical order: Newnes Plateau Shrub Swamp in the Sydney Basin Bioregion (as described in the final determination of the Scientific Committee to list the ecological community) Dated, this 27th day of June 2005.

Dr Lesley Hughes 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.nationalparks.nsw.gov.au,
- (b) by contacting the Scientific Committee Unit, by post C/- Department of Environment and Conservation, PO Box 1967, Hurstville, 2220, by telephone (02) 9585 6940 or by facsimile (02) 9585 6606,
- (c) in person at the Department of Environment and Conservation Information Centre, Level 14, 59–61 Goulburn St, Sydney.

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s05-284-25.p02

NSW SCIENTIFIC COMMITTEE

Final Determination

The Scientific Committee, established by the Threatened Species Conservation Act, has made a Final Determination to list Newnes Plateau Shrub Swamp in the Sydney Basin Bioregion, as an ENDANGERED ECOLOGICAL COMMUNITY in Part 3 of Schedule 1 of the Act. Listing of endangered ecological communities is provided for by Part 2 of the Act.

The Scientific Committee has found that:

- 1. Newnes Plateau Shrub Swamp in the Sydney Basin Bioregion is the name given to the ecological community dominated by shrubs and sedges that occurs on sites with impeded drainage in low slope headwater valleys on the Newnes Plateau in the upper Blue Mountains.
- 2. Newnes Plateau Shrub Swamp is characterised by the following assemblage of species

Baeckea linifolia	Baeckea utilis
Baloskion australe	Bauera rubioides
Blechnum nudum	Boronia deanei
Callistemon citrinus	Callistemon linearis
Celmisia longifolia	Centella asiatica
Daviesia latifolia	Deyeuxia gunniana
Dillwynia stipulifera	Drosera spathulata
Eleocharis sphacelata	Empodisma minus
Epacris microphylla	Epacris paludosa
Gahnia sieberiana	Geranium neglectum
Gleichenia dicarpa	Gonocarpus micranthus
Goodenia bellidifolia	Grevillea acanthifolia subsp. acanthifolia
Gymnoschoenus sphaerocephalus	Hydrocotyle peduncularis
Juncus continuus	Lepidosperma limicola
Leptospermum continentale	Leptospermum grandifolium
Leptospermum myrtifolium	Leptospermum obovatum
Lepyrodia anarthria	Lepyrodia scariosa
Lomandra longifolia	Luzula ovata
Notochloe microdon	Olearia quercifolia
Patersonia fragilis	Sporadanthus gracilis
Sprengelia incarnata	Stylidium graminifolium
Todea barbara	Utricularia dichotoma
Velleia montana	Viola sieberiana
Xanthosia dissecta	Xyris gracilis
Xyris ustulata	

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, and a diverse fauna, both vertebrate and invertebrate. These components of the community are poorly documented.

- 4. Newnes Plateau Shrub Swamp occurs in narrow, elongated swamps formed in low-slope headwaters of the Newnes Plateau, in predominantly sandstone catchments of Triassic Narrabeen Group geology, at approximately 900-1200 m elevation on deep sandy organic sediments that are permanently to periodically waterlogged.
- 5. Newnes Plateau Shrub Swamp is characteristically dominated by shrubs, with a variable cover of sedges. Shrubs have a dense to open cover, and include *Baeckea linifolia*, *Grevillea acanthifolia* subsp. *acanthifolia*, *Epacris paludosa* and *Leptospermum* species. The cover of sedges varies inversely with shrub cover. Common sedges include *Baloskion australe*, *Empodisma minus*, *Lepyrodia scariosa* and *Lepidosperma limicola*, while herbs include *Patersonia fragilis* and *Xanthosia dissecta*. *Gleichenia dicarpa* and *Gymnoschoenus sphaerocephalus* may occur around drainage lines, while *Lomandra longifolia* may be prominent around the swamp margins. Floristic composition varies locally in relation to soil moisture gradients within the swamps (Keith and Benson 1988; Benson and Keith 1990).
- 6. With decreasing altitude, Newnes Plateau Shrub Swamp grades into Blue Mountains sedge swamp communities (Keith and Benson 1988). The transition occurs around Bell and Clarence at approximately 850-950 m above sea level. Blue Mountains sedge swamps typically have less cover of shrubs and a greater cover of sedges (particularly *Gymnoschoenus sphaerocephalus*) than Newnes Plateau Shrub Swamp. Other salient features that distinguish Newnes Plateau Shrub Swamp from Blue Mountains sedge swamps include the presence of species in the former such as *Dillwynia stipulifera* and *Boronia deanei*, the absence from the former of a range of shrub species that are not found at higher altitudes, and the occurrence of the former on subdued terrain, compared with the steep seepage slopes and headwater valleys that typify swamp habitats at lower elevations in the Blue Mountains.
- 7. Newnes Plateau Shrub Swamp may share a number of characteristics with Montane Peatlands and Swamps of the New England Tableland, NSW North Coast, Sydney Basin, South East Corner, South Eastern Highlands and Australian Alps bioregions, also listed as an Endangered Ecological Community under the *Threatened Species Conservation Act* (1995). However, this latter community has a lower diversity of sclerophyllous shrub species, a greater diversity of soft-leaved sedges, grasses and herbs, and typically occurs on more fertile substrates than Newnes Plateau Shrub Swamp.
- 8. Newnes Plateau Shrub Swamp provides habitat for threatened species including *Boronia deanei, Petalura gigantea,* the Giant Dragonfly, and *Eulamprus leuraensis,* the Blue Mountains Water Skink. The endangered shrub, *Persoonia hindii,* is also associated with the margins of the swamps.
- 9. Newnes Plateau Shrub Swamp has been recorded from the local government areas of Lithgow and Blue Mountains City (within the Sydney Basin Bioregion) but may occur

elsewhere in the Bioregion. Vegetation mapping of the entire range of Newnes Plateau Shrub Swamp indicates that it covers less than 650 ha in total (Keith and Benson 1988; Benson and Keith 1990). The largest swamp covers about 40 ha, and the average swamp size is less than 6 ha. Approximately 160 ha of Newnes Plateau Shrub Swamp occurs within Blue Mountains and Wollemi national parks, with the remainder on state forest and freehold land. Approximately 120 ha of the community, including the largest swamp, is adjacent to pine plantations or other cleared land.

- 10. Biogeographically, Newnes Plateau Shrub Swamp is related to other upland swamps in the Sydney Basin (e.g. Keith and Myerscough 1993). It represents the highest altitude expression of upland swamps on sandstone in mainland Australia, and is transitional between the 'Coastal Heath Swamps' and 'Montane Bogs and Fens' vegetation classes of Keith (2004). All of these swamps play important hydrological roles, acting as water filters, releasing water slowly to downstream watercourses, thereby regulating water quality and stream flows (Young and Young 1988).
- 11. A number of the water catchments containing Newnes Plateau Shrub Swamp contain transport corridors, pine plantations, sand quarries, coal mines or small-scale rural holdings. In some cases, these developments are located immediately adjacent to the swamps or with narrow buffer strips. The community is threatened by small-scale clearing, fragmentation, erosion and sedimentation all associated with roadworks, quarrying and periodic timber harvesting from adjacent plantations. Clearing of native vegetation is listed as a Key Threatening Process under the *Threatened Species Conservation Act* (1995).
- 12. Changes to drainage and moisture conditions in some swamps, including the largest example of the community, are caused by damming of swamp watercourses; roading across the swamps; sedimentation and erosion associated with roadways, quarries, mines and plantation harvesting within swamp catchments; and disposal of waste water from underground coal mines. These changes pose threats to the persistence and integrity of Newnes Plateau Shrub Swamp, given the crucial roles of water regimes in the composition, structure and function of the community. 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).
- 13. The Newnes plateau is underlain by extractable coal seams at varying depths, with underground longwall mining occurring, or proposed to occur, beneath the majority of the swamps. Subsidence of the land surface, and associated fracturing of bedrock between the coal seam and the surface, occurs after longwall mining, and this may change the hydrology of catchments and swamps they contain. Specifically, the conversion of perched water table flows into subsurface flows through mine-related voids may significantly alter the water balance of upland swamps (Young and Wray 2000). Changes to surface morphology within or near the swamps as a result of mine subsidence may also create nick points which become the focus of severe and rapid erosion (Young 1982). These changes pose threats to the persistence and integrity of, the community. Alteration of habitat following subsidence due to longwall mining is listed as a Key Threatening Process under the *Threatened Species Conservation Act* (1995).
- 14. Invasion of exotic species, including species of *Pinus*, and changes to fire regimes may pose threats to Newnes Plateau Shrub Swamp in future if any of the above processes

result in physical displacement of vegetation, increased influx of sediments and/or nutrients or significant drying of the swamps.

15. In view of the above the Scientific Committee is of the opinion that Newnes Plateau Shrub Swamp in the Sydney Basin Bioregion is likely to become extinct in nature in New South Wales unless the circumstances and factors threatening its survival cease to operate, or it might already be extinct.

Dr Lesley Hughes Chairperson Scientific Committee

References

- Benson DH, Keith DA (1990) The natural vegetation of the Wallerawang 1:100 000 map sheet. *Cunninghamia* **2**, 305-335.
- Keith DA, Benson DH (1988) The natural vegetation of the Katoomba 1:100 000 map sheet. *Cunninghamia* **2**, 107-143.
- Keith DA, Myerscough PJ (1993) Floristics and soil relations of upland swamp vegetation near Sydney. *Australian Journal of Ecology* **18**, 325-344.
- Young ARM (1982) Upland swamps (dells) on the Woronora plateau, N. S. W. PhD thesis, University of Wollongong.
- Young RW, Wray RAL (2000) The geomorphology of sandstones in the Sydney Region. In McNally GH and Franklin BJ eds Sandstone City – Sydney's Dimension Stone and other Sandstone Geomaterials. Proceedings of a symposium held on 7th July 2000, 15th Australian Geological Convention, University of Technology Sydney. Monograph No. 5, Geological Society of Australia, Springwood, NSW. Pp 55-73.
- Young RW, Young ARM (1982) 'Altogether barren, peculiarly romantic': the sandstone lands around Sydney. *Australian Geographer* **19**, 9-25.

OFFICIAL NOTICES

Appointments

PORTS CORPORATISATION (STAFF DIRECTOR ELECTIONS) REGULATION 2002

2005 Election of Elected Staff Director for the following Sydney Ports Corporation Newcastle Port Corporation Port Kembla Port Corporation

PURSUANT to clause 21(b) of the Ports Corporatisation (Staff Director Elections) Regulation 2002, I hereby declare the following candidates elected to the position of Elected Staff Director.

Sydney Ports Corporation:	Michael SULLIVAN
Newcastle Port Corporation:	Neil PEARSON
Port Kembla Port Corporation:	Geoff CORNWALL

BRIAN DECELIS, Returning Officer

Department of Infrastructure, Planning and Natural Resources

Infrastructure and Planning



New South Wales

Blacktown Local Environmental Plan 1988 (Amendment No 206)

under the

Environmental Planning and Assessment Act 1979

I, the Minister Assisting the Minister for Infrastructure and Planning (Planning Administration), make the following local environmental plan under the *Environmental Planning and Assessment Act 1979*. (SRW0000022/S69)

DIANE BEAMER, M.P., Minister Assisting the Minister for Infrastructure and Planning (Planning Administration)

e04-307-09.p01

Clause 1 Blacktown Local Environmental Plan 1988 (Amendment No 206)

Blacktown Local Environmental Plan 1988 (Amendment No 206)

under the

Environmental Planning and Assessment Act 1979

1 Name of plan

This plan is Blacktown Local Environmental Plan 1988 (Amendment No 206).

2 Aims of plan

This plan aims to include a school building known as *Siglingen* as a heritage item in Schedule 2 to *Blacktown Local Environmental Plan* 1988.

3 Land to which plan applies

This plan applies to Lot 2, DP 30191, Mount Druitt Road, Mount Druitt.

4 Amendment of Blacktown Local Environmental Plan 1988

Blacktown Local Environmental Plan 1988 is amended by inserting in Schedule 2 under the heading **Mount Druitt** after the matter relating to a church on Lot 1, DP 953447, Mount Druitt Road, the following words:

School Building—Siglingen—Lot 2, DP 30191, Mount Druitt Road



New South Wales

Hornsby Shire Local Environmental Plan 1994 (Amendment No 89)

under the

Environmental Planning and Assessment Act 1979

I, the Minister Assisting the Minister for Infrastructure and Planning (Planning Administration), make the following local environmental plan under the *Environmental Planning and Assessment Act 1979*. (SRE0000041/S69)

DIANE BEAMER, M.P., Minister Assisting the Minister for Infrastructure and Planning (Planning Administration)

e05-053-09.p01

Clause 1 Hornsby Shire Local Environmental Plan 1994 (Amendment No 89)

Hornsby Shire Local Environmental Plan 1994 (Amendment No 89)

under the

Environmental Planning and Assessment Act 1979

1 Name of plan

This plan is Hornsby Shire Local Environmental Plan 1994 (Amendment No 89).

2 Aims of plan

This plan aims to allow, with the consent of Hornsby Shire Council, the carrying out of development on the land to which this plan applies for the purpose of a day endoscopy centre.

3 Land to which plan applies

This plan applies to Lot 9, Section 1, DP 6740 and Lot 7, DP 304975, and known as No 10 Ramsay Road, Pennant Hills, as shown edged heavy black on the map marked "Hornsby Shire Local Environmental Plan 1994 (Amendment No 89)" deposited in the office of Hornsby Shire Council.

4 Amendment of Hornsby Shire Local Environmental Plan 1994

Hornsby Shire Local Environmental Plan 1994 is amended by inserting at the end of the Table to clause 22 (1) under the headings "Address/Area", "Land Description" and "Permitted Land Use or Other Development", respectively, the following words:

No 10 Ramsay Road, Pennant	Lot 9 Section 1 DP 6740	Day
Hills	Lot 7 DP 304975	endoscopy
		centre



Kogarah Local Environmental Plan 1998 (Amendment No 38)

under the

Environmental Planning and Assessment Act 1979

I, the Minister Assisting the Minister for Infrastructure and Planning (Planning Administration), make the following local environmental plan under the *Environmental Planning and Assessment Act 1979.* (S02/01903/S69)

BOB DEBUS, M.P.,

for Minister Assisting the Minister for Infrastructure and Planning (Planning Administration)

e03-048-09.p02

Clause 1 Kogarah Local Environmental Plan 1998 (Amendment No 38)

Kogarah Local Environmental Plan 1998 (Amendment No 38)

under the

Environmental Planning and Assessment Act 1979

1 Name of plan

This plan is Kogarah Local Environmental Plan 1998 (Amendment No 38).

2 Aims of plan

- (1) This plan aims:
 - (a) to prohibit the carrying out of development for the purpose of housing for older people and people with a disability, and
 - (b) to allow, with the consent of Kogarah Municipal Council, the carrying out of development for the purpose of residential care facilities (being accommodation for older people),

on the land to which this plan applies so as to maintain the amenity and low density environment of areas predominantly characterised by detached dwelling houses.

(2) This plan is not intended to limit the carrying out of development on the land to which this plan applies under *State Environmental Planning Policy (Seniors Living) 2004* by or on behalf of the Director-General of the Department of Housing, or a local government or community housing provider.

3 Land to which plan applies

This plan applies to all land situated in the local government area of Kogarah within the Residential 2 (a)—Residential (Low Density) Zone under *Kogarah Local Environmental Plan 1998*.

4 Amendment of Kogarah Local Environmental Plan 1998

Kogarah Local Environmental Plan 1998 is amended as set out in Schedule 1.

Kogarah Local Environmental Plan 1998 (Amendment No 38)

Amendments

Schedule 1

(Clause 4)

Schedule 1 Amendments

[1] Clause 7 Zoning control table

Omit "housing for older people or people with a disability;" from Item 3 (Only with development consent) in the zoning control table to the clause in the matter relating to the Residential 2 (a)—Residential (Low Density) Zone.

[2] Clause 7, zoning control table

Insert "; residential care facilities" in alphabetical order in Item 3 in the matter relating to the Residential 2 (a)—Residential (Low Density) Zone.



New South Wales

Maclean Local Environmental Plan 2001 (Amendment No 14)

under the

Environmental Planning and Assessment Act 1979

I, the Minister Assisting the Minister for Infrastructure and Planning (Planning Administration), make the following local environmental plan under the *Environmental Planning and Assessment Act 1979*. (G04/00062/PC)

DIANE BEAMER, M.P., Minister Assisting the Minister for Infrastructure and Planning (Planning Administration)

e05-036-09.p01

Clause 1 Maclean Local Environmental Plan 2001 (Amendment No 14)

Maclean Local Environmental Plan 2001 (Amendment No 14)

under the

Environmental Planning and Assessment Act 1979

1 Name of plan

This plan is Maclean Local Environmental Plan 2001 (Amendment No 14).

2 Aims of plan

- (1) This plan aims to allow, with the consent of Clarence Valley Council, the development of the land to which this plan applies (being the Yamba Shopping Fair centre), but only if the Council is satisfied that any access to and egress from the land to Yamba Road will be restricted to "left-in-only" access and a raised median along Yamba Road will be provided to prevent right-turn movements into and out of the site.
- (2) This plan also aims to effect minor law revision.

3 Land to which plan applies

- In respect of the aim referred to in clause 2 (1), this plan applies to Lots 1–3, DP 518466 and Lot 1, DP 413855, Yamba Road and Lot 2, DP 413856 and Lot 2, DP 738054, Treelands Drive, Yamba, known as the Yamba Shopping Fair centre.
- (2) In respect of the aim referred to in clause 2 (2), this plan applies to all land under *Maclean Local Environmental Plan 2001*.

4 Amendment of Maclean Local Environmental Plan 2001

Maclean Local Environmental Plan 2001 is amended as set out in Schedule 1.

Maclean Local Environmental Plan 2001 (Amendment No 14)

Amendments

Schedule 1

Schedule 1 Amendments

(Clause 4)

[1] Clause 19 Development along main or arterial roads

Insert "the only" after "unless" in clause 19 (1) (a).

[2] Clause 19A

Insert after clause 19:

19A Vehicular access to Yamba Shopping Fair centre

- (1) This clause applies Lots 1–3, DP 518466 and Lot 1, DP 413855, Yamba Road and Lot 2, DP 413856 and Lot 2, DP 738054, Treelands Drive, Yamba, known as the Yamba Shopping Fair centre.
- (2) Despite any other provision of this plan and, in particular, clause 19 (1) (a), the Council may grant consent to the development of the land to which this clause applies, but only if it is satisfied that:
 - (a) any access to and egress from the land to Yamba Road will be restricted to "left-in-only" access, and
 - (b) a raised median along Yamba Road will be provided to prevent right-turn movements into and out of the site.



New South Wales

Manly Local Environmental Plan 1988 (Amendment No 68)

under the

Environmental Planning and Assessment Act 1979

I, the Minister Assisting the Minister for Infrastructure and Planning (Planning Administration), make the following local environmental plan under the *Environmental Planning and Assessment Act 1979*. (S04/00677/S69)

DIANE BEAMER, M.P., Minister Assisting the Minister for Infrastructure and Planning (Planning Administration)

e05-075-03.p01

Clause 1 Manly Local Environmental Plan 1988 (Amendment No 68)

Manly Local Environmental Plan 1988 (Amendment No 68)

under the

Environmental Planning and Assessment Act 1979

1 Name of plan

This plan is Manly Local Environmental Plan 1988 (Amendment No 68).

2 Aims of plan

This plan aims to add the building on the land to which this plan applies as an item of the environmental heritage in Schedule 4 to *Manly Local Environmental Plan 1988*.

3 Land to which plan applies

This plan applies to land known as Lot 14, DP 3806, being 101 Bower Street, Manly, as shown coloured brown and edged heavy black on the map marked "Manly Local Environmental Plan 1988 (Amendment No 68)" deposited in the office of Manly Council.

4 Amendment of Manly Local Environmental Plan 1988

Manly Local Environmental Plan 1988 is amended as set out in Schedule 1.

Manly Local Environmental Plan 1988 (Amendment No 68)

Amendments

[1]

Schedule 1

(Clause 4)

Schedule 1 Amendments

Clause 7 Interpretation

Insert in appropriate order in the definition of *item of the environmental heritage* in clause 7 (1):

Manly Local Environmental Plan 1988 (Amendment No 68)

[2] Schedule 4 Items of the environmental heritage

Insert in numerical order of street number in the entries for Bower Street, Manly, under the headings "*Architectural and Archaeological Items*", "(A) Alphabetical Entry by Street", "Item" and "Address":

House

101 Bower Street, Manly (Lot 14, DP 3806)



New South Wales

Woollahra Local Environmental Plan 1995 (Amendment No 52)

under the

Environmental Planning and Assessment Act 1979

I, the Minister Assisting the Minister for Infrastructure and Planning (Planning Administration), make the following local environmental plan under the *Environmental Planning and Assessment Act 1979*. (S03/03316/S69)

DIANE BEAMER, M.P., Minister Assisting the Minister for Infrastructure and Planning (Planning Administration)

e04-266-09.p01

Clause 1 Woollahra Local Environmental Plan 1995 (Amendment No 52)

Woollahra Local Environmental Plan 1995 (Amendment No 52)

under the

Environmental Planning and Assessment Act 1979

1 Name of plan

This plan is Woollahra Local Environmental Plan 1995 (Amendment No 52).

2 Aims of plan

This plan aims to amend Woollahra Local Environmental Plan 1995:

- (a) to add properties to the schedule of heritage items, and
- (b) to create a heritage conservation area for land in the vicinity of Mona Road, Darling Point, and
- (c) to add properties to the schedule of heritage items forming a heritage item group.

3 Land to which plan applies

This plan applies to land within the local government area of Woollahra shown by distinctive colouring and edged heavy black on Sheets 1–9, or edged blue and marked "Heritage Conservation Area" on Sheet 2, of the map marked "Woollahra Local Environmental Plan 1995 (Amendment No 52)—Heritage Conservation Map" deposited in the office of Woollahra Council.

4 Amendment of Woollahra Local Environmental Plan 1995

Woollahra Local Environmental Plan 1995 is amended as set out in Schedule 1.

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Woollahra Local Environmental Plan 1995 (Amendment No 52)

Amendments

Schedule 1

(Clause 4)

Schedule 1 Amendments

[1] Schedule 1 Definitions

Insert in appropriate order in the definition of *heritage conservation map*: Woollahra Local Environmental Plan 1995 (Amendment No 52)— Heritage Conservation Map

[2] Schedule 3 Heritage items

Insert in alphabetical and numerical order of street name and number:

Annandale St, Darling Point	8	Balgowan-house and grounds
Balfour Rd, Rose Bay	9	<i>St Bernard Hall</i> —residential flat building and grounds
Balfour Rd, Rose Bay, outside properties within road reservation	13–31 and 18–36	Avenue of Plane trees and Fig trees
Balfour Rd, Rose Bay	19	<i>Wycombe</i> —residential flat building and grounds—Balfour Rd heritage item group (see also 21, 23 and 25 Balfour Rd, Rose Bay)
Balfour Rd, Rose Bay	21	Residential flat building and grounds—Balfour Rd heritage item group (see also 19, 23 and 25 Balfour Rd, Rose Bay)
Balfour Rd, Rose Bay	23	Residential flat building and grounds—Balfour Rd heritage item group (see also 21, 23 and 25 Balfour Rd, Rose Bay)
Balfour Rd, Rose Bay	25	<i>Springfield</i> —residential flat building and grounds—Balfour Rd heritage item group (see also 19, 21 and 23 Balfour Rd, Rose Bay)
Carthona Av, Darling Point	2	Neidpath—house and grounds
Darling Pt. Rd, Darling Point	14a	<i>Barbiston</i> —residential flat building, grounds and sandstone wall to street
Darling Pt. Rd, Darling Point	28	House and grounds
Eastbourne Rd, Darling Point	7	House and grounds

Woollahra Local Environmental Plan 1995 (Amendment No 52)

Goomerah Cr, Darling Point	9	Sandstone retaining walls, balustrade and rockface to the former house <i>Denholm</i> — Goomerah Cr/Yarranabbe Rd/ Darling Point Rd heritage item group (see also 54 Darling Point Rd, Darling Point and 28 Yarranabbe Rd, Darling Point)
Greenoaks Av, Darling Point	10	Glenires—house and grounds
Kent Rd, Rose Bay	4a	<i>Fermoyle</i> —residential flat building and front fence
Kent Rd, Rose Bay	16	<i>Sherland Lodge</i> —house and grounds
Kent Rd, Rose Bay	17	Samares—house and grounds
Kent Rd, Rose Bay	19	The Knoll—house and grounds
Kent Rd, Rose Bay	20	<i>Tudor House</i> —residential flat building and grounds
Kent Rd, Rose Bay	32	House and grounds
Latimer Rd, Bellevue Hill	1	<i>Phillip Court</i> —residential flat building and grounds—Latimer Rd heritage item group (see also 101 O'Sullivan Rd, Bellevue Hill)
Mona Rd, Darling Point	14	<i>Wyralla</i> —house, grounds and sandstone retaining wall to Mona La
Mona Rd, Darling Point	15	Semi-detached house, grounds, and sandstone retaining wall to street—Mona Rd heritage item group (see also 17 Mona Rd, Darling Point)
Mona Rd, Darling Point	16	<i>Mindarraba</i> —house, grounds and sandstone retaining wall to Mona La
Mona Rd, Darling Point	17	Semi-detached house, grounds and sandstone retaining wall to street—Mona Rd heritage item group (see also 15 Mona Rd, Darling Point)
Mona Rd, Darling Point	18	<i>Brereton</i> —former house, grounds and sandstone retaining wall to Mona La

Schedule 1

Woollahra Local Environmental Plan 1995 (Amendment No 52)

Amendments

Mona Rd, Darling Point	20	<i>Winburn</i> —house, grounds and sandstone retaining wall to Mona La
Mona Rd, Darling Point	21	<i>Greycliffe Flats</i> —house, grounds and sandstone retaining wall to street
Mona Rd, Darling Point	23	<i>Greycliffe Flats</i> —house, grounds and sandstone retaining wall to street
Mona Rd, Darling Point	25–27	<i>The Grange</i> —residential flat building, grounds and brick retaining wall to street
Mona Rd, Darling Point	36a	<i>Gwelo</i> —former house and grounds
New South Hd Rd, Rose Bay	633	Murong—house and grounds
O'Sullivan Rd, Rose Bay	51-55	Former service station and grounds
O'Sullivan Rd, Rose Bay	79	<i>Darnley</i> —residential flat building and grounds
O'Sullivan Rd, Bellevue Hill	97	Avalon—residential flat building and grounds
O'Sullivan Rd, Bellevue Hill	101	<i>Beresford Court</i> —residential flat building and grounds—Latimer Rd heritage item group (see also 1 Latimer Rd, Bellevue Hill)
O'Sullivan Rd, Bellevue Hill	285	Residential flat building, shops, garage and grounds
Oswald La, Darling Point	10	<i>Thanet</i> —house, grounds and sandstone retaining walls
Salisbury Rd, Rose Bay	23	Simcha—house and grounds
Yarranabbe Rd, Darling Point	5–9	Former house and grounds
Yarranabbe Rd, Darling Point	12–14	House and grounds

[3] Schedule 3

Insert "—Goomerah Cr/Yarranabbe Rd/Darling Point Rd heritage item group (see also 9 Goomerah Cr, Darling Point and 28 Yarranabbe Rd, Darling Point)" after "Gateposts to former house *Denholm*" in the description of the heritage item for 54 Darling Point Road, Darling Point.

Woollahra Local Environmental Plan 1995 (Amendment No 52)

Schedule 1 Amendments

[4] Schedule 3

Omit "Cook Pine" from the description of the heritage item for 23 Eastbourne Road, Darling Point.

Insert instead "Chiltern-house, Cook Pine and grounds".

[5] Schedule 3

Insert "—Goomerah Cr/Yarranabbe Rd/Darling Point Rd heritage item group (see also 54 Darling Point Rd, Darling Point and 9 Goomerah Cr, Darling Point)" after "House" in the description of the heritage item for 28 Yarranabbe Road, Darling Point.



New South Wales

Wollongong Local Environmental Plan 1990 (Amendment No 231)

under the

Environmental Planning and Assessment Act 1979

I, the Minister Assisting the Minister for Infrastructure and Planning (Planning Administration), make the following local environmental plan under the *Environmental Planning and Assessment Act 1979*. (W03/00159/S69)

DIANE BEAMER, M.P., Minister Assisting the Minister for Infrastructure and Planning (Planning Administration)

e05-055-09.p01

Clause 1 Wollongong Local Environmental Plan 1990 (Amendment No 231)

Wollongong Local Environmental Plan 1990 (Amendment No 231)

under the

Environmental Planning and Assessment Act 1979

1 Name of plan

This plan is Wollongong Local Environmental Plan 1990 (Amendment No 231).

2 Aims of plan

This plan aims to allow, with the consent of Wollongong City Council, the carrying out of development on the land to which this plan applies for the purpose of a RSPCA animal shelter.

3 Land to which plan applies

This plan applies to land situated in the City of Wollongong, being Lot 215, DP 1066585, Industrial Road, Unanderra, as shown edged heavy black on the map marked "Wollongong Local Environmental Plan 1990 (Amendment No 231)" deposited in the office of Wollongong City Council.

4 Amendment of Wollongong Local Environmental Plan 1990

Wollongong Local Environmental Plan 1990 is amended as set out in Schedule 1.

Wollongong Local Environmental Plan 1990 (Amendment No 231)

Amendment

Schedule 1 Amendment

Schedule 2 Additional development

Insert at the end of the Schedule in Columns 1, 2 and 3, respectively:

Lot 215, DP 1066585, RSPCA animal shelter Develo Industrial Road, Unanderra. building, animal boarding kennels, food preparation areas, car parking and landscaping). (a)

Development consent must not be granted unless the Council is satisfied that:

- a) the two mature fig trees on the land will be retained, and
- (b) the remnant Illawarra subtropical rainforest on the land will be rehabilitated, and
- (c) there will be a removal of weeds from the land and a revegetation of that part of the land not affected by the development.

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Schedule 1

(Clause 4)

ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979 LAND ACQUISITION (JUST TERMS COMPENSATION) ACT 1991 NOTICE OF COMPULSORY ACQUISITION OF LAND IN THE LOCAL GOVERNMENT AREA OF WILLOUGHBY

The Minister administering the Environmental Planning and Assessment Act 1979 declares, with the approval of Her Excellency the Governor, that the land described in the Schedule below is acquired by compulsory process under the provisions of the Land Acquisition (Just Terms Compensation) Act 1991 for the purposes of the Environmental Planning and Assessment Act 1979.

Dated at Sydney this 27th day of April 2005.

By Her Excellencyís Command,

DIANE BEAMER, M.P., Minister Assisting the Minister for Infrastructure and Planning (Planning Administration)

Schedule

- 1. All that piece or parcel of land in the City of Willoughby, Parish of Willoughby, County of Cumberland being Lot 200, Deposited Plan 1074678 and being part of the land comprised in part Certificate of Title Volume 2348 Folio 78 and part land in serial number 111, page 1185.
- 2. All that piece and parcel of land in the City of Willoughby, Parish of Willoughby, County of Cumberland being Lot 501, Deposited Plan 1074679 and being part of the land in Book 2419 Conveyance No. 910 and part of the land in serial number 111, page 1185.
- 3. All that piece or parcel of land in the City of Willoughby, Parish of Willoughby, County of Cumberland being Lot 202, Deposited Plan 1074677 and being part of the land within Serial 111 Page 1185 and also being part of Lot C, Deposited Plan 160424 being part of the residue of land within Book 1364, Conveyance No. 406.
- 4. All that piece or parcel of land in the City of Willoughby, Parish of Willoughby, County of Cumberland being the whole of Lot 6 Deposited Plan 21172 comprised within part Certificate of Title Volume 5991 Folio 107.
- 5. All that piece or parcel of land in the City of Willoughby, Parish of Willoughby, County of Cumberland, being the whole of Lot 7 Deposited Plan 21172 comprised within Certificate of Title Volume 5991 Folio 110.

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Natural Resources

WATER ACT 1912

AN application under Part 8, being within a Proclaimed (declared) Local Area under Section 5(4) of the Water Act. AN application for Approval of Controlled Works under Section 167 within the Proclaimed (declared) Local Area described hereunder has been received as follows:

Gwydir River Valley

GRAINCORP OPERATIONS LIMITED for Controlled Works consisting of Levees on the Lower Gwydir Floodplain on Lot 1, DP613623 TSR 25202, Parish of Christie, County of Denham on the property known as Merrywinebone Silo Complex for prevention of inundation of land. Ref: 90CW810940.

Plans showing the location of the works referred to in the above application may be viewed at the Tamworth, Narrabri or Moree offices of the Department of Infrastructure, Planning & Natural Resources.

Written objections to the application specifying the grounds thereof may be made by any statutory authority or local occupier within the Proclaimed Area, whose interest may be affected must be lodged with the Department's Resource Access Manager at Tamworth by 19 August, 2005.

GA2472218.

GEOFF CAMERON, Manager Resource Access

Department of Infrastructure Planning and Natural Resources PO Box 550 Tamworth NSW 2340

WATER ACT 1912

AN application under Part 8, being within a Proclaimed (declared) Local Area under Section 5(4) of the Water Act. An application for Approval of Controlled Works under Section 167 within the Proclaimed (declared) Local Area described hereunder has been received as follows:

Namoi River Valley

E M SIMSHAUSER PTY LIMITED for Controlled Works consisting of Levees and Supply Channels on the Lower Namoi Floodplain on Lot 1, DP218496 and Lot 19, DP753945, Parish of Merah North, County of Jamison on the property known as "Bonny Hill" for prevention of inundation of land and irrigation and/or drainage development on the floodplain. Ref: 90CW810751.

Plans showing the location of the works referred to in the above application may be viewed at the Tamworth, Narrabri or Moree offices of the Department of Infrastructure, Planning & Natural Resources.

Written objections to the application specifying the grounds thereof may be made by any statutory authority or local occupier within the Proclaimed Area, whose interest may be affected must be lodged with the Department's Resource Access Manager at Tamworth by 19 August, 2005.

GA2472219.

GEOFF CAMERON, Manager Resource Access

Department of Infrastructure Planning and Natural Resources PO Box 550 Tamworth NSW 2340

WATER ACT 1912

APPLICATIONS FOR Licenses under Section 10 of Part 2 of the Water Act have been received as follows:

Nathan Robert BOURKE and Emma Lee BOURKE for a pump on the Paterson River on Lot 91 DP264075, Parish of Tyraman, County of Durham for irrigation of 1.0 hectare (improved pasture, permanent water transfer): 20SL061486.

VALEDEN PTY LTD for a pump on the Paterson River on Lot 111 DP229401, Parish of Gresford, County of Durham for irrigation of 28.0 hectares (improved pasture, split of existing entitlement): 20SL061502.

VALEDEN PTY LTD for four pumps on the Paterson River on Lot 3 DP1047199, Parish of Tyraman, County of Durham for irrigation of 97.0 hectares (improved pasture, split of existing entitlement and permanent water transfer): 20SL061503.

VALEDEN PTY LTD for three pumps on the Paterson River on Lot 132 DP1058065, Parish of Gresford, County of Durham for water supply for farming (dairy) purposes and irrigation of 21.5 hectares (improved pasture, split of existing entitlement): 20SL061504.

VALEDEN PTY LTD for a pump on the Paterson River on Lot 82 DP871749, Parish of Tyraman, County of Durham for irrigation of 16.5 hectares (improved pasture, split of existing entitlement): 20SL061505.

CORNISH GROUP PTY LTD (trading as Torryburn Stud) for two pumps on the Allyn River on part Lot 72 DP1007377 and a pump on McIntyre Creek and a dam and pump on an Unnamed watercourse on Lot 1 DP188558 all Parish of Fingal, County of Durham for conservation of water for stock purposes and irrigation of 41.5 hectares (improved pasture, to combine and replace existing license with permanent water transfers): 20SL061507.

Any inquiries regarding the above should be directed to Brian McDougall on telephone number (02) 4929 9817.

Written objections specifying grounds thereof must be lodged with the Department within 28 days of the date of this publication as prescribed by the Act.

> VICKI MCBRIDE, A/Resource Access Manager Hunter Region

Department of Infrastructure, Planning and Natural Resources PO Box 2213 Dangar NSW 2309

WATER ACT, 1912

AN application for a license, under Section 10 of Part 2 of the Water Act, 1912, as amended, has been received as follows:

Evelyn Mary Burgess for a pump on the Nepean River on Lot 141//1083224, Parish of Warragamba, County of Camden for water supply for stock and domestic purposes and the irrigation of 2.0 hectares(fodder)(part replacement licence - part replaces 10SL30467)(no increase in authorised area – no increase in annual water allocation)(not subject to the Hawkesbury /Nepean embargo) (Ref: 10SL56657) (GA2: 462885). Evelyn Mary Burgess for a pump on the Nepean River on Lot 141//1083224, Parish of Warragamba, County Camden for water supply for stock and domestic purposes and the irrigation of 2.0 hectares(fodder)(part replacement licence – part replaces 10SL30467)(no increase in authorised area – no increase in annual water allocation)(not subject to the Hawkesbury /Nepean embargo) (Ref: 10SL56658) (GA2:462885).

Evelyn Mary Burgess for a pump on the Nepean River on Lot 18//546709, Parish of Warragamba, County Camden for water supply for stock and domestic purposes and the irrigation of 2.5 hectares(fodder)(part replacement licence – part replaces 10SL30467)(no increase in authorised area – no increase in annual water allocation)(not subject to the Hawkesbury /Nepean embargo) (10SL56659) GA2:462885).

Evelyn Mary Burgess for a pump on the Nepean River on Lot 142//1083224, Parish of Warragamba, County of Camden, for water supply for stock and domestic purposes and the irrigation of 2.0 hectares(fodder)(part replacement licence – part replaces 10SL30467)(no increase in authorised area – no increase in annual water allocation)(not subject to the Hawkesbury /Nepean embargo) (10SL56660) (GA2:462885).

Evelyn Mary Burgess for a pump on the Nepean River on Lot 141//1083224, Parish of Warragamba, County Of Camden, for water supply for stock and domestic purposes and the irrigation of 6.0 hectares(fodder)(part replacement licence – part replaces 10SL30467)(no increase in authorised area – no increase in annual water allocation)(not subject to the Hawkesbury/Nepean embargo) (10SL56661) (GA2:462885).

Written objections specifying grounds thereof must be lodged with the Department within 28 days of the date of this publication as prescribed by the Act.

> WAYNE CONNERS, Natural Resource Project Officer Sydney/South Coast Region

Department of Land and Water Conservation PO Box 3720 PARRAMATTA NSW 2124

WATER ACT (1912)

Notice Under Section 20Z

Water Allocation Announcement Regulated Bega/Brogo River

THE Water Administration Ministerial Corporation, pursuant to Section 20Z of the Water Act, (1912), is satisfied that the water source known as the Bega/Brogo regulated river system (being subject to a Volumetric Allocation scheme as Gazetted under Section 20W), is unlikely to have sufficient water available to meet the requirements during the 2005/2006 water year of those persons authorised by law to take water from the water source.

By this Order, the Ministerial Corporation being satisfied of the above, hereby announces the water allocations under the said scheme for the 2005/2006 water year to be the proportions specified in Schedule 1. This Order shall have effect from the date of publication to 30 June 2006 and supersedes earlier announcements. This Order applies to all entitlements subject to the Volumetric Allocation Scheme other than high security users who will receive their entire allocation.

Signed for the Water Administration Ministerial Corporation.

Dated this 15th day of July 2005.

MARIANNE CHRISTMANN, Regional Director South Coast Region

Schedule 1

• Water allocation for the full 2005/2006 water year is 40% of entitlement.

WATER ACT 1912

Volumetric Water Allocation Scheme Notice under section 20z of the Water Act 1912 Toonumbar Dam and the regulated sections of Iron Pot Creek and Eden Creek

THE Department of Infrastructure, Planning and Natural Resources is satisfied that during the 2005/2006 water year, the water sources of Iron Pot Creek and Eden Creek below Toonumbar Dam and including Toonumbar Dam storage area which are subject to a scheme pursuant to Section 20X of the Water Act 1912 is unlikely to have sufficient water available to meet all the requirements of persons authorised by law to take water from the water sources or to meet other requirements previously determined by the Department.

Consequently, for the 2005/2006 water year, except as provided hereunder, all general security allocations from Toonumbar Dam are reduced to 80% of their basic allocation.

This reduction shall take effect on and from 1 July 2005.

This reduction does not apply to the allocations under entitlements for town water supply, stock, domestic and farming purposes.

Signed for the Department of Infrastructure, Planning and Natural Resources.

D. SCHRODER, Regional Director North Coast Region

Dated this 18th day July 2005.

GA2: 476118.

WATER ACT 1912

AN application under Part 2, being within a proclaimed (declared) local area under Section 10 of the Water Act, 1912, as amended.

An application for a Licence within a proclaimed local area as generally described hereunder has been received as follows:

Macintyre-Dumaresq River Valley

Walter Desmond CARRIGAN and Anthony Lloyd CARRIGAN for two pumps on the Macintyre River on Lot 10, DP755990, Parish of Carroby, County of Stapylton for irrigation of 423.3 hectares. Replacement licence - Permanent transfer of an existing Dumaresq River entitlement. (LO Papers 90SL100851). (GA2:472220).

Written objections to the application specifying the grounds thereof may be made by any statutory authority or local occupier within the proclaimed (declared) area, whose interest may be affected and must be lodged with the Department's Manager, Resource Access, Tamworth within 28 days as specified in the Act.

> GEOFF CAMERON, Manager Resource Access

Department of Infrastructure, Planning and Natural Resources PO Box 550 Tamworth NSW 2340

WATER ACT 1912

APPLICATION for an Approval under Part 8 of the Water Act 1912 being within a Proclaimed (declared) Local Area under section 5(4) of the Act.

An Application for an Approval under Section 167(1) of Part 8 of the Water Act, has been received as follows;

Lachlan River Valley

John Francis, Teresa Mary and William John KAVENEY for a levee on Bland Creek on Lots 63, 9, 10, 11 and 12 DP750604, Parish of Jingerangle, County of Bland, for prevention of inundation of land by floodwaters (New Approval) (GA2:466381) (Ref: 70CW808655).

Written Objections specifying grounds thereof, may be made by any Statutory Authority or local occupier within the Proclaimed local area whose interests may be effected must be lodged with the Department's Forbes office by 20 August 2005.

> VIV RUSSELL, Resource Access Manager Central West Region

Department of Infrastructure, Planning and Natural Resources P O Box 136, Forbes NSW 2871 (02) 6852 1222

Department of Lands

GRAFTON OFFICE 76 Victoria Street (Locked Bag 10), Grafton NSW 2460 Phone: (02) 6640 2000 Fax: (02) 6640 2035

NOTIFICATION OF CLOSING OF PUBLIC ROAD

IN pursuance of the provisions of the Roads Act 1993, the road hereunder described is closed and the land comprised therein ceases to be a public road and the rights of passage and access that previously existed in relation to the road are extinguished.

TONY KELLY, M.L.C., Minister for Lands

Description

Land District - Murwillumbah; Shire - Tweed;

Road closed: Lot 23, DP 1077509, at Chinderah, Parish Cudgen, County Rous.

File No.: GF01 H 292.

Note: On closing, the land within 23 DP 1077509 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 6900 Fax: (02) 4428 6988

DRAFT ASSESSMENT OF LAND UNDER PART 3 OF THE CROWN LANDS ACT 1989 AND THE CROWN LANDS REGULATIONS 2000

THE Minister for Lands has prepared a draft land assessment for the Crown Land described hereunder.

Inspection of this draft assessment can be made at http://lands/LandManagement/CrownLandAssessments, or at the Department of Lands Offices at 5 O'Keefe Avenue, Nowra, and Suite 2, Bega Centre, 106 Auckland Street, at the Eurobodalla Shire Council Chambers, Vulcan Street, Moruya and at the Narooma Post Office, 106 Wagonga Street, Narooma during normal business hours.

Representations are invited on the draft assessment. These may be made in writing for a period commencing from 29 June 2005 and ending 5 August 2005 and should be sent to the Land Assessment Officer, Department of Lands, PO Box 309, Nowra NSW 2541.

Reason for Assessment: To assist in the consideration of appropriate future land use and management options.

TONY KELLY, M.L.C., Minister for Lands Description

Land District – Moruya; Local Government Area – Eurobodalla Shire; Parish – Wagonga; County – Dampier.

Crown Lands comprising Lots 219–224, DP 45809; Lot 233, DP 729164; Lot 7022, DP 1053765 and unsurveyed Crown Land generally located on the western shore of Barlows Bay at Wagonga Inlet.

File No.: NA05 H 132.

ORANGE OFFICE 92 Kite Street (PO Box 2146), Orange NSW 2800 Phone: (02) 6393 4300 Fax: (02) 6362 3896

ESTABLISHMENT OF RESERVE TRUST

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

> TONY KELLY, M.L.C., Minister for Lands

Schedule

COLUMN 1 Rylstone District Hospital Reserve Trust

COLUMN 2 Reserve No. 9804 Public Purpose: Hospital Site Notified: 28 September 1889 File Reference: OE05R3/1

APPOINTMENT OF CORPORATION TO MANAGE **RESERVE TRUST**

PURSUANT to section 95 of the Crown Lands Act 1989, the corporation specified in Column 1 of the Schedule hereunder is appointed to manage the affairs of the reserve trust specified opposite thereto in Column 2, which is trustee of the reserve referred to in Column 3 of the Schedule.

> TONY KELLY, M.L.C., Minister for Lands

Schedule

COLUMN 1 Greater Western Area Health Service

Trust

COLUMN 2 Rylstone District Hospital Reserve

COLUMN 3 Reserve No. 9804 Public Purpose: Hospital Site Notified: 28 September 1889 File Reference: OE05R3/1

APPOINTMENT OF TRUST BOARD MEMBERS

PURSUANT to section 93 of the Crown Lands Act 1989, the persons whose names are specified in Column 1 of the Schedule hereunder are appointed, for the terms of office specified in that Column, as members of the trust board for the reserve trust specified opposite thereto in Column 2, which has been established and appointed as trustee of the reserve referred to opposite thereto in Column 3 of the Schedule.

> TONY KELLY, M.L.C., Minister for Lands

Schedule COLUMN 2

Bathurst

Trust

Showground

COLUMN 1

The person for the time being holding the office of Show Councillor, Bathurst Agricultural Horticultural & Pastoral Association Inc (ex-officio member) The person for the time being holding the office of Director, Bathurst Harness Racing Club Ltd (ex-officio member) David Colin McKibbin (re-appointment) Maurice John Garment

COLUMN 3 Dedication No. 590074 Public Purpose: Showground Notified: 19 October 1877 File Reference: OE80R245/7

(re-appointment) Kenneth Fenton Harris (re-appointment) Jill Elizabeth Williams (re-appointment) Alfred Robert Hayter (re-appointment) Mark Thomas Collins (new member) Kevin Francis Doherty (new member)

For a term commencing this day and expiring 21 July 2010.

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.

> TONY KELLY, M.L.C., Minister for Lands

Schedule

COLUMN 1

Balfour Girl Guides (R90378) Reserve Trust

COLUMN 2 Reserve No. 90378 Public Purpose: Girl Guides Notified: 1 February 1974 File Reference: OE03R2/1

REVOCATION OF RESERVATION OF CROWN LAND

PURSUANT to section 90 of the Crown Lands Act 1989, the reservation of Crown land specified in Column 1 of the Schedule hereunder is revoked to the extent specified opposite thereto in Column 2 of the Schedule.

> TONY KELLY, M.L.C., Minister for Lands

Schedule

COLUMN 2

Land District: Bathurst Local Government Area: Oberon Council Locality: Balfour Reserve No. 90378 Public Purpose: Girl Guides Notified: 1 February 1974 File Reference: OE03R2/1

COLUMN 1

The whole being Lot Sec. D.P. No. Parish County 94 757037 Balfour Westmoreland of an area of 5035m2

TAREE OFFICE 102-112 Victoria Street (PO Box 440), Taree NSW 2430 Phone: (02) 6552 2788 Fax: (02) 6552 2816

OFFICIAL NOTICES

APPOINTMENT OF TRUST BOARD MEMBERS

PURSUANT to section 93 of the Crown Lands Act 1989, the persons whose names are specified in Column 1 of the Schedule hereunder are appointed, for the terms of office specified in that Column, as members of the trust board for the reserve trust specified opposite thereto in Column 2, which has been established and appointed as trustee of the reserve referred to opposite thereto in Column 3 of the Schedule.

TONY KELLY, M.L.C., Minister for Lands

Schedule					
COLUMN 1	COLUMN 2	COLUMN 3			
Kay Lynette Smith and Brian William Keep (new members)	Caffreys Flat Public Hall Reserve Trust	Reserve No. 79588 Public Purpose: Public Hall Notified: 10 May 1957 File Reference: TE80R165/2			
Ean a tames a amon		filia nation and armining			

For a term commencing the date of this notice and expiring 26 November 2008.

NOTIFICATION OF CLOSING OF PUBLIC ROAD

IN pursuance of the provisions of the Roads Act 1993, the road hereunder described is closed and the land comprised therein ceases to be a public road and the rights of passage and access that previously existed in relation to the road are extinguished.

> TONY KELLY, M.L.C., Minister for Lands

Description

Land District – Port Macquarie; Local Government Area – Hastings

Road closed: Lots 3 & 5 DP 1067035 at Herons Creek

Parish of Camden Haven, County of Macquarie. File No. TE00H 238.

On closing, the land within lots 3 & 5 remains vested in the State of New South Wales as Crown land.

SYDNEY METROPOLITAN OFFICE Level 12, Macquarie Tower, 10 Valentine Avenue, Parramatta 2150 (PO Box 3935, Parramatta NSW 2124) Fax: (02) 9895 6227 Phone: (02) 9895 7657

NOTIFICATION OF CLOSING OF ROAD

IN pursuance of the provisions of the Roads Act, 1993, the road hereunder specified is closed and the road ceases to be public road and the rights of passage and access that previously existed in relation to the road are extinguished.

> TONY KELLY, M.L.C., Minister for Lands

Descriptions

Land District – Picton; L.G.A. – Campbelltown

Lot 2, DP 1082894 at Campbelltown, Parish St Peter (Sheet 3), County Cumberland. MN04H91.

Notes: 1. On closing, title for the land in lot 2 remains vested in Campbelltown City Council as operational land.

2. The road is closed subject to the easement for overhead power lines 9 wide and variable, the easement for underground cables 1 wide as shown in DP 1082894.

WAGGA WAGGA OFFICE Corner Johnston and Tarcutta Streets (PO Box 60), Wagga Wagga NSW 2650 Phone: (02) 6937 2700 Fax: (02) 6921 1851

ROADS ACT 1993

ORDER

Transfer of Crown Road to a Council

IN pursuance of the provisions of Section 151, Roads Act 1993, the Crown public roads specified in Schedule 1 are transferred to the Roads Authority specified in Schedule 2 hereunder, as from the date of publication of this notice and as from that date, the roads specified in Schedule 1 cease to be Crown public road.

TONY KELLY, M.L.C., Minister for Lands

Parish – Tootool; County – Mitchell; Land District – Wagga Wagga; Shire – Lockhart

Schedule 1

Crown Public Road 20.115 metres wide described as the road east of Lots 47 & 18 DP 754566; south of Lot 18 DP 754566 and the northernmost 153.8 metres west of Lot 1 DP 390407.

Schedule 2

Roads Authority: Lockhart Shire Council

File No: WA05H340

Parish – Boree Creek; County – Urana; Land District –Urana; Shire – Lockhart

Schedule 1

Crown Public Road 40.234 metres wide described as the road east of Lot 116 DP 756392.

Schedule 2

Roads Authority: Lockhart Shire Council File No: WA05H340

Department of Primary Industries

Agriculture

MARKETING OF PRIMARY PRODUCTS ACT 1983

Proclamation

MARIE BASHIR, AC, Governor

I, Professor Marie Bashir AC, Governor of the State of New South Wales, with the advice of the Executive Council, and in pursuance of clause 28 of the Marketing of Primary Products (Polls and Elections) Regulation 2000, do, by this my Proclamation, direct that an election be held for members of the Rice Marketing Board.

Signed and sealed at Sydney, this13th day of July 2005.

By Her Excellency's Command.

IAN MACDONALD, M.L.C., Nsw Minister For Primary Industries

NSW Fisheries

NOTICE OF RECEIPT OF APPLICATION FOR AQUACULTURE LEASE

Notification under s.163 (7) of the Fisheries Management Act 1994, and cl.33 of the Fisheries Management (Aquaculture) Regulation 2002

AN application has been received for an aquaculture (oyster) lease for the purposes of cultivating Sydney rock oysters, in the Manning River, for an area to be known as AL05/017 (if granted) of approximately 0.5 hectares. The area is situated between existing leases OL80/237 and OL58/305 near Mangrove Island. Application by Gary and Errol Ruprecht of Mitchells Island, NSW. If granted the lease will be subject to standard covenants and conditions of an aquaculture lease as provided under the above Act. NSW Department of Primary Industries (DPI) is:

- calling for written submissions from any person supporting or objecting to the lease proposal, citing reasons for the support/objection.
- calling for expressions of interest from persons or corporations interested in leasing the area. An expression of interest must be in the form of a written response referring to lease number AL05/017, signed and dated with a return address.

Specific details can be obtained, or enquiries made with NSW Fisheries, Aquaculture Administration Section on (02) 4982 1232. Objections or expressions of interest for consideration in the determination of the application must be received at the address below, within 30 days from the date of publication of this notification.

Executive Director, Aquaculture and Sustainable Fisheries, NSW Fisheries, Aquaculture Administration Section, Port Stephens Fisheries Centre, Private Bag 1, NELSON BAY, NSW, 2315.

If additional expressions of interest are received, DPI may offer the area for leasing through a competitive public tender process, auction or ballot. The applicant may be required to obtain development consent from Greater Taree Council under Part 4 (Integrated Development) of the Environmental Planning and Assessment Act, 1979. If granted the lease will be subject to standard covenants and conditions of an aquaculture lease and aquaculture permit, under the Fisheries Management Act, 1994, and any conditions of consent as imposed by Council.

> DR NICK RAYNS, Director, Fisheries Management Agriculture and Fisheries Division Department of Primary Industries

FISHERIES MANAGEMENT ACT 1994

FISHERIES MANAGEMENT (AQUACULTURE) REGULATION 2002

Clause 39 (4) – Notice of Aquaculture Lease Renewal

THE Minister has renewed the following class 1 Aquaculture Leases:

OL73/321 within the estuary of Port Stephens, having an area of 0.5060 hectares to Michael O'Connor of Karuah, NSW, for a term of 15 years expiring on 22 January 2019. OL75/046 within the estuary of the Moruya River, having an area of 1.6918 hectares to Southern Management Consultants Pty Ltd of Garran, ACT, for a term of 15 years expiring on 12 November 2020.

OL58/261 within the estuary of the Manning River, having an area of 0.5497 hectares to Clift Oysters Pty Ltd of Tuncurry, NSW, for a term of 15 years expiring on 21 June 2020.

OL59/041 within the estuary of Tuross Lake, having an area of 1.8007 hectares to Wayne Davies and Glenn Chapman of Wallaga Lake, NSW, for a term of 15 years expiring on 5 April 2020.

OL86/261 within the estuary of Wallis Lake, having an area of 0.4267 hectares to Bertram Leonard Kenney of Tuncurry, NSW, for a term of 15 years expiring on 25 July 2019.

OL60/106 within the estuary of the Hawkesbury River, having an area of 1.4862 hectares to MS Verdich & Sons Pty Ltd of Forster, NSW, for a term of 15 years expiring on 25 April 2021.

OL89/050 within the estuary of the Wallis Lake, having an area of 2.3295 hectares to Tadeven Pty Ltd of Tuncurry, NSW, for a term of 15 years expiring on 10 April 2021.

OL89/051 within the estuary of the Wallis Lake, having an area of 3.1987 hectares to Tadeven Pty Ltd of Tuncurry, NSW, for a term of 15 years expiring on 10 April 2021.

OL77/099 within the estuary of the Clyde River, having an area of 0.6031 hectares to Florence Elliott of Batemans Bay, NSW, for a term of 15 years expiring on 15 November 2019.

> NICK RAYNS, Director, Fisheries Management

Agriculture and Fisheries Division NSW Department of Primary Industries

FISHERIES MANAGEMENT ACT 1994 FISHERIES MANAGEMENT (AQUACULTURE) REGULATION 2002

Clause 49 (8) - Notice of Aquaculture Lease Subdivision

THE Minister has subdivided the following Aquaculture Leases:

OL73/367 within the estuary of Bellinger River having an area of 2.007 ha is subdivided into two leases referred to as AL04/051 having an area of 0.9463 ha and AL04/052 having an area of 1.0607 ha to Jeffrey, Nevelle and Shirley Boyd of Raleigh, NSW. The subdivided leases will expire on 3 November 2005.

> DR NICK RAYNS, Director, Fisheries Management

Agriculture and Fisheries Division Department of Primary Industries

Mineral Resources

NOTICE is given that the following applications have been received:

EXPLORATION LICENCE APPLICATIONS

(05-154)

No. 2546, NORTHERN ENERGY CORPORATION LIMITED (ACN 081 244 395) and RENISON BELL HOLDINGS PTY LTD (ACN 100 163 942), area of 4370 hectares, for Group 9, dated 20 June 2005. (Inverell Mining Division).

(05-155)

No. 2547, RENISON BELL HOLDINGS PTY LTD (ACN 100 163 942), area of 127.3 square kilometres, for Group 9, dated 20 June 2005. (Inverell Mining Division).

(05-227)

No. 2548, SYDNEY SAND & AGGREGATE PTY LIMITED (ACN 109 084 102), area of 55 units, for Group 10, dated 26 June 2005. (Sydney Mining Division).

(05-228)

No. 2549, MINEX (AUST) PTY LTD (ACN 091 546 708), area of 100 units, for Group 1, dated 28 June 2005. (Wagga Wagga Mining Division).

(05-229)

No. 2550, BLUE CIRCLE SOUTHERN CEMENT LTD (ACN 008 528 523), area of 94 units, for Group 2, dated 30 June 2005. (Cobar Mining Division).

KERRY HICKEY, M.P., Minister for Mineral Resources

NOTICE is given that the following applications have been granted:

EXPLORATION LICENCE APPLICATIONS

(05-159)

No. 2476, now Exploration Licence No. 6435, RESOURCE INVESTMENT GROUP PTY LTD (ACN 106 872 799), County of Mootwingee, Map Sheet (7235), area of 16 units, for Group 1, dated 20 June 2005, for a term until 19 June 2007.

(05-173)

No. 2491, now Exploration Licence No. 6436, BROKEN HILL COBALT LIMITED (ACN 003 453 503), Counties of Menindee and Yancowinna, Map Sheet (7133), area of 18 units, for Group 1, dated 29 June 2005, for a term until 28 June 2007. As a result of the grant of this title, Exploration Licence No. 5765 has partly ceased to have effect.

(05-177)

No. 2496, now Exploration Licence No. 6437, TRIAKO RESOURCES LIMITED (ACN 008 498 119) and MOUNT CONQUEROR MINERALS N.L. (ACN 003 312 721), County of Cunningham, Map Sheet (8332), area of 9 units, for Group 1, dated 30 June 2005, for a term until 29 June 2007. As a result of the grant of this title, Exploration Licence No. 2727, Exploration Licence No. 4766 and Exploration Licence No. 5757 have ceased to have effect.

PETROLEUM APPLICATION

(05-418)

No. 12, now Petroleum Special Prospecting Authority No. 11, SANTELLE PTY LTD (ACN 099 110 675), area of 6 blocks, for petroleum, dated 20 May 2005, for a term until 19 May 2006. (Singleton Mining Division). For exact location details refer to the Department's NSW State Map of Petroleum Titles.

> KERRY HICKEY, M.P., Minister for Mineral Resources

NOTICE is given that the following applications have been refused:

EXPLORATION LICENCE APPLICATIONS (05-123)

No. 2475, Stephen DUNBAR and Wendy DUNBAR,

County of Livingstone, Map Sheet (7534). Refusal took effect on 20 June 2005.

(05-219)

No. 2538, CADIA HOLDINGS PTY LIMITED (ACN 062 648 006), County of Bathurst, Map Sheet (8730). Refusal took effect on 27 June 2005.

> KERRY HICKEY, M.P., Minister for Mineral Resources

NOTICE is given that the following applications have been withdrawn:

EXPLORATION LICENCE APPLICATIONS

(05-172)

No. 2490, SAMS REEF MINING PTY LIMITED (ACN 108 530 712), County of Ashburnham, Map Sheet (8631). Withdrawal took effect on 5 July 2005.

(05-226)

No. 2545, LADY BURBETT MINING PTY LIMITED (ACN 109 556 158), County of Ashburnham and County of Bathurst, Map Sheet (8630, 8631). Withdrawal took effect on 5 July 2005.

> KERRY HICKEY, M.P., Minister for Mineral Resources

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

(T97-1226)

Exploration Licence No. 5343, CENTRAL WEST GOLD N.L. (ACN 003 078 591) and MOUNT CONQUEROR MINERALS N.L. (ACN 003 312 721), area of 1 units. Application for renewal received 7 July 2005.

(C04-0069)

Exploration Licence No. 5599, HENRY WALKER ELTIN GROUP LIMITED (ACN 007 710 483), area of 1204 hectares. Application for renewal received 23 June 2005.

(T98-1250)

Exploration Licence No. 5609, NEWCREST OPERATIONS LIMITED (ACN 009 221 505), area of 1 units. Application for renewal received 27 June 2005.

(T01-0102)

Exploration Licence No. 5879, PERILYA BROKEN HILL LIMITED (ACN 099 761 289), area of 5 units. Application for renewal received 27 June 2005.

(T01-0109)

Exploration Licence No. 5880, RIMFIRE PACIFIC MINING N.L. (ACN 006 911 744), area of 2 units. Application for renewal received 28 June 2005.

(T03-0030)

Exploration Licence No. 6101, GRAVITY CAPITAL LIMITED (ACN 009 178 689), area of 18 units. Application for renewal received 23 June 2005.

(T03-0040)

Exploration Licence No. 6102, GATEWAY MINING N.L. (ACN 008 402 391), area of 1 unit. Application for renewal received 22 June 2005.

(T02-0412)

Exploration Licence No. 6104, DRONVISA PTY LIMITED (ACN 002 070 680), area of 4 units. Application for renewal received 27 June 2005.

(T03-0028)

Exploration Licence No. 6105, TRITTON RESOURCES LIMITED (ACN 100 095 494), area of 13 units. Application for renewal received 27 June 2005.

(T03-0050)

Exploration Licence No. 6108, PEREGRINE MINERAL SANDS N.L. (ACN 009 307 591), area of 56 units. Application for renewal received 1 July 2005.

(T03-0062)

Exploration Licence No. 6109, GOLDEN CROSS OPERATIONS PTY LTD (ACN 050 212 827), area of 13 units. Application for renewal received 20 June 2005.

(T03-0059)

Exploration Licence No. 6111, LFB RESOURCES N.L. (ACN 073 478 574), area of 13 units. Application for renewal received 7 July 2005.

(T02-0429)

Exploration Licence No. 6114, MOUNT CONQUEROR MINERALS N.L. (ACN 003 312 721) and CENTRAL WEST GOLD N.L. (ACN 003 078 591), area of 8 units. Application for renewal received 7 July 2005.

(T03-0015)

Exploration Licence No. 6118, David THOMPSON, area of 8 units. Application for renewal received 13 July 2005.

(C03-0035)

Consolidated Coal Lease No. 700 (Act 1973), HTT HUNTLEY HERITAGE PTY LIMITED (ACN 086 238 682), area of 5036 hectares. Application for renewal received 19 June 2005.

(C03-0104)

Consolidated Coal Lease No. 704 (Act 1973), CENTENNIAL ANGUS PLACE PTY LIMITED (ACN 101 508 945), area of 2541 hectares. Application for renewal received 30 June 2005.

(T86-0304)

Mining Purposes Lease No. 1295 (Act 1906), UNIMIN AUSTRALIA LIMITED (ACN 000 971 844), area of 1.3456 hectares. Application for renewal received 6 July 2005.

> KERRY HICKEY, M.P., Minister for Mineral Resources

RENEWAL OF CERTAIN AUTHORITIES

Notice is given that the following authorities have been renewed:

(M81-5980)

Authorisation No. 295, ENDEAVOUR COAL PTY LTD (ACN 099 830 476), County of Camden, Map Sheet (9029), area of 1151 hectares, for a further term until 27 October 2009. Renewal effective on and from 11 July 2005.

(T80-1331)

Exploration Licence No. 1590, BARRICK AUSTRALIA LIMITED (ACN 007 857 598) and AURIONGOLD EXPLORATION PTY LIMITED (ACN 067 813 932), Counties of Bland and Gipps, Map Sheet (8330), area of 24 units, for a further term until 12 March 2007. Renewal effective on and from 8 July 2005.

(T91-0698)

Exploration Licence No. 4232, AUSMINDEX PTY LIMITED (ACN 003 287 634) and ALLEGIANCE MINING OPERATIONS PTY LTD (ACN 066 454 457), County of Mouramba, Map Sheet (8133), area of 5 units, for a further term until 16 March 2007. Renewal effective on and from 5 July 2005.

(T93-0617)

Exploration Licence No. 4620, NEWCREST OPERATIONS LIMITED (ACN 009 221 505) and JERVOIS MINING LIMITED (ACN 007 626 575), County of Bathurst, Map Sheet (8731), area of 10 units, for a further term until 18 November 2006. Renewal effective on and from 13 July 2005.

(T94-0003)

Exploration Licence No. 4752, METALLIC RESOURCES PTY LIMITED (ACN 001 867 296), Counties of Ashburnham and Kennedy, Map Sheet (8532), area of 8 units, for a further term until 11 December 2006. Renewal effective on and from 13 July 2005.

(T94-0244)

Exploration Licence No. 4848, Robert Patrick HEWETT, County of Hawes, Map Sheet (9234), area of 1 unit, for a further term until 18 August 2006. Renewal effective on and from 29 June 2005.

(T98-1075)

Exploration Licence No. 5524, NEWCREST OPERATIONS LIMITED (ACN 009 221 505), Counties of Bland and Gipps, Map Sheet (8330, 8430, 8431), area of 53 units, for a further term until 15 September 2006. Renewal effective on and from 13 July 2005.

(T98-1108)

Exploration Licence No. 5526, ZINTOBA PTY LTD (ACN 001 318 341), County of Blaxland, Map Sheet (8132), area of 9 units, for a further term until 5 October 2006. Renewal effective on and from 14 July 2005.

(T98-1140)

Exploration Licence No. 5548, ALKANE EXPLORATION LTD (ACN 000 689 216), Counties of Gordon and Lincoln, Map Sheet (8633), area of 27 units, for a further term until 20 January 2007. Renewal effective on and from 8 June 2005.

(T98-1169)

Exploration Licence No. 5563, COMPASS RESOURCES N.L. (ACN 010 536 820), Counties of Ashburnham, Kennedy and Narromine, Map Sheet (8531, 8532), area of 15 units, for a further term until 22 March 2007. Renewal effective on and from 13 July 2005.

(T00-0076)

Exploration Licence No. 5792, TEMPLAR RESOURCES LIMITED (ACN 085 644 944), County of Bland, Map Sheet (8329, 8429, 8430), area of 105 units, for a further term until 8 November 2006. Renewal effective on and from 23 June 2005.

(T00-0095)

Exploration Licence No. 5801, NORTH MINING LIMITED (ACN 000 081 434), Counties of Ashburnham, Cunningham and Kennedy, Map Sheet (8431, 8432, 8531, 8532), area of 172 units, for a further term until 7 January 2010. Renewal effective on and from 28 June 2005.

(T02-0038)

Exploration Licence No. 5986, OMYAAUSTRALIAPTY LIMITED (ACN 001 682 533), County of Argyle, Map Sheet (8828), area of 10 units, for a further term until 2 September 2006. Renewal effective on and from 2 December 2004.

(T02-0085)

Exploration Licence No. 6008 Peter John ASLOP, County of Murchison, Map Sheet (9037), area of 2 units, for a further term until13 October 2006. Renewal effective on and from 12 July 2005.

(T02-0010)

Exploration Licence No. 6016, CENTRAL WEST GOLD N.L. (ACN 003 078 591), County of Westmoreland, Map Sheet (8830), area of 1 unit, for a further term until 24 October 2006. Renewal effective on and from 15 July 2005.

(T02-0083)

Exploration Licence No. 6025, LFB RESOURCES N.L. (ACN 073 478 574), Counties of Ashburnham and Wellington, Map Sheet (8631, 8731), area of 71 units, for a further term until 20 November 2006. Renewal effective on and from 8 June 2005.

(T02-0375)

Exploration Licence No. 6046, Barry Ferguson COSIER, Colin Maxwell RIBAUX, Peter Raymond RIBAUX, Robert Gilbert RIBAUX and Thomas Arthur HAWLEY, County of Roxburgh, Map Sheet (8931), area of 7 units, for a further term until 22 January 2007. Renewal effective on and from 23 June 2005.

(T02-0448)

Exploration Licence No. 6064, TRIAKO RESOURCES LIMITED (ACN 008 498 119), County of Kennedy, Map Sheet (8333), area of 10 units, for a further term until 20 March 2007. Renewal effective on and from 28 June 2005.

(T02-0399)

Exploration Licence No. 6065, CENTRAL WEST GOLD N.L. (ACN 003 078 591), County of Wellington, Map Sheet (8832), area of 1 unit, for a further term until 20 March 2007. Renewal effective on and from 5 July 2005.

(T83-1374)

Exploration (Prospecting) Licence No. 1050, Kenneth Garry KEMLO, County of Hardinge, Map Sheet (9138), area of 4 units, for a further term until 22 October 2005. Renewal effective on and from 15 July 2004.

(T86-0334)

Exploration (Prospecting) Licence No. 1094, Robert Patrick HEWETT, County of Hawes, Map Sheet (9234), area of 2 units, for a further term until 18 August 2005. Renewal effective on and from 29 June 2005.

(C97-0394)

Consolidated Coal Lease No. 766 (Act 1973), HTT HUNTLEY HERITAGE PTY LIMITED (ACN 086 238 682), Parish of Calderwood, County of Camden and Parish of Wongawilli, County of Camden, Map Sheet (9028-4-N), area of 514 hectares, for a further term until 9 October 2015. Renewal effective on and from 27 June 2005.

> KERRY HICKEY, M.P., Minister for Mineral Resources

REFUSAL OF APPLICATION FOR RENEWAL

NOTICE is given that the application for renewal in respect of the following authority has been refused:

(T01-0214)

Exploration Licence No. 5948, GODS GOLDEN CHI PTY LIMITED (ACN 087 384 012), County of Northumberland, Map Sheet (9131), area of 12 units. The authority ceased to have effect on 1 July 2005.

KERRY HICKEY, M.P., Minister for Mineral Resources

CANCELLATION OF AUTHORITIES AT REQUEST OF HOLDERS

NOTICE is given that the following authorities have been cancelled:

(T03-0074)

Exploration Licence No. 6164, GOLDEN CROSS OPERATIONS PTY LTD (ACN 050 212 827), County of Wynyard, Map Sheet (8527), area of 19 units. Cancellation took effect on 21 June 2005.

(T03-0887)

Exploration Licence No. 6211, GOLDEN CROSS OPERATIONS PTY LTD (ACN 050 212 827), Counties of Bland and Harden, Map Sheet (8528, 8529) area of 35 units. Cancellation took effect on 21 June 2005.

(T04-0031)

Exploration Licence No. 6271, COMET RESOURCES LIMITED (ACN 060 628 202), Counties of Vincent and Dampier, Map Sheet (8826, 8926), area of 100 units. Cancellation took effect on 30 May 2005.

(T04-0036)

Exploration Licence No. 6272, COMET RESOURCES LIMITED (ACN 060 628 202), County of Dampier, Map Sheet (8825), area of 96 units. Cancellation took effect on 30 May 2005.

(T01-0023)

Gold Lease No. 5832 (Act 1906), HARGRAVES RESOURCES N.L. (in liquidation) (ACN 060 052 897), Parish of Parkes, County of Ashburnham, Map Sheet (8531-4-S), area of 4.039 hectares. Cancellation took effect on 27 June 2005.

(T01-0023)

Mining Lease No. 1215 (Act 1973), HARGRAVES RESOURCES N.L. (in liquidation) (ACN 060 052 897), Parish of Parkes, County of Ashburnham, Map Sheet (8531-4-S), area of 340.6 hectares. Cancellation took effect on 27 June 2005.

(T80-0085)

Private Lands Lease No. 1138 (Act 1924), BHP REFRACTORIES PTY LTD (ACN 004 346 972), Parish of Marulan, County of Argyle, Map Sheet (8828-2-N), area of 8.09 hectares. Cancellation took effect on 21 June 2005.

KERRY HICKEY, M.P., Minister for Mineral Resources

PART CANCELLATIONS

NOTICE is given that the following authorities have been cancelled in part:

(T02-0062)

Exploration Licence No. 5995, GOLDEN CROSS OPERATIONS PTY LTD (ACN 050 212 827).

Description of area cancelled:

An area of 31 units has been cancelled. For further information contact Titles Branch.

Part cancellation took effect on 11 July 2005.

The authority now embraces an area of 8 units.

(T03-0012)

Exploration Licence No. 6148, Anthony Claude BERGER.

Description of area cancelled:

An area of 4 units has been cancelled. For further information contact Titles Branch.

Part cancellation took effect on 7 July 2005.

The authority now embraces an area of 13 units.

KERRY HICKEY, M.P., Minister for Mineral Resources

TRANSFERS

(05-1360)

Authorisation No. 405, formerly held by HUNTER VALLEY ENERGY COAL LIMITED (ACN 062 894 464) has been transferred to KORES AUSTRALIA PTY LIMITED (ACN 063 786 087). The transfer was registered on 24 June 2005.

(05-1360)

Exploration Licence No. 4911, formerly held by HUNTER VALLEY ENERGY COAL LIMITED (ACN 062 894 464) has been transferred to KORES AUSTRALIA PTY LIMITED (ACN 063 786 087). The transfer was registered on 24 June 2005.

(05-1360)

Exploration Licence No. 4912, formerly held by HUNTER VALLEY ENERGY COAL LIMITED (ACN 062 894 464) has been transferred to KORES AUSTRALIA PTY LIMITED (ACN 063 786 087). The transfer was registered on 24 June 2005.

(05-1360)

Exploration Licence No. 5903, formerly held by HUNTER VALLEY ENERGY COAL LIMITED (ACN 062 894 464) has been transferred to KORES AUSTRALIA PTY LIMITED (ACN 063 786 087). The transfer was registered on 24 June 2005.

> KERRY HICKEY, M.P., Minister for Mineral Resources

TRANSFER OF PART OF AN AUTHORITY

(05-3281)

Exploration Licence No. 6024, held by ILUKA RESOURCES LIMITED (ACN 008 675 018) has been transferred in part to BEMAX RESOURCES N.L. (ACN 009 247 858). The transfer was registered on 4 July 2005.

Pursuant to section 123 of the Mining Act 1992:

- (1) Exploration Licence No. 6024 has been cancelled as to the area transferred; and
- (2) Exploration Licence No. 6421 has been granted to BEMAX RESOURCES N.L. (ACN 009 247 858) over the area transferred for a period until 19 November 2006.

Description of area part transferred:

An area of about 84 units. For further information contact Titles Branch.

KERRY HICKEY, M.P., Minister for Mineral Resources

EXPIRIES

Mineral Claim No. 78 (Act 1992), Melissa Edith WARD, Parish of Devon, County of Sandon and Parish of Uralla. This title expired on 30 June 2005.

Mineral Claim No. 79 (Act 1992), Melissa Edith WARD, Parish of Devon, County of Sandon and Parish of Uralla. This title expired on 30 June 2005. Mineral Claim No. 83 (Act 1992), Daniel Rex Martyn WARD, Parish of Devon, County of Sandon and Parish of Uralla. This title expired on 30 June 2005.

Mineral Claim No. 84 (Act 1992), Daniel Rex Martyn WARD, Parish of Devon, County of Sandon and Parish of Uralla. This title expired on 30 June, 2005.

KERRY HICKEY, M.P., Minister for Mineral Resources

File No: 04/3126

Occupational Health and Safety Act 2000

Appointment of Inspectors under Section 47A

I, Alan Coutts, Deputy Director-General, Department of Primary Industries -Mineral Resources, under subdelegated authority and pursuant to section 47A of the *Occupational Health and Safety Act 2000* (the Act):

- (a) revoke all previous appointments under section 47A of the Act; and
- (b) appoint as an inspector for the purposes of the Act and the regulations under the Act any person named in Column 1 of Schedule 1 below; and
- (c) limit the functions that a person so appointed has as such an inspector to functions other than those within the exclusion category specified in Column 2 of Schedule 1 opposite the person's name.

For the purposes of paragraph (c), the functions within an exclusion category are those specified in Column 2 of Schedule 2 below opposite the category.

Dated this Fifth day of July 2005.

Alan Coutts Deputy Director General, Department of Primary Industries - Mineral Resources

Schedule 1

Column 1

Column 2

Name of person **Exclusion category** (functions outside inspector's powers) ANDERSON Ian Charles В **BARNES Mathew Robert** С BARRACLOUGH William A CHILMAN Keith Herbert В С COUNDOURIS Aristede Nicholas COWAN Graham William В

Schedule 1 (continued)

Column 1 Column 2 Name of person Exclusion category (functions outside inspector's powers) CRAM David Alan С С **DE GRUCHY** Paul Warren С **DILLON Ronald Francis** С **DRAIN Paul William** FISHER Mark Stephen В С **FREEMAN Mark William** HAMSON Paul Vincent Carey В A **HEALEY** Paul Thomas **HOWELL David Hampton** В **IVANOVIC** Dobrosav В С JAY Robert Alan **JERVIS** Gordon David В JOHNSON Robert Lewis В С JOHNSTON Graham William С **KELLY Noel Lloyd** В KENNEDY Robert Alexander В **KOPPE** Wouter Johan **LEGGETT Raymond William** B С LEONTE Mihai MACDONALD Glyn Ranald В MAGINNIS Stanley Ferguson В MARTIN Timothy Daniel С В McDOUALL Rawdon Angus С MCMAHON James Edward **MILLINGTON Steven James** В MORGAN Edward Walker В MOSS John Lorden А **NEWEY Paul Geoffrey** В **NICHOLS David Johnstone** В В NORCOTT John Humphrey С **PIGGOTT Alwyn** С POTTER Alan William **RAFTERY Paul** С **REGAN Robert William** А С SCHOFIELD Warwick Hutton С SCULLY Paul Gregory SMITH Douglas В С SMITH Antony В SPRUCE Dennis James В STEPHENS Lewis Mark С SUNOL Peter Alsina С **TOWN** Janet С **TSALLOS** John

Schedule 1 (continued)

Column 1

Column 2

Exclusion category

Name of person

	(functions outside inspector's powers)
WAUDBY John Francis	В
WELSH Greg	В
WHITE Paul Dudley	В
WILLOUGHBY Matthew Lees	С

Schedule 2

Column 1	Column 2
Exclusion category	Functions (within exclusion category)
А	Functions of an inspector under section 108 <i>(Penalty notices</i>) of the Act
В	Functions of an inspector under section 32B (<i>Prosecution</i> for offences under this Part (Part 2A Workplace deaths – offence)) and section 106 (<i>Authority to prosecute</i>) and section 108 (<i>Penalty notices</i>) of the Act
С	Functions of an inspector under section 32B (<i>Prosecution</i> for offences under this Part (Part 2A Workplace deaths – offence)) and Division 2 (<i>Improvement notices</i>) and Division 3 (<i>Prohibition notices</i>) of Part 6 and section 106 (<i>Authority to prosecute</i>) and section 108 (<i>Penalty notices</i>) of the Act

File No: 04/3126

Occupational Health and Safety Act 2000

Appointment of Inspector under Section 47A

I, Alan Coutts, Deputy Director-General, Department of Primary Industries -Mineral Resources, under subdelegated authority and pursuant to section 47A of the *Occupational Health and Safety Act 2000* (the Act):

- (a) appoint Rodney Dale Morrison as an inspector for the purposes of the Act and the regulations under the Act; and
- (b) limit the functions that he is authorised to exercise as such an inspector to those functions contained in section 32B (*Prosecution for offences under this Part (Part 2A Workplace deaths – offence)*) and section 106 (*Authority to prosecute*) of the Act.

Dated this Sixth day of July 2005.

Alan Coutts Deputy Director General, Department of Primary Industries - Mineral Resources

Roads and Traffic Authority

ROADS ACT 1993

Notice of Dedication of Land as Public Road at Frederickton in the Kempsey Shire Council area

THE Roads and Traffic Authority of New South Wales, by its delegate, dedicates the land described in the schedule below as public road under section 10 of the Roads Act 1993.

ROADS ACT 1993

Notice of Dedication of Land as Public Road at Werris Creek in the Liverpool Plains Shire Council area

THE Roads and Traffic Authority of New South Wales, by its delegate, dedicates the land described in the schedule below as public road under section 10 of the Roads Act 1993.

Manager, Compulsory Acquisition & Road Dedication Roads and Traffic Authority of New South Wales

SCHEDULE

All those pieces or parcels of land situated in the Kempsey Shire Council area, Parish of Yarrabandini and County of Dudley, shown as Lots 10 and 16 to 21 inclusive Deposited Plan 1069003.

(RTA Papers: 10/235.1239)

Manager, Compulsory Acquisition & Road Dedication, Roads and Traffic Authority of New South Wales.

SCHEDULE

All those pieces or parcels of land situated in the Liverpool Plains Shire Council area, Parish of Grenfell and County of Buckland, shown as Lots 4 to 9 inclusive Deposited Plan 245207.

(RTA Papers: 357.1174)

ROADS ACT 1993

Notice of Dedication of Land as Public Road at Somerton in the Tamworth Regional Council area

THE Roads and Traffic Authority of New South Wales, by its delegate, dedicates the land described in the schedule below as public road under section 10 of the Roads Act 1993.

Manager, Compulsory Acquisition & Road Dedication, Roads and Traffic Authority of New South Wales.

SCHEDULE

All that piece or parcel of land situated in the Tamworth Regional Council area, Parish of Somerton and County of Parry, shown as Lot 9 Deposited Plan 261840.

(RTA Papers: 11/364.125)

ROADS ACT 1993

Notice of Dedication of Land as Public Road at Moonbi in the Tamworth Regional Council area

THE Roads and Traffic Authority of New South Wales, by its delegate, dedicates the land described in the schedule below as public road under section 10 of the Roads Act 1993.

Manager, Compulsory Acquisition & Road Dedication, Roads and Traffic Authority of New South Wales.

SCHEDULE

All that piece or parcel of land situated in the Tamworth Regional Council area, Parish of Moonbi and County of Inglis, shown as Lot 2 Deposited Plan 531464.

(RTA Papers: FPP 5M2471; RO 9/90.1124)

Other Notices

ADDENDUM

THE Annual Report and Determination of Additional Entitlements for Members of the Parliament of NSW by the Parliamentary Remuneration Tribunal of 29 June 2005 is amended as set out hereunder

The conditions for the Sydney Allowance are amended as follows (page 44 of the determination).

Sydney Allowance condition 9 should be followed by condition 10 which reads.

10. Members are not to claim the Sydney Allowance if they stay in Government owned or funded accommodation including Parliament House.

The Electorate Mailout Account is amended as follows (page 71 of the determination).

The allocation for the electorate of Macquarie Fields should read.

ELECTORAL DISTRICT	CURRENT ENTITLEMENT (31 March 2005) As provided by the State Electoral Office	ANNUAL ENTITLEMENT
48. MACQUARIE FIELDS	57,153	\$74,299

The Honourable Justice R. BOLAND, The Parliamentary Remuneration Tirubnal

ASSOCIATIONS INCORPORATION ACT 1984

Cancellation of Incorporation pursuant to Sections 55A and 55B

TAKE notice that the incorporation of the following associations is cancelled by this notice pursuant to sections 55A and 55B of the Associations Incorporation Act 1984.

Cancellation is effective as at the date of gazettal.

Bourbin Creek Landcare Group Inc Y1188127.

Snowy Monaro Family History Group Incorporated Y2212407.

The New South Wales Federation of School Community Organisations Incorporated INC9874264.

Way Ahead Joinery Incorporated Y2466022.

Dated: 15 July 2005.

CHRISTINE GOWLAND, A/General Manager, Registry of Co-operatives and Associations, Office of Fair Trading, Department of Commerce

ASSOCIATIONS INCORPORATION ACT 1984

Cancellation of Incorporation pursuant to sSctions 55A and 55B

TAKE notice that the incorporation of the following associations is cancelled by this notice pursuant to sections 55A and 55B of the Associations Incorporation Act 1984.

Cancellation is effective as at the date of gazettal.

- Bingara District Historical Society Incorporated Y1676014.
- Glenhaven & District Community Services Inc Y1565908.

Dated: 15 July 2005.

CHRISTINE GOWLAND, A/General Manager, Registry of Co-operatives and Associations, Office of Fair Trading, Department of Commerce

ASSOCIATIONS INCORPORATION ACT 1984

Cancellation of Incorporation pursuant to Section 55A

TAKE notice that the incorporation of the following associations is cancelled by this notice pursuant to section 55A of the Associations Incorporation Act 1984.

Cancellation is effective as at the date of gazettal.

- Futsal Australia Rebound Incorporated INC9881558.
- Futsal Australia Beach Soccer Incorporated INC9881553.
- Futsal Australia New South Wales Incorporated INC9881556.
- The Prince Of Wales Hospital Foundation Incorporated INC9880716.

Dated: 15 July 2005.

CHRISTINE GOWLAND, A/General Manager, Registry of Co-operatives and Associations, Office of Fair Trading, Department of Commerce

ASSOCIATIONS INCORPORATION ACT 1984

Cancellation of Incorporation pursuant to Sections 55A and 55B

TAKE notice that the incorporation of the following associations is cancelled by this notice pursuant to sections 55A and 55B of the Associations Incorporation Act 1984.

Cancellation is effective as at the date of gazettal.

Adult Leisure Education Recreation and Tuition Inc Y0330706.

Dated: 15 July 2005.

CHRISTINE GOWLAND, A/General Manager, Registry of Co-operatives and Associations, Office of Fair Trading, Department of Commerce

ASSOCIATIONS INCORPORATION ACT 1984

Cancellation of Incorporation pursuant to Section 55A

TAKE notice that the incorporation of the following associations is cancelled by this notice pursuant to section 55A of the Associations Incorporation Act 1984.

Cancellation is effective as at the date of gazettal.

Australian Association for Bioinformatics Incorporated INC9879126.

Dated: 15 July 2005.

CHRISTINE GOWLAND, A/General Manager, Registry of Co-operatives and Associations, Office of Fair Trading, Department of Commerce

CO-OPERATIVE HOUSING AND STARR-BOWKETT SOCIETIES ACT 1998

Notice Under Section 601AA of the Corporations Law as Applied by Section 177 of the Co-operative Housing and Starr-Bowkett Societies Act 1998

NOTICE is hereby given that the Co-operative mentioned below will be deregistered when two months have passed since the publication of this notice.

State Wide (RV) Co-operative Housing Society.

Dated this 19th day of July 2005.

C. GOWLAND, Delegate of the Registrar of Co-operatives

HERITAGE ACT 1977

Notice of order under section 139(4)

I, Chair of the Heritage Council of New South Wales, pursuant to section 139(4) of the Heritage Act 1977, in accordance with the resolution of the Heritage Council of New South Wales, do by this Order, revoke the exceptions to subsections 139(1) and (2) of the Heritage Act 1977 published in the Government Gazette on 18 June 2004 and create exceptions to subsections 139(1) and (2) of the Heritage Act 1977, described in the Schedule below.

> MICHAEL COLLINS, Chair, Heritage Council of New South Wales

Sydney, 19th July 2005

Schedule

- Excavation or disturbance of land of the kind specified below does not require an excavation permit under s. 139 of the Heritage Act, provided that the Director of the NSW Heritage Office (the Director) is satisfied that the criteria in (a), (b) or (c) have been met and the person proposing to undertake the excavation or disturbance of land has received a notice advising that the Director is satisfied:
 - (a) where an archaeological assessment has been prepared in accordance with Guidelines published by the Heritage Council of NSW which indicates that any relics in the land are unlikely to have State or local heritage significance; or

- (b) where the excavation or disturbance of land will have a minor impact on archaeological relics; or
- (c) where the excavation or disturbance of land involves only the removal of unstratified fill which has been deposited on the land.
- 2. A person proposing to excavate or disturb land in the manner described in paragraph 1 must write to the Director and describe the proposed excavation or disturbance of land and set out why it satisfies the criteria set out in paragraph 1. If the Director is satisfied that the proposed development meets the criteria set out in paragraph (a), (b) or (c) the Director shall notify the applicant.
- 3. The Assistant Director, Principal Heritage Officers employed by the NSW Heritage Office, the Executive Director, Tenant and Asset Management Services employed by the Sydney Harbour Foreshore Authority and the Executive Director Cultural Heritage employed by the Department of Environment and Conservation may perform any of the functions of the Director under this exception.

The authorisation to the Executive Director, Tenant and Asset Management Services of the Sydney Harbour Foreshore Authority is restricted to land for which the Sydney Harbour Foreshore Authority is the delegated approval body under section 169 of the Heritage Act, and the preparation and submission of information required to demonstrate that compliance with the criteria contained in this exception is satisfied, must not be carried out by the Executive Director, Tenant and Asset Management Services.

The authorisation to the Executive Director Cultural Heritage of the Department of Environment and Conservation is restricted to land for which the Department of Environment and Conservation is the delegated approval body under section 169 of the Heritage Act, and the preparation and submission of information required to demonstrate that compliance with the criteria contained in this exception is satisfied, must not be carried out by the Executive Director Cultural Heritage.

- NOTE 1: Any excavation with the potential to affect Aboriginal objects should be referred to the Director-General of the Department of Environment and Conservation.
- NOTE 2: If any Aboriginal objects are discovered on the site, excavation or disturbance is to cease and the Department of Environment and Conservation is to be informed in accordance with s. 91 of the National Parks and Wildlife Act, 1974.
- NOTE 3: This exception does not allow the removal of State significant relics.
- NOTE 4: Where substantial intact archaeological relics of State or local significance, not identified in the archaeological assessment or statement required by this exception, are unexpectedly discovered during excavation, work must cease in the affected area and the Heritage Office must be notified in writing in accordance with s. 146 of the Act. Depending on the nature of the discovery, additional assessment and possibly an excavation permit may be required prior to the recommencement of excavation in the affected area.

22 July 2005

NOTE 5: Anything done pursuant to this exception must be specified, supervised and carried out by people with knowledge, skills and experience appropriate to the work.

LOCAL GOVERNMENT ACT 1993

Proclamation

MARIE BASHIR, Governor

I, Professor Marie Bashir AC, Governor of the State of New South Wales, with the advice of the Executive Council, and in pursuance of section 207 of the Local Government Act 1993, do by this Proclamation, declare that the Area of Upper Lachlan as constituted by proclamation in Government Gazette No. 32 of 11 February 2004 under the Local Government Act 1993, be renamed Upper Lachlan Shire.

Signed and sealed at Sydney, this 6th day of July 2005.

By Her Excellency's Command,

ANTHONY KELLY, M.L.C., Minister for Local Government

GOD SAVE THE QUEEN!

LOCAL GOVERNMENT ACT 1993

Proclamation

MARIE BASHIR, Governor

I, Professor Marie Bashir AC, Governor of the State of New South Wales, with the advice of the Executive Council, and in pursuance of section 207 of the Local Government Act 1993, do by this Proclamation, declare that the Area of Hastings as constituted by proclamation in Government Gazette No. 3 of 12 January 1996 under the Local Government Act 1993, be renamed Port Macquarie-Hastings.

Signed and sealed at Sydney, this 13th day of July 2005.

By Her Excellency's Command,

DAVID CAMPBELL, M.P., Acting Minister for Local Government

GOD SAVE THE QUEEN!

PIPELINES ACT 1967

Notification of grant of renewal of pipeline licence No 9

Plumpton to Killingworth Petroleum Pipeline

IT is hereby notified that, Her Excellency the Governor, with the advice of the Executive Council, has pursuant to section 16 of the Pipelines Act 1967, approved the renewal to Newcastle Pipe Line Company Pty Limited (ACN 001 764 012) of Pipeline Licence No 9 for the period of twenty one (21) years effective from the Thirteenth day of July 2005.

FRANK SARTOR, M.P., Minister For Energy and Utilities

PIPELINES ACT 1967

Notification of grant of renewal of pipeline licence No 10

Silverwater to Plumpton Petroleum Pipeline

IT is hereby notified that, Her Excellency the Governor, with the advice of the Executive Council, has pursuant to section 16 of the Pipelines Act 1967, approved the renewal to Hunter Pipe Line Company Pty Limited (ACN 001 764 852) of Pipeline Licence No 10 for the period of twenty one (21) years effective from the Thirteenth day of July 2005.

FRANK SARTOR, M.P., Minister For Energy and Utilities

PIPELINES ACT 1967

Notification of grant of renewal of pipeline licence No 11

Killingworth to Wickham Petroleum Pipeline

IT is hereby notified that, Her Excellency the Governor, with the advice of the Executive Council, has pursuant to section 16 of the Pipelines Act 1967, approved the renewal to Newcastle Pipe Line Company Pty Limited (ACN 001 764 012) of Pipeline Licence No 11 for the period of twenty one (21) years effective from the Thirteenth day of July 2005.

FRANK SARTOR, M.P., Minister For Energy and Utilities

POISONS AND THERAPEUTIC GOODS ACT 1966 ORDER UNDER CLAUSE 171(1), POISONS AND THERAPEUTIC GOODS REGULATION 2002.

Withdrawal of Drug Authority

IN accordance with the provisions of clause 171(1) of the Poisons and Therapeutic Goods Regulation 2002 an order has been made on Dr Miriam Marguerite Adair of Suite 3, Level 1, 776 Pacific Highway, Gordon 2072 prohibiting her, until further notice, as a medical practitioner from having possession of and supplying drugs of addiction as authorised by clause 101 of the Regulation and issuing a prescription for a drug of addiction as authorised by clause 76 of the Regulation.

This order is to take effect on and from Friday 23 July 2005.

ROBYN KRUK, Director-General

Department of Health, New South Wales Sydney, Monday 18 July 2005

STATE EMERGENCY AND RESCUE MANAGEMENT ACT 1989

Appointment of Deputy State Emergency Operations Controller

HER Excellency the Governor and the Executive Council, in accordance with section 18 (1) of the State Emergency and Rescue Management Act 1989, has appointed acting Deputy Commissioner T Collins, as the Deputy State Emergency Operations Controller for the purposes of administering the requirements of the State Emergency and rescue management Act 1989, No 165.

> DAVID CAMPBELL, M.P., Acting Minister for Emergency Services

Signed - I Grey

.....

Signed - J Colenso

SYDNEY WATER ACT, 1994

Land Acquisition (Just Terms Compensation) Act, 1991

Notice of Compulsory Acquisition of an easement at Albion Park in the Local Government Area of Shellharbour

SYDNEY WATER CORPORATION declares, with the approval of Her Excellency, the Governor, that the interest in land described in the First Schedule hereto is acquired over the land described in the Second and Third Schedules hereto by compulsory process under the provisions of the Land Acquisition (Just Terms Compensation) Act, 1991 for the purpose of the Sydney Water Act 1994.

Dated at Sydney this Fifteenth day of July 2005

Signed for Sydney Water Corporation by its Attorneys

IAN WILLIAM GREY

JEFFREY FRANCIS COLENSO

who hereby state at the time of executing this) instrument have no notice of the revocation of) the Power of Attorney Registered No. 689) Book 4409 under the Authority of which this) instrument has been executed.

Schedule 1

Easement for Water Supply Purposes more fully described in Memorandum 7158329B lodged at the Department of Lands (Division of Land and Property Information) NSW, Sydney

Schedule 2

All that piece or parcel of land containing 372.2 m² in the Local Government Area of Shellharbour, Parish of Jamberoo, County of Camden, and State of New South Wales, being part of Lot 120 in Deposited Plan 775662, and shown on Deposited Plan 1058059 as "PROPOSED EASEMENT FOR WATER SUPPLY PURPOSES 5 & 3 WIDE, said to be in the possession of the Minister for Education and Youth Affairs.

Schedule 3

All that piece or parcel of land containing 891.2 m² in the Local Government Area of Shellharbour, Parish of Jamberoo, County of Camden, and State of New South Wales, being part of Lot 860 in Deposited Plan 788782, and shown on Deposited Plan 1058059 as "PROPOSED EASEMENT FOR WATER SUPPLY PURPOSES 5 & 3 WIDE, said to be in the possession of the Minister for Education and Youth Affairs.

[Sydney Water reference: 489705F6]

THREATENED SPECIES CONSERVATION ACT

NSW SCIENTIFIC COMMITTEE

Notice of Preliminary Determinations

THE Scientific Committee, established by the Threatened Species Conservation Act, has made Preliminary Determinations to support proposals to list the following in the relevant Schedules of the Act. Endangered Species (Part 1 of Schedule 1)

Acacia dangarensis Tindale & Kodela, a small tree Genoplesium superbum D. L. Jones, a midge orchid

Endangered Ecological Community (Part 3 of Schedule 1) Hunter Valley Weeping Myall Woodland of the Sydney Basin bioregion

Any person may make a written submission regarding these Preliminary Determinations, which should be forwarded to:

Scientific Committee PO Box 1967 Hurstville NSW 2220 Attention: Suzanne Chate Executive Officer

Submissions must be received by 16th September, 2005.

Copies of these Determinations, which contain the reasons for the determinations, may be obtained free of charge:

On the Internet www.nationalparks.nsw.gov.au,

By contacting the Scientific Committee Unit,

C/- Department of Environment and Conservation

PO Box 1967 Hurstville 2220.

Tel: (02) 9585 6940 or Fax (02) 9585 6606,

In person at the Department of Environment and Conservation Information Centre, Level 14, 59-61 Goulburn Street, Sydney.

Copies of the determinations may also be obtained from National Parks and Wildlife Service Area Offices and Visitor Centres, subject to availability.

The National Parks and Wildlife Service is part of the Department of Environment and Conservation.

Dr LESLEY HUGHES, Chairperson Scientific Committee

TRANSPORT ADMINISTRATION ACT 1988

Land Acquisition (Just Terms Compensation) Act 1991

Notice of Compulsory Acquisition of Land for the purposes of the Rail Corporation New South Wales

RAIL Corporation New South Wales, with the approval of Her Excellency the Governor, declares that the land described in the Schedule hereto is acquired by compulsory process under the provisions of the Land Acquisition (Just Terms Compensation) Act 1991 for the purposes of the Rail Corporation New South Wales, as authorised by the Transport Administration Act, 1988.

Dated this 14th day of July 2005

VINCE GRAHAM, Chief Executive Officer

Schedule

All that land situate at Katoomba in the Local Government Area of Blue Mountains, Parish of Megalong, County of Cook and State of New South Wales, being Lot 1 in Deposited Plan 1046118 having an area of 27 square metres or thereabouts and said to be in the possession of Blue Mountains City Council.

RailCorp Reference: 011258.





Guidelines for the assessment of the degree of permanent impairment

September 2005

Guidelines for the assessment of the degree of permanent impairment of an injured person

Explanatory Note

These MAA Guidelines are issued pursuant to section 44(1)(c) of the Motor Accidents Compensation Act 1999 ("the Act") and apply in respect of a motor accident occurring on or after 5 October 1999. These Guidelines replace the "MAA Medical Guidelines - Guidelines on the assessment of the degree of permanent impairment of an injured person" published in Government Gazette No 39 of 24 March 2000 at page 2390.

The Act requires that damages for non-economic loss only be awarded where the permanent impairment of the injured person caused by the motor accident is greater than 10%. Further, the assessment of the degree of permanent impairment is to be made in accordance with the MAA Medical Guidelines issued for that purpose.

These guidelines have been developed to fulfil that role. They use the American Medical Association Guides to the Evaluation of Permanent Impairment (Fourth Edition, Third Printing) 1995 (AMA 4 Guides) as their basis. The AMA 4 Guides are widely used as an authoritative source for the assessment of permanent impairment. However, these MAA Guidelines make significant changes to the AMA 4 Guides to align them with Australian clinical practice and to better suit them to the purposes of the Act.

These Guidelines commence on 1 September 2005.

Application of Guidelines

These Guidelines apply to all assessments of the degree of permanent impairment (under s.58(1)(d) of the Act) conducted by a medical assessor on or after the commencement date. These Guidelines apply to a further medical assessment of the degree of permanent impairment (under s.62 of the Act) conducted by a medical assessor on or after the commencement date.

These Guidelines apply in the review of an assessment (under s.63 of the Act) where:

- (i) the assessment by a single medical assessor was made in accordance with these Guidelines; or
- (ii) the assessment by a single medical assessor was made before the commencement date and the review panel, on or after the commencement date, issues a new certificate, but these Guidelines apply only for the purpose of issuing the new certificate.

Questions regarding these Guidelines should be directed to the Rehabilitation Branch at the Motor Accidents Authority.

David Bowen General Manager Motor Accidents Authority

3859

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MAA Impairment Assessment Guidelines

Chapter 1

Introduction to the MAA Guidelines

Introduction

- 1.1 These MAA Guidelines have been developed for the purpose of assessing the degree of permanent impairment arising from the injury caused by a motor accident, in accordance with section 133(2)(a) of the New South Wales Motor Accidents Compensation Act (1999).
- 1.2 The MAA Guidelines are based on the American Medical Association publication "Guides to the Evaluation of Permanent Impairment", 4th Edition, 3rd Printing (1995) (AMA 4 Guides). However, in these Guidelines there are some very significant departures from that document. Persons undertaking impairment assessments for the purposes of the NSW Motor Accidents Compensation Act (1999) must read these MAA Guidelines in conjunction with the AMA 4 Guides. These MAA Guidelines are definitive with regard to the matters they address. Where they are silent on an issue, the AMA 4 Guides should be followed. In particular, chapters 1 and 2 of the AMA 4 Guides should be read carefully in conjunction with this chapter of the MAA Guidelines. Some of the examples in AMA 4 are not valid for the assessment of impairment under the Motor Accidents Compensation Act 1999. It may be helpful for assessors to mark their working copy of the AMA 4 Guides with the changes required by these MAA Guidelines.
- 1.3 The convention used in these MAA Guidelines is that if the text is in bold, it is a directive as to how the assessment should be performed.

Causation of injury

- 1.4 An assessment of permanent impairment is as prescribed under section 58 (1)(d) of the Motor Accidents Compensation Act. The assessment should determine the *degree of permanent impairment of the injured person as a result of the injury caused by the motor accident.* A determination as to whether the claimant's symptoms and impairment are related to the accident in question is therefore implied in all such assessments. Assessors should be aware of the relevant provisions of the AMA 4 Guides, as well as the common law principles that would be applied by a court (or claims assessor) in considering such issues.
- 1.5 Causation is defined in the Glossary at page 316 of the AMA 4 Guides as follows: "*Causation* means that a physical, chemical, or biologic factor contributed to the occurrence of a medical condition. To decide that a factor alleged to have caused or contributed to the occurrence or worsening of a medical condition has, in fact, done so, it is necessary to verify both of the following.
 - (a) The alleged factor *could have caused* or contributed to worsening of the impairment, which is a medical determination.
 - (b) The alleged factor *did cause* or contribute to worsening of the impairment, which is a non-medical determination".

This therefore involves a medical decision and a non-medical informed judgement.

1.6 There is no simple common test of causation that is applicable to all cases, but the accepted approach involves determining whether the injury (and the associated impairment) was caused or materially contributed to by the motor accident. The motor accident does not have to be a sole cause as long as it is a contributing cause, which is more than negligible. Considering the question "Would this injury (or impairment) have occurred if not for the accident?" may be useful in some cases, although this is not a definitive test and may be inapplicable in circumstances where there are multiple contributing causes.

Impairment and disability

1.7 It is critically important to clearly define the term *impairment* and distinguish it from the *disability* that may result.

- 1.8 *Impairment* is defined as an alteration to a person's health status. It is a deviation from normality in a body part or organ system and its functioning. Hence, impairment is a medical issue and is assessed by medical means.
- 1.9 This definition is consistent with that of the World Health Organisation (WHO) which has defined impairment as "any loss or abnormality of psychological, physiological or anatomical structure or function." ⁽¹⁾
- 1.10 *Disability*, on the other hand, is a consequence of an impairment. The WHO definition is "any restriction or lack of ability to perform an activity in the manner or within the range considered normal for a human being". ⁽¹⁾
- 1.11 Confusion between the two terms can arise because in some instances the clearest way to measure an impairment is by considering the effect on a person's 'activities of daily living' (that is, on the consequent disability). The AMA 4 Guides, in several places, refer to restrictions in the activities of daily living of a person. Hence the disability is being used as an indicator of severity of impairment.
- 1.12 Where alteration in activities of daily living forms part of the impairment evaluation, for example when assessing brain injury or facial scarring, refer to the Table of Activities of Daily Living on page 317 of AMA 4 Guides. The assessor should explain how the injury impacts on activities of daily living in the impairment evaluation report.
- 1.13 Two examples may help emphasise the distinction between impairment and disability.
 - (i) The loss of the little finger of the right hand would be an equal impairment for both a bank manager and a concert pianist and so, for these guidelines, the impairment is identical. But the concert pianist has sustained a greater disability.
 - (ii) An upper arm injury might make it impossible for an injured person to contract the fingers of the right hand. That loss of function is an impairment. However, the consequences of that impairment, such as an inability to hold a cup of coffee, or button up clothes, constitute a disability.
- 1.14 A *handicap* is a further possible consequence of an impairment or disability, being a disadvantage that limits or prevents fulfilment of a <u>role that is/was normal for that individual</u>. The concert pianist in the example above is likely to be handicapped by his/her impairment.
- 1.15 It must be emphasised, in the context of these MAA Guidelines, that it is not the role of the assessor to determine disability, other than as described in 1.11 above.

Evaluation of impairment

- 1.16 The assessor should consider the available evidence and be satisfied that there:
 - (i) was an injury to the part being assessed caused by the accident;
 - (ii) is a defined diagnosis that can be confirmed by examination; and
 - (iii) is an impairment as defined at 1.8 and 1.10 of the MAA Guidelines.
- 1.17 An assessment of the degree of permanent impairment involves three stages:
 - A review of medical and hospital records, including

 all available treating and medico-legal doctor notes and reports (general practitioner, specialist and allied health), both prior to and following the accident, and
 diagnostic findings from all available relevant investigations.
 - (ii) An interview and a clinical examination, wherever possible, to obtain the information specified in the MAA Guidelines and the AMA 4 Guides necessary to determine the percentage impairment, and
 - (iii) The preparation of a report using the methods specified in these MAA Guidelines which determines the percentage permanent impairment together with the evidence, calculations and reasoning on which the determination is based. The applicable parts of the MAA Guidelines and the AMA 4 Guides should be referenced.

Permanent impairment

1.18 Before an impairment evaluation is undertaken, it must be shown that the impairment has been present for a period of time, is static, well stabilised and unlikely to change substantially regardless of treatment. The AMA 4 Guides (page 315) state that permanent impairment is

impairment that has become static or well stabilised with or without medical treatment and is not likely to remit despite medical treatment. A permanent impairment is considered to be unlikely to change substantially (i.e. by more than 3% whole person impairment) in the next year with or without medical treatment. If an impairment is not permanent, it is inappropriate to characterise it as such and evaluate it according to the guidelines.

1.19 Generally when an impairment is considered permanent, the injuries will also be stabilised. However, there could be cases where an impairment is considered permanent because it is unlikely to change in future months regardless of treatment, but the injuries are not stabilised because future treatment is intended and the extent of this is not predictable. Amputation and paraplegia are possible examples – the impairment is permanent and may be able to be assessed soon after the injury, as it is not expected to change regardless of treatment. However the injuries may not be stabilised for some time as the extent of future treatment and rehabilitation are not known.

1.20 The evaluation should only consider the impairment as it is at the time of the assessment.

1.21 The evaluation should *not* include any allowance for a predicted deterioration, such as osteoarthritis in a joint many years after an intra-articular fracture, as it is impossible to be precise about any such later alteration. However, it may be appropriate to comment on this possibility in the impairment evaluation report.

Non-assessable injuries

1.22 Certain injuries may not result in an assessable impairment covered by the MAA Guidelines and AMA 4 Guides. For example, uncomplicated healed sternal and rib fractures do not result in any assessable impairment.

Impairments not covered by MAA Guidelines and AMA 4 Guides

1.23 A condition may present which is not covered in the MAA Guidelines or the AMA 4 Guides. If objective clinical findings of such a condition are present, indicating the presence of an impairment then assessment by analogy to a similar condition is appropriate. Include the rationale for the methodology chosen in the impairment evaluation report.

Adjustments for effects of treatment or lack of treatment

- 1.24 The results of past treatment (e.g. operations) must be considered, since the claimant is being evaluated as they present at the time of assessment.
- 1.25 Where the effective long term treatment of the effects of an injury result in apparent, substantial or total elimination of a physical permanent impairment, but the claimant is likely to revert to the <u>fully</u> impaired state if treatment is withdrawn, the assessor may increase the percentage of whole person impairment by 1, 2 or 3% whole person impairment. This percentage should be combined with any other impairment percentage using the Combined Values Chart (pp 322-324, AMA 4 Guides). An example might be long term drug treatment for epilepsy. This paragraph does not apply to the use of analgesics or anti-inflammatory drugs for pain relief.

1.26 For adjustments for the effect of treatment on a permanent psychiatric impairment refer to 7.21 in Chapter 7 Mental and Behavioural Disorders Impairments of these guidelines.

- 1.27 If a claimant has declined a particular treatment or therapy that the medical assessor believes would be beneficial, this should not change the impairment estimate. However, a comment on the matter should be included in the impairment evaluation report.
- 1.28 Equally, if the assessor believes substance abuse is a factor influencing the clinical state of the claimant that should be noted in the impairment evaluation report.

Adjustments for the effects of prostheses or assistive devices

1.29 Whenever possible, the impairment assessment should be conducted without assistive devices, except where these cannot be removed. However, the visual system should be assessed in accordance with 8.14 to 8.17.

Pre-existing impairment

- 1.30 The evaluation of the permanent impairment may be complicated by the presence of an impairment in the same region that existed prior to the relevant motor accident. If there is objective evidence of a pre-existing symptomatic permanent impairment in the same region at the time of the accident then its value should be calculated and subtracted from the current whole person impairment value. If there is no objective evidence of pre-existing symptomatic permanent impairment impairment then its possible presence should be ignored.
- 1.31 The capacity of an assessor to determine a change in physical impairment will depend upon the reliability of clinical information on the pre-existing condition. To quote the AMA 4 Guides page 10, "For example, in apportioning a spine impairment, first the current spine impairment would be estimated, and then impairment from any pre-existing spine problem would be estimated. The estimate for the pre-existing impairment would be subtracted from that for the present impairment to account for the effects of the former. Using this approach to apportionment would require accurate information and data on both impairments". Refer to 7.18 for the approach to a pre-existing psychiatric impairment.
- 1.32 Pre-existing impairments should not be assessed if they are unrelated or not relevant to the impairment arising from the motor vehicle accident.

Subsequent injuries

1.33 The evaluation of permanent impairment may be complicated by the presence of an impairment in the same region that has occurred subsequent to the relevant motor accident. If there is objective evidence of a subsequent and unrelated injury or condition resulting in permanent impairment in the same region its value should be calculated. The permanent impairment resulting from the relevant motor accident should also be calculated. If there is no objective evidence of the subsequent impairment its possible presence should be ignored.

Psychiatric impairment

1.34 Psychiatric impairment is assessed in accordance with chapter 7 of these MAA Guidelines.

Psychiatric and physical impairments

- 1.35 Impairment resulting from a physical injury is to be assessed separately from the impairment resulting from psychiatric or psychological injury.
- 1.36 When determining whether the degree of permanent impairment of the injured person resulting from the motor accident is greater than 10%, the impairment rating for a physical injury cannot be combined with the impairment rating for a psychiatric or psychological injury.

Pain

1.37 Some tables require the pain associated with a particular neurological impairment to be assessed. Because of the difficulties of objective measurement, **assessors should make no separate allowance for permanent impairment due to pain, and chapter 15 of the AMA 4 Guides should not be used.** However, each chapter of the AMA 4 Guides includes an allowance for associated pain in the impairment percentages.

Rounding up or down

1.38 The AMA 4 Guides (p 9) permit (but do not require) that a final whole person impairment may be rounded to the nearest percentage ending in 0 or 5. This could cause inconsistency between two otherwise identical assessments. For this reason **assessors must not round** whole person impairment values at any point of the assessment process. During the

impairment calculation process however, fractional values might occur when evaluating the regional impairment (e.g. an upper extremity impairment value of 13.25%) and this should be rounded (in this case to 13%). Whole person impairment values can only be integers (not fractions).

Consistency

- 1.39 Tests of consistency such as using a goniometer to measure range of motion are good but imperfect indicators of claimants' efforts. The assessor must utilise the entire gamut of clinical skill and judgement in assessing whether or not the results of measurements or tests are plausible and relate to the impairment being evaluated. If, in spite of an observation or test result the medical evidence appears not to verify that an impairment of a certain magnitude exists, the assessor should modify the impairment estimate accordingly, describing the modification and outlining the reasons in the impairment evaluation report.
- 1.40 Where there are inconsistencies between the assessor's clinical findings and information obtained through medical records and/or observations of nonclinical activities the inconsistencies should be brought to the claimant's attention, eg inconsistency demonstrated between range of shoulder motion when undressing and range of active shoulder movement during the physical examination. The claimant will then have an opportunity to confirm the history and/or respond to the inconsistent observations to ensure accuracy and procedural fairness.

Assessment of children

1.41 The determination of the degree of permanent impairment in children may be impossible in some instances, due to the natural growth and development of the child (examples are injuries to growth plates of bones or brain damage). In some cases the effects of the injury may not be considered stable and the assessment of permanent impairment may be delayed until growth and development is complete.

Additional investigations

- 1.42 The claimant who is being assessed should attend with the results of all diagnostic tests. It is not appropriate for an assessor to order additional investigations such as further spinal imaging other than those required as part of the impairment assessment. If it is strongly believed there are clinical reasons to order an investigation, the suggestion should be made in the impairment evaluation report.
- 1.43 There are some circumstances where testing is required as part of the impairment assessment e.g. respiratory, cardiovascular, ENT and ophthalmology. In these cases it is appropriate to conduct the prescribed tests as part of the assessment.

Combining values

1.44 In general, when separate impairment percentages are obtained for various impairments being assessed these are *not* simply added together, but must be *combined* using the Combined Values Chart (pp 322-324, AMA 4 Guides). This process is necessary to ensure the total whole person or regional impairment does not exceed 100% of the person or region. The calculation becomes straightforward after working through a few examples (for instance, see page 53 of the AMA 4 Guides). Note, however, that in a few specific instances, for example, for ranges of motion of the thumb joints, (AMA 4 Guides p 16), the impairment values are directly added. Multiple impairment scores should be treated precisely as the AMA 4 Guides or MAA Guidelines instruct.

References:

1. World Health Organisation. International Classification of Impairments, Disabilities and Handicaps.Geneva, 1980.

Chapter 2

Upper Extremity Impairment

Introduction

2.1 The hand and upper extremity is discussed in section 3.1 of Chapter 3 of the AMA 4 Guides (pp 15-74). This section provides guidelines on methods of assessing permanent impairment involving the upper extremity. It is a complex section that requires an organised approach with careful documentation of findings on a worksheet.

The approach to assessment of the upper extremity and hand

- 2.2 Assessment of the upper extremity involves a physical evaluation that can utilise a variety of methods. The assessment, in this chapter, does not include a cosmetic evaluation, which should be done with reference to Chapter 13 of the AMA 4 Guides.
- 2.3 The assessed impairment of a part or region can never exceed the impairment due to amputation of that part or region. For an upper limb, therefore, the maximum evaluation is 60% whole person impairment.
- 2.4 Although range of motion appears to be a suitable method for evaluating impairment, it can be subject to variation because of pain during motion at different times of examination and/or possible lack of co-operation by the person being assessed. If there is such inconsistency then range of motion should not be used as a valid parameter of impairment evaluation. Refer to section 1.40 of these Guidelines. Active range of motion should be measured with at least three consistent repetitions to establish that the results are reliable. Only active motion is measured, not passive motion. A goniometer should be used where clinically indicated.
- 2.5 If the contralateral uninjured joint has a less than average mobility, the impairment value(s) corresponding with the uninjured joint can serve as a baseline and are subtracted from the calculated impairment for the injured joint only if there is a reasonable expectation the injured joint would have had similar findings to the uninjured joint before injury. The rationale for this decision should be explained in the impairment evaluation report.
- 2.6 To achieve an accurate and comprehensive assessment of the upper extremity, findings should be documented on a standard form. Figure 1 of the AMA 4 Guides (pp 16-17) is extremely useful to document findings and guide assessment of the upper extremity.

Note however, that the final summary part of Figure 1 (pp 16-17, AMA 4 Guides) does not make it clear that impairments due to peripheral nerve injuries cannot be combined with other impairments in the upper extremities unless they are separate injuries.

- 2.7 The hand and upper extremity are divided into the regions of the thumb, fingers, wrist, elbow, and shoulder. Close attention needs to be paid to the instructions in Figure 1 (pp 16-17, AMA 4 Guides) regarding adding or combining impairments.
- 2.8 Table 3 (p 20, AMA 4 Guides) is used to convert upper extremity impairment to whole person impairment. Note that 100% upper extremity impairment is equivalent to 60% whole person impairment.
- 2.9 If the condition is not in the AMA 4 Guides it may be assessed using another like condition. For example, a rotator cuff injury may be assessed by impairment of shoulder range of movement or other disorders of the upper extremity (pp 58-65, AMA 4 Guides).

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Specific Interpretation of the AMA 4 Guides

Impairment of the upper extremity due to peripheral nerve disorders

- 2.10 If an impairment results solely from a peripheral nerve injury the assessor should not evaluate impairment from Sections 3.1f to 3.1j (pp 24-45, AMA 4 Guides). Sections 3.1k and subsequent sections should be used for evaluation of such impairment. For peripheral nerve lesions use Table 15 (p 54, AMA 4 Guides) together with Tables 11a and 12a (pp 48-49, AMA 4 Guides) for evaluation. Table 16 (p 57, AMA 4 Guides) must not be used.
- 2.11 When applying Tables 11a 12a (pp 48-49, AMA 4 Guides) the maximum value for each grade should be used unless assessing Complex Regional Pain Syndrome.
- 2.12 For purposes of interpreting Table 11 (p 48, AMA 4 Guides) "abnormal sensation" includes disturbances in sensation such as dysaesthesia, paraesthesia and cold intolerance. "Decreased sensibility" includes anaesthesia and hypoaesthesia.

Impairment of the upper extremity due to complex regional pain syndrome

- 2.13 **The section, "Causalgia and Reflex Sympathetic Dystrophy"** (p 56, AMA 4 Guides) **should not be used.** These conditions have been better defined since publication of the AMA 4 Guides. The current terminology is Complex Regional Pain Syndrome type I (referring to what was termed Reflex Sympathetic Dystrophy) and Complex Regional Pain Syndrome type II (referring to what was termed Causalgia).
- 2.14 For a diagnosis of Complex Regional Pain Syndrome at least eight (8) of the following 11 criteria must be present. The criteria are: skin colour that is mottled or cyanotic; cool skin temperature; oedema; skin dry or overly moist; skin texture that is smooth and non elastic; soft tissue atrophy (especially fingertips); joint stiffness and decreased passive motion; nail changes with blemished, curved or talonlike nails; hair growth changes with hair falling out, longer or finer; x-rays showing trophic bone changes or osteoporosis; bone scan showing findings consistent with CRPS.
- 2.15 When the diagnosis of Complex Regional Pain Syndrome (CRPS) has been established, impairment due to CRPS I (previously reflex sympathetic dystrophy) is evaluated as follows:
 - (i) Rate the upper extremity impairment resulting from the loss of motion of each individual joint.
 - (ii) Rate the upper extremity impairment resulting from sensory deficits and pain according to the grade that best describes the severity of interference with activities of daily living as described in Table 11a (p 48, AMA 4 Guides). The maximum value is not applied in this case (see 2.11 above). The value selected represents the upper extremity impairment. A nerve multiplier is not used.
 - (iii) Combine the upper extremity value for loss of joint motion (step 1) with the value for pain and sensory deficits (step 2) using the Combined Values Chart (pp 322-324, AMA 4 Guides).
 - (iv) Convert the upper extremity impairment to whole person impairment by using Table 3 (p 20, AMA 4 Guides).
- 2.16 When the diagnosis of Complex Regional Pain Syndrome (CRPS) has been established, impairment due to CRPS II (previously causalgia) is evaluated as follows:
 - (i) Rate the upper extremity impairment resulting from the loss of motion of each individual joint.
 - (ii) Rate the upper extremity impairment present resulting from sensory deficits and pain according to the methods described in section 3.1k (pp 46-56, AMA 4 Guides) and Table 11a (p 48, AMA 4 Guides).
 - (iii) Rate the upper extremity impairment resulting from motor deficits and loss of power of the injured nerve according to the determination method described in section 3.1k (pp 46-56, AMA 4 Guides) and Table 12a (p 49, AMA 4 Guides);

- (iv) Combine the upper extremity impairment percentages for loss of joint motion (step 1), pain and sensory deficits (step 2) and motor deficits (step 3) using the Combined Values Chart (pp 322-324, AMA 4 Guides).
- (v) Convert the upper extremity impairment to whole person impairment by using Table 3 (p 20, AMA 4 Guides).

Impairment due to other disorders of the upper extremity

- 2.17 The section, "Impairment Due to Other Disorders of the Upper Extremity" (section 3.1m, pp 58-65 AMA 4 Guides), should be rarely used in the context of motor vehicle injuries. The assessor must take care to avoid duplication of impairments.
- 2.18 Radiographs for carpal instability (p 61, AMA 4 Guides) should only be considered, if available, along with the clinical signs. X-ray examination should not be performed solely for the impairment evaluation.
- 2.19 Strength evaluations (pp 64-65, AMA 4 Guides) and Table 34 must <u>not</u> be used, as they are unreliable indicators of impairment. Where actual loss of muscle bulk has occurred the assessment can be completed by analogy, for example with a relevant peripheral nerve injury. Similar principles can be applied where tendon transfers have been performed or after amputation reattachment if no other suitable methods of impairment evaluation are available.

Chapter 3

Lower Extremity Impairment

Introduction

31 The lower extremity is discussed in section 3.2 of Chapter 3 in the AMA 4 Guides (pp 75-93). This section provides a number of alternative methods of assessing permanent impairment involving the lower extremity. It is a complex section that requires an organised approach. Findings should be carefully documented on a worksheet.

The approach to assessment of the lower extremity

- 3.2 Assessment of the lower extremity involves a physical evaluation that can utilise a variety of methods. In general the method that most specifically addresses the impairment present should be used. For example, impairment due to a peripheral nerve injury in the lower extremity should be assessed with reference to that nerve rather than by its effect on gait.
- 3.3 There are several different forms of evaluation that can be used as indicated in sections 3.2a to 3.2m (pp 75-89 AMA 4 Guides). Table 3.3 in these guidelines indicates which evaluation methods can and cannot be *combined* for the assessment of each injury. It may be possible to perform several different evaluations as long as they are reproducible and meet the conditions specified below and in the AMA 4 Guides. The most specific method of impairment assessment should be used. When more than one equally specific method of rating the same impairment is available, the method providing the highest rating should be chosen. Table 3.4 can be used to assist the process of selecting the most appropriate method(s) of rating lower extremity impairment.
- 3.4 If there is more than one injury in the limb, each injury is to be assessed separately and then the whole person impairments combined, for example a fractured tibial plateau and laxity of the medial collateral ligament are separately assessed and their whole person impairment combined.
- 3.5 If the contralateral uninjured joint has a less than average mobility, the impairment value(s) corresponding with the uninjured joint can serve as a baseline and are subtracted from the calculated impairment for the injured joint, only if there is a reasonable expectation the injured joint would have had similar findings to the uninjured joint before injury. The rationale for this decision should be explained in the impairment evaluation report.
- 3.6 The assessed impairment of a part or region can never exceed the impairment due to amputation of that part or region. For a lower limb, therefore, the maximum evaluation is 40% whole person impairment.
- 3.7 When the Combined Values Table is used, the assessor must ensure that the values all relate to the same system (i.e. whole person impairment, or lower extremity impairment, or foot impairment). Lower extremity impairment can then be combined with impairments in other parts of the body using the same table and ensuring only whole person impairments are combined.
- Table 3.3 should be referred to frequently in order to determine which impairments can be 3.8 combined and which cannot.

Specific Interpretation of the AMA 4 Guides –

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Leg length discrepancy

- **3.9** When true leg length discrepancy is determined clinically (p 75, AMA 4 Guides) the method used must be indicated (for example, tape measure from anterior superior iliac spine to medial malleolus). Clinical assessment of leg length discrepancy is an acceptable method but if computerised tomography films are available they should be used in preference. Such an examination should not be ordered solely for determining leg lengths.
- **3.10** Table 35 (p 75, AMA 4 Guides) should have the element of choice removed such that impairments for leg length should be read as the higher figure of the range quoted, being 0, 3, 5, 7, or 8 for whole person impairment, or 0, 9, 14, 19, or 20 for lower limb impairment.

Gait derangement

- 3.11 Assessment of impairment based on gait derangement should be used as the method of last resort (pp 75-76 AMA 4 Guides). Methods most specific to the nature of the disorder should always be used in preference. If gait derangement is used it cannot be combined with any other impairment evaluation in the lower extremity. It can only be used if no other valid method is applicable and reasons why it is chosen should be provided in the impairment evaluation report.
- 3.12 The use of any walking aid must be necessary and permanent.
- 3.13 In the application of Table 36 (p 76, AMA 4 Guides) Item b. is deleted as the Trendelenburg sign is not sufficiently reliable.

Muscle atrophy (unilateral)

- 3.14 This section (p76, AMA 4 Guides) is not applicable if the limb other than that being assessed is abnormal (for example, if varicose veins cause swelling, or if there is other injury).
- **3.15** In the use of Table 37 (p 77, AMA 4 Guides) the element of choice should be removed in the impairment rating and only the higher figure used. Therefore, for the thigh, the whole person impairment should be assessed as 0, 2, 4, or 5 %, or lower limb impairment as 0, 8, 13, or 13 % respectively. For the calf the equivalent figures have the same numerical values.

Manual muscle strength testing

3.16 The Medical Research Council (MRC) gradings for muscle strength are universally accepted. They are not linear in their application, but ordinal. Only six grades (0-5) should be used, as they are reproducible among experienced assessors. The descriptions in Table 38 (p 77, AMA 4 Guides) are correct. The results of electrodiagnostic methods and tests are not to be considered in the evaluation of muscle testing which can be performed manually. Table 39 (p 77, AMA 4 Guides) is to be used for this method of evaluation.

Range of motion

- 3.17 Although range of motion (pp 77-78, AMA 4 Guides) appears to be a suitable method for evaluating impairment, it is subject to variation because of pain during motion at different times of examination, possible lack of co-operation by the person being assessed and inconsistency. If there is such inconsistency then range of motion cannot be used as a valid parameter of impairment evaluation. Active range of motion should be measured with at least three consistent repetitions to establish that the results are reliable. Only active motion is measured, not passive motion. A goniometer should be used where clinically indicated.
- 3.18 If range of motion is used as an assessment measure, Tables 40 to 45 (p 78, AMA 4 Guides) are selected for the joint or joints being tested. Where a joint has more than one range of motion, and the impairment assessment is different (i.e. mild, moderate or severe) for the different directions, then only the highest level of impairment is selected.

Ankylosis

3.19 For the assessment of impairment when a joint is ankylosed (pp 79-82, AMA 4 Guides)

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the calculation to be applied is to select the impairment if the joint is ankylosed in optimum position, and then, if not anklylosed in the optimum position, by adding (not combining) the values of whole person impairment using Tables 46 - 61 (pp 79-82, AMA 4 Guides).

Note: The example listed under the heading "Hip" on p 79 AMA 4 Guides is incorrect.

JOINT	Whole Person	Lower Extremity	Ankle or Foot
HIP	20%	50%	
KNEE	27%	67%	
ANKLE	4%	10%	14%
FOOT	4%	10%	14%

	Table 3.1	Impairment for ank	vlosis in the o	ptimum position is:
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3.20 Note that the whole person impairment from ankylosis of a joint, or joints, in the lower limb cannot exceed 40% whole person impairment or 100% lower limb impairment. If this figure is exceeded when lower limb impairments are combined then only 40% can be accepted as the maximum whole person impairment.

Arthritis

- 3.21 Impairment due to arthritis (pp 82-83, AMA 4 Guides) can be assessed by measuring the distance between the subchondral bone ends ("joint space") if radiography is performed in defined positions. It indicates the thickness of articular cartilage. No notice is to be taken of other diagnostic features of arthritis such as osteophytes, or cystic changes, in the bone. Hip radiography can be done in any position of the hip, but specified positions for the knee and ankle (p82, AMA 4 Guides) must be achieved by the radiographer.
- 3.22 Table 62 (p 83, AMA 4 Guides) indicates the impairment assessment for arthritis based on articular cartilage thickness.
- 3.23 If arthritis is used as the basis for impairment assessment in this way, then the rating *cannot be combined* with gait disturbance, atrophy, or range of movement assessments. It can be combined with a diagnosis-based estimate. (See Table 3.3.)
- 3.24 When interpreting Table 62 (p 83, AMA 4 Guides) if the articular cartilage interval is not a whole number, round to the higher impairment figure.

Amputation

3.25 Where there has been amputation of part of a lower extremity Table 63 (p 83, AMA 4 Guides) applies. In that table the references to 3 inches for below the knee amputation should be converted to 7.5 centimetres.

Diagnosis-based estimates (lower extremity)

- 3.26 Section 3.2i (pp 84-88, AMA 4 Guides) lists a number of conditions that fit a category of diagnosis-based estimates. They are listed in Table 64 (pp 85-86, AMA 4 Guides). When using this table it is essential to read the footnotes carefully. Only permanent impairments should be assessed (see Section 1.18).
- 3.27 It is possible to *combine* impairments from Table 64 for diagnosis-based estimates with other components (e.g. nerve injury) using the Combined Values Chart (pp 322-324, AMA 4 Guides).
- 3.28 Pelvic fractures should be assessed using section 3.4 (p 131 AMA 4 Guides). Fractures of the acetabulum should be assessed using Table 64 (pp 85-86, AMA 4 Guides.
- 3.29 In interpreting Table 64 reference to the hindfoot, intra-articular fractures, the words *subtalar*

joint, talonavicular joint, and *calcaneocuboid joint* imply that the bone is displaced on one or both sides of the joint mentioned.

- 3.30 In order to avoid the risk of double assessment if avascular necrosis with collapse is used as the basis, it cannot be combined with intra-articular fracture of the ankle with displacement, or intra-articular fracture of the hind foot with displacement in Table 64, column 1 (p 86 AMA 4 Guides).
- 3.31 Table 65 and Table 66 (pp 87-88, AMA 4 Guides) use a different concept of evaluation. A point score system is applied, and then the total of points calculated for the hip or knee joint respectively, is converted to an impairment rating from Table 64. Tables 65 and 66 refer to the hip and knee joint replacement respectively. Note that, while all the points are *added* in Table 65, some points are *deducted* when Table 66 is used.
- 3.32 In Table 65 references to "distance walked" under "b. Function" should be construed as six blocks being 600 metres, and three blocks being 300 metres.

Skin loss (lower extremity)

3.33 **Skin loss** can only be included in the calculation of impairment if it is in certain sites and meets the criteria listed in Table 67 (p 88, AMA 4 Guides).

Impairment of the lower extremity due to peripheral nerve injuries

- 3.34 When assessing the impairment due to peripheral nerve injury (pp 88-89, AMA 4 Guides) assessors should read the text in this section. Note that the separate impairments for the motor, sensory and dysaesthetic components of nerve dysfunction in Table 68 (p 89, AMA 4 Guides) are to be *combined*.
- 3.35 Note that the (posterior) tibial nerve is not included in Table 68, but its contribution can be calculated by subtraction of common peroneal nerves from sciatic nerve ratings. The tibial nerve can be assessed as follows with reference to Table 68. The values in brackets are lower extremity impairment values.

Sciatic nerve	30 (75) / 7 (17) / 5 (12)
Common peroneal	15 (42) / 2 (5) / 2 (5)
Tibial	15 (33) / 5 (12) / 3 (7)

- 3.36 Peripheral nerve injury impairments can be *combined* with other impairments, but <u>not</u> those for <u>muscle weakness</u> and <u>atrophy</u>, as shown in Table 3.3.
- 3.37 When using Table 68 refer to Tables 11a and 12a (pp 48-49, AMA 4 Guides) and 2.10, 2.11 and 2.12 of MAA Guidelines.

Impairment of the lower extremity due to complex regional pain syndrome

- **3.38** The section, "Causalgia and Reflex Sympathetic Dystrophy" (p 89, AMA 4 Guides) should not be used. These conditions have been better defined since the publication of the AMA 4 Guides. The current terminology is Complex Regional Pain Syndrome type I (referring to what was termed Reflex Sympathetic Dystrophy) and Complex Regional Pain Syndrome type II (referring to what was termed Causalgia).
- 3.39 When complex regional pain syndrome occurs in the lower extremity it should be evaluated as for the Upper Extremity using 2.13 2.16, MAA Guidelines.

Impairment of the lower extremity due to peripheral vascular disease

- 3.40 Lower extremity impairment due to Peripheral Vascular Disease is evaluated from Table 69 (p 89, AMA 4 Guides). **Table 14 (p 198, AMA 4 Guides) should not be used.** In Table 69 there is a range of lower extremity impairments, not whole person impairment, within each of the Classes 1 to 5. As there is a clinical description of conditions that place a person's lower extremity impairment in a particular class, the assessor has a choice of impairment rating within a class, the value of which is left to the clinical judgment of the assessor.
- 3.41 Lower extremity impairment values from Table 69 (p 89, AMA 4 Guides) must be converted to whole person impairment using Table 3.2.

% Impa	irm	ent of	% Impa	irm	nent of	% Impa	irm	ent of	% Impa	irm	ent of
Lower		Whole	Lower		Whole	Lower		Whole	Lower		Whole
Extremity		Person	Extremity		Person	Extremity		Person	Extremity		Person
1	=	0	26	=	10	51	=	20	76	=	30
2	=	1	27	=	11	52	=	21	77	=	31
3	=	1	28	=	11	53	=	21	78	=	31
4	=	2	29	=	12	54	=	22	79	=	32
5	=	2	30	=	12	55	=	22	80	=	32
		•			10	-0		~~			
6	=	2	31	=	12	56	=	22	81	=	32
7	=	3	32	=	13	57	=	23	82	=	33
8	=	3	33	=	13	58	=	23	83	=	33
9	=	4	34	=	14	59	=	24	84	=	34
10	=	4	35	=	14	60	=	24	85	=	34
11	=	4	36	=	14	61	=	24	86	=	34
12	=	5	37	=	14	62	=	24 25	87	=	35
13	=	5	38	_	15	63	=	25	88	=	35
13	=	6	39	=	16	64	=	26	89	=	36
14	=	6	40	=	16	65	=	26	90	=	36
15	-	0	40	_	10	05	_	20	30	_	50
16	=	6	41	=	16	66	=	26	91	=	36
17	=	7	42	=	17	67	=	27	92	=	37
18	=	7	43	=	17	68	=	27	93	=	37
19	=	8	44	=	18	69	=	28	94	=	38
20	=	8	45	=	18	70	=	28	95	=	38
21	=	8	46	=	18	71	=	28	96	=	38
22	=	9	47	=	19	72	=	29	97	=	39
23	=	9	48	=	19	73	=	29	98	=	39
24	=	10	49	=	20	74	=	30	99	=	40
25	=	10	50	=	20	75	=	30	100	=	40

Table 3.2 Whole person impairment values calculated from lower extremity impairment

extremity assessment methods	
of lower	
ermissible combinations	
Table 3.3 Po	

	Limb Length Discrepancy	Gait Derangement	Muscle Atrophy	Muscle Strength	Range of Motion or Ankylosis	Arthritis	Amputations	Diagnosis -Based Estimates	Skin Loss	Peripheral Nerve Injuries	Complex Regional Pain Syndrome	Vascular Disorders
Limb Length Discrepancy	•		>	>	>	>		>	>	>	>	>
Gait Derangement		•										
Muscle Atrophy	>		•						>			>
Muscle Strength	>			•			>		>		0	>
Range of Motion or Ankylosis	>				•		>		>	>	0	>
Arthritis	>					•	>	>	>	>	>	>
Amputations				>	>	>		>	>	>	>	>
Diagnosis-Based Estimates	>					>	>	•	>	>	>	>
Skin Loss	>		>	>	>	>	>	>	•	>	>	>
Peripheral Nerve Injuries	>				>	>	>	>	>	•		>
Complex Regional Pain Syndrome	>			0	0	>	>	>	>			
Vascular Disorders	>		>	>	*	>	>	~	>	>		•
✓ You may combine these methods of assessment	these methods of	f assessment										

NEW SOUTH WALES GOVERNMENT GAZETTE No. 92

4

See specific instructions for CRPS in lower extremity You may combine these methods of assessment o

American Medical Association, The Guides Newsletter, January/February, 1998; Lower Extremity Section, pp3/75-3/93, The AMA 4 Guides to the Evaluation of Permanent Impairment, Fourth Edition Organization – Format © 1992, Randall D. Lea MD, FAADEP Second Revision Feb 1998; Third Revision March 1999 Anthony J. Dorto, MD, FAADEP Reprinted with permission of American Academy of Disability Evaluating Physicians, DISABILITY, May 1999, Vol. 8, No. 2 Source:

MAA Impairment Assessment Guidelines

worksheet
extremity
Lower
Table 3.4:

Line	Impairment	Table	AMA 4 page	Potential Impairment	Selected Impairment
-	Gait derangement	36	76		
2	Unilateral muscle atrophy	37	77		
e	True muscle weakness	39	77		
4	Range of motion	40-45	78		
5	Joint ankylosis	46-61	79-82		
6	Arthritis	62	83		
7	Amputation	63	83		
8	Diagnosis-based estimates	64	85-86		
6	Limb length discrepancy	35	75		
10	Skin loss	67	88		
11	Peripheral nerve deficit	68	89		
12	Peripheral vascular disease	69	68		
13	Complex Regional Pain syndrome	See sections 3.37 and 3.38	AMA 4 not used		
	Combined Impairment Rating (refer to Table 3.1 for permissible combinations)	nations)			

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Chapter 4

Spinal Impairment

Introduction

- 4.1 The spine is discussed in section 3.3 of chapter 3 in the AMA 4 Guides (pp 94-138). That chapter presents several methods of assessing impairments of the spine. Only the diagnosis-related estimate (DRE) method is to be used for evaluation of impairment of the spine, as modified by this chapter. The AMA 4 Guides use the term 'Injury Model' for this method.
- 4.2 The "Injury Model" relies especially on evidence of neurological deficits and uncommon, adverse structural changes, such as fractures and dislocations. Under this model DREs are differentiated according to clinical findings that are verifiable using standard medical procedures.
- 4.3 The assessment of spinal impairment is made at the time a person is examined, provided the assessor is convinced the condition is stable and permanent. If surgery has been performed then the effect of the surgery as well as the structural inclusions must be taken into consideration when making the assessment of impairment. Refer also to paragraph 1.19 in these MAA Guidelines.
- 4.4 The AMA 4 Guides use the terms cervicothoracic, thoracolumbar and lumbosacral for the three spine regions. These terms relate to the cervical, thoracic and lumbar regions respectively.

The approach to assessment of the spine

- 4.5 The Range of Motion (ROM) model is not to be used for spinal impairment evaluation. (Pages 112-130, AMA 4 Guides, including Table 75 are not to be used.)
- 4.6 The assessor should start with Table 4.1 of these MAA Guidelines to establish the appropriate category for the spine impairment. Its principal difference from Table 70 (p 108, AMA 4 Guides) is the removal of the term 'motion segment integrity' wherever it appears (see section 4.13 below).

Patient's condition	Diagnosis-related estimate category				
	I	II	III	IV	V
Low back pain, neck pain [back pain (lumbago),					
WAD* I] complaints or symptoms	Ι				
Vertebral body compression, < 25%		II			
Low back pain or neck pain with guarding or non- verifiable radicular complaints or nonuniform range of motion (dysmetria)		II			
Posterior element fracture, healed, stable, no dislocation or radiculopathy		П			
Transverse or spinous process fracture with displacement of fragment, healed, stable		П			
Low back or neck pain with radiculopathy [WAD III]			III		
Vertebral body compression fracture 25–50%			Ш		
Posterior element fracture with spinal canal deformity or radiculopathy, stable, healed			Ш		
Radiculopathy			III		
Vertebral body compression > 50%				IV	V
Multilevel structural compromise				IV	V
Spondylolysis with radiculopathy				IV	V
Spondylolisthesis without radiculopathy	Ι	II			
Spondylolisthesis with radiculopathy				IV	V
Vertebral body fracture without radiculopathy		II		IV	
Vertebral body fracture with radiculopathy			III	IV	V
Vertebral body dislocation without radiculopathy		II	Ш	IV	
Vertebral body dislocation with radiculopathy			Ш	IV	V
Previous spine operation without radiculopathy		Ш	Ш	IV	
Previous spine operation with radiculopathy			Ш	IV	V
Stenosis, facet arthrosis or disease, or disc arthrosis	Ι	П			
Stenosis, facet arthrosis or disease, or disc arthrosis with radiculopathy			III		

Table 4.1: Assessing spinal impairment

*Whiplash associated disorder. WAD 1: Neck complaint of pain, stiffness or tenderness only. No physical sign(s). WAD II: Neck complaint AND musculoskeletal sign(s). Musculoskeletal signs include nonuniform range of motion and point tenderness. WAD III: Neck complaint AND neurological sign(s). Neurological signs include decreased or absent deep tendon reflexes, weakness and sensory deficits. WAD IV: Neck complaint AND fracture or dislocation. (Motor Accidents Authority. *Update of Quebec Task Force Guidelines for the Management of Whiplash-associated Disorders*. January 2001: p5.

Note: DRE Categories VI, VII and VIII involve spinal cord injuries and should be assessed according to para 4.41- 4.42 of these guides.

- 4.7 The evaluation should not include any allowance for predicted long term change. For example, a spinal stenosis syndrome after vertebral fracture, or increased back pain due to osteoarthritis of synovial joints after intervertebral disc injury should <u>not</u> be factored in to the impairment evaluation.
- 4.8 All impairments in relation to the spine should be calculated in terms of whole person impairment and assessed in accordance with this chapter and chapter 1 of these MAA Guidelines and chapter 3.3 of AMA 4 Guides.
- 4.9 A chart similar to Figure 61 (pp 96-97, AMA 4 Guides) can be utilised for a summary of the spinal history.
- 4.10 The assessment should include a comprehensive accurate history; a review of all pertinent records available at the assessment; a comprehensive description of the individual's current symptoms; a careful and thorough physical examination; and all findings of relevant laboratory, imaging, diagnostic and ancillary tests available at the assessment. Imaging findings that are used to support the impairment rating should be concordant with symptoms and findings on examination. The assessor should record whether diagnostic tests and radiographs were seen or whether they relied on reports.
- 4.11 While imaging and other studies may assist medical assessors in making a diagnosis, it is important to note that the presence of a morphological variation from what is called 'normal' in an imaging study in and of itself does not make the diagnosis. Several reports indicate that approximately 30% of persons who have never had back pain will have an imaging study that can be interpreted as 'positive' for a herniated disc, and 50% or more will have bulging discs. Further, the prevalence of degenerative changes, bulges and herniations increases with advancing age. To be of diagnostic value, imaging findings must be concordant with clinical symptoms and signs. In other words, an imaging test is useful to confirm a diagnosis, but an imaging result alone is insufficient to qualify for a DRE category.
- 4.12 The assessor should include in the report a description of how the impairment rating was calculated, with reference to the relevant tables and/or figures used.

Specific Interpretation of the AMA 4 Guides

Loss of motion segment integrity

4.13 The section on Loss of Motion Segment Integrity (pp 98-99, AMA 4 Guides) and all subsequent references to it should not be applied, as all conditions in which it might be pertinent are considered to be covered by the "Injury Model" (DRE method).

Definitions of clinical findings used to place an individual in a DRE category

4.14 Definitions of clinical findings which are used to place an individual in a DRE category are provided in the box below.

Definitions of clinical findings

Muscle spasm

Muscle spasm is a sudden, involuntary contraction of a muscle or a group of muscles. Paravertebral muscle spasm is common after acute spinal injury but is rare in chronic back pain. It is occasionally visible as a contracted paraspinal muscle but is more often diagnosed by palpation (a hard muscle). To differentiate true muscle spasm from voluntary muscle contraction, the individual should not be able to relax the contractions. The spasm should be present standing as well as in the supine position and frequently causes scoliosis. The assessor can sometimes differentiate spasm from voluntary contraction by asking the individual to place all his or her weight first on one foot and then the other while the assessor gently palpates the paraspinal muscles. With this manoeuvre, the individual normally relaxes the paraspinal muscles on the weight-bearing side. If the assessor witnesses this relaxation, it usually means that true muscle spasm is not present.

Muscle guarding

Guarding is a contraction of muscle to minimise motion or agitation of the injured or diseased tissue. It is not true muscle spasm because the contraction can be relaxed. In the lumbar spine, the contraction frequently results in loss of the normal lumbar lordosis, and it may be associated with reproducible loss of spinal motion.

Nonuniform loss of spinal motion (dysmetria)

Nonuniform loss of motion of the spine in one of the three principal planes is sometimes caused by muscle spasm or guarding. To qualify as true nonuniform loss of motion, the finding must be reproducible and consistent and the assessor must be convinced that the individual is co-operative and giving full effort.

Non-verifiable radicular pain

Non-verifiable radicular pain is pain that is in the distribution of a nerve root but has no identifiable origin; that is, there are no objective physical findings relating to nerve root dysfunction.

Reflexes

Reflexes may be normal, increased, reduced or absent. For reflex abnormalities to be considered valid, the involved and normal limbs should show marked asymmetry on repeated testing. Abnormal reflexes such as Babinski signs or clonus may be signs of corticospinal tract involvement.

Weakness and loss of sensation

To be valid, the sensory findings must be in a strict anatomic distribution, i.e., follow dermatomal patterns. Motor findings should also be consistent with the affected nerve structure(s). Significant long standing weakness is usually accompanied by atrophy.

Atrophy

Atrophy is measured with a tape measure at identical levels on both limbs. For reasons of reproducibility, the difference in circumference should be 2cm or greater in the thigh and 1 cm or greater in the arm, forearm or leg. The assessor can address asymmetry due to extremity dominance in the report. Measurements should be recorded to the nearest 0.5cm.

Nerve root tension signs

Sciatic nerve tension signs are important indicators of irritation of the lumbosacral nerve roots. While most commonly seen in individuals with a herniated lumbar disc, this is not always the case. In chronic nerve root compression due to spinal stenosis, tension signs are often absent. A variety of nerve tension signs have been described. The most commonly used is the straight leg raising test (SLR). When performed in the supine position, the hip is flexed with the knee extended. In the sitting position, with the hip flexed 90 degrees, the knee is extended. The test is positive when thigh and/or leg pain along the appropriate dermatomal distribution is reproduced. The degree of elevation at which pain occurs is recorded.

Research indicates that the maximum movement of nerve roots occurs when the leg is at an angle of 20 degrees to 70 degrees relative to the trunk. However, this may vary depending on the individual's anatomy. Further, the L4, L5, and S1 nerve roots are those that primarily change their length when straight leg raising is performed.

Thus, pathology at higher levels of the lumbar spine is often associated with a negative SLR. Root tension signs are most reliable when the pain is elicited in a dermatomal distribution. Back pain on SLR is not a positive test. Hamstring tightness must also be differentiated from posterior thigh pain due to root tension.

Diagnosis-related estimates (DRE) model

- 4.15 To determine the correct DRE category, the assessor should start with Table 4.1 (MAA Guidelines), and use this table in conjunction with the DRE descriptors (pp 102-107 AMA 4 Guides), as clarified by the definitions in the box above.
- 4.16 If an assessor is unable to distinguish between two DRE categories, then the higher of those two categories should apply. The inability to differentiate should be noted in the assessor's report and explained.
- 4.17 Table 71 (p 109 AMA 4 Guides) is not to be used. The Definitions of Clinical Findings in the box above should be the criteria by which a diagnosis, and allocation of a DRE category, are made.

Applying the DRE method

- 4.18 The Specific Procedures and Directions Section (Section 3.3f, p 101, AMA 4 Guides) indicates the steps that should be followed. Table 4.1 (MAA Guidelines) is a simplified version of that section, and should be interpreted in conjunction with the amendments listed above.
- 4.19 DRE I applies when the injured person complains about symptoms but there are no objective clinical findings by the assessor. DRE II applies when there are clinical findings made by the assessor, as described in the sections "Description and Verification", (pp 102–107 AMA 4 Guides) with the amendments, for each of the three regions of the spine. Note that symmetric loss of movement is not dysmetria and does not constitute an objective clinical finding.
- 4.20 When allocating the injured person to a DRE category the assessor must reference the relevant differentiators and/or structural inclusions.
- 4.21 Separate injuries to different regions of the spine should be combined.
- 4.22 Do not combine multiple impairments **within** one spinal region. The highest DRE category within the region should be chosen.

Loss of structural integrity

4.23 The AMA 4 Guides (p 99) use the term 'structural inclusions' on to define certain spine fracture patterns that may lead to significant impairment and yet not demonstrate any of the findings involving differentiators. Some fracture patterns are clearly described in the examples of DRE categories in sections 3.3g, 3.3h and 3.3i. They are not the only types of injury in which there is a loss of structural integrity of the spine. In addition to potentially unstable vertebral body fractures, loss of structural integrity can occur by purely soft tissue flexion-distraction injuries.

Spondylolysis and spondylolisthesis

- 4.24 Spondylolysis and spondylolisthesis are conditions that are often asymptomatic and are present in 5-6% of the population. In assessing their relevance the degree of slip (anteroposterior translation) is a measure of the grade of spondylolisthesis and <u>not</u> in itself evidence of loss of structural integrity. To assess a claimant as having symptomatic spondylolysis or spondylolisthesis requires a clinical assessment as to the nature and pattern of the injury, the claimant's symptoms, and the assessor's findings on clinical examination. Table 4.1 can be used to allocate spondylolysis or spondylolisthesis to categories I V depending on the descriptors clinical findings in the appropriate DRE. The patient's DRE must fit the description of clinical findings described in the box above.
- 4.25 Assessors should be aware that acute traumatic spondylolisthesis is a rare event.

Sexual functioning

4.26 Sexual dysfunction should only be assessed as an impairment related to spinal injury where there is <u>other</u> objective evidence of spinal cord, cauda equina or <u>bilateral</u> nerve root

dysfunction (Table 19, p 149, AMA 4 Guides). There is no additional impairment rating system for impotence in the absence of objective clinical findings.

4.27 Chapter 11 (The Urinary and Reproductive System of the AMA 4 Guides) should only be used to assess impairment for impotence where there has been a direct injury to the urinary tract. If this occurs the impairment for impotence could be *combined* with a spine-related whole person impairment. An example is provided in the AMA 4 Guides (p 257) where there is a fracture and dissociation of the symphysis publis <u>and</u> a traumatic disruption of the urethra.

Radiculopathy

- 4.28 Radiculopathy is the impairment caused by dysfunction of a spinal nerve root or nerve roots. To conclude that a radiculopathy is present <u>two or more</u> of the following signs should be found:
 - (i) loss or asymmetry of reflexes (see the definitions of clinical findings in the box above)
 - (ii) positive nerve root tension sign (see the definitions of clinical findings in the box above)
 - (iii) muscle atrophy and/or decreased limb circumference (see the definitions of clinical findings in the box above)
 - (iv) muscle weakness which is anatomically localised to an appropriate spinal nerve root distribution
 - (v) reproducible sensory loss which is anatomically localised to an appropriate spinal nerve root distribution.
- 4.29 Note that complaints of pain, or sensory features, that follow anatomical pathways but cannot be verified by neurological findings do not by themselves constitute radiculopathy. They are described as 'non-verifiable radicular pain' in the definitions of clinical findings in the box above.
- 4.30 Global weakness of a limb related to pain or inhibition or other factors <u>does not constitute</u> weakness due to spinal nerve malfunction.
- 4.31 Electrodiagnostic tests are rarely necessary investigations and a decision about the presence of radiculopathy can generally be made on clinical grounds if a competent examination is performed. The diagnosis of radiculopathy should not be made solely from electrodiagnostic tests.

Multilevel structural compromise

- 4.32 Multilevel structural compromise is mentioned in Table 70 (p 108, AMA 4 Guides) and refers to those DREs that are in categories IV and V. It is constituted by "structural inclusion", which by definition (p 99, AMA 4 Guides) is related to "spine fracture patterns" and is different from the differentiators and clinical findings in the box above.
- **4.33 Multilevel structural compromise is to be interpreted as fractures of more than one vertebra.** To provide consistency of interpretation of the meaning of multiple vertebral fractures the definition of a vertebral fracture includes <u>any</u> fracture of the vertebral body, or of the posterior elements forming the ring of the spinal canal (the pedicle or lamina). It <u>does not include</u> fractures of transverse processes or spinous processes, even at multiple levels (see also 4.36 of these Guidelines).
- 4.34 Multilevel structural compromise also includes spinal fusion and intervertebral disc replacement.
- 4.35 Multilevel structural compromise or spinal fusion across regions are assessed as if they are in one region. The region giving the highest impairment value should be chosen. A fusion of L5 and S1 is considered to be an intervertebral fusion.
- 4.36 A vertebroplasty should be assessed on the basis of the fracture(s) for which it was performed.

4.37

- Compression Fracture(s): In determining the percentage loss of height of a compression fracture, the loss of vertebral height should be measured at the most compressed part and must be documented in the impairment evaluation report. The estimated normal height of the compressed vertebra should be determined where possible by averaging the heights of the two adjacent (unaffected) vertebrae.
- 4.38 Fractures of transverse or spinous processes (one or more) within a spinal region are assessed as DRE category II because the fracture(s) does not disrupt the spinal canal (p 104, AMA 4 Guides), and they do not cause multilevel structural compromise.
- 4.39 One or more end plate fractures in a single spinal region without measurable compression of the vertebral body are rated as DRE category II.
- 4.40 In the application of Table 4.1 to persons with multilevel structural compromise:
 - Multiple vertebral fractures without radiculopathy are classed as Category IV; and
 - Multiple vertebral fractures with radiculopathy are classed as Category V.

Spinal cord injury

- 4.41 Spinal cord injury can be assessed by either Spinal Cord (Section 4.3, pp 147-149 AMA 4 Guides, the Nervous System) or the DRE model (the Musculo-skeletal System) tables. If both forms of assessment are calculated the higher level of impairment should be used.
- The DRE model provides very similar results to the Spinal Cord tables except that it does not 4.42 include respiratory dysfunction secondary to a high cervical cord injury. The impairment can be calculated by the DRE model, in *combination* with Respiratory Impairment (Table 16, p 149, AMA 4 Guides) where applicable.
- The preferred method for assessment of spinal cord injury is to use Section 4.3. AMA 4 4.43 Guides. Table 4.3 in the MAA Guidelines indicates the application and process for the use of the tables. The final percentage whole person impairment is arrived at using the Combined Values Chart (pp 322-324, AMA 4 Guides).
- 4.44 Cauda equina syndrome: In the AMA 4 Guides this term does not have its usual medical meaning. For the purposes of the AMA 4 Guides a person with cauda equina syndrome has objectively demonstrated permanent, partial loss of lower extremity function bilaterally. This syndrome may, or may not, have associated objectively demonstrated bowel or bladder impairment.

Pelvic fractures

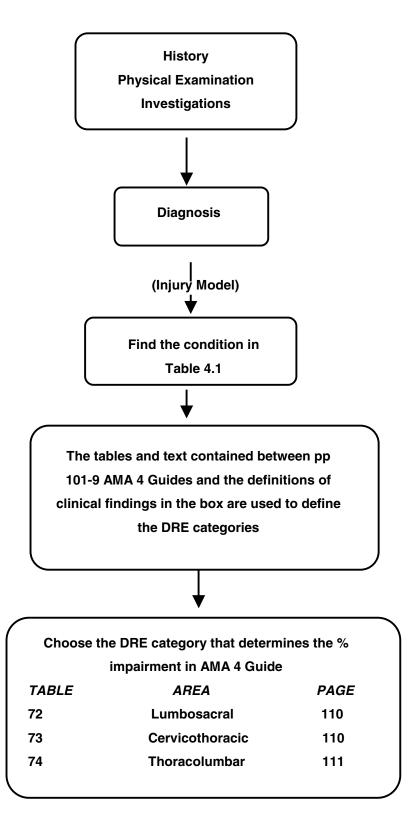
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- 4.45 Pelvic fractures should be assessed using section 3.4 (p 131 AMA 4 Guides). Fractures of the acetabulum should be assessed using Table 64 (pp 85-86, AMA 4 Guides.
- 4.46 Multiple fractures of the pelvis should be assessed separately and then combined.

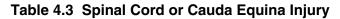
22

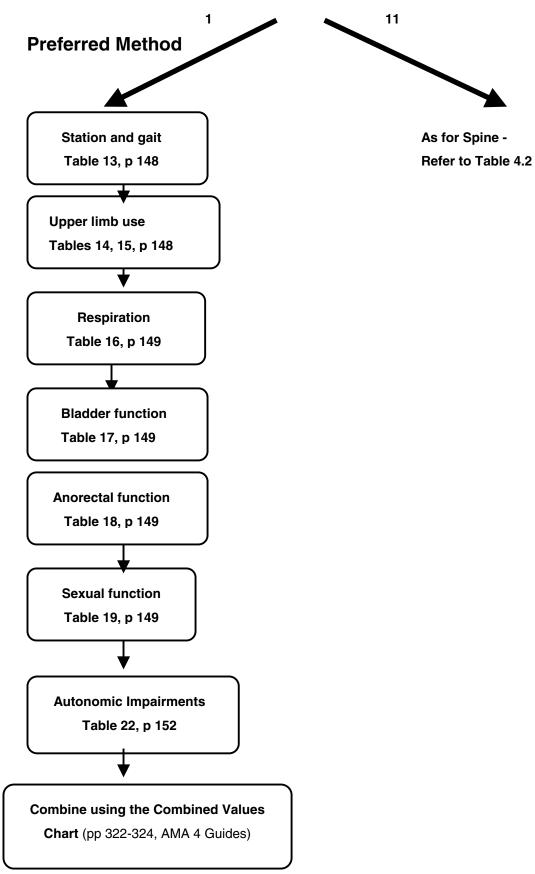
TABLE 4.2: Spine: No Spinal Cord Injury

(The terms cervicothoracic, thoracolumbar, and lumbosacral have been defined in paragraph 4.4)



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Chapter 5

Nervous System Impairment

Introduction

- 5.1 Chapter 4 in the AMA 4 Guides (pp 139-152) provides guidelines on methods of assessing permanent impairment involving the central nervous system. Elements of the assessment of permanent impairment involving the peripheral nervous system can be found in relevant parts of the Upper Extremity, Lower Extremity and Spine sections.
- 5.2 Chapter 4 is logically structured and consistent with the usual sequence of examination of the nervous system. Cortical functions are discussed first, followed by the cranial nerves, the brain stem, the spinal cord and the peripheral nervous system.
- 5.3 Spinal cord injuries can be assessed using the nervous system chapter or the spine section of the AMA 4 Guides and MAA Guides. The methods used will yield similar results except with high level tetraplegia with respiratory dysfunction.
- 5.4 The relevant part of the Upper Extremity, Lower Extremity and Spine sections of the AMA 4 Guides should be used to evaluate impairments of the peripheral nervous system.

The approach to assessment of permanent neurological impairment

- 5.5 The introduction to chapter 4 (the Nervous System) of the AMA 4 Guides is ambiguous in its statement about combining nervous system impairments. The most severe impairment in the categories of (1) disturbances of consciousness and awareness (permanent and episodic), (2) aphasia or communication disorders, (3) mental status and integrative functioning abnormalities, or (4) emotional and behavioural disturbances <u>only</u> should be assessed. Select the highest rating from categories 1 to 4. This rating can then be combined with ratings from other body regions.
- 5.6 A different approach is taken in the assessment of Spinal Cord Impairment (section 4.3, pp147-148, AMA 4 Guides). In this case impairments due to this pathology can be combined using the Combined Values Chart (pp 322-324 AMA 4 Guides). It should be noted that section 4.3 Spinal Cord should be used for motor or sensory impairments caused by a central nervous system lesion. Impairment evaluation of SCI should be combined with the associated DRE 1-5 from Chapter 3 Spine of the AMA 4 Guides. Thus this section covers hemiplegia due to cortical injury as well as spinal cord injury.
- 5.7 Headache or other pain potentially arising from the nervous system, including migraine, is assessed as part of the impairment related to a specific structure. The AMA 4 Guides state that the impairments percentages shown in the chapters of the AMA 4 Guides make allowance for the pain that may accompany the impairing condition.
- 5.8 The nervous system chapter of the AMA 4 Guides lists many impairments where the range for the associated whole person impairment is from 0 to 9% or 0 to 14%. Where there is a range of impairment percentages listed, the assessor should nominate an impairment percentage based on the complete clinical circumstances revealed during the consultation.

Specific Interpretation of the AMA 4 Guides

The central nervous system - cerebrum or forebrain

- 5.9 For an assessment of Mental Status Impairments and Emotional and Behavioural Impairments there should be
 - (i) evidence of a significant impact to the head, or a cerebral insult, or that the motor accident involved a high velocity vehicle impact; and
 - (ii) one or more significant medically verified abnormalities such as an abnormal initial post injury Glasgow Coma Scale score, or Post Traumatic Amnesia, or brain imaging abnormality.
- 5.10 The results of psychometric testing, if available, should be taken into consideration.
- 5.11 Assessment of disturbances of Mental Status and Integrative Functioning

The assessor should use Table 5.1 of these MAA Guidelines, the Clinical Dementia Rating (CDR) which combines cognitive skills and function.

- 5.12 When using the CDR the individual's cognitive function for each category should be scored independently. The maximum CDR score is 3. Memory is considered the primary category, the other categories are secondary. If at least three secondary categories are given the same numeric score as memory then the CDR = M. If three or more secondary categories are given a score greater or less than the memory score, CDR = the score of the majority of secondary categories unless three secondary categories are scored on one side of M and two secondary categories are scored on the other side of M. In this case CDR = M. Similarly if two secondary categories are above M, two are below M and one is the same as M, CDR=M.
- 5.13 Corresponding impairment ratings for CDR scores are listed in Table 5.2 below.
- 5.14 Assessment of Emotional or Behavioural Disturbances is done using Table 3 of the AMA 4 Guides (p 142).
- 5.15 Assessment of Arousal and Sleep Disorders, (pp 143-144 and Table 6, p 143, AMA 4 Guides).

The assessor should make ratings of Sleep and Arousal Disorders based on the clinical assessment normally done for clinically significant disorders of this type.

5.16 Visual Impairment Assessment (p 144, AMA 4 Guides).

An ophthalmologist should assess all impairment of visual acuity, visual fields or extraocular movements.

5.17 Trigeminal Nerve Assessment (p 145, AMA 4 Guides).

Sensory impairments of the trigeminal nerve should be assessed with reference to Table 9 (p 145, AMA 4 Guides). The words "or sensory disturbance" should be added to the table after the words "neuralgic pain" in each instance. Impairment percentages for the three divisions of the trigeminal nerve should be apportioned with extra weighting for the first division (e.g. division 1 40%, and division 2&3 30% each). If present, motor loss for the trigeminal nerve should be assessed in terms of its impact on mastication and deglutition (p 231, AMA 4 Guides).

5.18 Assessment of Sexual Functioning, (p 149, AMA 4 Guides)

Sexual dysfunction is assessed as an impairment only if there is an associated objective neurological impairment. This is consistent with paragraph 4.26 and 4.27 in these MAA Guidelines.

5.19 Olfaction and Taste

The assessment of olfaction and taste is covered at 6.14 and 6.15 of these Guidelines.

	Impairment Level and CDR Score	CDR Score			
	None 0	Questionable 0.5	Mild 1.0	Moderate 2.0	Severe 3.0
Memory (M)	No memory loss or slight inconsistent forgetfulness	Consistent slight forgetfulness; partial recollection of events; "benign" forgetfulness	Moderate memory loss; more marked for recent events; defect interferes with everyday activities	Severe memory loss; only highly learned material retained; new material rapidly lost	Severe memory loss; only fragments remain
Orientation (O)	Fully oriented	Fully oriented except for slight difficulty with time relationships	Moderate difficultly with time relationships; oriented in place at examination; may have geographic disorientation else where	Severe difficulty with time relationships; usually disoriented to time, often to place	Oriented to person only
Judgement and Problem Solving (JPS)	Solves everyday problems and handles business and financial affairs well; judgement good in relation to past performance	Slight impairment in solving problems, similarities and differences	Moderate difficulty in handling problems, similarities, and differences; social judgement usually maintained	Severely impaired in handling problems, similarities, and differences; social judgement usually impaired	Unable to make judgements or solve problems
Community Affairs (CA)	Independent function at usual level in job, shopping, volunteer and social groups	Slight impairment in these activities	Unable to function independently at these activities although may still be engaged in some; appears normal to casual inspection	No pretence of independent function outside home Appears well enough to be taken to functions outside a family home	No pretence of independent function outside home Appears too ill to be taken to functions outside a family home
Home and Hobbies (HH)	Life at home, hobbies and intellectual interests well maintained	Life at home, hobbies and intellectual interests slightly impaired	Mild but definite impairment of function at home; more difficult chores abandoned; more complicated hobbies and interests abandoned	Only simple chores preserved; very restricted interests, poorly maintained	No significant function at home
Personal Care (PC)	Fully capable of self care	Fully capable of self care	Needs prompting	Requires assistance in dressing, hygiene, keeping of personal effects	Requires much help with personal care; frequent incontinence

Table 5.1 Clinical dementia rating

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Class 1 1%-14% Impairment of the Whole Person	Class 2 15%-29% Impairment of the Whole Person	Class 3 30%-49% Impairment of the Whole Person	Class 4 50%-70% Impairment of the Whole Person			
Impairment exists, but ability remains to perform satisfactorily most activities of daily living	Impairment requires direction of some activities of daily living	Impairment requires assistance and supervision for most activities of daily living	Unable to care for self and be safe in any situation without supervision			
CDR = 0.5	CDR = 1.0	CDR = 2.0	CDR = 3.0			

Table 5.2 Criteria for rating impairment related to mental status

Chapter 6

Ear, Nose and Throat and Related Structures Impairment

Introduction

- 6.1 Chapter 9 in the AMA 4 Guides (pp 223-234) provides guidelines on methods of assessing permanent impairment involving the ear, nose and throat and related structures including the face. The assessment of permanent impairment involving scarring of the face may be undertaken using chapter 13, *The Skin*, in the AMA 4 Guides (pp 279-280) and/or Section 9.2 (p 229-230 AMA 4 Guides) *The Face*.
- 6.2 Chapter 9 discusses the ear, hearing, equilibrium, the face, respiratory (air passage) obstruction, mastication and deglutition, olfaction and taste, and speech. There is potential overlap with other chapters, particularly the nervous system, in these areas.

The approach to assessment of ear, nose and throat and related structures

6.3 For assessment of impairment of the ear, nose and throat and related structures it is essential the injured person is interviewed by the assessor. While the assessment may be based principally on the results of audiological or other investigations, the complete clinical picture must be elaborated through direct consultation with the claimant by the medical assessor.

Specific Interpretation of the AMA 4 Guides The Ear and Hearing

- 6.4 The Ear and Tinnitus (pp 223-224, AMA 4 Guides). Tinnitus is only assessable in the presence of hearing loss. An impairment of up to 5% can be added, not combined, to the percentage binaural hearing impairment prior to converting to whole person impairment hearing loss if tinnitus is permanent and severe.
- 6.5 Hearing Impairment (pp 224 to 228, AMA 4 Guides). Sections 9.1a and 9.1b of the AMA 4 Guides are replaced with the following section.

Hearing impairment

- 6.6 Impairment of an injured person's hearing is determined according to evaluation of the individual's binaural hearing impairment.
- 6.7 <u>Permanent hearing impairment.</u> Hearing impairment should be evaluated when the impairment is permanent. Prosthetic devices (i.e hearing aids) must not be used during evaluation of hearing sensitivity.
- 6.8 <u>Hearing threshold level for pure tones</u> is defined as the number of decibels above a standard audiometric zero level for a given frequency at which the listener's threshold of hearing lies when tested in a suitable sound attenuated environment. It is the reading on the hearing level dial of an audiometer calibrated according to Australian Standard AS 2586-1983 of Standards Australia.
- 6.9 <u>Evaluation of binaural hearing impairment.</u> Binaural hearing impairment is determined by means of the 1988 NAL tables "Improved Procedure for Determining Percentage Loss of Hearing" with allowance for presbyacusis according to the presbyacusis correction table in the same publication. ⁽¹⁾
- 6.10 Table 3 (p 228, AMA 4 Guides) is used to convert binaural hearing impairment to impairment of the whole person. For example, a person aged 50 with a total unilateral hearing loss in the right ear and no hearing loss in the left ear has 17% binaural hearing impairment less 0% presbyacusis correction which is equivalent to 6% whole person impairment.

Equilibrium

- 6.11 Assessment of impairment due to disorders of equilibrium (pp 228-229 of the AMA 4 Guides) is dependent on objective findings of vestibular dysfunction. Such data must be available to the assessor.
- 6.12 There is an error in the description of Classes 3, 4 and 5 Criteria of Vestibular Impairment (p 229, AMA 4 Guides). Class 3 of Impairment of Vestibular function is associated with a whole person impairment of 11% to 30%. Class 4 is 31 to 60% and Class 5, 61% to 95%.

The face

6.13 In Table 4 (p 230 AMA 4 Guides) "total" means all branches of the facial nerve.

Olfaction and taste

- 6.14 There is a discrepancy in the AMA 4 Guides in the treatment of olfaction and taste between the neurology chapter (pp 144, 146) and the ENT chapter (pp231-232). To resolve this difference the assessor may assign a value of whole person impairment from 1 to 5% for loss of sense of taste and a value of whole person impairment from 1 to 5% for loss of sense of olfaction.
- 6.15 However, the very rare case of total permanent loss of taste and olfaction is deemed in these MAA Guidelines to constitute greater than 10% permanent impairment.

Scarring

6.16 Scarring, for example from burns, can be evaluated by applying Table 2 (p 280, AMA 4 Guides) or by applying criteria from other chapters based on the effect of the scarring. Facial scarring/disfigurement may also be assessed by reference to Table 4 (p 230, AMA 4 Guides). Contractures can lead to decreased range of motion of a part, or might involve peripheral nerves, thereby requiring assessment of the associated impairment.

Teeth

- 6.17 An impairment assessment for loss of teeth should be done with the injured person wearing their dental prosthesis if this was normal for the injured person prior to the accident. If, as a result of the accident the injured person required a dental prosthesis for the first time, or a different dental prosthesis, the difference should be accounted for in the assessment of permanent impairment.
- 6.18 Damage to the teeth can only be assessed when there is a permanent impact on mastication and deglutition (p 231, AMA 4 Guides) and/or loss of structural integrity of the face (pp 229-230, AMA 4 Guides).
- 6.19 When using Table 6 (p 231, AMA 4 Guides) Relationship of Dietary Restrictions to Permanent Impairment the first category is to be 0-19%, not 5 –19%.
- 6.20 In some cases it will be necessary to access current dental x-rays to assess permanent impairment.

Respiration

6.21 When Table 5 (p 231, AMA 4 Guides) is used for the evaluation of air passage defects these MAA guidelines allow 0-5% whole person impairment where there is significant difficulty in breathing through the nose and examination reveals significant partial obstruction of the right and/or left nasal cavity or nasopharynx or significant septal perforation.

Speech

6.22 When Table 7 Speech Impairment Criteria (p. 233, AMA 4 Guides) is used the percentage from the table must be converted to whole person impairment using Table 9 p 234, AMA 4 Guides.

References:

1. Improved Procedure for Determining Percentage Loss of Hearing, NAL Report No. 118, National Acoustics Laboratory, Commonwealth of Australia, 1988.

Chapter 7

Mental and Behavioural Disorders Impairment

Introduction

- 7.1 Psychiatric disorders have complex effects on the individual, and impairment is multi-axial.
- 7.2 The AMA 4 Guides do not give percentages of psychiatric impairment in chapter 14 (pp 291-302), which deals with mental and behavioural disorders. The Guides' authors explain that medically determinable impairments in thinking, affect, intelligence, perception, judgment and behaviour are difficult to translate into functional limitations.
- 7.3 One of the ways to determine the degree of psychiatric impairment is to examine the level of disability produced by an equivalent degree of physical impairment. The compatibility between psychiatric and physical disability will minimize discrimination between persons suffering psychiatric injuries and persons suffering physical injuries.
- 7.4 The Assessment of Mental and Behavioural Disorders must be undertaken in accordance with the Psychiatric Impairment Rating Scale as set out in these MAA Guidelines. Chapter 14 of the AMA 4 Guides (pp 291-302) is to be used for background or reference only.
- 7.5 The Psychiatric Impairment Rating Scale (PIRS) scale has been developed drawing heavily on chapter 14 of the AMA 4 Guides.
- 7.6 The AMA 4 Guides provide a framework to determine whether a motor vehicle accident has caused psychiatric impairment. They bridge the gap between impairment and disability by focussing on four areas or aspects of functioning:
 - 1. Activities of daily living (three aspects of ADL are used in the PIRS system)
 - 2. Social functioning
 - 3. Concentration, persistence and pace
 - 4. Adaptation

These areas are described in detail on pp 294-295, AMA 4 Guides.

- 7.7 Activities of daily living include self-care, personal hygiene, communication, ambulation, travel and social and recreational activities.
- 7.8 Social functioning refers to capacity to get along with others and communicate effectively.
- 7.9 Concentration, persistence and pace is defined as the ability to sustain focussed attention, long enough to permit the timely completion of tasks commonly found in work settings.
- 7.10 Adaptation (also called deterioration or de-compensation in work or work like settings) refers to the repeated failure to adapt to stressful circumstances.
- 7.11 Impairment is divided into five classes ranging from no impairment to extreme impairment.
- 7.12 Mental and behavioural disorders resulting from an organic brain injury are most suitably assessed as an organic problem under the Nervous System Impairment chapter of these MAA Guidelines (chapter 5).

Approach to assessment of mental and behavioural disorders

7.13 The impairment must be attributable to a recognised psychiatric diagnosis in accordance with the Diagnostic Statistics Manual of Mental Disorders (4th edition) [DSM IV], Internal Classification of Diseases (10th edition) [ICD 10] or a substantial body of peer review research literature. The impairment evaluation report must specify the diagnostic criteria upon which the diagnosis is based.

7.14 Impairment due to physical injury, for example, deficits in self care or travel caused by brain or spinal cord injury, is assessed using different criteria by nervous system impairment assessors.

7.15 The PIRS is not to be used to measure impairment due to pain or somatoform disorders.

- 7.16 Where cognitive deficits are suspected, the assessor must carefully consider the history of the injury, medical treatment and progress through rehabilitation. The assessor will also take into account results of CT and MRI scans, electroencephalograms (EEGs) and results of psychometric tests.
- 7.17 The scale is to be used by a properly trained assessor. Clinical judgment will be the most important tool in the application of the scale. The impairment rating must be consistent with a recognised psychiatric diagnosis, and clinical experience.
- 7.18 In order to measure impairment caused by a specific event, the assessor **must**, in the case of an injured person with a pre-existing psychiatric diagnosis or condition, estimate the overall pre-existing impairment using precisely the method set out in this chapter, and subtract this value from the current impairment rating.

The Psychiatric Impairment Rating Scale

- 7.19 Behavioural consequences of psychiatric disorder are assessed on six 'Areas of Function', each of which evaluates an area of functional impairment:
 - Self care and personal hygiene (Table 7.1)
 - Social and recreational activities (Table 7.2)
 - Travel (Table 7.3)
 - Social functioning (relationships) (Table 7.4)
 - Concentration, persistence and pace (Table 7.5)
 - Adaptation (Table 7.6).
- 7.20 Impairment in each area of function is rated using class descriptors. Classes range from 1 to 5 according to severity. The standard form (Figure 7.1) must be used when scoring the PIRS. The classes in each Area of Function are described by way of common examples. These are intended to be illustrative rather than literal criteria. The assessor should obtain a history of the injured person's pre-accident lifestyle, activities and habits and then assess the extent to which these have changed as a result of the psychiatric injury. The assessor should take into account variations in lifestyle due to age, gender, cultural, economic, educational and other factors.

Adjustments for effects of treatment or lack of treatment

- 7.21 An adjustment for the effects of prescribed treatment may be made by the assessor if all of the following requirements are met:
 - (i) There is research evidence demonstrating that the treatment prescribed is effective for the claimant's diagnosed psychiatric condition;
 - (ii) The assessor is satisfied that the treatment has been appropriate, for example, medication has been taken in the appropriate dose and duration;
 - (iii) There is clear clinical evidence that the treatment has been effective, that is, the claimant's symptoms have improved and/or functioning has improved; and
 - (iv) It is the clinical judgement of the assessor that ceasing treatment will result in deterioration of symptoms and/or a worsening in function.

The assessor may increase the percentage of whole person impairment by 0% whole person impairment (no or negligible treatment effect), 1% whole person impairment (a mild treatment effect), 2% whole person impairment (a moderate treatment effect) or 3% whole person impairment (a full remission). This paragraph does not apply to the use of analgesics, anti-inflammatory or anti-depressant drugs for analgesia or pain management.

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	Table 7.1 Psychiatric Impairment Rating Scale
	Self care and personal hygiene
Class 1	No deficit, or minor deficit attributable to normal variation in the general population.
Class 2	Mild impairment. Able to live independently and look after self adequately, although may look unkempt occasionally. Sometimes misses a meal or relies on take-away food.
Class 3	Moderate impairment. Cannot live independently without regular support. Needs prompting to shower daily and wear clean clothes. Cannot prepare own meals, frequently misses meals. Family member or community nurse visits (or should visit) 2-3 times per week to ensure minimum level of hygiene and nutrition.
Class 4	Severe impairment. Needs supervised residential care. If unsupervised, may accidentally or purposefully hurt self.
Class 5	Totally impaired. Needs assistance with basic functions, such as feeding and toileting.

	Table 7.2 Psychiatric Impairment Rating Scale
	Social and recreational activities
Class 1	No deficit, or minor deficit attributable to normal variation in the general population. Able to go out regularly to cinemas, restaurants or other recreational venue. Belongs to clubs or associations and is actively involved with these.
Class 2	Mild impairment. Able to occasionally go out to social events without needing a support person, but does not become actively involved, e.g. in dancing, cheering favourite team.
Class 3	Moderate impairment. Rarely goes to social events, and mostly when prompted by family or close friend. Unable to go out without a support person. Not actively involved, remains quiet and withdrawn.
Class 4	Severe impairment. Never leaves place of residence. Tolerates the company of family member or close friend, but will go to a different room or garden when others visit family or flat mate.
Class 5	Totally impaired. Cannot tolerate living with anybody, extremely uncomfortable when visited by close family member.

	Table 7.3 Psychiatric Impairment Rating Scale
	Travel
Class 1	No deficit, or minor deficit attributable to normal variation in the general population. Able to travel to new environments without supervision.
Class 2	Mild impairment. Able to travel without support person, but only in a familiar area such as local shops or visiting a neighbour.
Class 3	Moderate impairment. Unable to travel away from own residence without support person. Problems may be due to excessive anxiety or cognitive impairment.
Class 4	Severe impairment. Finds it extremely uncomfortable to leave own residence even with a trusted person.
Class 5	Totally impaired. Cannot be left unsupervised, even at home. May require two or more persons to supervise when travelling.

	Table 7.4 Psychiatric Impairment Rating Scale Social functioning
Class 1	No deficit, or minor deficit attributable to normal variation in the general population. No difficulty in forming and sustaining relationships, e.g. partner, close friendships lasting years.
Class 2	Mild impairment. Existing relationships strained. Tension and arguments with partner or close family member, loss of some friendships.
Class 3	Moderate impairment. Previously established relationships severely strained, evidenced for example by periods of separation or domestic violence. Partner, relatives or community services looking after children.
Class 4	Severe impairment. Unable to form or sustain long term relationships. Pre- existing relationships ended, e.g. lost partner, close friends. Unable to care for dependants, e.g. own children, elderly parent.
Class 5	Totally impaired. Unable to function within society. Living away from populated areas, actively avoids social contact.

Table 7.5 Psychiatric Impairment Rating Scale

Concentration, persistence and pace

- Class 1 No deficit, or minor deficit attributable to normal variation in the general population. Able to operate at previous educational level e.g. pass a TAFE or university course within normal time frame.
- Class 2 Mild impairment. Can undertake a basic retraining course, or a standard course at a slower pace. Can focus on intellectually demanding tasks for up to thirty minutes e.g. then feels fatigued or develops headache.
- Class 3 Moderate impairment. Unable to read more than newspaper articles. Finds it difficult to follow complex instructions, e.g. operating manuals, building plans, make significant repairs to motor vehicle, type detailed documents, follow a pattern for making clothes, tapestry or knitting.
- Class 4 Severe impairment. Can only read a few lines before losing concentration. Difficulties following simple instructions. Concentration deficits obvious even during brief conversation. Unable to live alone, or needs regular assistance from relatives or community services.
- Class 5 Totally impaired. Needs constant supervision and assistance within an institutional setting.

	Table 7.6 Psychiatric Impairment Rating Scale										
	Adaptation										
Class 1	No deficit, or minor deficit attributable to normal variation in the general population. Able to work full time. Duties and performance are consistent with person's education and training. The person is able to cope with the normal demands of the job.										
Class 2	Mild impairment. Able to work full time in a different environment. The duties require comparable skill and intellect. Can work in the same position, but no more than 20 hours per week e.g. no longer happy to work with specific persons, work in a specific location due to travel required.										
Class 3	Moderate impairment. Cannot work at all in same position as previously. Can perform less than 20 hours per week in a different position, which requires less skill or is qualitatively different e.g. less stressful.										
Class 4	Severe impairment. Cannot work more than one or two days at a time, less than twenty hours per fortnight. Pace is reduced, attendance is erratic.										
Class 5	Totally impaired. Cannot work at all.										

Calculation of Whole Person Psychiatric Impairment

- 7.22 Rating psychiatric impairment using the PIRS is a three-step procedure:
 - (i) Determining the Median Class Score
 - (ii) Calculation of the Aggregate Score

(iii) Converting the Median Class and Aggregate Score to % whole person impairment

7.23 **Determining the Median Class Score:** Each area of function described in the PIRS is given an impairment rating ranging from Class 1 to 5. The six class scores are arranged in ascending order using the standard form (Figure 7). The median class is then calculated by averaging the two middle scores. For example:

Example A:	1, 2, 3, 3 , 4, 5	Median Class = 3
Example B:	1, 2, 2, 3, 3, 4	Median Class = 2.5 = 3
Example C:	1, 2, 3, 5, 5, 5	Median Class = 4

7.24 If a score falls between two classes it is rounded up to the next class. A Median Class Score of 2.5 thus becomes 3.

The Median Class Score method was chosen as it is not influenced by extremes. Each area of function is assessed separately. Whilst impairment in one area is neither equivalent to nor interchangeable with impairment in other areas, the median seems the fairest way to translate different impairments onto a linear scale.

- **7.25** Calculation of the Aggregate Score: The Aggregate Score is used to determine an exact percentage of impairment within a particular class range. The six class scores are added to give the aggregate score.
- **7.26** Converting the Aggregate Score: The median class and aggregate score are converted to a percentage impairment score using the Conversion Table (Table 7.7).

												Agg	rega	te sc	ore										
	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Class 1	0	0	1	1	2	2	2	3	3																
Class 2				4	5	5	6	7	7	8	9	9	10												
Class 3	, 11 13 15 17 19 22 24 26									26	28	30													
Class 4									31	34	37	41	44	47	50	54	57	60							
Class 5																61	65	70	74	78	83	87	91	96	100

Table 7.7: Conversion table

Conversion Table – Explanatory Notes

A Distribution of aggregate scores

The lowest aggregate score that can be produced is: 1+1+1+1+1=6.

The highest score that can be produced is: 5+5+5+5+5=30.

The table therefore has aggregate scores ranging from 6 to 30.

Each median class score has a range of possible aggregate scores and hence a range of possible impairment scores (e.g. class 3 = 11-30% whole person impairment).

The conversion table distributes the impairment percentages across the possible range of aggregate scores.

В Same aggregate score in different classes

The conversion table shows that the same aggregate score leads to different impairment percentages for different median classes. For example, an aggregate score of 18 is equivalent to an impairment rating of

- 10% in class 2 •
- 22% in class 3 and
- 34% in class 4

This is because a claimant whose impairment is in median class 2 is likely to have a lower score across most areas of function. The claimant may be significantly impaired in one aspect of their life, such as travel, yet have low impairment in social function, self care or concentration. In contrast someone whose impairment reaches median class 4 will experience significant impairment across most aspects of his or her life.

Examples

Example A	1												
List classes	s in ascendin	g order					Media	an class value					
1	2	3	3	4	5			3					
Aggregate	score						Total	%					
1 +	2 +	3 +	3 +	4 +	5	=	18	22 % WPI					
Example B List classes in ascending order Median class value													
1	2	2	3	3	5			3					
Aggregate	score			_			Total	%					
1+	2 +	2 +	3 +	3 +	5	=	16	17 % WPI					

Example C

List classes	s in ascendin	ig order				_	Media	an class value					
1	2	3	5	5	5								
Aggregate	score		Total	%									
1 +	2 +	3 +	5 +	5 +	5	=	21	44% WPI					

Figure 7.1 Psychiatric Impairment Rating Scale- Assessment Form

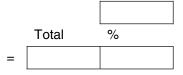
Psychiatric diagnoses	1.	2.
	3.	4.
Psychiatric treatment		
Description		

Category	Class	Reason for decision
Self care and personal hygiene		
Social and recreational activities		
Travel		
Social functioning		
Concentration, persistence and pace		
Adaptation		

List classes in ascending order

Aggregate	score				
+	+	+	+	+	

Median Class Value



Pre-existing impairment? If yes, determine % as above

List classes in ascending order

Aggregate	score				
+	+	+	+	+	

Median Class Value

Final % whole person impairment

Chapter 8

Impairment of Other Body Systems

8.1 Permanent Impairment of other body systems is less common in the motor accident environment, but will occur. The following material provides commentary on the relevant sections of the AMA 4 Guides.

The Respiratory System

Introduction and approach to assessment

8.2 The system of respiratory impairment classification is straightforward and based on a combination of forced vital capacity (FVC), forced expiratory volume (FEV1) and diffusing capacity of carbon monoxide (DCO) or measurement of exercise capacity (VO2max). Chapter 5 of the AMA 4 Guides (pp 153-167) should be infrequently used in assessing impairment following motor vehicle accidents. Healed sternal and rib fractures do not result in any assessable impairment unless they result in a permanent impairment of respiratory function.

Specific Interpretation of the AMA 4 Guides

- 8.3 The claimant needs to bring to the assessment the results of investigations that have determined the lung function parameters listed above. It is anticipated that some claimants will also have had their maximum oxygen consumption assessed.
- 8.4 Table 8 (p 162, AMA 4 Guides) provides the classification of respiratory impairment. A footnote to the table reinforces that conditions other than respiratory disease may reduce maximum exercise capacity and assessors must carefully interpret the clinical presentation of the claimant.
- 8.5 The assessor should provide a specific percentage impairment for permanent impairment due to respiratory conditions. Table 8 (p 162, AMA 4 Guides) should be used to classify the claimant's impairment. Classes 2, 3 and 4 define a range of whole person impairment percentages. The assessor should provide a specific percentage impairment within the range for the class that best describes the clinical status of the claimant. Class 2 (10 to 25% whole person impairment) will need careful consideration.

The Cardiovascular System

Introduction and approach to assessment

8.6 Chapter 6 of the AMA 4 Guides (pp 169-199) provides a clear explanation of the methods required for the assessment of the cardiovascular system.

Specific Interpretation of the AMA 4 Guides

- 8.7 It is particularly important that the claimant being assessed attends with results of all diagnostic tests performed that provide information on the cardiovascular impairment to be assessed. The important data to be brought to the impairment evaluation will include (where possible):
 - ECG (including an exercise ECG)
 - Standard and trans-oesophageal echocardiogram

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- Exercise Thallium scan, exercise echo scan
- Coronary angiograms
- Operative notes for coronary artery bypass grafts, coronary angioplasty or other surgery
- Holter monitoring results
- Electrodiagnostic studies
- Serum urea/electrolytes and urinalysis (particularly if hypertensive).

Diagnostic tests should not be ordered for the purpose of rating of impairment. This is in keeping with the approach taken elsewhere in these MAA Guidelines.

- 8.8 <u>Functional Classification of Cardiovascular System Impairments.</u> Table 2 (p 171, AMA 4 Guides) should be used as an option if the assessor is not sure into which category the claimant should be placed based on specific pathology. (Refer to Tables 4-12, pp172-195 of the AMA 4 Guides) Table 2 can be used as a "referee" or "umpire" if there is doubt about the level of impairment that is obtained using the other recommended tables in this section.
- 8.9 <u>Hypertensive Cardiovascular Disease</u> (section 6.4, pp 185-188, AMA 4 Guides)

This type of cardiovascular disease (Table 9, p 187, AMA 4 Guides) requires previous documentation of the hypertension (from medical records). If the injured person's illness is controlled with medication, then he/she might not be assessable under this table. The assessor should review all relevant tests that have been done by the claimant's treating physician(s).

8.10 <u>Vascular Diseases Affecting the Extremities</u> (pp 196-198, AMA 4 Guides)

Impairments due to upper or lower extremity peripheral vascular disease due to vascular trauma are better assessed using the musculoskeletal chapter of the AMA 4 Guides. This section should not be used.

8.11 Impairment scores from Table 13 Impairment of the Upper Extremity Due to Peripheral Vascular Disease (p 197, AMA 4 Guides) and Table 14 Impairment of the Lower Extremity Due to Peripheral Vascular Disease (p 198, AMA 4 Guides) must be converted to whole person impairments.

The Haematopoietic System

Introduction and approach to assessment

- 8.12 Chapter 7 of the AMA 4 Guides (pp 201-207) will be infrequently used in the motor accident context. The methods of impairment assessment suggested in the chapter should be used.
- 8.13 Splenectomy is covered in this chapter (p 205, AMA 4 Guides). A claimant with post traumatic splenectomy should be assessed as having 3% whole person impairment.

The Visual System

Introduction and approach to assessment

- 8.14 The visual system should be assessed by an ophthalmologist. Chapter 8 of the AMA 4 Guides (pp 210-222) is adopted for the MAA Guidelines without significant change.
- 8.15 Impairment of vision should be measured with the injured person wearing their corrective spectacles or contact lenses, if it was normal for the injured person prior to the motor vehicle accident, or if the need for such spectacles has become necessary due to normal physiological changes to the refractive error either in distance or near vision. If, as a result of the injury, the injured person has been prescribed corrective spectacles and/or contact lenses for the first time, or different spectacles and/or contact lenses than those prescribed pre-injury, the difference should be accounted for in the assessment of permanent impairment.

- 8.16 As suggested elsewhere in the MAA Guidelines, the ophthalmologist should perform all tests necessary for the assessment himself/herself rather than relying on tests done by the orthoptist or optometrist.
- 8.17 Visual impairment should be assessed by an ophthalmologist. An exception is made for clear cut visual field impairments that can be assessed as part of the nervous system chapter.

The Digestive System

Introduction and approach to assessment

- 8.18 Assessments should be performed using the methods outlined in Chapter 10 of the AMA 4 Guides (pp 235-248).
- 8.19 Tables 2 to 7 in Chapter 10 of the AMA 4 Guides (pp 239-247) give details of the components to be assessed. Examples are given that assist by describing illustrative cases. Note that splenectomy is discussed in the haematopoietic system chapter.
- 8.20 Table 7 (p 247, AMA 4 Guides): In classes 1 and 2 the first criterion must be present together with the second or third criterion. In class 3 all three criteria must be present.

The Urinary and Reproductive Systems

Introduction and approach to assessment

- 8.21 In general chapter 11 of the AMA 4 Guides (pp 249-262) provides clear methods for assessment of impairment in these systems.
- 8.22 For male and female sexual dysfunction, objective pathology should be present for an impairment percentage to be given.

The Endocrine System

Introduction and approach to assessment

- 8.23 Chapter 12 of the AMA 4 Guides (pp263-275) will be used occasionally to assess impairment following motor vehicle accidents. Each endocrine organ or system is listed separately.
- 8.24 Where an impairment class defines a range of whole person impairment percentages the assessor should define a specific percentage impairment within the range described by the class that best describes the clinical status of the claimant.
- 8.25 Where injury has resulted in fat necrosis in the mammary glands this should be assessed using Chapter 13 (pp 278-289, AMA 4 Guides) the Skin.

Specific Interpretation of the AMA Guides

8.26 Section 12.8 (p 275, AMA 4 Guides) with the title of Mammary Glands is superseded by the MAA Guidelines. Total loss of one or both mammary glands is deemed to be an impairment of greater than 10% of the whole person.

The Skin

Introduction and approach to assessment

- 8.27 Chapter 13 of the AMA 4 Guides (pp278-289) refers to skin diseases generally. In the context of injury, sections 13.4 Disfigurement (p 279, AMA 4 Guides) and 13.5 Scars and Skin Grafts, are particularly relevant.
- 8.28 Disfigurement, scars and skin grafts may be assessed as causing significant permanent impairment when the skin condition causes limitation in performance of activities of daily living. Assessment should include a history that sets out any alterations in activities of daily living. The AMA 4 Guides (p 317) contains a table of activities of daily living.
- 8.29 A scar may be present and rated 0% whole person impairment.

Specific interpretation of the AMA Guides

- 8.30 Table 2 (p 280, AMA 4 Guides) provides the method of classification of impairment due to skin disorders. Three components, namely signs and symptoms of skin disorder, limitation of activities of daily living and requirements for treatment define five classes of impairment. The assessing physician should derive a specific percentage impairment within the range described by the class that best describes the clinical status of the claimant. All three criteria must be present. Impairment values are whole person impairment.
- 8.31 When using Table 2 (p 280, AMA 4 Guides) the assessor is reminded to consider the skin as an organ. The effect of scarring (whether single or multiple) is to be considered as the total effect of the scar(s) on the organ system as it relates to the criteria in Table 2.
- 8.32 Criteria for facial impairment are listed on page 229 of the AMA 4 Guides. Table 4, (p 230 AMA 4 Guides) provides whole person impairment scores for specific facial disfigurement.
- 8.33 For the purpose of assessing fat necrosis Chapter 13, the Skin (pp277-289) may be used by analogy, where appropriate.

Appendix 1

The first version of these Guidelines was developed for the NSW Motor Accidents Authority by a consortium comprising Dr Jim Stewart, Associate Professor Ian Cameron, Associate Professor Malcolm Sim and Professor Peter Disler. The bulk of the task was undertaken by seven clinical Reference Groups, whose members are listed below. Particular mention should be made of the extensive contributions of Dr Dwight Dowda, Professor Sydney Nade and Dr Julian Parmegiani. A number of Victorian clinicians with experience in the use of the AMA Second and Fourth Edition

Guides have provided valuable assistance. They are Dr Neil Cullen, Dr Michael Epstein, Dr Peter

Lothian, Dr Gary Speck, Dr Richard Stark and Dr Nigel Strauss. Dr Alan Rosen provided valuable comment on the Psychiatric Scale.

Upper extre

mity

Prof Sydney Nade (chair) Prof Bill Marsden Dr Bruce Conolly Dr Lyn March Dr David Duckworth Dr Jim Stewart Dr Dwight Dowda Dr Ian Cameron

Lower extremity

Prof Sydney Nade (chair) Prof Bill Marsden Dr Ken Hume Dr Lyn March Dr Jim Stewart Dr Dwight Dowda Dr Ian Cameron

Spine

Prof Sydney Nade (chair) Dr Michael Ryan Dr John Yeo Dr Jim Stewart Dr Dwight Dowda Dr Ian Cameron

Nervous system

Dr Stephen Buckley (chair) Dr Peter Blum Dr Ivan Lorenz Dr Keith Lethlean Dr Jim Stewart Dr Dwight Dowda Dr Ian Cameron

ENT and scarring

Dr Ray Carroll (chair) Dr Brian Williams Dr Victor Zielinski Dr Dwight Dowda Dr Ian Cameron

Mental and behavioural disorders

Dr Julian Parmegiani (chair) Dr Yvonne Skinner Dr Rod Milton Dr Derek Lovell Dr Jim Stewart Dr Dwight Dowda Dr Ian Cameron

Other body systems

Dr Ian Cameron (chair) Dr Dwight Dowda Dr Jim Stewart

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PRIVATE ADVERTISEMENTS

COUNCIL NOTICES

CABONNE COUNCIL

Naming of Roads

ERRATUM

THE Cabonne Council notice which appeared in the Government Gazette No 90 on the 15th July 2005, folio 3769 contained an error

The road name "Peterson" should have read "Petersen"

This erratum now amends that error. [1462]

FORBES SHIRE COUNCIL

Roads Act 1993, Section 10

Dedication of Land as Public Road

NOTICE is hereby given that Forbes Shire Council, in pursuance of section 10 of the Roads Act 1993, dedicates the land described in the Schedule below as public road. CHRIS DEVITT, General Manager, Forbes Shire Council, PO Box 333, Forbes NSW 2871.

SCHEDULE

Road widening area being Lot 1, DP 1011520 having an area of 1,756 square metres.

Road widening area being Lot 2, DP 1011520 having an area of 1,552 square metres. [1458]

GREAT LAKES COUNCIL

Roads Act 1993, Section 162

Roads (General) Regulation 2000

Naming of Roads

NOTICE is hereby given that Great Lakes Council, pursuant to the aforementioned Act and Regulation, has named the roads described hereunder. KEITH O'LEARY, General Manager, Great Lakes Council, Breese Parade, Forster, NSW 2428.

Description

New road within Stage 8C of subdivision, Forster Palms Estate, west of Pioneer Drive, Forster.

New road within Stage 8C of subdivision, Forster Palms Estate, west of Pioneer Drive, Forster.

New road within Stage 8C of subdivision, Forster Palms Estate, west of Pioneer Drive, Forster.

New road within Stage 8C of subdivision, Forster Palms Estate, west of Pioneer Drive, Forster.

Name Narran Close

Carrinda Place

Wirrana Circuit

Manara Crescent

[1461]

GREATER TAREE CITY COUNCIL

Roads Act 1993, Roads (General) Regulation 2000 Part 2 - Roads, Division 2 - Naming of Roads

NOTICE is hereby given that Greater Taree City Council, in pursuance of the above act and regulations, has named new roads within Harrington Waters Estate Stage 3 as; Annie D Place, Rocklily Street, Gwendoline Place, Eliza Anne Court, Mary Ann Court, Faith Court, Defiance Court, Volunteer Street, Rifleman Place and Scotia Place. PHIL PINYON, General manager, Greater Taree City Council, PO Box 482, Taree NSW 2430. [1457]

MAITLAND CITY COUNCIL

Naming of Public Roads

NOTICE is hereby given that Maitland City Council, in pursuance of section 162 of the Roads Act 1993 and Part 2 of The Roads (General) Regulation 2000, has approved the following new road name/s for gazettal:

Deposited Plan	Location	Road Name
DP859622	Off Jenna Drive Raworth.	Riley James Drive
DP859622	Off Jenna Drive Raworth.	Aileen Close
DP859622	Off Jenna Drive Raworth.	Susan Place

The above road names have been advertised & notified for a period of 28 days. The road names received approval from the Geographical Names Board of NSW. DAVID EVANS, General Manager, Maitland City Council, High Street (PO Box 220) MAITLAND NSW 2320. [1454]

PENRITH CITY COUNCIL

Road Name

PURSUANT to section 7 of the Roads (General) Regulation 2000, notice is hereby given that application has been received for the naming of the following roads:

Location

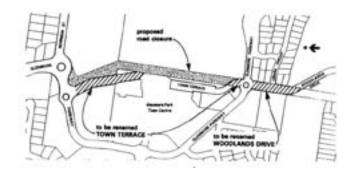
Off Glenmore Parkway, Glenmore Park.

Woodlands Drive.

Name

Off Glenmore Parkway, Glenmore Park.

Town Terrace.



For further information please contact Jasper Childs on 4732 7693. A. TRAVERS, General Manager, Penrith City Council, PO Box 60, Penrith NSW 2751. [1460]

NOTICE of intended distribution of estate.—Any person having any claim upon the estate of RODERICK GEORGE COOPER, late of Lugarno in the State of New South Wales, retired, who died on 22nd April 2005, must send particulars of his claim to the executor, Elsie Cooper, c.o. Truman Hoyle Lawyers, Level 18, 68 Pitt Street Sydney NSW, within one (1) calendar month from publication of this notice. After that time the assets of the estate and the property may be conveyed and distributed having regard only to the claims of which at the time of conveyance or distribution the executor has notice. Probate was granted in New South Wales on 13th July 2005. TRUMAN HOYLE, Lawyers, Level 18, 68 Pitt Street Sydney NSW, (DX 263 Sydney), ref: DLS(SR)4426, tel.: (02) 9232 5588. [1455]

COMPANY NOTICES

NOTICE of meeting of members.-PICKSTONE CONSTRUCTIONS PTY LTD, ACN 059 120 973 (in liquidation).-Notice is hereby given pursuant to section 509 of the Corporations Act 2001, the final meeting of members of the abovenamed company will be held at the office of K. H. Perry & Co. Pty Ltd, Suite 12 Westlakes Arcade 108-112 The Boulevarde, Toronto, on the 22nd day of August 2005, at 4 o'clock for the purpose of laying before the meeting the liquidators final account and report and giving any explanation thereof. Dated this 18th July 2005. IAN HAMILTON PERRY, Liquidator, c.o. K. H. Perry & Co. Pty Ltd, Chartered Accountants, Suite 12 Westlakes Arcade, 108-112 The Boulevarde, Toronto, NSW 2283, tel.: (02) 4959 5322. [1456] ISSN 0155-6320

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