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NEW SOUTH WALES

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LEGISLATION

Online notification of the making of statutory instruments

Week beginning 7 December 2009

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

Proclamations commencing Acts

Children (Criminal Proceedings) Amendment (Naming of Children) Act 2009 No 81 (2009-567) — published LW 11 December 2009

Regulations and other statutory instruments

Allocation of the Administration of Acts 2009 (No 4—General Allocation) (2009-565) published LW 8 December 2009 Liquor Amendment (Notification of Applications) Regulation 2009 (2009-564) published LW 7 December 2009 Public Health Amendment (Deaths Involving Anaesthetics) Regulation 2009 (2009-568) published LW 11 December 2009 Public Sector Employment and Management (Ministerial Changes) Order 2009 (2009-566) published LW 8 December 2009 Public Sector Employment and Management (New Ministerial Arrangements) Order 2009 (2009-563) published LW 7 December 2009 Uniform Civil Procedure Rules (Amendment No 30) 2009 (2009-569) — published LW 11 December 2009 Uniform Civil Procedure Rules (Amendment No 31) 2009 (2009-570) — published LW 11 December 2009

Assents to Acts

ACTS OF PARLIAMENT ASSENTED TO

Legislative Council Office Sydney 14 December 2009

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

Act No. 99, 2009 - An Act to amend the Crimes Act 1900 with respect to fraud, identity, forgery and other related offences; and to make related amendments to the Criminal Procedure Act 1986 and other Acts. [Crimes Amendment (Fraud, Identity and Forgery Offences) Act 2009].

Act No. 100, 2009 - An Act to amend the Electricity Supply Act 1995 with respect to abatement certificates and abatement certificate providers and the liability of the State in connection with the GGAS Scheme and to make provision with respect to the termination of that Scheme; and for other purposes. [Electricity Supply Amendment (GGAS) Act 2009].

Act No. 101, 2009 - An Act to amend the Electricity Supply Act 1995 in relation to renewable energy generation by retail customers. [Electricity Supply Amendment (Solar Bonus Scheme) Act 2009].

Act No. 102, 2009 - An Act to amend the Parliamentary Electorates and Elections Act 1912 in relation to the preparation of electoral rolls by the Electoral Commissioner; to make miscellaneous amendments to that Act; and for other purposes. [Parliamentary Electorates and Elections Amendment (Automatic Enrolment) Act 2009].

Act No. 103, 2009 - An Act to amend the Personal Property Securities (Commonwealth Powers) Act 2009 to make provision for matters of a savings or transitional nature consequent on the referral of matters by that Act to the Parliament of the Commonwealth; and to make related amendments to other legislation. [Personal Property Securities (Commonwealth Powers) Amendment Act 2009].

Act No. 104, 2009 - An Act to make miscellaneous amendments to the road transport legislation and related amendments to the Fines Act 1996. [Road Transport Legislation Amendment (Miscellaneous Provisions) Act 2009].

Act No. 105, 2009 - An Act to amend the Rural Lands Protection Act 1998 and the Rural Lands Protection Amendment Act 2008 to make further provision with respect to rates; and for other purposes. [Rural Lands Protection Amendment Act 2009].

Act No. 106, 2009 - An Act to repeal certain Acts and to amend certain other Acts and instruments in various respects and for the purpose of effecting statute law revision; and to make certain savings. [Statute Law (Miscellaneous Provisions) Act (No. 2) 2009].

Act No. 107, 2009 - An Act to amend the Swimming Pools Act 1992 to make further provision with respect to ensuring access to private swimming pools is effectively restricted; and for other purposes. [Swimming Pools Amendment Act 2009].

Act No. 108, 2009 - An Act to repeal the Trade Measurement Act 1989 and the Trade Measurement Administration Act 1989 as a consequence of the transfer of trade measurement responsibilities to the Commonwealth; and to make provision for transitional and consequential matters. [Trade Measurement (Repeal) Act 2009].

Act No. 109, 2009 - An Act to amend the Trustee Companies Act 1964 to facilitate the regulation of trustee companies by the Commonwealth; and for other purposes. [Trustee Companies Amendment Act 2009].

Act No. 110, 2009 - An Act to amend the Water Management Act 2000 and the State Water Corporation Act 2004 with respect to the installation, operation and maintenance of meters; and for other purposes. [Water Management Amendment Act 2009].

LYNN LOVELOCK, Clerk of the Parliaments

LEGISLATION

ACTS OF PARLIAMENT ASSENTED TO

Legislative Assembly Office, Sydney 14 December 2009

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

Act No. 111 2009 – An Act to amend the Crimes (Forensic Procedures) Act 2000 to make further provision with respect to the carrying out of forensic procedures and the use of forensic material and DNA profiles; and for other purposes. [Crimes (Forensic Procedures) Amendment Bill].

Act No. 112 2009 – An Act to amend the Criminal Procedure Act 1986 in relation to case management of criminal trials; and for other purposes. [Criminal Procedure Amendment (Case Management) Bill].

Act No. 113 2009 – An Act to amend the Election Funding and Disclosures Act 1981 to prohibit political donations by property developers. [Election Funding and Disclosures Amendment (Property Developers Prohibition) Bill].

Act No. 114 2009 – An Act to amend the Fisheries Management Act 1994 to make further provision for the management of fishery resources; and to make related amendments to other Acts. [Fisheries Management Amendment Bill].

Act No. 115 2009 – An Act to refer certain matters relating to workplace relations to the Parliament of the Commonwealth for the purposes of section 51 (xxxvii) of the Constitution of the Commonwealth; and to amend the Industrial Relations Act 1996. [Industrial Relations (Commonwealth Powers) Bill].

Act No. 116 2009 – An Act to amend the James Hardie Former Subsidiaries (Winding up and Administration) Act 2005 to make further provision with respect to the funding of claims against certain former subsidiaries of the James Hardie corporate group. [James Hardie Former Subsidiaries (Winding up and Administration) Amendment Bill].

Act No. 117 2009 – An Act to amend the Judicial Officers Act 1986 in relation to judicial officers exchange arrangements and incompatibility of office. [Judicial Officers Amendment Bill].

Act No. 118 2009 – An Act to amend the Passenger Transport Act 1990 with respect to taxi-cab licences; and for other purposes. [Passenger Transport Amendment (Taxi Licensing) Bill].

Act No. 119 2009 – An Act to amend the Surveying Act 2002 in relation to the objects of that Act and the carrying out of land and mining surveys; and for other purposes. [Surveying Amendment Bill].

RUSSELL D. GROVE, PSM, Clerk of the Legislative Assembly

ACTS OF PARLIAMENT ASSENTED TO

Legislative Assembly Office, Sydney 16 December 2009

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

Act No. 120 2009—An Act to amend the Food Act 2003 with respect to the advertising, packaging and labelling of beef. [Food Amendment (Beef Labelling) Bill].

RUSSELL D. GROVE, PSM, Clerk of the Legislative Assembly

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 species referred to in paragraph (a) as a critically endangered species under that Act, and, as a consequence, to omit reference to that species as an endangered species and, accordingly:

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

Prasophyllum sp. Majors Creek (Jones 11084)

(b) Schedule 1 to that Act is amended by omitting from Part 1 under the heading "Orchidaceae" (under the heading "Plants"):

Prasophyllum sp. Majors Creek (Jones 11084)

This Notice commences on the day on which it is published in the Gazette. Dated, this 6th day of December 2009.

Dr Richard Major Chairperson of the Scientific Committee

Copies of final determination and reasons

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

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

s2009-452-32.d02

Notice of Final Determination

- (b) by contacting the Scientific Committee Unit, by post C/- Department of Environment, Climate Change and Water, PO Box 1967, Hurstville, 1481, by telephone (02) 9585 6940 or by facsimile (02) 9585 6606,
- (c) in person at the Department of Environment, Climate Change and Water Information Centre, Level 14, 59–61 Goulburn St, Sydney.



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 ecological community referred to in paragraph (a) as a critically endangered ecological community under that Act, and, as a consequence, to omit reference to that ecological community as an endangered ecological community and, accordingly:

- (a) Schedule 1A to that Act is amended by inserting in Part 2 in alphabetical order:
 - * Cumberland Plain Woodland in the Sydney Basin Bioregion (as described in the final determination of the Scientific Committee to list the ecological community)
- (b) Schedule 1 to that Act is amended by omitting from Part 3:
 - * Cumberland Plain Woodland (as described in the final determination of the Scientific Committee to list the ecological community)

This Notice commences on the day on which it is published in the Gazette. Dated, this 6th day of December 2009.

Dr Richard Major Chairperson of the Scientific Committee

s2009-496-32.d02

Notice of Final Determination

Copies of final determination and reasons

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

- (a) on the Internet at www.environment.nsw.gov.au,
- (b) by contacting the Scientific Committee Unit, by post C/- Department of Environment, Climate Change and Water, PO Box 1967, Hurstville BC, 1481, by telephone (02) 9585 6940 or by facsimile (02) 9585 6606,
- (c) in person at the Department of Environment, Climate Change and Water Information Centre, Level 14, 59–61 Goulburn St, Sydney.

NSW SCIENTIFIC COMMITTEE

Final Determination

The Scientific Committee, established by the Threatened Species Conservation Act, has made a Final Determination to list the Cumberland Plain Woodland in the Sydney Basin Bioregion as a CRITICALLY ENDANGERED ECOLOGICAL COMMUNITY in Part 2 of Schedule 1A of the Act and as a consequence, to omit reference to Cumberland Plain Woodland from Part 3 of Schedule 1 (Endangered Ecological Communities) of the Act. The listing of Critically Endangered Ecological Communities is provided for by Part 2 of the Act.

The Scientific Committee has found that:

- 1. Cumberland Plain Woodland was listed as an Endangered Ecological Community under the *Threatened Species Conservation Act* 1995 in June 1997 (NSW Scientific Committee 1997). Since this listing, a large volume of new data and analyses have become available. In addition, a nomination to change the status of Cumberland Woodland to Critically Endangered status has been received. This Determination addresses additional information now available in accordance with current listing criteria under the *Threatened Species Conservation Regulation* 2002.
- 2. Cumberland Plain Woodland is the name given to the ecological community in the Sydney Basin bioregion associated with clay soils derived from Wianamatta Group geology, or more rarely alluvial substrates, on the Cumberland Plain, a rainshadow area to the west of Sydney's Central Business District. The mean annual rainfall of this area is typically in the range of 700-900 mm, and is generally lower than that received on more elevated terrain that partially surrounds the Plain. The community typically occurs on flat to undulating or hilly terrain up to about 350 m elevation but may also occur on locally steep sites and at slightly higher elevations. Cumberland Plain Woodland is characterised by the assemblage of species listed in paragraph 3 and typically comprises an open tree canopy, a near-continuous groundcover dominated by grasses and herbs, sometimes with layers of shrubs and/or small trees. Shrubs may sometimes occur in locally dense stands. Less disturbed stands of the community may have a woodland or forest structure. Small trees or saplings may dominate the community in relatively high densities after partial or total clearing, and the groundcover may be relatively sparse, especially where densities of trees or shrubs are high. The community also includes 'derived' native grasslands which result from removal of the woody strata from the woodlands and forests.
- 3. Cumberland Plain Woodland is characterised by the following assemblage of species:
 - Acacia implexa Aristida ramosa Arthropodium milleflorum Asperula conferta Austrodanthonia racemosa var. racemosa Bossiaea prostrata Bothriochloa macra Bursaria spinosa
- Ajuga australis Aristida vagans Arthropodium minus Austrodanthonia caespitosa Austrodanthonia tenuior Bothriochloa decipiens Brunoniella australis Carex inversa

Centaurium spicatum Cheilanthes distans Chloris truncata Chorizema parviflorum Clematis glycinoides var. glycinoides Crassula sieberiana Cymbopogon refractus Daucus glochidiatus Desmodium brachypodium Dianella longifolia Dichelachne micrantha Dichondra repens Dichopogon strictus Dillwynia sieberi Echinopogon caespitosus var. caespitosus Einadia hastata Einadia polygonoides Elymus scaber var. scaber Eremophila debilis Eucalyptus crebra Eucalyptus moluccana Euchiton sphaericus Fimbristylis dichotoma Galium propinguum Geranium solanderi var. solanderi *Glycine clandestina* Glycine tabacina Hardenbergia violacea Hypoxis hygrometrica Indigofera australis Lachnagrostis avenacea var. avenacea Lomandra multiflora subsp. multiflora Microlaena stipoides var. stipoides Oxalis perennans Paspalidium distans Plantago debilis Plectranthus parviflorus Pratia purpurascens Rubus parvifolius Scutellaria humilis Senecio hispidulus var. hispidulus Solanum cinereum Sorghum leiocladum Sporobolus elongatus Themeda australis Vernonia cinerea var. cinerea Wahlenbergia gracilis Wurmbea dioica subsp. dioica

Centella asiatica Cheilanthes sieberi subsp. sieberi Chloris ventricosa Chrysocephalum apiculatum Commelina cyanea Cymbonotus lawsonianus Cyperus gracilis Daviesia ulicifolia Desmodium varians Dichanthium sericeum Dichelachne parva Dichopogon fimbriatus Digitaria diffusa Dodonaea viscosa subsp. cuneata Echinopogon ovatus Einadia nutans Einadia trigonos Eragrostis leptostachya Eriochloa pseudoacrotricha Eucalyptus eugenioides Eucalyptus tereticornis Exocarpus cupressiformis Galium migrans Geranium homeanum Glossogyne tannensis *Glycine microphylla* Goodenia hederacea subsp. hederacea Hypericum gramineum Hypoxis pratensis var. pratensis Juncus usitatus Lomandra filiformis subsp. filiformis Mentha diemenica *Opercularia diphylla* Panicum effusum Phyllanthus virgatus Plantago gaudichaudii Poa labillardieri var. labillardieri Pultenaea microphylla Scleria mackaviensis Senecio diaschides Sida corrugata Solanum prinophyllum Sporobolus creber Stackhousia viminea Tricoryne elatior Veronica plebeia Wahlenbergia stricta subsp. stricta Zornia dyctiocarpa var. dyctiocarpa

Other tree species occurring less frequently in this community include:

Angophora bakeri Angophora subvelutina Eucalyptus amplifolia Eucalyptus bosistoana Eucalyptus globoidea Eucalyptus paniculata Syncarpia glomulifera Angophora floribunda Corymbia maculata Eucalyptus baueriana Eucalyptus fibrosa Eucalyptus longifolia Eucalyptus punctata

- 4. The total species list of the community is larger than that given above, with many species present in only one or two sites or in low abundance. The species composition of a site will be influenced by the size of the site, recent rainfall or drought conditions and by its disturbance (including grazing, land clearing and fire) history. The number and relative abundance of species will change with time since fire, and may also change in response to changes in fire frequency or grazing regime. At any one time, above-ground individuals of some species may be absent, but the species may be represented below-ground in soil seed banks or as dormant structures such as bulbs, corms, rhizomes, rootstocks or lignotubers. Benson and Howell (2002) and Benson & von Richter (2008) document the temporal variability in the species, however the community also includes micro-organisms, fungi, cryptogamic plants and a diverse fauna, both vertebrate and invertebrate. The mammalian and avian components of the fauna have been described by Leary (*in litt*. August 2007) and Farrell (*in litt*. June 2007). Other components of the community are poorly documented (although see Benson & von Richter 2008).
- 5. Cumberland Plain Woodland is characterised by an upper-storey that is usually dominated by Eucalyptus moluccana (Grey Box) and E. tereticornis (Forest Red Gum), often with E. crebra (Grey Ironbark), E. eugenioides (Narrow-leaved Stringybark), Corymbia maculata (Spotted Gum) or other less frequently occurring eucalypts, including Angophora floribunda, A. subvelutina (Broad-leaved Apple), E. amplifolia (Cabbage Gum) and E. fibrosa (Broad-leaved Ironbark). The community may have an open stratum of small trees that may include any of these eucalypts, as well as species such as Acacia decurrens (Black Wattle), A. parramattensis (Parramatta Wattle), A. implexa (Hickory Wattle) or Exocarpos cupressiformis (Native Cherry). Shrubs are typically scattered in the understorey but may be absent or locally dense as a result of clearing activity or changes in grazing or fire regimes. Bursaria spinosa (Blackthorn) is usually dominant, while other species include Daviesia ulicifolia (Gorse Bitter Pea), Dillwynia sieberi, Dodonaea viscosa subsp. cuneata and Indigofera australis (Native Indigo). The ground cover is dominated by a diverse range of grasses including Aristida ramosa (Purple Wiregrass), A. vagans (Threeawn Speargrass), Cymbopogon refractus (Barbed Wire Grass), Dichelachne micrantha (Plumegrass), Echinopogon caespitosus (Forest Hedgehog Grass), Eragrostis leptostachya (Paddock Lovegrass), Microlaena stipoides (Weeping Grass), Paspalidium distans and Themeda australis (Kangaroo Grass), and with graminoids Carex inversa (Knob Sedge), Cyperus gracilis, Lomandra filiformis subsp. filiformis (Wattle Mat-rush) and L. multiflorus subsp. multiflorus (Many-flowered Mat-rush). The ground cover also includes a diversity of forbs such as Asperula conferta (Common Woodruff), Brunoniella australis (Blue Trumpet), Desmodium varians (Slender Tick Trefoil), Dianella longifolia (Blue Flax Lily), Dichondra repens (Kidney Weed), Opercularia diphylla, Oxalis

perennans and *Wahlenbergia gracilis* (Australian Bluebell), as well as scramblers, *Glycine* spp. and *Hardenbergia violacea* (Native Sarsaparilla) and the fern *Cheilanthes sieberi* (Poison Rock Fern).

- 6. The structure of the community varies depending on past and current disturbances, particularly clearing, fire and grazing. Contemporary tree-dominated stands of the community are largely relics or regrowth of originally taller forests and woodlands, which are likely to have had scattered shrubs and a largely continuous grassy groundcover. At some sites, mature trees may exceed 30 m tall, although regrowth stands may be shorter than 10 m tall. After total or partial clearing, the tree canopy may remain sparse or may regrow to form dense stands of saplings and small trees, which are typically associated with a ground layer of reduced cover and diversity. Either or both of the upper-storey and mid-storey may be absent from the community. Native grasslands derived from clearing of the woodland and forest are also part of this community if they contain characteristic non-woody species listed in paragraph 3.
- Cumberland Plain Woodland includes: 'Shale Hills Woodland' (map unit 9) and 'Shale Plains Woodland' (map unit 10) of Tozer (2003); 'Spotted Gum Forest' (map unit 9b), 'Grey Box Woodland' (map unit 10c) and 'Grey Box Ironbark Woodland' (map unit 10d) of Benson (1992); and 'Cumberland Plain Woodlands' of Benson & Howell (1990a; b). Tindall *et al.* (2004) and Tozer *et al.* (2006) subsequently reproduced Tozer's (2003) classification and mapping, re-labelling map units 9 and 10 as 'Cumberland Shale Hills Woodland' (map unit GW p28) and 'Cumberland Shale Plains Woodland' (map unit GW p29), respectively. Cumberland Plain Woodland belongs to the Coastal Valley Grassy Woodlands vegetation class (Keith 2004).
- 8. Several other ecological communities listed under the *Threatened Species Conservation Act* 1995 may intergrade with Cumberland Plain Woodland. These include Cooks River/ Castlereagh Ironbark Forest in the Sydney Basin Bioregion; Moist Shale Woodland in the Sydney Basin Bioregion; Shale / Sandstone Transition Forest; Shale Gravel Transition Forest in the Sydney Basin Bioregion; and Sydney Turpentine-Ironbark Forest. While Tozer (2003) provides information on the features that distinguish these communities, some transitional stands will be difficult to assign to a single community with a high level of confidence (Keith 2009). Transitional stands between Cumberland Plain Woodland and other communities listed under the *Threatened Species Conservation Act* 1995 are considered part of a listed community, and should be assigned to the community with which they share greatest resemblance in species composition and other properties.
- 9. Cumberland Plain Woodland in the Sydney Basin Bioregion is included within the critically endangered ecological community listed under the *Environment Protection and Biodiversity Conservation Act* as "Cumberland Plain Shale Woodlands and Shale-Gravel Transition Forest". However the Commonwealth listing advice excludes some patches, here regarded as Cumberland Plain Woodland, on the basis of condition or structure thresholds.
- 10. The following threatened species have been recorded from Cumberland Plain Woodland:

InvertebratesCumberland Land SnailMeridolum corneovirens

Endangered

Birds

Dirus		
Gang Gang Cockatoo	Callocephalon fimbriatum	Vulnerable
Glossy Black-Cockatoo	Calyptorhynchus lathami	Vulnerable
Brown Treecreeper	Climacteris picumnus	Vulnerable
Painted Honeyeater	Grantiella picta	Vulnerable
Swift Parrot	Lathamus discolor	Endangered
Square-tailed Kite	Lophoictinia isura	Vulnerable
Hooded Robin (south-easter	m Melanodryas cucullata cucullata	Vulnerable
form)		
Black-chinned Honeyeater	Melithreptus gularis gularis	Vulnerable
(eastern subspecies)		
Turquoise Parrot	Neophema pulchella	Vulnerable
Barking Owl	Ninox connivens	Vulnerable
Powerful Owl	Ninox strenua	Vulnerable
Speckled Warbler	Pyrrholaemus sagittatus	Vulnerable
Diamond Firetail	Stagonopleura guttata	Vulnerable
Masked Owl	Tyto novaehollandiae	Vulnerable
Sooty Owl	Tyto tenebricosa	Vulnerable
Regent Honeyeater	Xanthomyza phrygia	Endangered
Mammals		
Large-eared Pied Bat	Chalinalabus duwari	Vulnerable
Spotted-tail Quoll	Chalinolobus dwyeri Dagwyrus magylata	Vulnerable
1	Dasyurus maculata Falsistrellus tasmaniensis	Vulnerable
Eastern False Pipistrelle		Vulnerable
Eastern Bent-wing Bat Eastern Freetail Bat	Miniopterus schreibersii Mormonterus norfolkonsis	Vulnerable
	Mormopterus norfolkensis	Vulnerable
Southern Myotis	Myotis macropus Petaurus australis	
Yellow-bellied Glider		Vulnerable
Squirrel Glider	Petaurus norfolkensis	Vulnerable
Koala Creative for for	Phascolarctos cinereus	Vulnerable
Grey-headed Flying-fox	Pteropus poliocephalus	Vulnerable
Yellow-bellied Sheathtail B	3	Vulnerable
Greater Broad-nosed Bat	Scoteanax rueppellii	Vulnerable
Plants		
Downy Wattle	Acacia pubescens	Vulnerable
Juniper-leaved Grevillea	Grevillea juniperina subsp. juniperina	Vulnerable
Native Pear	Marsdenia viridiflora subsp. viridiflora	Endangered
		Population
Narrow-leaved Geebung	Persoonia nutans	Endangered
Spiked Riceflower	Pimelea spicata	Endangered
Matted Bush-pea	Pultenaea pedunculata	Endangered
Sydney Plains Greenhood	Pterostylis saxicola	Endangered
j - j - 2		

11. Cumberland Plain Woodland is restricted to the Sydney Basin Bioregion (*sensu* Thackway and Cresswell) and is currently known to occur within the local government areas of Auburn, Bankstown, Baulkham Hills, Blacktown, Camden, Campbelltown, Fairfield, Hawkesbury, Holroyd, Liverpool, Parramatta, Penrith and Wollondilly, but may occur elsewhere within the bioregion. Using map data from Tozer (2003), Cumberland Plain Woodland was estimated to occur within an extent of occurrence of 2810 km², and an area of occupancy of just under 2 100 km² based on 2 x 2 km grid cells, the spatial scale recommended by IUCN (2008) for assessing areas of occupancy for species.

- 12. Small areas of Cumberland Plain Woodland have been recorded from Kemps Creek, Mulgoa and Windsor Downs Nature Reserves, Scheyville National Park, and Leacock, Rouse Hill and Western Sydney Regional Parks.
- 13. Based on aerial photography flown in November 1998, Tozer (2003) estimated the total extent of woody vegetation referred to as Cumberland Plain Woodland was 11 054 (±1 564) ha (upper and lower plausible bounds, sensu Keith et al. 2009), representing 8.8 (± 1.2) % of the pre-European distribution of the community. Patches of the community lacking woody vegetation are very small in extent and can be considered to be included within the plausible bounds. For that part of the community's distribution to the east of the Hawkesbury-Nepean River, earlier mapping at coarser resolution by Benson & Howell (1990b) suggests a similar level of depletion, with an estimated 6 420 ha of 'Cumberland Plain Woodlands', representing 6% of the pre-European distribution east of the Hawkesbury-Nepean River. An update of Tozer's (2003) map, based on interpretation of imagery flown in January-March 2007 shows that the extent of Cumberland Plain Woodland east of the Hawkesbury - Nepean River had declined by 442±46 ha, a reduction of 5.2±0.6% in 9 years (NSW Scientific Committee & Simpson 2008). These estimates indicate that the geographic distribution of the community has undergone a very large reduction over a time frame appropriate to the life cycle and habitat characteristics of its component species.
- 14. Some areas of Cumberland Plain Woodland subjected to a history of partial clearing and grazing have recently undergone a change in management to conserve the community. Examples include Mt Annan Botanic Garden, Scheyville National Park, Western Sydney Regional Park, Elizabeth Macarthur Agricultural Institute, Orchard Hills Defence Site and the former Australian Defence Industries site at St Marys. Experience from these areas suggests that the community is capable of some recovery, provided the soil has not been disturbed by earthworks, cultivation, fertiliser application or other means of nutrient or moisture enrichment (Benson & Howell 2002; Pellow 2003; Keith et al. 2005; J. Howell in litt. August 2007; J. Sanders in litt. January 2008). In contrast, restoration of Cumberland Plain Woodland has proved to be problematic on sites that have been exposed to such soil disturbance. At Western Sydney Regional Park, for example, Wilkins et al. (2003), Nichols (2005) and Nichols et al. (2005) studied the recovery of abandoned pastures that had been planted with more than 20 native tree and shrub species of Cumberland Plain Woodland. Over 10 years they found no evidence of convergence in species composition with nearby remnant stands of the community and the species composition of restored areas remained indistinguishable from untreated pastures. There was some evidence that restored vegetation had begun to develop more species-rich assemblages of moths and butterflies compared to untreated pastures, although after 10 years, it lacked a number of species characteristic of remnant woodland (Lomov et al. 2006). Ant communities also showed marked differences between restored and remnant vegetation although some ecological processes, such as pollination and seed dispersal, showed some evidence of development at restored sites (Lomov 2005). These results suggest that sites with a history of soil disturbance will be extremely slow to recover characteristics of Cumberland Plain Woodland, if at all, and that experimentation with alternative restoration technologies is required. As a large proportion of the former distribution of the community has either undergone similar histories of soil disturbance or are now occupied by urban development, opportunities for restoration of the community across significant areas appear limited.

- 15. The reduction in the geographic distribution of Cumberland Plain Woodland was initially due to tree-felling for timber and clearing for crops and pastures (Benson & Howell 1990a). Benson & Howell (1990b) estimated that the community had been reduced to approximately half of its pre-European extent by 1850. Following World War II, there was a marked acceleration in urban and industrial development, which continues to deplete the distribution of the community to the present day. These trends appear likely to continue into the future as the urban area continues to expand to accommodate Sydney's increasing population, which is projected to grow by 1.0-1.1 million people during the 20 years 2007-2026 and 2.2-3.3 million during the 50 years 2007-2056 (Australian Bureau of Statistics 2008). Recent draft plans to develop growth centres in north-west and southwest Sydney, for example, identify staged release of land for residential and employment development over the next 25 years. These areas contain approximately 2000 ha (onefifth) of the estimated remaining Cumberland Plain Woodland based on Tozer (2003), of which about two-thirds will be available for development, the loss of which is planned for offsetting through voluntary land acquisition and/or the establishment of conservation agreements on lands outside the Growth Centres (Growth Centres Commission 2007) for the primary purpose of biodiversity conservation. While important examples of Cumberland Plain Woodland are represented within conservation reserves, much of the remaining area of the community occurs on private land or on public easements, where it is at risk from small-scale clearing associated with housing, industrial development and transport infrastructure. There are significant logistic and technological constraints and time lags associated with efforts to restore the community (Wilkins et al. 2003; Nichols 2005; Nichols et al. 2005). 'Clearing of native vegetation' is listed as a Key Threatening Process under the Threatened Species Conservation Act 1995.
- 16. Fragmentation of habitat associated with clearing has resulted in a very large reduction in the ecological function of Cumberland Plain Woodland. The remaining area of the community is severely fragmented, with more than half of the remaining tree cover mapped by Tozer (2003) occurring in patches of less than 80 ha and half of all mapped patches being smaller than 3 ha (Tozer in litt. October 2007). The integrity and survival of small, isolated stands is impaired by the small population size of many species, enhanced risks from environmental stochasticity, disruption to pollination and dispersal of fruits or seeds, and likely reductions in the genetic diversity of isolated populations (Young et al. 1996; Young & Clarke 2000). The impacts of fragmentation and associated processes are most evident in the loss of vertebrate fauna from the community (Farrell 2005; Farrell in litt. June 2007; Leary 2005; in litt, August 2007). As well, some invertebrate species, such as the Endangered Cumberland Land Snail, appear to be in decline, at least in the smaller fragments (M. Shea in litt. June 2007). The dieback of eucalypt canopies observed in stands of Cumberland Plain Woodland at Scheyville (D. Keith pers. comm. October 2008) may be a result of complex interactions involving insect attack, weed invasion, nutrient enrichment and drought, in which fragmentation also plays a role (Reid & Landsberg 2000; Wardell-Johnson et al. 2006). Despite their history of fragmentation, some very small and apparently degraded remnants may contain a surprisingly high diversity of species and important examples of rare species, particularly plants (James et al. 1999; Benson & Keith 1984; McBarron et al. 1988; Benson & Howell 1990a; Kirkpatrick & Gilfedder 1995). However, clearing and continuing degradation of these patches reduces the likelihood that all of these species will persist, particularly because a large proportion of species are known from very few locations which are not clustered in predictable ways (Benson & Howell 2002; Tozer 2003). Fragmentation also results in reduced fire frequencies within some patches, which may reduce the viability of some native plant populations, and hence the diversity of species within the patches (Clarke 2000; Watson 2005).

- 17. Changes in structure contribute to a very large reduction in the ecological function of Cumberland Plain Woodland. Almost all of the remaining area of the community is regrowth forest and woodland from past clearing activities (Benson & Howell 1990a). Mean tree densities in contemporary stands of the community were found to be substantially higher than historical estimates and tree sizes were thought to be smaller (Benson 1992). Large trees approximating the stature of the community prior to European settlement occur very sparsely within remnant patches of vegetation or remain as isolated individuals within paddocks or urban areas. Schevville National Park, for example, which contains a large remnant of Cumberland Plain Woodland, was extensively logged and partially cleared over many decades prior to its reservation and is thought to contain as few as five large old trees likely to date from pre-European times (J. Sanders, in litt. January 2008). Loss of these large trees, which provide habitat resources for a range of fauna, is associated with declines and local extinctions of numerous birds and mammals that were once more common on the Cumberland Plain (Farrell 2005; T. Leary in litt. August 2007). Changes in understorey are difficult to assess, as responses to anthropogenic disturbances are confounded with responses to climatic variability (Benson & Howell 2002). Nevertheless, other structural changes to the community include the removal of fallen woody debris and standing dead trees, the removal of woody understorey plants, or conversely the development of regrowth stands with very high densities of eucalypt saplings or shrubs, notably Bursaria spinosa, which may suppress the ground flora. Botanist Allan Cunningham noted high densities of B. spinosa in farmland near Liverpool as early as 1817 (Lee 1927; Benson 1992), while similar phases of high shrub abundance have been observed recently at Mt Annan and Scheyville in response to abandonment of farming practices (Benson & Howell 2002; J. Sanders, in litt. January 2008). Some areas of the community now devoid of woody plant species may retain a substantial suite of native grasses and herbs in the ground layer. The Orchard Hills Defence Site includes outstanding examples of this phenomenon (Pellow 2003; Keith et al. 2005). 'Loss of hollow-bearing trees' and 'Removal of dead wood and dead trees' are listed as Key Threatening Processes under the Threatened Species Conservation Act 1995.
- 18. While a sample of the original fauna of Cumberland Plain Woodland persists, some components have already been lost and others continue to decline (Leary 2005; in litt. Aug. 2008). The original mammal fauna of the Cumberland Plain was estimated to include approximately 60 species (NPWS 1997), of which less than 40 were detected in recent intensive surveys and only 14 species are now considered to be relatively common and widespread (Leary 2005; in litt. August 2008). The majority of these latter species are micro-bats, while small ground-dwelling mammals are unexpectedly scarce. A systematic survey involving 22 000 trap nights and 14 000 hair tube nights across conservation reserves containing Cumberland Plain Woodland failed to detect any native rodents or dasyurids, except at sites on the periphery of the plain, close to larger vegetated areas on sandstone (Leary 2005; in litt. August 2008). Long-nosed Bandicoots have recently been recorded in inner western Sydney (NSW Scientific Committee 2008), but remain scarce and have not been recorded during the systematic fauna surveys of Cumberland Plain Woodland. A number of bird species have also disappeared from or markedly declined on the Cumberland Plain (Keast 1995; Farrell 2005; Leary 2005; in litt. August 2008). A sequence of repeated surveys in Scheyville National Park, the largest remnant of Cumberland Plain Woodland, have documented disappearance of the Black-chinned Honeyeater, Brown Treecreeper, Diamond Firetail, Zebra Finch, Hooded Robin, Redcapped Robin, Scarlet Robin, Flame Robin and Black-eared Cuckoo, while declines have been observed in populations of the Speckled Warbler, Fuscous Honeyeater, Jacky

Winter, Weebill and Buff-rumped Thornbill (Farrell 2005; *in litt.* June 2008). Repeated surveys of Nurragingy Reserve near Blacktown indicate that all of these species have also been lost from the reserve, except for the Fuscous Honeyeater and Weebill (Farrell 2005; *in litt.* June 2008). Many of these species either feed or nest on or near the ground. Declines of reptiles and amphibians on the Cumberland Plain have been less well documented, but include at least three species of frog, one species of turtle, one skink, possibly two species of goanna and one species of snake (Leary 2005; *in litt.* August 2008). Two species of plants, *Swainsona monticola* and *Thesium australe*, are presumed to have gone extinct in Cumberland Plain Woodland (Benson & Howell 2002), while James *et al.* (1999) list many other species that have undergone substantial declines, including threatened species such as *Acacia pubescens, Pimelea spicata* and *Pterostylis saxicola*. In addition to these losses and declines across a wide range of biota within the community, Benson & Howell (1990a; 2002) describe other changes in species composition that indicate a very large reduction in the ecological function of Cumberland Plain Woodland.

19. Weed invasion also poses a major threat to Cumberland Plain Woodland. While very large numbers of weed species have invaded many different areas of the community, principal weed species include (Benson 1992; Tozer 2003; Benson & von Richter 2008):

Anagallis arvensis Araujia serciflora Asparagus asparagoides Aster subulatus *Centaurium tenuiflorum* Chloris gayana Cyclospermum leptophyllum Cirsium vulgare Conyza sumatrensis Ehrharta erecta Eragrostis curvula *Heliotropium amplexicaule* Hypochaeris radicata Lantana camara Leontodon taraxacoides subsp. taraxacoides Ligustrum sinense Nassella neesiana Olea europaea subsp. cuspidata Paspalum dilatatum Plantago lanceolata Richardia stellaris Senecio madagascariensis Setaria gracilis Sida rhombifolia Solanum spp. Sonchus oleraceus Sporobolus africanus

Scarlet Pimpernel Moth Vine Bridal Creeper Wild Aster, Bushy Starwort

Rhodes Grass Slender Celery Thistle Tall Fleabane Panic Veldtgrass African Lovegrass Blue Heliotrope Catsear Lantana Lesser Hawkbit, Hairy Hawkbit

Small-leaf Privet Chilean Needlegrass African Olive Paspalum Lamb's Tongues, Plantain

Fireweed Slender Pigeon Grass Paddy's Lucerne Nightshades Common Sowthistle Parramatta Grass

Several of these species, particularly grasses, form a dense ground layer capable of smothering indigenous plants, reducing both reproduction and survival, and inhibiting emergence and establishment of their seedlings. The propagules of weeds are spread into Cumberland Plain Woodland by stormwater, dumping of refuse, frugivorous birds and wind (Benson & Howell 1990b), making it difficult to abate the invasion process, especially for those species capable of establishing in sites that have been exposed to relatively little disturbance (J. Sanders, in litt. January 2008). Hill et al. (2005) found that high species richness and abundance of weeds was associated with remnants that either had a history of clearing and grazing, were in close proximity to creeks or downslope from sealed roads. They also found some relationship between weeds and elevated total soil phosphorus, conductivity and water retention capacity, but relationships with these soil properties were weak and varied between sites with different types of disturbance history. The dramatic recent expansion of African Olive poses the greatest invasive threat to Cumberland Plain Woodland. Initially introduced to south-western Sydney in the 1820s, it was generally confined to the Camden-Picton area until the 1970s and now occurs frequently throughout the distribution of the community (Tozer 2003; Cuneo &

Leishman 2006). Roberts (1999) mapped approximately 1000 ha of Cumberland Plain Woodland (c. 10% of total remaining) which had a dense understorey of African Olive that was visible on aerial photographs flown in November 1997. Tozer (2003) recorded African Olive in 43% of 198 plots surveyed throughout the distribution of Cumberland Plain Woodland. Cuneo et al. (2009) found that 837 ha of Cumberland Plain Woodland in south-west Sydney was invaded by African Olive (8.5% of the area assessed). The species is highly fecund, with fleshy fruit spread widely by a range of frugivorous birds, and seedlings establish readily in relatively undisturbed bushland, as well as fragmented edges (Cuneo & Leishman 2006). As shrubs grow, their canopies cast deep shade and suppress and ultimately eliminate most native shrub and groundcover species. Cook et al. (2005) and Tozer (in litt. October 2007, based on data from Tozer 2003), both recorded strong inverse relationships between the cover abundance of African Olive and the diversity and cover of native ground layer species. Other weeds that pose future threats to the community include Ailanthus altissima, Asparagus asparagoides, Acer negundo, Gleditsia triacanthos and Macfadyena unguis-cati (Benson & Howell 2002; J. Howell in litt. August 2007; J. Sanders in litt. January 2008; L. Harrold pers comm. 2009). The invasion and establishment of exotic weeds is resulting in a very large reduction in the ecological function of Cumberland Plain Woodland. 'Invasion of exotic perennial grasses' and 'Invasion and establishment of exotic vines and scramblers' are listed as Key Threatening Processes under the Threatened Species Conservation Act 1995.

- 20. Moderate to heavy grazing of Cumberland Plain Woodland by livestock and rabbits results in the decline and disappearance of palatable plant species, including shrubs and herbs, and compaction and erosion of topsoil, making re-establishment of a diverse native understorey problematic. The effects of such overgrazing may be exacerbated under drought conditions. Habitat degradation associated with overgrazing and erosion contributes to a large reduction in ecological function of the community.
- 21. The soils of Cumberland Plain Woodland have undergone chemical and structural modification associated with agricultural land uses. Trampling by livestock has resulted in localised areas of soil compaction, primarily around watering points. Research carried out at the University of Western Sydney found that mean soil inorganic nitrogen levels were two to three times higher in areas of former agricultural land use than in remnant woodland, but was unable to detect differences in other soil properties (E. C. Morris *in litt*.

June 2007). Addition of carbon and burning reduced soil inorganic nitrogen and reduced growth of exotic ground layer species relative to native species, suggesting that elevated soil inorganic nitrogen could favour exotics to the detriment of natives in Cumberland Plain Woodland (E. C. Morris *in litt*. June 2007). Hill *et al.* (2005) found elevated levels of phosphorus and conductivity in former agricultural areas compared to remnant woodland, but did not examine soil nitrogen. The sources of nutrient addition to soils of Cumberland Plain Woodland include addition of fertilisers during previous agricultural land use, deposition of livestock dung, rubbish dumping and stormwater runoff from urban areas. Expansion of urban land uses across the Cumberland Plain is likely to increase urban runoff from sealed surfaces into remaining bushland fragments, resulting in further nutrient enrichment of soils and associated replacement of native flora by exotic species. Disruption of ecological processes and degradation of habitat associated with nutrient enrichment contributes to a very large reduction in ecological function of the community.

- 22. Fire regimes influence the plant species composition and vegetation structure of Cumberland Plain Woodland (Benson & Howell 2002; Watson 2005) and are also likely to influence other components of the biota. Based on a study of Cumberland Plain Woodland remnants with varying fire histories, Watson (2005) found that variable intervals of 4 - 12 years between successive fires are likely to maintain populations of most understorey species in the community, including resprouting and obligate-seeding shrubs, grasses and herbs. Fragmentation of Cumberland Plain Woodland may exclude fire from some patches for extended periods by reducing fire spread. The consequent reduction in fire frequency sometimes leads to increased dominance of shrubs and associated declines in diversity of grasses and herbs (Watson 2005), as well as increased abundance of woody exotic species, such as African Olive (Benson & Howell 2002; Watson 2005; von Richter et al. 2005), which is likely to further reduce the flammability of the community. Conversely, high frequencies of fires may result where fragmentation increases the interface between urban areas and bushland, as this results in increased arson, car dumping, planned fuel-reduction fires and accidental ignitions. High fire frequencies are associated with reduced diversity of native plant species in Cumberland Plain Woodland (Watson 2005). 'High frequency fire resulting in disruption of life cycle processes in plants and animals and loss of vegetation structure and composition' is listed as a Key Threatening Process under the Threatened Species Conservation Act 1995. The season of fire, which may be altered as a consequence of hazard reduction fires, may also influence the species composition of the grassy woodland understorey (Knox & Clarke 2006; Benson & von Richter 2008). Disruption of ecological processes associated with alteration of fire regimes contributes to a very large reduction in ecological function of the community.
- 23. Cumberland Plain Woodland in the Sydney Basin Bioregion is eligible to be listed as a Critically Endangered Ecological Community as, in the opinion of the Scientific Committee, it is facing an extremely high risk of extinction in New South Wales in the immediate future, as determined in accordance with the following criteria as prescribed by the *Threatened Species Conservation Regulation* 2002:

Clause 25

The ecological community has undergone, is observed, estimated, inferred or reasonably suspected to have undergone or is likely to undergo within a time span appropriate to the life cycle and habitat characteristics of its component species: (a) a very large reduction in geographic distribution.

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Clause 27

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

(a) a very large reduction in ecological function,

as indicated by any of the following:

(d) a change in community structure

(e) a change in species composition

(f) disruption of ecological processes

(g) invasion and establishment of exotic species

(h) degradation of habitat

(i) fragmentation of habitat.

Dr Richard Major Chairperson Scientific Committee **References**

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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 a vulnerable species under that Act, and, accordingly, Schedule 2 to that Act is amended by inserting in Part 1 in alphabetical order under the heading "Fabaceae" (under the heading "Plants"):

Bossiaea bombayensis K.L. McDougall

This Notice commences on the day on which it is published in the Gazette. Dated, this 6th day of December 2009.

Dr Richard Major Chairperson of the Scientific Committee

Copies of final determination and reasons

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

- (a) on the Internet at www.environment.nsw.gov.au,
- (b) by contacting the Scientific Committee Unit, by post C/- Department of Environment, Climate Change and Water, PO Box 1967, Hurstville BC, 1481, by telephone (02) 9585 6940 or by facsimile (02) 9585 6606,
- (c) in person at the Department of Environment, Climate Change and Water Information Centre, Level 14, 59–61 Goulburn St, Sydney.

s2009-497-32.d02



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 species referred to in paragraph (a) as a critically endangered species under that Act, and, as a consequence, to omit reference to that species as a vulnerable species and, accordingly:

- (a) Schedule 1A to that Act is amended by inserting in Part 1 in alphabetical order under the heading "Orchidaceae" (under the heading "Plants"):
 - * Prasophyllum fuscum R. Br. sensu stricto
- (b) Schedule 2 to that Act is amended by omitting from Part 1 under the heading "Orchidaceae" (under the heading "Plants"):
 - * Prasophyllum fuscum R. Br.

This Notice commences on the day on which it is published in the Gazette. Dated, this 6th day of December 2009.

Dr Richard Major Chairperson of the Scientific Committee

Copies of final determination and reasons

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

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

s2009-498-32.d03

Notice of Final Determination

(b) by contacting the Scientific Committee Unit, by post C/- Department of Environment, Climate Change and Water, PO Box 1967, Hurstville BC, 1481, by telephone (02) 9585 6940 or by facsimile (02) 9585 6606,

⁽c) in person at the Department of Environment, Climate Change and Water Information Centre, Level 14, 59–61 Goulburn St, Sydney.



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 species referred to in paragraph (a) as a critically endangered species under that Act, and, as a consequence, to omit reference to that species as an endangered species and, accordingly:

- (a) Schedule 1A to that Act is amended by inserting in Part 1 in alphabetical order under the heading "Orchidaceae" (under the heading "Plants"):
 - * Prasophyllum uroglossum Rupp
- (b) Schedule 1 to that Act is amended by omitting from Part 1 under the heading "Orchidaceae" (under the heading "Plants"):
 - * Prasophyllum uroglossum Rupp

This Notice commences on the day on which it is published in the Gazette. Dated, this 6th day of December 2009.

Dr Richard Major Chairperson of the Scientific Committee

Copies of final determination and reasons

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

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

s2009-502-32.d03

Notice of Final Determination

- (b) by contacting the Scientific Committee Unit, by post C/- Department of Environment, Climate Change and Water, PO Box 1967, Hurstville BC, 1481, by telephone (02) 9585 6940 or by facsimile (02) 9585 6606,
- (c) in person at the Department of Environment, Climate Change and Water Information Centre, Level 14, 59–61 Goulburn St, Sydney.

THREATENED SPECIES CONSERVATION ACT 1995 NO 101

ERRATUM

The Notice of Final Determination under the *Threatened Species Conservation Act 1995* which was published in the *Government Gazette* on 4 December 2009, No. 189 at page 5955 was published in error. The Notice of Final Determination should not have appeared. This erratum corrects that error.



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 determination to insert the following species as a critically endangered species under that Act, and, accordingly, Schedule 1A to that Act is amended by inserting in Part 1 in alphabetical order (under the heading "Plants"):

Fabaceae

Bossiaea fragrans K.L. McDougall

This Notice commences on the day on which it is published in the Gazette.

Dated, this 15th day of December 2009.

Dr Richard Major Chairperson of the Scientific Committee

Copies of final determination and reasons

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

- (a) on the Internet at www.environment.nsw.gov.au,
- (b) by contacting the Scientific Committee Unit, by post C/- Department of Environment, Climate Change and Water, PO Box 1967, Hurstville, 1481, by telephone (02) 9585 6940 or by facsimile (02) 9585 6606,
- (c) in person at the Department of Environment, Climate Change and Water Information Centre, Level 14, 59–61 Goulburn St, Sydney.

s2009-558-32.d03

6125

OFFICIAL NOTICES Appointments

CONSTITUTION ACT, 1902

Ministerial arrangements during the absence of the Minister for Climate Change and the Environment, Minister for Energy, Minister for Corrective Services, and Minister for Public Sector Reform

PURSUANT to section 36 of the Constitution Act, 1902, Her Excellency the Governor, with the advice of the Executive Council, has authorised the Hon B M Perry MP, Minister for Local Government, and Minister Assisting the Minister for Health (Mental Health and Cancer), to act for and on behalf of the Minister for Climate Change and the Environment, Minister for Energy, Minister for Corrective Services, Minister for Public Sector Reform, and Special Minister of State, as on and from 11 January 2010, with a view to her performing the duties of the Honourable J C Robertson MLC, during his absence from duty.

KRISTINA KENEALLY, M.P., Premier

Department of Premier and Cabinet, Sydney 2009

CONSTITUTION ACT, 1902

Ministerial arrangements during the absence of the Minister for Police, and Minister for Finance

PURSUANT to section 36 of the Constitution Act, 1902, Her Excellency the Governor, with the advice of the Executive Council, has authorised the Hon D A Campbell MP, Minister for Transport and Roads to act for and on behalf of the Minister for Police, and Minister for Finance, as on and from 11 January 2010, with a view to his performing the duties of the Honourable M J Daley MP, during his absence from duty.

> KRISTINA KENEALLY, M.P., Premier

Department of Premier and Cabinet, Sydney 2009

CONSTITUTION ACT, 1902

Ministerial arrangements during the absence of the Minister for Fair Trading, Minister for Citizenship, and Minister Assisting the Premier on the Arts

PURSUANT to section 36 of the Constitution Act, 1902, Her Excellency the Governor, with the advice of the Executive Council, has authorised the Hon G J West MP, Minister for Juvenile Justice, Minister for Volunteering, Minister for Youth, and Minister Assisting the Premier on Veterans' Affairs to act for and on behalf of the Minister for Fair Trading, Minister for Citizenship, and Minister Assisting the Premier on the Arts, as on and from 19 December 2009, with a view to his performing the duties of the Honourable V D Judge MP, during her absence from duty.

KRISTINA KENEALLY, M.P.,

Premier

Department of Premier and Cabinet, Sydney 2009

CONSTITUTION ACT, 1902

Ministerial arrangements during the absence of the Minister for Ageing, Minister for Disability Services, and Minister for Aboriginal Affairs

PURSUANT to section 36 of the Constitution Act, 1902, Her Excellency the Governor, with the advice of the Executive Council, has authorised the Hon D L Borger MP, Minister for Housing, Minister for Western Sydney, and Minister Assisting the Minister for Transport and Roads, to act for and on behalf of the Minister for Ageing, Minister for Disability Services, and Minister for Aboriginal Affairs, as on and from 21 December 2009, with a view to his performing the duties of the Honourable P G Lynch MP, during his absence from duty.

KRISTINA KENEALLY, M.P., Premier

Department of Premier and Cabinet, Sydney 2009

CONSTITUTION ACT, 1902

Ministerial arrangements during the absence of the Minister for Ageing, Minister for Disability Services, and Minister for Aboriginal Affairs

PURSUANT to section 36 of the Constitution Act, 1902, Her Excellency the Governor, with the advice of the Executive Council, has authorised the Hon P E McLeay MP, Minister for Ports and Waterways, and Minister for the Illawarra, to act for and on behalf of the Minister for Ageing, Minister for Disability Services, and Minister for Aboriginal Affairs, as on and from 11 January 2010, with a view to his performing the duties of the Honourable P G Lynch MP, during his absence from duty.

> KRISTINA KENEALLY, M.P., Premier

Department of Premier and Cabinet, Sydney 2009

CONSTITUTION ACT, 1902

Ministerial arrangements during the absence of the Minister for State and Regional Development, Minister for Mineral and Forest Resources, and Minister for the Central Coast

PURSUANT to section 36 of the Constitution Act, 1902, Her Excellency the Governor, with the advice of the Executive Council, has authorised the Hon A B Kelly MLC, Minister for Planning, Minister for Infrastructure, and Minister for Lands, to act for and on behalf of the Minister for State and Regional Development, Minister for Mineral and Forest Resources, and Minister for the Central Coast, as on and from 21 December 2009, with a view to his performing the duties of the Honourable I M Macdonald, during his absence from duty.

> KRISTINA KENEALLY, M.P., Premier

Department of Premier and Cabinet, Sydney 2009

CONSTITUTION ACT, 1902

Ministerial arrangements during the absence of the Minister for Local Government

PURSUANT to section 36 of the Constitution Act, 1902, Her Excellency the Governor, with the advice of the Executive Council, has authorised the Hon J C Robertson MLC, Minister for Climate Change and the Environment, Minister for Energy, Minister for Corrective Services, Minister for Public Sector Reform, and Special Minister of State, to act for and on behalf of the Minister for Local Government, as on and from 21 December 2009, with a view to his performing the duties of the Honourable B M Perry MP, during her absence from duty.

KRISTINA KENEALLY, M.P.,

Premier

Department of Premier and Cabinet, Sydney 2009

PARRAMATTA STADIUM TRUST ACT 1988

Appointment of Trustees of Parramatta Stadium

HER Excellency the Governor, with the advice of the Executive Council, pursuant to section 4(3) of the Parramatta Stadium Trust Act 1988, has appointed the persons listed below as members of the Parramatta Stadium Trust for a term commencing from 16 December 2009 to 30 June 2013 (inclusive):

Communities NSW John Brown, AO Doris Drewery Denis Fitzgerald Craig Gallagher Alan Overton, AM Pam Smith Patrick Smith

Her Excellency the Governor, with the advice of the Executive Council, pursuant to Clause 8(1) of the Parramatta Stadium Trust Act 1988 has appointed Mr Craig Gallagher as Chairperson for the duration of his term of appointment.

KEVIN GREENE, M.P., Minister for Gaming and Racing Minister for Sport and Recreation

SPORTING VENUES AUTHORITIES ACT 2008

Appointment of Members of Board of Management

HER Excellency the Governor, with the advice of the Executive Council, pursuant to section 14(1) of the Sporting Venues Authorities Act 2008, has appointed the persons listed below as members of the Board of Management of the Illawarra Region Sporting Venues Authority for a term commencing from 16 December 2009 to 15 January 2013 (inclusive):

Communities NSW Chris Christodoulou Judith Henderson Nick Hartgerink Ian Hunt Vicki Tiegs David Farmer Lynette Kofod Her Excellency the Governor, with the advice of the Executive Council, pursuant to section 14(2) of the Sporting Venues Authorities Act 2008 has appointed Mr Chris Christodoulou as Chairperson for the duration of his term of appointment.

KEVIN GREENE, M.P., Minister for Gaming and Racing Minister for Sport and Recreation

THE UNIVERSITY OF WESTERN SYDNEY ACT 1997

Notification of Appointment to the Board of Trustees

I, VERITY FIRTH, M.P., Minister for Education and Training, in pursuance of section 12(1)(b) of the University of Western Sydney Act 1997, appoint the following persons as members of the Board of Trustees of the University of Western Sydney for terms of office commencing on 1 January 2010 and expiring on 31 December 2013:

Ms Vivienne JAMES Mr Glen SANFORD Mr Ian STONE The Hon. Kim YEADON Ms Emma STEIN Mr John BANKS

> VERITY FIRTH, M.P., Minister for Education and Training

THE UNIVERSITY OF WOLLONGONG ACT 1989

Notification of Appointment to the Council

I, VERITY FIRTH, M.P., Minister for Education and Training, in pursuance of sections 9(1)(b) and 9(4) of the University of Wollongong Act 1989, appoint the following persons as members of the Council of the University of Wollongong commencing on 1 January 2010:

- The Hon. David CAMPBELL, M.P., for a term of office expiring on 31 December 2013.
- Mr Dom FIGLIOMENI, for a term of office expiring on 31 December 2013.
- Mr Robert RYAN, for a term of office expiring on 31 December 2013.
- Dr Liz McGASSEY, for a term of office expiring on 31 December 2011.

VERITY FIRTH, M.P., Minister for Education and Training

Land and Property Management Authority

ARMIDALE OFFICE 108 Faulkner Street (PO Box 199A), Armidale NSW 2350 Phone: (02) 6770 3100 Fax (02) 6771 5348

APPOINTMENT OF TRUST BOARD MEMBERS

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

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

SCHEDULE 1

Column 3

Column 1 Donald John CROSS (re-appointment), Belinda Jane COLWELL (re-appointment), Jeffrey Laurence O'KEEFE (re-appointment).

Column 2 Yarrowitch Public Hall and Recreation Reserve Trust.

Reserve No.: 86435. Public Purpose: Public hall and public recreation. Notified: 15 September 1967. File No.: AE80 R 13.

Term of Office

For a term commencing 1 January 2010 and expiring 31 December 2014.

SCHEDULE 2

Column 1 Column 2 Liston War Daryl Raymond BEDDOW (re-appointment), Trust. Peter Roland BONNER (re-appointment), Bruce Leonard McLADY (re-appointment).

Column 3

Reserve No.: 86913. Memorial Reserve Public Purpose: War Memorial. Notified: 18 October 1968. File No.: AE82 R 29/2.

Term of Office

For a term commencing 1 January 2010 and expiring 31 December 2014.

DUBBO OFFICE

142 Brisbane Street (PO Box 865), Dubbo NSW 2830 Phone: (02) 6883 3300 Fax: (02) 6882 6920

APPOINTMENT OF RESERVE TRUST AS TRUSTEE **OF A RESERVE**

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

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

SCHEDULE

Column 1

Column 2

Gulgong Showground Trust.

Reserve No.: 82984. Public Purpose: Future public requirements and public recreation. Notified: 13 January 1961. File No.: DB80 R 158/4.

AUTHORISATION OF ADDITIONAL PURPOSE

IT is hereby notified pursuant to section 121A of the Crown Lands Act 1989, that the purpose specified in Column 1 of the Schedule hereunder, is applied to the whole of the reserve specified opposite thereto in Column 2.

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

SCHEDULE

Column 2

Reserve No.: 82984. Public Purpose: Future public requirements. Notified: 13 January 1961. File No.: DB98 R 5.

Column 1 Public recreation.

GRAFTON OFFICE 76 Victoria Street (Locked Bag 10), Grafton NSW 2460 Phone: (02) 6640 3400 Fax: (02) 6642 5375

PLAN OF MANAGEMENT FOR CROWN RESERVES UNDER DIVISION 6 OF PART 5 OF THE CROWN LANDS ACT 1989 AND CROWN LANDS REGULATION 2006

A draft plan of management has been prepared for the coastal Crown Reserves at Evans Head described below.

The draft plan may be inspected during normal business hours at:

- 1. Land and Property Management Authority, 76 Victoria Street, Grafton NSW;
- 2. Richmond Valley Council Evans Head Office, Woodburn Street (corner School Lane), Evans Head NSW;
- 3. Richmond Valley Council Casino Office, Graham Place (corner Walker Street), Casino NSW;
- 4. Silver Sands Holiday Park, Evans Head NSW.

The draft plan may also be viewed on the Land and Property Management Authority website: www.lpma.nsw.gov.au.

Representations relating to the draft plan are invited from the public. These may be made in writing between the period commencing Saturday, 19 December 2009, until Friday, 12 February 2010 and should be sent to the Manager, Land Management, Land and Property Management Authority, PO Box 272, Grafton NSW 2460.

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

Description Of Reserves

Land District – Richmond; Parish – Riley; Location – Evans Head NSW; Local Government Area – Richmond Valley; County – Richmond

Reserve No.	Purpose	Date of Noti cation	Land Description
92456.	Public recreation.	13 June 1980.	Lot 7027, DP 1112996.
87867.	Public recreation.	24 July 1970.	Lot 7026, DP 1112980.
82910.	Public recreation.	18 November 1960.	Lots 172, 281, 287, 372 and 405, DP 755624; Lots 10 and 11, DP 1045792; Lots 549 and 550, DP 1091080; Lot 7036, DP 1113078 and Lots 7303 and 7304, DP 1136547.
87795.	Public recreation.	5 June 1970.	Lot 7028, DP 1113043.
86541.	Public recreation.	24 November 1967.	Lot 10, DP 824498; Lot 7029, DP 92612 and unidentified lot.
58547.	Public baths.	5 February 1926.	Lot 7030, DP 1075732 and Lot 7062, DP 1075701.
28105 (Pts).	Water.	17 September 1898.	Lot 547, DP 48550; Lot 7016, DP 1112989; Lot 7019, DP 1051692 and Lot 7020, DP 1051335.
81617.	Future public requirements.	22 May 1959.	Lot 469, DP 755624.
62583.	Public recreation.	2 April 1931.	Lot 7015, DP 1076665 and Lot 7096, DP 1113511.
76203.	Future public requirements.	4 September 1953.	Lot 7040, DP 1052589.
93865.	Future public requirements.	17 October 1980.	Lot 7035, DP 1113049.
93866.	Future public requirements.	17 October 1980.	Lot 472, DP 755624.
87866.	Future public requirements.	24 July 1970.	Lot 513, DP 755624.
56146 (Pts).	Reserve from sale or lease generally.	11 May 1923.	Adjoining Crown lands.
1011268 (Pts).	Reserve for future public requirements.	3 February 2006.	Adjoining Crown lands covered by R56146 and foreshore land below the High Water Mark (including the Intertidal Zone).
755624 (Pts).	Reserve for future public requirements.	29 June 2007.	Adjoining Crown lands not within a reserve or part of a holding.
1012192 (Pts).	Reserve for access and public requirements, rural services, tourism purposes and environmental and heritage conservation.	25 August 2006.	All of the above Crown lands (being part Richmond Coast Regional Crown Reserve).

File No.: GF06 R 66.

IN pursuance of the provisions of the Roads Act 1993, the road hereunder described is closed and the land comprised therein ceases to be a public road and the rights of passage and access that previously existed in relation to the road are extinguished. On road closing, title to the land comprising the former public road vests in the body specified in the Schedule hereunder.

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

Description

Land District – Lismore; L.G.A. – Byron

Road Closed: Lot 1, DP 1145292 at Bangalow and McLeods Shoot, Parish Byron,

County Rous.

File No.: GF05 H 960.

Schedule

On closing, the land within Lot 1, DP 1145292 remains vested in the State of New South Wales as Crown Land.

Description

Land District – Lismore; L.G.A. – Lismore Road Closed: Lots 1, 2 and 3, DP 1144206 at Jiggi, Parish Tunstall, County Rous.

File No.: GF06 H 115.

Schedule

On closing, the land within Lots 1, 2 and 3, DP 1144206 remains vested in the State of New South Wales as Crown Land.

Description

Land District – Casino; L.G.A. – Richmond Valley Road Closed: Lot 1, DP 1145021 at Shannon Brook, Parish Wooroowoolgan, County Richmond.

File No.: 08/11326.

Schedule

On closing, the land within Lot 1, DP 1145021 remains vested in the State of New South Wales as Crown Land.

Description

Land District – Lismore; L.G.A. – Ballina

Road Closed: Lot 3, DP 1144210 at Alstonville, Parish Teven, County Rous.

File No.: GF05 H 658.

Schedule

On closing, the land within Lot 3, DP 1144210 remains vested in the State of New South Wales as Crown Land.

Description

Land District - Tamworth; L.G.A. - Tamworth

Road Closed: Lots 1 and 2, DP 1144509 at Gowrie, Parishes Turi, Goonoo Goonoo and Currabubula, Counties Parry and Buckland.

File No.: TH05 H 24.

Schedule

On closing, the land within Lots 1 and 2, DP 1144509 remains vested in the State of New South Wales as Crown Land.

GRIFFITH OFFICE 2nd Floor, Griffith City Plaza, 120–130 Banna Avenue (PO Box 1030), Griffith NSW 2680 Phone: (02) 6960 3600 Fax: (02) 6962 5670

Column 1

JAMIESON

(new member),

Neil Cameron

(new member),

(new member), Stephen WOODHAM (new member), Leslie John IRVIN (re-appointment),

(re-appointment).

Rodney Bruce IRVIN (new member),

James Andrew MANNING

Thomas Herbert MANNING

FINDLAY

Thomas Maxwell

APPOINTMENT OF TRUST BOARD MEMBERS

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

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

SCHEDULE

Column 2

Showground

Barellan

Trust.

Column 3 Reserve No.: 50481. Public Purpose: Racecourse and showground. Notified: 20 January 1915. File No.: GH89 R 68/2.

Term of Office

For a term commencing the date of this notice and expiring 17 December 2014.

NEW SOUTH WALES GOVERNMENT GAZETTE No. 207

HAY OFFICE 126 Lachlan Street (PO Box 182), Hay NSW 2711 Phone: (02) 6990 1800 Fax: (02) 6993 1135

APPOINTMENT OF CORPORATION TO MANAGE **RESERVE TRUST**

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

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

SCHEDULE

Column 1	Column 2	Column 3
Scouts Australia	1st Barham Scout	Reserve No.: 1024648.
NSW.	Group.	Public Purpose: Community
		purposes.
		Notified: This day.
		File No.: HY80 H 328.

For a term commencing the date of this notice.

ESTABLISHMENT OF RESERVE TRUST

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

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

SCHEDULE

Column 1

1st Barham Scout Group.

Column 2 Reserve No.: 1024648.

Public Purpose: Community purposes. Notified: This day. File No.: HY80 H 328.

RESERVATION OF CROWN LAND

PURSUANT to section 87 of the Crown Lands Act 1989, the Crown Land specified in Column 1 of the Schedule hereunder, is reserved as specified opposite thereto in Column 2 of the Schedule.

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

SCHEDULE

Column 2

purposes.

Column 1

Land District: Deniliquin. Reserve No.: 1024648. Local Government Area: Public Purpose: Community Wakool Shire Council. Locality: Barham. Lot 117, DP No. 756508, Parish Barham, County Wakool. Area: About 1821 square metres. File No.: HY80 H 328.

NOTIFICATION OF CLOSING OF PUBLIC ROAD

IN pursuance of the provisions of the Roads Act 1993, the road hereunder described is closed and the land comprised therein ceases to be a public road and the rights of passage and access that previously existed in relation to the road are extinguished. On road closure, title to the land comprising the former public road vests in the body specified in the Schedule hereunder.

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

Description

Land District of Deniliquin; L.G.A. – Berrigan

Lot 1 in DP 1143459, Parish of Kilnyana, County of Denison.

File No.: HY98 H 334.

Schedule

On closing, title for the land comprised in Lot 1, DP 1143459 remains vested in the State of New South Wales as Crown Land.

MAITLAND OFFICE Corner Newcastle Road and Banks Street (PO Box 6), East Maitland NSW 2323 Phone: (02) 4937 9306 Fax: (02) 4934 8417

NOTIFICATION OF CLOSING OF PUBLIC ROAD

IN pursuance of the provisions of the Roads Act 1993, the road hereunder described is closed and the land comprised therein ceases to be a public road and the rights of passage and access that previously existed in relation to the road are extinguished. On road closing, title to the land comprising the former public road vests in the body specified in the Schedule hereunder.

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

Description

Parish – Avenal; County – Durham; Land District – Dungog; L.G.A. – Dungog

Road Closed: Lot 1, DP 1140487 (not being land under the Real Property Act).

File No.: 07/1146.

Schedule

On closing, the land within Lot 1, DP 1140487 remains vested in the State of New South Wales as Crown Land.

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

NOTIFICATION OF CLOSING OF ROAD

IN pursuance of the provisions of the Roads Act 1993, the roads hereunder described are closed and the land comprised therein ceases to be public road and the rights of passage and access that previously existed in relation to the roads are extinguished. On road closing, title to the land comprising the former public roads vests in the body specified in the Schedules hereunder.

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

Description

Parish – Narooma; County – Dampier; Land District – Moruya; Local Government Area – Eurobodalla

Road Closed: Lot 1, DP 1145883 at Central Tilba.

File No.: NA06 H 222.

Schedule

On closing, the land within Lot 1, DP 1145883 remains vested in State of New South Wales as Crown Land.

Description

Parish – Wandella; County – Dampier; Land District – Bega; Local Government Area – Bega Valley

Road Closed: Lot 10, DP 45833 at Wandella.

File No.: 09/01137.

Schedule

On closing, the land within Lot 10, DP 45833 remains vested in State of New South Wales as Crown Land.

Description

Parish – Clyde; County – St Vincent; Land District – Moruya; Local Government Area – Eurobodalla

Road Closed: Lots 1 and 2, DP 1144661 at Benandarah.

File No.: NA07 H 152.

Schedule

On closing, the land within Lots 1 and 2, DP 1144661 remains vested in State of New South Wales as Crown Land.

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

NOTIFICATION OF CLOSING OF PUBLIC ROAD

IN pursuance of the provisions of the Roads Act 1993, the road hereunder described is closed and the land comprised therein ceases to be a public road and the rights of passage and access that previously existed in relation to the road are extinguished. On road closing, title to the land comprising the former public road vests in the body specified in the Schedule hereunder.

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

Description

Parish – Nanami; County – Ashburnham; Land District – Molong; L.G.A. – Cabonne

Road Closed: Lot 10 in Deposited Plan 1141289.

File No.: 08/10423.

Schedule

On closing, the land within Lot 10, DP 1141289 remains vested in Cabonne Shire Council as operational land for the purposes of the Local Government Act 1993.

Council Reference: 29-0008-39 and 2009/98.

Description

Land District – Blayney; L.G.A. – Blayney

Road Closed: Lot 2, DP 1143628 at Tallwood, Parish Beaufort, County Bathurst.

File No.: 09/03796.

Schedule

On closing, the land within Lot 2, DP 1143628 remains vested in the State of New South Wales as Crown Land.

Description

Land District – Rylstone; L.G.A. – Lithgow

Road Closed: Lot 2, DP 1145012 at Mount Marsden, Parish Clandulla, County Roxburgh.

File No.: CL/00488.

Schedule

On closing, the land within Lot 2, DP 1145012 remains vested in the State of New South Wales as Crown Land.

Description

Land District – Molong; L.G.A. – Cabonne

Road Closed: Lot 1, DP 1144833 at Cargo, Parish Cargo, County Ashburnham.

File No.: CL/00706.

Schedule

On closing, the land within Lot 1, DP 1144833 remains vested in the State of New South Wales as Crown Land.

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: Molong. Local Government Area: Wellington. Locality: Bakers Swamp. Reserve No.: 94809 (whole). Public Purpose: Future public requirements. Notified: 15 May 1981. File No.: 09/17638.

Column 1

The whole being Lot 103, DP No. 753241, Parish Narragal, County Gordon and Lot 153, DP No. 753241, Parish Narragal, County Gordon, of a total area of 2.19 hectares.

ROADS ACT 1993

ORDER

Transfer of Crown Road to Council

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

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

SCHEDULE 1

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

Roads through Lots 104, 24, 1, 17, 16, 2, 150, 9, 132, 128, 127, 55, 52, 4, 28, 133 and 151, DP 755430; the easternmost road through Lot 54, DP 755430; the northernmost 270 metres of road through Lot 23, DP 255210; north Lots 82, 81 and 84, DP 755430; the easternmost 140 metres of road north Lot 24, DP 755430; west Lots 84, 11 and 6, DP 755430 and south Lots 67 and 2, DP 755430.

SCHEDULE 2

Roads Authority: Mid-Western Regional Council.

Department File: 09/18974.

Council Reference: sm:A0010002 and R079007.

CROWN LANDS ACT 1989

Erratum

IN the notice appearing in the *New South Wales Government Gazette* No. 189 of the 4 December 2009, Folio 5964, under the heading "NOTIFICATION OF CLOSING OF ROAD", in respect of Road Closed: Lot 12, DP 1137873 at Bedgerebong, Lot 12 DP1137873 should be deleted and Lot 1 DP1141871 inserted in lieu.

File No.: CL/00726.

SYDNEY METROPOLITAN OFFICE Level 12, Macquarie Tower, 10 Valentine Avenue, Parramatta 2150 (PO Box 3935, Parramatta NSW 2124) Phone: (02) 8836 5300 Fax: (02) 8836 5365

NOTIFICATION OF CLOSING OF ROAD

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

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

Description

Land District – Metropolitan; L.G.A. – City of Sydney

Lot 1, DP 1145720 at Alexandria, Parish Alexandria, County Cumberland.

File No.: 07/2354.

- Notes: (1) On closing, title for the land in lot 1 remains vested in City of Sydney Council as operational land.
 - (2) The road is closed subject to the easement to drain water 3.66m wide, and the easement to drain sewerage 3.66m wide as shown in DP 1145720.

REVOCATION OF RESERVATION OF CROWN LAND

PURSUANT to section 90 (1) of the Crown Lands Act 1989, the reservation of Crown Land 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: Scone. Council: Upper Hunter. Parish: Russell. County: Durham. Location: Aberdeen. Reserve: R13724. Purpose: Public buildings. Date of Notification: 2 May 1891. File No.: 09/09694.

Column 1

Residue of Reserve 13724 being the whole of Lot 179, DP 822136 having an area of 1612 square metres. **RESERVATION OF CROWN LAND**

PURSUANT to section 87 of the Crown Lands Act 1989, the Crown Land specified in Column 1 of the Schedule hereunder, is reserved as specified opposite thereto in Column 2 of the Schedule.

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

Reserve No.: 1024628.

Public Purpose: Public

recreation and community

SCHEDULE

Column 2

purposes.

Column 1

Land District: Metropolitan. Local Government Area: Liverpool City Council.

Locality: Liverpool.

Lot 500, DP No. 1140587,

Parish St Luke,

County Cumberland.

Area: About 2384 square metres. File No.: MN80 R 331.

Note: Reserve 88476 and Part Reserve No. 100094 are hereby revoked by this notice.

APPOINTMENT OF RESERVE TRUST AS TRUSTEE OF A RESERVE

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

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

SCHEDULE

Column 2

Column 1 Reserve (88476) Reserve Trust.

Reserve No.: 1024628. Public Purpose: Public recreation and community purposes. Notified: This day.

File No.: MN80 R 331.

6133

TAREE OFFICE 98 Victoria Street (PO Box 440), Taree NSW 2430 Phone: (02) 6591 3500 Fax: (02) 6552 2816

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 Schedules hereunder, is revoked to the extent specified opposite thereto in Column 2 of the Schedules.

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

SCHEDULE 1

Column 1 Column 2 Within Lots 802-805. Land District: Taree. Local Government Area: Great Lakes. Locality: Long Is, Wallis Lake. Reserve No.: 56146. Public Purpose: From sale or lease generally. Notified: 11 May 1923. File Nos: TE06 H 213, 07/4348, 09/18757 and 09/18761.

DP 1136318, Parish Forster, County Gloucester. Area: 6799 square metres.

SCHEDULE 2

Column 1 Column 2 Land District: Taree. Within Lots 802-805, Local Government Area: DP 1136318, Parish Forster, Great Lakes. County Gloucester. Locality: Long Is, Wallis Lake. Area: 6799 square metres. Reserve No.: R97462. Public Purpose: Public recreation and preservation of native fauna. Notified: 28 September 1984. File Nos: TE06 H 213, 07/4348, 09/18757 and 09/18761.

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 2

Column 1

Harrington Beach State Park Trust.

Reserve No.: 1014609. Public Purpose: Community purposes, public recreation and coastal environmental protection, tourist facilities and services (known as Harrington Beach State Park). Notified: 7 March 2008. File No.: 08/1904.

APPOINTMENT OF CORPORATIONS TO MANAGE **RESERVE TRUST**

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

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

SCHEDULE

Column 1	Column 2	Column 3
Greater Taree City Council and Lands Administration Ministerial Corporation.	Harrington Beach	Reserve No.: 1014609. Public Purpose: Community purposes, public recreation and coastal environmental protection, tourist facilities and services (known as
		Harrington Beach State Park). Notified: 7 March 2008. File No.: 08/1904.

Commencing the date of this notice.

Note: Refer to the Memorandum of Understanding between Land and Property Management Authority and Greater Taree City Council, dated 24 September 2009, for the terms of appointment in respect of the allocation and exercise of functions in relation to the management of the affairs of the Trust.

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 Manning Entrance State Park Trust.

Column 2

Reserve No.: 1014610. Public Purpose: Community purposes, public recreation and coastal environmental protection, tourist facilities and services (known as Manning Entrance State Park). Notified: 7 March 2008. File No.: 08/1905.

REMOVAL OF RESERVE TRUST FROM MANAGEMENT OF RESERVE

PURSUANT to section 92(2) of the Crown Lands Act 1989, the reserve trust specified in Schedule 1 hereunder, is removed from of management of that part of the reserve specified in Schedule 2.

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

SCHEDULE 1

Harrington/Crowdy Head Holiday and Leisure Reserves Reserve Trust.

Greater Taree Utilities Reserves Reserve Trust.

SCHEDULE 2

Trust
Harrington/Crowdy Head Holiday and Leisure Reserves Reserve Trust.
Greater Taree Utilities Reserves Reserve Trust.
Harrington/Crowdy Head Holiday and Leisure Reserves Reserve Trust.
Harrington/Crowdy Head Holiday and Leisure Reserves Reserve Trust.
Harrington/Crowdy Head Holiday and Leisure Reserves Reserve Trust.
Harrington/Crowdy Head Holiday and Leisure Reserves Reserve Trust.
Harrington/Crowdy Head Holiday and Leisure Reserves Reserve Trust.

Note: Any tenures or agreements granted by this Trust over the lands specified above remain in place under the Harrington Beach State Park Trust.

REMOVAL OF RESERVE TRUST FROM MANAGEMENT OF RESERVE

PURSUANT to section 92(2) of the Crown Lands Act 1989, the reserve trust specified in Schedule 1 hereunder, is removed from of management of that part of the reserve specified in Schedule 2.

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

SCHEDULE 1

Greater Taree Holiday and Leisure Reserves Reserve Trust. Farquhar Park Charleys Island Reserve (R45183, R89356)

Trust. Old Bar Holiday and Leisure Reserves Reserve Trust.

Greater Taree Community Reserves Reserve Trust.

SCHEDULE 2

Reserve Number, Purpose and Gazettal date	Trust
R66952 for public recreation and preservation of native flora, notified 10 September 1937.	Greater Taree Holiday and Leisure Reserves Reserve Trust.
R45183 for public recreation, notified 27 April 1910.	Farquhar Park Charleys Island Reserve (R45183, R89356) Trust.
R89356 for public recreation, notified 31 January 1975.	Farquhar Park Charleys Island Reserve (R45183, R89356) Trust.
R610006 for public recreation, notified 25 July 1884 (Dedication).	Old Bar Holiday and Leisure Reserves Reserve Trust.
R210076 for community purposes, notified 1 December 1989.	Greater Taree Community Reserves Reserve Trust.
Note: Any tenures or agreeme the lands specified abo Manning Entrance State	ve remain in place under the

File No.: 08/1905.

APPOINTMENT OF CORPORATIONS TO MANAGE **RESERVE TRUST**

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

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

SCHEDULE

Column 1	Column 2	Column 3
	0	Reserve No.: 1014610. Public Purpose: Community purposes, public recreation
Ministerial Corporation.		and coastal environmental protection, tourist facilities and services (known as
		Manning Entrance State

Park). Notified: 7 March 2008. File No.: 08/1905.

Commencing the date of this notice.

Note: Refer to the Memorandum of Understanding between Land and Property Management Authority and Greater Taree City Council dated 24 September 2009, for the terms of appointment in respect of the allocation and exercise of functions in relation to the management of the affairs of the Trust.

NOTIFICATION OF CLOSING OF ROAD

IN pursuance of the provisions of the Roads Act 1993, the road hereunder described is closed and the land comprised therein ceases to be a public road and the rights of passage and access that previously existed in relation to the road are extinguished. On road closing, title to the land comprising the former public road vests in the body specified in the Schedule hereunder.

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

Description

Land District – Port Macquarie; L.G.A. – Port Macquarie-Hastings

Road Closed: Lot 1, DP 1141670 at Upper Pappinbarra and Pappinbarra, Parish Bellangry, County Macquarie.

File No.: TE06 H 3.

Schedule

On closing, the land within Lot 1, DP 1141670 remains vested in the State of New South Wales as Crown Land.

Description

Land District – Taree; L.G.A. – Greater Taree

Road Closed: Lot 1, DP 1140327 at Upper Lansdowne and Melinga, Parish Dawson, County Macquarie.

File No.: TE05 H 57.

Schedule

On closing, the land within Lot 1, DP 1140327 remains vested in the State of New South Wales as Crown Land.

WESTERN REGION OFFICE 45 Wingewarra Street (PO Box 1840), Dubbo NSW 2830 Phone: (02) 6883 5400 Fax: (02) 6884 2067

ALTERATION OF PURPOSE/CONDITIONS OF A WESTERN LANDS LEASE

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

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

Administrative District – Hillston North; Shire – Cobar; Parish – Hyandra; County – Blaxland

The purpose/conditions of Western Lands Lease 5315, being the land contained within Folio Identifier 6350/769244 has been altered from "Grazing" to "Grazing and Cultivation" effective from 5 December 2009.

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

The conditions previously annexed to Western Lands Lease 5315 have been revoked and the following conditions have been annexed to thereto.

CONDITIONS ATTACHED TO WESTERN LANDS LEASE 5315

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

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

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

- (b) Notwithstanding any other provision of this Agreement:
 - (i) If a GST applies to any supply made by either party under or in connection with this Agreement, the consideration provided or to be provided for that supply will be increased by an amount equal to the GST liability properly incurred by the party making the supply.
 - (ii) If the imposition of a GST or any subsequent change in the GST law is accompanied by or undertaken in connection with the abolition of or reduction in any existing taxes, duties or statutory charges (in this clause "taxes"), the consideration payable by the recipient of the supply made under this Agreement will be reduced by the actual costs of the party making the supply that are reduced directly or indirectly as a consequence of the abolition of or reduction in taxes.
- (7) The lessee shall pay all rates and taxes assessed on or in respect of the land leased during the currency of the lease.
- (8) The lessee shall hold and use the land leased bona fide for the lessee's own exclusive benefit and shall not transfer, convey or assign the land or any portion thereof without having first obtained the written consent of the Minister.
- (9) The lessee shall not enter into a sublease of the land leased unless the sublease specifies the purpose for which the land may be used under the sublease, and it is a purpose which is consistent with the purpose for which the land may be used under this lease.
- (10) If the lessee enters into a sublease of the land leased, the lessee must notify the Commissioner of the granting of the sublease within 28 days after it is granted.
- (11) The land leased shall be used only for the purpose of Grazing and Cultivation (Dryland & Irrigated).

- (12) The lessee shall maintain and keep in reasonable repair all improvements on the land leased during the currency of the lease and shall permit the Minister or the Commissioner or any person authorised by the Minister or the Commissioner at all times to enter upon and examine the whole or any part of the land leased and the buildings or other improvements thereon.
- (13) All minerals within the meaning of the Mining Act 1992, and all other metals, gemstones and semiprecious stones, which may be in, under or upon the land leased are reserved to the Crown and the lessee shall permit any person duly authorised in that behalf to enter upon the land leased and search, work, win and remove all or any minerals, metals, gemstones and semiprecious stones in, under or upon the land leased.
- (14) Mining operations may be carried on, upon and in the lands below the land leased and upon and in the lands adjoining the land leased and the lands below those lands and metals and minerals may be removed therefrom and the Crown and any lessee or lessees under any Mining Act or Acts shall not be subject to any proceedings by way of injunction or otherwise in respect of or be liable for any damage occasioned by the letting down, subsidence or lateral movement of the land leased or any part thereof or otherwise by reason of the following acts and matters, that is to say, by reason of the Crown or any person on behalf of the Crown or any lessee or lessees, having worked now or hereafter working any mines or having carried on or now or hereafter carrying on mining operations or having searched for, worked, won or removed or now or hereafter searching for, working, winning or removing any metals or minerals under, in or from the lands lying beneath the land leased or any part thereof, or on, in, under or from any other lands situated laterally to the land leased or any part thereof or the lands lying beneath those lands, and whether on or below the surface of those other lands and by reason of those acts and matters or in the course thereof the Crown reserves the liberty and authority for the Crown, any person on behalf of the Crown and any lessee or lessees from time to time to let down without payment of any compensation any part of the land leased or of the surface thereof.
- (15) The lessee shall comply with the provisions of the Local Government Act 1993, and of the ordinances made thereunder.
- (16) The lessee shall comply with the provisions of the Water Management Act 2000 and any regulations made in pursuance of that Act.
- (17) The lessee shall not erect or permit any person to erect any buildings or extend any existing buildings on the land leased except to the satisfaction of the Commissioner.
- (18) The lessee shall ensure that the land leased is kept in a neat and tidy condition to the satisfaction of the Commissioner and not permit refuse to accumulate on the land.
- (19) Upon termination or forfeiture of the lease the Commissioner may direct that the former lessee shall remove any structure or material from the land at his own cost and without compensation. Where such a direction has been given the former lessee shall leave the land in a clean and tidy condition free from rubbish and debris.

- (20) The lessee shall, within 1 year from the date of commencement of the lease or such further period as the Commissioner may allow, enclose the land leased, either separately or conjointly with other lands held in the same interest, with a suitable fence to the satisfaction of the Commissioner.
- (21) The lessee shall not obstruct or interfere with any reserves, roads or tracks on the land leased, or the lawful use thereof by any person.
- (22) The lessee shall erect gates on roads within the land leased when and where directed by the Commissioner for public use and shall maintain those gates together with approaches thereto in good order to the satisfaction of the Commissioner.
- (23) The right is reserved to the public of free access to, and passage along, the bank of any watercourse adjoining the land leased and the lessee shall not obstruct access or passage by any member of the public to or along the bank.
- (24) Any part of a reserve for travelling stock, camping or water supply within the land leased shall, during the whole currency of the lease, be open to the use of bona fide travellers, travelling stock, teamsters and carriers without interference or annoyance by the lessee and the lessee shall post in a conspicuous place on the reserve a notice board indicating for public information the purpose of such reserve and, in fencing the land leased, the lessee shall provide gates and other facilities for the entrance and exit of travelling stock, teamsters and others. The notice board, gates and facilities shall be erected and maintained to the satisfaction of the Commissioner. The lessee shall not overstock, wholly or in part, the areas leased within the reserve, the decision as to overstocking resting with the Commissioner.
- (25) The Crown shall not be responsible to the lessee or the lessee's successors in title for provision of access to the land leased.
- (26) The lessee shall comply with the provisions of the Native Vegetation Act 2003 and any regulations made in pursuance of that Act.
- (27) The lessee shall comply with requirements of section 18DA of the Western Lands Act 1901 which provides that except in circumstances referred to in subsection (3) of that section, cultivation of the land leased or occupied may not be carried out unless the written consent of the Department has first been obtained and any condition to which the consent is subject under sub section (6) is complied with.
- (28) Notwithstanding any other condition annexed to the lease, the lessee shall, in removing timber for the purpose of building, fencing or firewood, comply with the routine agricultural management activities listed in the Native Vegetation Act 2003.
- (29) The lessee shall not interfere with the timber on any of the land leased which is within a State forest, timber reserve or flora reserve unless authorisation has been obtained under the provisions of the Forestry Act 1916 and shall not prevent any person or persons duly authorised in that behalf from taking timber on the land leased. The lessee shall not have any property right in the timber on the land leased and shall not ringbark,

kill, destroy or permit the killing or destruction of any timber unless authorised under the Forestry Act 1916 or unless approval has been issued in accordance with the Native Vegetation Act 2003, but the lessee may take such timber as the lessee may reasonably require for use on the land leased, or on any contiguous land held in the same interest, for building, fencing or firewood.

- (30) The lessee shall undertake any fuel management and/ or provision of fire trail access in accordance with fire mitigation measures to the satisfaction of the NSW Rural Fire Service.
- (31) The lessee shall, as the Commissioner may from time to time direct, foster and cultivate on the land leased such edible shrubs and plants as the Commissioner may consider can be advantageously and successfully cultivated.
- (32) Whenever so directed by the Commissioner, the lessee shall, on such part or parts of the land leased as shall be specified in the direction, carry out agricultural practices, or refrain from agricultural practices, of such types and for such periods as the Commissioner may in the direction specify.
- (33) The lessee shall not overstock, or permit or allow to be overstocked, the land leased and the decision of the Commissioner as to what constitutes overstocking shall be final and the lessee shall comply with any directions of the Commissioner to prevent or discontinue overstocking.
- (34) The lessee shall, if the Commissioner so directs, prevent the use by stock of any part of the land leased for such periods as the Commissioner considers necessary to permit of the natural reseeding and regeneration of vegetation and, for that purpose, the lessee shall erect within the time appointed by the Commissioner such fencing as the Commissioner may consider necessary.
- (35) The lessee shall furnish such returns and statements as the Commissioner may from time to time require on any matter connected with the land leased or any other land (whether within or outside the Western Division) in which the lessee has an interest.
- (36) The lessee shall, within such time as may be specified by the Commissioner take such steps and measures as the Commissioner shall direct to destroy vermin and such animals and weeds as may, under any Act, from time to time be declared (by declaration covering the land leased) noxious in the Gazette and shall keep the land free of such vermin and noxious animals and weeds during the currency of the lease to the satisfaction of the Commissioner.
- (37) The lessee shall not remove or permit any person to remove gravel, stone, clay, shells or other material for the purpose of sale from the land leased unless the lessee or the person is the holder of a quarry license under regulations made under the Crown Lands Act 1989 or, in respect of land in a State forest, unless the lessee or the person is the holder of a forest materials licence under the Forestry Act 1916, and has obtained the special authority of the Minister to operate on the land, but the lessee may, with the approval of the Commissioner, take from the land such gravel, stone,

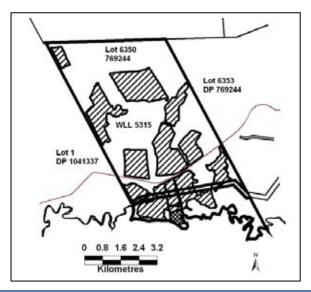
clay, shells or other material for building and other purposes upon the land as may be required by the lessee.

- (38) The lessee shall comply with the provisions of the Protection of the Environment Operations Act 1997 particularly in relation to disposal of tailwaters or waters which may be contaminated with fertiliser, herbicide or pesticide or similar chemicals.
- (39) The lessee shall not clear any native vegetation within the area shown cross-hatched on the diagram hereunder unless written approval has been granted by the local Catchment Management Authority.
- (40) The lessee shall ensure that cultivation and associated activities do not interfere with any road formation within the allowable area.
- (41) The lessee shall not cultivate within the channel of incised drainage lines (other than man made structures) which carry water after storms in the channels, nor cultivate within a distance of 20 metres on either side of the banks of the channels, except when otherwise specified by the Western Lands Commissioner.
- (42) The lessee shall cease work immediately should any Aboriginal archaeological relics or sites be uncovered during the proposed works (Aboriginal Sites are protected under the National Parks and Wildlife Act 1974, and are extremely vulnerable to many kinds of agricultural development).
- (43) The lessee shall establish windbreaks at his/her own expense, as may be ordered by the Western Lands Commissioner to provide adequate protection of the soil.
- (44) The lessee shall ensure that stubble and other crop residue is retained on the soil surface and shall not be burnt, except with the written approval of the Western Lands Commissioner or his delegate. Where such approval is granted, stubble burning shall be carried out with the approval as per requirements of the NSW Rural Fire Services.
- (45) The lessee shall undertake any appropriate measures, at his/her own expense, ordered by the Commissioner to rehabilitate any degraded cultivated areas.
- (46) The lessee shall not permanently transfer Irrigation water from the lease without the prior written permission of the Western Lands Commissioner.
- (47) The lessee shall contact the Environmental Protection Authority before disposing of any tailwater or water which may be contaminated with fertiliser, herbicide or pesticide. Disposal of tailwater into creeks and rivers is controlled by the Environment Protection Authority under the Clean Waters Act.
- (48) The lessee shall negotiate with the relevant Rural Lands Protection Board regarding the movement of stock within the area allowed to be cultivated. This area is partly covered by Travelling Stock Reserves 618A. If suitable arrangements cannot be made with the Rural Lands Protection Board, the matter will be determined by the Western Lands Commissioner.
- (49) The lessee must ensure that sandhills and other soils with a surface texture of loamy sand or coarser are left uncultivated unless specifically approved by the commissioner.

- (50) Texture contrast (or duplex) soils are soil types which have a sandy to loamy topsoil abruptly overlaying a clay subsoil and are prone to scolding (producing claypans and hummocks).Land within 60 metres of any texture contrast or duplex soil area shall not be cultivated except in accordance with a plan approved by the Commissioner.
- (51) Areas with a slope greater than 2% shall not be cultivated until any soil conservation measures documented in a plan approved by the Commissioner have been implemented at the lessee' expense.
- (52) Cultivation and cropping are not to alter the natural flood regime. Crops are not to be protected by levees.
- (53) Aboriginal sites are protected under the National Parks and Wildlife Act 1974, and are extremely vulnerable to many kinds of agricultural development.

Should any Aboriginal archaeological relics or sites be uncovered during the proposed works, work is to cease immediately. The lessee must consider the requirements of the National Parks and Wildlife Act 1974, with regard to aboriginal relics. Under section 90 it is an offence to damage or destroy relics without prior consent of the Director-General of the Department of Environmental and Climate Change. If an aboriginal site is found in this area, the subject of this consent, the cultivation must cease until the consent holder has notified the Department of Environmental and Climate Change of the existence of the Aboriginal site. Contact details are: The Manager, Cultural Heritage Unit, Department of Environmental and Climate Change, Phone (02) 6883 5324 or at 58-62 Wingewarra St, Dubbo.

- (54) Access tracks to the area to be cultivated and must be arranged in such a manner as to minimise the disturbance of any land surfaces within the areas required to be left uncultivated to comply with conditions of this Change of lease Purpose.
- (55) The lessee shall ensure that no run-off will escape onto adjoining lands.
- (56) The lessee shall conduct dryland cultivation to a maximum 1448 ha as shown hatched on the attached diagram and Irrigated cultivation 29 ha shown cross-hatched on the diagram. Cultivation shall occur only within the areas indicated on the diagram hereunder. Cultivation outside this area will only be allowable with the written consent of the Commissioner or Minister.



ALTERATION OF PURPOSE/CONDITIONS OF A WESTERN LANDS LEASE

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

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

Administrative District – Hillston North; Shire – Cobar; Parish – Guagong; County – Blaxland

The purpose/conditions of Western Lands Lease 12989, being the land contained within Folio Identifier 1041/762314 has been altered from "Grazing" to "Grazing and Cultivation" effective from 15 December 2009.

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

The conditions previously annexed to Western Lands Lease 12989 have been revoked and the following conditions have been annexed thereto.

CONDITIONS ATTACHED TO WESTERN LANDS LEASE 12989

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

- (4) The rent of the lease shall be assessed in accordance with Part 6 of the Western Lands Act 1901.
- (5) The rent shall be due and payable annually in advance on 1 July in each year.
- (6) (a) "GST" means any tax on goods and/or services, including any value-added tax, broad-based consumption tax or other similar tax introduced in Australia.

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

- (b) Notwithstanding any other provision of this Agreement:
 - (i) If a GST applies to any supply made by either party under or in connection with this Agreement, the consideration provided or to be provided for that supply will be increased by an amount equal to the GST liability properly incurred by the party making the supply.
 - (ii) If the imposition of a GST or any subsequent change in the GST law is accompanied by or undertaken in connection with the abolition of or reduction in any existing taxes, duties or statutory charges (in this clause "taxes"), the consideration payable by the recipient of the supply made under this Agreement will be reduced by the actual costs of the party making the supply that are reduced directly or indirectly as a consequence of the abolition of or reduction in taxes.
- (7) The lessee must pay all rates and taxes assessed on or in respect of the land leased during the currency of the lease.
- (8) The lessee must hold and use the land leased bona fide for the lessee's own exclusive benefit and must not transfer, convey or assign the land or any portion thereof without having first obtained the written consent of the Minister.
- (9) The lessee must not enter into a sublease of the land leased unless the sublease specifies the purpose for which the land may be used under the sublease, and it is a purpose which is consistent with the purpose for which the land may be used under this lease.
- (10) If the lessee enters into a sublease of the land leased, the lessee must notify the Commissioner of the granting of the sublease within 28 days after it is granted.
- (11) The land leased must be used only for the purpose of Grazing and Cultivation (Dryland and Irrigated).
- (12) The lessee must maintain and keep in reasonable repair all improvements on the land leased during the currency of the lease and shall permit the Minister or the Commissioner or any person authorised by the Minister or the Commissioner at all times to enter upon and examine the whole or any part of the land leased and the buildings or other improvements thereon.
- (13) All minerals within the meaning of the Mining Act 1992, and all other metals, gemstones and semiprecious stones, which may be in, under or upon the land leased are reserved to the Crown and the lessee shall permit any person duly authorised in that behalf to enter upon

the land leased and search, work, win and remove all or any minerals, metals, gemstones and semiprecious stones in, under or upon the land leased.

- (14) Mining operations may be carried on, upon and in the lands below the land leased and upon and in the lands adjoining the land leased and the lands below those lands and metals and minerals may be removed therefrom and the Crown and any lessee or lessees under any Mining Act or Acts shall not be subject to any proceedings by way of injunction or otherwise in respect of or be liable for any damage occasioned by the letting down, subsidence or lateral movement of the land leased or any part thereof or otherwise by reason of the following acts and matters, that is to say, by reason of the Crown or any person on behalf of the Crown or any lessee or lessees, having worked now or hereafter working any mines or having carried on or now or hereafter carrying on mining operations or having searched for, worked, won or removed or now or hereafter searching for, working, winning or removing any metals or minerals under, in or from the lands lying beneath the land leased or any part thereof, or on, in, under or from any other lands situated laterally to the land leased or any part thereof or the lands lying beneath those lands, and whether on or below the surface of those other lands and by reason of those acts and matters or in the course thereof the Crown reserves the liberty and authority for the Crown, any person on behalf of the Crown and any lessee or lessees from time to time to let down without payment of any compensation any part of the land leased or of the surface thereof.
- (15) The lessee must comply with the provisions of the Local Government Act 1993, and of the ordinances made thereunder.
- (16) The lessee must comply with the provisions of the Water Management Act 2000 and any regulations made in pursuance of that Act.
- (17) The lessee must not erect or permit any person to erect any buildings or extend any existing buildings on the land leased except to the satisfaction of the Commissioner.
- (18) The lessee must ensure that the land leased is kept in a neat and tidy condition to the satisfaction of the Commissioner and not permit refuse to accumulate on the land.
- (19) Upon termination or forfeiture of the lease the Commissioner may direct that the former lessee remove any structure or material from the land at his own cost and without compensation. Where such a direction has been given the former lessee must leave the land in a clean and tidy condition free from rubbish and debris.
- (20) The lessee must, within 1 year from the date of commencement of the lease or such further period as the Commissioner may allow, enclose the land leased, either separately or conjointly with other lands held in the same interest, with a suitable fence to the satisfaction of the Commissioner.
- (21) The lessee must not obstruct or interfere with any reserves, roads or tracks on the land leased, or the lawful use thereof by any person.

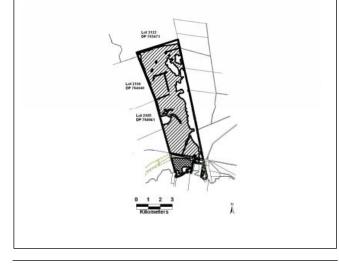
- (22) The lessee must erect gates on roads within the land leased when and where directed by the Commissioner for public use and must maintain those gates together with approaches thereto in good order to the satisfaction of the Commissioner.
- (23) The right is reserved to the public of free access to, and passage along, the bank of any watercourse adjoining the land leased and the lessee must not obstruct access or passage by any member of the public to or along the bank.
- (24) Any part of a reserve for travelling stock, camping or water supply within the land leased must, during the whole currency of the lease, be open to the use of bona fide travellers, travelling stock, teamsters and carriers without interference or annoyance by the lessee and the lessee must post in a conspicuous place on the reserve a notice board indicating for public information the purpose of such reserve and, in fencing the land leased, the lessee must provide gates and other facilities for the entrance and exit of travelling stock, teamsters and others. The notice board, gates and facilities must be erected and maintained to the satisfaction of the Commissioner. The lessee must not overstock, wholly or in part, the areas leased within the reserve, the decision as to overstocking resting with the Commissioner.
- (25) The Crown shall not be responsible to the lessee or the lessee's successors in title for provision of access to the land leased.
- (26) The lessee must comply with the provisions of the Native Vegetation Act 2003 and any regulations made in pursuance of that Act.
- (27) The lessee must comply with requirements of section 18DA of the Western Lands Act 1901 which provides that except in circumstances referred to in subsection (3) of that section, cultivation of the land leased or occupied may not be carried out unless the written consent of the Authority has first been obtained and any condition to which the consent is subject under sub section (6) is complied with.
- (28) Notwithstanding any other condition annexed to the lease, the lessee must, in removing timber for the purpose of building, fencing or firewood, comply with the routine agricultural management activities listed in the Native Vegetation Act 2003.
- (29) The lessee must not interfere with the timber on any of the land leased which is within a State forest, timber reserve or flora reserve unless authorisation has been obtained under the provisions of the Forestry Act 1916 and must not prevent any person or persons duly authorised in that behalf from taking timber on the land leased. The lessee shall not have any property right in the timber on the land leased and must not ringbark, kill, destroy or permit the killing or destruction of any timber unless authorised under the Forestry Act 1916 or unless approval has been issued in accordance with the Native Vegetation Act 2003, but the lessee may take such timber as the lessee may reasonably require for use on the land leased, or on any contiguous land held in the same interest, for building, fencing or firewood.

- (30) The lessee must undertake any fuel management and/ or provision of fire trail access in accordance with fire mitigation measures to the satisfaction of the NSW Rural Fire Service.
- (31) The lessee must, as the Commissioner may from time to time direct, foster and cultivate on the land leased such edible shrubs and plants as the Commissioner may consider can be advantageously and successfully cultivated.
- (32) Whenever so directed by the Commissioner, the lessee must, on such part or parts of the land leased as shall be specified in the direction, carry out agricultural practices, or refrain from agricultural practices, of such types and for such periods as the Commissioner may in the direction specify.
- (33) The lessee must not overstock, or permit or allow to be overstocked, the land leased and the decision of the Commissioner as to what constitutes overstocking shall be final and the lessee must comply with any directions of the Commissioner to prevent or discontinue overstocking.
- (34) The lessee must, if the Commissioner so directs, prevent the use by stock of any part of the land leased for such periods as the Commissioner considers necessary to permit of the natural reseeding and regeneration of vegetation and, for that purpose, the lessee must erect within the time appointed by the Commissioner such fencing as the Commissioner may consider necessary.
- (35) The lessee must furnish such returns and statements as the Commissioner may from time to time require on any matter connected with the land leased or any other land (whether within or outside the Western Division) in which the lessee has an interest.
- (36) The lessee must, within such time as may be specified by the Commissioner take such steps and measures as the Commissioner shall direct to destroy vermin and such animals and weeds as may, under any Act, from time to time be declared (by declaration covering the land leased) noxious in the Gazette and must keep the land free of such vermin and noxious animals and weeds during the currency of the lease to the satisfaction of the Commissioner.
- (37) The lessee must not remove or permit any person to remove gravel, stone, clay, shells or other material for the purpose of sale from the land leased unless the lessee or the person is the holder of a quarry license under regulations made under the Crown Lands Act 1989 or, in respect of land in a State forest, unless the lessee or the person is the holder of a forest materials licence under the Forestry Act 1916, and has obtained the special authority of the Minister to operate on the land, but the lessee may, with the approval of the Commissioner, take from the land such gravel, stone, clay, shells or other material for building and other purposes upon the land as may be required by the lessee.
- (38) The lessee must ensure that cultivation and associated activities do not interfere with any road formation within the allowable area.

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- (39) The lessee shall ensure, except with the specific approval of the Commissioner, that no cultivation or ancillary works associated with any cultivation shall be undertaken within 50 metres, on the landward side, of the Lachlan River. These areas are not to be disturbed by the use of any implements or used for any silo, temporary grain storage, machinery shed or other installation or works of any kind.
- (40) The lessee shall ensure that no cultivation is undertaken within five (5) metres of the Tullebung Channel.
- (41) The lessee shall ensure that no cultivation is undertaken within thirty (30) metres of the Parkes – Broken Hill Railway.
- (42) The lessee shall ensure incised drainage lines, other than man-made structures, which carry water after storms are left uncultivated in the channels and for a distance of at least 20 metres on either side of the banks of the channels except where the Commissioner specifies otherwise.
- (43) The lessee must cease work immediately should any Aboriginal archaeological relics or sites be uncovered during the proposed works (Aboriginal Sites are protected under the National Parks and Wildlife Act 1974, and are extremely vulnerable to many kinds of agricultural development).
- (44) The lessee must consider the requirements of the National Parks and Wildlife Act 1974 with regard to Aboriginal relics. Under Section 90 it is an offence to damage or destroy relics without prior consent of the Director-General of the Department of Environment, Climate Change and Water. If a site is discovered the lessee must contact the Manager, Cultural Heritage Unit, Department of Environment, Climate Change and Water on Phone (02) 6883 5324 or at 58-62 Wingewarra St, Dubbo.
- (45) The lessee must establish windbreaks at his/her own expense, as may be ordered by the Western Lands Commissioner to provide adequate protection of the soil.
- (46) The lessee must ensure that stubble and other crop residue is retained on the soil surface and shall not be burnt, except with the written approval of the Western Lands Commissioner or his delegate. Where such approval is granted, stubble burning must be carried out with the approval as per requirements of the NSW Rural Fire Services.
- (47) The lessee shall undertake any appropriate measures, at his/her own expense, ordered by the Commissioner to rehabilitate any degraded cultivated areas.
- (48) The cultivation areas partly cover Travelling Stock Reserve 2007 and suitable arrangements must be made with the relevant Livestock Health and Pest Authority prior to commencement of any development. If suitable arrangements cannot be made with the Livestock Health and Pest Authorities, the matter will be determined by the Western Lands Commissioner.
- (49) The lessee must ensure that sandhills and other soils with a surface texture of loamy sand or coarser are left uncultivated unless specifically approved by the commissioner.

- (50) The lessee shall ensure land within 60 metres of any texture contrast or duplex soil area remains uncultivated except in accordance with a plan approved by the Commissioner. Texture contrast (or duplex) soils are soil types which have a sandy to loamy topsoil abruptly overlying a clay subsoil and are prone to scolding.
- (51) The lessee shall ensure areas with a slope greater than 2% remain uncultivated until any soil conservation measures documented in a plan approved by the Commissioner have been implemented at lessee's expense.
- (52) The lessee must ensure that Cultivation and cropping do not alter the natural flood regime or obstruct the reasonable passage of floodwaters. Crops are not to be protected by levees.
- (53) The lessee must not permanently transfer Irrigation water from the lease without the prior written permission of the Western Lands Commissioner.
- (54) Disposal of tail water into creeks and rivers is controlled by the Department of Environment, Climate Change and Water under the Protection of the Environment Act 2003. Before disposing of any tail water or water which may be contaminated with fertiliser, herbicide or pesticide the Department of Environment, Climate Change and Water must be contacted.
- (55) The lessee must ensure that no tail water or drainage water run-off will escape onto adjoining lands.
- (56) The lessee is authorised to conduct dryland cultivation of 2,101 ha shown hatched on the attached diagram and Irrigated cultivation to a maximum of 143 ha shown cross-hatched. Cultivation outside of the areas shown will only be allowable with the written consent of the Commissioner or Minister.



ERRATUM

IN the *New South Wales Government Gazette* of 4 December 2009, Folio 5971, under the heading "Reservation of Crown Land", the Parish for Lot 79 DP 1123923, should read Wallangulla.

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

Department of Primary Industries

COAL MINE HEALTH AND SAFETY ACT 2002

Instrument of appointment

I, BRAD MULLARD, Executive Director Mineral Resources, Department of Industry and Investment, pursuant to section 145(1)(b) of the Coal Mine Health and Safety Act 2002, hereby appoint Keith Gary JOHNSON as an Inspector.

Dated this 11th day of December 2009.

BRAD MULLARD, Executive Director Mineral Resources Department of Industry and Investment (under subdelegation from Director-General of authority delegated by Minister)

FISHERIES MANAGEMENT ACT 1994

FISHERIES MANAGEMENT (AQUACULTURE) REGULATION 2007

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 2007

INDUSTRY & Investment NSW (I&I NSW) advises an application has been received for ten (10) new aquaculture leases over public water land for the purpose of cultivating Sydney rock oysters and triploid Pacific oysters. Location is the Hawkesbury River, described as follows:

- 0.9693 hectares over former oyster lease OL57/177.
- 3.9897 hectares over former oyster lease OL59/337.
- 1.0011 hectares over former oyster lease OL62/094.
- 0.4537 hectares over former oyster lease OL66/100.
- 8.4608 hectares over former oyster lease OL66/144.
- 0.7997 hectares over former oyster lease OL67/225.
- 0.6871 hectares over former oyster lease OL78/127.
- 0.5908 hectares over former oyster lease OL78/161.
- 0.9087 hectares over former oyster lease OL79/052.
- 0.7710 hectares over former oyster lease OL80/193.

I&I NSW is calling for written submissions from any person supporting or objecting to the oyster lease proposals, citing reasons for the support/objection. I&I NSW is also calling for expressions of interest from persons or corporations interested in leasing one or more of the areas specified above, for the purpose of aquaculture. An expression of interest must be in the form of a written response referring to relevant lease number(s) to be signed and dated with a return address.

If additional expressions of interest are received, I&I NSW may offer the area(s) for leasing through a competitive public tender process, auction or ballot. If granted the leases will be subject to standard covenants and conditions of an aquaculture lease and aquaculture permit, under the Fisheries Management Act 1994.

Specific details of the proposed leases can be obtained, or enquiries made with I&I NSW, Aquaculture Administration Section, Port Stephens on (02) 4982 1232. Objections or expressions of interest for consideration in the determination of the applications must be received at the address below, within 30 days from the date of publication of this notification. Director, Fisheries Conservation and Aquaculture Branch, Aquaculture Administration Section, Port Stephens Fisheries Institute, Locked Bag 1, Nelson Bay NSW 2315.

> BILL TALBOT, Director, Fisheries Conservation and Aquaculture Branch, Industry & Investment NSW

FISHERIES MANAGEMENT ACT 1994

Section 8 Notification - Fishing Closure

Prohibition on the taking of fish using Abalone Viscera as Bait

I, PAUL O'CONNOR, Principal Director, Fisheries and Compliance, with the delegated authority of the Minister for Primary Industries and the Director-General of the Department of Industry and Investment pursuant to sections 227 and 228 of the Fisheries Management Act ("the Act") and pursuant to section 8 of the Act, do by this Notification prohibit the taking of all species of fish using abalone viscera as bait or berley, by all persons and in all waters.

This fishing closure remains in force for a period of 5 years from the date of publication, unless sooner amended or revoked.

Dated this 14th day of December 2009.

PAUL O'CONNOR, Principal Director, Fisheries and Compliance, Department of Industry and Investment

Explanatory Note:

The primary purpose of this fishing closure is to reduce the risk of transmission of *abalone viral ganglioneuritis* into New South Wales waters. This fishing closure applies to all recreational and commercial fishers.

MINE HEALTH AND SAFETY ACT 2004

Instrument of appointment

I, BRAD MULLARD, Executive Director Mineral Resources, Department of Industry and Investment, pursuant to section 127(1)(b) of the Mine Health and Safety Act 2004, hereby appoint Keith Gary JOHNSON as an Inspector.

Dated this 11th day of December 2009.

BRAD MULLARD, Executive Director Mineral Resources Department of Industry and Investment (under subdelegation from Director-General of authority delegated by Minister)

MINERAL RESOURCES

NOTICE is given that the following applications have been received:

EXPLORATION LICENCE APPLICATIONS

(T09-0286)

No. 3880, AUSTRALIA ORIENTAL MINERALS NL (ACN 010 126 708), area of 13 units, for Group 1, dated 4 December, 2009. (Inverell Mining Division).

(T09-0287)

No. 3881, NEWMONT EXPLORATION PTY LTD (ACN 006 306 690), area of 7 units, for Group 1, dated 7 December, 2009. (Orange Mining Division).

(T09-0288)

No. 3882, NEWMONT EXPLORATION PTY LTD (ACN 006 306 690), area of 14 units, for Group 1, dated 7 December, 2009. (Orange Mining Division).

(T09-0289)

No. 3883, HIGHLAKE RESOURCES PTY LTD (ACN 062 487 585), area of 98 units, for Group 1, dated 7 December, 2009. (Broken Hill Mining Division).

(T09-0290)

No. 3884, HIGHLAKE RESOURCES PTY LTD (ACN 062 487 585), area of 98 units, for Group 1, dated 7 December, 2009. (Broken Hill Mining Division).

(T09-0291)

No. 3885, HIGHLAKE RESOURCES PTY LTD (ACN 062 487 585), area of 99 units, for Group 1, dated 7 December, 2009. (Broken Hill Mining Division).

(T09-0292)

No. 3886, TITUS RESOURCES LIMITED (ACN 140 575 604), area of 17 units, for Group 1, dated 9 December, 2009. (Inverell Mining Division).

(T09-0293)

No. 3887, TITUS RESOURCES LIMITED (ACN 140 575 604), area of 73 units, for Group 1, dated 9 December, 2009. (Sydney Mining Division).

(T09-0294)

No. 3888, ALKANE RESOURCES LTD (ACN 000 689 216), area of 39 units, for Group 1, dated 9 December, 2009. (Orange Mining Division).

(T09-0295)

No. 3889, D'AGUILAR GOLD LIMITED (ACN 052 354 837), area of 41 units, for Group 1, dated 10 December, 2009. (Orange Mining Division).

MINING LEASE APPLICATIONS

(Z09-3984)

No. 338, CHARBON COAL PTY LIMITED (ACN 064 237 118) AND SK AUSTRALIA PTY LIMITED (ACN 003 964 225), area of about 591 hectares, to mine for coal, dated 7 December, 2009. (Orange Mining Division).

(T09-0246)

No. 339, HUNTER VALLEY ENERGY COAL PTY LTD (ACN 062 894 464), area of about 149 hectares, for the purpose of building, road, railway, conveyor, bin,

pipeline, transmission of electricity, signalling system, dam and telephone, dated 9 December, 2009. (Singleton Mining Division).

> IAN MACDONALD, M.L.C., Minister for Mineral and Forest Resources

NOTICE is given that the following applications have been granted:

EXPLORATION LICENCE APPLICATIONS

(T09-0086)

No. 3694, now Exploration Licence No. 7416, NEWMONT EXPLORATION PTY LTD (ACN 006 306 690), County of Bathurst, Map Sheet (8630), area of 9 units, for Group 1, dated 2 November, 2009, for a term until 2 November, 2011.

(T09-0128)

No. 3739, now Exploration Licence No. 7421, AUSTRALIAN HUALONG PTY LTD (ACN 131 800 934), Counties of Georgiana and King, Map Sheets (8629, 8729), area of 46 units, for Group 1, dated 5 November, 2009, for a term until 5 November, 2011.

(T09-0141)

No. 3748, now Exploration Licence No. 7417, UNIMIN AUSTRALIA LIMITED (ACN 000 971 844), County of Phillip, Map Sheet (8832), area of 1 units, for Group 2, dated 2 November, 2009, for a term until 2 November, 2011.

(T09-0142)

No. 3749, now Exploration Licence No. 7418, UNIMIN AUSTRALIA LIMITED (ACN 000 971 844), Counties of Phillip and Roxburgh, Map Sheet (8832), area of 1 units, for Group 2, dated 2 November, 2009, for a term until 2 November, 2011.

(T09-0143)

No. 3750, now Exploration Licence No. 7419, UNIMIN AUSTRALIA LIMITED (ACN 000 971 844), County of Phillip, Map Sheet (8832), area of 1 units, for Group 2, dated 2 November, 2009, for a term until 2 November, 2011.

(T09-0144)

No. 3751, now Exploration Licence No. 7420, UNIMIN AUSTRALIA LIMITED (ACN 000 971 844), Counties of Phillip and Roxburgh, Map Sheet (8832), area of 6 units, for Group 2, dated 2 November, 2009, for a term until 2 November, 2011.

(T09-0156)

No. 3763, now Exploration Licence No. 7427, OAKLAND RESOURCES PTY LTD (ACN 137 606 476), Counties of Harden, King and Murray, Map Sheets (8628, 8728), area of 100 units, for Group 1, dated 4 December, 2009, for a term until 4 December, 2011.

PETROLEUM APPLICATIONS

(T09-0010)

No. 41, now Petroleum Special Prospecting Authority No. 34, PANGAEA OIL & GAS PTY LIMITED (ACN 068 812 171), area of 292 blocks, for petroleum, dated 11 November, 2009, for a term until 11 November, 2010. (Inverell Mining Division). For exact location details refer to the Department's NSW State Map of Petroleum Titles.

(T09-0012)

No. 43, now Petroleum Special Prospecting Authority No. 36, PANGAEA OIL & GAS PTY LIMITED (ACN 068 812 171), area of 313 blocks, for petroleum, dated 11 November, 2009, for a term until 11 November, 2010. (Coffs Harbour Mining Division). For exact location details refer to the Department's NSW State Map of Petroleum Titles.

(T09-0006)

No. 113, now Petroleum Exploration Licence No. 478, CLARENCE MORETON RESOURCES PTY LIMITED (ACN 140 886 853), area of 12 blocks, for petroleum, dated 11 December, 2009, for a term until 11 December, 2012. (Coffs Harbour Mining Division). For exact location details refer to the Department's NSW State Map of Petroleum Titles.

(T09-0008)

No. 115, now Petroleum Exploration Licence No. 476, PANGAEA OIL & GAS PTY LIMITED (ACN 068 812 171), area of 139 blocks, for petroleum, dated 11 November, 2009, for a term until 11 November, 2012. (Armidale Mining Division). For exact location details refer to the Department's NSW State Map of Petroleum Titles.

IAN MACDONALD, M.L.C., Minister for Mineral and Forest Resources

NOTICE is given that the following applications have been withdrawn:

EXPLORATION LICENCE APPLICATIONS

(Z07-0177)

No. 3072, LEVIATHAN RESOURCES LIMITED (ACN 054 584 397), County of Perry and County of Wentworth, Map Sheet (7430, 7431). Withdrawal took effect on 4 December, 2009.

(T09-0269)

No. 3863, CENTRAL WEST GOLD NL (ACN 003 078 591), County of Georgiana, Map Sheet (8729, 8730). Withdrawal took effect on 25 November, 2009.

(T09-0289)

No. 3883, HIGHLAKE RESOURCES PTY LTD (ACN 062 487 585), County of Tandora, Map Sheet (7333, 7334, 7433, 7434). Withdrawal took effect on 9 December, 2009.

IAN MACDONALD, M.L.C., Minister for Mineral and Forest Resources

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

(T87-0419)

Exploration Licence No. 4192, NEWNES KAOLIN PTY LTD (ACN 065 564 794), area of 3 units. Application for renewal received 14 December, 2009.

(T98-1028)

Exploration Licence No. 5664, PEREGRINE MINERAL SANDS PTY LTD (ACN 009 307 591), area of 11 units. Application for renewal received 7 December, 2009.

(T98-1029)

Exploration Licence No. 5665, PEREGRINE MINERAL SANDS PTY LTD (ACN 009 307 591), area of 40 units. Application for renewal received 7 December, 2009.

(T98-1138)

Exploration Licence No. 5668, PEREGRINE MINERAL SANDS PTY LTD (ACN 009 307 591), area of 4 units. Application for renewal received 7 December, 2009.

(Z06-7630)

Exploration Licence No. 5671, STIRLING MINERALS LIMITED (ACN 123 972 814), area of 5 units. Application for renewal received 9 December, 2009.

(Z09-8391)

Exploration Licence No. 5692, DOWMILL PTY LIMITED (ACN 002 329 615), NOSEBI MINING & MANAGEMENT PTY LTD (ACN 002 516 109) AND UNIVERSAL RESOURCES LIMITED (ACN 090 468 018), area of 16 units. Application for renewal received 8 December, 2009.

(T00-0095)

Exploration Licence No. 5801, NORTH MINING LIMITED (ACN 000 081 434), area of 172 units. Application for renewal received 3 December, 2009.

(T03-0058)

Exploration Licence No. 6181, CLANCY EXPLORATION LIMITED (ACN 105 578 756), area of 29 units. Application for renewal received 14 December, 2009.

(Z05-0175)

Exploration Licence No. 6490, DINGO RESOURCES PTY LIMITED (ACN 113 025 657), area of 95 units. Application for renewal received 3 December, 2009.

(Z05-0246)

Exploration Licence No. 6501, ISOKIND PTY LIMITED (ACN 081 732 498), area of 18 units. Application for renewal received 3 December, 2009.

(Z07-0142)

Exploration Licence No. 6966, NSW TIN PTY LIMITED (ACN 126 083 967), area of 49 units. Application for renewal received 10 December, 2009.

(Z07-0140)

Exploration Licence No. 6986, NSW TIN PTY LIMITED (ACN 126 083 967), area of 35 units. Application for renewal received 10 December, 2009.

(Z07-0392)

Exploration Licence No. 7000, RAPTOR MINERALS LIMITED (ACN 101 168 343), area of 212 units. Application for renewal received 2 December, 2009.

(Z07-0290)

Exploration Licence No. 7003, MERIDIAN MINERALS LIMITED (ACN 125 825 532), area of 89 units. Application for renewal received 14 December, 2009.

(Z07-0292)

Exploration Licence No. 7004, MERIDIAN MINERALS LIMITED (ACN 125 825 532), area of 86 units. Application for renewal received 14 December, 2009.

(Z07-0293)

Exploration Licence No. 7005, MERIDIAN MINERALS LIMITED (ACN 125 825 532), area of 29 units. Application for renewal received 14 December, 2009.

(Z07-0294)

Exploration Licence No. 7006, MERIDIAN MINERALS LIMITED (ACN 125 825 532), area of 29 units. Application for renewal received 14 December, 2009.

(Z07-0295)

Exploration Licence No. 7007, MERIDIAN MINERALS LIMITED (ACN 125 825 532), area of 42 units. Application for renewal received 14 December, 2009.

(Z07-0296)

Exploration Licence No. 7008, MERIDIAN MINERALS LIMITED (ACN 125 825 532), area of 51 units. Application for renewal received 14 December, 2009.

(Z07-0395)

Exploration Licence No. 7010, BALRANALD GYPSUM PTY LTD (ACN 081 196 947), area of 10 units. Application for renewal received 14 December, 2009.

(T07-0454)

Exploration Licence No. 7011, CONRAD SILVER MINES PTY LTD (ACN 106 967 506), area of 50 units. Application for renewal received 15 December, 2009.

(Z07-0393)

Exploration Licence No. 7072, BALRANALD GYPSUM PTY LTD (ACN 081 196 947), area of 14 hectares. Application for renewal received 14 December, 2009.

(T01-0004)

Mining Lease No. 1237 (Act 1973), MALACHITE RESOURCES LIMITED (ACN 075 613 268), area of 61.8 hectares. Application for renewal received 3 December, 2009.

(T01-0004)

Mining Lease No. 1238 (Act 1973), MALACHITE RESOURCES LIMITED (ACN 075 613 268), area of 183 hectares. Application for renewal received 3 December, 2009.

(T01-0004)

Mining Lease No. 1385 (Act 1992), MALACHITE RESOURCES LIMITED (ACN 075 613 268), area of 16.22 hectares. Application for renewal received 3 December, 2009.

(T97-1270)

Mining Lease No. 1527 (Act 1992), WILSON GEMS & INVESTMENTS PTY.LTD (ACN 001 155 755), area of 162 hectares. Application for renewal received 3 December, 2009.

IAN MACDONALD, M.L.C., Minister for Mineral and Forest Resources

RENEWAL OF CERTAIN AUTHORITIES

NOTICE is given that the following authorities have been renewed:

(Z04-1753)

Exploration Licence No. 3854, NIMROD RESOURCES LIMITED (ACN 130 842 063), Counties of Gunderbooka and Irrara, Map Sheet (8038), area of 7 units, for a further term until 20 May, 2011. Renewal effective on and from 7 December, 2009.

(Z07-4171)

Exploration Licence No. 5242, JAGUAR MINERALS LIMITED (ACN 107 159 713), Counties of Bathurst, Georgiana and Westmoreland, Map Sheet (8830), area of 45 units, for a further term until 27 June, 2011. Renewal effective on and from 15 December, 2009.

(Z04-4860)

Exploration Licence No. 5297, RAVENSWORTH OPERATIONS PTY LIMITED (ACN 098 937 761), County of Durham, Map Sheets (9033, 9133), area of 441 hectares, for a further term until 7 May, 2014. Renewal effective on and from 10 December, 2009.

(Z07-6654)

Exploration Licence No. 5337, NEWCASTLE COAL COMPANY PTY LTD (ACN 074 900 208), County of Northumberland, Map Sheet (9232), area of 2379 hectares, for a further term until 4 August, 2012. Renewal effective on and from 10 December, 2009.

(T98-1166)

Exploration Licence No. 5565, RIMFIRE PACIFIC MINING NL (ACN 006 911 744), County of Cunningham, Map Sheet (8331, 8431), area of 4 units, for a further term until 23 March, 2011. Renewal effective on and from 1 December, 2009.

(Z07-4677)

Exploration Licence No. 5878, TRI ORIGIN MINERALS LTD (ACN 062 002 475), Counties of Cunningham and Flinders, Map Sheet (8233), area of 16 units, for a further term until 23 July, 2011. Renewal effective on and from 30 November, 2009.

(T03-0022)

Exploration Licence No. 6122, INFERUS RESOURCES PTY LTD (ACN 119 368 160), Counties of Forbes and Monteagle, Map Sheet (8530), area of 42 units, for a further term until 31 August, 2011. Renewal effective on and from 4 December, 2009.

(Z05-5711)

Exploration Licence No. 6587, WHITEHAVEN COAL MINING LIMITED (ACN 086 426 253), County of Arrawatta, Map Sheet (9139), area of 218 hectares, for a further term until 3 July, 2012. Renewal effective on and from 4 December, 2009.

(Z06-4189)

Exploration Licence No. 6765, NEWNES KAOLIN PTY LTD (ACN 065 564 794), County of Roxburgh, Map Sheet (8931), area of 2 units, for a further term until 1 May, 2011. Renewal effective on and from 1 December, 2009.

(Z06-0128)

Exploration Licence No. 6810, MERIDIEN RESOURCES LTD (ACN 131 758 177), County of Georgiana, Map Sheet (8830), area of 1 units, for a further term until 19 June, 2011. Renewal effective on and from 8 December, 2009.

IAN MACDONALD, M.L.C., Minister for Mineral and Forest Resources

CANCELLATION OF AUTHORITIES AT REQUEST OF HOLDERS

NOTICE is given that the following application for cancellation has been received

(Z06-4188)

Exploration Licence No. 6703, ILUKA RESOURCES LIMITED, (ACN 008 675 018), County of Wentworth, area of 216 units . Application for Cancellation was received on 09 December 2009

IAN MACDONALD, M.L.C., Minister for Mineral and Forest Resources

REVIEW OF PLANTATIONS LEGISLATION

Proposed amendments to the Plantations and Reafforestation Act 1999 and the Plantations and Reafforestation (Code) Regulation 2001 are now on public exhibition until 12 February 2010.

A Draft Amendment Bill and Regulation, together with a Better Regulation Statement, and Information Sheets are available from the Industry & Investment NSW website: www.dpi.nsw.gov.au/ or from Industry & Investment NSW offices at Wollongbar (Ph. (02) 6626 1221), Coffs Harbour (Ph. (02) 6650 3126), Albury (Ph. (02) 6051 7711) and Port Stephens (Ph. (02) 4916 3924).

Submissions should be forwarded to the Plantations Assessment Unit, 1243 Bruxner Highway, Wollongbar NSW 2477, or by e-mail to pra.review@industry.nsw.gov.au.

Submissions Close: Friday, 12 February 2010.

RICE MARKETING ACT 1983

Appointment of elected members to

The Rice Marketing Board

Her Excellency Professor MARIE BASHIR, A.C., C.V.O., Governor

I, Professor MARIE BASHIR, A.C., C.V.O., Governor of the State of New South Wales, with the advice of the Executive Council pursuant to section 11 of the Rice Marketing Act 1983, hereby approve the appointment of Mr Noel Graham, Ms Gillian Kirkup and Mr Gerry Lawson as the elected members of the Rice Marketing Board for a term of office commencing on and from 14 December 2009 until the date of the Governor's approval.

Signed and seal at Sydney this 16th day of December 2009.

By Her Excellency's Command,

STEVE WHAN M.P., Minister for Primary Industries

GOD SAVE THE QUEEN!

RICE MARKETING ACT 1983

Appointment of elected members to

The Rice Marketing Board

Her Excellency Professor MARIE BASHIR, A.C., C.V.O., Governor

I, Professor MARIE BASHIR, A.C., C.V.O., Governor of the State of New South Wales, with the advice of the Executive Council pursuant to section 11 of the Rice Marketing Act 1983, hereby approve the appointment of Mr Noel Graham, Ms Gillian Kirkup and Mr Gerry Lawson as the elected members of the Rice Marketing Board for a term of office commencing on and from the date of the Governor's approval until and including 13 December 2013.

Signed and seal at Sydney this 16th day of December 2009.

By Her Excellency's Command,

STEVE WHAN M.P., Minister for Primary Industries

GOD SAVE THE QUEEN!

STOCK DISEASES ACT 1923

Appointment of Inspector

Notification No: 512

I, RICHARD FREDERICK SHELDRAKE, Director-General pursuant to section 6(1) of the Stock Diseases Act 1923 ("the Act") hereby appoint Julie Dawn BOLAM-JOHNSON as an inspector for the purposes of the Act.

Dated this 11th day of December 2009

R. F. SHELDRAKE, Director-General Department of Industry and Investment

MINING ACT 1992

Order under Section 175 specifying the Conditions that are to apply to Mineral Claims within the Lightning Ridge Mineral Claims District

I, PETER PRIMROSE MLC, Minister for Mineral Resources, revoke all previous Orders made under Section 175 of the Mining Act 1992 and make the following Order pursuant to Section 175 of the Mining Act 1992, specifying the conditions that are to apply to mineral claims granted over land within the Lightning Ridge Mineral Claims District.

1. Classes of mineral claims

The following types (classes) of mineral claims can be granted in Lightning Ridge Mineral Claims District. Claims not fitting into the following classes are not permitted to be granted.

CLASS A	Size:	Claim area must not exceed 2,500m2.
Standard Mineral Claim	Shape:	Claim should be square in shape with sides 50m x 50m.
		Claim may be granted over a different shaped area if physical or legal constraints make a square claim area impracticable. In such case no single side is to be greater than 100m.
	Permitted	Mining – Yes
	Operations*:	Prospecting – Yes
		Mining Purposes – Yes but only mining purposes related to mining operations carried out on the claim. Wet processing (opal puddling) is not permitted.
CLASS B A person who is, at the time of lodgement of an application for a mineral claim, the	Size:	Claim area must not exceed 2 hectares.
holder of an opal	Shape:	Claim must not have any side being greater than 200m in length.
prospecting licence (being a licence having a term of 3 months)		The claim area must be wholly within the boundary of the relevant opal prospecting licence.
	Permitted	Mining – Yes
	Operations*:	Prospecting – Yes
		Mining Purposes – Yes but only mining purposes related to mining operations carried out on the claim. Wet processing (opal puddling) is not permitted.
CLASS C A person who is, at the time of lodgement of an application for a mineral claim, the holder of an opal prospecting licence (being a licence having a term of 28 days)	Size:	Claim area must not exceed 2 hectares.
	Shape:	Claim must not have any side being greater than 200m in length.
		The claim area must be wholly within the boundary of the relevant opal prospecting licence.
	Permitted	Prospecting: Yes.
	Operations:	Mining and Mining purposes not permitted.
CLASS D Mining Purpose –	Size:	Claim area must not exceed two hectares.
processing,	Shape:	Claim must not have any side being greater than 200m in length.
	Permitted	Mining: No
	Operations:	Prospecting: No
		Mining Purposes: Yes - "processing" only, subject to 5(c) below
CLASS E Mining Purpose –	Size:	Claim area must not exceed two hectares.
Mullock stockpiling	Shape:	Claim must not have any side being greater than 200m in length.
	Permitted	Mining: No
	Operations:	Prospecting: No
		Mining Purposes: Yes - stockpiling or depositing of overburden, ore or tailings only

OFFICIAL NOTICES

CLASS F Prospecting Claim	Size:	Claim area must not exceed two hectares.
areas within the boundaries of Opal Prospecting Areas 1,	Shape:	Claim must not have any side being greater than 200m in length.
2 & 3, but not within opal prospecting	Permitted	Prospecting: Yes.
blocks in the Narran- Warrambool mining reserve	Operations:	Mining and Mining purposes not permitted.
CLASS G	Size:	Claim area must not exceed two hectares.
	Shape:	Claim must not have any side being greater than 200m in length.
	Permitted	Mining: Open Cut Mining Operations.
	Operations:	Prospecting: Only in conjunction with open cut mining operations.
		Mining Purposes: Yes but only mining purposes related to mining operations carried out on the claim. Opal Puddling not permitted.

* subject to claim conditions and special condition 5.

2. Restrictions on minerals:

(a) Mineral claims may be granted in respect of opal only.

3. The maximum number of mineral claims that may be held by any one person:

- (a) A Class A, B, C and D mineral claim must not be granted to a person if the grant would result in the person holding more than 2 claims (in total) from Classes A, B, C and D at the time of grant.
- (b) A Class F mineral claim must not be granted to a person if the grant would result in the person holding more than 2 Class F claims at the time of grant.
- (c) A Class G mineral claim must not be granted to a person if the grant would result in the person holding more than 2 Class G claims at the time of grant.

Note: There is no restriction on the number of mineral claims of Class E that may be held by any one person at any *point in time.*

4. The period for which a mineral claim is to have effect:

- (a) Mineral claims of Class A may be granted for a term of up to 2 years and may be renewed for terms of up to 2 years each renewal.
- (b) Mineral claims of Class B may be granted for a term of up to 12 months and may be renewed once only for a further term of up to 12 months.
- (c) Mineral claims of Class C and F may be granted for a term of 70 days and will not be renewed.
- (d) Mineral claims of Class D, E and G may be granted for a term of up to 5 years and may be renewed for terms of up to 5 years each renewal

5. The Nature and Extent of Prospecting and Mining Operations that may be Carried Out in respect of Mineral Claims:

- (a) This clause does not apply to mineral claims of Class C, D, E, F and G.
- (b) Subject to (c), a mineral claim holder must not in a mineral claim area:
 - (i) conduct open cut operations,
 - (ii) use a dry rumbler, a wet rumbler or other motorised revolving drum for the purpose of opal puddling,
 - (iii) use power operated equipment or machinery.
- (c) In 5(b)iii "power operated equipment or machinery":
 - (i) includes:
 - a bulldozer, ripper (whether self propelled or towed), backhoe, dragline, cable scraper, face shovel, front end or overhead loader, skimmer, grab, bucketwheel excavator, trench cutter, grader, or suction pump,
 - (ii) but does not include any:
 - hand held pneumatic or electric pick, hammer or road breaker;
 - shaft sinking equipment or machinery or drilling or boring equipment or machinery when used to sink a vertical or near vertical shaft or exploratory shaft, drill hole or borehole;
 - windlass winch or elevator for transporting mined or excavated material to the surface; or,
 - equipment or machinery used to: load and transport previously mined or excavated material to a treatment plant; fill in, make safe or securely protect any shaft or excavation

- (d) The restriction in 5(b) does not apply if operations are conducted in accordance with an approval issued by the Director-General.
- (e) Nothing in these conditions prevents a mineral claim holder from carrying out such works as are necessary to comply with any lawful direction issued under any Act or Regulation.

6. Miscellaneous

(a) The holder of a mineral claim must within 14 days of the date of the grant of a mineral claim fix to each picket or post defining the area of the mineral claim a tag on which is legibly stamped the number of the mineral claim.

7. Levies payable in respect of mineral claims and the purposes for which those levies may be applied

(a) The following levies are to be paid on the grant or renewal of any mineral claim by the applicant for the claim, to the Department of Primary Industries:

Levy Payable	Purpose for which the levy may be applied
Environmental Levy of \$20.00 for each year or part thereof	Rehabilitation and environmental maintenance work on areas not currently held under mineral claim.
Roads Levy of \$25.00 for each year or part thereof	Establishment of new roads, maintenance of roads; purchase, installation, repair of grids, gates, access signage.
Mullock Levy of \$10.00 for each year or part thereof	Maintenance and environmental rehabilitation work on stockpiles of mullock.

Dated this 25th day of November 2009.

PETER PRIMROSE, M.L.C., Minister for Mineral Resources

December 2009

A NSW Government Initiative

A NSW Government initiative of Department of Premier's and Cabinet, Department of Planning; Industry & Investment NSW; Department of Environment, Climate Change and Water; Land and Property Management Authority; Department of Local Government and NSW Food Authority to encourage sustainable land based aquaculture.

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Disclaimer

The information contained in this publication is based on knowledge and understanding at the time of writing. However, because of advances in knowledge, users are reminded of the need to ensure that information upon which they rely is up to date and to check the currency of the information with the appropriate officer of Industry & Investment NSW or the independent adviser.

Executive Summary

Aquaculture is one of the fastest-growing industries in the world. Already 50% of seafood consumed worldwide is produced through aquaculture. According to the United Nations' Food and Agriculture Organization it is estimated that at least an additional 40 million tonnes of aquatic food will be required by 2030 to maintain the current per capita consumption.

New South Wales is poised to capture a significant proportion of this projected growth. A growing number of viable aquaculture investment opportunities are being generated by the drive to satisfy increasing domestic and export demand, and by the competitive advantages (both natural and man-made) which this State offers.

New South Wales has large areas suitable for the development of land based aquaculture with access to high quality surface water, ground water, estuarine and marine waters. The State's transport and energy infrastructure are well developed with the capacity to service growth in the aquaculture sector.

Aquaculture industry participants and the NSW Government's regulatory agencies are very conscious of the need to ensure that the development of the aquaculture industry in New South Wales proceeds in a manner that does not jeopardise its ecological sustainability. Industry and government continue to invest heavily in research, technology and management practices to provide for the sustainable growth of this sensitive industry. Both recognise the environmental benefits arising from aquaculture, as well as the environmental conditions aquaculture needs to ensure the continuing high quality of its products.

The NSW Land Based Sustainable Aquaculture Strategy (NSW LBSAS) is made up of two interlinked sections – a best management section and an integrated approvals section so that projects can be established and operated to meet sustainability objectives.

The best management section provides the basis for the Aquaculture Industry Development Plan (AIDP) for land based aquaculture in NSW under the provisions of the *Fisheries Management Act 1994*. The AIDP identifies best management for business planning, species selection, site selection and design, planning and operation of the facility and includes the performance requirements for relevant environmental regulations.

Based on best practice in the AIDP a 'project profile analysis' has been established to provide an up-front preliminary assessment of the likely level of risk to the environment from aquaculture proposals. The project profile analysis provides the basis for streamlining approvals. Low risk proposals will require a statement of environmental effects to analyse potential environmental impact. Only those developments that are identified as high risk in the project profile analysis will require an Environmental Impact Statement (EIS). The project profile analysis is given effect under *State Environmental Planning Policy No 62 – Sustainable Aquaculture*.

The NSW LBSAS recognises the importance of the role of Industry & Investment NSW (I&I NSW) in extension and compliance. In addition to I&I NSW Officers being available to provide current information from research programs and advice on best practice in aquaculture management, they will be in the front line in ensuring best practice is followed.

The NSW LBSAS is designed to provide information to investors, government agencies and the community and to ensure that aquaculture enterprises in New South Wales are established and operated in a sustainable manner.

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DEFINITIONS

TERM	s apply as used in this Strategy: DEFINITION		
Acid Sulfate	Acidic soil material resulting from the oxidation of iron sulfides. 'Acid Sulfate Soils' means		
Soils (ASS)	actual acid sulfate soils and/or potential acid sulfate soils. 'Actual Acid Sulfate Soils' are soils		
	containing highly acidic soil horizons or layers resulting from the aeration of soil materials that		
	are rich in sulfides, primarily iron sulfide. This oxidation produces hydrogen ions in excess of		
	the sediment's capacity to neutralise the acidity resulting in soils of pH of 4 or less		
Australian Hoight	A common national place of level corresponding approximately to mean sea level.		
Australian Height Datum (AHD)	A common national place of level corresponding approximately to mean sea level.		
Aquaculture	The cultivation of aquatic animals or marine vegetation for the purpose of harvesting the		
	animals or marine vegetation, or their progeny for sale, or the keeping of animals or marine		
	vegetation in a confined area for a commercial purposes.		
Aquifer	A layer of rock or soil which holds water in sufficient quantity to provide a source of water that		
quitor	can be tapped by a bore.		
Average	It represents a flood that has a particular probability of occurring in any one year. A 1 in 100		
recurrent interval	ARI flood is a best estimate of a flood which has on average, 1 chance in 100 of occurring in		
(ARI) flood event	any one year. It is important to acknowledge that the 100 year ARI event may occur more		
ANI) NOOU EVENI	than once in a 100 year period as the definition of the event is that it occurs once, on average		
	in 100 years.		
Diaskamiaal			
Biochemical	The quantity of oxygen used in the biochemical breakdown of organic matter in the effluent		
Oxygen Demand	expressed in milligrams per litre or ppm.		
(BOD)			
Broodstock	A parent fish.		
Catchment Area	A drainage area, eg. for a reservoir, river or river reach.		
Closed system	An aquaculture facility where there is no direct discharge of water to a waterway.		
Discharge	Treated water discharged from ponds, hatcheries etc that may be reused in the ponds or for		
Nater/effluent	irrigation or may be discharged to waterways.		
Dissolved	The amount of oxygen dissolved in water expressed in milligrams per litre or ppm. In ponds it		
Oxygen (DO)	is a measure of the stability of the water environment. The colder the water, the greater the		
	amount of oxygen that can dissolve in it. In freshwater, oxygen is soluble up to 14.6 mg/L at		
	0°C, and up to 8.4 mg/L at 25°C. Fish and other aquatic organisms generally require more		
	than 2 mg/L of DO to survive.		
Endangered	The species is likely to become extinct in nature if threats continue, or its numbers are		
Species	reduced to a critical level, or its habitat is reduced.		
Endemic Species	A species confined in occurrence to a local region.		
Environmental	The potential biophysical, social and/or economic effects of a project on the community or the		
Impact	natural environment		
Environmental	A detailed assessment on the potential effects of a Class 3 project (See Chapter 9). It should		
Impact Statement	be prepared by an appropriately qualified person and must stand up to rigorous community		
(EIS)	and agency review. The EIS must address all matters requested by the consent authority.		
Estuarine	Estuary means any part of a river whose level is periodically or intermittently affected by		
	coastal tides or any lake or other partially enclosed body of water that is periodically or		
	intermittently open to the sea or anything declared by the regulations under the Water		
	Management Act 2000 to be an estuary.		
Estuarine waters	Saline waters sourced from an estuary as defined under the Water Management Act 2000.		
Fish	Means any marine, estuarine or freshwater fish or other aquatic animals life at any stage of		
	their life history (whether dead or alive). Fish includes oysters and other aquatic molluscs,		
	crustaceans, echinoderms and beachworms and other aquatic polychaetes. It also includes		
	any part of a fish but does not include whales, mammals, reptiles, birds, amphibians or other		
	things excluded from the definition by regulations.		
Flood planning	Area below the flood planning level (FPL). Many Councils use the 100 year flood event plus a		
area	0.5 m freeboard as the basis for defining the FPL and therefore the flood planning area. (see		
	floodplain development manual)		
Food conversion	Food conversion ratio (FCR) is the ratio of dry weight of food to the wet weight gain of the		
Food conversion			
ratio	fish. The lower the ratio, the more efficiently food has been converted.		
Groundwater	Underground waters (aquifers).		
Growout	Stage and/or unit where the cultivation of aquatic animals is undertaken from initial seeding of		
	young fry or juveniles up to harvesting of marketable sizes.		
Health Certificate	A certificate issued by a competent authority attesting to the health status of a shipment of		
	aquatic animals and/or their production facility.		
Indigenous	A species native to a particular region or country.		
Species			

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TERM	DEFINITION
Intensive	Aquaculture undertaken by providing supplementary food for the fish or marine vegetation
Aquaculture	that are being cultivated (whether or not naturally occurring food is consumed or available for
	consumption by the fish or marine vegetation).
Introduced	A species introduced into an area where it does not naturally occur.
Species	
L ou décrim	Devision of the landforms above staving distinctive plane, share, size, forms and type of
Landform Element	Part of the landform characterised by a distinctive slope, shape, size, form and type of geomorphologic processes (eg. alluvial) active on it.
Open system	An aquaculture facility which discharges on average between 15 to 100% per day of its
open system	culture water directly to a waterway. This system is sometimes refered to as a flow through
	system.
Pathogen	An infectious agent capable of causing disease.
Permeability	The ease with which water can penetrate or force its way through rocks, gravel and soils.
	Coarse sand and gravel permit rapid flow and are rated as highly permeable materials.
	Microscopic pores in clay impede flows; such soils are considered impermeable or of low
	permeability for dike and dam constructions.
рН	A measure of acidity or alkalinity of a substance.
PMF or Probable	The PMF is the largest flood that could conceivably occur at a particular location, usually
Maximum Flood	estimated from probable maximum precipitation, and where applicable, snow melt, coupled
	with the worst flood producing catchment conditions. Generally, it is not physically or
	economically possible to provide complete protection against this event. The PMF defines the
	extent of flood prone land, that is, the floodplain. The extent, nature and potential
	consequences of flooding associated with a range of events rarer than the flood used for
	designing mitigation works and controlling development, up to and including the PMF event should be addressed in a floodplain risk management study. (see floodplain development
	manual)
Project Profile	A matrix of environmental and operational factors for ranking the level of environmental
Analysis	design and operational factors and the level of environmental risk in relation to the siting,
	establishment and operation of an aquaculture development in relation to those factors (See
	chapter 9).
Pond	Type of aquaculture undertaken predominantly in ponds or dams (including any part of the
Aquaculture	aquaculture undertaken in tanks such as during the hatchery or depuration phases), but not
•	including natural water-based aquaculture.
Quarantine	The holding of aquatic animals or plants in an isolation facility.
Reconditioned Water	Water from culture units that has been treated by physical, biological and chemical processes to remove waste products.
Recycled Water	Wastewater from ponds, tanks or hatcheries that has been treated and re-used for culture.
Saline	Saline water sourced from a bore or inland saline interception scheme.
groundwater	
Salinity	The measure of salt concentration of water in ponds, tanks or hatchery expressed in part per
	thousand or ppt.
Semi closed	An aquaculture facility which discharges on average less than 15% per day of its culture
system	water directly to a waterway.
SEPP	State Environmental Planning Policy as an instrument pertaining to issues of State
	Environmental Planning significance made under section 39 of the Environmental Planning
0	and Assessment Act 1979.
Statement of	A detailed assessment of the potential effects of a Class 1 or 2 project.
Environmental	
Effects (SEE) Stocking	Number of animals per square metre of effective pond area.
Densities	Number of animals per square metre of enective point area.
Suspended	The mass of particulate matter (organic and inorganic) that is suspended in the water.
Solids	
Tank	Type of intensive aquaculture that utilises recirculating water technology in tanks (eg.
Aquaculture	hatcheries and tank aquaculture of barramundi, and abalone).
Vulnerable	A species that will become endangered unless mitigating action is taken against its threats.
Vulnerable	A species that will become endangered unless mitigating action is taken against its threats.
	A species that will become endangered unless mitigating action is taken against its threats. Untreated water discharged from ponds, tanks, hatcheries, etc. Generally refers to creek, river, wetland, waterbody or groundwater.

ACRONYM	S
AHD	Australian Height Datum
AIDP	Aquaculture Industry Development Plan
ANZECC	Australian and New Zealand Environment and Conservation Council
ASS	Acid Sulfate Soils
BCA	Building Code of Australia
BOD	Biological Oxygen Demand
CMA	Catchment Management Authority
DA	Development Application
DECCW	Department of Environment, Climate Change and Water
DGR's	Director General requirements (Department of Planning)
DLG	Department of Local Government
DLWC	Former Department of Land and Water Conservation
DO	Dissolved Oxygen
DoP	Department of Planning
EA	Environmental assessment
EC	Electrical Conductivity
EIS	Environmental Impact Statement
EP&A Act	Environmental Planning and Assessment Act 1979
FCR	Food conversion ratio
GIS	Geographical Information System
HACCP	Hazard Analysis Critical Control Point
I&I NSW	Industry & Investment NSW (incorporating former Department of Primary
	Industries and the Department of State and Regional Development)
IDA	Integrated Development Assessment
LEP	Local Environment Plan
LPMA	Land and Property Management Authority (formerly Department of Lands)
MHWN	Mean High Water Neap
MLWN	Mean Low Water Neap
NOW	NSW Office of Water
PCA	Principal certifying authority
рН	Acidity or basicity of water; Amount of Hydrogen-ion concentration
PMF	Probable Maximum Flood
POEO Act	Protection of the Environment Operations Act 1997
PVP	Property Vegetation Plan
RAMSAR	Convention on Wetlands of International Importance (Ramsar Convention)
REP	Regional Environmental Plan
RTA	Road Transport Authority
SEE	State Environmental Effects
SEPP SIS	State Environmental Planning Policy
VENM	Species Impact Statement
VENM WQO's	Virgin Excavated Natural Material Water quality objectives
1140 5	water quality objectives

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Acknowledgment

The NSW Aquaculture Strategy Steering Group developed the NSW Land Based Sustainable Aquaculture Strategy (NSW LBSAS) as an extension of the NSW State Government's Aquaculture Initiative. The steering group would like to thank all those who contributed to the development of the NSW LBSAS by making submissions. The steering group will continue to liaise with all stakeholders in implementing the NSW LBSAS and reviewing it from time to time.

The following have contributed through the State Aquaculture Strategy Steering Group to the development of the NSW LBSAS.

Industry & Investment NSW Primary Industries Graeme Bowley, Ian Lyall, Tim Gippel,

State & Regional Development

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NSW Ofice of Water

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Department of Environment, Climate Change and Water. Mark Gifford, Rei Beumer, Duncan McLuckie, Glenn Atkinson.

Food Authority

Phil Read.

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For further Information

For technical advice Aquaculture Management Unit Industry & Investment NSW Port Stephens Fisheries Research Institute Locked Bag 1, Nelson Bay 2315 02 4982 1232 www.dpi.nsw.gov.au/fisheries/aquaculture

To obtain copies of the Strategy

Copies of the document can be accessed from Industry & Investment NSW website.

Please note that this document has been compiled using linkages to relevant websites which contain detailed information regarding the topic being discussed in the text. The electronic version of this document contains numerous links to relevant websites and these links are indicated by blue text. To activate these links please place your curser in the word and then press the left mouse button and the web page should open. The printed form of this document contains a number of the key links both within the document and also listed in Appendix 2. The web links were active at the time of preparation of this document and may refer to previous government agencies that were in the process of being amalgamated into a new department at the time of writing. The electronic web version of this document will be amended once government agency amalgamations have been completed and their respective websites updated.

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1.1 Introduction

The NSW Land Based Sustainable Aquaculture Strategy (NSW LBSAS) provides information on best practice for land based aquaculture and establishes a streamlined approvals process for land based aquaculture in NSW. The information is provided in two sections:

- Section 1: Aquaculture Industry Development Plan under the *Fisheries Management Act* 1994.
- Section 2: Assessment and approvals under the *Environmental Planning and Assessment Act* 1979.

The detailed sections of the NSW LBSAS will assist you in analysing a proposed project and assist in completing the project profile analysis tables found in Chapter 9 along with any environmental assessments required.

In addition, NSW government agencies are available and willing to assist proponents with information and advice. Key web links for additional information are contained in Appendix 2.

Aquaculture within public waterways is not dealt with in the NSW LBSAS. However, land based aquaculture may access water from public waterways including rivers, estuaries and the ocean.

1.2 What is land based aquaculture?

Aquaculture means the breeding, growing, keeping and harvesting of fish or marine vegetation with a view to sale or commercial purpose. The NSW LBSAS uses the definition of aquaculture given in the *Fisheries Management Act 1994*.

The NSW LBSAS covers the following types of land based aquaculture which may be used to produce fish for food, fish stocking and the ornamental trade, namely:

- Pond aquaculture systems using estuarine, marine, saline groundwater or fresh water for growing species.
- Tank aquaculture systems using estuarine, marine, saline groundwater or fresh water for growing species.

1.3 Critical success factors

Some critical factors to consider and resolve when deciding whether an aquaculture venture may be feasible include:

- Water access to abundant good quality water;
- Land predominantly freehold land that is zoned appropriately (Crown land may be used for pipelines or other services) and free of constraints to the proposed development;
- Stock reliable access (numbers and time of year) to juveniles of your selected fish species;
- Feed access to quality feed that ensures the physiological requirements of your selected fish species;
- **Markets** access to established markets or the ability to establish new markets;
- Finance initial finance required for total capital expenditure plus 2 years operating expenses;
- Profitability development of a sound business plan.

1.4 Strategy purpose and vision

The purpose of the NSW LBSAS is to detail best practice guidelines which promote ecologically sustainable development (ESD) of the land based aquaculture industry in NSW. It aims to simplify the approvals process giving greater certainty to investors and the community.

The vision for the land based aquaculture industry in NSW is for a thriving, economically and environmentally sustainable industry.

1.5 Ecological sustainable development

ESD is not just about the environment, but also about the viability of businesses and the broader community's well being. The principles of ecologically sustainable development were adopted by all Australian governments in the National Strategy on ESD (1992) which states that we should be:

'Using, conserving and enhancing the community's resources so that ecological processes, on which life depends, are maintained, and the total quality of life, now and in the future, can be increased.'

ESD has become a major objective of all NSW natural resource management, environment protection and planning legislation. A key object of the *Fisheries Management Act 1994*, is to promote ecologically sustainable development and this is being met in part through the development of statewide sustainable aquaculture strategies. ESD is now accepted as the foundation for aquaculture management in NSW.

The relevant definition for ESD in NSW is given in the *Protection of the Environment Administration Act 1991*, (s.6), which states:

Ecologically sustainable development requires the effective integration of economic and environmental considerations in decision-making processes. Ecologically sustainable development can be achieved through the implementation of the following principles and programs:

(a) the precautionary principle—namely, that if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.

In the application of the precautionary principle, public and private decisions should be guided by:

- (i) careful evaluation to avoid, wherever practicable, serious or irreversible damage to the environment, and
- (ii) an assessment of the risk-weighted consequences of various options,
- (b) inter-generational equity—namely, that the present generation should ensure that the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generations,
- (c) conservation of biological diversity and ecological integrity—namely, that conservation of biological diversity and ecological integrity should be a fundamental consideration,
- (d) improved valuation, pricing and incentive mechanisms—namely, that environmental factors should be included in the valuation of assets and services, such as:
 - (i) polluter pays—that is, those who generate pollution and waste should bear the cost of containment, avoidance or abatement,
 - (ii) the users of goods and services should pay prices based on the full life cycle of costs of providing goods and services, including the use of natural resources and assets and the ultimate disposal of any waste,
 - (iii) environmental goals, having been established, should be pursued in the most cost effective way, by establishing incentive structures, including market mechanisms, that enable those best placed to maximise benefits or minimise costs to develop their own solutions and responses to environmental problems.

The principles of ESD are integrated into NSW LBSAS by:

- Identifying areas where land based aquaculture is a permitted land use and ecologically sustainable through implementing measures that will lead to the protection of the environment in those areas;
- Describing best operational and management practices based on ESD principles.

For the land based aquaculture industry, adopting ESD principles will:

- Provide a pathway to address issues affecting the industry's long-term survival;
- Put in place a systematic and recognised means of establishing the industry's resource management credentials with regulatory agencies, seafood consumers and the community;
- Support the industry's position as a legitimate user of water resources and crown land (eg. pipelines);
- Result in improved development outcomes that provide greater certainty and a simplified assessment and decision making process.

For individual farmers the potential benefits are to:

- Safeguard business profitability through maintaining access to existing markets, accessing new 'green' markets and reducing the cost of production;
- Gain the support of the local community and reduce the risk of conflict with neighbours;
- Understand obligations to comply with environmental and planning legislation so that the risk of breaches can be minimised;
- Have ongoing continual improvement that will help the business keep pace with developments in environmental legislation and community expectations.

For the broader community the potential benefits are:

- Improved environmental outcomes that address cumulative issues and provide effective indicators of sustainability;
- Increased certainty in the nature and operation of the industry;
- Increased confidence in the environmental performance of the industry;
- Improved employment outcomes with an improvement in industry viability;
- Improved outcomes for regional NSW with a coordinated approach to providing sustainable land based aquaculture investment opportunities.

1.6 Implementation and legislation

The implementation of NSW LBSAS requires effective collaboration between government, industry and the community. The NSW LBSAS brings together the interests of economic development, land use planning and sustainable natural resource management to form a partnership that can lead to sustainable land based aquaculture and generate employment in regional NSW.

I&I NSW is the key agency responsible for delivery of the on-the-ground outcomes of the NSW LBSAS. Local government and State agencies share responsibility for development assessment processes.

Section one of the NSW LBSAS establishes details for an Aquaculture Industry Development Plan under s.143 of the *Fisheries Management Act 1994* with section two providing revised planning provisions for the NSW land based aquaculture industry to be gazetted under State Environmental Planning Policy 62 – Sustainable Aquaculture.

1.7 Performance indicators and review

The *Fisheries Management Act 1994*, requires performance indicators to be established within an AIDP to determine if the objectives set out in the plan are being achieved. The plan must also specify at what point a review is required if these performance indicators are not being met.

I&I NSW will report annually on the performance indicators. This report shall consider the need to update or review the NSW LBSAS generally or in relation to particular culture systems or particular aspects of environmental performance. New species, improved land based farming practices and management responses to emerging issues will also be considered. The NSW LBSAS will be reviewed in five years, or earlier if triggered by the performance indicators given in Table 1.

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Indicator	Measure	Trigger for review	
1. Number of new or expanded aquaculture permits per annum	Reflect effectiveness of objective to encourage aquaculture industry development.	Less than 5 aquaculture permits per annum	
 Percentage of aquaculture farms providing Industry & Investment NSW with 'acceptable' compliance reports per annum 	Reflect effectiveness of the industries acceptance of responsibility for environmental performance.	Less than 90% per annum	
 Surface area of estuary pond farms per estuary compared with area suitable for estuarine pond farms in estuary 	Potential cumulative water quality issues	Greater than 10% of area suitable for estuarine pond farms in an estuary developed.	
 Percentage of designated development proposals or Part 3A. 	Reflect the effectiveness of objective to encourage lower risk projects	Greater than 30% of aquaculture projects being designated development or Part 3A.	
 Number of years since review (if not triggered for other reasons) 	Potential to become out of date with advice no longer reflecting the most sustainable approach.	Greater than 5 years since gazettal or last review.	

Table 1. Triggers for review of the NSW Land Based Sustainable Aquaculture Strategy.

1.8 Developing and implementing the NSW LBSAS

The initial ideas for the NSW LBSAS were developed through a working group of government agency representatives. The working group consolidated the regional North Coast and the Hunter & Central Coast Sustainable Aquaculture Strategies along with some preliminary work undertaken to develop strategies for the South East and Riverina – Murray regions to provide for an overaching Statewide sustainable aquaculture strategy.

The aim was to develop innovative ways to overcome 'red tape' associated with approvals for aquaculture development. Following this initial process, input was sought from both industry and community stakeholders.

The major stakeholders in the NSW LBSAS are:

- the private sector aquaculturalists and other business people investing in aquaculture;
- State and local government I&I NSW is the major State Government participant, delivering on the ground outcomes in four action areas (see Figure 1). Local Council or Department of Planning for development consent and integrated approvals (see Figure 1);
- the NSW Aquaculture Steering Group providing technical assistance regarding legislative requirements, performance standards and monitoring protocols;
- general Community.

The partnerships between government, industry and the community are essential to:

- maximise efficiencies and competitive advantages for new and expanding aquaculture projects;
- avoid duplication of effort by applicants and agencies;
- streamline assessment and approval processes provided that environmental requirements and criteria are met;
- provide incentives to adopt best practice guidelines in aquaculture;
- strategically consider projects by assessing the environmental impacts both at the individual project level and cumulatively in a catchment.

Implementation of the NSW LBSAS falls into four distinct areas as shown in Figure 1.

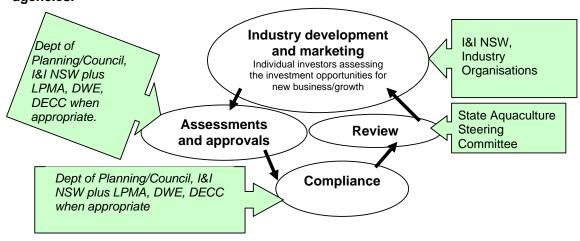
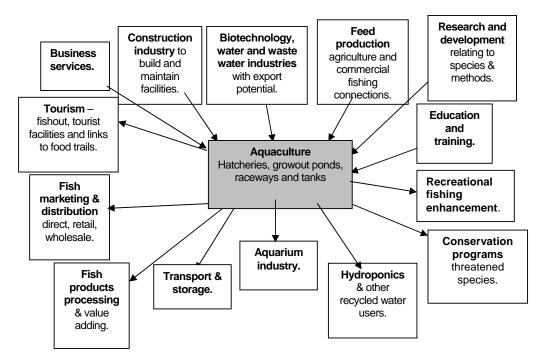


Figure 1. NSW LBSAS implementation – the four key areas and key government agencies.

1.9 Investment and employment

Aquaculture is estimated to employ up to one full time person per 2 hectares of ponds (plus casual labour during busy periods). In addition, it is an industry with significant flow-on value and employment benefits for regional communities, as well as export potential. If aquaculture is integrated into the local tourism industry, such as has happened on the Eyre Peninsula in SA, the flow on employment value of the industry is greatly increased. Figure 2 summarises the multiple employment and investment opportunities that aquaculture has the potential to generate.





2. The Aquaculture Industry Development Plan

What is the AIDP?

The Aquaculture Industry Development Plan (AIDP) is one of the two components of the NSW LBSAS. It provides a best practice approach to environmental management that aims to attract investment and employment in economically and environmentally sustainable land based aquaculture by:

- reinforcing within the aquaculture industry environmentally sustainable practices and a duty of care for the environment in which the industry is located;
- ensuring environmental factors are considered during site selection for new aquaculture enterprises;
- ensuring environmental factors are considered during the planning, design and operation of all aquaculture enterprises;
- providing the technical basis for the efficient and effective regulation of the industry with up-front certainty to applicants, the community and decision makers as to the appropriate environmental performance of aquaculture businesses.

Current industry operators and new investors are expected to meet the environmental performance objectives. Further, there is an expectation of continuous improvement in environmental performance. In practice this means the encouragement of approaches which provide outcomes above those outlined in the AIDP (best practice at the time of developing this publication).

Figure 3 summarises the five key components of the AIDP. The numbering of key component in Figure 3 cross references it to the relevant chapters of the AIDP (section one) in the NSW LBSAS.

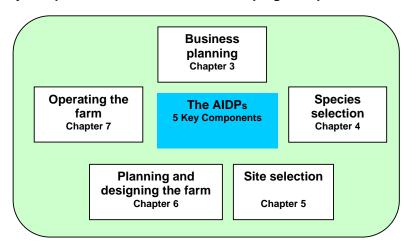


Figure 3. Key components of the AIDP for developing an aquaculture venture.

3. Business Planning

Remember the old saying: 'most people do not plan to fail, they simply fail to plan'.

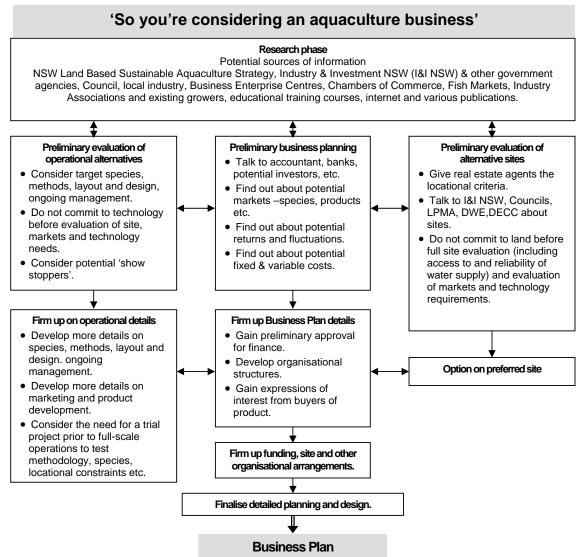
3.1 Introduction

The success of an aquaculture venture will primarly be determined by its ability to operate as a profitable business. Large purpose built facilites will normally start by identifying a market, then selecting a species, a site and suitable culture technology in that order.

However, if you already own a site or have previous experience with a particular species or method you will probably be inclined to build on these existing assets. In this case, you must still come back to considering the market for your product as an essential part of deciding if the venture is viable.

No two businesses are exactly the same and therefore a business plan specifically addressing your production and marketing issues needs to be one of the first things to be developed. The business plan acts as a blueprint for the future operation and growth of the business. Figure 4 summarises the process of preparing a business plan

Figure 4. Business and project planning.



The business plan will need to demonstrate solid reasoning behind your aquaculture business and the justification for financial support. Its importance cannot be over-stated as potential investors or financial institutions will use it to evaluate the business and many will be unfamiliar with aquaculture.

Business plans can take various formats, depending on the type and source of funding sought. Before you start writing your business plan it is useful to do some background preparation. In addition to the information contained within this document additional information can be found using the following web link, www.smallbiz.nsw.gov.au. Also, project management software packages are available that enable you to store, document, report and monitor your business.

A Commercial Farm Development Plan (CFDP) is required under the *Fisheries Management Act 1994* as part of the application for an aquaculture permit. The requirements of the CFDP will be predominantly addressed by the business plan developed for your aquaculture farm. Therefore, the business plan can either be used to complete the CFDP or if it addresses all of the matters within the CFDP, it can be submitted as your CFDP.

3.2 The business and its structure

Sole proprietorship is a common organisational structure for NSW aquaculture enterprises. Factors affecting structure choice may include access to resources, management issues, long term plans, interrelationships, liability and taxation issues.

You should seek advice from a business planner, accountant and/or legal advisor about the options and potential of different business structures and how they may affect an aquaculture business at different phases of development.

3.3 Marketing feasibility

The aim of commercial aquaculture is to maintain a profitable business. Therefore, the business requires the production of sufficient quantities of marketable product and the ability to receive a market price greater than the production costs.

All too often, a decision is made to farm a species based on production factors with little consideration given to market acceptance and price. A marketing plan is a core part of the business plan, and helps determine the marketing strategy. Developing the marketing plan is often the hardest part of an aquaculture business plan. Getting it right can fundamentally influence the businesses profitability.

Help is at hand

Potential sources for business information and consumer data include: Regional Development Boards, Department of State and Regional Development, NSW Business Advisory Service, Business Enterprise Centres, Chambers of Commerce or the Yellow Pages.

The Sydney Fish Market is a key source of information on market trends and opportunities.

A tip!

Farmer networks can help ensure that a consistent and reliable supply of quality product is supplied to meet market specifications and requirements. This will help increase demand and smooth out periods of glut and short supply, thereby leading to more reliable prices for the farmed products. Industry groups are better placed to develop quality assurance programs and promote markets for new aquaculture products than individual producers. (See NSW Aquaculture Directory)

The domestic market

The main areas of the domestic seafood market are:

- Live seafood market. Generally returns higher prices than chilled product; has the added value of freshness but can have a degree of risk/costs associated with harvest, holding and transport;
- High volume markets for fresh seafood. Chilled product, including cooked, fresh chilled, filleted, head on gilled and gutted, frozen, vacuum packed or smoked. There is a risk that this higher volume market will return lower prices and in some cases insufficient to cover production costs;
- Restaurants and seafood retailers. Direct sale in live and/or slaughtered form;
- Recreational markets. eg. tourism (Fishouts), aquarium trade and fishing bait.

Export markets

Wild fisheries are expected to plateau or decline over coming years and aquaculture product has the potential to fulfill shortfalls in supply. Australia is well placed to meet these shortfalls however, establishing export markets requires comprehensive research and marketing.

Factors affecting market value and price

The price can vary between market sectors and geographic locations. There can be significant differences in price between local markets and the Sydney, Brisbane and Melbourne markets, and between wholesalers, retailers (supermarkets and fishmongers), restaurants and the take-away-food sector.

It is essential to be well informed regarding the cost implications in getting your product to market and the likely differentials in returns. The lowest acceptable price once both fixed and variable costs have been factored in should be equal to the cost per kilogram (including profit) to produce the product.

Positioning

In some cases, product can be 'positioned' to maximise returns by creating or utilising boutique markets. This may be achieved as individual or regional producers under the banner of aquaculture associations or cooperatives. The implementation of quality assurance protocols helps maintain a quality product through emphasis on careful handling, cleaning, processing, packaging, reliable transport and quality service.

Promotion

Product promotion is essential and one of the best forms of promotion is the product's reputation supported by a quality assurance protocol. Individual business promotion may dovetail with the promotion of the State, region or the industry as a whole. Promotion through regular appearances at regional or promotional events, markets and direct contact with customers is effective, particularly as it provides opportunity for customer feedback.

Quality assurance

A quality assurance program is necessary to ensure consistent quality of product. All products should meet the National Food Standards and will be required to meet NSW Food Authority requirements. (See also Australian Seafood Industry Quality Assurance Project by Seafood Services Australia).

Packaging and presentation

Packaging and presentation must be considered, especially in the retail market. The use of well designed innovative packaging can add value and increase returns, especially for speciality products.

Market acceptance

Market acceptance is critical. You must do your own research as market acceptance can change for a wide range of reasons.

Distribution

Market location including the distance to market and the logistics of supplying the products is another major practical business planning issue. You will need to determine available delivery options (eg. using agents, distribution companies or own staff) and costs in reaching your markets.

Direct deliveries to speciality markets often have the greatest potential for the highest return per kilogram. However, the full cost in terms of staff time (lost from production activities), equipment, vehicle costs, packaging, ice, plastic bags, boxes, labels, etc should be considered.

Tourism

Tourism may have potential for additional returns, but must warrant the added expense. It is important that the full cost of a tourism component to the business (eg. customer amenities, insurance, sales display area, equipment and additional staff costs) and costs associated with disruption to the daily operations of the farm. Tourism projects may include fishouts or guided tours (see Planning and Design Chapter).

3.4 **Production feasibility**

Once the business planning has determined that there is a potential market for the product, a full production feasibility assessment is undertaken. Preliminary research on this topic should be undertaken as any barriers in production could have implications for the long term viability of the business. The production feasibility assessment should consider all fixed and variable costs, including:

- the site's suitability (see the Site Selection chapter);
- the species to be produced (caution should be exercised in trialling new species, species with difficult production phases or no species specific commercially available feed);
- production methods;
- feed costs and food conversion ratio (FCR);
- infrastructure requirements (caution should be exercised in respect of expensive technical rearing and husbandry equipment);
- staff the availability of suitably experienced and skilled staff or advisers and/or access to appropriate training and instruction so that the enterprise can run smoothly;
- management including the ability of management to make decisions and take actions for the reliable production of product;
- quality controls.

In the production feasibility analysis, slight changes in cost of feed, juveniles, power, labour and health management should be considered to test the sensitivity of the production viability.

3.5 Financial feasibility

A cash flow projection (statement) is required within the business plan to help predict possible cash deficits as well as profitability. It is critical for those enterprises where there will be a single harvest per year while the production and marketing expenses will be spread over the year.

It should also include timing of capital investments and managing of borrowings, particularly if future expansion is proposed in the business plan. A cash flow projection plan should include monthly budgets for preferably 3 years or until the operation is likely to be 'in the black'. In many operations, expenditure occurs in spurts, with higher costs experienced during stocking and harvesting when additional labour may be required. You need to distinguish between:

- Fixed costs those that do not change as production volume changes (eg. full time employee salaries, overheads, insurance and depreciation on ponds/tanks, plant and equipment);
- Variable costs those that change with production levels (eg. costs of juveniles, feed, chemicals, water, electricity and casual labour).

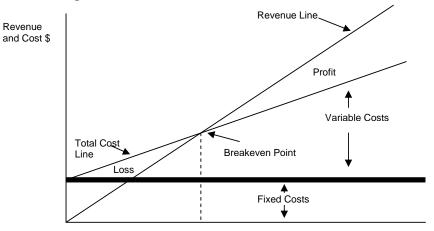
On the revenue side, there can be difficulties in making predictions because of price variability and harvest quantities. Therefore, it is essential that you consider variations in:

- sale price for various products in various markets;
- costs, including feed, water, juveniles, power and transport.

A risk analysis should also consider the short and longer term viability of the business if various scenarios occur. These may include:

- disease outbreaks and subsequent mortalities;
- constraints on water supply because of droughts or regulations;
- major or extreme flood events;
- variable interest rates;
- shortages in the availability of juveniles;
- domestic or overseas market constraints.

Figure 5. Considering fixed and variable costs.



Sales/Production Volume

Insurance

A comprehensive business plan greatly assists in acquiring insurances particularly stock insurance. Some policies are compulsory and others are essential to mitigate potential risks to the business. Examples of insurances that should be considered include:

- workers compensation;
- sickness and accident;
- key person;
- product liability;
- public liability;
- loss of profits;
- fire;
- burglary;
- machinery breakdown.

Under insurance as well as lack of insurance could endanger your business and it should be reviewed on a regular basis. Aside from those required by law, a good starting point is to assess the extent to which the business is at risk from potential hazards. You should discuss your

insurance requirements with an insurance broker, insurance company, accountant or legal advisor prior to commencing business.

3.6 Planning for continued success

Business planning doesn't stop once a business has been established – a business plan should be a living document. It needs to be checked from time to time (to ensure the marketing, production and financial strategies remain internally consistent and supportive of each other) and whenever there are major events or changes.

It is good practice to have a regular cycle of review, covering issues including:

- Past performance assessing the production yields and cost, quality and any other defined performance variables; and marketing and financial performance measures. It is then possible to compare actual with planned performance and make any necessary adjustments to the strategies;
- Strengths and weaknesses analysis including a comparative analysis of your business's performance (as best you can) compared with other growers. This 'benchmarking' review of your performance against others (quantity as well as quality and costs of production) will give some indication as to how the farm is performing;
- Opportunities and threats analysis you need to be aware of changes in markets and the potential for competition from within the region as well as interstate and overseas. Other changes in value adding, harvest size, transport, technology, cultivation species, species management, interest rates, etc. may offer opportunities as well as threats;
- Adjusting the plan as necessary you may need to make changes to your business plan as threats and/or opportunities arise.

Avoiding business failure

Aquaculture like any business has potential pitfalls that may hamper the development of a strong business. Some pitfalls include:

- for family operations, the death of the key person (who understood how to operate the farm) or marital/divorce problems or attempting to support too many family members, especially during start up times;
- natural disasters (flood, drought, extreme heat or cold, etc.);
- speculation without proper research of as yet undeveloped technologies;
- poor business plan with unrealistic returns;
- under capitalisation;
- poor production management;
- failure to realise that aquaculture is a farming business and that animals have specific physiological requirements which often requires attention 24/7;
- poor marketing;
- poor monitoring or record keeping of the production, financial and/or marketing aspects;
- appropriate/adequate information not used for decision making;
- lack of 'business' experience or skills;
- not planning for expenses such as professional fees and taxes.
- lack of reliable/experienced workers and managers.

3.7 Further information

There are many resources available to assist with preparing a business plan. The Internet is a useful source of information on aquaculture management and business planning in general. The following are some useful web links.

Australian Government Business Entry Point

www.business.gov.au

Industry & Investment NSW

www.dpi.nsw.gov.au/fisheries/aquaculture NSW Aquaculture Directory NSW Aquaculture Production Reports www.business.nsw.gov.au/ www.smallbiz.nsw.gov.au/

Sydney Fish Market

www.sydneyfishmarket.com.au

NSW Food Authority

www.foodauthority.nsw.gov.au

Seafood Services Australia

www.seafood.net.au

Seafood CRC

The Seafood CRC's mission is to assist end-users of its research to profitably deliver safe, highquality, nutritious Australian seafood products to premium markets, domestically and overseas.

National Aquaculture Council

The National Aquaculture Council (NAC) is the peak body representing the aquaculture industry across Australia. The NAC has established a website called the Australian Aquaculture Portal which has been developed in an attempt to centralise the growing body of information, research and business opportunities in the Australian aquaculture industry. The Australian Aquaculture Portal contains a number of useful links to Federal, State and Territory government agencies and aquaculture associations.

Local Council

Contact the economic development manager with your local Council for advice on site selection and planning issues.

Local tourist authority

Your local tourist authority may be able to provide advice on the tourism potential of a site, particularly a fishout or public sale outlet and how it may be linked with other regional tourism facilities.

Local Business Enterprise Centre (BECs)

BECs are able to assist with business start up and business planning issues. www.beca.org.au

Professional and trade sources

Equipment suppliers can also be a useful source of information on the latest technology. Professional associations also have helpful general information on planning and operating a successful aquaculture enterprise.

Universities & TAFEs

There are a number of Universities and TAFEs that run aquaculture courses in NSW oand other states. See the NSW Aquaculture trade directory.

NSW aquaculture associations

Industry associations can be a useful source information on the aquaculture industry in Australia. The I&I NSW website contains a trade directory which provides contact details for aquaculture associations, suppliers of aquaculture products and aquaculturalists.

4. Species Selection

4.1 Introduction

Aquaculture businesses and the species they culture are not restricted to the production of protein for human consumption. They can include production for conservation or recreational stockings, aquarium trade, production of pharmaceuticals or specialist health products, jewellery and feeds for other cultured/farmed organisms.

The decision to culture a specific species is determined by many factors, including:

- Is the species permitted for your intended aquaculture production method and location?
- Is there a ready supply of juvenile stock from hatcheries or will you need to breed the species yourself?
- Market analysis (eg. acceptability of product at a price that ensures a viable business);
- The biological feasibility of culturing the species (degree of control over the life cycle, spawning, egg incubation, larval and juvenile rearing or availability, growout and feed conversion, sensitivity to crowding, disease and handling); feed sources, availability and suitability to meet the physiological requirements of the species;
- Do you go for one or more species? (and if more than one, which species are most compatible);
- Site specific attributes (eg. size required to be profitable, degree of flood liability and associated development limits or controls, climate, water quality and quantity) – see Site Selection chapter;
- Management issues, including disease management see Operating the Farm chapter.

Generally a species that is already successfully cultured is selected however, this should not deter investigating a new species provided careful planning is undertaken including:

- Preliminary screening collection of information of the ecology/biology of the species and any legal constraints (see 4.2 below) and some investigation of market assessment;
- Pilot study focusing on the general physiological/environmental requirements of the species; reproduction, growth, nutrition, survival, growout trials and the economic feasibility;
- Commercial trial construction of full size culture units, spawning runs, information on costs/profits and handling of large volumes;
- Full production increase in number of culture units and hatchery output, suitable site has been selected and capital organised, further market development.

4.2 Translocation policy and species selection

Translocation is the introduction of animals or plants to an area to which they are not endemic and includes genetically distinct populations of endemic species. Industry & Investment NSW aims to protect indigenous (native) species from non-indigenous species and this may limit your choice of species or how you farm.

All proposals for land based aquaculture must be assessed according to the National Translocation Policy Guidelines. The guidelines set out a risk assessment process for considering translocation issues.

Translocation of non-indigenous species can be approved in some catchments (eg. trout stocking for recreational fishing). However, some freshwater species that are capable of breeding in certain NSW regions that are not endemic have been assessed as high risk and have been determined as high security species. There are stricter requirements in terms of site selection, design and operational parameters for high security species. (See Site Selection, *Planning and Design and Operating the Farm Chapters*).

Translocation issues may vary as new knowledge on a species is obtained or as new species enter culture. Therefore, it is imperative that when you consider a species to be cultured, you consult with I&I NSW to ascertain if it has any specific translocation issues.

Table 2 summarises the key translocation principles that apply to aquaculture in NSW.

Table 2. Key Translocation Principles for Aquaculture in NSW.

1. Non-endemic marine species to NSW cannot be translocated into estuarine or marine semi closed or open systems.

- 2. Non-endemic species to NSW may be required to meet prescribed health testing protocols for stock to be translocated from interstate.
- Non-endemic species to NSW with high security status are generally permitted only in tank aquaculture. Stock imported from outside of NSW must be certified disease free in accordance with any current I&I NSW disease testing protocols which may also cover discharge water treatment and disposal.
- Non-endemic species to a region with a high security status are only permitted if site selection, design and operational components meet the relevant AIDP performance criteria.
- 5. Other non-endemic species to a region such as Silver, Golden perch and Yabbies are permitted in freshwater pond aquaculture that meet the relevant AIDP performance criteria.

I&I NSW has evaluated the risk of culturing a number of species in Table 3. Any new species proposed for culture will require to undergo an evaluation of its associated risks. Under this risk management approach a species may be prohibited for culture if any associated risks can not be adequately addressed.

Table 3 summarises, species by species, the translocation issues, culture methods and specific constraints – it must be read in conjunction with Table 2 to determine possible species for cultivation in NSW. I&I NSW may consider variation of permissible culture methods providing an appropriate risk management strategy is developed.

Species	Disease/ Pathogen	Risk of survival & establishment	Permissible culture methods ¹ Tank Ponds Ponds Open				Specific operational and site constraints
	security status	following escape		below the PMF level in the eastern drainage or below the 1:100 ARI flood level in the western drainage. 2	above the PMF level in the eastern drainage or above 1:100 ARI flood level in the western drainage. 2	system (Flow – through)	Site constraints
Any hybrid fish, any species not listed in this table or a variation of culture method listed in this table.		ust be done on a case Translocatio					nal Policy on the

Table 3. Species culture methods and constraints.

¹ For any **culture methods** not listed in this table an assessment must be done on a case by case basis according to the National Policy on the translocation of live aquatic organisms.

² Higest historical flood level may be considered where 1:100 ARI flood event is not readily available in the western drainage.

	Pathogen a security status	Risk of survival &	Pern meth	nissible c ods ¹	Specific		
		establishment following escape	Tank	Ponds below the PMF level in the eastern drainage or below the 1:100 ARI flood level in the western drainage. 2	Ponds above the PMF level in the eastern drainage or above 1:100 ARI flood level in the western drainage.	Open system (Flow – through)	operational and site constraints
Freshwater aquariu	n species						I
Exotic freshwater aquarium species listed on Schedule 6 of the EPBC Act.	High	High	Yes	No	Yes	No	
Flat – headed gudgeon (Philypnodon grandiceps)	Natives:Low within endemic area – high outside	Natives:Low within endemic area – high outside/ domesticated natives: High	Yes	Yes	Yes	No	
Climbing galaxias (Galaxias brevipinnis)	As above	As above	Yes	Yes	Yes	No	
Common jollytail (Galaxias maculatus)	As above	As above	Yes	Yes	Yes	No	
Eastern dwarf galaxias (Gallaxiella pusilla)	As above	As above	Yes	Yes	Yes	No	
Empire gudgeon (Hypseleotris compressa)	As above	As above	Yes	Yes	Yes	No	
Firetail gudgeon (Hypseleotris galii)	As above	As above	Yes	Yes	Yes	No	
Goldfish (Carassius auratus)	High	High	Yes	No	Yes	No	Prohibited in catchments free of Carp/Goldfish.
Koi carp (Cyprinus carpio)	High	High	Yes	No	Yes	No	Prohibited in catchments free of Carp
Cox's gudgeon (Gobiomorphus coxii)	Natives:Low within endemic area – high outside	Natives: Low within endemic area – high outside/ domesticated natives: High	Yes	Yes	Yes	No	
Purple spotted gudgeon (Mogurnda adspersa)	As above	As above	Yes	Yes	Yes	No	
Murray cray (Euastacus armatus)	As above	As above	Yes	Yes	Yes	No	
Pacific blue eye (Pseudomugil signifer)	As above	As above	Yes	Yes	Yes	No	
Rainbow fish (Melanotaenia sp.)	As above	As above	Yes	Yes	Yes	No	
Striped gudgeon (Gobiomorphus australis)	As above	As above	Yes	Yes	Yes	No	
Sydney crayfish (Euastacus spinifer)	As above	As above	Yes	Yes	Yes	No	
Western carp gudgeon (Hypseleotris klunzingeri)	As above	As above	Yes	Yes	Yes	No	
Bullrout (Notesthes robusta)	As above	As above	Yes	Yes	Yes	No	
Floodplain mussel (Velesunio ambiguus)	As above	As above	Yes	Yes	Yes	No	
River blackfish (Gadopsis marmoratus)	As above	As above	Yes	Yes	Yes	No	
Marine aquarium sp	ecies	1	1	1	1		1
Barramundi cod (Cromileptes altivelis)	High	Low	Yes	No	No	No	

Patho	Disease/	Risk of survival	Permissible culture methods ¹				Specific
	ratnogen &	Tank	Ponds below the PMF level in the eastern drainage or below the 1:100 ARI flood level in the western drainage. 2	Ponds above the PMF level in the eastern drainage or above 1:100 ARI flood level in the western drainage.	Open system (Flow – through)	operational and site constraints	
Seahorse	Low in east high in	As above	Yes	No	No	No	
(Hippocampus kuda) Seahorse	West As above	As above	Yes	No	No	No	
(Hippocampus procerus) Seahorse (Hippocampus trimaculatus)	As above	As above	Yes	No	No	No	
Seahorse (Hippocampus tristis)	As above	As above	Yes	No	No	No	
(Hippocampus tristis) Seahorse (Hippocampus whitei)	As above	As above	Yes	No	No	No	
Wrasse (Labroides bicolor)	As above	As above	Yes	No	No	No	
Wrasse (Labroides dimidiatus)	As above	As above	Yes	No	No	No	
Wrasse (Labroides pectoralus)	As above	As above	Yes	No	No	No	
Species non ender	nic to NSW	•					
Atlantic salmon (Salmo salar)	High	Low within present distribution or High elsewhere	Yes	Yes	Yes	Yes	
Brook trout (Salvelinus fontinalis)	High	As above	Yes	Yes	Yes	Yes	
Brown trout (Salmo trutta)	High	As above	Yes	Yes	Yes	Yes	
Carp (Cyprinus carpio)	High eastern / Low western	High	Yes	Yes	Yes	No	Prohibited in catchments free of Carp
Rainbow trout (Oncorhynchus mykiss)	High	Low within present distribution or High elsewhere	Yes	Yes	Yes	Yes	
Redfin (Perca fluviatilis)	High	High	Yes	Yes	Yes	No	Prohibited in catchments free of Redfin
Barramundi (Lates calcarifer)	High	Low	Yes	No	No	No	Farms are to be above the PMF in the eastern drainage or above 1:100 ARI flood event level in western drainage or above level of highest historic flood level. No discharge of any waters to natural water bodies permitted.
Marron (Cherax tenuimanus)	High	High	Yes	No	Yes	No	Special fencing may be required
Redclaw (Cherax quadricarinatus)	High	High	Yes	No	Yes	No	Special fencing may be required
Sleepy cod (Oxyeleotris lineolatus)	High	High	Yes	No	No	No	
Brine shrimp (Artemia sp.)	High	High	Yes	Yes	Yes	No	

Path	Disease/	Risk of survival	Permissible culture methods ¹				Specific
	Pathogen & security status establishment following escape	Tank	Ponds below the PMF level in the eastern drainage or below the 1:100 ARI flood level in the western drainage.	Ponds above the PMF level in the eastern drainage or above 1:100 ARI flood level in the western	Open system (Flow – through)	operational and site constraints	
				2	drainage.		
Freshwater species							
Australian bass (Macquaria	High in Western drainage Low in	High in Western drainage Low in	Yes	Yes	Yes	No	Eastern drainage sites
novemaculeata)	Eastern Drainage	Eastern Drainage					
Eel tailed catfish -	High in Western	High	Yes	Yes	Yes	no	Stock to be sourced
eastern form	drainage Low in Eastern Drainage						from approved genetic broodfish
(Tandanus tandanus) Eel tailed catfish –	High in Eastern	High	Yes	Yes	Yes	No	Stock to be sourced
western form	drainage Low in	i ligit	100	100	100	110	from approved genetic
(Tandanus tandanus)	Western Drainage		Ň	Ň			broodfish
Eel-long finned (Anguilla reinhardtii)	High in Western drainage Low in	High in Western drainage Low in	Yes	Yes	Yes	No	Special fencing may be required of ponds.
	Eastern Drainage	Eastern Drainage					be required of portus.
Eel-short finned	High in Western	High in Western	Yes	Yes	Yes	No	Special fencing may
(Anguilla australis)	drainage Low in	drainage Low in					be required of ponds.
Freshwater mullet	Eastern Drainage High in Western	Eastern Drainage High in Western	Yes	Yes	Yes	No	
(Myxus petardi)	drainage Low in Eastern Drainage	drainage & South of Shoalhaven - Low in remaining Eastern Drainage					
Cusped crayfish (Cherax cuspidatus)	High outside natural range / low within natural range	Low North Coast / High otherwise	Yes	Yes	Yes	No	Special fencing may be required outside natural range
Rotund crayfish	High outside natural	High outside natural	Yes	Yes	Yes	No	Special fencing may
(Cherax rotundus)	range / low within natural range	range / low within natural range					be required outside natural range
Strong crayfish (Euastacus valentulus)	High outside natural range / low within natural range	High outside natural range / low within natural range	Yes	Yes	Yes	No	Special fencing may be required outside natural range
Freshwater prawn	High outside natural	High	Yes	Yes	Yes	Yes	Broodstock must be
(Macrobrachium sp.)	range / low within natural range	l link	Vee	Vee	Vaa	Vee	sourced from local catchment Broodstock must be
Freshwater shrimp (Atyidae sp.)	High outside natural range / low within natural range	High	Yes	Yes	Yes	Yes	sourced from local catchment
Mussels (freshwater) (Velesunio entate e)	High outside natural range / low within natural range	High outside natural range / low within natural range	Yes	Yes	Yes	Yes	Broodstock must be sourced from local catchment
Barcoo grunter	High	High	Yes	No	No	No	
(Scortum barcoo)	Ligh in Eastern	High in Eastern	V	Vaa	Vaa	Ne	
Bony bream (Nematalosa erebi)	High in Eastern drainage Low in Western Drainage	High in Eastern drainage Low in Western Drainage	Yes	Yes	Yes	No	
Golden perch (Macquaria ambigua)	High in Eastern drainage Low in Western Drainage	high (high genetic variation)	Yes	Yes	Yes	No	
Murray cod (Maccullochella peelii)	High in Eastern drainage Low in Western Drainage	High in Eastern drainage Low in Western Drainage	Yes	No in Eastern Drainage	Yes	No	Prohibited in ponds within Richmond and Clarence River catchments.
Silver perch (Bidyanus bidyanus)	High in Eastern drainage Low in Western Drainage	High in Eastern drainage Low in Western Drainage	Yes	Yes	Yes	No	

Species	Disease/	Risk of survival	Permissible culture methods ¹				Specific
	-	establishment following	Tank	Ponds below the PMF level in the eastern drainage or below the 1:100 ARI flood level in the western drainage. 2	Ponds above the PMF level in the eastern drainage or above 1:100 ARI flood level in the western drainage.	Open system (Flow – through)	operational and site constraints
Spangled perch (Leiopotherapon unicolor)	High in Eastern drainage Low in Western Drainage	High in Eastern drainage Low in Western Drainage	Yes	Yes	Yes	No	
Welchs grunter (Bidyanus welchi)	High	High	Yes	No	No	No	
Yabby (Cherax destructor)	High in Eastern drainage Low in Western Drainage	High in Eastern drainage Low in Western Drainage	Yes	Yes	Yes	No	Special fencing may be required in East
Marine / estuary spe	· · · · · ·	y					
Balmain bugs (Ibacus peronii)	High in Western drainage Low in Eastern Drainage	low	Yes	Yes	Yes	Yes	Open system in eastern drainage
Banana prawn (Fenneropenaeus merguiensis)	As Above	As Above	Yes	Yes	Yes	Yes	Open system in eastern drainage
Banded coral shrimp (Stenopus hispidus)	As Above	As Above	Yes	Yes	Yes	Yes	Open system in eastern drainage
Beachworm (Australonuphis parateres)	As Above	As Above	Yes	Yes	Yes	Yes	Open system in eastern drainage
Beachworm (Australonuphis teres)	As Above	As Above	Yes	Yes	Yes	Yes	Open system in eastern drainage
Beachworm (Hirsutonumphis mariahirsuta)	As Above	As Above	Yes	Yes	Yes	Yes	Open system in eastern drainage
Black tiger prawn (Penaeus monodon)	As Above	As Above	Yes	Yes	Yes	Yes	Open system in eastern drainage
Blacklip abalone (Haliotis rubra)	As Above	As Above	Yes	Yes	Yes	Yes	Open system in eastern drainage
Bloodworms (Marphysa sanguinea)	As Above	As Above	Yes	Yes	Yes	Yes	Open system in eastern drainage
Blue mussel (Mytilus gallo provincialis)	As Above	As Above	Yes	Yes	Yes	Yes	Open system in eastern drainage
Brown tiger prawn (Penaeus esculentus)	As Above	As Above	Yes	Yes	Yes	Yes	Open system in eastern drainage
Cobia (Rachycetron canadum)	As Above	As Above	Yes	Yes	Yes	Yes	Open system in eastern drainage
Coral trout (Plectropomus leopardus)	As Above	As Above	Yes	Yes	Yes	Yes	Open system in eastern drainage
Dusky flathead (Platycephalus fuscus)	As Above	As Above	Yes	Yes	Yes	Yes	Open system in eastern drainage
Eastern king prawn (Melicertus plebejus)	As Above	As Above	Yes	Yes	Yes	Yes	Open system in eastern drainage
Eastern lobster (Jasus verrauxi)	As Above	As Above	Yes	Yes	Yes	Yes	Open system in eastern drainage
Estuarine clam (Katelysia rhytiphora)	As Above	As Above	Yes	Yes	Yes	Yes	Open system in eastern drainage
Estuarine clam (Tapes dorsatus)	As Above	As Above	Yes	Yes	Yes	Yes	Open system in eastern drainage
Estuary cod (Epinephelus coioides)	As Above	As Above	Yes	Yes	Yes	Yes	Open system in eastern drainage
Estuary perch (Macquaria colonorum)	As Above	As Above	Yes	Yes	Yes	Yes	Open system in eastern drainage
Fingermark bream (Lutjanus johni)	As Above	As Above	Yes	No	No	No	Open system in eastern drainage

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Species	Disease/	Risk of survival	Perm meth	nissible c 10ds ¹		Specific	
	Pathogen & security status establishn following escape	establishment following	Tank	Ponds below the PMF level in the eastern drainage or below the 1:100 ARI flood level in the western drainage. 2	Ponds above the PMF level in the eastern drainage or above 1:100 ARI flood level in the western drainage.	Open system (Flow – through)	operational and site constraints
Flat (mud) oysters (Ostrea angasi)	As Above	As Above	Yes	Yes	Yes	Yes	Open system in eastern drainage
Flowery cod (Epinephelus fuscoguttatus)	As Above	As Above	Yes	Yes	Yes	Yes	Open system in eastern drainage
Greasyback prawn (Metapenaeus bennettae)	As Above	As Above	Yes	Yes	Yes	Yes	Open system in eastern drainage
Greenback flounder (Rhombosolea tapirina)	As Above	As Above	Yes	Yes	Yes	Yes	Open system in eastern drainage
Kingfish (Seriola lalandi)	As Above	As Above	Yes	Yes	Yes	Yes	Open system in eastern drainage
Kuruma prawn (Marsupenaeus japonicus)	As Above	As Above	Yes	Yes	Yes	Yes	Open system in eastern drainage
Mahi mahi (Coryphaena hippurus)	As Above	As Above	Yes	Yes	Yes	Yes	Open system in eastern drainage
Mangrove Jack (Lutjanus argentimaculatus)	As Above	As Above	Yes	Yes	Yes	Yes	Open system in eastern drainage
Mud crab (Scylla serrata)	As Above	As Above	Yes	Yes	Yes	Yes	Open system in eastern drainage
Mullet (Mugil cephalus)	As Above	As Above	Yes	Yes	Yes	Yes	Open system in eastern drainage
Mulloway (Argyrosomus japonicus)	As Above	As Above	Yes	Yes	Yes	Yes	Open system in eastern drainage
Offshore greasyback prawn (M. ensis)	As Above	As Above	Yes	Yes	Yes	Yes	Open system in eastern drainage
Pacific oysters (Crassostrea gigas)	As Above	As Above	Yes	Yes	Yes	No	Noxious species in all estuaries except Port Stephens.
Queensland groper (Epinephelus lancedatus)	As Above	As Above	Yes	Yes	Yes	Yes	Open system in eastern drainage
Red emperor (Lutjanus sebae)	As Above	As Above	Yes	Yes	Yes	Yes	Open system in eastern drainage
Sand whiting (Sillago ciliata)	As Above	As Above	Yes	Yes	Yes	Yes	Open system in eastern drainage
School prawn (Metapenaeus macleayi)	As Above	As Above	Yes	Yes	Yes	Yes	Open system in eastern drainage
Silver bream (Acanthopagrus australis)	As Above	As Above	Yes	Yes	Yes	Yes	Open system in eastern drainage
Silver trevally (Pseudocaranx dentex)	As Above	As Above	Yes	Yes	Yes	Yes	Open system in eastern drainage
(Pagrus auratus)	As Above	As Above	Yes	Yes	Yes	Yes	Open system in eastern drainage
Southern bream (Acanthopagrus butcheri)	As Above	As Above	Yes	Yes	Yes	Yes	Open system in eastern drainage
Sydney rock oysters (Saccostrea glomerata)	As Above	As Above	Yes	Yes	Yes	Yes	Open system in eastern drainage
Tubeworms (Diopatra aciculata)	As Above	As Above	Yes	Yes	Yes	Yes	Open system in eastern drainage
Tubeworms (Diopatra dentata)	As Above	As Above	Yes	Yes	Yes	Yes	Open system in eastern drainage
Yellow eye mullet (Aldrichetta forsteri)	As Above	As Above	Yes	Yes	Yes	Yes	Open system in eastern drainage

It should be noted that silver perch are not permitted in extensive aquaculture and eels are not permitted under a Class E aquaculture permit.

4.3 A single species or polyculture

Monoculture, or the culture of a single species at any given time, is the most common form of aquaculture in NSW. 'Polyculture' is the growing of more than one species together in the same culture facility which can help maximise productivity. Polyculture can provide for greater economical use of water, feed and energy.

The integration of aquaculture with an agricultural use (eg. hydroponics, rice, trees) can be a valuable sideline to an aquaculture business. It can greatly increase the economical use of water and energy.

4.4 Temperature

Water temperature is one of the most critical environmental factors affecting the growth and health of aquatic species. Each species has a preferred water temperature at which biological functions, including growth, are optimal.

Table 4 summarises the optimal growing temperatures for several species. It is important to consider climate (temperatures) when selecting a site for species grown outdoors as minimum and/or maximum temperatures may be lethal (See Site Selection chapter).

Species	Ideal temperature					
opecies	Hatcheries	Growout facilities				
Prawn – Black tiger	28 – 32°C	25 – 32°C				
Prawns – Kuruma	25 – 30°C	20 – 28°C				
Prawns – School	-	2I – 27°C				
Crustacea – Redclaw	27 – 30°C	27 – 32°C				
Crustacea – Yabbies	15 – 20°C	23 – 25°C				
Barramundi	27 – 30°C	26 – 30°C				
Eels	-	23 – 28°C				
Kingfish	21 – 24°C	15 – 25°C				
Mahi-Mahi	25 – 30°C	25 – 30°C				
Mulloway	21 – 26°C	14 – 30°C				
Murray Cod	19 – 21°C	23 – 26°C				
Silver Perch	20 – 25°C	23 – 28°C				
Snapper	21 – 24°C	17 – 30°C				
Trout Brown	*6 – 10°C	4 – 19°C				
Trout Rainbow	*9 – 14°C	10 – 22°C				

 Table 4. Temperature range for breeding and growout.

*for spawning and egg production

4.5 Feed

Intensive and semi-intensive aquaculture generally requires a high degree of management, high stocking levels and the feeding of formulated diets. Higher production rates can be achieved when using formulated feeds specific to the selected species. However, not all species readily accept pellets (eg. Australian bass and golden perch) and some species are difficult to wean during early hatchery stages. Consequently, there has been limited progress in the culture of some of these species.

Dietary requirements vary significantly between species and need a good balance of protein, energy, minerals and vitamins to meet the physiological requirements of the selected species.

Often due to the lack of specific dietary research, feeds targeting other species are utilised. However, there is some danger in taking this approach often resulting in poor growth, fatty animals or poor resistance to disease and husbandry issues.

Feed costs often constitute 40 to 55% of total production costs, therefore it is essential to use species that convert food efficiently and use efficient feeding practices. Species that have high meat to total body weight ratio are desirable because of their more efficient conversion of feed into edible flesh.

If you plan to market your product for human consumption, you need to obtain a vendor declaration or written statement from the feed manufacturer stating that the feed is suitable for feeding to food producing animals.

4.6 Hatchery and Seed stock

A caution

Aquaculture ventures incorporating a hatchery wishing to produce fingerlings for stocking NSW waters will need to be accredited under the NSW Hatchery Quality Assurance Scheme.

A critical issue for any aquaculture venture is the reliable availability of seed stock (juveniles). Some aquaculture growout ventures incorporate juvenile production into their business whereas others are reliant on sourcing stock from other farms and hatcheries. Generally, hatcheries require specialised infrastructure and technical expertise beyond that required for growout operations. However, having control over hatchery operations offers clear advantages to the growout farm including selection and reliability of stock. Some species are only available once per year whereas others may be more frequently available due to manipulative breeding techniques within the hatchery. It is important that a new ventures carefully research the availability of seedstock to make sure the hatchery is capable of producing the quantities of seedstock to satisfy the farm's projected production plan.

Some important aspects a hatchery needs to consider when managing broodstock and seed stock are:

- maintenance of genetic diversity and avoidance of inbreeding;
- production of disease-free stock;
- seed stock are not contaminated with other species;
- maintaining a bio-secure site.

Broodstock can be collected from the wild in NSW under the authority of a I&I NSW permit, grown and maintained in a hatchery or purchased from a commercial supplier. Ventures wishing to undertake hatchery operations should be familiar with the NSW Hatchery Quality Assurance Scheme (HQAS) and the rules and regulations relating to broodstock collection and species.

5. Site Selection

5.1 Introduction

Selection of an appropriate aquaculture site is paramount to the success of the venture. Appropriate site selection can avoid the need for environmental mitigation measures and costly ongoing management, operational and monitoring procedures. Whether the land is already owned or the property is to be purchased, the following should be considered:

- 1. Aquaculture must be a permissible land use and compatible with nearby land uses. The site must not be affected by near-by agricultural pesticide use or be constrained by potential adverse affects on adjacent residents.
- 2. Site specific investigations should indicate that the site is fundamentally suitable for an aquaculture operation. Consider the supply of water (quality & quantity); soils suitable for pond construction; a climate suitable for the culture species; enough land to manage waste water or means of disposal via municipal infrastructure; proximity to power; suitable land slope for construction, minimisation of pumping costs and managing waste; proximity to markets, service providers, supplies and manpower (all can impact adversely on operational costs).

A site-specific investigation and evaluation, commensurate with the size and complexity of the proposal is required. The evaluation will consider all relevant legislation, plans and government policies (eg. in relation to river and estuary flows regimes, water allocation, floodplain management, vegetation management, zoning, heritage strategies, potential land use conflicts, acid sulfate soils, biodiversity protection, etc). In general, the selection of a site should be based on a thorough knowledge of local and regional hydrology, geology, topography, ecology and climate. Although environmental factors are critical when assessing sites other factors such as land and construction costs need to also be considered.

The project profile analysis chapter of this document provides a systematic and rigorous 'sieve' approach to site selection. Government agencies will use this approach when formally assessing a proposed aquaculture venture.

Firstly assessing a project or location against the project profile analysis model will help determine whether your proposal meets minimum mandatory performance criteria. If it does, then the process, in conjunction with the information in this strategy, will help assess how the proposal will be classified from low risk to higher risk.

Information in this strategy provides detail to be considered when undertaking a project profile analysis.

5.2 Estuarine aquaculture sites

Assessment of estuarine aquaculture sites should refer to the NSW Government's sea level rise planning benchmarks, relevant coastal zone management plans and address issues related to inundation, water quality, drainage and acid sulfate soils (ASS) which could impact on the long-term viability of aquaculture on the sites.

To provide assistance in identifying potential sites for saline pond aquaculture within estuarine areas of NSW, maps have been prepared for 12 northern NSW estuaries (see appendix 1). These areas are:

- 1. Tweed River Estuary
- 2. Brunswick River Estuary
- 3. Richmond River Estuary
- 4. Clarence River Estuary
- 5. Bellinger and Kalang River Estuaries

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- 6. Nambucca River Estuary
- 7. Macleay River Estuary
- 8. Hasting River Estuary
- 9. Camden Haven River Estuary
- 10. Manning. River Estuary
- 11. Port Stephens including Myall and Karauh rivers.
- 12. Hunter including Hunter, Patterson and Williams Rivers.

These maps have been developed using GIS information and identify potential locations based on attributes including:

- elevation above Australian Height Datum;
- spatial salinity for the estuary and bathometry assessment;
- acid sulfate soil profile;
- land use zoning;
- conservation exclusion zones.

Although maps have only been prepared for the above estuarine areas, saline pond aquaculture is potentially suitable within other NSW estuaries provided the site meets the minimum locational performance criteria.

It should be noted that the 12 estuarine aquaculture maps were compiled based on data available at the time of production and only represent areas that may have potential for aquaculture. Detailed site assessment as outlined in this chapter is still required and current LEP and other mapping information may need further investigation.

Because of the extent of locational possibilities for freshwater tank, raceways and ponds, a detailed mapping approach to identify potential freshwater aquaculture sites has not been undertaken.

5.3 Water considerations

Overview

The following is an overview of the issues that need to be considered when determining whether a proposed site would have a reliable water supply of the necessary quality and quantity for the success of an aquaculture business. **This is not an exhaustive list but a guide only.**

Water budgets for any aquaculture venture must be carefully considered. Water budgets should be calculated based on volumes required to fill tanks, pipes, ponds and storages, seepage, evaporation and operational procedures.

Water supply quantity

PREFERRED LOCATION A site with abundant, permanent and affordable supply of good quality water with no access restrictions.

An abundant, all-seasons supply of good quality water is essential for land based aquaculture. The quantity of water required will be dependant on the size of the farm, type of farm infrastructure (pond or tank), water budget of the site (rainfall and evaporation), discharge classification (closed, semi closed or open systems) and species requirements. Water sources may include estuaries, rivers, ocean or bay, irrigation channels, bores, saline interception schemes, municipal supplies and over land catchment. All waters should be tested for compatibility with the selected species early in the planning process. Pumping costs can be high and should be minimised with options for gravity flow, low head or relatively short suction and delivery lines. These issues must be considered when evaluating a site and assessing layout options.

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Potential impacts of climate change need to be factored into any water quantity and Quality investigations. The NSW Office of Water (NOW) may assist early in the planning process to ascertain water management issues affecting water availability including water harvesting or extraction from a water source. Local government approval may also be required for the construction of any water storages.

NSW Water Quality Objectives

Water quality must be of a standard that satisfies all the physiological requirements of the targeted species. Guidelines exist for acceptable parameters for some species. Sub-optimal or poor water quality can increase the running costs of operations significantly through poor growth, disease, loss of stock, equipment deterioration and expenditure on remediation.

The NSW Government is committed to ensuring the long-term health of NSW waterways, with improved water quality and flow regimes its prime objectives. The intent is to achieve a better balance in the sharing of water between users and the environment, and reduce the stress on rivers and aquifer systems.

For each of the State's catchments, the State government has endorsed the community's environmental values for water known as 'Water Quality Objectives' (WQOs). Booklets outlining the WQOs for catchments are available by telephoning the Pollution Line on 131 555 or you can access the documents on the DECCW website at www.environment.nsw.gov.au/publictions/epa/.

The NSW WQOs are consistent with the agreed national framework for assessing water quality set out in the ANZECC 2000 Guidelines. These guidelines provide an agreed framework to assess water quality in terms of whether the water is suitable for a range of environmental values. The WQOs provide environmental values for NSW waters and the ANZECC 2000 Guidelines provide the technical guidance to assess the water quality needed to protect those values.

Water quality and flow objectives are required for the protection of aquatic ecosystems; visual amenity; recreation, aquatic food, commercial shellfish production; maintaining wetland and floodplain inundation; managing groundwater for ecosystems; minimising the effects of weirs and other structures; maintaining or rehabilitating estuarine processes and habitats; and maintain natural flow variability. Particular water quality issues include:

- Nutrients and other contaminants in stormwater and sewage outflows and the release of highly acidic waters from ASS areas into estuaries;
- Dredging and drainage works within the flood planning area that could disturb ASS.

The NSW Shellfish Program administered by the NSW Food Authority regularly monitors estuarine water quality to support commercial shellfish production.

Water supply quality for aquaculture

PREFERRED LOCATION

A site having consistent high water quality and unlikely to adversely affect water quality for other users.

Access to reliable potable (drinking) water or mains water for processing, pre-market conditioning and employee uses.

Avoid sites downstream of land uses that are likely to adversely affect water quality (eg. downstream of sewage treatment works discharge, town storm-water overflows, industrial centres, proximity to agricultural chemical uses or recreational boating including marinas). In evaluating the suitability of the quality of a water supply, factors that need to be considered include:

- the water is free of organic, agricultural or industrial pollution (pesticides, heavy metals);
- the water is free of suspended particles (check particulates composition (organic and inorganic), size, concentration, likely seasonal variation);
- the waters physical and chemical properties (pH, salinity and tidal amplitudes, temperature, dissolved oxygen, ammonia, nitrite and nitrates, alkalinity and hardness, hydrogen sulphides, chlorine, turbidity, carbon dioxide, etc);
- the water is free of pathogens, trash fish and other undesirable aquatic organisms.

It is desirable that the source of water for aquaculture meets the relevant criteria set down in the ANZECC Water Quality Guidelines including protection of aquatic ecosystems and aquaculture and human consumption of aquatic foods. The guidelines suggest levels of physio-chemical parameters that would be required to maintain a viable natural aquatic community and provide guidance relating to levels of organic contaminants that may cause tainting of the products.

If the water supply does not meet the criteria set out in the ANZECC Guidelines, you need to assess the potential effect this would have on the selected species at all stages of the life cycle (eg. an animal may tolerate waters having a pH of 6.0, however, eggs and larvae may not survive).

In some waterways, the water quality may meet the criteria for protection of the aquatic communities, but not meet the guidelines for human health or food safety requirements. See ANZECC Guidelines and consult NSW Food Authority.

Water licensing

A water licence or activity approval is required to install a pump, construct a levee, divert the river flow, undertake works within 40 metres of a river, install a bore or piezometer or to harvest more than 10% of catchment overland flows across a site.

Measuring water extraction

Under the water licence provisions for water extraction, NOW may, as conditions of licences or approvals, require the quantity of water to be recorded and reported, annually or more regularly, if required using approved measuring equipment. Information required will include hours pumped, monthly extraction rate and use of water. NOW may limit the extraction from a river from time to time to ensure adequate flows remain for other water users and the environment.

Estuarine or marine water supply

Tidal exchange

Ideally you need a satisfactory estuarine water supply on a site adjacent to waterways. The estuarine aquaculture maps (see Appendix 1) identify sites that potentially have water quality satisfactory for an estuarine water supply source.

Detailed investigations will be required to determine if there is good tidal exchange and circulation, and if the water quality is able to consistently recover quickly following rain events.

Avoid sites with significant freshwater ingress and variable salinity, high suspended solids, low pH (acid sulfate), high organic loading and other poor water quality characteristics.

Tidal amplitude

PREFERRED LOCATION

A site adjoining an estuary with a tidal amplitude of greater than 600 millimetres.

Ideally you need water intake sites in an area of good water ventilation. An indirect measure of ventilation is tidal amplitude. Tidal amplitude is defined as:

MHWN - MLWN where MWHN = Mean High Water Neap, and MLWN = Mean Low Water Neap.

Generally, tidal amplitude will diminish further up river systems and where restriction to tidal movement occurs such as narrow and/or shallow channels and sand bars. Tidal gauge data is available from the Manly Hydraulic Laboratories in Sydney. You may need the assistance of a coastal engineer to calculate tidal amplitude where there are no tidal gauges.

Avoid areas that may be adversely and significantly impacted by adjoining floodgates and land runoff.

Access

PREFERRED LOCATION

A site where no deepening is required of the estuary for a pumping station, or existing infrastructure exists to carry inlet and outlet pipes for estuarine or marine waters.

Carefully consider if potential inlet sites will require a change to the estuary channel (eg. require a sump or deepening or other disturbance of the bed of the estuary). If mangroves, seagrass or foreshore vegetation is likely to be disturbed, a permit may also be required under the *Fisheries Management Act 1994*.

Where it is proposed to undertake work (excavation, fillor anything that could affect the flow or quantity of water) in, on or within 40 metres of an estuary, a controlled activity approval will be required pursuant to the *Water Management Act 2000*.

Establishment of pipelines across ocean beaches to access marine waters requires detailed investigations as storms may result in catastrophic failure of the pipeline. You will need to consult with LPMA to obtain approval for the pipeline.

Note also that pipelines that cross SEPP 14 wetlands will trigger the requirement for an environmental impact statement and if a RAMSAR wetland is involved, a Commonwealth approval under the *Environmental Protection and Biodiversity Conservation Act* may be required.

Saline ground water supply

PREFERRED LOCATION

Adjacent to a saline ground water interception scheme.

Access to saline ground water may be from either a saline ground water interception scheme or bore. Care needs to be undertaken in managing the saline ground water within the aquaculture facility to ensure that freshwater aquifers are not impacted. You will need to consult with NOW.

All saline ground water bores must be of an approved diameter, lined and capped to the standards required and licensed by NOW.

Freshwater supply Access licence or extraction rights

PREFERRED LOCATION

A site with an approved access licence or available rights for water extraction.

Water for freshwater fish farms can be drawn from sources such as streams, on-site dams, underground bore water or town supply providing the relevant permit/entitlement can be obtained. For advice on water extraction rights consult the NOW.

Water Access restrictions

PREFERRED LOCATION

A site with no water access restrictions based on flows under normal conditions.

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Detailed investigations will be required to evaluate the reliability of water quantity and quality during drought periods, periods of high demand (multi-users), floods and 'fresh' river flows. Sites having the potential to experience periods of restricted water access should consider on-site storage or alternative sources (bores/wells) and have the capacity to support continued operation during these events.

Pumping station

PREFERRED LOCATION

A site requiring no deepening of the river for intake line and for easy management during floods.

Ideally you need a river site having sufficient depth under all flows and readily accessible to remove infrastructure for maintenance and during rising waters and floods. The existing profile of the channel or bank must not be disturbed more than is necessary to install the pumping facility. The intake should be as protected as possible from debris and excessive flows.

Any location where the bank or the bed of the river would require substantial disturbance (especially of aquatic or foreshore vegetation) should be avoided. The construction of a pump station may require a controlled activities approval under the *Water Management Act 2000*. Where a licence or permit issued for the commercial use of water, an exemption from controlled activity approvals exist, refer to clause 39A of the *Water Management (General) Regulation 2004*.

Be aware!

Surface water access rules

NSW Office of Water (NOW) should be contacted to ascertain the current water access licensing rules applying to basic landholder rights, on farm dams, extraction from watercourses and any surface water licence embargoes that may apply to a selected site.

Groundwater access

All ground water bores must be of an approved diameter, lined and capped to the standards required and licensed by NOW.

You will need to consult with NOW on the principles and issues to be considered relating to groundwater, for example:

- groundwater quality, quantity and vulnerability;
- threats and protecting the resource;
- conservation of water resources.

Be aware!

Groundwater access rules

Under Section 112 of the *Water Act 1912*, anyone using a bore or well **must have** a groundwater licence. There are a number of alluvial aquifers in NSW that are embargoed, and therefore no new water licences will be approved. However, applications can be made to transfer allocations from existing licences.

Any proposed use of groundwater in areas possessing ASS will need considerable environmental assessment to ensure that such extraction will not lower groundwater tables to levels leading to the formation of acidic ground water. NOW will generally require a full assessment of any works in areas mapped as having either vulnerable groundwater, or significant potential for ASS. See Table 5.

A licence or approval is required **prior** to the construction of any bore and all applications for licences are subject to assessment by NOW.

Situation	Site selection assessment required
In areas where groundwater is not vulnerable because of the depth, overlying geology and where there are no obvious sources of contaminants and no ASS are present (as indicated in DECCW ASS Risk Maps).	No assessment is necessary.
In areas which have groundwater of 'low' value which may be vulnerable and where there are no obvious sources of contaminants.	A professional opinion is required as to the nature of the groundwater resource and the risk the development places on the resource.
In areas where there <u>may be</u> a potential risk to groundwater or the environment.	A desk study is required showing the nature of groundwater resource, pollution risk, effect of any barriers to pollution flow, either natural or engineered. Calculations need to show the level of environmental risks based on existing knowledge of the site.
In areas where the desk study indicate that there <u>are</u> potential risks to the environment.	Limited site studies are required with soil and water testing to establish a baseline and to confirm the characteristics of the resource and the likely effectiveness of barriers or other possible measures (natural or engineered) to protect the resource.
In areas where there <u>are significant</u> risks to the quality of groundwater as indicated by the desk study or the limited site studies.	Extensive site studies are required with soil and water testing and modelling of the groundwater flows and quality to predict the likely effectiveness of the barriers and other design and planning options to prevent degradation of the resource. There may be some situations where the groundwater quality cannot be protected and the siting may not be feasible.

Sites that have underlying high quality fresh potable groundwater within 3 metres of the surface will require detailed investigations. The quality of the underlying groundwater should not be put at risk by the aquaculture activity, in particular where saline ponds are over fresh water aquifers. Any risk to groundwater used for potable water supplies may result in a proposed aquaculture development being refused.

Multiple use of recycled freshwater pond/tank or processing water

There are significant economic and environmental benefits to multiple water use. Multiple uses include hydroponics, horticulture or irrigated agriculture. Any irrigation schemes associated with aquaculture should be considered as a value adding process utilising the discharged water.

Pond siting

PREFERRED LOCATION

A pond aquaculture site not located in areas of high groundwater (within 3 metres of the surface), or areas highly vulnerable to groundwater contamination, which are used for stock, domestic or town water supplies.

If your area is one where there are ASS, you need to consider the cost of minimising the generation and runoff of acid into the ponds or neighbouring environment.

Sites with high groundwater are high risk for pond construction and management. It can be difficult to build the ponds and prevent seepage. It also may not be possible to adequately drain and dry out ponds built in such areas, something which is necessary for efficient pond management.

Flood liability

PREFERRED LOCATION

A site that is not within the flood planning area and/or a design that will not impede the flow of flood waters or affect catchment stormwater drainage. A site where the development is compatible with the relevant Council or DECCW floodplain management plan, where available.

Freshwater aquaculture ponds should be constructed above the probable maximum flood (PMF) level in the eastern drainage and constructed so not inundated by the discharge of a 1:100 ARI (average recurrent interval) flood event in the western drainage. In the western drainage if data is not readily available regarding the 1:100 ARI flood event a proponent may wish to consider the highest historic flood level. An aquaculture site within a flood planning area is likely to be severely impacted by floodwater and should therefore be avoided.

Ponds using estuarine or marine waters should be constructed above the 1:100 ARI flood event, although a case-by-case evaluation may be considered.

It is preferable that there is no major stormwater drainage across the site. If unavoidable, there should be sufficient space to manage the flows so as not to affect neighbouring properties or ecosystems.

Waterway protection

PREFERRED LOCATION

A site that allows for all infrastructure (except pipelines) to be at least 50 metres from the riparian zone.

Separation between the facility and any natural waterbodies is necessary to avoid disturbance of riparian vegetation and to allow for natural hydrological processes (such as bank erosion) without putting ponds or buildings at risk.

Disturbed buffer areas should be revegetated to prevent erosion and minimise flow into the waterbody. There should be a vegetated buffer zone of at least 20 to 40 metres between any effluent irrigated areas and the high bank of any adjoining watercourse.

Tip!

A buffer area of more than 40 metres would avoid the need for a controlled activities approval under the *Water Management Act 2000*. In addition, Aboriginal sites commonly occur adjacent to waterways, and a set back may reduce the likelihood of disturbance to Aboriginal sites.

Water temperature at a site

Water temperature is a key limiting factor in species selection and when selecting a site this must be considered. Information on freshwater temperatures is available for some river systems however it should be noted that water temperature within culture facilities is often much higher. Information on estuarine and seawater temperatures can be found using the following web link for a number of NSW coastal locations www.metoc.gov.au/products/data.html.

5.4 Elevation and topography

PREFERRED LOCATION

Ponds using estuarine or marine waters on a site with an elevation above 1 metre Australian Height Datum (AHD) and a slope of less than 2%. A site for freshwater ponds that has a slope of less than 5%.

Key elevation and topographic considerations include:

- coastal land below 1 metre AHD is likely to have significant ASS issues. Ponds constructed on these sites are likely to have problems with draining and drying and ASS. Tidal and flooding inundation is likely to occur on land below 1 metre AHD. These sites are also at greater risk from sea level rise;
- land above 2 metres AHD is less likely to contain ASS;
- the slope of the land will influence the shape of the ponds, drainage system and construction cost.

Topography is an important issue for high security species with translocation concerns. It is also an important factor if pond discharge water is to be used onsite for irrigated crops. I&I NSW Agnote DPI-493, "Landform and soil requirements for biosolids and effluent reuse" (I&I NSW 2004) contains further information on landform assessment and requirements for effluent reuse.

5.5 Soil and soil contamination

PREFERRED LOCATION

A site that:

- has clay loam or a soil/sand mix with low erosion potential;
- has no soil contamination from previous land uses;
- has no ASS; or ASS landform Process Class A with Landform Element class b, I, t, p, y or w;
- is suitable for freshwater recycle systems/irrigated agriculture.

The soil characteristics of a site can influence construction costs and the long term maintenance and management costs. With high security species, particularly those with translocation concerns, the assessment of suitability of the soil for pond or dam construction is essential.

Key soil considerations include:

- sites which have clay or clay loam soil characteristics suitable for pond construction (stable and nil seepage). A soil survey is recommended covering the pond construction site and at the estimated pond excavation depth to determine if there are likely to be any gravel or sand layers, rock strata and other soils characteristics that may interfere with water holding qualities and thus add to the construction costs. Soil specialists at the Land and Property Management Authority and/or DECCW may have soil survey information or maps of particular sites. If saline water is used the risk of seepage is high even in clay soils as the saline water can cause the clays to flocculate and increase permeability;
- for sites with highly dispersive or flocculative soils, additional erosion controls and other measures (dam liners) to prevent dam wall failure through 'tunnelling' may need to be factored into the costs;
- land previously used for crops, should be tested for accumulated pesticide residues such as organophosphate, carbamates and synthetic pyrethroids. Current pesticide and herbicide use on adjoining lands and within the catchment need to be investigated to ensure minimal impact on site;
- in estuarine areas, high-risk acid sulfate soils (ASS) should be avoided. ASS can impact on aquaculture operation through poor water quality, acid runoff and costly remediation. Sulfidic muds also have poor load bearing characteristics resulting in pond wall instability and leakages. Soil survey work will be required to identify the depth to the ASS and any likely 'hot spot' areas, particularly as ASS may not be evenly distributed across a site. Reference should be made to the ASS Manual for sampling and assessment regimes;
- with some soils the preloading of the site prior to construction may need to be considered to ensure stability. However, consideration of the effects of compaction on groundwater levels and the potential for discharge of acid is required.

Tip!

ASS risks maps (available from DECCW) are a useful tool for ruling out unsuitable aquaculture sites. Sites on ASS should be evaluated using methods in the ASS Manual.

Irrigation Soils

The characteristics of the receiving soils for irrigation need to be thoroughly investigated to ensure they are suitable to receive such waters into the future without creating environmental or management issues.

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Tip!

If irrigation is proposed using recycled water or processing wastewater, the suitability of the soil for pasture, crops or tree plantations must be considered. Factors such as fertility, permeability and slope should be considered when assessing methods of irrigation and crop types. All relevant soil characteristics should be fully established when designing an irrigation system. NSW DPI Agnote DPI-493, Landform and soil requirements for biosolids and effluent reuse (NSW DPI 2004) and the DECCW Environmental Guidelines: Use of Effluent by Irrigation contains further information on landform assessment and requirements for effluent reuse.

5.6 Local climate and air quality

Key climate and air quality considerations include:

- Growing cycle Water temperature significantly affects the metabolism and growth of aquatic animals. The longer the temperature is below the optimum range, the longer the growout cycle. It is therefore important to consider climate when evaluating a site. (See Water temperature);
- Design and construction issues Climate and weather conditions should be considered when planning construction timetables, use of solar energy, positioning of ponds (water fetch, wave action, erosion), runoff, catchment and flood management facilities or flood control works;
- Effect on environmental performance Noise and odour impacts are likely to be more of an issue in areas that experience local temperature inversions;
- Effect on irrigation water use Temperature, humidity, rainfall, sunlight and wind patterns will affect plant growth and evapotranspiration levels. These factors will dictate the effectiveness of an irrigation area to utilise discharged water.

5.7 Ecological factors

PREFERRED LOCATION

The site should have:

- no impact on threatened species, populations or ecological communities or their habitats or critical habitat listed under the *Threatened Species Conservation Act 1995* or the *Fisheries Management Act 1994*;
- no disturbance of native vegetation (including trees, shrubs, grasses, etc).

Key ecological considerations include:

- If terrestrial or aquatic threatened species, populations or ecological communities or their habitats occur on the site or in the area of impact, a test of significance (Section 5A of the *Environmental Planning and Assessment Act 1979*) must be undertaken (see Figure 6) and referred to the consent authority before a development application (DA) is lodged. The authority may determine that a Species Impact Statement is required under the *Threatened Species Conservation Act 1995* and, in the case of any threatened aquatic species, under the *Fisheries Management Act 1994*. The Department of Environment, Climate Change and Water maintains a register of critical habitat.
- Areas of native vegetation and habitat should be retained wherever possibleto maintain or improve diodiversity values of a site. The site layout should be designed to minimise the destruction or disturbance of native terrestrial and aquatic vegetation;
- The clearing of native trees, shrubs or grasses will usually require an approval under the Native Vegetation Act 2003. Native vegetation may be permitted to be cleared under routine agricultural management activities (RAMAs). If the vegetation is removed within 40 metres of the bank of a waterway or wetland, a controlled activity approval could also be required under the Water Management Act 2000. If mangroves, seagrass or foreshore vegetation is to be disturbed by the inlet and outlet pipes or drains, an approval may be required under the Fisheries Management Act 1994 (both Acts list threatened species, population and ecological communities and protected habitats) and Water Management Act 2000;

- Vegetation Management under the Native Vegetation Act 2003 is administered by DECCW and has developed a land management system which includes Property Vegetation Plans (PVPs). PVPs are developed in consultation with the Local Catchment Management Authorities (CMAs).
- If impacts on native vegetation can not be avoided or mitigated then <u>offsets</u> should be established.
- If abutting an estuarine area, consideration should be given to the likely risks to any nearby oyster aquaculture particularly Priority Oyster Aquaculture Areas or important fish nurseries or habitat;

Tip!

To determine the appropriate level of assessment for an aquaculture proposal, a test of significance and a project profile analysis can be referred to the consent authority for consideration.

Figure 6. The factors to consider in a test of significance.

The *Environmental Planning and Assessment Act 1979* requires the following factors to be considered when assessing whether there is likely to be a significant effect on threatened species, populations or ecological communities, or their habitat:

- (a) in the case of a threatened species, whether the action proposed is likely to have an adverse effect on the life cycle of the species such that a viable local population of the species is likely to be placed at risk of extinction,
- (b) in the case of an endangered population, whether the action proposed is likely to have an adverse effect on the life cycle of the species that constitutes the endangered population such that a viable local population of the species is likely to be placed at risk of extinction,
- (c) in the case of an endangered ecological community or critically endangered ecological community, whether the action proposed:
 - (i) is likely to have an adverse effect on the extent of the ecological community such that its local occurrence is likely to be placed at risk of extinction, or
 - (ii) is likely to substantially and adversely modify the composition of the ecological community such that its local occurrence is likely to be placed at risk of extinction,
- (d) in relation to the habitat of a threatened species, population or ecological community:
 - (i) the extent to which habitat is likely to be removed or modified as a result of the action proposed, and
 - (ii) whether an area of habitat is likely to become fragmented or isolated from other areas of habitat as a result of the proposed action, and
 - (iii) the importance of the habitat to be removed, modified, fragmented or isolated to the long-term survival of the species, population or ecological community in the locality,
- (e) whether the action proposed is likely to have an adverse effect on critical habitat (either directly or indirectly),
- (f) whether the action proposed is consistent with the objectives or actions of a recovery plan or threat abatement plan.
- (g) whether the action proposed constitutes or is part of a key threatening process or is likely to result in the operation of, or increase the impact of, a key threatening process.

Tip!

<u>DECCW</u> maintains a GIS database of information on the flora and fauna of NSW - *Atlas Listing* of *Fauna and Flora Records in NSW* (Contact: Data Licensing Officer (02) 9585 6684). This may provide an early warning of the occurrence of threatened wildlife species on or near the site. Councils may also have lists of species, populations and ecological communities in their areas and other useful data.

You should contact I&I NSW to see if any threatened species, populations or ecological communities have been recorded for a particular estuary or river.

Conservation sites

Good site seletion avoids sites that may impact on areas of high conservation value. Various pieces of legislation protect these sites and are require additional assessment and additional approvals if they are potentially impacted. Conservation sites include:

- **Coastal rainforest** especially SEPP 26 Littoral Rainforest;
- Wetlands especially SEPP 14 Coastal Wetlands, wetlands listed in the *Directory of* Important Wetlands in Australia should also be considered;
- RAMSAR wetlands. Please note that a project does not need to be in or adjacent to a RAMSAR wetland to have an impact eg. development in a catchment of RAMSAR wetland could significantly alter water quality and quantity in the RAMSAR wetland;
- Habitat of migratory species protected under CAMBA and JAMBA international agreements;
- Critical habitat declared under Part 3 of the Threatened Species Conservation Act 1995;
- DECCW protected areas which include all lands managed by the DECCW and protected under the National Parks and Wildlife Act 1974 such as National Parks, Nature Reserves, Historic Sites, Aboriginal areas, Karst conservation areas, State recreation areas and regional parks;
- Wilderness Areas declared under the Wilderness Act 1987;
- World Heritage Area. Please note that a project does not need to be in or adjacent to a World Heritage Area to have an impact eg. development in a catchment of World Heritage area could significantly alter water quality and quantity in the World Heritage area;
- Marine parks: The zoning of Marine Parks permits aquaculture where it can be demonstrated that the activity is environmentally sustainable and does not impact adversely on the marine park environment or its flora and fauna (see zoning plan for each park);
- **Aquatic reserves**: These **Reserves** provide protection for important sensitive fish habitat as well as providing unspoilt natural sites for recreation, education and research;
- Areas identified as high conservation value in regional strategies and regional conservation plans.

Aquatic ecology

You need to consider the risks of the site's operation to native aquatic species within the catchment. Risks may include escape of stock, spread of disease (discharge water or flood breaches), water use or erosion. These issues are considered in the species selection chapter, however they are also listed here as a site selection factor as the preferred species may have locational constraints.

Predators

The impact of bird or other predators needs to be assessed as their activity can impact significantly on farm operational costs.

Tip!

Avoid sites near where predator aquatic birds congregate as the long term costs, either through loss of fish or in mitigation measures, can be very significant (See Planning and Design chapter for more details).

5.8 Native title

Tip!

Proposals sited on Crown lands subject to a Commonwealth Native Title Claim/NSW Aboriginal Land cannot proceed until the claims are resolved.

Key native title considerations include:

- Native title claims are not quickly resolved. Most vacant State Crown land is subject to a claim under NSW Land Rights Act 1993. LPMA can provide information on those areas that are presently under claim.
- Aquaculture proposals that need to cross Crown land (subject to either of these claims) to gain access to water supply should be avoided unless agreements can be made with the claimants.

5.9 Heritage

Land previously cleared and used for agriculture is less likely to contain heritage items (Aboriginal or non Aboriginal). However, if heritage issues are suspected of occurring on the site (built and non-built) the following 2-step process should be considered at the site selection stage.

Step 1: Research and collate information from the following sources:

- i) consult relevant heritage or historical research on the area;
- ii) consult with the local Council, the Aboriginal community (DECCW can provide relevant contacts) and local historical societies;
- iii) inspect existing heritage registers, databases or lists including:
 - in LEPs and REPs for relevant heritage issues,
 - in heritage studies prepared by a local Council,
 - on State Heritage Register for items protected under the Heritage Act or subject to Interim Heritage Orders or s.136 Orders,
 - on the National Trust Register,
 - on DECCW Aboriginal Heritage Information Management System (AHIMS),
 - in Shipwrecks Atlas (if affecting an estuary or its banks or accessing marine waters),
 - on the National Heritage List (Australian Heritage Commission).

Step 2: Survey the area to identify any items of potential heritage significance:

- The Aboriginal Cultural Heritage Standards and Guideline Kit provides guidance on methodology for surveying, identifying and assessing the importance of Aboriginal sites;
- The *NSW Heritage Manual 1996* provides guidance on methodology for surveying, identifying and assessing the importance of non-Aboriginals sites.

Tip!

The Heritage Office maintains a computerised State Heritage Inventory with listings of items protected under the *Heritage Act 1977* and LEPs or REPs.

Aboriginal heritage

PREFERRED LOCATION

The site does not contain or impact on any recorded Aboriginal sites, places or values of significance to the Aboriginal community and/or Aboriginal sites, places or values.

Aboriginal sites or items have been recorded across the landscape in the State. Other cultural values may also be associated with this landscape, such as traditional uses of an area (eg. a ceremonial area, a historic event or place, and/or contemporary values such as access to wild resources). Areas that are adjacent to creeklines and waterways often have a high potential to contain Aboriginal sites. Steps to identify potential Aboriginal sites include searching the DECCW Aboriginal Heritage Information Management System (AHIMS) and the State Heritage Inventory, and early consultation with the local Aboriginal community and/or Local Aboriginal Land Council (LALC) is advisable. There is a fee for each search of the AHIMS contact: (02) 9585 6513 or 9585 6345. All search requests should clearly identify the site and state the

reason for the request, ie. to accompany an aquaculture development application in accordance with the NSW LBSAS. The results of the search and accompanying advice will be sent to the applicant. In determining the assessment required, DECCW considers a range of factors including:

- the results of the DECCW Aboriginal Heritage Information Management System search;
- reference to general archaeological models relating to Aboriginal site locations within a given area;
- the views of the local Aboriginal community.

Tip!

It is wise to consult the relevant Aboriginal communities early in the site selection and evaluation process to determine if there are any major constraints on the site relating to Aboriginal heritage issues.

When lodging a request with DECCW AHIMS, applicants should send a letter of notification to the Aboriginal groups in the area (DECCW can advise of the relevant groups). This letter should include a copy of the relevant 1:25,000 topographic map clearly illustrating the area of the proposal and a brief description of works proposed. It should request notification of the presence of any Aboriginal sites on the property and further discussions with the group should Aboriginal sites be present which require active management.

Under the Integrated Development Approvals (IDA) process DECCW can require up to an additional 46 days to consult with Aboriginal communities, organisations or LALC after the development application has been lodged prior to issuing general terms of approval, if it is considered by DECCW that an Aboriginal place or object is likely to be disturbed or destroyed.

A survey may be required, by an appropriately qualified and experienced person in consultation with the relevant Aboriginal community group/s. The significance of any places or values that are recorded should be assessed, and appropriate management options developed. Places of high significance should be conserved in-situ wherever possible.

Non-Aboriginal heritage

PREFERRED LOCATION

The site does not contain any heritage items identified in a Local Environment Plan (LEP) and if present the project will not affect the significance of these items.

You should check the LEP, REP, State Heritage register, National Heritage list and the National Trust register for any historic or cultural items on the site already listed for protection.

You may need to engage an appropriately qualified and experienced heritage expert to undertake an investigation of the site. If in doubt, contact Council officers and/or the NSW Heritage Office regarding the appropriate provisions for the identification, assessment and conservation of heritage items.

5.10 Amenity issues

Conflicts can arise if there is a perception that the amenity of residents or recreational users is likely to be impacted by an aquaculture business. Site evaluation must consider the compatibility of the aquaculture business with surrounding existing or future land and water uses. Concerns raised may include:

- risks to any heritage significance of the adjacent properties, buildings or sites;
- the amenity of the area being compromised due to noise, air or water emissions, and stock loss;
- the visibility of sheds, ponds and other plant on the site could affect the visual quality of the landscape of the area.

If there is potential for conflicts, consideration should be given to acquiring additional land to provide adequate on-site separation to mitigate noise or odour generating activities including pumps, aerators, plant and waste storage areas. The level of odour, dust or noise beyond the site boundary must be kept to acceptable levels. Landscaping can act as a visual barrier or vegetation buffers from nearby houses. This will help maintain good relationships with neighbours.

5.11 Strategic land use issues

PREFERRED LOCATION

The site is compatible with neighbouring land uses.

Early discussions with the local Council are required to understand the future strategic land use of the area. Sites in 'stable' agricultural areas (or industrial areas for tank production) are preferable. Areas in transition from agriculture to rural residential or residential carry long term risks which may require future costly mitigation measures or even pressure the aquaculture enterprise to relocate.

Sites for pond aquaculture will generally have an agricultural land use or for tank culture an agricultural or industrial land use. Evaluations need to consider:

- If the land is prime agricultural land, the practicality and cost of returning the land to agriculture if aquaculture should fail;
- If the site is on prime agricultural land (eg. class 1, 2 or 3), marrying the aquaculture project with agricultural production that could utilise discharge water (eg. hydroponics, horticulture, orchards, vineyards or fodder) may be considered;
- Residual agricultural chemicals eg. pesticides, fungicides, nemocides or herbicides on the site or adjacent land. Soil analysis should be undertaken early in the site evaluation process. Sites with significant soil contamination should be avoided;
- The potential for chemical contamination from chemical sprays used on surrounding land should be considered. The site should be assessed for prevailing winds, neighbouring spray regimes and buffer zones.

5.12 Potential cumulative impacts

Cumulative impacts can arise from the clustering of similar industries in a catchment. Table 6 identifies most common cumulative impacts.

Potential cumulative impact	Examples of contributing industries/activities to cumulative impacts
Water quality - sedimentation	Urban development, agriculture, storm water, forestry, estuarine aquaculture and road works.
Surface water quality - nutrients	Urban development, agriculture, sewage treatment & stormwater, manufacturing and estuarine aquaculture.
Sub-surface water quality	Agriculture, manufacturing, aquaculture, sewage treatment and the disturbance of ASS.
Water supply usage	Urban development, agriculture, aquaculture and manufacturing industry.
Disturbance of ASS	Urban development, agriculture, estuarine aquaculture, road works and manufacturing industry.
Aquatic diseases	Aquaculture, fishery activities and stress from poor water quality especially ASS discharge.
Land clearing – loss of vegetation & habitats	Urban development, agriculture, forestry, aquaculture and road works.
Noise & odour	Urban development, agriculture, aquaculture and sewage treatment.

 Table 6. Potential contributing industries/activities to cumulative impacts.

5.13 Size of the site

A site needs to be large enough for current production needs plus any future expansion or buffers. Depending on the project type, there should be adequate area for the following:

- Growing facilities ponds and/or tanks;
- Spawning and/or hatchery facilities/laboratory complex;
- Cold storage and packing and possibly processing sheds;
- Water storage tanks/dams;
- Pond/tank water recycling and reuse facilities including storage dams;
- Waste management facilities mortalities, sludges, processing waste water, sewage, etc;
- Management and staff facilities;
- Roadways, loading docks and carparks;
- Tourist facilities if relevant.

5.14 Energy

The site should permit the facility to be designed to minimise energy use and maximise opportunities for the use of alternative energy sources. The layout and design of the facility on the site needs to critically consider energy issues including alternative energy sources (solar or wind) to reduce operation and production costs.

Water pumping is expensive. Where possible the site should provide for the use of gravity for water recirculation.

Initiate early discussions with the appropriate power transmission authority about power supply (3 phase), capacity and access. Also you should contact the Industry & Investment NSW (I&I NSW) and the Australian Greenhouse Office (in Canberra) about energy saving in business design and management.

5.15 Availability of services and other practical matters

PREFERRED LOCATION

The site has access and services available or can be readily connected.

Practical factors for consideration include:

- Access to power (3 phase);
- Vehicle access (safe truck entry and exit) and transport networks;
- Proximity to markets; efficient transport options to Sydney, Canberra or Melbourne;
- Distance and availability of stock, feeds, plumbing and other supplies;
- Availability of suitable manpower to operate the farm;
- Ability to secure the site against poaching and sabotage;
- Proximity to processors;
- Availability of services for staff (eg schools, health services, etc.).

5.16 Access and location for tourists

If an aquaculture facility is to be developed as a tourist attraction then site aspects such as ease of access, prominent location and integration with other tourist facilities or routes should be considered. Businesses incorporating tourism may need to consider insurance, construction aspects such as coach or car with caravan access, public amenities and safety.

6. Planning and Designing the Farm

6.1 Good planning and design are key elements

Land based aquaculture accounts for over 95% of world aquaculture fish production. Earthen ponds are used in many regions of the world and are practical, reliable and viable. The use of intensive tank recirculation systems is increasing as new technology improves the reliability, performance and viability of these systems. The success of both culturing methods is dependent upon the selection of good sites and the implementation of good design features.

It cannot be over emphasised that planning and design are critical steps when building a new facility or expanding an existing aquaculture farm. Construction is one of the major capital investments of aquaculture. Sound planning and design can minimise the costs associated with construction, operation and management of an aquaculture development and any associated environmental protection measures.

6.2 General site layout and design issues

Once a site is identified, the next step is the physical site planning and design. Advice and assistance from professionals such as aquaculturists, water and soil chemists, engineers, irrigation and agricultural scientists, accountants and relevant Government departments should be sought and used. It is advised that similar aquaculture facilities are visited to discuss operational procedures and view farm design features.

A detailed survey of the site will determine the most efficient location of facilities, minimising construction costs and providing for efficient running of the operation. A plan detailing the farm's most efficient layout of water supply, reticulation and drainage lines, power access, buildings and roads, predation control, visual barriers, etc. should be drawn up and specifications documented. Make a checklist and consult with I&I NSW as to available information sources and what approvals may be required given the risk profile (see Site Selection and Project Profile Analysis chapters).

6.3 Water supply dams

If an aquaculture project is located on a large property, water catchment could be significant and could provide a primary or supplementary source of water. The implications of harvestable rights should be considered with the option to 'capture' and use 10% of the average yearly regional runoff from the property without needing a licence.

Projects accessing water via estuaries or rivers may experience periods of poor water quality during low or high river flows. Off-river storage during periods of high quality water may be an optional design feature and should be discussed with NOW.

Guidance on the location, design and construction of dams may be provided by Land and Property Management Authority (Soil Conservation Services). Factors to be considered include:

- the location of the dam in relation to local water flows;
- the dam construction features wall design, heights, method of construction, etc;
- volume of water and extent of the land inundated when the dam is at capacity;
- the relative height and dimensions of the by-wash to control the dam's capacity or the provisions to ensure that inundation of land does not exceed the specified extent;
- provision to provide for passing flows.

NOW approval is required if dam design or location is to be altered. Aquaculture projects, particularly pond aquaculture, should not rely on small dams (and limited catchments) as their major water supply.

6.4 Accommodating operational facilities

Buildings are essential components of an aquaculture facility and their design and location should be planned so that space, labour and equipment are used efficiently and economically within the site. The layout should meet the relevant local Council development control plan or other development controls.

6.5 Road access

Road access should provide for safe entry and exit from the site. The design needs to consider the traffic flow in the road adjacent to the site and the likely level of vehicle movements particularly during peak flows. Public roads having high flows may require design features in accordance with the RTA road design guidelines. Adequate off street parking spaces should be provided for trucks and cars (particularly if tourist or fishout facilities are part of the aquaculture project). Car parking layout should take into consideration the provisions of AS 2890.1-1993.

6.6 Crown lands and road reserves

A licence is required for any structure that is built on Crown land or crosses it or is attached to the estuary bottom (eg. Pipeline for water access). Under the *Crown Lands Act 1989*, the bed of all estuaries below the high tide mark is Crown Land. The extent of the estuary varies depending on the river system. Some river beds are also Crown land but they may also be private property.

You may need to undertake a title search to determine the status of estuary and riverbanks and to determine the exact land status of the proposed development site.

There are numerous unconstructed 'unopened' Council controlled roads (administered by Council) or Crown roads (administered by LPMA) for which a reserve has been created under the *Roads Act 1993*. Some of these roads have been incorporated into the management of abutting freehold properties for a number of years. Before any aquaculture works are built on these roads they should be formally closed if not required for access.

Setback from any natural waterbody

PREFERRED DESIGN

Culture or effluent pond/dam/buildings which are at least a distance of 50 metres from any riparian areas.

The setback distance provides protection for riparian vegetation and allows for natural hydrological processes such as bank erosion without putting infrastructure at risk. There should be sufficient buffer (may be greater than 50 metres depending on the size, location and morphology of the stream or subject to any PVP) so that if any pond water should overtop or be accidently released, it will not drain directly into the natural waterbody. The buffer areas should be vegetated to prevent erosion and minimise flow into the waterbody.

In addition, a vegetated buffer zone of not less than 20 metres should be maintained between any irrigated areas and any adjoining watercourse. It should be maintained to protect any existing native plant species.

Tip!

A setback of more than 40 metres would avoid the need for a permit from NOW under the *Water Management Act 2000* and reduce the likelihood of disturbance to Aboriginal sites.

6.7 Disturbance of native vegetation

PREFERRED DESIGN

No native vegetation/habitat to be disturbed. No riparian vegetation, mangroves or aquatic habitat to be disturbed.

The site layout for the ponds, dams, buildings, water intake, outlet and water reticulation system and operational facilities should be designed to minimise the destruction or disturbance of native terrestrial and/or aquatic vegetation or the habitat of native fauna.

Any disturbance of native vegetation (terrestrial or aquatic communities) must be undertaken in accordance with any relevant approvals (eg. under the *Threatened Species Conservation Act 1995*, *Native Vegetation Act 2003*, *Fisheries Management Act 1994*). Native vegetation located near construction activities (which are not to be disturbed) should be marked or temporarily fenced (or equivalent) to ensure that accidental damage does not occur. In particular, threatened or protected species for which disturbance has not been approved, should be marked to avoid accidental disturbance. Wherever possible, native vegetation including grasses should be used in the rehabilitation or stabilisation of disturbed areas.

The clearing of native trees, shrubs or grasses will usually require an approval by the relevant Catchment Management Authority, DECCW and/or local Council under the *Native Vegetation Act 2003*. Reference should be made to any regional vegetation plan or Catchment Action Plan prepared for the catchment. Also if vegetation is removed within 40 metres of the bank of a waterway or wetland, a controlled activity approval could also be required under the *Water Management Act 2000*.

Any channels, drains, pipes or pumping equipment should be installed to minimise disturbance of foreshore or aquatic vegetation communities (in particular mangrove communities). If mangroves, seagrass or foreshore vegetation is to be disturbed by the inlet and outlet pipes or drains, an approval may be required under the *Fisheries Management Act 1994* and *Water Management Act 2000*.

If vegetation is cleared or lopped, the material should be mulched and used onsite to minimise erosion and to encourage revegetation of disturbed areas using native endemic species as soon as possible.

6.8 Threatened species issues

PREFERRED DESIGN

No impact on threatened species, populations or ecological communities or their habitats.

If terrestrial or aquatic threatened species, populations or ecological communities or their habitats occur on the site or in the area of impact, a test of significance (S5A of the EP&A Act) must be undertaken (see Figure 6). The test of significance sets out the factors to be considered in determining whether there is likely to be a significant impact. If there is likely to be significant impacts on threatened terrestrial species or marine mammal or reptile species, populations or ecological communities, or their habitats, a Species Impact Statement (SIS) must be prepared under the *Threatened Species Conservation Act 1995*. The proponent must contact DECCW to obtain these requirements. DECCW maintains a register of critical habitat. In addition if there is likely to be a significant impact on any threatened aquatic species, populations or communities or their habitats, a SIS will be required under the *Fisheries Management Act 1994*.

A test of significance should be referred to the consent authority to decide if a SIS is required prior to lodging the development application (DA). To determine the appropriate level of assessment for an aquaculture proposal the test of significance (if necessary) could be referred to the consent authority at the same time as a project profile analysis.

6.9 Noise issues

The design and layout should mitigate the impacts of the aquaculture facility on neighbours and the broader community. Noisy activities (eg. truck loading areas or plant/equipment) should be located away from or with a barrier between the noisy activity and the receiver.

DECCW's Noise Policies and information provides details of the requirements or contact DECCW directly. Where noise could become a nuisance, options to reduce noise impacts may include:

- quieter, insulated plant/equipment;
- enclosing the noisy activities in a building;
- building of noise barriers; or
- adjusting work schedules.

Construction noise

During construction the recommended maximum noise levels as outlined in DECCW noise guidelines should be adhered to. Where recommended levels cannot be adhered to discussions should be held with neighbours and the Council on how activities can be managed. Generally, a construction noise management protocol is required with the level of detail matching the level of noise nuisance. The protocol should include:

- compliance standards;
- community consultation;
- complaints handling monitoring/system and site contact person to follow up complaints;
- contingency measures where noise complaints are received;
- mitigation measures, with design and orientation of the proposed mitigation method demonstrating best practice;
- construction times;
- monitoring methods and program.

6.10 Heritage considerations

PREFERRED DESIGN

No heritage items present on the site or disturbance or impact on items should be avoided.

As outlined in the site selection chapter an assessment should be undertaken of Aboriginal and non-Aboriginal heritage items and their significance established. The aquaculture project should be designed to ensure that there is no disturbance or impact on heritage items and their significance on the site.

If during construction, a previously unrecorded Aboriginal site (eg. midden or tools) is uncovered, work in the area should cease immediately and the regional office of DECCW contacted. Prior to further disturbance occurring to Aboriginal sites, an approval is required from DECCW. Under s.140 of the *Heritage Act 1977*, works involving the disturbance of other archaeological relics (land or under water) require Heritage Council approval.

6.11 Pond design

Ponds are constructed by excavating earth and reshaping it to create a purpose built pond that has the capacity to hold and exchange water. These structures may be constructed below or above ground level and may be lined with impervious soils or with a liner such as concrete, rubber, plastic or fibreglass in areas where seepage is a problem or to prevent erosion in open (flow through) systems.

Common pond features include batters, inlets and outlets, sloping bottoms, sumps or low points, power outlets, walkways and vehicle access roads. Ponds are typically 0.1 to 1.0 ha (1000 to $10,000 \text{ m}^2$) in size, rectangular or square in shape, have a water inlet and outlet and have

power to drive aerators and pumps. Ponds may have a sump area (lowest point) made of concrete, fibreglass or plastic to facilitate harvest and final draining of the pond. Ponds may contain raceway devices that, although being tank like they are fully contained within the ponds, and therefore are considered pond aquaculture.

Existing dams on farms that are used for stock or domestic water supplies or as irrigation storage may be used for extensive aquaculture under a Class C or E aquaculture permit issued under the *Fisheries Management Act 1994*. These dams/ponds must meet the criteria as outlined in the project profile analysis chapter.

Water and system type

The type of water used within the pond aquaculture facility also needs consideration in the design phase, as saline waters such as estuarine, marine and saline ground waters may cause soils to flocculate and therefore ponds may need to be specially lined.

Open pond (flowthrough) systems generally have large volumes of water flowing through them and therefore will require careful design to prevent erosion.

Designing for climatic effects

A pond site that is open to the weather is advantageous because it allows some wind aeration of ponds. However, at exposed sites, ponds should be built having their long axis perpendicular to prevailing winds to reduce bank erosion and any predatory netting needs to be well constructed. In areas where there are likely to be temperature inversions, any noisy or odour generating activities could be amplified.

Drainage and flooding controls

PREFERRED DESIGN

- Aquaculture development is not liable to flooding and is consistent with any Council or DECCW Floodplain Management Plan relevant to the site.
- The design will not adversely affect the passage of flood waters or have adverse impacts on other developments. The development will maintain environmental flows to flood dependant ecosystems.
- Design will not affect site stormwater drainage.
- No stormwater catchment drainage into excess water (effluent) storage pond/dam.

An analysis of any flooding implications should be undertaken and discussed with the relevant local Council. Any flood mitigation works must be constructed and installed so as not to obstruct the passage of floodwaters flowing in, to or from a river. These should be designed in consultation with the local Council and DECCW. The plans for levees or other flood control works should:

- specify the location and nature of the works;
- specify the level of the crest of the works;
- be consistent with any relevant local Council or DECCW Floodplain Management Plan;
- show analysis to indicate that flood behaviour will not result in adverse impacts on nearby land;
- meet the requirements of Part 8 of the Water Act 1912 or the Water Management Act 2000 for flood control works, where applicable.

The blockage of stormwater drainage passage across the site by ponds, drains, roads or other structures can result in management and maintenance problems as well as local flooding problems for neighbouring properties.

Ponds used to hold excess water (effluent) discharged from culture/growout ponds, tank or hatchery facilities must have no stormwater catchment draining into them. This is to prevent the

ponds filling during storm events and nutrient rich waters escaping into the environment uncontrolled.

Pond shape and size

Aquaculture ponds should be designed for efficient filling, cleaning, draining and water circulation and for efficient management. The shape and size of a pond affects:

- the cost of construction;
- the level of production;
- the size of inlet and outlet pipes, water circulation, the amount of aeration and power outlets;
- the stocking density, harvesting and feeding methods;
- the water volume and farm water budget.

Management, topography and site characteristics will determine the pond size and shape. Square and rectangle ponds are the most efficient use of space. Rectangular ponds are generally easier to manage than square ponds as they offer good water circulation (provided they are not too narrow), they are relatively cheap to build and have practical feeding and harvesting advantages. Most earthen aquaculture ponds range from 1 to 2 metres in depth; this allows good light penetration, good aeration of the water and bottom muds and uniform temperature with little chance of stratification.

Ponds generally are designed to have a deep section (2 - 2.5 metres) and a shallow section (about 1 metre). Depths will vary but generally having a deep section provides a buffer against extremes of temperature, reduces evaporation during summer, facilitates harvesting and reduces the growth of macrophytes (large aquatic plants).

Pond size is determined by several factors; namely, the target level of production, land area and ease of management (water quality monitoring, harvesting, aeration, etc). Larger ponds tend to have lower cost per unit area to construct and maintain compared to smaller ponds. However, they have some disadvantages including: they are more difficult disease control; they require more aeration, power outlets and larger inlet and outlet pipes;and, they are more difficult to harvest and maintain stock inventories. Well managed smaller ponds (eg. less than 0.5 hectares) can maintain relatively higher production levels without these issues.

Pond banks and floor

Earthen pond banks should be designed with optimal batter angles to prevent slump or erosion. It is important that they are wide enough to ensure strength, stability and vehicular access. The recommended dimensions of pond embankments are:

- crest approximately 3 metres in width;
- 2.5:1 on the inside and 2:1 on the outside for embankments less than 3 metres high;
- 2.5:1 for embankments greater than 3 metres but less than 6 metres;
- 3:1 for embankments greater than 6 metres (rare);
- have freeboard minimum of 0.5 metres (where wave action fetch is less than 100 metres);
- have a cut-off trench minimum 300 millimetres into good clay.

Ponds made of manufactured products such as plastic/rubber liners or reinforced embankments utilising concrete etc may have steeper gradients. However, care must be taken so that the steepness does not create access and maintenance issues.

Walkways to any drainage outlet structures (eg. penstocks and monks) enable efficient control of the boards, screens and valves, as well as being ideal sites for observing and feeding stock and monitoring water quality.

Acid sulfate soils (ASS) should not be used in pond bank construction. If no alternative is available, consult the ASS Manual to ensure that the long-term use of the ponds and surrounding environments is not jeopardised.

Be aware!

The construction on and disturbance of ASS would constitute a 'high risk' option, requiring a high level of assessment and approval.

Earthen pond banks, batters and backfill should be covered with stockpiled topsoil and planted with grasses to ensure stability and prevent erosion. In some circumstances (highly erodable soils, or with some water circulation/aeration systems), a pond bank liner should be used. Any embankment at the water inlet should be fortified to prevent erosion. Animals (cattle, horses and to a lesser extent sheep and goats) grazing the banks may lead to bank degradation, and increase turbidity and eutrophication.

Pond water inlet

PREFERRED DESIGN

Inlet pipes that allow the largest pond to be filled within 24 hours or less.

Water inlets, other than bore water, should be screened to prevent the entry of trash fish and other undesirable aquatic fauna. Where there is likely to be poor water quality or restricted access to water supply because of seasonal variations in flows, it is good practice for the farm to include a storage system of high quality water.

Each pond should have a separate water inlet and outlet of at least 150 mm in diameter depending on pond dimensions. Water supply reservoirs should be aerated and if topography permits piped by gravity to the individual ponds and buildings.

Pond water outlets

Ponds should be designed so that they can be drained individually, completely and rapidly. This will enable the removal of all stock, maintain inventories, dry out, de-silt and re-shape bottoms and walls.

The water outlet (eg. monk, tower, penstock, gate or standpipe) is the most important feature for regulating the water levels and draining the pond. Outlets vary in construction and costs and should be screened to allow water passage during water exchange and rainfall whilst retaining stock.

Ponds using a monk as an outlet are usually 300 mm to 800 mm in width. There must be adequate space between the rear board and back wall of the monk to avoid restricting the drainage capacity of the pipeline. The drainage pipeline traversing the embankment should have an incline between 0.5% and 1.5%. If fish are to be externally harvested through the outlet pipe, pipes should be a minimum 300 mm diameter, the receiving sump should be at least 30 cm in depth and large enough to hold most of the fish. External drain harvest is most successful when harvesting small fingerlings and fry (eg. hatchery operations).

Circulation and drainage systems

Ponds should be sited to allow for efficient water reticulation. Main features include water supply facilities, storage dams, culture/growing ponds, discharge ponds and drainage lines. Reticulation systems should be designed to allow:

- culture pond discharge water to be retained in reconditioning ponds (to reduce suspended solids and to allow for appropriate treatment if necessary); and
- ample capacity to recirculate the culture water on the farm or release/reuse the water in an appropriate manner (see Figure 7).

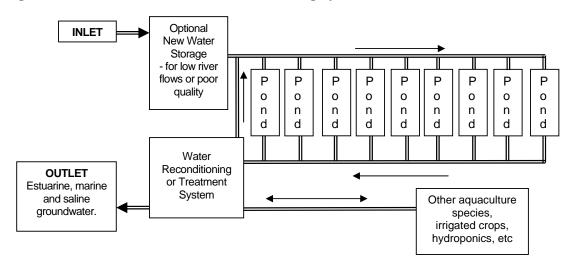


Figure 7. Water recirculation and reconditioning system.

Site planning should include drainage earthworks:

- to protect the farm and ponds from excessive runoff drainage from surrounding land during storms or flooding;
- to protect surrounding areas from run-off water from the farm.

For freshwater farms, site planning needs to provide for efficient use of reconditioned water following pond use. In some areas, it may be possible to provide discharge water to nearby irrigated agriculture, hydroponics or other water users. If the pipes cross a public road, permission will be required from the RTA, the local Council or Land and Property Management Authority. If on-site irrigation is proposed, the irrigation layout should consider land slope and relief, soil type, distance from natural creeks or drainage lines, location of pumping systems, irrigation reticulation systems and catch drains (if relevant). See Site Selection Chapter for further information on site and soil assessment for proposed irrigation areas.

For estuarine and marine farms, the discharge points need to be located to maximise the dispersal of the discharge water, minimise disturbance of marine vegetation or any oyster leases in the estuary and sited away from water intake points.

Fencing ponds and/or the farm

Ponds culturing freshwater crayfish and eels may require perimeter fencing to prevent stock from escaping. Properly constructed fencing can also help exclude water rats and eels, which are both nuisance predators for yabby farmers.

6.12 Pond water reticulation system

Water management as a resource

Reconditioning and recycling of culture pond discharge water should be part of standard environmental management practice for aquaculture farms. Any new or expanding existing farms should incorporate a reconditioning area and/or treatment systems so that water is reused within the aquaculture farm.

Tip!

For estuarine and marine farms, a water recirculation system should include appropriate reconditioning areas to strip nutrients and suspended solids before reticulation or discharge.

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Discharge to waterway

It is I&I NSW policy that intensive freshwater aquaculture enterprises (except approved open (flow-through) systems) are not permitted to discharge water directly onto public or Crown roads, Crown land, neighbouring land (without landowner permission), rivers, creeks or natural wetlands or groundwater aquifers. This requirement does not apply to extensive aquaculture.

Open (flow through) systems and semi closed systems using estuarine, marine and saline ground waters may be permitted to discharge under a licence issued by DECCW. However, this will also require extensive consideration by NOW in terms of water extraction, embargoes and water quality impacts on the river system. See *Operating the Farm* chapter for further information on discharge considerations and requirements. Culture water sourced from a saline interception scheme should be discharged back to the same scheme.

Discharge water reconditioning system

PREFERRED DESIGN

Freshwater reconditioning storage capacity of greater than 2 times the size of the largest culture/growout pond (except open systems and extensive systems).

For open freshwater (for approved species) or estuarine, marine and saline ground water semi closed pond aquaculture, water treatment system to ensure discharge meets water quality objectives (WQOs) of receiving waters or licence requirments.

The capacity to recirculate water discharged from culture/growing ponds within a farm system relies on the pond discharge water being appropriately reconditioned.

Saline ground water discharged from a farm into a saline interception scheme may require treatment in accordance with any conditions applied by the scheme managers.

Open aquaculture farms may have filtering less than 1000 microns and a water treatment system to reduce impacts on water quality in receiving waters. They may require other design features in accordance with any conditions of a licence issued by DECCW regarding the management of the discharged water

If using sedimentation basins as a water treatment system, the two most important factors determining efficiency of are *retention time* and *pond geometry*. The four main features are an inlet zone (water is dispersed across the full width of the basin); settling zone; bottom zone (settled particles accumulate as sludge) and; outlet zone (waste water is drawn and/or discharged). Ideally, the length to width ratio of sedimentation basins should be at least 4:1 and preferably 8:1 with the long side set transversely to prevailing winds. This arrangement helps achieve uniform horizontal and vertical mixing throughout the depth and breadth of the basin and hence good deposition of suspended particles.

A reconditioning area or any channel systems should have the ability to be completely drained and maintained for de-silting and re-shaping.

Use of reconditioned freshwater

Efficient use of water is a management goal on aquaculture farms. You should consider establishing an integrated aquaculture/agriculture system with the reconditioned freshwater water used for hydroponics or agricultural crops, preferably substituting for raw water. It may be possible to pass on or on-sell to a neighbouring water user.

Use of reconditioned saline water (estuarine, marine or saline groundwater)

In some saline water aquaculture systems overseas, the water is used by species such as fish, filter-feeding organisms, and seaweeds prior to the water passing through mangroves or wetlands into the natural system.

PREFERRED DESIGN

Disposal of saline groundwater via piping or channels lined with impervious liner to a saline groundwater interception and evaporation scheme, onsite evaporation facility or reinjection to a saline aquifer.

The use of saline groundwater will require the design of evaporation ponds if discharge water cannot be sent directly to a saline groundwater interception and evaporation scheme, or reinjected into an aquifer or discharged to the sea or an estuary.

Pre-market conditioning facilities

Some species require pre-market conditioning (purging) in clean water for 3 to 14 days to improve the product taste. Some algae and bacteria produce off-flavours in pond and tank aquaculture systems. Taste testing the product will determine the presence of any off-flavours. The design of pre-market conditioning systems should include:

- fibreglass or plastic tanks;
- clean water, free of algae and off flavour compounds (eg. underground bore or spring, rainwater or domestic (dechlorinated);
- the ability to exchange water and provide good aeration.

6.13 Predator management

During the site selection process, you need to evaluate the extent of any predatory bird activity in the area. In addition to cormorants, nuisance predators may include water rats, night herons and pelicans.

Avian predators

PREFERRED DESIGN

Netting of fingerling ponds and deterrent system for other ponds.

Pond aquaculture needs to be designed to minimise losses to predator birds. Ponds require daily checking, particularly at dawn when birds often visit. Methods could include:

- deterring the birds from gathering around the farm (eg. removal of dead roosting trees);
- deterring the birds from entering the water (eg. pond netting, deterant wires, regular checking, activity around ponds).

Exclusion and partial exclusion netting

Total exclusion netting is costly but may be a requirement at some sites. Netting design can be at the water surface level using props of wire or timber, waist level using perimeter fencing and cross-wires as support; or elevated (approx 4 metres) using a grid of poles and tension cables.

Other systems include nylon scare line set 300 millimetres apart and running in two directions across the pond.

Fright methods for avian predator control

Fright devices (eg. gas guns) used to manage predator birds can have noise implications and should be avoided if residences are nearby. Discussions should be held with neighbours and the Council to determine if acceptable protocols can be developed for the use of noisy scare devices. The neighbours should be informed of the likely frequency of use, the times of the day and season to be used, the loudness and likely affect on the birds.

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'Fright' methods (see Table 7) utilising gas guns or scarecrows tend to have limited or short term success and should not be considered as the first line of defence. Surveillance (often a person on a motor bike doing 'rounds') coupled with a number of fright mechanisms seems to offer the best solution.

Table 7.	Summary	/ of some	fright	methods.
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Birdscare, Bird Deter or recorded calls	Various commercial machines have been developed which generate distress calls of target species, which are turned on and off at random or in response to the presence of birds. Devices that emit more random noises, or respond to movement are likely to be more effective as birds do become familiar with the device.
Birdfrite	Cartridges are fired from shotguns or pistols that explode in the air. When fired at random and aimed at the flock it is likely to be more effective.
Water bird effigies	Life size models of birds which can simulate a bird in distress in combination with birdscare calls can be effective for a time.
Chemicals	The use of chemicals around the ponds is not recommended.
Hawk kites &	When the wind is favourable, the flying of simulated birds of prey can be effective. The approach
silhouettes or	is labour intensive and effective for a short time and like scarecrows need to be moved around
Scarecrow	to remain effective. Otherwise the birds become familiar with them.
Dogs	Some breeds of dogs can be trained to deter birds. Dogs which will also swim can be quite effective.
Motor bikes or vehicles	Regular monitoring of ponds at dawn and dusk is the most effective deterrent but is labour intensive.
Gas guns	Emit regular loud bangs; birds can become familiar with it.

Predator birds, particularly cormorants, can lead to significant fish losses. Research has shown uncontrolled bird predation can lead to complete loss of fish in unprotected ponds. The daily presence of any predators causes stock stress, disease, poor feeding and subsequently lower productivity.

Summary of potential risks

Great Cormorant

The Great Cormorant (*Phalacrocorax carbo*) occurs in most areas of NSW, breeding along rivers and lakes in the Murray Darling and some coastal rivers of NSW. They congregate in significant numbers at breeding locations and can travel considerable distances in search of suitable feeding habitats. Estuaries can support cormorants year round, with the numbers boosted significantly during droughts.

Great Cormorants are sociable feeding birds, their diet being mainly freshwater fish supplemented by crustacean, salt-water fish, frogs and insects. They principally feed in daylight but have been observed feeding at night. They are capable of taking fish up to 1kg with a daily intake of a breeding bird of around 750 grams and can make significant impacts on the stock in a short period if unchecked.

Risk: Significant risk, visitation at dawn and dusk and ability to take large numbers of large fish.

Little Black Cormorant

The Little Black Cormorant's (*Phalacrocorax sulcirostris*) distribution is similar to the Great Cormorant. During summer and autumn they tend to congregate in colonies of up to 100 birds in breeding localities such as swamps, lakes and along rivers but tend to disperse during other times. Drought will increase the numbers in coastal areas. The Little Black Cormorant feeds socially taking fresh and salt water fish, crustacea and insects. They tend to take smaller slow swimming fish but because of their abundance in NSW, they have significant impacts on aquaculture farms.

Risk: Significant risk; unprotected fingerling ponds most vulnerable; can hunt in large numbers.

Pied Cormorant

The Pied Cormorant (*Phalacrocorax varius*) occurs sporadically in NSW. They tend to breed in colonies during autumn and winter in estuarine areas. They feed principally on fish but also take crustacea and molluscs. Because of their size, they are capable of taking quite large fish but are less of a problem compared with the Great Cormorant.

Risk: Less of a risk because of their lower numbers.

Little Pied Cormorant

The Little Pied Cormorant (*Phalacrocorax melanoleucos*) is widespread and most common of the cormorants along most of the rivers, lagoons and swamps of NSW. Colonies may include as many as 4000 birds. These Cormorants tend to be solitary feeders mainly on freshwater crustacea, invertebrates or small slow moving fish up to about 90 millimetres in size. Generally, they are not considered to be a risk for fish farms but can be a major concern for yabby farms. They mainly take slower moving trash fish.

Risk: Low risk due to solitary behaviour; can become a problem for crustacean farms.

Darter

The Darter (*Anhinga melanogaster*) distribution is similar to other cormorants but is usually seen in low numbers but may form colonies of up to 100 birds. They can be nomadic with a sudden appearance at water bodies. Their main source of food is fish, small crustacea, molluscs and aquatic insects. Because of their size, it is expected that they will consume similar quantities of fish to the Great Cormorant. However, as they are solitary feeders, they are thought to pose less of a problem than the Great Cormorant.

Risk: Reasonable risk, can cause stress to stock and damage to cages.

Other potential problem birds

Nankeen Night Heron (usually at night) and White Faced Herons can be problematic for crustacea, larvae and smaller fish.

Water rats

Water rats can be a nuisance at some sites particularly east coast yabby farms. Water rats are very agile and are often capable of climbing low perimeter fencing.

Fish predators

Poorly designed screening of inlet water can allow the entry of 'trash' fish (including eels) into ponds. Trash fish compete for feed and harbour disease; some species are capable of causing physical damage to stock. Filtering water at the intake, the reservoir and at the pond can eliminate this problem.

Poaching

Poaching of aquaculture stock occurs irregularly particularly from perimeter ponds adjacent to public roads. Some sites may require gates and fencing to prevent access. Strategically placed movement detection lights may be an effective deterrent.

6.14 Construction of ponds and related facilities

It is strongly recommended that you invest in professional construction of ponds to avoid, costly maintenance caused by pond wall erosion, slump, leakage or failure. Leaking ponds (seepage) result in unnecessary cost due to additional water pumping and repair work.

The most common pond type is the 'excavated' pond in which earth is removed and used for building the banks and can be constructed on flat or undulating land. 'Levee' ponds are

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constructed on very flat land typically with imported material and are similar in structure to rice bays but have pond walls.

Soil material

The pond walls and floor should be constructed and/or lined with material capable of retaining water with hydraulic conductivity (eg. less than10⁻⁹metres/sec). Clay or clay/loam is preferable. In loamy soils, heavy compaction using rollers or bulldozers is required. Prior to construction, the proposed site should be surveyed for rock, gravel or sand layers at proposed pond depths. Ponds constructed in sandy or other porous soils may be made watertight by lining the bottom and sides with clay, using sealers or artificial liners. However, this is often expensive and the pond water quality, waste assimilation and ecosystem operate vastly different to earthen surfaces.

The construction of ponds in areas of high groundwater can be problematic as it may be difficult to build ponds that can be completely drained and dried at these sites. Ponds leaking saline water to groundwater pose contamination risks.

Seasonal conditions can affect construction and must be considered in the scheduling of work contracts. Wet weather can create difficulties with plant and equipment and add significantly to costs. Dry conditions will necessitate the application of water to maintain soil moisture during construction.

The main factors that contribute to pond failure are insufficient soil moisture, lack of compaction and the use of poor soil material.

Erosion and sediment controls

Disturbed areas should be kept to a minimum to reduce erosion during construction activities including problems associated with soil stockpiles, rehabilitation works or truck movements.

Measures to reduce erosion during construction and intercept mobile sediment should include silt fences, sediment traps and the use of straw bales. At some sites, it may be necessary to bund the construction site and soil stockpiles to prevent overland flows from entering the construction area. Measures should include:

- integrating clearing and grading with layout design;
- limiting grading to areas involved in current construction activities;
- limiting the time during which unprotected graded areas are exposed to the wind and rain;
- subdividing drainage catchments into smaller units, at a size appropriate to the type of sediment control measure to be used;
- trapping sediment as close to the source as possible, with sediment traps or filters below all disturbed areas to intercept and detain sediment laden runoff and above all prevent sediment entering environmental sensitive areas such as streams;
- reducing runoff velocity by minimising the length of flow paths and constructing channels with gentle gradients, with rough linings to the steeper channels;
- intercepting and diverting clean runoff water from flowing onto all disturbed areas, including soil stockpiles;
- installing permanent stormwater drainage works as soon as possible;
- applying temporary vegetation or mulch to all disturbed areas, including soil stockpiles, where construction is only partially completed and which will remain exposed for a period of 14 days or more;
- progressively stabilising all disturbed areas either with permanent vegetation or mulch as each stage is completed.

Rehabilitation of the pond walls and disturbed areas

At the commencement of pond construction, topsoil should be stripped and stored for later use on pond walls, batters or in the rehabilitation of other disturbed areas. As soon as possible, pond walls, batters, backfilling and disturbed areas should be rehabilitated preferably with local native vegetation. All cleared vegetation should be mulched and used to help stabilise disturbed areas. This material should not be placed where it could enter streams during heavy rains or impede drainage.

Any disturbance to coastal or riparian zones including the bed or banks of rivers, estuaries or drainage lines should be stabilised and restored using native vegetation.

Contaminated soils

You may need to test previous agriculture sites for chemical residues (pesticide, herbicides, cattle dips). If present, it may be necessary to remove all the topsoil and not use it in the rehabilitation of the pond and batter walls. Leachate from contaminated soil into aquaculture ponds can cause water quality and long-term production problems.

Acid sulfate soils

PREFERRED DESIGN

In a location where there is no ASS, or ASS Landform Class A with Landform Element class b, I, t, p, y or w. (ASS Risk Maps can be obtained from DECCW).

The excavation or disturbance of ASS during construction of ponds, access roads or reticulation drains should be avoided. If the disturbance of ASS is unavoidable, then the construction must be undertaken in accordance with an approved environmental management plan that is consistent with the ASS Manual. Soil survey work will be required to identify the depth to the ASS and any likely 'hot spot' areas. All excavated ASS material should be treated in accordance with the ASS Manual.

Preloading of the site may be required, with hydrological analysis necessary to determine the effects of compaction on groundwater levels and the potential for discharge of acid.

Be aware!

Some ASS clays have the consistency of a gel with up to 70% water content; they have low load bearing capacity resulting in lateral movement or subsidence under load.

6.15 Tanks and related facilities

Tank aquaculture may be in open (flow through), semi closed or closed systems. Semi closed and closed farms may also utilise what is referred to as a recirculating aquaculture system (RAS). The tanks may be constructed from materials such as fibreglass, plastic, concrete, glass or metal and are usually situated either wholly or partly above ground. The technologies used in a RAS enable water to be reconditioned and recycled through the farm. The high rates of recycling, together with high stocking levels require sophisticated equipment to polish the culture water for reuse. This equipment includes filtration such as a swirl separators, drum filters and settling tanks, oxygenation, ozonation or UV sterilisation units, pumps, de-gassing chambers and a bio-filter.

Tank aquaculture is generally undertaken in a purpose built farm, industrial or plastic covered shed to assist in controlling environmental factors. They typically have a concrete floor with an integrated drainage system. Tanks are successfully used to rear Murray cod, barramundi and ornamental fish.

The risk of loss in these systems increases proportionally with intensification due to the inherent dependence on life support technology. However, a closed tank aquaculture farm utilising RAS technologies is a secure facility providing protection to both the environment and the aquaculture farm.

General provisions

The advantages of tank aquaculture include control over stock (including non endemic species), conservation of water, flexibility in site selection and extended growing seasons with temperature control. However, tank aquaculture often has higher capital and operational costs and requires skilled technicians to manage the system. RAS often have the following features:

- structurally sound sheds or buildings;
- stock culture tanks (may include troughs/raceways);
- water pumps and drainage system;
- recirculation system with mechanical filters to remove solids, biological filter system to remove nitrogenous wastes; degassing towers; UV or ozone; temperature control;
- laboratory and general workroom with tanks for holding, sorting, quarantining and treating fish;
- handling/ packaging room for preparing stock for packaging and dispatch;
- plant room(s) with backup generators;
- store rooms for chemicals, feed, equipment;
- office(s) and staff meeting room, toilet and washroom;
- solid waste management facilities (filters, dead fish, packaging, solid waste);
- reconditioned water-holding tanks and disposal provisions if there is no trade waste agreement with Council;
- vehicular access.

The buildings/structures

The fundamental requirements for structures housing tank aquaculture are that they:

- use well-insulated material to maintain temperature;
- have a concrete floor with high insulating properties and drains;
- have cladding that is salt and water resistant;
- are structurally sound and meet the functional needs of the proposal;
- are cost effective to construct or convert and maintain;
- have sufficient room surrounding the building(s) to handle waste water.

It is preferable that tank drainage lines are not enclosed in the floor concrete as routine cleaning and airing of drainage lines is important. It also allows easy access to all plumbing fixtures and allows for later modifications to the design if necessary.

Tank aquaculture systems can generate high humidity within buildings. Low humidity areas for office and feed storage are required. Electrical service to the site should be sufficient to accommodate immediate and future needs.

Recirculation aquaculture systems (RAS) components

1. Tanks

Generally, circular tanks allow for efficient water circulation and solids removal. However, rectangular tanks/troughs/raceways use floor space more efficiently. Fibreglass tanks have the advantage over concrete of reduced frictional loss, weight, manoeuvrability, wear, colour choice and costs.

2. Solids removal

The removal of settlable, suspended and fine solids is fundamental to the successful operation of RAS. Suspended solids and fine solids are the most difficult to remove. Equipment required

to achieve this process include drum screen, belt and bead filters, hydroclones, swirl separators and foam fractionators.

3. Biofiltration

The assimilation and breakdown of protein (feed) generates ammonia. The biofilter is a 'living' filtration unit designed to convert ammonia to nitrite and then to nitrate by nitrifying bacteria (eg. *Nitrobacter* sp and *Nitrosomonas* sp.) on high surface area media.

4. Water disinfection

The high bacterial load of RAS often necessitates the use of ozonation or UV sterilisation units.

5. Aeration

RAS require high stocking densities to operate profitably. High densities can adversely affect water quality and generally RAS require oxygen generators and/or carbon dioxide stripping devices to maintain water quality. Larger systems may incorporate automated pH control to prevent acid waters developing.

Discharged water reconditioning system

PREFERRED DESIGN

Freshwater closed tank aquaculture with tanks or ponds capable of storing greater than 2 times the volume of the largest culture/growout tank.

If storage ponds are used then they should comply with the design features outlined in the pond chapter above.

Discharge water management

PREFERRED DESIGN

Open (flow through) freshwater (for approved species) or estuarine, marine or saline ground water tank aquaculture with screening to avoid escapement of stock and a water treatment system.

Open (flow through) tank aquaculture farms or semi closed tank aquaculture farms using estuarine, marine or saline ground waters may require additional design features in accordance with any conditions of a licence issued by DECCW regarding the management of the discharged water.

In semi closed tank aquaculture, the volume of discharged water tends to be relatively small (5 to 15% of culture tank volume/day). Therefore, in some land use zones (eg. industrial estates) waste water may be disposed of through the municipal sewage system under a trade waste agreement with the local Council.

It is I&I NSW policy that freshwater tank aquaculture (except approved open (flow through) systems) are not permitted to discharge directly to natural waterbodies or wetlands. Discharged freshwater should be collected in a storage unit (tank or pond) prior to another use such as irrigated agriculture (see *Pond Water Reticulation System*). In land use zones where other uses may not be readily available (eg. industrial estate) freshwater may be discharged with approval to sewer.

6.16 Water inlets and outlets

PREFERRED DESIGN

Existing infrastructure to carry inlet and outlet pipe for estuarine or marine water based farms (eg. wharf).

The location of marine inlet and outlet systems is critical from an engineering perspective, particularly in areas exposed to high energy waves and currents. Pipelines traversing sandy beaches must be designed to ensure they are not affected by coastal storms and erosion. Existing infrastructure (eg. piers) or use of existing bedrock for anchoring the pipeline is an other option.

In freshwater open (flow through) production systems, place the inlet and outlet points to prevent dramatic modification to stream levels and flows, taking account of the large volumes of water required.

Be aware!

The use of freshwater for open systems will require extensive consideration by NOW and DECCW in terms of water extraction, embargoes and discharge water impacts on the river system (See Operating the Farm chapter for further information).

6.17 Hatcheries

Hatcheries are facilities where seedstock (fry, spat, etc) is produced for use in aquaculture and stock enhancement of waterways (See Species Selection chapter). Hatchery facilities include specialised buildings having tanks, incubators, laboratories, live food rearing systems, offices, and earthen ponds. Hatcheries may be stand alone facilities or integrated with a growout aquaculture farm.

Hatcheries require a high degree of technical knowledge involving broodstock conditioning, egg incubation, larval rearing, live feed production and nursery management.

Hatchery water management systems

With an integrated hatchery/aquaculture farm, it is recommended that the hatchery water reconditioning system be kept separate from the farm's system.

Generally, nutrient loading from hatcheries is relatively minor due to a small biomass, low levels of feed input and regular de-stocking to growout farms. However, freshwater hatcheries are still not permitted to discharge to natural waterways or wetlands except for approved open systems which would be evaluated and licenced by DECCW.

Estuarine, marine and saline ground waters based hatchery discharge will be considered on a case by case basis, however, systems should be designed to improve the quality of discharge water. A licence issued by DECCW may still be required to discharge waste water to waterways from these facilities.

Hatchery Quality Assurance Scheme (HQAS)

I&I NSW has developed a Hatchery Quality Assurance Scheme (HQAS) that describes the key features of the design and operation of fish hatcheries. The program provides a framework for best practice. Consult the HQAS when developing an aquaculture project plan that includes a hatchery facility.

The HQAS accredits fish hatcheries for the production of Murray cod, golden perch, silver perch and Australian bass fingerlings for recreational fishing enhancement stocking programs. It is planned to expand the HQAS to cover marine species. The scheme is a component of the I&I NSW Fisheries Management Strategy for fish stocking and was developed by I&I NSW Aquaculture and Recreational Fishing Staff with industry consultation and input.

A major objective of stocking programs is to maintain genetic diversity and the HQAS is designed to ensure the genetic integrity and health of consignments as well as the absence of

non-target species. Hatcheries in NSW that produce fingerlings for stocking under the FMS, must be accredited under the scheme.

HQAS accreditation for aquaculture production is also available for Murray cod, silver perch, golden perch and Australian bass as a quality assurance measure for the production of fingerlings to supply the aquaculture industry.

6.18 Tourist destination

There is community interest in visiting aquaculture facilities and buying produce directly from the growers. Visits provide an opportunity for the industry to showcase the sustainability of the aquaculture industry and for the broader community to develop an increased understanding of aquaculture operations.

An aquaculture business can include visitor facilities having displays explaining life cycles, operational procedures, farm design or tanks holding live product. Tourism facilities should include toilet facilities, tables and car parking. It is advisable to contact local tourism authorities for assistance.

Fish maintained in an aquarium for public display, might require a permit under the *Exhibited Animals Protection Act 1986*.

6.19 Fishout facility

A fishout is a business where anglers pay to fish in private ponds or tanks. The fishout may be associated with accommodation developments or located in close proximity to urban areas and in rural settings. Intensive fishouts are similar to an aquaculture culture/growout facility that has relatively high stocking levels and aeration to ensure high catch rates and to maintain good water quality and healthy stock. Extensive (no feeding) fishouts also offer quality recreational fishing experiences.

Fishouts should provide fishing tackle as anglers using their own tackle could introduce disease to the facility. Anglers visiting NSW fishouts do not require a NSW recreational fishing licence. Bag and size limits do not apply to fishouts but the operator must supply the angler with a 'record' of the fish taken (date, number, size, combined weight by species and location of fishout). This is to prove the fish was not been taken from the wild.

6.20 Waste management

PREFERRED DESIGN

Site design should provide for daily disposal of organic wastes (material held so not to generate odour or other issues) and the disposal method does not affect groundwater or the local amenity.

Design the aquaculture farm to minimise waste and maximise reuse and recycling of materials at every opportunity. This includes:

- pond and processing water;
- pond sludge and filter materials;
- processing wastes and dead fish;
- packaging material.

Adequate facilities should be included in the design for the safe and efficient management of all wastes, especially organic material. The short-term storage of waste on site or its permanent disposal can lead to odour and vermin issues that can evolve into amenity and health issues. Any proposal that includes the onsite disposal of waste, in particular organic waste, must consider the potential impacts on nearby residences or for contamination of surface or ground water.

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7. Operating the Farm

7.1 Business management

Annual production goals, products, markets

A business plan is a living document that should be prepared and reviewed regularly as the business evolves (see Business Planning chapter) and when major events occur, change of species, technology, production rates or management is proposed. The enterprise's progress and operation should be checked against the plan.

Personnel management and training

PREFERRED MANAGEMENT

Staff trained in water quality monitoring, disease management, husbandry practices and water management.

Experienced staff are essential in the operation of an aquaculture business. All new and existing staff must be aware of the need for the aquaculture enterprise to operate in an environmentally sustainable manner. They need specific training in disease and water quality management and correct husbandry procedures. Training should include:

- stock management, health and welfare;
- product quality control post harvest, quality assurance and food safety;
- pond/tank water management procedures;
- familiarisation with discharge permit, chemical approvals and licence conditions;
- commitment to waste prevention and energy conservation;
- contingency management procedures;
- the importance of monitoring and reporting.

Aquaculture courses exist at both tertiary and TAFE levels and training should include Occupational Health and Safety (including first aid, chemical use and machinery operation).

7.2 Species management

Only those species authorised by an Aquaculture Permit issued by I&I NSW can be cultured on the aquaculture farm. Also, certain species sourced from interstate are required to fulfil specific disease clearance protocols prior to stocking a farm.

Before fish are introduced to the culture environment, conditions should be favourable for survival and growth. Check water quality variables including temperature, salinity, pH, dissolved oxygen, ammonia, nitrite and alkalinity. Exclude potential predators. Stock containment practices must ensure that no farmed stock is released into the environment.

Stocking densities

Stocking density has a significant effect on the performance of aquatic animals. It influences behaviour, feeding patterns, incidence of disease, water quality and growth. Generally, stocking densities are much higher in tank aquaculture compared to pond aquaculture. To calculate an appropriate stocking density consider:

- Species;
- Culture system;
- Production strategies including life stages;
- Operator's skills and management systems.

Avoid stress

Aquatic animals are very prone to stress that may occur during handling (eg. grading, harvesting, transferring between ponds and under transport), heavy predation (eg. cormorants), during chemical treatments, poor water quality, malnourishment or overcrowding events. Stress will reduce growth, elevate FCR's cause disease, lessen marketability and impact on the success of

an aquaculture business. Good husbandry techniques to help stress prevention include:

- maintaining water quality;
- optimum stocking rates;
- quarantining of stock entering the farm and following handling;
- use of high quality feeds;
- regular monitoring of water quality and disease; prompt application of chemical treatments;
- implementation of disease preventative measures (eg. filtration, use of bore water, disinfection).

Health management

PREFERRED MANAGEMENT

Staff trained with appropriate equipment to monitor water quality and disease; quarantining facilities available.

Good aquaculture practices minimise stress and reduce disease risk in cultured animals. Initially, the purchase of certified pathogen free stock is advisable; new stock is a common pathway for disease transmission to farms. Quarantine and treat all new stock, including broodstock, prophylactically prior to stocking.

Most species are susceptible to disease under intensive and semi-intensive culture conditions. The interactions that cause disease outbreaks relate to three key components, namely:

- the presence of a disease agent;
- the host (the cultured organism);
- the environment (water, pond, tanks, feed, etc).

Disease prevention

Many disease organisms already exist in the culture environment and it is when an adverse environmental change occurs (eg. stress, poor water quality, over-crowding, poor husbandry practices, etc) the disease manifests. Disease on farms has a significant impact on production with the loss of stock and productivity, costs for chemical treatments and disruption of farm processes and staff. Disease in hatcheries can be a particular problem as the incident can affect the hatchery itself (loss of income) and any growout farms or programs reliant upon the hatchery stock.

Disease specific prevention programs will minimise the risk of disease outbreaks occurring. Disease can enter a farm via new stock, water exchanges (especially surface waters), borrowed equipment and visiting vehicles, personnel or animals. It is often costly and difficult to rid a farm of disease therefore it is advisable to take all precautionary measures. Equipment and operator transfer between tanks/ponds is a common way of spreading infectious agents once on the farm. Nets, boots, etc should be sterilised using baths (chlorine/iodine) and sun dried.

Disease management

Australia and NSW are fortunate in being free of the major diseases impacting on overseas aquaculture. Aquaculture permit conditions require I&I NSW to be promptly notified in the event of any disease/suspected disease or any significant deterioration in the wellbeing of stock (eg. greater than 5% mortality). I&I NSW may issue directions including quarantine of the premises in such an event. The permit holder is prohibited from releasing effluent (off farm) or selling fish having a Declared Disease (suspected or otherwise) under the *Fisheries Management Act* 1994.

It is important to have a Health Management Plan (HMP) to help diagnose, treat and manage disease (the HQAS contains an example HMP). A disease monitoring protocol as part of the HMP should include routine monitoring of stock behaviour and feeding activity, monitoring of

water quality, disease and disease management. Priority should be given to ponds or tanks having:

- high biomass or high feeding rates particularly during summer months;
- episodes of poor or changed water quality;
- signs of moribund stock, mortalities or poor feeding responses;
- stock behaving abnormally (including stock that has not been sighted for a few days).

New ventures need to plan for disease management. Approaches may include:

- protocols in place to submit disease samples to a diagnostic laboratory and a veterinarian;
- appropriate training of staff in disease recognition and treatment;
- clear quarantine procedures and processes of notification.

Most disease management can occur on-farm. The tools required to do this (water quality meters, dissection kit, microscope and references) are an essential component of any aquaculture operation.

Some disease profiles

Freshwater crayfish

Thelohania 'white tail disease'; protozoan, microsporidian; commensals, rotifers, platyhelminthes (*Temnocephala spp*).other protozoans, some records of nematodes, cestodes, polychaetes and arachnids found on Australian crayfish.

Freshwater native fishes

Ecto-parasitic protozoans common, myxosporeans, ect-commensals, gill flukes and copepods, fungal (*Saprolegniosis*) and less common, bacterial diseases

Trout

Temperature stress, bacterial diseases (*Streptococcus spp*); common parasites as for freshwater native fish, viral diseases, Epizootic Haematopoietic Necrosis Virus (EHNV).

Barramundi

As As for freshwater native fish particulary ecto-parasitic diseases; barramundi restricted to tank (RAS) systems in NSW, bacterial diseases (*Streptococcus, Mycobacteriosis*) can be problematic, barramundi potential carrier of Barramundi nervous necrosis virus (BNNV), has potential to affect native endemic species.

Eels

As for freshwater native fish particularly ecto-parasitic disease; juvenile eels sourced from the wild, potential carriers of disease organisms, some evidence of susceptibility to fungal and bacterial infections.

The document "*Diagnosis, treatment & prevention of diseases of the Australian freshwater fish* <u>Silver perch</u>" on the I&I NSW website contains a number of useful disease diagnosistic tools and management procedures that can be applied to other species.

Therapeutants and chemicals

At times, it will be necessary to apply therapeutants to treat stock for diseases and parasites.

No aquaculture therapeutants should be used unless approved for use by the Australian Pesticides and Veterinary Medicines Authority (APVMA) or a vetinerinary script is obtained. They should be used in accordance with the manufacturer's instructions as outlined on labels or permits, veterinarian directions and relevant State and Federal legislation. Aquaculturalists should maintain accurate records regarding the use of chemicals as part of their HMP. Any

withholding periods stated on the labels/permits should be adhered to prior to sale for human consumption.

Aquatic predator management

PREFERRED MANAGEMENT

Screening/filtering on intake of surfacewater, regular drying of storages, ponds and channels and exclusion netting or deterant systems.

Predator management should be considered as part of the HMP as predators can cause stress and disease in stock. Screening of intake water and outlet structures, regular drying of ponds/storages and removal of mortalities is recommended. Predatory birds should be deterred by using netting, overhead wires, deterant systems and staff patrols (See Planning and Design chapter).

Avian predator management Licenses to control native avian predators

It is illegal to harm native animal species unless a licence to control predatory birds has been granted by the Department of Environment, Climate Change and Water (DECCW). Licences issued by DECCW under section 121 of the *National Parks & Wildlife Act 1974* are considered an extreme measure for managing bird predation. Also, Commonwealth approval may be required ('migratory species of interest' under the EPBC Act) to harm some bird species. (see Integrated Approvals chapter).

Be aware!

Killing cormorants or other native birds or animals (eg water rats) is an offence. Aquaculturalists should not rely on DECCW continuing to issue licences to control predators.

If the birds are listed under the *Threatened Species Conservation Act 1995*, applications for licences to harm these species will require a detailed level of assessment. As a general rule, DECCW is not likely to issue a licence to 'lethally harm' threatened species.

7.3 Feed management

Be aware!

That a system that delivers feed at optimum levels will promote maximum growth and feed conversion, prevent disease, maintain water quality and results in the lowest cost of production.

Feeds and feeding are usually a major component of total operating costs of aquaculture operations. Improvements in feeding strategies (ie. feeding frequency, feeding rates and delivery methods) can significantly improve farm profitability. The goal is to feed efficiently using a diet that will produce rapid growth, best food conversion efficiency for the least cost.

Feed is the major contributor to pond/tank water quality deterioration. To minimise feed waste managers should:

- Regularly sample stock for growth and biomass; grade stock, adjust rations and pellet sizes as the stock grows. Over feeding causes poor water quality and wastage; underfeeding will result in poor growth;
- Use high quality feeds meeting the species nutritional requirements (eg. for protein and essential amino acids, digestible energy, total fat and essential fatty acids, trace minerals and vitamins);
- Store feed in a rodent proof, low humidity, cool room;
- Suspend feeding when water quality or disease problems are suspected.

The rate of delivery of feed is as important as the ration amount to prevent wastage.

7.4 Harvest management

Incorrect harvest procedures can cause fish stress and injury that will adversely affect product quality, marketability and the subsequent selling price. Harvesting methods might include the use of nets, traps, trawls or the draining of ponds/tanks.

Harvest procedures should minimise stress, even if animals are to be slaughtered. It is important to maintain water quality during harvest procedures; use bottled oxygen when practicable. Design preharvest procedures to ensure:

- a planned approach is undertaken; avoid harvesting in poor water quality, following feeding, when animals are diseased and during the heat of the day;
- adhere to any therapeutic or chemical withholding periods and purge animals if required;
- ensure seafood is chilled internally (use a probe thermometer) and packed well with ice.

7.5 Comprehensive quality assurance systems

Establish a comprehensive Quality Assurance System to assure product quality. A number of accredited systems have been developed and these usually revolve around hazard analysis critical control point (HACCP pronounced 'hass-up') principles.

Figure 8. The 7 steps to HACCP.

- 1. Determine what the hazards may be. 'Hazards' for the produce at the farm including pre-harvest, harvest and post harvest issues.
- 2. Identify the *Critical Control Points*. These are the important areas or stages where things may go wrong, so they are critical to eliminating the hazards (eg. product exposure to high temperatures following harvest).
- 3. Set the *critical limits*' for each Critical Control Point. Again, these will vary from business to business, but an example could be a chiller temperature setting. Exceeding the critical limit will cause a problem problem may occur.
- 4. Monitor the *Critical Control Points* to record whether the targets are being met and any problems can then be traced.
- 5. Establish corrective *Actions*. These are the actions taken when monitoring shows there is a problem.
- 6. Verify that the HACCP system is working correctly. It is all very well having an effective system but it must be doing the job required. For example this step might involve microbiological testing.
- 7. Keep an accurate record so those responsible can track trends to improve management decisions. Record keeping must be thorough. Regulators also need records for compliance and auditing purposes. Producers who have their quality systems accredited need comprehensive auditable records. Independent third party auditing proves to customers that the stated procedures are being followed.

Hazards may be introduced into any stage of the handling and distribution of fish products. Prevention relies on:

- attention to the design and construction of the premises;
- equipment design;
- water quality controls;
- appropriate premarket conditioning protocols (if necessary for aesthetic or health reasons);
- pest/vector control programs;
- cleaning control programs;
- personnel hygiene and health awareness.

These practises are defined as good manufacturing practises and good handling practises. Of particular importance is the need to prevent cross contamination from raw to cooked product and the exclusive use of potable water and ice at all times. Automatic temperature controls are necessary for the maintenance of quality and in some cases is vital for ensuring food safety. Temperature control throughout the distribution chain, from harvest to retail, is an essential precaution.

7.6 NSW Food Authority issues

NSW Food Authority administers the *Food Act 2003*. The NSW Food Authority is responsible for food safety arrangements from catch or harvest to plate. The NSW Food Authority is progressively developing Food Safety Programs for food industry sectors in NSW.

Seafood businesses - NSW Food Authority licensing requirements

Seafood businesses in NSW are required to be licensed with the NSW Food Authority. Seafood businesses are defined under section 147 of the *Food Regulation 2004*.

There are heavy penalties for the operation of a seafood business without a NSW Food Authority licence with maximum fines of up to \$275,000. To apply for a license you should contact the NSW Food Authority licensing branch on (02) 6552 3000 or go to the website for a licence application form.

The Food Standards Code

All food sold in Australia is required to meet the requirements of the Food Standards Code (the Code). Food that does not meet the requirements of the Code may be seized and destroyed, in addition the manufacturer of the food maybe prosecuted for non-compliance with the Code. The Code can be obtained from the Food Standards Australia New Zealand website.

The NSW Food Authority has adopted codes of practice that regulate the design and construction of seafood premises in addition to the food safety programs mentioned above which regulate the processing and storage of seafood.

As a part of its licensing and approval process the NSW Food Authority assists businesses in the development of a Food Safety Program that complies with the Food Standards Code. Freezers, cool rooms, processing and packaging rooms must comply with certain design requirements in relation to floors, walls, ceilings, fittings and amenities. The NSW Food Authority can provide advice on the construction and fit out of these facilities to ensure compliance with the relevant standards. For further details call the NSW Food Authority information line on 1300 552 406 (local call Australia wide).

7.8. Farm preparation before stocking

Tank and pond

Preparation of ponds or tanks for stocking is a step undertaken following total harvest of the culture unit or initial construction and start up. In the case of all in/all out production regimes, this usually follows a farm dryout, repair and maintenance phase.

A pond and tank preparation protocol should be developed with a timetable for activities such as maintenance, repair and reinstallation of all screens, aeration and filtration equipment, pumps and pond and tank structures. Pond preparation usually occurs at the completion of growout season or during cooler non-productive months.

Dryout periods (ponds & tanks)

Generally, complete dryout of the entire farm is favoured for some species, as this practice has shown to reduce disease incidence and result in higher production. At the completion of the growout cycle, the culture unit should be dried completely. For ponds a drying period can be completed in about one month under favourable weather conditions. Following the drying of ponds, the bed is usually tilled (5 to 10 centimetres) to ensure the oxidation of residual organic matter. Excess silt can be removed and pond walls repaired if necessary. Where soils are acidic, agricultural lime may be added. Calcium hydroxide (Ca(OH)₂) or calcium oxide (CaO) may be used to sterilise persistent damp patches.

Establishing optimal plankton populations for larvae/fry rearing stages (ponds)

Ponds with newly stocked larvae require microscopic animals (zooplankton) as a food source in order for them to survive. Zooplankton feeds upon phytoplankton (microscopic plants). The latter's growth is promoted by adding inorganic and organic fertilisers to the pond. This is often more an art than a science, individual farms having unique fertiliser regimes based on their climate, soil types and plankton response.

Recirculating aquaculture systems (RAS)

Pre-activation of the recirculation systems biofilter to stimulate the colonisation of nitrifying bacteria can be accomplished by seeding with appropriate bacteria or fish may be stocked with a gradual increase in feed (over 4 to 6 weeks). Biofilters usually take a period of months before being fully colonised and stable. Therefore, caution should be used when first stocking an RAS.

7.9 Pond/tank water management

Intensive aquaculture involves the addition of formulated feeds that result in elevated nutrient levels in the culture system and effluents. The degree of management of water quality will depend upon the type of culture that is undertaken.

Feed (protein) input can alter water quality by increasing turbidity (algae and suspended solids), ammonia, nitrite and nitrates. These processes can in turn, influence levels of DO, pH, alkalinity, carbon dioxide, hydrogen sulfides and other parameters.

Pond aquaculture usually employs a 'static' water rearing method where water is required for initial filling and then only to replace evaporation, seepage and water exchanges. The pond environment usually assimilates wastes generated from feed input. Water quality is more problematic under summer conditions due to high feed inputs and elevated temperatures.

In open culture units, the process of water exchange removes the metabolites.

Water quality management is more intensive in an RAS than pond aquaculture. RAS require sophisticated life-support equipment to maintain water quality. This includes swirl separators, biofilters, other filter units, pH buffering systems and de-gassing chambers. All tank facilities operate under partial water exchange to replace water lost through backwashing, cleaning and husbandry processes. Daily water exchange could range from 5% to 25% depending upon the system design and operation.

Monitoring

PREFERRED MANAGEMENT

Provide for regular monitoring of dissolved oxygen (DO), pH, temperature, ammonia, nitrite, nitrate and alkalinity.

Pond aquaculture should be monitored for water quality (DO, pH, temperature, TAN, ammonia) at least twice a week in summer. Tank aquaculture systems should be monitored for water quality daily (DO, ammonia, nitrite, nitrate, alkalinity, pH, salinity and temperature). Meters should be of high quality and calibrated regularly (once/week).

7.10 Discharge of reconditioned waste water *I&I NSW Policy!*

It is I&I NSW policy that intensive freshwater aquaculture farms are not permitted to directly discharge water to natural waterbodies or wetlands (exception for approved open (flow through) systems).

Be aware!

Aquaculture farms discharging water (fresh, estuarine, marine or saline ground waters) to natural waterways may require a licence issued by DECCW under the *Protection of the Environment Operations Act 1997*. Discharge structures placed in, on or within 40 metres of a water source will require a controlled activity approval for their construction under the *Water Management Act 2000*.

Land based aquaculture systems should endeavour to recirculate as much water as possible. The management of the ecological processes within the reconditioning areas or tanks can significantly improve discharge water quality prior to its return to the culture unit, reuse system or the environment (if permitted).

Aquaculture farms that are permitted to discharge water to natural waterbodies must manage this water to ensure it complies with the conditions of the aquaculture permit, the development consent and any licence issued by DECCW under the *Protection of the Environment Operations Act 1997* (POEO Act).

The DECCW licence conditions including load and concentration limits, and monitoring and reporting requirements will be determined on a case by case basis. These conditions will be developed with a view to maintaining the NSW Government Water Quality and River Flow Interim Environmental Objectives (WQOs) in the relevant catchment.

Where oyster leases or major fishing grounds are located nearby, there may be additional requirements for protection of water quality for safe consumption of aquatic foods. In the event of a disease issue, I&I NSW may order the farm water to be quarantined with no discharge being permitted from the premises.

Freshwater that can not be discharged to natural waterbodies or wetlands can be managed in the following ways:

- retained in a discharge pond and recycled in the aquaculture enterprise;
- discharged via town sewerage infrastructure (trade waste agreement);
- stored and utilised for agriculture, hydroponics or horticulture; or
- disposed of by irrigation or evaporation.

Monitoring quantity and quality of discharge

DECCW licences for aquaculture will usually be set for a number of parameters, including BOD, NFR, TP, TN, DO and pH. The licences may place limits on the daily discharge from the farm (eg. 10,000kL/day). The licence will set out how the discharge volume is to be monitored and calculated.

Monitoring of above parameters and an annual statement of compliance is required under the POEO Act.

Substituting raw water with discharge water

As part of an integrated freshwater aquaculture farming enterprise, horticultural or agricultural crops may utilise discharge water instead of raw water. Other uses on an aquaculture farm may include irrigation of landscaping or gardens. In some locations, it may be possible to transfer discharge water to neighbouring properties for irrigation use. Provision must be made to store discharge water during rainy periods. Discharge ponds should be constructed with plenty of leeway and runoff from surrounding land must not be captured. Land for irrigation should not be within 50 metres of a natural waterbody.

When irrigating with discharge water, the following factors should be considered:

soil characteristics (plant growth, permeability);

- avoiding sloping land unless drip irrigation;
- efficient application methods, metering/monitoring so not to over water;
- adequate erosion management provisions;
- avoiding land with salinity or potential salinity problems.

Under normal circumstances where water is used as a substitute for raw water, specific licence conditions for its use are not required.

Sludge management

Ponds should be dried regularly and de-silted. Removed silt/sludge can be used on-farm depending on the nature of the material. Sludge from tank aquaculture may be de-watered disposed of via:

- disposal to landfill;
- sent to a commercial composter; or
- used in agriculture.

7.11 Managing other environmental issues

Noise

On farm noise sources such as those associated with construction, equipment for feeding, pumping, aeration, harvesting, maintenance and construction need to be managed, particularly if located near residential areas. Sound may travel at night due to the effects of temperature inversion, air drainage and winds. Consequently, the responsibility is on the operator of the farm to ensure that noise impacts do not unreasonably affect neighbouring residents not only during the day but also evenings or weekends. DECCW can provide information on the assessment and management of noise issues.

With all plant and equipment, every effort should be made to reduce the noise levels at the source, for example with fitted silencers, insulation, vegetated bund walls or maintenance programs. For farms needing a licence under the POEO Act, there is a requirement that all plant and equipment should be operated and maintained so as not to exceed the prescribed sound levels.

The use of noisy predator scare systems, sirens, PA systems, vehicle backing or other noisy devices that may be a noise nuisance should be minimised where possible.

Odour

Odour emissions from aquaculture facilities can be associated with drying ponds, storage of feeds and management of any dead stock or fish processing wastes.

Minimising impacts of odours should be considered in the farm layout (eg. feed storage area, equipment, waste, cleaning and maintenance depots) and during operational procedures (pond/tank dry-out procedures). Solid waste should be stored, transported and disposed of so as not to cause an odour nuisance.

Sediment from ponds or sludge from tanks must be disposed of in a manner that will minimise odour or leachate problems. Do not disturb sediments in ponds until dry, when it can be either incorporated into the bed of the pond or removed. Sediment from tanks should be stored in a designated storage area (within appropriate bunding or sediment trap to prevent sediment runoff to adjoining areas/waterways) prior to:

- spreading as top soil in appropriate crop or pasture areas; or
- transport to a commercial composter or landfill.

Dust

Dust can pose problems during construction stages and dry periods (see Planning and Design chapter). Appropriate surfacing of high volume traffic roads and vegetating wind exposed areas can minimise dust emissions. Until disturbed areas are stabilised, water and/or mulch should be used to control dust. It is recommended that neighbours be advised ahead of work schedules that are likely to generate dust.

Visual appearance

Neat and tidy operations, vegetative screen plantings, earth mounds and aesthetically placed and coloured building should be adopted. In rural environments, landscaping should be used to soften the impact of 'industrial' shed complexes including planting of native species along boundaries.

Energy and greenhouse issues

Energy efficiency initiatives can lead to benefits which extend beyond energy savings to include pollution prevention, process efficiencies and increased productivity. Farm operations should be designed to minimise energy usage (eg. gravity distribution of water) and use renewable energy technologies (solar or wind power) where possible.

In addition, consider energy conservation and cost reduction opportunities including:

- monitoring annual and quarterly energy expenditure;
- maintain equipment performance;
- use of 'off-peak' energy;
- identifying and rectifying actions or activities that waste energy or use energy inefficiently.

Aquaculture operators may also be able to minimise their greenhouse gas emissions by participation in programs run by State and Federal Governments.

Waste management

Waste management protocols should be developed to reduce and recycle waste and to store and dispose of waste material responsibly.

The POEO Act establishes a classification system for wastes, which is documented in the *Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-Liquid Wastes* (Waste Guidelines – EPA 1999). The obligations in respect of the management of wastes are based on their classification in accordance with the waste guidelines.

Table 8. Waste categories likely to be generated by aquaculture farms.

Types of waste	Implications		
Non-liquid inert waste These	types of waste are subject to minimal regulation		
Virgin excavated natural material (VENM) eg. Clay, gravel, sand, soil or rock that has not been mixed with other waste. This category does not include chemical contaminated soils or ASS unless treated to meet criteria approved by DECCW.	If material is to be brought onto the site for the construction of ponds, it should be clearly established that the material is from an approved quarry or meets the VENM classification. In addition, if there is excess material to be removed from site following pond construction, ensure that it is not mixed with other materials or waste so it meets the VENM classification. If ASS are to be removed from site, ensure that it is treated in accordance with the ASS Manual (ASSMAC) prior to removal from site to neutralise/remove the acid generating potential.		
Building and demolition waste not mixed with other wastes or containing asbestos	Preferably building waste should always be sorted into components (eg. Brick/concrete, glass, timber and metal) for reuse or recycling.		
Packing and office waste (paper, plastics, glass, metal and timber) not mixed with other wastes.	Preferably these should be recycled. A major source of waste is the plastic or paper bags used to transport feed. Reductions in the use of feed as a result of efficient feeding management result in reduced waste generated or the supply of feed in bulk form.		
Solid waste			
Food waste.	Should pursue options to recycle material (eg. fishmeal, compost). Otherwise dispose of to an approved landfill.		
Cleaned pesticide, biocide, herbicide or fungicide containers (cleaned in according to AVCARE protocols).	Avcare Protocols require recycling of containers as a first option. For copies of the Avcare Container Management Strategy, contact: Avcare, Level 2, AMP Building, Hobart Place, Canberra, mail to Locked Bag 916, Canberra ACT 2601. Phone 02 6230 6399 Fax 02 6230 6355. Email: avcare@ozemail.com.au		
Pond/tank sludge that does not contain heavy metals or hazardous chemicals.	The preferred use of the material is in compost mixes and/or incorporation into agricultural purposes. If these preferred uses are not available or inappropriate it is appropriate to send to an approved landfill site. Composting and agricultural use of sludge may not be appropriate for sludge from salt-water ponds/tanks.		
Industrial waste	appropriate for studge norm sait water portas/tariks.		
Asbestos waste from old buildings or industrial plant.	Any asbestos should be managed in accordance with the requirements of Clause 29 of the <i>Protection of the Environment Operations (Waste) Regulation 1996</i> and disposed at a lawful waste management facility.		
Hazardous liquid or non-liqui			
Quarantine waste.	This material must be stored, handled, transported and pre-treated in accordance with the requirements of the Australian Quarantine and Inspection Service (AQIS) prior to disposal at a disposal facility approved by AQIS. It should be noted that most landfills are not licensed for disposal of quarantine waste.		
Chemicals, pharmaceuticals and poisons.	If chemicals are not to be use, inquiries should be made with distributors about the possibility of returning the material. Alternatively inquiries could be made as to whether other users are interested in taking the material. As a last option, the Assessment, Classification and Management Guidelines should be followed regarding the safe disposal of the material.		
Liquid wastes other than hazardous above			
Group A: Oils, solvents and solvent containing liquids.	Arrangements should be made with a contractor to remove these materials from the site preferably for reuse or recycling.		
Group B: Liquid food waste or grease traps from food processing.	Arrangements should be made with a contractor to remove these materials from the site preferably for reuse or recycling.		
Group C: Sewage – if on-site system.	Where connection to a reticulated sewerage system is not an option, on-site sewage treatment should be in accordance with the Guideline - <i>On-Site Sewage Management for Single Households 1998.</i>		

Environmental contingency planning

A Contingency Plan should be established with specified management actions documented to deal with problems should they occur. Issues that should be dealt with in the plan include:

- water quality incidents;
- predators;
- chemical spills;
- flooding;
- dam/pond security;
- power failure or mechanical failure of key equipment (especially important for tank aquaculture systems).

The Contingency Plan should include protocols which all staff should be made aware of including:

- agreed indicators that suggest that there is likely to be a problem;
- a requirement to alert appropriate senior person in the company immediately;
- what actions will be taken should the conditions deteriorate;
- what actions should be taken in the event that problem results in environmental breaches occurring;
- what actions should be taken in the event that the problem results in a loss of stock;
- when the regulatory authority and others should be alerted.

Other issues that may need to be contained in the Contingency Plan include drought proof planning in relation to pond/tank and/or potable water supplies particularly where water supply may not be reliable.

Decommissioning an aquaculture facility

The objective of the NSW LBSAS is to ensure that aquaculture enterprises are established and operated in a sustainable manner. As a result, emphasis has been placed on the need for careful site selection, design, operation and business management.

In the advent of an aquaculture enterprise ceasing operations, the site should be secured and not generate unacceptable off-site environmental impacts or create an unsafe environment (eg. electrical infrastructure, chemical storage, building security).

Decommissioning works may include:

- closure of water intake and outlet channels and removal of pipes/pumps from rivers/estuary;
- stabilisation of disturbed riparian zones;
- stabilisation of ponds/dams;
- perimeter fencing.

Good neighbour policy

The establishment and maintenance of good public relations is essential for individual farms and reflects on the industry as a whole. Aquaculture, in part due to its novelty, attracts a large amount of community interest. It is important to recognise this interest and deal with it in a sensitive manner.

Tourism and the community

Consumers are increasingly concerned with the environmental credentials of food production and aquaculture enterprises can benefit from demonstrating its environmental credentials. The public should be dealt with openly and honestly even when things go wrong. It may be useful to seek advice in preparing a Public Relations Management Plan for promoting products as well as for dealing with routine enquiries and complaints. Active and transparent management of community relationships can pay long term dividends.

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Making provision for the public to visit the facility either as part of a tourist visitor centre or as an active program (Fishout) can help establish an open door approach to the broader community. This can help to promote aquaculture in the local economy as well as help promote the industry as a whole.

Complaints handling procedures

Aquaculture farms may be required to establish complaint handling protocols under their conditions of consent. Local Councils should be informed of the procedures so that on receipt of any complaints they are able to redirect issues to the appropriate regulatory departments. The Complaints Handling Protocols may include:

- a contact number and a site contact person who manages complaints;
- a complaints register including a record of the complainant, the date/time, the nature of the complaint;
- proposed mitigation measures and follow up with the complainant;
- any contingency measures when repeated complaints are received including provisions for additional monitoring and amelioration measures;
- any compliance performance agreements with residents;
- any reporting procedures to relevant government agencies or Council.

It should be recorded if complaints originated from normal operational procedures, an 'incident' or occasional procedure:

- if from occasional procedures, discussions should be held with complainants regarding whether it was the timing or nature of the impact and how the impacts can be better managed. In many cases an agreement can be reached between parties regarding procedures, timetables, duration and intensity;
- if it resulted from normal operation procedures, these procedures should be reviewed in discussion with the relevant approval authorities.

7.12 Integrated compliance monitoring and reporting

Monitoring

An Environmental Monitoring Program, if required under a development consent, should be carefully designed and related to the key environmental indicators that demonstrate the sustainability of the aquaculture farm. The program requirements will be provided by the consent authority.

Record keeping

Comprehensive record keeping is essential, not only as a requirement of licence and permit conditions, but as a fundamental tool in farm management and trouble shooting. A database for record keeping should be established for tracking both business and environmental performance.

From a business management point of view, data sets make analysis of expenditures, production levels, returns and environmental performance for sound future planning. In addition, the data is available for reporting to relevant government agencies on environmental performance. DECCW usually requires records to be held for a minimum of 3 years so if necessary, the details of longitudinal trends can be checked.

Reporting

An annual report may be required under your development consent, aquaculture permit, environmental protection licence and any other approval. The report may include matters relating to stock management including translocation issues, disease management, sales and production.

DECCW may require more regular reporting (eg. monthly or quarterly) for farms that hold an environment protection licence under the POEO Act to discharge water to natural waterbodies.

Incident reporting

Aquaculture operators are required to report incidents that are not authorised under an approval of the appropriate regulatory authority. Table 9 summarises some incidents and the response required.

Table 9. Incident reporting.

Incidents	Authority	When
Disease outbreak or unusual stock behaviour	I&I NSW	As soon as practicable but within 24 hours
Incidents involving breaches of quarantine or translocation protocols	I&I NSW	Immediately and in not more than 24 hours
Incidents causing or likely to cause environmental harm whether on or off the premises which are not authorised under the approval (eg. chemical spills, accidental release of untreated water)	DECCW pollution line if appropriate regulatory authority or Council	As soon as practicable but within 24 hours
Dam safety or flooding issues	DECCW and local Council	As soon as practicable
Incidents involving harm to birds or other native fauna which are not authorised under the approval	DECCW	Immediately and in not more than 24 hours
Bushfires	Fire authority and local Council	Immediately

8. Assessment and Approvals

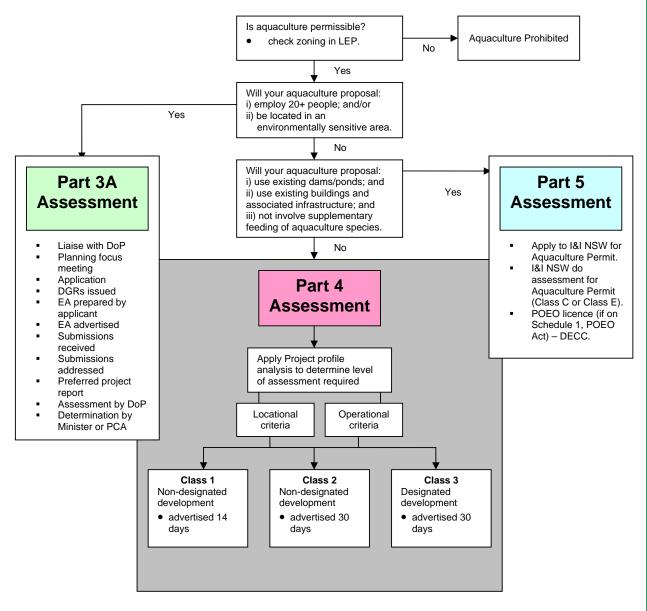
8.1 The Strategy's assessment regime

The NSW LBSAS includes identification of appropriate aquaculture sites and a simplified approvals process. It is gazetted under *State Environmental Planning Policy (SEPP)* – 62 *Sustainable Aquaculture*. NSW LBSAS also contains an *Aquaculture Industry Development Plan* (AIDP) which is gazetted under the *Fisheries Management Act 1994*. The AIDP specifies best practice guidelines based on ESD principals.

Part 3A, Part 4 or Part 5 of the EP&A Act

The assessment regime for aquaculture projects in NSW is determined by the *Environmental Planning and Assessment Act 1979* (EP&A Act). Depending on the size and location of a land based aquaculture project, the assessment can be under Part 3A, Part 4 or Part 5 of the EP&A Act. Figure 9 summarises the pathways for different land based aquaculture projects.

Figure 9. Assessment under the Environmental Planning and Assessment Act 1979.



8.2 Part 3A – Major projects

After establishing whether the proposed aquaculture project is permissible you can determine whether your project is a major project. *State Environmental Planning Policy - Major Projects 2005* (MP SEPP) identifies major projects that are assessed under Part 3A of the EP&A Act by DoP and determined by the Minister for Planning. These projects are either large and/or located in an environmentally sensitive area. The types of aquaculture projects that fall under Part 3A assessment are listed under Schedule 1 of the MP SEPP.

State Environmental Planning Policy (Major Projects) 2005

Schedule 1: Part 3A projects – classes of development Aquaculture

- (1) Development that employs 20 or more people for the purposes of aquaculture.
- (2) Development for the purpose of aquaculture located in environmentally sensitive areas of State significance.

Environmentally sensitive areas of State significance include:

- (a) coastal waters of the State, or
- (b) land to which State Environmental Planning Policy No 14—Coastal Wetlands or State Environmental Planning Policy No 26—Littoral Rainforests applies, or
- (c) land reserved as an aquatic reserve under the *Fisheries Management Act* 1994 or as a marine park under the *Marine Parks Act* 1997, or
- (d) land within a wetland of international significance declared under the Ramsar Convention on Wetlands or within a World heritage area declared under the World Heritage Convention, or
- (e) land identified in an environmental planning instrument as being of high Aboriginal cultural significance or high biodiversity significance, or
- (f) land reserved as a State conservation area under the National Parks and Wildlife Act 1974, or
- (g) land, places, buildings or structures listed on the State Heritage Register, or
- (h) land reserved or dedicated under the *Crown Lands Act 1989* for the preservation of flora, fauna, geological formations or for other environmental protection purposes, or
- (i) land identified as being critical habitat under the *Threatened Species Conservation Act* 1995 or Part 7A of the *Fisheries Management Act* 1994.

*correct at time of printing - please check for updates on www.legislation.nsw.gov.au

If your project is a major project, your application should be submitted to DoP and they will advise you of the issues that your environmental assessment (EA) must cover. Under Part 3A, DoP prepares and makes publicly available the key issues that a proponent must address in an environmental assessment of the proposal. These are known as the Director-General's requirements (DGRs) for environmental assessment. State agencies such as I&I NSW, DECCW and other relevant authorities including local Councils, are consulted in developing these requirements to ensure all key issues are identified at the start of the process.

In preparing the environmental assessment, the proponent is also encouraged to consult with the community, relevant Councils and agencies. The environmental assessment is generally required to include a written statement of commitments outlining how the project's likely environmental impacts will be minimised or managed. If the project is approved, the proponent will be required to honour these commitments as part of the conditions of approval.

Once the proponent has prepared the environmental assessment, it is checked to ensure it addresses the DGRs and, if satisfactory, the department will arrange to exhibit the environmental assessment for public comment for a minimum of 30 days.

Under Part 3A, the proponent can be required to respond in writing to issues raised in submissions and provide a preferred project report, which outlines any proposed changes to the project to minimise its environmental impact. If it is determined that the proposed changes significantly alter the nature of the project, the proponent may be required to make the preferred project report available to the public. All key project documents, including project declarations, applications and environmental assessments are made publicly available.

If approved, your aquaculture project will have a number of conditions that will be consistent with the best practice principles contained in the AIDP for land based aquaculture.

Application of AIDP to Part 3A projects

The AIDP can be used by proponents to plan their aquaculture project, using the best practice principles to ensure that their project complies with ecological sustainable principles, and that their application is of a high standard to maximise their likelihood for approval.

While the PPA is not used to classify Part 3A aquaculture projects (as it is for Part 4 projects), the proposed aquaculture project would almost always be classified in a high risk category because of their scale and/or location in an environmentally sensitive area of state significance.

For information about assessment of major projects go to the Department of Planning website, www.planning.nsw.gov.au/planningsystem/howda.asp.

Approvals needed under Part 3A

If your project is assessed and determined under Part 3A then you only need separate approvals for *Protection of the Environment Operations Act 1997* matters (eg. water pollution licence), approvals for *Water Management Act 2000* matters and an aquaculture permit from I&I NSW. Part 3A removes the need for single-issue approvals under other Acts. It also replaces a separate threatened species assessment with an integrated assessment process.

You may also need an approval from the Commonwealth government under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) if your project is likely to have an impact on matters of national environmental significance (eg. threatened species, migratory birds). For information about EPBC Act requirements go to: www.environment.gov.au/epbc/.

8.3 Part 4 projects

New aquaculture projects, or alterations or additions to existing aquaculture farms (which do not fall under Part 3A of the EP&A Act), are usually assessed under Part 4 of the EP&A Act by local Councils. Again, the first thing you must consider is whether the project is permissible in the area of land you propose to carry out the project.

Land based aquaculture is permissible if it complies with minimum site locational (including zoning provisions) and operational criteria listed in the PPA. The Council (or consent authority) may impose additional requirements to these minimum requirements. The consent authority has to take into consideration the AIDP when making their determination.

Once the class of development and level of assessment required has been determined in consultation with the consent authority the proponent can use the AIDP to assist them prepare their application to ensure that their project meets the ecologically sustainable objectives set out in the AIDP. When the SEE/EIS has been submitted to the consent authority a determination can be made on the project.

Approvals/consents need under Part 4

Under the integrated development assessment (IDA) provisions of the EP&A Act, aquaculture developments (whether designated or non-designated) are considered to be integrated

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development as they will require one or more licences, permits or approvals as listed in Table 10.

Table 10. Summary of Integrated Approvals under the EP&A Act.

(Most approvals will only relate to the establishment phase of the project. Those marked with * may be relevant throughout the life of the project.)

Act	Provision	Integrated approvals applying to aquaculture
Fisheries Management Act 1994	s 144* s 201/205	 aquaculture permit. permit to carry out dredging or reclamation work in any waters, permit to cut, remove, damage or destroy marine vegetation on public water land or an aquaculture lease, or on the foreshore of any such land or lease.
Heritage Act 1977	s 58	 approval in respect of the doing or carrying out of an act, matter or thing referred to in s 57(1).
National Parks and Wildlife Act 1974	s 90*	 consent to knowingly destroy, deface or damage or knowingly cause or permit the destruction or defacement of or damage to, a relic or Aboriginal place.
Protection of the Environment Operations Act 1997	s 43 (a), 47 and 55* s 43 (b), 48 and 55*	 Environment protection licence to authorise carrying out of scheduled development work at any premises. Environment protection licence to authorise carrying out of scheduled activities at any premises (excluding any activity described as a 'waste
	s 43 (d), 45, 55, 120* and 122*	 activity' but including any activity described as a 'waste facility'). Environment protection licences to control carrying out of non-scheduled activities for the purposes of regulating water pollution resulting from the activity.
Roads Act 1993	s 138	Consent to: • erect a structure or carry out a work in, on or over a public road, or • dig up or disturb the surface of a public road, or • remove or interfere with a structure, work or tree on a public road, or • pump water into a public road from any land adjoining the road, or • connect a road (whether public or private) to a classified road.
Water Act 1912 Note: the Act is under review	s 10*, 13, s 13A*	 Licence to construct and use a work, and to take and use water, if any, conserved or obtained by the work, and to dispose of the water for the use of occupiers of land.
	s 18F*	• Permit to construct and use a work, and to take and use water, if any, conserved or obtained by the work, and to dispose of the water for the use of occupiers of land for any purpose other than irrigation.
	s 20B*, s 20CA*	• Authority to take water from a river or lake for the purposes of a joint water supply scheme.
	s 113 Part 8	 Licence to commence sinking a bore or to enlarge, deepen or alter a bore. Approval to construct a flood controlled work.
Water Management Act	s89	 Water use approval to use water for a particular purpose at a particular location.
2000	s90	• Water management works approval to construct and use a specified water supply/drainage/flood work at a specified location.
	s91	 Activity approval to carry out a controlled/aquifer interference activity at a specified location or in a specified area.

For projects, which are integrated development, the consent authority (usually Council) must liaise with other approval authorities for an integrated consent. This process results in a streamlined approval process and a reduction in overlapping requirements from approval authorities. The process helps to ensure that the approval requirements are appropriate for the particular type of aquaculture proposal and reflect the level of risk.

It is therefore very important that you discuss with the consent authority (usually Council) what applications and assessment reports need to accompany a development application, as this information will be used to advise other agencies involved in the IDA process. The lack of, or poor information within your development application and/or assessment reports will result in a delayed approval process.

For Part 4 projects you may need a number of other approvals including:

- Aquaculture Permit. All aquaculture projects must hold a valid Aquaculture Permit from I&I NSW;
- Protection of the Environment Operations Act 1997 (POEO Act) licence. A land based aquaculture project will require a licence under the POEO Act if it is listed in Schedule 1 – Schedule of EPA-licensed activities;
- *Native Vegetation Act 2003.* The clearing of native vegetation will usually require approval.

You may need a licence under one or more of the following Acts:

- National Parks and Wildlife Act 1974 (Aboriginal heritage or intending to destroy predator birds);
- Water Act 1912 and Water Management Act 2000 (water use, water access and excavations near rivers);
- Exhibited Animals Protection Act 1986 (if intending to display live fish);
- EPBC Act (Commonwealth matters).

You may also need land owners consent from the Land and Property Management Authority if running water inlet/outlet pipelines over Crown land, prior to lodging a development application.

It should be noted that if a proposal is to be carried out in the vicinity of a marine park, under the *Marine Parks Act 1997*, the likely impact on the marine park must be considered and the Marine Parks Authority must be consulted as a permit may be required for certain developments eg. pipelines.

8.4 Classes of development

To determine the level of environmental assessment required in a land based aquaculture project, the PPA provides a matrix ranking of the level (or class) of environmental risk associated with the site locational and operational attributes of the aquaculture project. The criteria used in the PPA is consistent with the best practise principals in the AIDP. There are three classes of assessment possible when applying the PPA:

- Class 1 Non-designated development (low level risk)
 - if all risk levels in relation to each site locational and operational attribute are Level 1 (ie. lowest risk) in the PPA;
 - a statement of environmental effects (SEE) is required of the proponent;
 - this is an advertised development and required to be advertised for at least 14 days.
- Class 2 Non designated development (medium level risk)
 - if all the risk levels in relation to each attribute are level 2 (medium risk) or level 1 and 2 in the PPA;
 - a statement of environmental effects (SEE) is required of the proponent and level 2 risk attributes should have a higher level of assessment;
 - this is also an advertised development but must be advertised for at least 30 days.
- Class 3 Designated development
 - if any risk level in relation to an attribute is Level 3 (high risk) in the PPA;
 - an Environmental Impact Statement (EIS) is required of the proponent;
 - designated development is to be advertised for at least 30 days.

These classes are summarised in Figure 10 and apply directly to Part 4 projects and are used to assist the assessment of Part 3A projects.

	Risks associated with performance / species / methods			
	Low risk		→ High risk	
Risks associated	CLASS 1			
with location	Non-designated			
Low risk	development			
	SEE required			
		CLASS 2		
	Non-designated development – SEE required.			
	Greater assessment of m			
			CLASS 3	
High risk	Designated development -EIS required			

Figure 10. Level of assessment based on risk profile.

Assessment provisions under the EP&A Regulation

As Class 1 and 2 developments have been pre-assessed under the AIDP as less likely to significantly affect the environment, Schedule 3 of the EP&A regulation has been amended to remove the designation status from these classes of developments. However, Class 3 developments have been classified as designated development, even though that class may include development which would otherwise not be designated development under Schedule 3.

In addition, to streamlining the assessment process for Class 1 development because this class of development has been pre-assessed as being low risk, the EP&A regulation has been amended to reduce the exhibition period for this class of development to 14 days. Consent authorities and approval bodies will have 21 days to request additional information for this class of development.

8.5 LEP zoning permissibility

The LEP zoning table in the Project Profile Analysis chapter (see page 86) provides an overview of the zones in which pond and tank aquaculture is permissible. If aquaculture is permissible on the land then you will need to apply for consent from DoP or your local Council (depending on the scale and nature of the project).

8.6 Development application

The assessment guidelines and the relevant performance goals and best practice in the AIDP provide the information for the preparation of a SEE or EIS to accompany a development application. In addition, the applicant must consult:

- If an EIS is required, the Director-General, Department of Planning for any additional requirements.
- If an SIS is required, the Director-General of DECCW and/or I&I NSW.

Whatever document is prepared, it should address relevant issues in sufficient detail so that the various approval authorities can quickly and efficiently make an informed decision about the environmental impacts of the proposal and whether it complies with the AIDP. If insufficient information is provided, approval authorities can 'stop the assessment clock' and the assessment of the proposal will be delayed.

If an EIS is required and/or the development is a Part 3A project a planning focus meeting may be convened with Council and other relevant Government agencies. The meeting is to determine if there are additional matters (to those in the assessment guidelines) which require the consideration of the applicant in the preparation of the EIS, EA or SEE.

Lodging an application

Care should be taken to ensure all relevant information is provided with the development application so that there are not delays as a result of additional information being requested including:

- the development application on the appropriate form with relevant supporting documentation;
- indication of all approvals required;
- the owners consent (if the applicant is not the owner. Land and Property Management Authority must sign if Crown Land is affected);
- the SIS/EIS if relevant;
- the relevant development application fee sent to the consent authority and assessment fee sent directly to each of the relevant approval authorities.

If the information in the application and accompanying documents is insufficient, the consent authority and the integrated approval bodies may request additional information from the applicant during the first 21 days of the development application being lodged. A request from an integrated approval body (through the consent authority) will 'Stop the assessment clock' (for the purposes of deemed refusal) until the requested information is received. When the applicant supplies the consent authority with the information, they will refer the information to the integrated approval bodies and 're-start' the clock 2 days after the information is sent.

Assessment

In making a determination, the consent authority is required to consider s79C of the EP&A Act, which provides the following five generic heads of considerations:

- matters in environmental planning instruments (SEPPs, REPs and LEPs), including draft instruments, as well as development control plans and prescribed matters (the coastal policy and changes of building use);
- the impact of the development on the environment;
- the suitability of the site for the development;
- any submissions received;
- the public interest.

The consent authority has 40 days (if Class 1) and 60 days (if Class 2 or 3) from the day the development application was lodged to determine the application. This time includes the exhibition period. If the clock is stopped because of a request for additional information, the number of days the clock is stopped is added to the total number of days for a determination.

Appeal provisions

An integrated DA may be deemed to be refused if a decision has not been made within 40 days (if Class 1) and 60 days (if Class 2 or 3) plus the number of days when the clock was stopped.

A deemed refusal simply allows the applicant to begin proceedings in the Land and Environment Court (LEC) and does not prevent the consent authority determining the application. The applicant may choose to continue working with the consent authority and other relevant approval authorities to find a solution to outstanding issues that may be holding up the approval process. The LEC may make determinations on development consents where an applicant has appealed against a refusal or in relation to conditions of consent or when a third party has appealed against the decision on the legality of the process.

With Class 3 development, an objector to the DA can appeal the decision of the consent authority in the LEC on the merits of the decision. Where integrated development consent is considered by the LEC, both the consent authority and the approval body will be bound by the decision of the LEC.

8.7 Part 5 Assessments

Extensive aquaculture systems can utilise existing water storages and established facilities to support pre-market conditioning and packaging of cultured product.

If your aquaculture project will be using existing:

- farm dams/ponds (need to ensure that any existing dam is appropriately licenced for its use);
- buildings and associated infrastructure;
- it will not involve supplementary feeding of the aquaculture species;
- your local Council considers you do not require to lodge a development application.

Then your proposal may not require development consent or approval under Part 3A or Part 4 of the EP&A Act. If this is the case then your project will be assessed under Part 5 of the EP&A Act by I&I NSW. Only a Class C or Class E aquaculture permit would be issued under a Part 5 assessment.

8.8 Native title and land claims issues

Typically, Native Title Claims under the Commonwealth *Native Title Act 1993* are over vacant Crown land and can take a long time to be resolved. Generally, claims under the NSW *Aboriginal Land Rights Act 1983* are granted unless an essential public use of the land can be proved.

Proposals made on Crown land under native title claim cannot proceed until the claim is resolved. Aquaculture applications that require works such as road or water pipeline access across Crown Land under native title claim should be avoided unless agreement can be made in writing with the claimant.

8.9 Threatened Species Conservation Act

Under s5A of the EP&A Act, the consent authority must consider whether the granting of consent for an aquaculture proposal is likely to significantly affect terrestrial or aquatic threatened species, populations or ecological communities or their habitats (listed in the *Threatened Species Conservation Act 1995* and in the *Fisheries Management Act 1994*).

Applicants must provide the consent authority with adequate information to reach a conclusion as to whether threatened species, populations or ecological communities or their habitats are likely to be present on the development site and if so if the development is likely to significantly affect them. This is called the test of significance.

If there is likely to be a significant impact or if the proposal is on land that is, or is part of critical habitat, a Species Impact Statement (SIS) must be prepared in accordance with the requirements of the Director-General of DECCW (terrestrial plant and animal species and including marine mammals and reptiles) or Director-General of I&I NSW (marine vegetation and aquatic species not including marine mammals and reptiles). The SIS may be integrated into the SEE or EIS or exhibited separately. If a SIS is required and Council determines that a proposal is likely to proceed and will have a significant impact on threatened species, populations, ecological communities or their habitats, Council must seek the concurrence of the Director-General of DECCW/I&I NSW in making a decision. The Minister as consent authority must consult with the Minister for the Environment/Primary Industries in making a decision.

8.10 Construction and occupation certificate

Construction certificate

Under s109 of the EP&A Act, a construction certificate must be issued by the consent authority or an accredited certifier prior to any building works commencing. The purpose of the construction certificate is to ensure that the building is safe for use taking into consideration structural and fire safety matters and compliance with the relevant provisions in the *Building Code of Australia* (BCA).

Once a construction certificate has been issued, it becomes part of the development consent. It is possible to issue construction certificates for various stages of the development.

Before works begin

Before works begin, a principal certifying authority (PCA) must be appointed to ensure that the construction is in accordance with the DA approval. The PCA must undertake an audit of the building works by either carrying out specified inspections or by relying on other certifiers or professionals. The PCA may serve a notice to require a person to comply with the consent.

Occupation certificate

Before a PCA can issue an occupation certificate, they must be satisfied that the specific works have been completed in accordance with the construction certificate and DA and that the building complies with the relevant provisions in the BCA.

8.11 Information sources

The level of information necessary for the development application should match the scale of the proposal, the potential associated environmental risks and the potential sensitivity of the location.

The information regarding the minimum performance criteria for your site is available in Council local environment plan (LEP), Council or DECCW floodplain management plans and associated studies, acid sulfate soils (ASS) risk maps and from key agencies.

Industry & Investment NSW

Industry & Investment NSW (I&I NSW) has a range of aquaculture related information to assist investors or consultants including the estuarine aquaculture maps that identify land that is potentially suitable for estuarine pond aquaculture. Also aquatic habitat protection and aquatic threatened species information.

Local Council

It is essential to consult with the local Council to determine the zoning of the land on which the proposal and any ancilliary works (pipelines, roads) will be located. Also LEP maps can provide information on the location of road reserves or corridors identified for highway upgrades, wetlands mapped in SEPP 14 or SEPP 26 and land reserved for environmental protection.

Local Councils may also have floodplain management policies and floodplain management plans that may provide background on flood related issues and controls and which may provide advice on flooding in the vicinity of the site.

NSW Office of Water (NOW)

NOW holds important information relating to:

- Activities carried out in or near a lake, river or estuary;
- Licence and approval requirements under the Water Management act 2000 and Water Act 1912;
- Harvestable rights for farm dams;
- Groundwater policies including the Groundwater policy, policy on groundwater dependant ecosystems and groundwater quality policy.
- the water availability in river catchment/sub-catchments and groundwater aquifers;
- the Water Sharing Plan process under the Water Management Act 2000.

Land and Property Management Authority (LPMA) Information

LPMA can provide information on vacant Crown land and Crown land subject to native land claims. LPMA also holds topographical maps and air photos that may be important for an aquaculture proposal.

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DECCW Information

DECCW hold information on the important areas for conservation and protection. These include:

- DECCW protected areas National & Regional parks, reserves, historic sites, State recreation areas;
- Recorded Aboriginal sites and places, relevant contacts for local Aboriginal communities;
- Areas subject to conservation or management agreements, critical habitats;
- Areas where threatened species, populations and ecological communities have been recorded;
- Recovery and threat abatement plans prepared under *Threatened Species Conservation* Act 1995;
- acid sulfate soils risks;
- tidal characteristics of many estuaries;
- floodplain management plans.

9. Project Profile Analysis

The Aquaculture Industry Development Plan (AIDP) sets out best practice for the establishment and operation of land based aquaculture projects. Based on this information, a project profile analysis has been developed to enable a preliminary evaluation of the risks associated with site selection, species, design and planning and operational criteria. These criteria allow the applicant and the consent authority to evaluate the likely risks associated with a project and establish the level of assessment to match the likely risks to the environment.

The project profile analysis provides three 'sieves' to evaluate options.

- The *minimum performance criteria* provides the first environmental sieve for selecting sites and project characteristics. These <u>must</u> be met in order for the project to proceed;
- The site selection criteria (Tier 1 and Tier 2) provide the next two environmental sieves to determine the acceptability of risks. Tier 1 information is available from Government or Council sources. Tier 2 information will need to be obtained from site investigation or studies;
- Following the selection of a site, operational selection criteria (Tier 3) provides the next 'sieve' to evaluate various options including species, layout and operation factors. The Tier 3 evaluation can serve as a cost effective tool to determine the relative risk associated with species, design and operational options and to assist in deciding if certain options should be excluded from further consideration.

These factors can be used to rank the likely risks associated with establishing an aquaculture facility in a particular location, eg. Level 1, 2 or 3 risk. Figure 11 provides an overview of the sieving process.

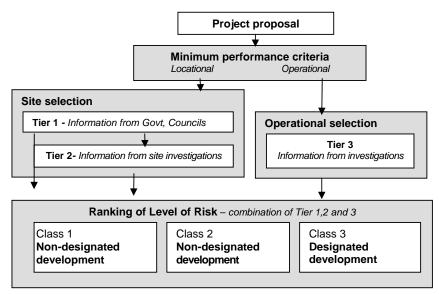


Figure 11. 'Sieves' in project profile analysis.

9.1 Minimum Site Performance and Operational Criteria

It is essential at the outset, that the minimum performance criteria for land based aquaculture in NSW is considered, as aquaculture projects that cannot meet these minimum performance criteria are not permissible. Information regarding the minimum performance criteria is readily available from Council, LPMA, DECCW or DoP.

9.2 Tier 1 Evaluation

For sites that meet the minimum locational performance criteria, the Tier 1 information should be sourced to determine the level of risk for the site for aquaculture. The Tier 1 criteria can be

sourced from information held by Council, I&I NSW, DECCW, LPMA, NOW or DoP. The ranking of Level 1, 2 or 3 for individual criteria will begin to provide a picture of the potential hurdles in developing a site and the likely level of environmental assessment and regulation that could apply. Whenever possible, higher risk sites should be avoided at Tier 1 evaluation.

9.3 Tier 2 Evaluation

For sites that are suitable after Tier 1 evaluation, the next layer of information should be sourced. Tier 2 investigations may involve significant expenditure with site investigations by technical experts, and in some cases, laboratory analysis may be required:

- to confirm the levels of ASS or soil contamination and develop management options;
- to determine soil suitability for dam construction;
- to identify threatened species, populations or ecological communities or their habitat;
- to identify any Aboriginal sites, areas of high potential to contain sites, areas of cultural sensitivity or other values of cultural significance to the Aboriginal community;
- to assess of potential water supply quality and security of supply.

It should be noted that the level of analysis at this stage needs to provide sufficient information for an informed decision to be made. Risk levels associated with the site along with the risk levels associated with operational constraints will decide the assessment regime of the project. The lower the risks, the lower the costs in assessment, mitigation and environmental supervision by authorities.

9.4 Tier 3 Operational evaluation

Following the selection of a site, and confirmation that the proposed design and planning parameters meet the minimum performance criteria, Tier 3 evaluation criteria provides the next 'sieve' to determine the relative level of risk associated with the aquaculture proposal.

The Tier 3 evaluation can serve as a cost effective device to determine if any of the proposed operational parameters are likely to lead to longer term costs associated with expensive mitigation measures. The ranking of Level 1, 2 and 3 operational criteria will begin to provide a picture of the potential hurdles and the likely level of environmental assessment and regulation that could apply; the lower the level of risk, the lower the level of assessment and regulation required.

9.5 Interpreting the rankings

The tables associated with Tier 1, 2 and 3 provide a ranking in relation to the criteria and the level of risk associated with the project characteristics. These rankings assist in evaluating individual sites and operational options as well as providing for a comparison between alternative options.

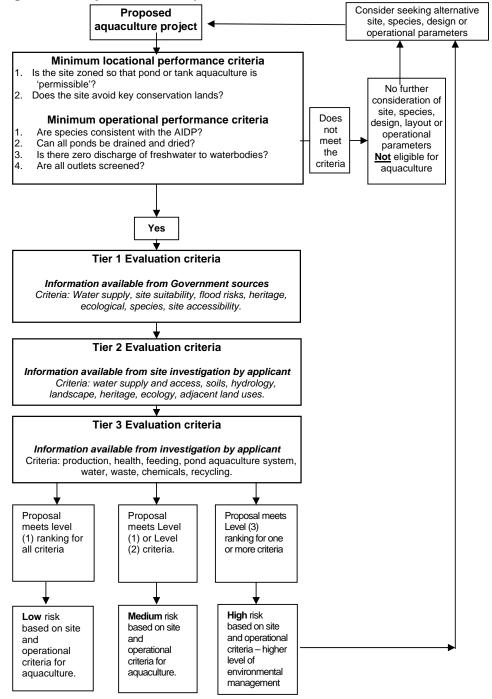
Table 11 provides an overview of how the rankings are interpreted to determine the class of development with Figure 12 providing an overview of the evaluation process.

Project profile analysis rankings	Class of development	Development assessment	Assessment document
Minimum performance criteria not met	Prohibited		
Minimum performance criteria met and all the rankings are level (1)	Class 1	Non-designated development	SEE
Minimum performance criteria met, any of the rankings are level (2) and none are level (3)	Class 2	Non-designated development	SEE with greater assessment of moderate risk factors
Minimum performance criteria met and any of the rankings are level (3)	Class 3	Designated development	EIS

Table 11. Interpreting the Rankings.

It must be reinforced that aquaculture projects undertaken in NSW, must meet the minimum locational and operational performance criteria.





9.6 Who makes the decision

The consent authority (the local Council or the Minister for Planning) will decide whether the project meets the minimum performance criteria and the level of assessment (Class 1, 2 or 3) required, based on the project profile analysis and the development application.

Usually, the local Council will be the consent authority and as the development will also require an aquaculture permit from I&I NSW it is considered an 'integrated development' and falls within the provisions of Part 4 of the EP&A Act. In some cases, where the project is determined to be a major project under Part 3A of the EP&A Act, the Minister for Planning will be the consent authority. I&I NSW will usually be the consent authority under part 5 of the EP&A Act for extensive aquaculture (Class C & E aquaculture permits) proposals, where existing farm dams and buildings are being used.

9.7 Transitional provisions

Where there is an existing aquaculture enterprise or a site of an abandoned aquaculture enterprise and there is a proposal to upgrade or re-establish an aquaculture operation on that site, the NSW LBSAS will apply.

For proposals that do not meet the minimum performance criteria, the applicant must formally seek and obtain agreement of the Minister for Planning to be exempted from the minimum performance criteria that would have otherwise made the proposal not permissible.

In making a decision for an exemption from the minimum performance criteria, the Minister shall take into consideration whether the proposal will lead to:

- improved environmental outcomes despite non or partial compliance with the site location minimum performance criteria;
- total compliance with the operational minimum performance criteria.

9.8 Project profile analysis - minimum performance criteria for ponds and tanks

The following are minimum performance criteria that proposals <u>must</u> meet to be permissible development within NSW.

Locational criteria	Minimum performance		
1. LEP zones for ponds or tanks	Within permitted zones of LEP zoning table.		
2. Conservation exclusion zones ¹	(1) Must not be carried out on land dedicated or reserved under the <i>National Parks and Wildlife Act 1974</i> :		
	(2) Must not be carried out on the following land, except to the extent necessary to gain access to water:		
	(a) land declared as critical habitat under the <i>Threatened Species Conservation Act 1995</i> ,		
	(b) vacant Crown land,		
	 (c) land within a wetland of international significance declared under the Ramsar Convention on Wetlands. 		
	(3) Must not be carried out on the following land, except for purposes of minimal infrastructure to support the extraction of water from, and discharge of water to, the land concerned:		
	(a) land declared as an aquatic reserve under the <i>Fisheries Management Act 1994,</i>		
	(b) land declared as a marine park under the <i>Marine Parks Act 1997</i> .		
Operational criteria			
1. Species selection	Species of fish or marine vegetation cultivated or kept must be consistent with the relevant Aquaculture Industry Development Plan.		
2. Intensive pond aquaculture—pond design	Ponds must be capable of being drained or pumped and then completely dried.		
 Intensive pond and tank aquaculture freshwater discharges 	No discharge of freshwater used to intensively cultivate or keep fish to natural waterbodies or wetlands is permitted, except freshwater discharge from open flow through systems		
4. Outlets from ponds etc	All outlets from culture ponds, tanks or other culture facilities must be screened to avoid the escape of fish.		

¹ Nothing in subclause (2) or (3) affects any requirement under an Act relating to land specified in subclause (2) or (3) to obtain a licence or other authority under that Act for development of the land.

LEP zoning table

LEP ZONES	AQUACULTURE TYPE	
	Pond	Tank
Rural		
RU1 Primary Production	Permissible	Permissible
RU2 Rural Landscape	Permissible	Permissible
RU3 Forestry	Permissible	Permissible
RU4 Rural Small Holdings	Permissible	Permissible
RU5 Village	Prohibited	Permissible
RU6 Transition	Prohibited	Permissible
Residential		
R1 General Residential	Permissible (1)	Permissible (1)
R2 Low Density Residential	Permissible (1)	Permissible (1)
R3 Medium Density Residential	Prohibited	Permissible (1)
R4 High Density Residential	Prohibited	Prohibited
R5 Large Lot Residential	Permissible (1)	Permissible (1)
Business	•	
B1 Neighbourhood Centre	Prohibited	Permissible
B2 Local Centre	Prohibited	Permissible
B3 Commercial Core	Prohibited	Permissible
B4 Mixed Use	Prohibited	Permissible
B5 Business Development	Prohibited	Permissible
B6 Enterprise Corridor	Prohibited	Permissible
B7 Business Park	Prohibited	Permissible
Industrial		
IN1 General Industrial	Prohibited	Permissible
IN2 Light Industrial	Prohibited	Permissible
IN3 Heavy Industrial	Prohibited	Permissible
IN4 Working Waterfront	Permissible	Permissible
Special Purpose Zones		
SP1 Special Activities	Permissible	Permissible
SP2 Infrastructure	Permissible	Permissible
SP3 Tourist	Permissible	Permissible
Recreation		
RE1 Public Recreation	Permissible	Permissible
RE2 Private Recreation	Permissible	Permissible
Environment protection		
E1 National Parks and Nature Reserves	Prohibited	Prohibited
E2 Environmental Conservation	Prohibited	Prohibited
E3 Environmental Management	Permissible (2)	Permissible (1)
E4 Environmental Living	Permissible (2)	Permissible (1)
Waterway		
W1 Natural Waterways	Permissible (3)	Permissible (3)
W2 Recreational Waterways	Permissible (3)	Permissible (3)
W3 Working Waterways	Permissible (3)	Permissible (3)

Note (1) Permissible only if the development is for the purposes of small scale aquarium fish production. **Note (2)** Permissible only if the development is for the purposes of extensive aquaculture.

Note (3) Permissible only if the development will utilise waterways to source water.

9.9 Project profile analysis - criteria for pond & tank aquaculture

Tier 1 - Site evaluation

Information for Tier 1 evaluation criteria is available from government sources such as Councils, Land and Property Management Authority, Department of Planning and other relevant government agencies.

SI	TE EVALUATION CRITERIA	TIER	1 LEVEL OF ASSESSME	NT
		Level 1	Level 2	Level 3
1.	Water Supply Information			
a)	Saline ground water availability	Saline water available from Saline Interception and Evaporation Scheme.	Bore required to source saline waters.	
b)	Fresh - Water availability	 Existing licence approved for bore or river extraction, or Licence available. 	 New licence required for bore or river extraction, or Reliant upon on-farm dam and 10% of local run-off. Use of a mains water supply for growout, nursery or hatchery. 	
c)	Freshwater projects that plan to pump water from a river – Environmental flows	No access restrictions based on flows in normal conditions	Access permitted only during high flows in normal conditions	
2.	Acid Sulfate Soils			
bas	te is less than 2 metres AHD ed on survey data, ASS soil file based on ASS Risk Maps ²	ASS Landform Process Class A with Landform Element Class b, I, t, p, y or w	ASS Landform Process Classes A,W, B, E, L, S with other Landform Element than b, I, t, p, y or w	
3.	Heritage Issues			
a)	Heritage sites based on LEP or REP maps and State Heritage Inventory	No listings on the proposed site	Listings onsite	
b)	Aboriginal heritage based on DECCW Aboriginal Heritage Information Management System and Local Aboriginal Land Council	No recorded sites or places and DECCW advises that no cultural or archaeological assessment is required	Sites or places recorded on the land and/or DECCW advises that a cultural and/or archaeological assessment is required.	Sites/places of regional or national significance present and likely to impact on sites/places.
4.	Native Title Issues			
Stat	tus of native title interests	Crown Land, previous determination Native Title extinguished	Crown Land Native Title interest needs to be determined	
5.	Flooding DECCW or Council info			
a)	Consistency with Council and/or DECCW Floodplain Management Plans	Development is consistent with the outcomes of management plans and needs no controls	Development of the site is consistent with the management plan but will be restricted or controlled	Development of the site is inconsistent with the outcomes of management plans
b)	Floodway Area	Development is not proposed in a floodway	Development is proposed in a floodway	

² Sourced from the Acid Sulfate Soil (ASS) Risk Maps

Tier 2 - Site evaluation

Tier 2 requires the proponent to undertake a detailed site assessment including investigations by technical experts and in some cases, laboratory analysis. The information gained from this investigation can provide the basis for preliminary design and operation planning.

SI	TE EVALUATION CRITERIA	TIER 2 LEVEL OF ASSESSMENT		
		Level 1	Level 2	Level 3
6.	Water Supply Quality			
a)	Water quality risks from nearby land uses	Growout water quality is consistently suitable for aquaculture and has low risk of contamination.	Growout water quality is mostly suitable for aquaculture and has low risk of contamination.	Growout water quality is not generally suitable for aquaculture and requires treatment OR has a high risk of contamination.
b)	Potable water for processing etc.	 Mains water; or Reliable supply of potable water onsite. 	 Insecure supply of potable water requiring supplementation during dry periods; or No existing potable water supply on site. 	
7.	Water Supply Access			
a)	Saline groundwater supply access	Via piping from a saline groundwater interception and evaporation scheme	Via saline groundwater bore on property	Via compacted earthen channel from a saline groundwater interception and evaporation scheme.
b)	Location of inlet/outlet pipe for estuarine or marine farms.	 Existing infrastructure suitable to carry inlet/outlet pipe, or Sump/pit or any deepening of bed of estuary or waterway is not required. 	 Rock anchoring of inlet/outlet pipeline for marine water, or Requires a sump/pit in estuary or waterway, or Establishment across ocean beach 	
c)	Fresh water pump station site	Does not require sump/pit or any deepening of bed of river.	Requires a sump/pit in river	
8.	Stock Security			
a)	Proposed species consistent with Table 3 (species culture methods and constraints) in Species Selection chapter.	Pond or tank site above the PMF level in the eastern drainage or above 1:100 ARI flood level in the western drainage. ³	Pond or tank site below PMF level in the eastern drainage or below 1:100 ARI flood level in the western drainage but constructed so unlikely to be inundated and lose stock in a flood event. ³	
9.	Hydrology Issues			
a)	Catchment Drainage including Stormwater	 No catchment drainage across site, or Provision to manage across site flows not likely to affect surrounding area 	 Catchment drainage across site; or Alteration of the drainage of stormwater likely to affect surrounding properties 	Flood management likely to alter the course of the river or drainage patterns.
b)	Excess water (effluent) storage pond/dam.	No stormwater catchment drainage into excess water (effluent) storage pond/dam.		
10.	Mean site elevation	. , , , , ,	•	
	an elevation of the area occupied bonds or tanks	>1 metre AHD	< 1 metre AHD	
11.	Ecology	1		1
a)	Vegetation type on the actual development site (flora survey required)	Cultivated land, improved pasture, or predominantly cleared and no need for consent to clear or disturb native vegetation under Native Vegetation Conservation Act or Water Management Act.	Predominantly native vegetation – trees, shrubs, grasslands OR Clearing vegetation requires consent under Native Vegetation Conservation Act or Water Management Act.	Proposal likely to impact on vegetation of ecological significance.

NSW Land	Based	Sustainable	Aquaculture	Strategy
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SITE EVALUATION CRITERIA	TIFR	2 LEVEL OF ASSESSME	NT
	Level 1	Level 2	Level 3
 b) Occurrence of threatened species, populations or ecological communities or their habitats (flora & fauna survey required) 	No threatened species, populations or ecological communities or their habitats known or likely to occur –Test of significance not required	Threatened species, populations or ecological communities or their habitats known or likely to occur – Test of significance required	Likely to significantly affect threatened species, populations or ecological communities or their habitats. ⁴
 c) Likely impact on aquatic habitats and mangroves. 	No likely disturbance or impact	Disturbance or impact on aquatic habitat or mangroves – approval or permit needed to disturb mangroves or seagrasses, reclamation or dredging works or impeding fish passages.	
12. Aboriginal Heritage			
 a) Consultation with Aboriginal community (Call DECCW for appropriate contacts) 	No values of cultural significance to the Aboriginal community identified.	Values of cultural significance to the Aboriginal community identified. Agreement reached between Aboriginal community, DECCW and proponent on the management of these values.	Values of cultural significance and no agreement reached with Aboriginal community or DECCW on the management of these values.
b) Location of Aboriginal Sites	No recorded Aboriginal site/place and DECCW advises that no cultural or archaeological assessment is required	Recorded Aboriginal site/place and/or DECCW advises that a cultural and/or archaeological assessment is required	
 c) Likely impact on Aboriginal heritage ⁴ 	No impact on Aboriginal sites/places or values of cultural significance to Aboriginal community	Impact on Aboriginal sites/places or values of cultural significance to Aboriginal community	Sites/places of regional or national significance present and likely to impact on sites/places.
13. Provision of Riparian Buffer			
Riparian buffer distance from the edge of the culture or effluent pond.	> 50 metres	< 50 metres	
14. Excess Water Disposal			
 Management of excess freshwater from closed systems 	 Non-irrigation reuse scheme (eg. Hydroponics, reuse, discharge to sewer with a trade waste agreement); OR Irrigation re-use scheme and irrigation site has adequate area and soils have slight limitiations⁵. 	Irrigation re-use scheme and irrigation site has inadequate area and/or soils have moderate or severe limitiations ⁵	
 Management of excess saline groundwater 	Disposed to a saline groundwater interception and evaporation scheme, estuary or ocean via piping or channels lined with impervious liner.	Disposal from a closed system to an on-site evaporation system or direct injection to a saline aquifer.	Disposed to a saline groundwater interception and evaporation scheme, estuary or ocean via earthen channel.
15. Adjacent Land Use			
Potential for conflict with neighbours	Neighbouring land zoning compatible eg. agriculture/industrial development.	Neighbouring land zoned for residential or rural residential purposes or has been identified as suitable for this purpose in an LEP or REP.	
16. Flooding Proponent Studies con	sidering DECCW or Council infor	mation where available.	·
Impacts of development on flooding	Development not likely to adversely impact flood behaviour	Development likely to adversely impact on flood behaviour	
³ Note: Highest historical flood level m	ay be considered where 1:100 A	RI flood level is not readily ava	ilable in the western drainage

Note: Highest historical flood level may be considered where 1:100 ARI flood level is not readily available in the western drainage

⁴ Note: approval from DECCW is required. ⁵ See Table 1 & Table 3 respectively in <u>Agnote DPI-493</u> Landform and soil requirements for biosolids and effluent reuse for more details.

Tier 3 - Operational evaluation

The proponent in Tier 3 is required to investigate operational criteria for species, design, layout and operation of the aquaculture proposal.

(OPERATIONAL CRITERIA	TIER 3 LEVEL OF ASSESSMENT			
		Level 1	Level 2	Level 3	
	Health Management				
	ntification and treatment of ease	 On site trained staff with appropriate facilities, or Demonstrated arrangement with accredited laboratory or veterinary practice 	No onsite provision for diagnosis of disease and no backup arrangements with an accredited laboratory or veterinary practice		
18.	Feed Management				
Fee	d storage	Vermin proof facilities to store feed (eg. enclosed shed, cool, low humidity)	Feed stored outdoors or so as not to minimise odour or other problems		
19.	Water Monitoring for Intensi	ve Culture			
a)	Capacity to monitor water quality.	Provisions of high quality water quality meters or test kits to monitor DO, Temperature, ammonia, salinity and pH	No provisions for regular monitoring		
20.	Organic Waste Management	t (eg. mortalities, processing v	vaste and other waste)		
a)	Temporary storage of organic waste	 Daily disposal; or Held prior to disposal so no odour generated (eg. frozen or chilled) 	Held in sealed or covered containers prior to intermittent disposal	No specific arrangements	
b)	Disposal of organic waste on- site or off-site	 Disposed at an approved off-site recycling or landfill facility; or Buried (with lime) or composted in an area which is > 100m from a waterways and where the groundwater is > 3m and the soil has low permeability 	Buried (with lime) or composted in an area which is < 100m from a waterways or where the groundwater is < 3m or the soil is not low permeability.	No specific arrangements	
c)	Disposal of stock in the event of a mass mortality, on-site or off- site	Arrangements in place for disposal at an approved off- site recycling or landfill facility.	Buried (with lime) or composed in an approved onsite disposal area.	No specific arrangements	
	Recirculating Water Manage	ment for Intensive Culture			
in cu	orage capacity for recycling water semi closed and closed intensive lture systems.	> 2 times the volume of largest growout pond or tank	1 - 2 times the volume of largest growout pond or tank	< the volume of largest growout pond or tank	
22.	Discharge Water Manageme marine or saline ground wa		rresnwater (for approved s	species) or estuarine,	
a)	POEO Act Licence	Not required	POEO Act licence required.		
b)	In stream water quality objectives.	In stream water quality objectives met.	In stream water quality objectives not met. Mitigation measures to meet WQOs required.		
c)	Discharge water treatment.	Discharge water screened to avoid escapement of stock and a water treatment system.	Discharge water screened to avoid escapement of stock and no treatment.		
d)	Daily Discharge limits for species approved for freshwater open systems eg. salmonids.	< 60mg/I TSS < 0.30mg/I Total N < 0.05mg/I Total P	> 60mg/I TSS > 0.30mg/I Total N > 0.05mg/I Total P		
e)	Total Discharge load limits for species approved for freshwater open systems eg. salmonids.	< 55kg N/tonne of fish produced < 12kg P/tonne of fish produced	 > 55kg N/tonne of fish produced > 12kg P/tonne of fish produced 		

9.10 Project profile analysis - additional criteria for pond aquaculture

Tier 1 – Additional specific site evaluation criteria for pond aquaculture

SITE EVALUATION CRITER	IA TIER 1 LE	TIER 1 LEVEL OF ASSESSMENT FOR PONDS			
FOR PONDS	Level 1	Level 1 Level 2 Level 3			
1. Water Supply Information					
Estuarine - Tidal amplitude	Greater than 600mm	Less than 600mm			

Tier 2 - Additional specific site evaluation criteria for pond aquaculture

SI	TE EVALUATION CRITERIA	TIER 2 LEVEL OF ASSESSMENT FOR PONDS				
	FOR PONDS	Level 1	Level 2	Level 3		
2.	Topography					
a)	Estuarine ponds – slope of land	< 2% slope	>2% slope			
b)	Freshwater ponds – slope of land	< 5% slope.	>5% slope			
3.	Soils					
a)	Soil Characteristics – Suitability for pond/dam construction	Clay with mixture of soil/sand and low erosion potential and suitable for dam construction	Sandy/gravely with erosion potential and/or limited water holding capacity – may need to import most pond clay for lining material or an artificial liner			
b)	Soil Contamination based on SEPP 55 criteria for the area occupied by any pond	Suitable for residential use or for animal occupation	Exceed levels safe for animal or residential uses			
4.	Hydrology Issues					
	ential to affect groundwater below / pond	No underlying potable or high quality fresh groundwater within 3m of the surface	Underlying groundwater within 3m of the surface.			
5.	5. Saline Groundwater Pond Design					
a)	Saline groundwater ponds including excess water storage ponds.	Artificial liner with compacted clay underneath and ground water monitoring bores.	Compacted clay and groundwater monitoring bores.			

Tier 3 - Additional specific operational evaluation criteria for ponds

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	OPERATIONAL CRITERIA	TIER 3 LEV	TIER 3 LEVEL OF ASSESSMENT FOR PONDS			
F	FOR POND AQUACULTURE	Level 1	Level 2	Level 3		
6.	Health Management for Inter	sive Culture				
a)	Period of total farm dryout after every production cycle for prawns.	>6 weeks between crops	<6 weeks between crops			
b)	Predators management of fingerling or growout ponds	All fingerling ponds screened/netted, or other management systems not intending harm to predators in place for growout ponds.	Only 'scare' systems (Note: may trigger need for Test of significance if threatened bird species are affected)			
7.	Pond Water Management for	Intensive Culture				
a)	Supply pipe or channel capacity	Largest growout pond can be filled in < 1 day	Largest pond can be filled in > 1 days			
b)	Intensive Pond Outlet system	No pumping required to drain a pond completely.	Requires pumping from an internal or external sump to drain pond.			

9.11 Project profile analysis - additional criteria for tank aquaculture

Tier 1 - Additional specific site evaluation criteria for tanks

SITE EVALUATION CRITERIA FOR	TIER 1 LEVEL OF ASSESSMENT FOR TANKS				
TANKS	Level 1	Level 2	Level 3		
1. Water Supply information					
Estuarine – Tidal amplitude	>300mm	< 300mm			

Tier 3 - Additional specific operational evaluation criteria for tanks

OPERATIONAL CRITERIA FOR	TIER 3 LEVEL OF ASSESSMENT FOR TANKS			
TANK CULTURE	Level 1	Level 2	Level 3	
2. Health Management				
Disinfection of tank aquaculture system	Systems capable of disinfection and dry-out to break pathogen cycle	Difficulty in total disinfection and dry-out of facility or no provisions		
3. Culture Water Management				
Semi closed and closed tank aquaculture systems	Recirculating aquaculture system with biofiltration, solids filtration (fine, suspended, settlable) oxygen, UV, or ozone, pH control	Recirculating aquaculture system having reduced or non-standard componentary.		

9.12 Project Profile Analysis - extensive pond aquaculture permissible without consent

Extensive pond aquaculture that is authorised under a Class C or E aquaculture permit that utilises existing on-farm water storages (dams or ponds) and buildings and meets all of the following criteria is permissible without consent.

2. Conservation exclusion (zones ⁶	 Within rural zone RU1 (Primary Production), RU2 (Rural Landscape), RU3 (Forestry), RU4 (Rural Small Holdings), or RU6 (Transition). 1) Must not be carried out on land dedicated or reserved under the National Parks and Wildlife Act 1974: 	
ZONES ⁶	,	
(2	 Must not be carried out on the following land, except to the extent necessary to gain access to water: 	
	a. land declared as critical habitat under the <i>Threatened Species Conservation Act 1995</i> , or	
	b. vacant Crown land, or	
	 c. land within a wetland of international significance declared under the Ramsar Convention on Wetlands. 	
i	Must be designed or constructed on land so that it will not be inundated by the discharge of a 1:100 ARI (average recurrent interval) flood event.	
Operational Criteria		
	Species of fish or marine vegetation cultivated or kept must be consistent with the relevant Aquaculture Industry Development Plan.	
2. Pond design	1. Must not require the construction of new ponds, water storages, dams or buildings.	
:	2. Must not be located on permanent watercourses, creeks, billabongs or isolated outreaches of creeks or rivers.	
:	Must be capable of preventing the escape of stock into natural water bodies or wetlands.	
3. Culture Water	Must use freshwater.	

^o Nothing in in subclause (2) affects any requirement under an Act relating to land specified in subclause (2) to obtain a licence or other authority under that Act for development of the land.

10 Assessment Guidelines

These guidelines identify important factors to be considered when preparing a Statement of Environmental Effect (SEE) or an Environmental Impact Statement (EIS) to accompany a development application (DA) for a sustainable land based aquaculture proposal.

The SEE or EIS should predict the likely environmental impacts of the proposal (including construction and ongoing operation) and provide the basis for the project's on-going sustainable management. This information is important for the applicant in making business decisions and for the broader community to understand what is happening in their community and the approval bodies so they have adequate information to make a decision.

The preparation of a SEE or EIS should be preceded by effective consultation with relevant government agencies, Councils and neighbours. There should be early evaluation of alternatives, taking into consideration the factors in this guideline and in the relevant chapters in the NSW LBSAS. A high priority should be given to:

- considering environmental factors in site selection;
- evaluating alternative species, design, layout and management practices;
- ascertaining the suitability of the proposal in the intended location.

The analysis and justification for the the preferred site, species and technology should be consistent with ecological sustainability principles. The assessment process should focus on key environmental issues. Key matters for land based aquaculture facilities and related activities include:

- selection of an appropriate location and design layout to provide for sustainable management;
- water lifecycle management: source and availability of water and minimisation; management of wastewater;
- minimisation of adverse impacts on flora and fauna, in particular the risks associated with the species to be farmed and management of predators.

The SEE/EIS should outline commitments to the ongoing environmental management of the proposal, including monitoring.

The relevance of matters in this guideline to a particular land based aquaculture proposal will depend upon the proposed location, the species cultivated, intensity of production and the proposed cultural methods. The greater the potential environmental impacts, the more carefully the site, design and operational practices must be considered and assessed.

10.1 When is an EIS required?

If an aquaculture proposal is a Class 3 - designated development, an EIS must be prepared and submitted with the development application;

10.2 Factors to consider when assessing a proposal

The aim of an environmental impact assessment is to enable the approving authority, public, local Council, government authorities and the applicant to properly consider the potential environmental consequences of a proposal. It is important to provide sufficient information for:

- the applicant to make decisions about costs and benefits associated with the location, species, design and operation of the facilities;
- the broader community to understand the nature of the proposal being located in their area and to make an informed contribution to the assessment process;
- the approving authorities (Council and government agencies) to make a decision on whether to approve a proposal and if so, under what conditions.

The SEE or EIS should also provide the basis for sound ongoing environmental management.

It is the applicant's responsibility to identify and address, as fully as possible, the matters relevant to the specific proposal and to comply with the statutory requirements for EIS preparation. It should address relevant issues in sufficient detail so that the consent authority can make an informed judgement about the environmental impacts of the proposal. The following factors are important when preparing an EIS.

10.3 Early consideration of the strategic context

Strategic environmental issues need to be considered at the outset when selecting options for the proposal. These broader strategic issues have been considered in the development of the NSW LBSAS. It is not the role of the project SEE/EIS to undertake an environmental assessment of performance goals in the NSW LBSAS. Where the performance goals have been set out in the Aquaculture Industry Development Plan (AIDP), the SEE/EIS will only need to demonstrate compliance with those goals, not the justification of the goals. Information in the AIDP does NOT need to be repeated in the SEE/EIS.

10.4 Early assessment of options

The applicant should liaise closely with Industry & Investment NSW and Council at the early stages of a development proposal particularly in identifying and testing various options to meet the applicant's objectives for the proposal. When weighing up all feasible alternatives, the biophysical, economic and social costs and benefits throughout the whole life cycle of the proposal should be considered. Early adoption of ESD principles can reduce possible conflicts, and additional costs and delays at later stages of the approval process.

10.5 Identifying issues

There is no prescribed framework for a SEE however the general framework for a EIS can be used as a guide. The general framework for an EIS is prescribed in Schedule 2 of the *EP&A Regulation 2000*. If an EIS is required, the Director General of Planning must be consulted as to any specific matters to be addressed in an EIS. In issuing requirements, the Director General must consult integrated approval bodies in preparing the requirements. The requirements of these agencies will also be sent to the applicant at this time.

In addition to the specific requirements, the applicant has a broader responsibility to consider all potential environmental issues in relation to the proposal. As a precursor to identifying potential environmental issues, the applicant must outline:

- the important characteristics of the project;
- the proposed site;
- a preliminary assessment of the sensitivity of the site.

In addition to the issues outlined in this guideline, other sources of information that may assist in the identification of potential issues include:

- any relevant guidelines produced by NSW Government authorities, other States or overseas;
- EISs for similar projects, and any relevant Commission of Inquiry report, determination report and conditions of approval;
- Relevant research and reference material on similar proposals.

To help identify issues relating to a particular proposal in a location, informal consultation or a structured process with a high level of consultation with all stakeholders should be undertaken. The choice of the approach will depend on the scale and type of proposal and the sensitivity of the environment.

10.6 Prioritising issues

The relative importance placed on different issues identified in this guideline will vary from case to case, and is a function of the type and size of the proposal and the sensitivity of the surrounding environment. Issues should therefore be prioritised according to their importance in the decision-making process.

It is important that the budget for preparing the SEE/EIS, is allocated so that the necessary studies which are essential to predicting impacts and making decisions are undertaken and money is not wasted on unnecessary studies which may not be important to the decision making or the long term management of the site. It is critical that resources are focused on 'key' issues with the AIDP and the project profile analysis assisting in ranking the likely risks associated with most of the issues associated with land based aquaculture proposals.

The outcome of the identification and prioritisation process should result in:

- a) a list of all issues with a preliminary estimate of the relative significance of their impacts;
- b) identification of the key issues taking into consideration the project profile analysis;
- c) an estimate of the scope of the information required for these key issues;
- d) an explanation as to why other issues are not considered to be key.

The SEE/EIS should address the key issues as fully as practicable. However, the level of analysis should reflect the level of significance of the impacts and their importance for the proposal.

10.7 Impact analysis and prediction

Discussion of likely impacts should include predictions of the nature and extent of potential impacts and the effectiveness of mitigation strategies. This information is fundamental in deciding the potential ecological sustainability and hence the acceptability of a particular proposal.

Baseline information

A certain amount of baseline information is required to determine the level of risk associated with the project based on the project profile analysis. A project considered high risk will require more detailed baseline information for predicting the likely level of impacts than a project considered to be low.

In some circumstances, there may be sufficient existing data available for assessment purposes without the need for additional data collection. Where existing data is used, its adequacy and appropriateness for assessment of the proposal's impacts should be reviewed and discussed.

In all cases, sampling programs and analysis procedures should reflect current scientific approaches for design, sampling methodology, data analysis and interpretation of results. Where baseline data is to be collected first-hand, careful consideration must be given to the design of the sampling program. The need for long term sampling to discern the variability of the environment should also be considered as early as possible to avoid time constraints. This could be an issue where discharges to natural waterways are proposed. Any assumptions and extrapolations used to draw conclusions from the data should be justified.

Predicting the likely impacts and identifying mitigation

Impact prediction should consider magnitude, duration, extent, direct and indirect effects, beneficial and adverse effects and whether impacts are reversible or permanent. All predictions of impacts using predictive models should be justified in terms of appropriateness for the task, outlining its strengths and weaknesses, the likely success of mitigation strategies have and the element of uncertainty associated with them. The applicant should identify and, where possible, indicate the level of uncertainty associated with these predictions and mitigation measures. This

information is fundamental in developing appropriate management strategies and informs the applicant, community, government agencies and the decision-maker of the degree of risk associated with the proposal and the importance of that risk.

Whenever conclusions and recommendations have been based substantially on judgements instead of facts or objective analytical results, the basis of the judgements should be clearly identified. A staged development may be required in order to monitor and test predicted impacts.

Mitigation strategies

Mitigation strategies must be considered both in relation to individual impacts and collectively for all impacts. This helps to avoid conflict between mitigation strategies and ensures that measures applied with respect to one (or more) potential impacts do not increase the magnitude or significance of other likely impacts. The mitigation strategy should include the environmental management principles that would be followed including:

- 1. a compilation of locational, layout, design or operational features in the EIS;
- 2. an outline of ongoing environmental management and monitoring plans.

Predictions made in the SEE/EIS should be monitored in an Environmental Management Plan (EMP). With projects posing potentially controversial environmental impacts, it may be appropriate to:

- consult with relevant government bodies, Council and the community;
- trial proposed mitigation measures in the EMP (obtaining necessary approvals);
- develop contingency measures to deal with impacts should mitigation measures not deliver the predicted outcomes;
- exhibit an annual environmental management report outlining the environmental performance of the proposal.

It is not expected that a detailed EMP be prepared at the development application stage. However the EIS/SEE should contain an outline of the content of an EMP addressing critical issues, structure and commitment to prepare an EMP if required.

10.8 Ecologically sustainable development

Under the *EP&A Regulation 2000*, it is necessary to justify the proposal having regard to the principles of ecologically sustainable development (ESD). Ecological sustainability requires a combination of good planning and an effective and environmentally sound approach to design, operation and management. The applicant should have regard to the principles of ESD throughout the whole project life cycle especially in the use and reuse of resources, consideration of neighbours and minimising irreversible impact on the natural environment.

Continual reference should be made to the question 'Is this proposal ecologically sustainable?'

10.9 Consultation

Purpose of pre-assessment consultation

Early consultation with the local residents, other industry, Councils and government agencies is of great assistance in making a preliminary assessment of the potential viability and likely acceptability of the project at a particular site. It can also assist in ensuring that the SEE or EIS is focused on those matters that will add value to the decision-making process.

Effective consultation should enable an applicant to:

- clarify the objectives the proposal taking into consideration community concerns or issues;
- clarify the relationship of the proposal to relevant government policy directions or land use, economic, estuary or vegetation management plans which may constrain development on the site;

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- identify feasible alternatives and their relative merits;
 - identify environmental issues to:
 - * prioritise and identify issues key to the decision-making process of the investors as well as to the consent and approval authorities;
 - identify the studies for key issues to provide adequate information for the decisionmaking process;
 - * identify performance objectives or indicators for key issues;
 - * when appropriate, identify experts (in government agencies or from other sources) who can assist in guiding and reviewing the assessment key issues;
- if appropriate, identify processes for continued community consultation.

In preparing the SEE or EIS, consultation with relevant parties should be undertaken early in the process and their comments taken into account in the SEE or EIS.

Planning focus meetings for major projects

To facilitate consultation with relevant government agencies, it may be appropriate to hold a planning focus meeting (PFM). PFMs should be held for all major or potentially controversial proposals. The consent authority would usually be responsible for organising the PFM which would include government authorities which have an approval role, other agencies or independent technical experts.

Pre-lodgement Meetings for smaller projects

For smaller projects, less formal meetings or discussions with relevant authorities, particularly the local Council, should be undertaken. Issues such as whether a proposal is consistent with the Council's strategic plan for the area and is permissible at the particular site should be clarified at the outset.

Formal consultation required for an EIS

Under the provisions of the *EP&A Regulation 2000*, an applicant or proponent must formally consult the Director General of Planning regarding the content of an EIS. It is recommended that the PFM or preliminary discussions with Council occur before the proponent consults the Director General and that the minutes of the PFM or issues canvassed in the discussions be forwarded to Department of Planning when the Director General's requirements are requested.

Formal consultation required for a Species Impact Statement (SIS)

If a proposal is on land that contains a 'critical habitat' or is likely to significantly affect threatened species, populations or ecological communities or their habitats, the Director General of the Department of Environment, Climate Change and Water should be consulted regarding the contents of a Species Impact Statement.

Community consultation

The community likely to be affected, whether directly or indirectly, should be informed of the proposal and consulted early in the preparation of the EIS or SEE. The community can be a valuable source of information about a locality and by taking a 'partnership' approach with the local community, these factors can be identified early and appropriately considered. Consultation should aim to include affected individuals, community groups and groups with special interests such as local Aboriginal communities.

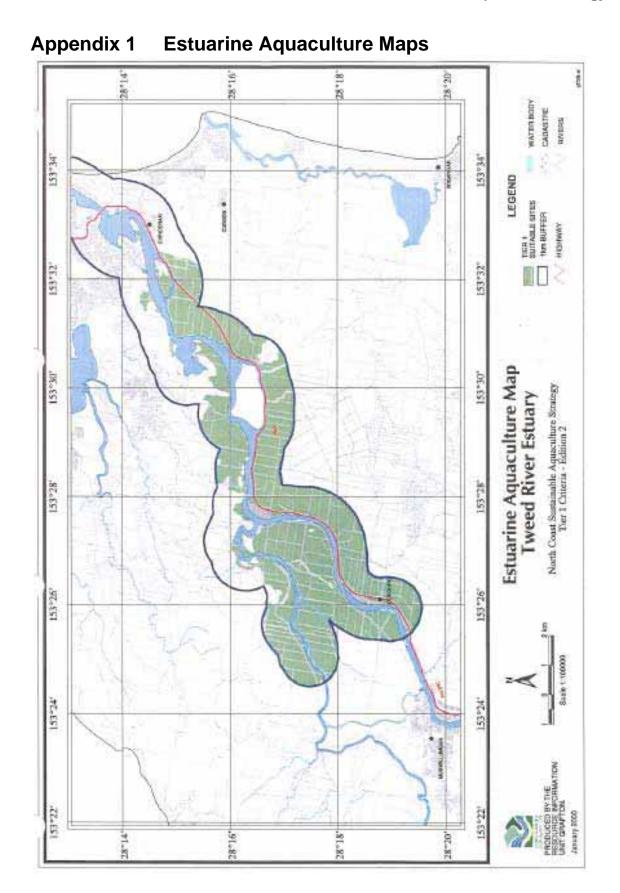
Consultation usually includes two phases:

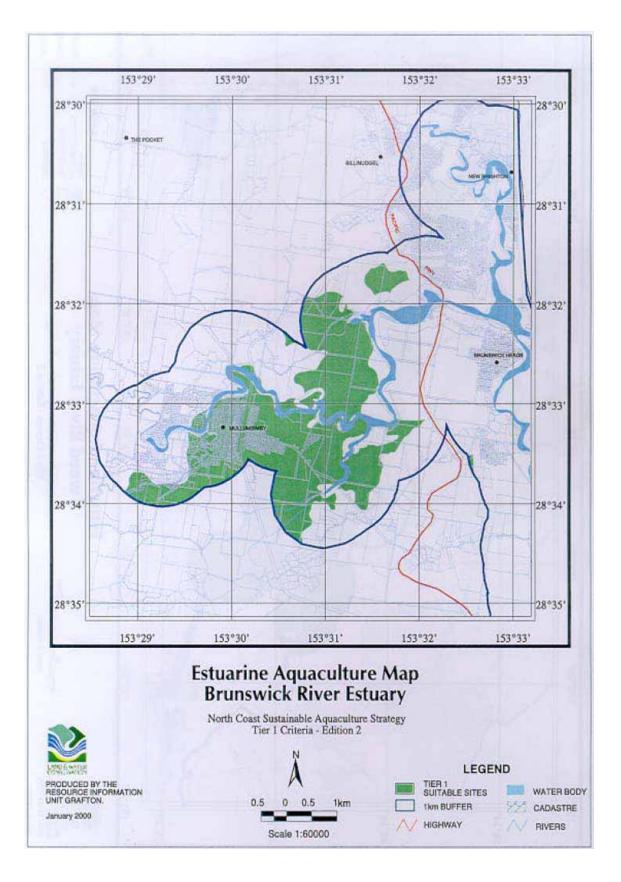
- Firstly, seeking to inform the community (public meetings, public displays or newsletters);
- Secondly, seeking to gain input on issues of community concern, to identify community values and to identify and evaluate alternatives (eg. focus meetings, 'issues' workshops and surveys).

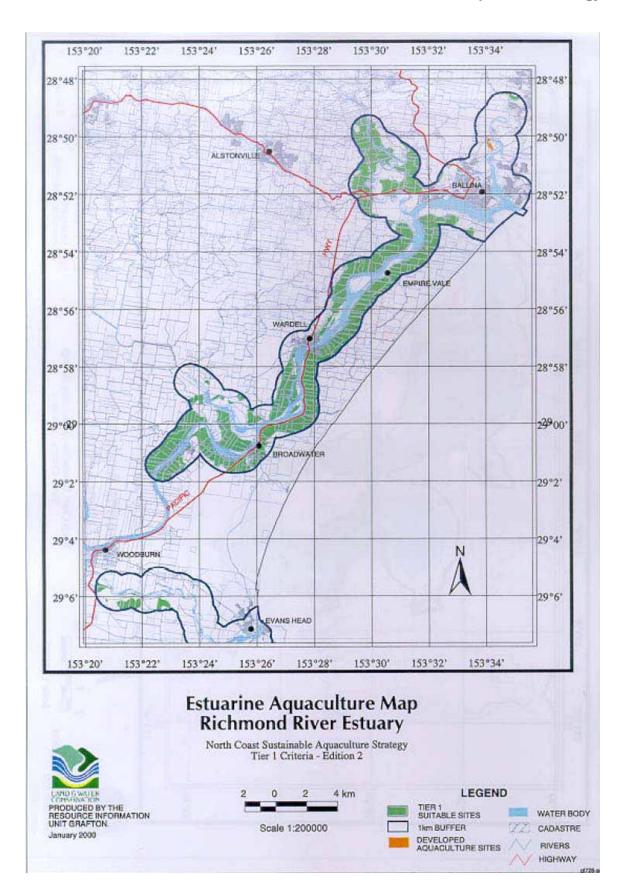
10.10 Who should be consulted on technical issues

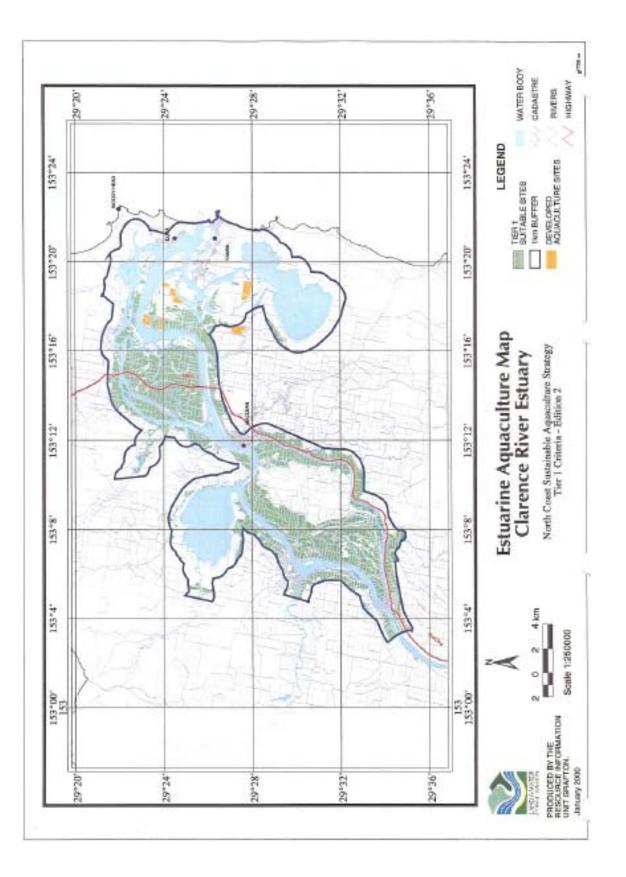
The consent authority (Council or Department of Planning) should be able to direct proponents to relevant State government agencies that may be able to assist on technical issues. These agencies may include:

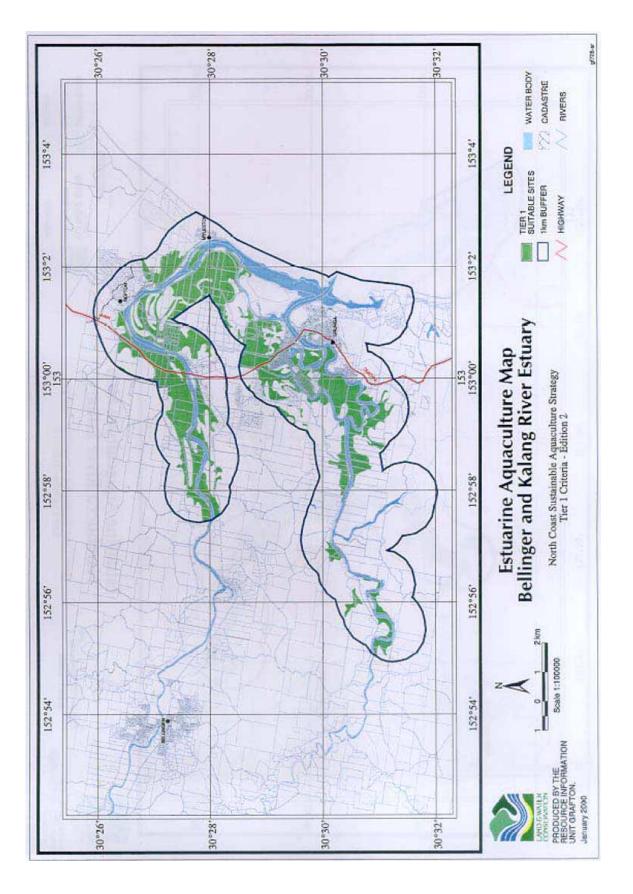
- Department of Water and Energy;
- Industry & Investment NSW;
- Land and Property Management Authority;
- Department of Environment, Climate Change and Water;
- NSW Food Authority;
- Roads and Traffic Authority or State Rail Authority;
- Department of Aboriginal Affairs;
- Department of Bushfire Services.





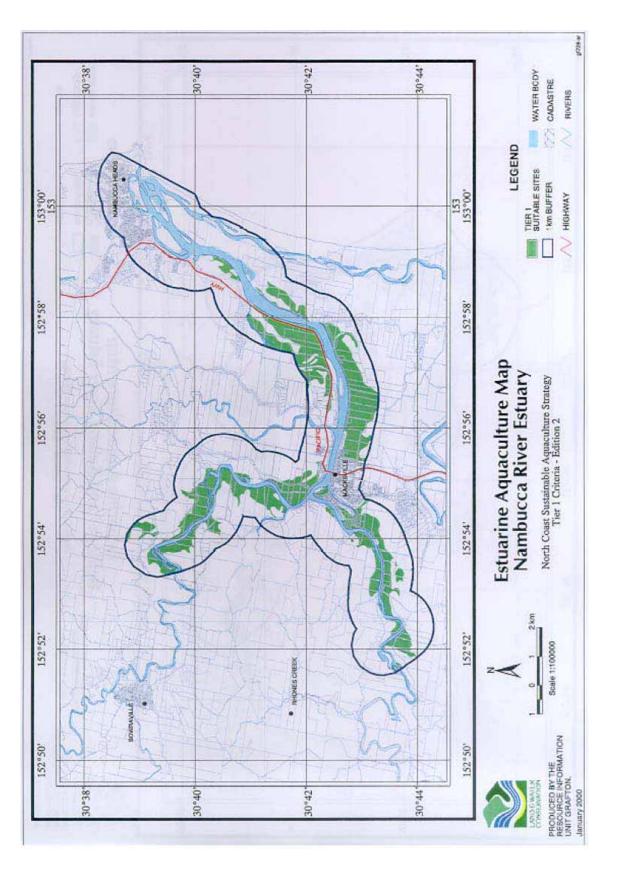




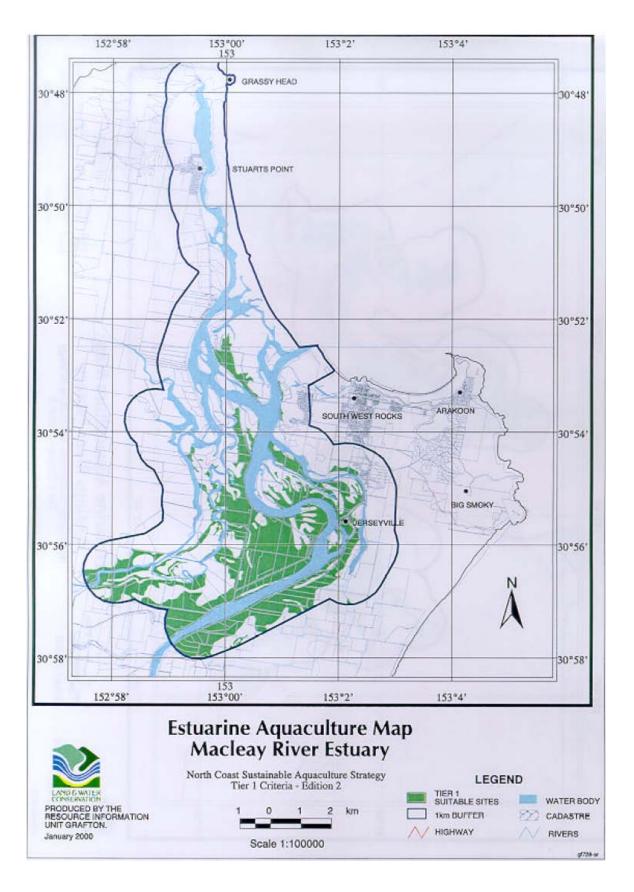


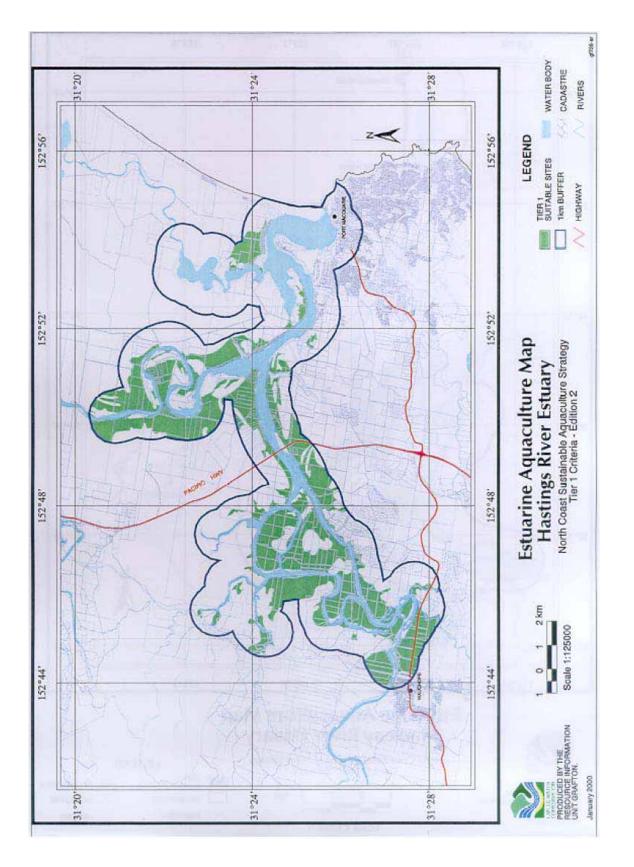
OFFICIAL NOTICES

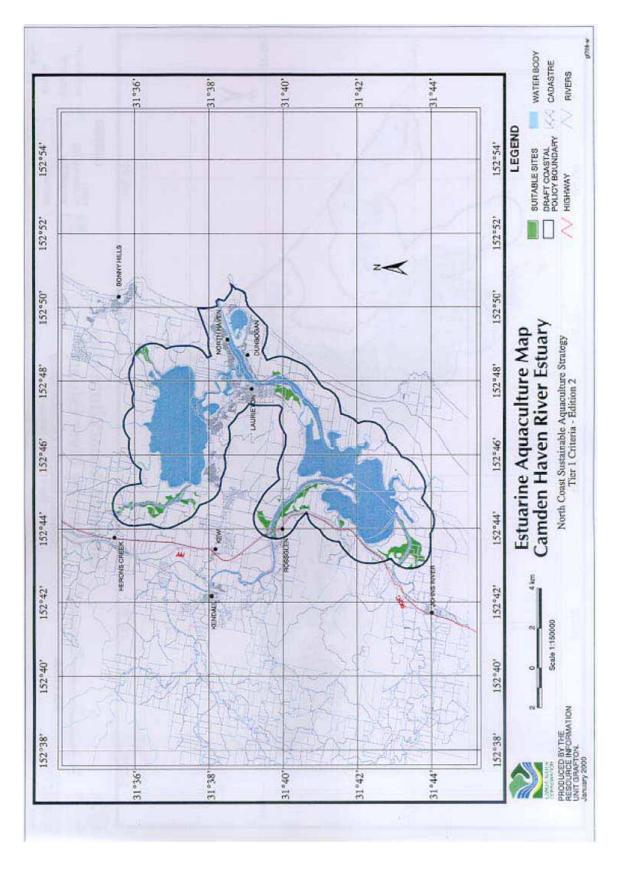
NSW Land Based Sustainable Aquaculture Strategy



NEW SOUTH WALES GOVERNMENT GAZETTE No. 207

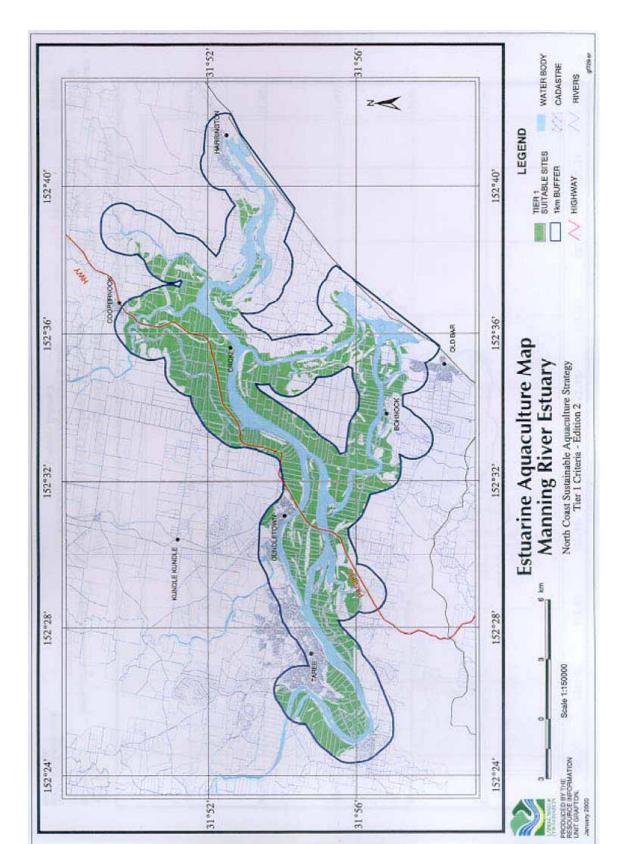




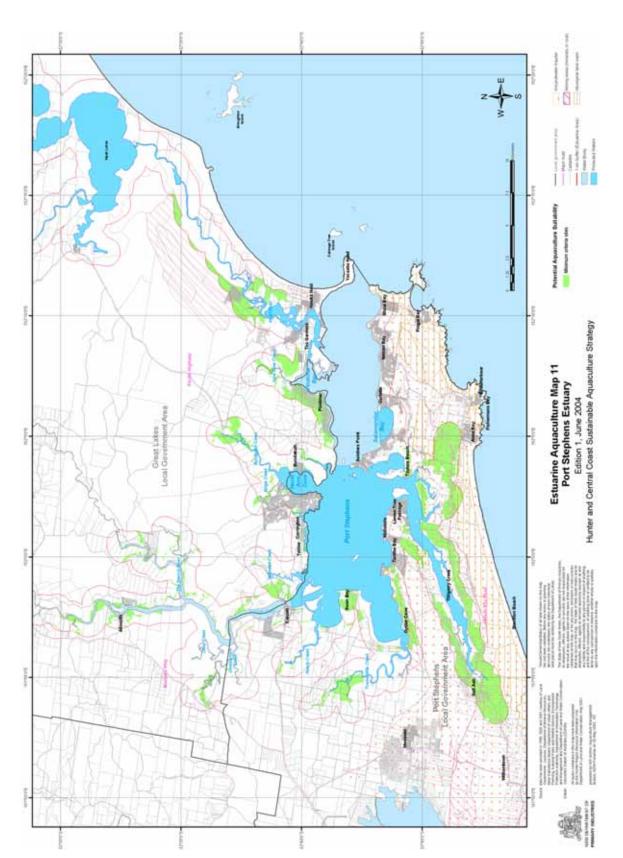


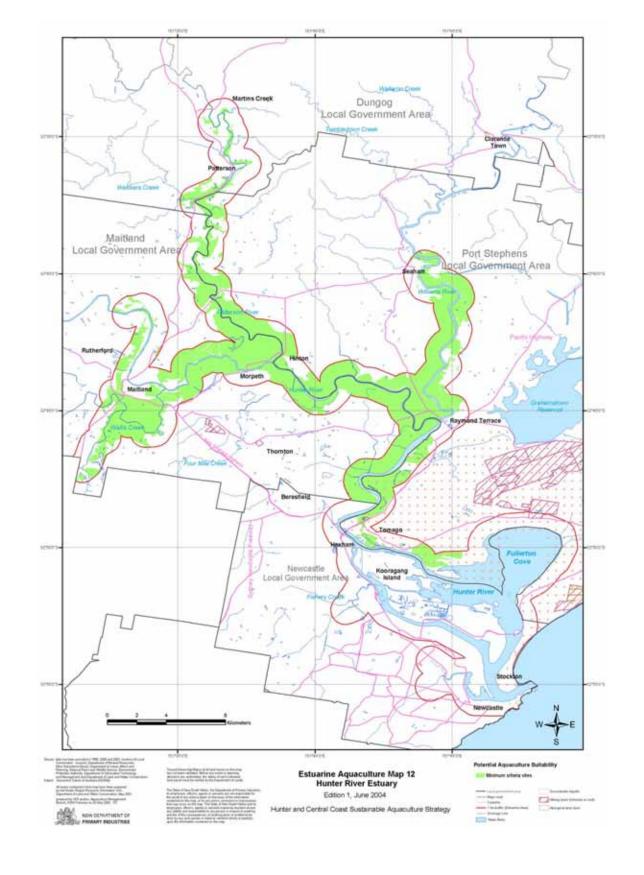
OFFICIAL NOTICES

NSW Land Based Sustainable Aquaculture Strategy



NEW SOUTH WALES GOVERNMENT GAZETTE No. 207





Appendix 2 Key Weblinks for Additional Information

Industry & Investment NSW

Primary Industries

www.dpi.nsw.gov.au/fisheries/aquaculture/ www.dpi.nsw.gov.au/fisheries/aquaculture/contacts/aquaculture-industry-directory www.dpi.nsw.gov.au/fisheries/aquaculture/publications/health/fish/info-sheet-silver-perch www.dpi.nsw.gov.au/fisheries/aquaculture/publications/aquaculture-production-reports www.dpi.nsw.gov.au/fisheries/aquaculture/publications/water-quality-management www.dpi.nsw.gov.au/fisheries/aquaculture/publications/species-freshwater/collecting-finshishbroodstock#NSW-Hatchery-Quality-Assurance-Scheme www.dpi.nsw.gov.au/agriculture/farm/recycling-waste-mgt www.industry.nsw.gov.au/energy

State and Regional Development

www.business.nsw.gov.au/ www.smallbiz.nsw.gov.au www.businesscentre.com.au/

Department of Planning

www.planning.nsw.gov.au/index.asp www.planning.nsw.gov.au/planningsystem/howda.asp www.planning.nsw.gov.au/assessingdev/pdf/gu_plfocus_0134.pdf

Land and Property Management Authority

www.lands.nsw.gov.au/crown land/aboriginal land www.lands.nsw.gov.au/contact_us www.lands.nsw.gov.au/land_titles www.lands.nsw.gov.au/survey_maps

NSW Office of Water

www.water.nsw.gov.au/ www.water.nsw.gov.au/Water-Licensing/default.aspx waterinfo.nsw.gov.au/drr/index.shtml

Department of Environment, Climate Change and Water

www.environment.nsw.gov.au/contact/ www.environment.nsw.gov.au/water/usinganzeccandwqos.htm www.dnr.nsw.gov.au/floodplains/manual.shtml www.dnr.nsw.gov.au/soils/sulfate.shtml www.environment.nsw.gov.au/water/effluent.htm www.environment.nsw.gov.au/criticalhabitat/CriticalHabitatProtectionByDoctype.htm www.dnr.nsw.gov.au/vegetation/nv.shtml www.environment.nsw.gov.au/nswcultureheritage/AboriginalPeopleAndCulturalLife.htm www.environment.nsw.gov.au/licences/AboriginalHeritageInformationManagementSystem.htm www.environment.nsw.gov.au/noise/index.htm www.environment.nsw.gov.au/wildlifelicences/LandownersDevelopersLicences.htm www.environment.nsw.gov.au/waste/envguidlns/index.htm www.environment.nsw.gov.au/waste/envguidlns/index.htm www.environment.nsw.gov.au/vegetation/noapproval.htm www.environment.nsw.gov.au/biocertification/offsets.htm

NSW Food Authority

www.foodauthority.nsw.gov.au

Road and Traffic Authority

www.rta.nsw.gov.au/

Department of Local Government

www.dlg.nsw.gov.au

Other NSW State Agencies or Organisations.

www.legislation.nsw.gov.au/ www.mpa.nsw.gov.au/ www.mhl.nsw.gov.au www.cma.nsw.gov.au/ www.heritage.nsw.gov.au/ www.nsw.nationaltrust.org.au/ http://maritime.heritage.nsw.gov.au/public/welcome.cfm www.bpb.nsw.gov.au/index.shtml www.aib.org.au/buildingcodes/bca.htm www.sydneyfishmarket.com.au

Other State/Federal Agencies or Organisations

www.dpi.qld.gov.au www.dpi.vic.gov.au/

www.foodstandards.gov.au/ www.environment.gov.au/epbc/ www.environment.gov.au/water/quality/nwqms/ www.environment.gov.au/water/publications/environmental/wetlands/database/ www.environment.gov.au/biodiversity/migratory/index.html www.environment.gov.au/biodiversity/migratory/index.html www.environment.gov.au/heritage/index.html www.nntt.gov.au/Pages/default.aspx www.greenhouse.gov.au/ www.metoc.gov.au/products/data.html

www.seafood.net.au www.seafoodcrc.com/ www.australian-aquacultureportal.com/

www.natfish.tafensw.edu.au/

www.seafoodtrail.com/

6274

Roads and Traffic Authority

ROAD TRANSPORT (SAFETY AND TRAFFIC MANAGEMENT) ACT 1999 – ORDER

(LS) 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 the Road Transport (Safety and Traffic Management) Act 1999 (the Act), (including section 57C, Approval of devices for multiple detection functions), do, by this my Order, approve a device of the type described hereunder as a:

speed measuring device, designed to perform the detection functions referred to in section 44 of the Act;

camera recording device, designed to perform the detection functions referred to in section 45(1) of the Act, and which is capable of recording images in the form of digitalised, electronic or computer-generated images, in accordance with the terms of section 45(2) of the Act; and

camera detection device, designed to perform the detection functions referred to in section 56 of the Act.

Type of device:

Gatsometer GTC-GS11 LTR

Signed and sealed at Sydney, this 16th day of December, 2009.

By Her Excellency's Command

DAVID CAMPBELL, M.P., Minister for Transport and Roads

EXPLANATORY NOTE

ROAD TRANSPORT (SAFETY AND TRAFFIC MANAGEMENT) ACT 1999. ORDER

Section 57C of the Road Transport (Safety and Traffic Management) Act 1999 provides that a device may be approved for use as an approved device for the purposes of 2 or more device approval provisions, by order of the Governor and published in the New South Wales Government Gazette.

The attached Order approves the Gatsometer GTC-GS11 LTR for the purposes of multiple detection functions.

ROAD TRANSPORT (SAFETY AND TRAFFIC MANAGEMENT) ACT 1999 – ORDER

(LS) 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 the Road Transport (Safety and Traffic Management) Act 1999 (the Act), (including section 57C, Approval of devices for multiple detection functions), do, by this my Order, approve a device of the type described hereunder as a:

speed measuring device, designed to perform the detection functions referred to in section 44 of the Act;

camera recording device, designed to perform the detection functions referred to in section 45(1) of the Act, and which is capable of recording images in the form of digitalised, electronic or computer-generated images, in accordance with the terms of section 45(2) of the Act; and

camera detection device, designed to perform the detection functions referred to in section 56 of the Act.

Type of device:

Gatsometer GTC-GS11 GLD

Signed and sealed at Sydney, this 16th day of December, 2009.

By Her Excellency's Command

DAVID CAMPBELL, M.P., Minister for Transport and Roads

EXPLANATORY NOTE

ROAD TRANSPORT (SAFETY AND TRAFFIC MANAGEMENT) ACT 1999. ORDER

Section 57C of the Road Transport (Safety and Traffic Management) Act 1999 provides that a device may be approved for use as an approved device for the purposes of 2 or more device approval provisions, by order of the Governor and published in the New South Wales Government Gazette.

The attached Order approves the Gatsometer GTC-GS11 GLD for the purposes of multiple detection functions.

ROAD TRANSPORT (SAFETY AND TRAFFIC MANAGEMENT) ACT 1999 – ORDER

(LS) 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 the Road Transport (Safety and Traffic Management) Act 1999 (the Act), (including section 57C, Approval of devices for multiple detection functions), do, by this my Order, approve a device of the type described hereunder as a:

speed measuring device, designed to perform the detection functions referred to in section 44 of the Act;

camera recording device, designed to perform the detection functions referred to in section 45(1) of the Act, and which is capable of recording images in the form of digitalised, electronic or computer-generated images, in accordance with the terms of section 45(2) of the Act; and

camera detection device, designed to perform the detection functions referred to in section 56 of the Act.

Type of device:

Traffistar SR420

Signed and sealed at Sydney, this 16th day of December, 2009.

By Her Excellency's Command DAVID CAMPBELL, M.P.,

Minister for Transport and Roads

EXPLANATORY NOTE

ROAD TRANSPORT (SAFETY AND TRAFFIC MANAGEMENT) ACT 1999. ORDER

Section 57C of the Road Transport (Safety and Traffic Management) Act 1999 provides that a device may be approved for use as an approved device for the purposes of 2 or more device approval provisions, by order of the Governor and published in the New South Wales Government Gazette.

The attached Order approves the Traffistar SR420 for the purposes of multiple detection functions.

ROAD TRANSPORT (SAFETY AND TRAFFIC MANAGEMENT) ACT 1999 – ORDER

(LS) 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 the Road Transport (Safety and Traffic Management) Act 1999 (the Act), (including section 57C, Approval of devices for multiple detection functions), do, by this my Order, approve a device of the type described hereunder as a:

speed measuring device, designed to perform the detection functions referred to in section 44 of the Act;

camera recording device, designed to perform the detection functions referred to in section 45(1) of the Act, and which is capable of recording images in the form of digitalised, electronic or computer-generated images, in accordance with the terms of section 45(2) of the Act; and

camera detection device, designed to perform the detection functions referred to in section 56 of the Act.

Type of device:

Traffistar SR490

Signed and sealed at Sydney, this 16th day of December, 2009.

By Her Excellency's Command

DAVID CAMPBELL, M.P., Minister for Transport and Roads

EXPLANATORY NOTE

ROAD TRANSPORT (SAFETY AND TRAFFIC MANAGEMENT) ACT 1999. ORDER

Section 57C of the Road Transport (Safety and Traffic Management) Act 1999 provides that a device may be approved for use as an approved device for the purposes of 2 or more device approval provisions, by order of the Governor and published in the New South Wales Government Gazette.

The attached Order approves the Traffistar SR490 for the purposes of multiple detection functions.

ROAD TRANSPORT (SAFETY AND TRAFFIC MANAGEMENT) ACT 1999 – ORDER

(LS) 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 the Road Transport (Safety and Traffic Management) Act 1999 (the Act), (including section 57C, Approval of devices for multiple detection functions), do, by this my Order, approve a device of the type described hereunder as a:

speed measuring device, designed to perform the detection functions referred to in section 44 of the Act;

camera recording device, designed to perform the detection functions referred to in section 45(1) of the Act, and which is capable of recording images in the form of digitalised, electronic or computer-generated images, in accordance with the terms of section 45(2) of the Act; and

camera detection device, designed to perform the detection functions referred to in section 56 of the Act.

Type of device:

Traffistar SR520

Signed and sealed at Sydney, this 16th day of December, 2009.

By Her Excellency's Command

DAVID CAMPBELL, M.P., Minister for Transport and Roads

EXPLANATORY NOTE

ROAD TRANSPORT (SAFETY AND TRAFFIC MANAGEMENT) ACT 1999. ORDER

Section 57C of the Road Transport (Safety and Traffic Management) Act 1999 provides that a device may be approved for use as an approved device for the purposes of 2 or more device approval provisions, by order of the Governor and published in the New South Wales Government Gazette.

The attached Order approves the Traffistar SR520 for the purposes of multiple detection functions.

ROAD TRANSPORT (SAFETY AND TRAFFIC MANAGEMENT) ACT 1999 – ORDER

(LS) 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 the Road Transport (Safety and Traffic Management) Act 1999 (the Act), (including section 57C, Approval of devices for multiple detection functions), do, by this my Order, approve a device of the type described hereunder as a:

speed measuring device, designed to perform the detection functions referred to in section 44 of the Act;

camera recording device, designed to perform the detection functions referred to in section 45(1) of the Act, and which is capable of recording images in the

form of digitalised, electronic or computer-generated images, in accordance with the terms of section 45(2) of the Act; and

camera detection device, designed to perform the detection functions referred to in section 56 of the Act.

Type of device:

Traffistar SR590

Signed and sealed at Sydney, this 16th day of December, 2009.

By Her Excellency's Command

DAVID CAMPBELL, M.P., Minister for Transport and Roads

EXPLANATORY NOTE

ROAD TRANSPORT (SAFETY AND TRAFFIC MANAGEMENT) ACT 1999. ORDER

Section 57C of the Road Transport (Safety and Traffic Management) Act 1999 provides that a device may be approved for use as an approved device for the purposes of 2 or more device approval provisions, by order of the Governor and published in the New South Wales Government Gazette.

The attached Order approves the Traffistar SR590 for the purposes of multiple detection functions.

ROAD TRANSPORT (SAFETY AND TRAFFIC MANAGEMENT) ACT 1999 – ORDER

(LS) 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 the Road Transport (Safety and Traffic Management) Act 1999 (the Act), (including section 57C, Approval of devices for multiple detection functions), do, by this my Order, approve a device of the type described hereunder as a:

speed measuring device, designed to perform the detection functions referred to in section 44 of the Act;

camera recording device, designed to perform the detection functions referred to in section 45(1) of the Act, and which is capable of recording images in the form of digitalised, electronic or computer-generated images, in accordance with the terms of section 45(2) of the Act; and

camera detection device, designed to perform the detection functions referred to in section 56 of the Act.

Type of device:

Redflex SR 101

Signed and sealed at Sydney, this 16th day of December, 2009.

By Her Excellency's Command

DAVID CAMPBELL, M.P., Minister for Transport and Roads

EXPLANATORY NOTE

ROAD TRANSPORT (SAFETY AND TRAFFIC MANAGEMENT) ACT 1999. ORDER

Section 57C of the Road Transport (Safety and Traffic Management) Act 1999 provides that a device may be approved for use as an approved device for the purposes of 2 or more device approval provisions, by order of the Governor and published in the New South Wales Government Gazette.

The attached Order approves the Redflex SR 101 for the purposes of multiple detection functions.

ROAD TRANSPORT (SAFETY AND TRAFFIC MANAGEMENT) ACT 1999 – ORDER

(LS) 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 the Road Transport (Safety and Traffic Management) Act 1999 (the Act), (including section 57C, Approval of devices for multiple detection functions), do, by this my Order, approve a device of the type described hereunder as a:

speed measuring device, designed to perform the detection functions referred to in section 44 of the Act;

camera recording device, designed to perform the detection functions referred to in section 45(1) of the Act, and which is capable of recording images in the form of digitalised, electronic or computer-generated images, in accordance with the terms of section 45(2) of the Act; and

camera detection device, designed to perform the detection functions referred to in section 56 of the Act.

Type of device:

Sensys RLSS

Signed and sealed at Sydney, this 16th day of December, 2009.

By Her Excellency's Command

DAVID CAMPBELL, M.P., Minister for Transport and Roads

EXPLANATORY NOTE

ROAD TRANSPORT (SAFETY AND TRAFFIC MANAGEMENT) ACT 1999. ORDER

Section 57C of the Road Transport (Safety and Traffic Management) Act 1999 provides that a device may be approved for use as an approved device for the purposes of 2 or more device approval provisions, by order of the Governor and published in the New South Wales Government Gazette.

The attached Order approves the Sensys RLSS for the purposes of multiple detection functions.

ROAD TRANSPORT (SAFETY AND TRAFFIC MANAGEMENT) ACT 1999 – ORDER

(LS) 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 the Road Transport (Safety and Traffic Management) Act 1999 (the Act), (including section 57C, Approval of devices for multiple detection functions), do, by this my Order, approve a device of the type described hereunder as a:

speed measuring device, designed to perform the detection functions referred to in section 44 of the Act;

camera recording device, designed to perform the detection functions referred to in section 45(1) of the Act, and which is capable of recording images in the form of digitalised, electronic or computer-generated images, in accordance with the terms of section 45(2) of the Act; and

camera detection device, designed to perform the detection functions referred to in section 56 of the Act.

Type of device:

TESS Digital Capture Unit

Signed and sealed at Sydney, this 16th day of December, 2009.

By Her Excellency's Command

DAVID CAMPBELL, M.P.,

Minister for Transport and Roads

EXPLANATORY NOTE

ROAD TRANSPORT (SAFETY AND TRAFFIC MANAGEMENT) ACT 1999. ORDER

Section 57C of the Road Transport (Safety and Traffic Management) Act 1999 provides that a device may be approved for use as an approved device for the purposes of 2 or more device approval provisions, by order of the Governor and published in the New South Wales Government Gazette.

The attached Order approves the TESS Digital Capture Unit for the purposes of multiple detection functions.

ROAD TRANSPORT (SAFETY AND TRAFFIC MANAGEMENT) ACT 1999 – ORDER

(LS) 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 the Road Transport (Safety and Traffic Management) Act 1999 (the Act), (including section 57C, Approval of devices for multiple detection functions), do, by this my Order, approve a device of the type described hereunder as a:

speed measuring device, designed to perform the detection functions referred to in section 44 of the Act;

camera recording device, designed to perform the detection functions referred to in section 45(1) of the Act, and which is capable of recording images in the form of digitalised, electronic or computer-generated images, in accordance with the terms of section 45(2) of the Act; and

Type of device:

Poliscan speed

Signed and sealed at Sydney, this 16th day of December, 2009.

By Her Excellency's Command

DAVID CAMPBELL, M.P., Minister for Transport and Roads

EXPLANATORY NOTE

ROAD TRANSPORT (SAFETY AND TRAFFIC MANAGEMENT) ACT 1999. ORDER

Section 57C of the Road Transport (Safety and Traffic Management) Act 1999 provides that a device may be approved for use as an approved device for the purposes of 2 or more device approval provisions, by order of the Governor and published in the New South Wales Government Gazette.

The attached Order approves the Poliscan speed for the purposes of multiple detection functions.

ROAD TRANSPORT (GENERAL) ACT 2005

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

CONARGO SHIRE COUNCIL, in pursuance of Division 4 of Part 2 of the Road Transport (Mass, Loading, Access) Regulation 2005, by this Notice, specify the routes and areas on or in which 25 metre B-Doubles may be used subject to any requirements or conditions set out in the Schedule.

BARRY W. BARLOW, General Manager, Conargo Shire Council (by delegation from the Minister for Roads)

SCHEDULE

1. Citation

This Notice may be cited as Conargo Shire Council 25 Metre B-Double Route Notice No. 2/2009.

2. Commencement

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

3. Effect

This Notice remains in force until 30th September 2010 unless it is amended or repealed earlier.

4. Application

This Notice applies to those 25 metre B-Double vehicles which comply with Schedule 1 of the Road Transport (Mass, Loading and Access) Regulation 2005 and Schedule 2 of the Road Transport (Vehicle Registration) Regulation 2007.

5. Routes

	Туре	Road Name	Starting Point	Finishing Point
	25.	Barratta Road (MR 296).	Box Creek – 26.4 Km's west of Pretty Pine.	Balpool Road Intersection.
4	25.	Balpool Road.	Barratta Road Intersection (MR 296).	Shire boundary.

ROAD TRANSPORT (GENERAL) ACT 2005

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

CONARGO SHIRE COUNCIL, in pursuance of Division 4 of Part 2 of the Road Transport (Mass, Loading, Access) Regulation 2005, by this Notice, specify the routes and areas on or in which 25 metre B-Doubles may be used subject to any requirements or conditions set out in the Schedule.

BARRY W. BARLOW, General Manager, Conargo Shire Council (by delegation from the Minister for Roads)

SCHEDULE

1. Citation

This Notice may be cited as Conargo Shire Council 25 Metre B-Double Route Notice No. 2/2009.

2. Commencement

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

3. Effect

This Notice remains in force until 30th September 2010 unless it is amended or repealed earlier.

4. Application

This Notice applies to those 25 metre B-Double vehicles which comply with Schedule 1 of the Road Transport (Mass, Loading and Access) Regulation 2005 and Schedule 2 of the Road Transport (Vehicle Registration) Regulation 2007.

5. Routes

	Туре	Road Name	Starting Point	Finishing Point
	25.	Barratta Road (MR 296).	Box Creek – 26.4 Km's west of Pretty Pine.	Balpool Road Intersection.
4	25.	Balpool Road.	Barratta Road Intersection (MR 296).	Shire boundary.

ROAD TRANSPORT (GENERAL) ACT 2005

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

JUNEE SHIRE COUNCIL, in pursuance of the Road Transport (Mass, Loading, Access) Regulation 2005, makes the amendment in the Schedule to the routes and areas previously specified on or in which 25 metre B-Double vehicles may be used.

Dated: 10 December 2009.

GREG CAMPBELL, General Manager, Junee Shire Council (by delegation from the Minister for Roads)

SCHEDULE

1. Citation

This Notice may be cited as the Junee Shire Council 25metre B-Double Repeal Notice No. 1/2009.

2. Commencement

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

3. Amendment

Omit the following routes from Part 2 – B-Double Routes in New South Wales (excluding the Sydney Region) of Appendix 2 – B-Double Routes in New South Wales.

Туре	Road No.	Area	Route	
25.	000.	Junee Shire.	All classified and rural roads within the Junee shire except for:	
			 Girrawheen Lane Warnes Gate Lane South 	
			and except for residential streets in the towns of Junee, Bethungra and Illabo unless those streets are approved.	

Туре	Road No.	Road Name	Starting Point	Finishing Point
25.	000.	Dagmar Lane, Junee.	Belmore Street (MR243).	100 metres north of Belmore Street.
25.	000.	Ducker Street, Junee.	Hill Street.	George Street.
25.	000.	Edgar Street, Junee.	George Street.	Harefield Road.
25.	000.	George Street, Junee.	Ducker Street.	Edgar Street.
25.	000.	Harold Street, Junee.	Kemp Street (MR243).	Roedigers Lane.
25.	000.	Lorne Street, Junee.	Belmore Street.	Hill Street.
25.	000.	Main Street, Junee.	Railway Underpass.	Ridge Street.
25.	000.	Queen Street, Junee.	Lord Street (MR243).	Illabo Road (MR78).
25.	000.	Baylis Street, Bethungra.	Ironbong Street (MR78).	Ironbong Road.
25.	000.	Crowther Street, Illabo.	Turland Street (MR78).	Stanyer Road.
25.	000.	Junee Street, Illabo.	Turland Street (MR78).	Brabins Road.
25.	000.	Morris Street, Illabo.	Junee Street.	Eurongilly Road.
25.	000.	Lawford Street, Illabo.	Morris Street.	Park Street.

ROAD TRANSPORT (GENERAL) ACT 2005

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

JUNEE SHIRE COUNCIL, in pursuance of Division 4 of Part 2 of the Road Transport (Mass, Loading, Access) Regulation 2005, by this Notice, specifies the routes and areas on or in which 25 metre B-Doubles may be used subject to any requirements or conditions set out in the Schedule.

Dated: 10 November 2009.

GREG CAMPBELL, General Manager, Junee Shire Council (by delegation from the Minister for Roads)

SCHEDULE

1. Citation

This Notice may be cited as Junee Shire Council 25 Metre B-Double Route Notice No. 2/2009.

2. Commencement

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

3. Effect

This Notice remains in force until it is amended or repealed.

4. Application

This Notice applies to those 25 metre B-Double vehicles which comply with Schedule 1 of the Road Transport (Mass, Loading and Access) Regulation 2005 and Schedule 2 of the Road Transport (Vehicle Registration) Regulation 2007.

5. Routes

B-Double Routes within the Junee Shire Council area.

Туре	Road No.	Area	Route
25.	000.	Junee Shire.	 All classified and rural roads within the Junee shire except for: Tenandra Road; and Residential streets in the towns of Junee, Bethungra and Illabo unless those streets are approved.

Туре	Road No.	Road Name	Starting Point	Finishing Point
25.	000.	Dagmar Lane, Junee.	Belmore Street (MR243).	100 metres north of Belmore Street.
25.	000.	Ducker Street, Junee.	Hill Street.	William Street.
25.	000.	William Street, Junee.	Ducker Street.	Edgar Street.
25.	000.	Edgar Street, Junee.	William Street.	Byrnes Road.
25.	000.	Harold Street, Junee.	Kemp Street (SR78).	Roedigers Lane.
25.	000.	Lorne Street, Junee.	Belmore Street.	Hill Street.
25.	000.	Main Street, Junee.	Railway Underpass.	Ridge Street.
25.	000.	Queen Street, Junee.	Lord Street (MR243).	Illabo Road (SR78).
25.	000.	Baylis Street, Bethungra.	Ironbong Street (SR78).	Ironbong Road.
25.	000.	Crowther Street, Illabo.	Turland Street (SR78).	Stanyer Road.
25.	000.	Junee Street, Illabo.	Turland Street (SR78).	Brabins Road.
25.	000.	Morris Street, Illabo.	Junee Street.	Eurongilly Road.
25.	000.	Lawford Street, Illabo.	Morris Street.	Park Street.

ROAD TRANSPORT (GENERAL) ACT 2005

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

JUNEE SHIRE COUNCIL, in pursuance of Division 4 of Part 2 of the Road Transport (Mass, Loading, Access) Regulation 2005, by this Notice, specifies the routes and areas on or in which 4.6 metre High Vehicles may be used subject to any requirements or conditions set out in the Schedule.

Dated: 30 November 2009.

GREG CAMPBELL, General Manager, Junee Shire Council (by delegation from the Minister for Roads)

SCHEDULE

1. Citation

This Notice may be cited as Junee Shire Council 4.6 Metre High Vehicle Route Notice No. 3/2009.

2. Commencement

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

3. Effect

This Notice remains in force until it is amended or repealed.

4. Application

This Notice applies to those 4.6 metre high vehicles which comply with Schedule 1 of the Road Transport (Mass, Loading and Access) Regulation 2005 and Schedule 2 of the Road Transport (Vehicle Registration) Regulation 2007.

5. Routes

4.6 metre High Vehicle Routes within the Junee Shire Council area.

Type	Road No.	Area	Route
25.	000.	Junee Shire.	All classified and rural roads within the Junee shire except for residential streets in the towns of Junee, Bethungra and Illabo unless those streets are approved.

Туре	Road No	Road Name	Starting Point	Finishing Point
25.	000.	Dagmar Lane, Junee.	Belmore Street (MR243).	100 metres north of Belmore Street.
25.	000.	Ducker Street, Junee.	Hill Street.	William Street.
25.	000.	William Street, Junee.	Ducker Street.	Edgar Street.
25.	000.	Edgar Street, Junee.	William Street.	Byrnes Road.
25.	000.	Harold Street, Junee.	Kemp Street (SR78).	Roedigers Lane.
25.	000.	Lorne Street, Junee.	Belmore Street.	Hill Street.
25.	000.	Main Street, Junee.	Railway Underpass.	Ridge Street.
25.	000.	Queen Street, Junee.	Lord Street (MR243).	Illabo Road (SR78).
25.	000.	Baylis Street, Bethungra.	Ironbong Street (SR78).	Ironbong Road.
25.	000.	Crowther Street, Illabo.	Turland Street (SR78).	Stanyer Road.
25.	000.	Junee Street, Illabo.	Turland Street (SR78).	Brabins Road.
25.	000.	Morris Street, Illabo.	Junee Street.	Eurongilly Road.
25.	000.	Lawford Street, Illabo.	Morris Street.	Park Street.

ROAD TRANSPORT (GENERAL) ACT 2005

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

BOMBALA COUNCIL, in pursuance of Division 4 of Part 2 of the Road Transport (Mass, Loading, Access) Regulation 2005, by this Notice, specify the routes and areas on or in which 25 metre B-Doubles may be used subject to any requirements or conditions set out in the Schedule.

Date: 10 December 2009.

DON COTTEE, General Manager Bombala Council (by delegation from the Minister for Roads)

SCHEDULE

1. Citation

This Notice may be cited as Bombala Council 25 Metre B-Double route Notice No 2/2009

2. Commencement

This Notice takes effect on the date of gazettal.

3. Effect

This Notice remains in force until 30th September 2010 unless it is amended or repealed earlier.

4. Application

This Notice applies to those 25 metre B-Double vehicles which comply with Schedule 1 of the Road Transport (Mass, Loading and Access) Regulation 2005 and Schedule 2 of the Road Transport (Vehicle Registration) Regulation 2007.

5. Routes

Type	Road Name	Starting Point	Finishing Point
25m.	Browns Camp Road, Delegate.	MR93 Delegate Road.	Corrowong Road.
25m.	Spring Flat Road, Corrowong.	Browns Camp Road.	Approx 2 kms from Browns Camp Road.

TOW TRUCK INDUSTRY ACT 1998

RTA Tow Truck Licensing & Compliance - Fees & Charges - from 18 December 2009

ITEM	COST	COST (3 year)	NOTES
Drivers certificate			
Drivers certificate	\$175	\$399	Includes \$105 (\$189 – 3 year) non refundable administration fee
Replacement D/C	\$27		
Reissue conditional D/C	\$27		
Re-application for expired conditional D/C (within 5 business days)	\$96		Expired greater than 5 business days -full re-application will apply
Operators licence			
Operators licence – metro	\$892	\$2,298	Includes \$315 (\$567 – 3 year) non refundable administration fee
Operators licence – country	\$574	\$1,344	Includes \$315 (\$567 – 3 year) non refundable administration fee
Plate – metro – category A	\$335	\$1,005	Per TT plate - per term
Plate – metro – category B & C	\$319	\$957	Per TT plate - per term
Plate – country – category A	\$133	\$399	Per TT plate - per term
Plate – country - category B & C	\$127	\$381	Per TT plate - per term
Amendment fee	\$50		Amendment / variation to operators licence
Replacement O/L	\$27		
Reissue conditional O/L	\$27		
Stand-By tow truck application fee	\$302		
Re-application for expired conditional O/L (within 5 business days)	\$276		Expired greater than 5 business days -full re-application will apply
Mutual recognition			
Drivers certificate – mutual recognition	\$133	\$303	Includes \$80 (\$144 – 3 year) non refundable administration fee
Operators licence – mutual recognition	\$467	\$1,089	Includes \$260 (\$468 – 3 year) non refundable administration fee
Plate – MR - category A	\$133	\$399	Per tow truck - per term
Plate – MR – category B & C	\$127	\$381	Per tow truck - per term
Exemption authority			
Exemption authority - metro	\$450		Includes \$200 non refundable administration fee
Exemption authority - country	\$350		Includes \$200 non refundable administration fee
Tow truck fee – metro	\$75		Per tow truck
Tow truck fee - country	\$50		Per tow truck
Other			
nvestigation fee	At cost		Any further investigation by the RTA to verify suitability, requiring the purchase of information from another agency (eg interstate records)
Towing authorisation forms - 20	\$416		Book of 20 forms
Towing authorisation forms - 5	\$104		Book of 5 forms

Note: Any refund that may be made by the TTLC as a result of a refused or failed application will not be made until any internal reviews or appeals in respect of the application are finalised.

Department of Water and Energy

LOCAL GOVERNMENT ACT 1993

Wilcannia Sewerage Augmentation

THE Minister for Water of the State of New South Wales, declares that all right, title and interest in the works described in the Schedule hereto, which were constructed for the purpose of the Wilcannia Sewerage Augmentation Scheme are vested in Central Darling Shire Council.

> PHILIP COSTA, M.P., Minister for Water

SCHEDULE

Works of Wilcannia Sewerage Augmentation for the Central Darling Shire Council comprising pump stations, rising main to the treatment works, an oxidation pond and a sewerage treatment pond. The works were completed in 1998.

DOC. Reference: S883.

LOCAL GOVERNMENT ACT 1993

Cooma Sewerage Augmentation

THE Minister for Water of the State of New South Wales, declares that all right, title and interest in the works described in the Schedule hereto, which were constructed for the purpose of the Cooma Sewerage Augmentation Scheme are vested in Cooma Monaro Shire Council.

> PHILIP COSTA, M.P., Minister for Water

SCHEDULE

Works of Cooma Sewerage Augmentation for the Cooma Monaro Shire Council comprising upgrading of pump stations and reticulation, rising main and access road to the treatment works, and a new sewerage treatment works. The works were completed in 1998.

DOC. Reference: S889.

WATER ACT 1912

Notice under Section 22B of the Water Act 1912

Pumping Restrictions

Unregulated MacIntyre River.

THE Water Administration Ministerial Corporation pursuant to section 22B of the Water Act 1912, is satisfied that the quantity of water available in the Unregulated MacIntyre River upstream of its confluence with the Severn River is insufficient to meet all requirements with respect to the taking of water therefrom and hereby gives notice to all holders of permits, authorities and licenses under Part 2 of the Act, authorising the pumping/diversion of water for commercial, industrial and irrigation purposes, that from 18th December 2009, and until further notice, the right to pump/divert water is suspended.

Dated this fourteenth day of December 2009.

Signed for the Water Administration Ministerial Corporation by:

DENNIS MILLING, Manager Licensing NSW Office of Water

Note: Inquiries should be directed to NSW Office of Water at the Moree Office on (02) 6757 2502

WATER ACT 1912

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

Christopher Ronald & Vicki Marie McPAUL for a pump on Old Hut Creek being Part Lot 2, DP 851812, Parish of Bimmil, County of Auckland for water supply for domestic purposes and water supply to the occupiers of Lots 62, 63 & 67, DP 831129. (New licence). (Exempt from the 2007 South Coast Rivers embargo order) (Ref:10SL056882)

Perisher Blue Pty Ltd for 6 pumps on Pipers Creek (aqueduct) on, DP 756697 Part Kosciusko National Park, Parish of Guthega, County of Wallace for water supply for industrial (snow making) purposes. (Water to be extracted directly from the Pipers Creek Aqueduct) (Replacement license – replacing 10SL056573 due to an increase in pumps – no increase in entitlement) Ref: 10SL056876. GA2:

Thomas Joseph & Sara Ellen KELLY for a pump on Dignams Creek being Part Lot 5, DP 1116552, Parish of Narira, County of Dampier for water supply for domestic purposes. New licence. Partly replacing 10SL025957 due to the permanent transfer of 2.0 megalitres. (Exempt from the 2007 South Coast Rivers embargo). Ref: 10SL056878.

Any inquiries should be directed to (02) 4429 4442. Written objections, from any local occupier or statutory authority, specifying grounds and how their interests are affected, must be lodged with the NSW Office of Water, PO Box 309, Nowra NSW 2541, within 28 days of this publication.

> WAYNE RYAN, Licensing Officer

Adele Allison and Guy Neville BURKITT for a pump on Bungonia Creek on Lot 152, DP 1118688, Parish of Inverary, County of Argyle for the irrigation of 5.0 hectares (improved pasture) (Part replacement license – part replacing 10SL043929) (no increase in annual water entitlement) (Not subject to the amended 2003 Hawkesbury/Nepean Embargo) (Ref:10SL056877)

Christopher Neil CROOK for an existing 1.4 megalitre bywash dam (not located on a watercourse) on Lot 407, DP 1060164, Parish of Calderwood, County of Camden for the conservation of water for domestic purposes (new licence) (dam in excess of MHRDC) (Not subject to the 2003 Lake Illawarra & tributaries Embargo) (Ref:10SL056874)

Carmen Pauline APAP for an existing 1.6 megalitre bywash dam and pump on an Unnamed Watercourse on Lot 6, DP 652626, Parish of Gidley, County of Cumberland for the conservation of water for the irrigation of 2.0 hectares(vegetables) (new licence) (Dam in excess of MHRDC) – (Not subject to the amended 2003 Hawkesbury/ Nepean Embargo) (Reference: 10SL056880)

Any inquiries should be directed to (02)9895 7194. Written objections, from any local occupier or statutory authority, specifying grounds and how their interests are affected, must be lodged with the NSW Office of Water, PO Box 3720, Parramatta NSW 2124, within 28 days of this publication.

> WAYNE CONNERS, Licensing Officer

Murray River Valley

TYRELL, Graeme Harley & Tyrell, Joyce Margaret for two pumps on Swampy Plain River on Lot 5 and Lot 3, DP 17341 Parish Indi, County Selwyn, for irrigation purposes. Note that this is a replacement for existing licence 50SA001606 to include an additional pump. (Ref.50SA006646).

TYRELL, Maurice for one pump on the Swampy Plain River on Lot 8, DP 17342 Parish Indi, County Selwyn. Note that this is a replacement for existing licence 50SL47394 due to a permanent transfer of entitlement (Ref. 50SL75713)

GLENFERRIE Pty Ltd for three pumps on Swampy Plain River on Lot 88, DP 755869 Parish Indi, County Selwyn, for irrigation purposes. Note that this is a replacement for existing licence 50SL47389 to include an additional pump. (Ref.50SL75712)

Any inquiries should be directed to (02) 6024 8852. Written objections, from any local occupier or statutory authority, specifying grounds and how their interests are affected, must be lodged with the NSW Office of Water, PO Box 829, Albury NSW 2640, within 28 days of this publication.

> DAVID FINNIMORE, Licensing Officer

Murrumbidgee Valley

THE MINISTER ADMINISTERING THE NATIONAL PARKS AND WILDLIFE ACT 1974 forr a pump on Lake Tala, on Lot2, DP 109149, Parish of Talpee, County of Caira for irrigation and conservation of water and water supply for environmental rehabilitation. Reference 40SL71186.

TUMUT SHIRE COUNCIL for a diversion pipe on Jounama Creek, Kosciusko National Park, Parish Jounama, County Buccleuch and a pontoon mounted emergency pump on Jounama Pondage, 10/850852, Parish Talbingo, County Buccleuch for town water supply to Talgingo Township. Reference: 40SL71183

Any inquiries should be directed to (02) 6953 0700. Written objections, from any local occupier or statutory authority, specifying grounds and how their interests are affected, must be lodged with the NSW Office of Water, PO Box 156, Leeton NSW 2705, within 28 days of this publication.

> S. F. WEBB, Licensing Manager, Licensing South

Other Notices

ADOPTION ACT 2000

Guidelines for the release of adoption information

THESE guidelines are published pursuant to sections 133E and 133G of the Adoption Act 2000 and relate to the supply of adoption information to birth parents and non-adopted siblings of adopted persons under 18 years of age for adoptions finalised on or after 1 January 2010.

1. INTRODUCTION

The purpose of these guidelines is to assist the Chief Executive of Community Services to determine for adoptions after 1 January 2010, whether the supply of adoption information, as outlined in sections 133E and 133G of the Adoption Act 2000 concerning an adopted person who is less than 18 years of age, poses a risk to the safety, welfare or well-being of the adopted child or adoptive parents.

Amendments to the Adoption Act 2000 (the Act) introduced by the Adoption Amendment Act 2008 provide for greater access to adoption information (such as birth certificates and adoption orders) for adopted children, adoptive parents, birth parents and siblings in respect of an adoption given effect to by an adoption order made on or after 1 January 2010. The amendments arise from a review of the Act undertaken by Community Services in 2006.

These changes represent an important step along the continuum of open adoption practice. They will ensure adopted children have an accurate picture of their identity from an early age. The changes will also encourage the establishment of sibling relationships for children affected by adoption which may endure a lifetime and will also assist the adopted child in attaining a greater understanding of their birth family heritage, identity and culture.

As adoption has become more open, it has generally been found that in approaching information sharing and contact both birth and adoptive families have the child's best interests at heart. Many of the relationships develop in a positive way as people get to know one another.

Research has demonstrated that for children growing up with adoptive parents, contact with immediate and extended birth family, community and culture is generally beneficial in assisting them to develop and maintain a sense of their identity and background.

Appendix A provides definitions of the terminology used in these guidelines.

2. PRINCIPLES THAT UNDERPIN THESE GUIDELINES

These guidelines have been developed having regard to the need for adoption decisions to be made with reference to all of the objects and principles set out in sections 7-9 of the Act with particular attention to the following objects and principles:

- To encourage openness in adoption (section 7 (g)).
- To ensure that adoption law and practice assist a child to know and have access to his or her birth family and cultural heritage (section 7 (c)).
- The best interests of the child, both in childhood and in later life, must be the paramount consideration (section 8 (1) (a)).

- If the child is able to form his or her own views on a matter concerning his or her adoption, he or she must be given an opportunity to express those views freely and those views are to be given due weight in accordance with the developmental capacity of the child and the circumstances (section 8 (1) (d)).
- A child's given name or names, identity, language and cultural and religious ties should, as far as possible, be identified and preserved (section 8 (1) (e)).
- The need to protect the child from physical or psychological harm caused or that may be caused, by being subjected or exposed to abuse, ill-treatment, violence or other behaviour or being present while a third person is subjected or exposed to abuse, ill-treatment, violence or other behaviour (section 8 (2) (j)).
- To ensure that a child is able to participate in any decision that has a significant impact on his or her life (section 9(1)).

3. AUTHORITY OF THE CHIEF EXECUTIVE TO PROVIDE OR REFUSE ACCESS TO INFORMATION

Section 133E of the Act provides for birth parents' rights to adoption information for adoptions given effect to by an adoption order made on or after 1 January 2010. Under section 133E, a birth parent may access identifying information about an adopted person under 18 years of age, unless the Chief Executive is of the opinion that the release of that information would pose a risk to the safety, welfare or well-being of the adopted child or adoptive parents. In these circumstances, the Chief Executive may refuse to issue an authority to supply adoption information (Supply Authority) or issue a Supply Authority subject to conditions.

Section 133G of the Act provides for non-adopted siblings' rights to adoption information for adoptions given effect to by an adoption order made on or after 1 January 2010. Under section 133G, a non-adopted sibling will be able to access identifying information about an adopted person. If the non-adopted sibling is under 18 years of age, their parent(s)' consent to apply will be required. In some circumstances where the parent(s)' consent is not possible to obtain, the Chief Executive's consent is required. If the adopted person is under 18 years of age, the Chief Executive may refuse to issue the Supply Authority if the release of that information would pose a risk to the safety, welfare or well-being of the adopted child or adoptive parents.

In determining an application from a non-adopted sibling it will be necessary to include the birth parent(s) in the assessment of risk as any identifying information obtained by a non-adopted sibling may be communicated to the birth parent(s).

3.1 Overview of assessment process

Persons seeking to access adoption information under section 133E or 133G of the Act must apply to Community Services for a Supply Authority. The purpose of the Supply Authority is to authorise an information source to supply adoption information.

An assessment of the risk to the safety, welfare or well-being of the adopted child or adoptive parents will be undertaken by Community Services when an application for a Supply Authority is received from a birth parent or nonadopted sibling and the adopted person is under 18 years of age. Following is an overview of the risk assessment process:

i. As a first step Community Services will determine if the adoption was arranged by Community Services or a non-government adoption service provider. When a non-government adoption service provider arranged the adoption, Community Services will advise them of the application for adoption information and ask them to prepare a review report that identifies any risks in releasing adoption information. The reviewing agency's report and recommendation, including any conditions, will be considered by Community Services as part of the risk assessment.

In the case of an out-of-home care adoption arranged by Community Services, if the out-of-home care service provider with case management responsibility undertook the adoption assessment and prepared the adoption assessment report, it will be the reviewing agency and will be asked to prepare the report and recommendation. In all other cases Community Services will prepare the report and recommendation.

- ii. The reviewing agency preparing the report and recommendation will undertake a review of its records to identify any issues of concern to the safety, welfare and well-being of the adopted child or adoptive parents and will contact the adoptive parents and adopted child and seek their views about the release of adoption information.
- iii. Community Services will conduct a KiDS safety check and review their current records.
- iv. If no issues of concern relating to the safety, welfare and well-being of the adopted child or adoptive parents have been identified at stages (i) to (iii), Community Services will complete the risk assessment (to be referred to as a Risk Assessment Level 1) and submit a recommendation to the Chief Executive to approve or approve with conditions the application for a Supply Authority.
- v. If issues of concern relating to the safety, welfare and well-being of the adopted child or adoptive parents are identified, a Risk Assessment Level 2 will be undertaken by Community Services with the assistance of adoption and out-of-home care service providers as necessary. An interview may be required with the applicant and other relevant parties. A detailed file review will be undertaken by relevant agencies and information may be sought from other Government agencies with the applicant's permission.
- vi. Following the completion of the Risk Assessment Level 2, Community Services will make a recommendation to the Chief Executive on whether to approve, approve with conditions or refuse the application for a Supply Authority.
- vii. Where the application relates to an Aboriginal child, the Chief Executive will consult with an appropriate community-based Aboriginal organisation before making a decision.
- viii. Written notice of the Chief Executive's decision, including the reasons for the decision and information

about how the decision may be reviewed, will be provided to the applicant and the adoptive parents. Where the adopted child is 16 years of age or over and it is considered necessary, the Chief Executive will also provide written notice of the decision to the child.

- ix. At the expiration of 28 days following a decision to approve or approve with conditions, the application for a Supply Authority, the Supply Authority will be provided to the applicant provided:
 - a. the Chief Executive has not received a request for an internal review of the decision from the adoptive parents or adopted child; and
 - b. there has been compliance with any conditions.

3.2 Risk assessment

Relevant considerations for the risk assessment

The following are details about relevant considerations for assessing whether the release of information will pose a risk to the safety, welfare or wellbeing of the adopted child and/or their adoptive parents:

(i) The views of the adopted child and his or her adoptive parents

The views and wishes of the child and the adoptive parents must be taken into account when assessing whether or not the disclosure of information will pose a risk to the safety, welfare or wellbeing of the adopted child or the adoptive parents. Concerns about any such risks for other members of the adoptive family also need to be considered. These views may be ascertained at a face-to-face meeting, via a telephone conversation or correspondence and be included in the report prepared by the reviewing agency.

The adopted child must be given every opportunity to freely express their views according to their age and developmental capacity. The adopted child may need help in understanding the implications of the release of information and may require help from a professional, preferably someone who has a significant relationship with the child, to understand the matter and express their view. For an Aboriginal child, an Aboriginal person known to the child must be identified for this role. The views of the adopted child must be given due weight in accordance with the developmental capacity of the child and the circumstances.

If the adoptive parents and the adopted child agree in writing to the information being released and a review of records that includes current records and the KiDS database does not identify any issues of concern, the application for a Supply Authority should be approved without further assessment.

If the adopted child or the adoptive parents oppose the disclosure of adoption information, a Risk Assessment Level 2 must be undertaken. The reasons for their opposition will be sought, evaluated, and the discussions recorded.

Concerns by adoptive parents regarding the possible inconvenience of contact with birth parents or siblings is not a sufficient reason to withhold supply of information, where it has been assessed that there is no risk to the safety, welfare or well-being of the adopted child or the adoptive parents. (ii) A review of relevant records

The reviewing agency must consider any information on the child's records that indicate the release of information will pose a risk to the safety, welfare or well-being of the adopted child and/or their adoptive parents.

Before a decision is made about the release of information, Community Services will review current records and the KiDS database. Current records will include records of the adoption and any post-adoption support provided.

When issues of concern are identified a Risk Assessment Level 2 will be undertaken by Community Services. This will include a full review of all the child's files held by the reviewing agency, Community Services and any other service providers involved with the child. For instance, when the child was in out-of-home care prior to the adoption, the review will include the child's files held by any service provider that supervised the child prior to and after the adoption.

Records may indicate relevant concerns, including those related to:

- the applicant's views at the time the adoption occurred
- whether consent to the adoption was voluntary or dispensed with by the Court
- any concerns that arose for the Chief Executive or Minister in administering his/her parental responsibilities for the child
- whether contact has occurred between the parties both before and after the adoption, the nature of the contact and whether issues arose affecting the safety, welfare or well-being of the adopted child or adoptive parents
- the existence of other relevant orders made in care and protection, criminal and family law jurisdictions that indicate the release of information could adversely affect the safety, welfare or well-being of the adopted child or the adoptive parents.
- (iii) Information about the applicant

The reviewing agency should consider all relevant information about the applicant held within the records or revealed through contact with the applicant. Where the applicant is a non-adopted sibling it will be necessary to also consider relevant information about the birth parent.

If a review of these records raises concerns regarding the safety, welfare and wellbeing of the child, a Risk Assessment Level 2 should be undertaken that includes an interview with relevant parties. If the applicant is a non-adopted sibling, the birth parent should also be interviewed.

Relevant considerations about the applicant and their behaviour that may give rise to a reasonable belief that the release of information would pose a risk to the safety, welfare or well-being of the adopted child or adoptive parents include the following:

- Information indicating the likelihood of frequent inappropriate intrusion, harassment or other confronting physical or emotional behaviour by the applicant into the life of the child and adoptive parents.
- Information that the applicant had in the past a history of violent behaviour (for example, a record

of sexual and violent offences or child protection orders), substance misuse or a history of mental illness resulting in concerning behaviour.

• The applicant's current management of their behaviour and/or illness. A history of violent behaviour, substance misuse or mental illness may not pose a risk to the safety, welfare or well-being of the adopted child and his or her adoptive parents, if the condition is now effectively and responsibly managed.

If concerns in relation to any of these matters remain and further detailed assessment is required, Community Services may ask the applicant to provide a report from a suitably qualified professional and/or sign their consent for Community Services to obtain additional information related to the issue of concern.

Identifying that an applicant has a history that includes any of the above considerations may not indicate a risk to the safety, welfare or well-being of the adopted child or the adoptive parents where the applicant's current circumstances have been assessed and the considerations found to be either well managed or no longer current.

(iv) Previous contact and exchange of information between the applicant and the adopted child and adoptive parents

The reviewing agency should consider, if contact has previously occurred between the applicant and the adopted child and adoptive parents, whether issues arose in the contact that adversely affected the safety, welfare or well-being of the adopted child or adoptive parents. For children adopted from out-of-home care, the nature of contact during the out-of-home care placement should also be taken into account.

If an exchange of information and/or contact between the applicant and the adopted child was provided for in an Adoption Plan, the reviewing agency should consider whether or not information was exchanged and/ or contact occurred and the adopted child's, adoptive parent(s)' and birth parent(s)' views about this.

Where the child was previously in out-of-home care, any previous decisions recorded on the child's file regarding the release of placement information to the birth parents under section 149B-K of the Children and Young Persons (Care and Protection) Act 1998 should be reviewed and the consequences for all parties around the release of that information assessed.

Involvement of multiple service providers

Where the report by the reviewing agency raises concerns regarding the safety, welfare and wellbeing of the child, it may be necessary for Community Services as part of the Risk Assessment Level 2 to obtain input from a variety of government or non-government agencies known to be involved with the birth parent and/or siblings.

For instance, where the birth parents have had other children in out-of-home care and these placements have been case managed by a non-government service provider, the provider may have important information to inform the risk assessment. The birth parent and/or sibling would be asked to give their written authority to obtain information from other service providers, such as in health or corrective services, for the risk assessment process. Information could be obtained from client records or from the service provider's current involvement with the birth parent and/or siblings. Where the contact details of the adopted child and his or her adoptive parents are unknown

The reviewing agency must make reasonable efforts to locate the adopted child and their adoptive parents, to ensure they have the best opportunity to have their views heard. This should include consulting the White Pages® Online and the Commonwealth Electoral Roll when the adoptive parents cannot be located at their last known address.

In circumstances where the adoptive family cannot be located to ascertain their views, the reviewing agency should consider all other relevant information in making a recommendation as to whether the release of information would pose a risk to the safety, welfare or wellbeing of the adopted child or the adoptive parents.

Where the applicant resides overseas

Where a child has been adopted through the intercountry adoption program and the applicant resides overseas, a risk assessment in line with the guidelines must be completed. In conducting the risk assessment a reviewing agency or Community Services may have less information available, particularly around the applicant and their behaviour. However, the risk assessment must still involve gathering the information available, including the views of the adopted child and his or her adoptive parent(s) and consulting relevant files and court or tribunal documents. If concerns are identified, the overseas adoption authority involved may be requested to provide relevant information held on the applicant.

3.3 Outcome of the risk assessment

At the completion of their review and report, the reviewing agency will make a recommendation to Community Services about whether the release of information would pose a risk to the safety, welfare and wellbeing of the adopted child or adoptive parents.

Community Services will take into account the recommendation of the reviewing agency and if it does not have information from the risk assessment that indicates the release of information would pose a risk to the safety, welfare or well-being of the adopted child or the adoptive parents, then a recommendation should be prepared recommending the Chief Executive approve the application with or without conditions and issue a Supply Authority.

Where the Chief Executive has a reasonable belief that the release of information would pose a risk to the safety, welfare or well-being of the adopted child and/or their adoptive parent(s), a recommendation must be made that the application for a Supply Authority either be:

declined or

• approved, with conditions imposed.

Where the application relates to an Aboriginal child, the Chief Executive must consult with an appropriate community-based Aboriginal organisation before making a decision.

Conditions that may be imposed on the issue of a Supply Authority would address the risk to the safety, welfare or well-being of the adopted child and the adoptive parent(s). The conditions would be determined on a case-by-case basis and would apply to the particular concerns that have been identified and the circumstances of the parties.

Written notice of the Chief Executive's decision, including the reasons for the decision and information about how the decision may be reviewed will be provided to the applicant and the adoptive parents.

The Chief Executive will also provide the adopted child with written notice of the decision, where the child is 16 years of age or over and it is considered necessary. For example, where the relationship between the child and the adoptive parents has broken down or where the adopted child no longer lives with the adoptive parents.

The Supply Authority will be issued no less than 28 days following the date of the letters advising the outcome of the application to applicant and adoptive parents (and child where relevant). The Supply Authority will not be released unless there is compliance with any conditions.

4. REVIEW

If the applicant, adoptive parents or adopted child disagree with a decision to approve or refuse to issue a Supply Authority, under section 133E or 133G of the Act the applicant, adoptive parents or child may apply for an internal review of the decision, consistent with the internal review process outlined in section 192 of the Act.

The internal review must be requested within 28 days of the date on the notice from the Chief Executive of the decision.

The internal review process must be conducted by Community Services and may affirm, vary or set aside the decision or make a decision in substitution. The Chief Executive must advise the person seeking the review of the decision in writing the reasons for the decision within 60 days of receiving the application for the internal review.

Following advice of the outcome of an internal review, the applicant, adoptive parents or child may apply to the Administrative Decisions Tribunal (ADT) for a review of the Chief Executive's decision if they remain dissatisfied with the decision. The applicant, adoptive parents or the child have 21 days from the date of the outcome of the internal review being sent to them to request an ADT review.

The ADT will be advised when the application relates to an Aboriginal child, so whenever it is possible, Aboriginal representation on the ADT will be arranged.

Issue of a Supply Authority must not be approved or proceed while the decision is subject to internal review or an ADT review. If the application for review is withdrawn then the review process ceases.

If an internal review has occurred at the request of the adoptive parents or the child and the authority to supply information is still approved and the adoptive parents or child do not seek a review of the decision through the ADT, the Supply Authority will be issued by the Chief Executive after a period of 21 days following the date of the letter advising the adoptive parents or child of the outcome of the internal review. The adoptive parents or child (if age appropriate) will also be advised in writing when the Supply Authority has been issued.

A decision by the ADT is binding and must be complied with by all parties.

A decision to refuse the issue of a Supply Authority will remain in force for two years from the date of that decision being made. After this time an applicant may reapply.

5. FEES

The gazetted fees for services will apply to all parties. This includes fees for obtaining a Supply Authority and prescribed information.

All parties will be responsible for fees set by the Registry of Births, Deaths and Marriages for obtaining information from the Registry.

APPENDIX A

DEFINITIONS

- Adopted child means a person who was adopted in NSW and is less than 18 years of age.
- Adoption information means any of the following: birth certificate, adoption order, adopted person's birth record or other information as prescribed by the regulations.
- *Reviewing agency* means either Community Services or the non-government service provider responsible for preparing a review report and recommendation to be considered as part of the risk assessment process.
- *Birth parent* means a biological parent of an adopted person.
- *Contact* means any form of contact between the adopted child and/or their adoptive family, and the child's birth family. This includes face to face meetings (supervised or unsupervised), correspondence, telephone calls, and internet communication.
- *Chief Executive* means the Chief Executive of Community Services or a delegate of the Chief Executive.
- *Identifying information* means any information that could be used to identify a party to an adoption. It is not limited to names and addresses but includes information that, when combined with other information, could be used to identify the person.

Information source means:

- (a) Community Services
- (b) the Department of Health
- (c) an accredited adoption service provider, or
- (d) a hospital, or
- (e) the Office of the Registrar of Births Deaths and marriages, or
- (f) the Supreme Court, or
- (g) any other institution, body or person prescribed in the regulations. These include The Benevolent Society, Post Adoption Resource Centre, Scarba Family Centre, Burnside, Link-up (NSW) Aboriginal Corporation, Salvation Army Post-Adoption Service and Wesley Dalmar Child and Family Care.

Parties to an adoption means the following:

- (a) the child
- (b) the birth parent or parents
- (c) the adoptive parent or parents
- (d) the Chief Executive
- (e) the appropriate Principal Officer of an accredited adoption service provider specified under section 19 of the Act.

Risk assessment means an assessment of the likely risk(s) posed to the safety, welfare or well-being of an adopted

person under the age of 18 years and/or his or her adoptive parents by the release of identifying information about the adopted person to a birth parent and/or non-adopted birth sibling.

Supply Authority is the term used to describe a document issued by Community Services' Adoption Information Unit that entitles the bearer to approach and request an information source to supply adoption information about the child, birth parents, siblings and adoptive parents from their records.

APPRENTICESHIP AND TRAINEESHIP ACT 2001

NOTICE is given of establishing a new Vocational Training Order for the recognised traineeship vocation of Health Services – Aromatherapy under section 6 of the Apprenticeship and Traineeship Act 2001.

The Order specifies a number of matters relating to the required training for this vocation, including the term/s of training, probationary period/s, competency outcome/s and course/s of study to be undertaken.

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

A copy of the Order may be inspected at any State Training Services Regional Office of the Department of Education and Training or on the Internet at https://www.training.nsw.gov. au/cib_vto/cibs/cib_441.html

APPRENTICESHIP AND TRAINEESHIP ACT 2001

NOTICE is given of establishing a new Vocational Training Order for the recognised traineeship vocation of Christian Ministry under section 6 of the Apprenticeship and Traineeship Act 2001.

The Order specifies a number of matters relating to the required training for this vocation, including the term/s of training, probationary period/s, competency outcome/s and course/s of study to be undertaken.

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

A copy of the Order may be inspected at any State Training Services Regional Office of the Department of Education and Training or on the Internet at https://www.training.nsw.gov. au/cib_vto/cibs/cib_442.html

APPRENTICESHIP AND TRAINEESHIP ACT 2001

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

- Carpentry
- Joinery (Stairs)
- Plumbing
- Roof Plumbing
- Fire Protection
- Bricklaying
- Painting and Decorating
- Roof Tiling
- Solid Plastering
- Wall and Floor Tiling
- Construction Carpentry
- Shopfitting

- Joinery
- · Carpentry and Joinery
- Signcraft
- Stonemasonry,

under section 6 of the Apprenticeship and Traineeship Act 2001.

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

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

A copy of the Order may be inspected at any State Training Services Regional Office of the Department of Education and Training or on the Internet at https://www.training.nsw.gov. au/cib_vto/cibs/cib_443.html

APPRENTICESHIP AND TRAINEESHIP ACT 2001

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

- Dogging
- Rigging
- Scaffolding
- Construction Waterproofing
- Paving,

under section 6 of the Apprenticeship and Traineeship Act 2001.

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

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

A copy of the Order may be inspected at any State Training Services Regional Office of the Department of Education and Training or on the Internet at https://www.training.nsw.gov. au/cib_vto/cibs/cib_444.html

APPRENTICESHIP AND TRAINEESHIP ACT 2001

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

- Aviation Rescue Crewman
- Aviation Aircrewman
- Aviation Flight Operations
- Aviation Ground Operations and Service
- Aviation Commercial Pilot Aeroplane Licence
- Aviation Commercial Pilot Helicopter Licence
- Aviation Leadership and Supervision,

under section 6 of the Apprenticeship and Traineeship Act 2001.

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

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

A copy of the Order may be inspected at any State Training Services Regional Office of the Department of Education and Training or on the Internet at https://www.training.nsw.gov. au/cib_vto/cibs/cib_445.html

ASSOCIATIONS INCORPORATION ACT 1984

Reinstatement of Cancelled Association pursuant to Section 54A

THE incorporation of BROKEN HILL SPEEDWAY CLUB INCORPORATED (Y2451237), cancelled on 4 December 2009, is reinstated pursuant to section 54A of the Associations Incorporation Act 1984.

Dated 11th day of December 2009.

ANTHONY DONOVAN, A/G Manager, Financial Analysis, Registry of Co-operatives and Associations, Office of Fair Trading, Department of Commerce

ASSOCIATIONS INCORPORATION ACT 1984

Reinstatement of Cancelled Association pursuant to Section 54A

THE incorporation of SNOWY RIVER BEARS RUGBY LEAGUE FOOTBALL CLUB INCORPORATED (Y1975541) cancelled on 2 January 2009 is reinstated pursuant to section 54A of the Associations Incorporation Act 1984.

Dated 14th day of December 2009.

ANTHONY DONOVAN, A/Manager, Financial Analysis Registry of Co-operatives & Associations NSW Fair Trading

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.

- Coffs Coast Table Tennis Centre Incorporated Inc9883425
- Oatley Residents Association Incorporated Y2275423
- Craft Expo Port Macquarie Incorporated Inc9891386
- Mount Sinai Ministries Inc Inc9889096
- NSW Sub Contractor Roof Tilers Association Incorporated – Inc9881485
- Sydney Community Care and Development Incorporated – Inc9890872
- Quota International of Penrith Incorporated Y0839213
- Order of the World Templar Lords Incorporated Inc9878103
- Good As New Tamworth Inc Inc9885751
- River of Life Christian Haven Church Incorporated Y2468016

Camden/Macarthur Residents Group Incorporated – Inc9888974 Morisset Drama Group Incorporated – Y0351646 Ways & Realistic Developments to Sustainability Incorporated – Inc9885577 Sydney Poongsunghan Church Incorporated – Inc9890451

Nepean Ninjutsu Incorporated - Inc9889624

Earth Festival Incorporated - Inc9888134

Wombalano Water Conservation Group Incorporated – Inc9884415

Barefeet Nomads Incorporated – Inc9888197 Shorecare Incorporated – Inc9886529

Dated: 30 November 2009.

ANTHONY DONOVAN, A/Manager, Financial Analysis Branch, Registry of Co-operatives & Associations, Office of Fair Trading

ASSOCIATIONS INCORPORATION ACT 1984

Reinstatement of Cancelled Association Pursuant to Section 55A (5)

THE incorporation of WOMEN'S HOUSING ASSOCIATION – HUNTER REGION INC (Y0096434) cancelled on 12 December 2008 is reinstated pursuant to section 55A (5) of the Associations Incorporation Act 1984.

Dated 16th day of December 2009.

ANTHONY DONOVAN, A/Manager, Financial Analysis Branch, Registry of Co-operatives & Associations, Office of Fair Trading

CHARITABLE TRUSTS ACT 1993

Order Under Section 12

Cy-Pres Scheme Relating to the Estate of the Late Ap Fava

Section 9 (1) of the Charitable Trusts Act 1993 permits the application of property cy-pres where the spirit of the original trust can no longer be implemented

THE will of the late Adrian Phillip Fava bequeathed his residuary estate upon trust to the 'St John of God Society'. There is no organisation by the name of the 'St John of God Society'. There do exist several organisations with the words 'St John of God' in their titles. Most of these organisations appear to operate under the auspices of the Hospitaller Order of St John of God.

The Public Trustee requested that the Attorney General establish a cy près scheme under the Charitable Trusts Act 1993 whereby the residuary estate can be applied to the Hospitaller Order of St John of God.

It would appear that the deceased established a charitable trust with this bequest and intended the gift to be for the advancement of religion or the relief of the poor, aged or impotent.

I have formed a view that the gift in the will of Mr Fava is a gift for a charitable purpose and that this gift was upon trust for a charitable purpose. I consider that the original gift has failed and that this is an appropriate matter in which the Attorney General should approve a cy-pres scheme under section 12(1)(a) of the Charitable Trusts Act 1993. I have approved a recommendation that the Attorney General establish a cy-pres scheme pursuant to section 12 of the Charitable Trusts Act 1993 to permit the bequest in the will to the 'St John of God Society' to be gifted to the Hospitaller Order of St John of God.

Therefore, pursuant to section 12 of the Charitable Trusts Act, I hereby order that the bequest in the will of Adrian Phillip Fava to the 'St John of God Society' be applied cy près and given to the Hospitaller Order of St John of God.

This Order will take effect 21 days after its publication in the *Government Gazette*, in accordance with section 16 (2) of the Charitable Trusts Act 1993.

Date of Order: 14 December 2009.

M. G. SEXTON, SC, Solicitor General (Under delegation from the Attorney General)

CHILDREN (PROTECTION AND PARENTAL RESPONSIBILITY) ACT 1997

Safer Community Compact - Order

I, the Honourable John Hatzistergos, Attorney General of the State of New South Wales, in pursuance of section 39 (1) of the Children (Protection and Parental Responsibility) Act 1997, do, by this my Order, approve Cessnock City Council's Crime Prevention Plan as a Safer Community Compact for the purposes of Division 3 of Part 4 of that Act.

This Order takes effect on 1 January 2010 and remains in force until 31 December 2012.

Signed at Sydney, this 3 day of December 2009.

JOHN HATZISTERGOS, Attorney General

COMPANION ANIMALS REGULATION 2008

ORDER

Organisations Approved by the Deputy Director General under Clause 16 (d) of the Companion Animals Regulation 2008

PURSUANT to Clause 16(d) of the Companion Animals Regulation 2008, the organisation listed in Schedule 1 is hereby approved, subject to the conditions contained in Schedule 2.

SCHEDULE 1

Name of Organisation	Address of Organisation	Name of Contact Of cer for Organisation
Port Macquarie Animal Welfare Service Inc.	PO Box 2025, Port Macquarie NSW 2444.	Mr Nigel BIRD.

SCHEDULE 2

1. The exemption under Clause 16 (d) of the Companion Animals Regulation 2008, from the requirements of section 9 of the Companion Animals Act 1998, only applies to an animal in the custody of an organisation listed in Schedule 1 if the organisation is holding that animal for the sole purpose of re-housing the animal with a new owner.

- 2. The exemption under Clause 16 (d) of the Companion Animals Regulation 2008, from the requirements of section 9 of the Companion Animals Act 1998, only applies to an animal in the custody of an organisation listed in Schedule 1 if the organisation maintains appropriate records that show compliance with the Companion Animals Act 1998, Companion Animals Regulation 2008 and the Guidelines for Approval to be an Organisation Exempt from Companion Animal Registration under Clause 16 (d) of the Companion Animals Regulation 2008.
- 3. The exemption under Clause 16 (d) of the Companion Animals Regulation 2008, from the requirements of section 9 of the Companion Animals Act 1998, only applies to an animal in the custody of an organisation listed in Schedule 1 if the organisation maintains a register that is made available to the relevant local council and the Division of Local Government, Department of Premier and Cabinet as requested. The Register must list the names of all carers involved in the rehoming of animals and the locations of all animals received under the exemption while in the custody of the organisation.
- 4. The exemption under Clause 16 (d) of the Companion Animals Regulation 2008, from the requirements of section 9 of the Companion Animals Act 1998, expires five years from the date of this order, unless revoked or varied at an earlier time.

Dated: 10 December 2009.

ROSS WOODWARD, Deputy Director General, Division of Local Government, Department of Premier and Cabinet

COMPANION ANIMALS REGULATION 2008

ORDER

Organisations Approved by the Deputy Director General under Clause 16 (d) of the Companion Animals Regulation 2008

PURSUANT to Clause 16(d) of the Companion Animals Regulation 2008, the organisation listed in Schedule 1 is hereby approved, subject to the conditions contained in Schedule 2.

SCHEDULE 1

Name of Organisation	Address of Organisation	Name of Contact Of cer for Organisation
Labrador Rescue	13A Glover Drive,	Katherine
Inc.	Yass NSW 2582.	MacDONALD.

SCHEDULE 2

1. The exemption under Clause 16 (d) of the Companion Animals Regulation 2008, from the requirements of section 9 of the Companion Animals Act 1998, only applies to an animal in the custody of an organisation listed in Schedule 1 if the organisation is holding that animal for the sole purpose of re-housing the animal with a new owner. 2. The exemption under Clause 16 (d) of the Companion Animals Regulation 2008, from the requirements of section 9 of the Companion Animals Act 1998, only applies to an animal in the custody of an organisation listed in Schedule 1 if the organisation maintains appropriate records that show compliance with the Companion Animals Act 1998, Companion Animals Regulation 2008 and the Guidelines for Approval to be an Organisation Exempt from Companion Animal Registration under Clause 16 (d) of the Companion Animals Regulation 2008.

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- 3. The exemption under Clause 16 (d) of the Companion Animals Regulation 2008, from the requirements of section 9 of the Companion Animals Act 1998, only applies to an animal in the custody of an organisation listed in Schedule 1 if the organisation maintains a register that is made available to the relevant local council and the Division of Local Government, Department of Premier and Cabinet as requested. The Register must list the names of all carers involved in the rehoming of animals and the locations of all animals received under the exemption while in the custody of the organisation.
- 4. The exemption under Clause 16 (d) of the Companion Animals Regulation 2008, from the requirements of section 9 of the Companion Animals Act 1998, expires five years from the date of this order, unless revoked or varied at an earlier time.

Dated: 9 December 2009.

ROSS WOODWARD, Deputy Director General, Division of Local Government, Department of Premier and Cabinet

ELECTRICITY SUPPLY ACT 1995

Section 119 (1)(a)

ORDER

I, John Robertson, MLC, Minister for Energy, pursuant to Section 119 (1) (a) of the Electricity Supply Act 1995 (the Act) declare as follows:

- 1. Each electricity load used by the persons (including any related bodies corporate) specified in the Schedule (the specified person) at the locations set out in the Schedule is partially exempt from the energy savings scheme in Part 9 of the Act. The proportion of each electricity load that is exempt is specified in the Schedule as a percentage (the exempt proportion).
- 2. In applying the exemption granted by paragraph 1 of this Order a scheme participant may deduct from the total value of its liable acquisitions an allowance of 5% of the exempt proportion for losses occurring between the purchase of electricity by the scheme participant and its use by the specified person.
- 3. The exemption granted by paragraph 1 of this Order is effective from 1 July 2009 until revoked and to the extent it is inconsistent with the Interim Order published on 14 August 2009, will prevail over the Interim Order.
- 4. The Scheme Regulator, pursuant to Section 120(5) of the Act is authorised to make rules with respect to the exemption granted by paragraphs 1 and 2 of this Order (including rules relating to assessment of deductions under Division 5 of the Act)

18 December 2009

I am satisfied that each electricity load to which this Order applies is used in connection with an industry or activity that is both emissions intensive and trade exposed and that the exemption is generally consistent with the objects of Part 9 of the Act.

Dated: 17 December 2009.

JOHN ROBERTSON, M.L.C., Minister for Energy

SCHEDULE

Speci ed person – name and ABN	Location	Activity or industry	Proportion of load exempt (exempt proportion)
ACI Glass Packaging Penrith Pty Ltd 92 004 243 725	Andrews Road, Penrith NSW 2749	Glass containers production	60%
Australian Paper Pty Ltd Shoalhaven Paper Mill 63 061 583 533	340 Bolong Road, Bomaderry NSW 2541	Printing and writing paper manufacturing	90%
Amcor Packaging (Australia) Pty Ltd 55 004 275 165	1891 Botany Road, Matraville NSW 2038	Cartonboard manufacturing Packaging and industrial paper manufacturing	90%
Blue Circle Southern Cement Ltd 62 008 528 523	Taylor Avenue, New Berrima NSW 2577	Lime production Clinker	90%
Blue Circle Southern Cement Ltd 62 008 528 523	Maldon Bridge Road, Picton NSW 2571	Lime production Clinker	90%
Blue Circle Southern Cement Ltd 62 008 528 523	Hume Street, Marulan South NSW 2579	Lime production	90%
Blue Circle Southern Cement Ltd 62 008 528 523	Lot 3, Eubindal Road, Galong NSW 2585	Lime production	90%
Bluescope Steel Limited 16 000 011 058	Lot 1 Five Islands Road, Port Kembla NSW 2505	Coke production Pig iron production Integrated iron and steel Carbon steel from cold ferrous feed	90%
Caltex Australia Limited 40 004 201 307	2 Solander Street NSW Kurnell 2231	Petroleum refining	60%
Cement Australia Holdings Pty Ltd 99 001 085 561	Jamieson Street, Kandos NSW 2848	Lime production Clinker	90%

Speci ed person – name and ABN	Location	Activity or industry	Proportion of load exempt (exempt proportion)
Continental Carbon Australia Pty Ltd 80 000 486 966	Sir Joseph Banks Drive, Kurnell NSW 2231	Carbon black production	90%
CSR Viridian	8-40 Euston	Flat glass	90%
Limited 68 006 904 052	Road, Alexandria	production	2070
	NSW 2015		000/
CSR Viridian Limited 68 006 904 052	8 Williamson Road, Ingleburn NSW 2565	Flat glass production	90%
Hydro Aluminium Kurri Kurri Pty Ltd 55 093 266 221	Hart Road, Kurri Kurri NSW 2327	Aluminium smelting	90%
Illawarra Coke Company Pty Ltd 85 000 009 807	Lawrence Hargrave Drive, Coalcliff NSW 2508	Coke production	60%
Illawarra Coke Company Pty Ltd 85 000 009 807	27 Railway St Corrimal NSW 2518	Coke production	60%
Norske Skog Paper Mills (Australia) Limited 84 009 477 132	Norske Skog Paper Mill, Hume Highway, Albury NSW 2640	Newsprint manufacturing	90%
OneSteel Manufacturing Pty Limited 42 004 651 325	22 Kellogg Road, Rooty Hill NSW 2766	Integrated iron and steel Carbon steel from cold ferrous feed	90%
OneSteel Manufacturing Pty Limited 42 004 651 325	Ingall Street, Mayfield NSW 2304	Integrated iron and steel Carbon steel from cold ferrous feed	90%
OneSteel Manufacturing Pty Limited 42 004 651 325	Maud Street, Waratah NSW 2298	Carbon steel from cold ferrous feed	90%
Orica Australia Pty Ltd 99 004 117 828	Botany Industrial Park, 16-20 Beauchamp Road, Matraville NSW 2036	Chlorine gas and sodium hydroxide (caustic soda) production	60%
Orica Australia Pty Ltd 99 004 117 828	15 Greenleaf Road, Kooragang NSW 2304	Ammonium Nitrate	60%
Qenos Pty Ltd 62 054 196 771	Botany Industrial Park, 16-20 Beauchamp Road, Matraville NSW 2036	Ethylene/ polyethylene production	60%

Speci ed person – name and ABN	Location	Activity or industry	Proportion of load exempt (exempt proportion)
Shell Refining (Australia) Pty Ltd 46 004 303 842	Shell Clyde Refinery, Durham Street, Rosehill NSW 2142	Petroleum refining	60%
Shoalhaven Starches Pty Ltd 94 000 045 045	160 Bolong Road, Bomaderry NSW 2541	High purity ethanol production	60%
Tomago Aluminium Company Pty Ltd 68 001 862 228	33 Tomago Road, Tomago NSW 2322	Aluminium smelting	90%
Visy Industries Holdings Pty Ltd 56 005 787 968	Gadara Street, Tumut NSW 2720	Cartonboard manufacturing Packaging and industrial paper manufacturing	90%
Visy Industries Holdings Pty Ltd 56 005 787 968	158 McCredie Road, Smithfield NSW 2164	Cartonboard manufacturing Packaging and industrial paper manufacturing	90%
Solvay Interox 70 000 882 137	20-22 McPherson St, Banksmeadow NSW 2019	Hydrogen peroxide	60%

FAIR TRADING ACT 1987

Interim Prohibition Order Section 30 (1)

I, VIRGINIA JUDGE, Minister for Fair Trading,

- 1. noting that the supply of goods of the kind specified in Schedule 1 ("the Goods") has been prohibited on an interim basis under a law of the Commonwealth, in the interests of public safety, particulars of which are specified in Schedule 2; and
- 2. considering that the Goods are so dangerous that their supply should, in the interests of public safety, be prohibited immediately,

HEREBY:

- 3. prohibit, pursuant to section 30 (1) of the Act, the supply of the Goods; and
- 4. declare that this Order shall expire three (3) months after the date of its publication in the *New South Wales Government Gazette*.

Dated this 4th day of December 2009.

VIRGINIA JUDGE, M.P., Minister for Fair Trading

SCHEDULE 1

"Sky Lanterns". A Sky Lantern is essentially a miniature, unmanned hot air balloon that relies on an open flame as a heat source to heat the air inside the lantern with the intention of causing it to lift into the atmosphere.

SCHEDULE 2

The Declaration of Unsafe Goods under section 65C (5) of the Trade Practices Act 1974 (Cth), dated 2nd September 2009, relating to Sky Lanterns (a "Sky Lantern" being essentially a miniature, unmanned hot air balloon that relies on an open flame as a heat source to heat the air inside the lantern with the intention of causing it to lift into the atmosphere), published in the *Commonwealth of Australia Gazette*, No. S150, Thursday, 24 September 2009 (Consumer Protection Notice No. 19 of 2009).

FLUORIDATION OF PUBLIC WATER SUPPLIES ACT 1957

Approval of Addition of Fluorine to a Public Water Supply

(Ballina Shire Council – Marom Creek)

PURSUANT to section 6 of the Fluoridation of Public Water Supplies Act 1957, I, Professor Debora Picone, AM, Director-General of the Department of Health, do hereby approve the addition by the Ballina Shire Council, a water supply authority, of fluorine to the public water supply under its control to those areas of the Ballina local government area situated downstream of a proposed fluorine dosing point located at the Marom Creek Filtration Plant (in this notification referred to as the "Ballina – Marom Creek water supply").

This approval is subject to the following terms and conditions:

- 1. The Ballina Shire Council may only add fluorine to the Ballina – Marom Creek water supply in accordance with this approval and any provisions, directions or approvals made or varied from time to time under the Fluoridation of Public Water Supplies Act 1957, the Code of Practice for the Fluoridation of Public Water Supplies made under that Act as in force from time to time, and the Fluoridation of Public Water Supplies Regulation 2007 or any subsequent Regulation made in its place; and
- 2. The Ballina Shire Council shall maintain the content of fluorine to the Ballina Marom Creek water supply at a target concentration level of 1.0 mg/L with an overall accuracy of +/-5% and within an operating range of not more than 1.5 mg/L and not less than 0.9 mg/L and generally in accordance with the relevant provisions of the Code of Practice for the Fluoridation of Public Water Supplies; and
- 3. The Ballina Shire Council shall have commenced the upward adjustment of fluorine in the Ballina Marom Creek water supply by no later than 31 December 2010, unless otherwise approved by the Chief Dental Officer of NSW Health or that officer's approved representative.

Signed at Sydney this eleventh day of December 2009.

Professor DEBORA PICONE, AM, Director-General

GAME AND FERAL ANIMAL CONTROL ACT 2002

Notification of Suspension of Schedule 1 Conditions of NSW Game Hunting Licences

IN pursuance of the Game and Feral Animal Control Regulation 2004, the Game Council of NSW gives notice of the suspension of operations of provisions in Clauses 4, 5, 8 and 9 of Schedule 1 of the Game and Feral Animal Control Regulation 2004, on the land specified in the Bouddi Deer Management Plan for the control of Fallow deer (*Dama dama*)

For the period 1 January 2010 until 31 December 2011.

Approved by Game Council of NSW this 11th day of December 2009.

BRIAN BOYLE, Chief Executive Officer (for and on behalf of the Game Council of NSW)

GEOGRAPHICAL NAMES ACT 1966

Notice of Determination for Address Locality Names and Boundaries within the Wingecarribee Local Government Area

PURSUANT to the provisions of section 10 of the Geographical Names Act 1966, the Geographical Names Board hereby notifies that it has this day determined address locality names and boundaries in the Wingecarribee Local Government Area as shown on map GNB3728.

The following fifty one names have been determined for address localities as shown on map GNB3728: Alpine, Avoca, Aylmerton, Balaclava, Balmoral, Bargo, Belanglo, Berrima, Bowral, Braemar, Bullio, Bundanoon, Burradoo, Burrawang, Buxton, Canyonleigh, Colo Vale, East Kangaloon, Exeter, Fitzroy Falls, Glenquarry, Goodmans Ford, High Range, Hilltop, Joadja, Kangaloon, Lake Avon, Mandemar, Medway, Meryla, Mittagong, Moss Vale, Mount Lindsey, Mount Murray, New Berrima, Paddys River, Penrose, Renwick, Robertson, Sutton Forest, Tallong, Upper Kangaroo Valley, Wattle Ridge, Welby, Werai, Wildes Meadow, Willow Vale, Wingello, Wombeyan Caves, Woodlands and Yerrinbool.

The position and extent of these features are shown in the Geographical Names Register of New South Wales which can be viewed on the Geographical Names Board's internet site at www.gnb@nsw.gov.au.

WARWICK WATKINS, Chairperson

Geographical Names Board, PO Box 143, Bathurst NSW 2795.

GEOGRAPHICAL NAMES ACT 1966

PURSUANT to the provisions of Section 10 of the Geographical Names Act 1966, the Geographical Names Board has this day assigned the names listed hereunder as geographical names.

Assigned Name: Designation: L.G.A.: Parish: County: L.P.I. Map: 1:100,000 Map: Reference: Boxsell Oval Reserve Kiama Broughton Camden Kiama Kiama 9028 GNB 5411

Assigned Name: Badu Reserve Designation: Reserve L.G.A.: Kiama Parish: Kiama County: Camden L.P.I. Map: Kiama 1:100,000 Map: Kiama 9028 GNB 5411 Reference: Assigned Name: Waabie Reserve Designation: Reserve L.G.A. Kiama Parish: Kiama Camden County: L.P.I. Map: Kiama 1:100,000 Map: Kiama 9028 Reference: GNB 5411 Assigned Name: **Bulga Reserve** Designation: Reserve L.G.A.: Kiama Parish: Kiama County: Camden L.P.I. Map: Kiama 1:100,000 Map: Kiama 9028 GNB 5411 Reference:

The position and the extent for these features are recorded and shown within the Geographical Names Register of New South Wales. This information can be accessed through the Board's Website at www.gnb.nsw.gov.au

> WARWICK WATKINS, Chairperson

Geographical Names Board, PO Box 143, Bathurst NSW 2795.

GEOGRAPHICAL NAMES ACT 1966

Notice of Amendment of Address Locality Boundaries in the Campbelltown Local Government Area

PURSUANT to the provisions of section 10 of the Geographical Names Act 1966, the Geographical Names Board hereby notifies that it has this day amended address locality boundaries in the Campbelltown Local Government Area to enable the creation of a new address locality called Bardia as shown on map GNB4174-3.

The position and extent of these features are shown in the Geographical Names Register of New South Wales which can be viewed on the Geographical Names Board's internet site at www.gnb@nsw.gov.au.

WARWICK WATKINS, Chairperson

Geographical Names Board, PO Box 143, Bathurst NSW 2795.

GEOGRAPHICAL NAMES ACT 1966

Notice of Amendment of Address Locality Boundaries in the Liverpool Local Government Area

PURSUANT to the provisions of section 10 of the Geographical Names Act 1966, the Geographical Names Board hereby notifies that it has this day created two new address localities called Len Waters Estate and Elizabeth Hills in the Liverpool Local Government Area as shown on map GNB3573-3.

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Also, PURSUANT to the provisions of section 10 of the Geographical Names Act 1966, the Geographical Names Board hereby notifies that it has amended the locality boundary of Edmondson Park in the Liverpool Local Government Area as shown on map GNB3573-3.

The position and extent of these features are shown in the Geographical Names Register of New South Wales which can be viewed on the Geographical Names Board's internet site at www.gnb@nsw.gov.au.

WARWICK WATKINS, Chairperson

Geographical Names Board, PO Box 143, Bathurst NSW 2795.

GEOGRAPHICAL NAMES ACT 1966

Amendment of a Geographical Name

PURSUANT to the provisions of sections 10 and 14 of the Geographical Names Act 1966, the Geographical Names Board hereby notifies that it has this day discontinued the name Osrey Flat and in its place assigned the name Ossory Flat, for a flat beside Lake Burrendong about 4km SW by W of Yarrabin and about 5km NE by N of Kangaroo Ground.

The position and extent for this feature is recorded and shown within the Geographical Names Register of New South Wales. This information can be accessed through the Board's Web Site at www.gnb.nsw.gov.au.

WARWICK WATKINS,

Chairman

Geographical Names Board, Panorama Avenue, Bathurst NSW 2795.

GEOGRAPHICAL NAMES ACT 1966

Erratum

THE notice to assign the name Robertson Corner pursuant to section 10 of the Geographical Names Act 1966, has been duplicated and appears on Folio 6066 and 6067 of 11 December 2009. The notice to assign the name that appears on Folio 6067 is deleted.

This notice corrects this duplication.

WARWICK WATKINS, Chairman

Geographical Names Board, PO Box 143, Bathurst NSW 2795.

GEOGRAPHICAL NAMES ACT 1966

Erratum

THE notice in *New South Wales Government Gazette* of 11 December 2009, Folio 6066, refers to the assignment of a geographical name Berenice Forster Park, LGA Sutherland. The correct LGA should be Sutherland Shire. This notice corrects that error.

W. WATKINS, Chairman

Geographical Names Board, PO Box 143, Bathurst NSW 2795.

LAND TAX MANAGEMENT ACT 1956

Land Tax Returns for 2010 Tax Year

1. This Order is made under section 12(1) of the Land Tax Management Act 1956. The purpose of this Order is to advise persons who own land in New South Wales if and when they are required to lodge an initial return or a variation return in relation to the 2010 land tax year or an earlier tax year.

Persons Who Must Lodge an Initial Return

- 2. The requirement to lodge an initial land tax return in 2010, as specified in this Order, applies to certain "persons" who are "owners" of land in New South Wales at midnight on 31 December 2009 (or any previous year if paragraph 5 applies). The reference to an "owner" includes a reference to a person who is an owner of land or is deemed to be an owner for land tax purposes by the Land Tax Management Act 1956. A "person" includes a company, a trustee, a beneficiary of a trust and a natural person.
- 3. Persons who own land in New South Wales at midnight on 31 December 2009 which is not exempt from land tax must lodge an Initial Return unless they were assessed and received a land tax notice of assessment for the 2009 land tax year.
- 4. Persons who have received a land tax notice of assessment for any land tax year prior to 2010 showing nil tax payable and who have subsequently acquired additional land or an additional interest in land and are the owners of land at midnight 31 December 2009 which is not exempt from land tax must lodge an Initial Return.
- 5. Persons who are liable to be assessed for land tax for any tax year prior to 2009 and have not lodged a return previously or have not received a land tax notice of assessment for that tax year must also lodge an Initial Return.
- 6. Persons who own land that has previously been exempt from land tax in any tax year prior to 2010 but is not exempt for the 2010 tax year must lodge an initial return.
- 7. Where land is subject to a trust, and the trustee has not previously lodged a land tax return, the trustee must lodge an initial return on behalf of the trust. If the trustee fails to lodge a return, or fails to provide the information specified on the form about the beneficiaries of the trust, the trust may be assessed as if it were a special trust.
- 8. A Land Tax Registration Form is an Initial Return for the purposes of section 12.

Due date for lodgement of Initial Returns

- 9. Any person who is required by this Order to lodge an Initial Return must do so by 31 March 2010.
- 10. Penalty tax and interest may be imposed under the Land Tax Management Act 1956 and the Taxation Administration Act 1996 for failing to lodge a return by the due date.

Persons Who Must Lodge a Variation Return

11. A Variation Return is required to be lodged by a person who receives an incorrect notice of assessment of land tax. Errors on the notice which may result in an incorrect notice of assessment of land tax may include:

- (a) details of land owned by the person as shown on the notice are incorrect;
- (b) exempt land has been incorrectly assessed as liable for land tax;
- (c) liable land has been incorrectly classified as exempt;
- (d) the calculation of tax contains errors;
- (e) a special trust has been incorrectly assessed as if it were a fixed trust;
- (f) a fixed trust has been incorrectly assessed as if it were a special trust;
- (g) the beneficial owners of land owned by a family unit trust have changed since 31 December 2005;
- (h) additional land has been acquired by a family unit trust, so that the total liable land owned by the trust has a taxable value of over \$1 million;
- (i) a group constituted under section 29 of the Land Tax Management Act 1956 does not have a member classified as a concessional company;
- (j) a group constituted under section 29 of the Land Tax Management Act 1956 has more than one member classified and separately assessed as a concessional company (note that two or more companies can be correctly classified as joint concessional companies and jointly assessed as such);
- (k) an error in the calculation of the average value of a parcel of land.
- 12. A variation return disclosing details of the beneficiaries must be lodged by a trustee of a trust, other than a special trust, if the trustee has not previously advised the Chief Commissioner of the beneficiaries of the trust or the beneficial owners of land owned by the trust. If a trustee fails to comply with this requirement, the Chief Commissioner may assess the trust as if it were a special trust.

Due Date for Lodgement of Variation Returns

- 13. A Variation Return is required to be lodged by the first instalment date shown on the notice of assessment. If the notice of assessment shows that no tax is payable, the due date for lodgment of a variation return is 40 days after the "Issue Date" shown on the notice.
- 14. Penalty tax and interest may be imposed under the Land Tax Management Act 1956 and the Taxation Administration Act 1996 for failing to lodge a return by the due date.

How to lodge a return

- 15. A person, including an agent or trustee, who is required to lodge an Initial Return or a Variation Return can provide the relevant information:
 - via the Office of State Revenue's Website at www.osr. nsw.gov.au, or
 - by telephone to the OSR's telephone inquiry service on 1300 139 816, or
 - by lodging a written return form with OSR.
- 16. Note that in some cases lodgment by webform or telephone will not be possible and a written return form may still be required. Under section 12(2) of the Land Tax Management Act 1956, the Chief Commissioner may require any person to lodge a return or a further return.

Other matters

- 17. A requirement to lodge a return specified in this notice does not affect a requirement to lodge a return by an earlier date specified by the Chief Commissioner under section 12(2) of the Act or an earlier date specified in any previous Order made under section 12(1).
- 18. Land tax information brochures are available on the Office of State Revenue's Website at www.osr.nsw.gov.au.

T. NEWBURY, Chief Commissioner of State Revenue

NATIONAL PARKS AND WILDLIFE ACT 1974

Bangadilly National Park Woomargama National Park and SCA and Mullengandra Nature Reserve and SCA

Plans of Management

A plan of management for Bangadilly National Park and a plan for Woomargama National Park, Woomargama State Conservation Area, Mullengandra Nature Reserve and Mullengandra State Conservation Area were adopted by the Minister for Climate Change and the Environment on 1st November 2009.

Copies of the Bangadilly plan are available from the NPWS South Coast Region Office at 55 Graham Street, Nowra (ph 4423 2170). Copies of the Woomargama plan are available from the NPWS South West Slopes Region Office at 7a Adelong Street, Tumut (ph 6947 7000). The plans are also on the website: www.environment.nsw.gov.au.

NATIONAL PARKS AND WILDLIFE ACT, 1974

Coolamatong (Lambie Gorge) Aboriginal Place

IN pursuance of the power vested in me under section 84 of the National Parks and Wildlife Act 1974, I, the Minister for Climate Change and the Environment, do, by this my order, declare such of lands described hereunder as an Aboriginal Place.

The Coolamatong (Lambie Gorge) Aboriginal Place is a place of special significance to Aboriginal people. The Aboriginal cultural values of the place includes Bagel (totem) figures located in the landscape which are associated with the Snake, Frog and Turtle story and is regarded as the 'birthing' place for the story of frogs and turtles themselves; the area is regarded as place imbued with spiritual and cultural values that 'link' people with old people in traditional times; the area contains a traditional camping ground; the place is regarded as a traditional teaching place for the associated 'dreaming' story and continues to be used contemporarily for teaching children about Aboriginal culture; the plant, animal and mineral resources of the area have cultural value including their traditional use and association with Aboriginal people; the presence of artifacts indicating earlier use are valued as physical evidence of the earlier occupation of the area by Aboriginal people; the place is valued for its tangible link between Aboriginal people and culture today and Aboriginal people and culture in the past; Aboriginal people continue to visit the place to maintain their connection with it and to pass on knowledge of its significance.

JOHN ROBERTSON, Minister for Climate Change and the Environment

Land District – Cooma; LGA – Cooma-Monaro

County Beresford, Parish Cooma, about 1.6 hectares, being Lot 3 in DP 704165 and the that part of the bed of Cooma Back Creek separating Lot 3 in DP 704165 from Lots 6 and 7 in DP 574199 and Lot 4 in DP 232738: DECCW08/15590.

PESTICIDES ACT 1999

Notice under Section 48 (4)

NOTICE is hereby given, pursuant to section 48 (4) of the Pesticides Act 1999, that I have granted a Pilot (Pesticide Rating) Licence, particulars of which are stated in the Schedule.

SEAN NUNAN, Team Leader, Licensing and Registration (by delegation)

SCHEDULE

Pilot (Pesticide Rating) Licence

Name and address of Licensee

Mr Alistair MITCHELL, 3704 Thunderbolts Way, Uralla NSW 2358. Date of Granting of Licence 11 December 2009.

POISONS AND THERAPEUTIC GOODS ACT 1966

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

Withdrawal of Drug Authority

IN accordance with the provisions of Clause 175 (1) of the Poisons and Therapeutic Goods Regulation 2008, an Order has been made on Dr Thomas Murai FIAY, MPO 019429, of 163 Pound Street, Grafton NSW 2460, prohibiting him until further notice, as a medical practitioner from supplying or having possession of drugs of addiction as authorised by Clause 101 of the Regulation and issuing a prescription for a drug of addiction as authorised by Clause 77 of the Regulation.

This order is to take effect on and from 11 December 2009.

Professor DEBORA PICONE, AM, Director-General

Department of Health, New South Wales, Sydney, 8 December 2009.

POISONS AND THERAPEUTIC GOODS ACT 1966

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

Withdrawal of Drug Authority

IN accordance with the provisions of Clause 175 (1) of the Poisons and Therapeutic Goods Regulation 2008, an order has been made on Dr Wael GHANNOUM, MPO 308348, of PO Box 976, Merrylands NSW 2160, prohibiting him until

further notice, as a medical practitioner from supplying or having possession of drugs of addiction as authorised by Clause 101 of the Regulation and issuing a prescription for a drug of addiction as authorised by Clause 77 of the Regulation.

This order is to take effect on and from 11 December 2009.

Professor DEBORA PICONE, AM, Director-General

Department of Health, New South Wales, Sydney, 7 December 2009.

PRACTICE NOTE SC EQ 9

COMMERCIAL ARBITRATION LIST

Commencement

1. This Practice Note was issued on 15 December 2009 and commences on 1 February 2010.

Application

- 2. This Practice Note applies to new and existing proceedings in, or to be entered in, the Commercial Arbitration List in the Equity Division which are proceedings concerning any international or domestic commercial arbitration.
- 3. Under the provisions of the *International Arbitration Act* 1974 (Cth) this Court is taken to have been specified in article 6 of the *UNCITRAL Model law on International Commercial Arbitration* to perform the functions referred to in that article if the place of arbitration is or is to be in New South Wales.
- 4. Under s 4(1) of the *Commercial Arbitration Act* 1984 (NSW) "the Court" in that Act means, subject to s 4(2) of that Act, this Court. That Act confers jurisdiction on this Court in relation to proceedings under it.

Introduction

- 5. The purpose of this Practice Note is to set out the case management procedures for the Commercial Arbitration List for the just, quick and cheap disposal of proceedings.
- 6. A party who considers that compliance with this Practice Note will not be possible, or will not be conducive to the just, quick and cheap disposal of the proceedings, may apply to be relieved from compliance on the basis that an alternative proposed regime will be more conducive to such disposal.

Definitions

7. In this Practice Note:

List means the Commercial Arbitration List

List Judge means a judge of the Equity Division assigned to administer the List

Terms defined in Practice Note SC Eq 3 shall, unless the context otherwise indicates, have the same meaning in this Practice Note.

Pleadings and Entry in the List

8. A matter in the List shall be commenced in the general form of Summons prescribed under the Uniform Civil Procedure Rules 2005. There is to be filed with the Summons:

- 1.1 a "Commercial Arbitration List Statement", setting out, in summary form, in the form of Annexure 1 to Practice Note SC Eq 3:
 - 1.1.1 the nature of the dispute
 - 1.1.2 the issues which the plaintiff believes are likely to arise
 - 1.1.3 the plaintiff's contentions
- 1.2 if the proceedings concern an arbitral award, a copy of the arbitral award
- 1.3 a copy of any agreement under which the arbitration has taken or is to take place
- 1.4 an affidavit setting out in summary form the facts which give rise to the dispute and to which is to be attached any documents in support of the relief claimed.
- 9. A defendant shall file and serve a "Commercial Arbitration List Response", setting out, in summary form in the form of Annexure 1 to Practice Note SC Eq 3:
 - 9.1 the nature of the dispute
 - 9.2 the issues which the defendant believes are likely to arise
 - 9.3 the defendant's response to the plaintiff's contentions including the legal grounds for opposition to the relief claimed in the Summons
- 10. A defendant shall file and serve with the Commercial Arbitration List Response:
 - 10.1 any additional arbitral award or agreement which is asserted to be relevant to any issues raised by the Commercial Arbitration List Response
 - 10.2 an affidavit setting out which of the facts in the plaintiff's affidavit are disputed and any additional facts which are asserted to be material to the dispute and to which affidavit shall be attached any documents (in addition to those provided by the plaintiff) relied upon to resist the relief sought.
- 11. Paragraphs 12 to 17 of Practice Note SC Eq 3 apply to the pleadings and entry into the List except that the pleadings shall be entitled Commercial Arbitration List. A cross claimant or cross respondent is together with its cross claim and cross claim response to serve any documents upon which they rely in support of or resisting the relief claimed respectively.
- 12. If any document referred to paragraph 8, 10 or 11 required to be provided is not in English, a certified English translation of it is to be provided.
- 13. If a party intends to rely on other evidence then paragraphs 33 36 inclusive of Practice Note SC Eq 1 apply to such evidence.

Case Management

- 14. It is expected that any applications in respect of any arbitrations or arbitral awards will be given a hearing date on the first return date of the Summons. Practitioners are expected to agree to a timetable, and adopt the Usual Order for Hearing or an agreed Modified Order for Hearing on that date.
- 15. All proceedings in the List will be case managed by the Commercial List Judge with the aim of ensuring a speedy resolution of the real issues between the parties. Motions in the Commercial Arbitration List are listed at 9.15am on Fridays and are called through for the

purpose of ascertaining the length of the hearing and allocating a time for hearing on that or some other day. The Commercial Arbitration List will otherwise be administered at 12 noon on Fridays.

- 16. The Court expects that Practitioners will have advised their clients of the effect of the provisions of the sections 56 to 61 inclusive of the Civil Procedure Act 2005 in addition to the expectation set out in paragraph 22 of Practice Note SC Eq 3.
- 17. The parties will be expected to discuss mediation or other alternative dispute resolution mechanisms.

Discovery

18. No orders will be made for discovery in any application in the Commercial Arbitration List, unless special reasons are established.

> J. J. SPIGELMAN, AC, Chief Justice of New South Wales 15 December 2009

Related Information

Practice Note SC Eq 9 was issued on 15 December 2009 and commenced on 1 February 2010.

See also:

Practice Note SC Eq 1 - Case Management

Practice Note SC Eq 3 – Commercial List and Technology and Construction List

International Arbitration Act 1974 (Cth)

Commercial Arbitration Act 1984 (NSW)

Civil Procedure Act 2005

Uniform Civil Procedure Rules 2005

UNCITRAL Model Law on Commercial Litigation

PRACTICE NOTE DC (CIVIL) No. 8

EARLY RETURN OF SUBPOENAS

THIS Practice Note supersedes and replaces the previous Practices Notes referable to early return of subpoenas.

- 1. INTRODUCTION
 - 1.1 The issuing of subpoenas and the inspection of documents is vital to the proper preparation of cases. The Court provides a system for the early production of documents so that parties can meet the standards imposed by Practice Notes.
 - 1.2 The power to deal with subpoenas is delegated to the registrar by a direction under section 13 of the Civil Procedure Act 2005.

2. SYSTEM FOR EARLY RETURN OF SUBPOENAS

- 2.1 The Court aims to allocate a return date within 6 weeks of the issue of a subpoena for production.
- 2.2 The Court has adopted the following system for the early return of subpoenas and access to documents to give effect to the powers in rule 33.9 of the Uniform Civil Procedure Rules 2005:
 - a) The issuing party will obtain a return date from the registry and endorse it on the subpoena. In Sydney, the return date will be on a Monday at 11am before the registrar.

- b) The issuing party must complete and attach the approved form of subpoena notice and declaration (Form28) to the front of the subpoena. The issuing party is also required to indicate a proposed access order in the subpoena notice and the addressee (subpoena recipient) is required to complete the attached declaration as to whether the documents produced are copies of documents, original documents or a mix of copies of documents and original documents. If the material produced is declared to be copies of documents the Registrar may, without further notice to you, destroy the copies after the expiry of a period of 4 months from the conclusion of the proceedings or, if the documents become exhibits in the proceeding, when they are no longer required in connection with the proceeding, including on appeal. If the material produced is declared to be original documents or a mix of original and copies of documents the Court will return all of the material to you at the address specified in the declaration. Unless an alternative order is sought the proposed access order will be "Plaintiff to have first access for 7 days; thereafter, in the absence of further application, access to all parties." Where a different proposed access order is sought the issuing party must state his or her reasons in the notice. If there is a dispute over the proposed access, the parties must appear on the return date.
- c) The issuing party must serve a copy of the subpoena and notice on all other parties who have an address for service within 7 days of issue. If the return date is less than 2 weeks away, the copy and notice must be served within 24 hours.
- d) The issuing party must appear on the return date if it has not notified all parties of the issue of the subpoena. All other parties must attend on the return date unless the issuing party has obtained consent to mention the matter for all parties. The Court may make costs orders against parties who have not complied with the rules and this practice note.
- e) Any party, or the producer, may object to the issuing party about the proposed access order. The issuing party must notify all other parties of the objection. Parties who wish to contest the proposed access order must appear on the return date and argue the question before the registrar.
- f) If there is no appearance on the return date, the Court will generally make the proposed access order. There is no need for the parties to appear on the return date if all parties consent to the order sought.
- g) If the subpoena has not been served, the issuing party should appear on the return date and ask the registrar for a new return date.
- h) If documents have not been produced, any party may obtain a further return date from the registry. That party must inform all other parties of the new return date.

3. ACCESS TO DOCUMENTS

- 3.1 When the proposed access order takes effect, parties may inspect documents in the registry in accordance with that order. The other parties may inspect the documents produced as soon as the first access order has expired.
- 3.2 Practitioners should be aware that, if the party with first access does not inspect documents in accordance with the proposed access order, other parties may inspect privileged documents and the privilege may be lost.
- 3.3 The Court has broad discretionary powers under rule 33.8 of the Uniform Civil Procedure Rules 2005 with respect to access to and copying of documents.

The Hon. Justice R. O. BLANCH A.M. Chief Judge 15 December 2009

PROFESSIONAL STANDARDS ACT 1994

Notification Pursuant to Section 13

ACS Limited Liabilty (NSW) Scheme

PURSUANT to section 13 of the Professional Standards Act 1994, I authorise the publication of the ACS Limited Liability (NSW) Scheme. The Scheme will commence on 1 January 2010.

> JOHN HATZISTERGOS, Attorney General

PROFESSIONAL STANDARDS ACT 1994 (NSW)

The ACS Limited Liabilty (NSW) Scheme

PREAMBLE

- A. The Australian Computer Society (ACS) is an occupational association.
- B. The ACS has made an application to the Professional Standards Council, appointed under the Professional Standards Act 1994 (NSW) (the Act), for a scheme under the Act.
- C. The scheme is prepared by the ACS for the purposes of limiting occupational liability to the extent to which such liability may be limited under the Act.
- D. The scheme propounded by the ACS is to apply to ACS members who qualify as Certified Computer Professionals.
- E. The ACS has furnished the Council with a detailed list of the risk management strategies intended to be implemented in respect of its members and the means by which those strategies are intended to be implemented.
- F. The ACS has furnished the Council with insurance standards determined by ACS with which members must comply for purposes of this scheme.
- G. The scheme is intended to remain in force for five (5) years from its commencement unless, prior to that time, it is revoked, its operation ceases or it is extended pursuant to s32 of the Act.
- H. The scheme is intended to operate as a scheme of New South Wales, the Australian Capital Territory, the Northern Territory, Queensland and Victoria.

THE ACS LIMITED LIABILITY (NSW) SCHEME

- 1. Occupational association
 - 1.1 The ACS scheme (the scheme) is a scheme under the Professional Standards Act 1994 (NSW) (the Act) prepared by the Australian Computer Society (ACS) whose business address is: Level 3, 160 Clarence Street, Sydney, NSW, 2000.
- 2. Persons to Whom the Scheme Applies ¹
 - 2.1 The scheme applies to all individual practitioner members of the ACS who qualify as Certified Computer Professionals, unless exempted by ACS.
 - 2.2 This scheme also applies to all persons to whom the scheme applied under clause 2.1 at the time of any act or omission giving rise to occupational liability.²
 - 2.3 The ACS may, on written application by a member to whom this scheme applies, exempt the member from the scheme³, provided that the scheme does not apply to the person by virtue of that person being a partner or employee of a person to whom the scheme applies or the person being prescribed by regulation as a person to whom the scheme applies.
- 3 Limitation of liability
 - 3.1 This scheme only affects the liability for damages⁴ arising from a single cause of action to the extent to which the liability results in damages exceeding \$1.5 million.
 - 3.2 If a person, who was at the time of the act or omission giving rise to occupational liability, a person to whom the scheme applied, against whom a proceeding relating to occupational liability is brought, is able to satisfy the court⁵ that such person has the benefit of an insurance policy:
 - (a) of a kind which complies with the standards determined by the ACS,
 - (b) insuring such person against that occupational liability, and
 - (c) under which the amount payable in respect of that occupational liability is not less than the monetary ceiling specified in this scheme,

that person is not liable in damages in relation to that cause of action above the monetary ceiling specified in this scheme.

- 3.3 The monetary ceiling is \$1.5 million.
- 3.4 Clause 3.2 does not limit the amount of damages to which a person to whom the scheme applies is liable if the amount is less than the amount specified for the purpose in this scheme in relation to a person to whom the scheme applies.
- 3.5 This scheme limits the occupational liability in respect of a cause of action founded on an act or omission occurring during the period when the scheme was in force in respect of any person to whom the scheme applied at the time the act or omission occurred.
- 4 Conferral of discretionary amount
 - 4.1 Pursuant to s24 of the Act this scheme confers on the ACS a discretionary authority to specify, on application by a person to whom the scheme applies, in relation to that person, a monetary ceiling (maximum amount of liability) not exceeding \$10

million in relation to the person either in all cases or in any specified case or class of case.

- 5 Duration
 - 5.1 This scheme will commence on 1 January 2010 and will be in force for a period of 5 years from the date of commencement.

¹ Sections 18 and 19 of the Act provide that if the scheme applies to a body corporate, the scheme also applies to each officer of the body corporate and if the scheme applies to a person, the scheme also applies to each partner of the person, and if the scheme applies to a person the scheme also applies to each employee of the person, provided that if such officer of the corporation or partner of the person or employee of the person is entitled to be a member of the same occupational association. Section 20 provides that the scheme may also apply to other persons as specified in that section. Section 20A extends the limitation of liability of persons to whom the scheme applies by virtue of sections 18 to 20. [Equivalent sections of legislation in other jurisdictions in which the scheme is intended to apply under mutual recognition are: Civil Law (Wrongs) Act 2002 (ACT) Schedule 4 Professional Standards s4.15; Professional Standards Act 2004 (Qld) s19, s21A; Professional Standards Act 2003 (Vic) s19]

² Occupational liability is defined in s4(1) of the Act to mean 'civil liability arising (in tort, contract or otherwise) directly or vicariously from anything done or omitted by a member of an occupational association acting in the performance of his or her occupation. However, s5(1) of the Act provides that the Act does not apply to liability for damages arising from the death or personal injury to a person, a breach of trust or fraud or dishonesty. [Note: All jurisdictions other than NSW exclude a lawyer acting in a personal injury matter.] Section 5(2) of the Act also provides that the Act does not apply to liability which may be the subject of proceedings under Part 13 or 14 of the Real Property Act 1900 (NSW). [Equivalent sections of legislation in other jurisdictions in which the scheme is intended to apply under mutual recognition are: Civil Law (Wrongs) Act 2002 (ACT) Schedule 4 Professional Standards s4.2, s4.3(2); Professional Standards Act 2004 (Qld) s7 sch2 Dictionary, s6(2); Professional Standards Act 2003 (Vic) s4, s5(2)]

³ Section 17 of the Act provides that a scheme ceases to apply to a person exempted from the scheme on and from the date on which the exemption is granted or on and from a later date specified in the exemption. [Equivalent sections of legislation in other jurisdictions in which the scheme is intended to apply under mutual recognition are: Civil Law (Wrongs) Act 2002 (ACT) Schedule 4 Professional Standards s4.15; Professional Standards Act 2004 (NT) s18; Professional Standards Act 2004 (Qld) s19; Professional Standards Act 2003 (Vic) s19]

⁴ Damages as defined in s4 of the Act means (a) damages awarded in respect of a claim or counter-claim or by way of set-off and (b) costs in or in relation to the proceedings ordered to be paid in connection with such an award (other than costs incurred in enforcing a judgment or incurred on an appeal made by a defendant), and (c) any interest payable on the amount of those damages or costs. [Equivalent sections of legislation in other jurisdictions in which the scheme is intended to apply under mutual recognition are: Civil Law (Wrongs) Act 2002 (ACT) Schedule 4 Professional Standards s4.15; Professional Standards Act 2004 (NT) s18; Professional Standards Act 2004 (Qld) s19; Professional Standards Act 2003 (Vic) s19]

⁵ Court as defined in s4 of the Act includes an arbitrator. [Equivalent sections of legislation in other jurisdictions in which the scheme is intended to apply under mutual recognition are: Civil Law (Wrongs) Act 2002 (ACT) Schedule 4 Professional Standards s4.2; Professional Standards Act 2004 (NT) s4; Professional Standards Act 2004 (Qld) s7; Professional Standards Act 2003 (Vic) s4]

THREATENED SPECIES CONSERVATION ACT 1995

Notice of Preliminary Determination

THE Scientific Committee has made Preliminary Determinations proposing that the following be listed in the relevant Schedules of the Threatened Species Conservation Act 1995.

Endangered Species (Part 1 of Schedule 1) Grey Falcon *Falco hypoleucos* Gould, 1841

Species Presumed Extinct (Part 4 of Schedule 1) *Solanum bauerianum* Endl., Bridal Flower, a shrub

Critically Endangered Species (Part 1 of Schedule 1A) Desert Mouse *Pseudomys desertor* (Troughton, 1932)

Critically Endangered Ecological Community (Part 2 of Schedule 1A)

Lagunaria Swamp Forest on Lord Howe Island

6304

Any person may make a written submission regarding these Preliminary Determinations. Send submissions to Suzanne Chate, NSW Scientific Committee, PO Box 1967, Hurstville BC NSW 1481. Submissions close 5th March 2010.

Copies of these Determinations, which contain the reasons for the determinations, may be obtained free of charge on the Internet www.environment.nsw.gov.au, by contacting the Scientific Committee Unit, PO Box 1967, Hurstville BC NSW 1481. Tel: (02) 9585 6940 or Fax (02) 9585 6606 or in person at the Department of Environment, Climate Change and Water 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.

> Dr RICHARD MAJOR, Chairperson

TRANSPORT ADMINISTRATION ACT 1988

Erratum

THE Transport Administration Act 1988 notice which appeared in the *New South Wales Government Gazette* No. 200, Folio 6068, on 11 December 2009, appeared twice. This notice should only have appeared once. The following notice which should have appeared on the 11 December 2009, is now published in full.

TRANSPORT ADMINISTRATION ACT 1988

LAND ACQUISITION (JUST TERMS COMPENSATION) ACT 1991

ROADS ACT 1993

Notice of Compulsory Acquisition of Land for the purposes of the Transport Infrastructure Development Corporation

THE Transport Infrastructure Development Corporation, with the approval of Her Excellency the Governor with the advice of the Executive Council, declares that the freehold interest described in the Schedule hereto is acquired by compulsory process under the provisions of the Land Acquisition (Just Terms Compensation) Act 1991 and Roads Act 1993, for the purposes of the Transport Infrastructure Development Corporation, as authorised by the Transport Administration Act 1988.

Dated this 3rd day of December 2009.

CHRIS LOCK, Chief Executive Officer

SCHEDULE

All that piece or parcel of land situated at Wollongong, in the Local Government area of Wollongong, Parish of Wollongong, County of Camden and State of New South Wales, being Lot 1 in Deposited Plan 1144028, held in the offices of Transport Infrastructure Development Corporation, having an area of 156 square metres or thereabouts and said to be in the possession of Wollongong City Council.

TIDC Reference: 632848_2.DOC.



Independent Pricing and Regulatory Tribunal



Review of fares for metropolitan and outer metropolitan bus services from January 2010

Government and private bus services in Sydney, Newcastle, the Central Coast, Wollongong, the Blue Mountains and the Hunter regions

Transport — Final Determinations December 2009



Independent Pricing and Regulatory Tribunal

Review of fares for metropolitan and outer metropolitan bus services from January 2010

Government and private bus services in Sydney, Newcastle, the Central Coast, Wollongong, the Blue Mountains and the Hunter regions

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The Tribunal members for this review are:

Mr James Cox, Acting Chairman and Chief Executive Officer

Ms Sibylle Krieger, Part Time Member

Inquiries regarding this document should be directed to a staff member:

 Pamela Soon
 (02) 91130 7704

 Mark Gillard
 (02) 9290 8463

Independent Pricing and Regulatory Tribunal of New South Wales PO Box Q290, QVB Post Office NSW 1230 Level 8, 1 Market Street, Sydney NSW 2000 T (02) 9290 8400 F (02) 9290 2061 www.ipart.nsw.gov.au

ii IPART Review of fares for metropolitan and outer metropolitan bus services from January 2010

Independent Pricing and Regulatory Tribunal

Sydney Metropolitan and Outer Metropolitan Bus Services (other than TravelPass Services)

Determination No. 7, 2009

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Sydney Metropolitan and Outer Metropolitan Bus Services (other than TravelPass Services) IPART iii

Preliminary

1 Background

1.1 Passenger Transport Act 1990 (NSW)

- (a) Section 28J(2) of the Passenger Transport Act 1990 (NSW) (the Passenger Transport Act) permits IPART to conduct investigations and make reports to the Minister on the determination of maximum fares for Regular Bus Services supplied under a Bus Service Contract (Regulated Bus Services).
- (b) In investigating and reporting on the maximum fares for Regulated Bus Services, IPART has had regard to a broad range of matters, including the criteria set out in section 28J(5) of the Passenger Transport Act.

1.2 Independent Pricing and Regulatory Tribunal Act 1992 (NSW)

- (a) Section 11 of the *Independent Pricing and Regulatory Tribunal Act* 1992 (NSW) (the **IPART Act**) provides IPART with a standing reference to conduct investigations and make reports to the Minister on the determination of the pricing for a government monopoly service supplied by a government agency specified in Schedule 1 of the IPART Act.
- (b) The State Transit Authority (STA) (excluding any bus services provided by STA under a service contract to which section 28J of the Passenger Transport Act applies) is listed as a government agency for the purposes of Schedule 1 of the IPART Act.
- (c) The services of STA declared as monopoly services under the *Independent Pricing and Regulatory Tribunal (Passenger Transport Services) Order 1998* (NSW) are regular passenger services (within the meaning of the Passenger Transport Act) supplied by STA, excluding:
 - services supplied in accordance with the ticket known as the "SydneyPass";
 - (2) the bus known as the "Airport Express";
 - (3) the bus service known as the "Sydney Explorer", the bus service known as the "Bondi & Bay Explorer" and any other similar bus services operating in any other areas.
- (d) The declared monopoly services include the T-Way Services operated by Western Sydney Buses, a subsidiary of STA. Accordingly, IPART may determine the maximum fares that Western Sydney Buses may charge for the T-Way Services.

Sydney Metropolitan and Outer Metropolitan Bus Services (other than TravelPass Services) **IPART** | 1

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- (e) IPART has fixed a maximum price for the T-Way Services. In investigating and reporting on the pricing of the T-Way Services, IPART has had regard to a broad range of matters, including the criteria set out in section 15(1) of the IPART Act.
- (f) By section 18(2) of the IPART Act, Western Sydney Buses may not fix a price below that determined by IPART without the approval of the Treasurer.

2 Application of this determination

This determination:

- (a) sets the maximum fares for all Regulated Bus Services and T-Way Services;
- (b) commences on the later of 3 January 2010 and the date that it is published in the NSW Government Gazette (**2010 Commencement Date**); and
- (c) applies from the 2010 Commencement Date to the 2013 Termination Date.

3 Replacement of Determination No. 7 of 2008

- (a) From the 2010 Commencement Date, this determination replaces Determination No. 7 of 2008, other than:
 - (1) that part of Schedule 1 of Determination No. 7 of 2008 which relates to bus travelpasses and bus and ferry travelpasses; and
 - (2) that part of Schedule 2 of Determination No. 7 of 2008 which relates to travelpasses.
- (b) The replacement does not affect anything done or omitted to be done, or rights or obligations accrued, under that part of the Determination No. 7 of 2008 identified in clause 3(a) above.

4 Schedules

- (a) Schedule 1 and the table in that schedule set out the maximum fares for Regulated Bus Services provided by Sydney Buses.
- (b) Schedule 2 and the table in that schedule set out the maximum fares for Regulated Bus Services provided by Newcastle Buses.
- (c) Schedule 3 and the table in that schedule set out the maximum fares for Regulated Bus Services provided by Private Bus Operators.
- (d) Schedule 4 and the table in that schedule set out the maximum fares for the T-Way Services provided by Western Sydney Buses.
- (e) Schedule 5 sets out the definitions and interpretation provisions.
- 2 IPART Sydney Metropolitan and Outer Metropolitan Bus Services (other than TravelPass Services)

Schedule 1 Maximum fares for Regulated Bus Services provided by Sydney Buses

1 Application

This schedule sets the maximum fares for Regulated Bus Services provided by Sydney Buses.

2 Maximum fares for Regulated Bus Services provided by Sydney Buses

2.1 Tickets listed in Table 1

- (a) The maximum Adult Fare that may be charged by Sydney Buses for any ticket listed in the first column of Table 1 (except for the School Term Pass) is:
 - for the 2010 Year, the corresponding fare for that ticket in the second column of Table 1;
 - (2) for the 2011 Year, the corresponding fare for that ticket in the third column of Table 1, rounded in accordance with the Rounding Rule;
 - (3) for the 2012 Year, the corresponding fare for that ticket in the fourth column of Table 1, rounded in accordance with the Rounding Rule; and
 - (4) for the 2013 Year, the corresponding fare for that ticket in the fifth column of Table 1, rounded in accordance with the Rounding Rule.
- (b) The maximum Concession Fare that may be charged by Sydney Buses for:
 - (1) any ticket listed in the first column of Table 1 (except for the School Term Pass) is 50% of the relevant Adult Fare (calculated in accordance with subclause 2.1(a) of this schedule), rounded in accordance with the Concession Rounding Rule; and
 - (2) the School Term Pass is:
 - (A) for the 2010 Year, the corresponding fare for that ticket in the second column of Table 1;
 - (B) for the 2011 Year, the corresponding fare for that ticket in the third column of Table 1, rounded in accordance with the Rounding Rule;

Sydney Metropolitan and Outer Metropolitan Bus Services (other than TravelPass Services) **IPART 3**

Schedule 1 Maximum fares for Regulated Bus Services provided by Sydney Buses

- (C) for the 2012 Year, the corresponding fare for that ticket in the fourth column of Table 1, rounded in accordance with the Rounding Rule; and
- (D) for the 2013 Year, the corresponding fare for that ticket in the fifth column of Table 1, rounded in accordance with the Rounding Rule.

2.2 TravelTen

- (a) The maximum Adult Fare that may be charged by Sydney Buses for a TravelTen is 8 times the relevant Adult Fare for a Single Ride Ticket (calculated in accordance with subclause 2.1(a) of this schedule)¹.
- (b) The maximum Concession Fare that may be charged by Sydney Buses for a TravelTen is 50% of the relevant Adult Fare for a TravelTen (calculated in accordance with subclause 2.2(a) of this schedule).

¹ Assume for the purpose of this example only, for the 2011 Year, the ΔCPI₁ is 0.02, the Adult Fare for a Single Ride Ticket for 1-2 Sections calculated in accordance with subclause 2.1(a) is \$2.00, therefore the Adult Fare for a TravelTen for 1-2 Sections calculated in accordance with subclause 2.2(a) is \$16.00.

⁴ IPART Sydney Metropolitan and Outer Metropolitan Bus Services (other than TravelPass Services)

Table 1

 Table 1
 Maximum Fares^a for tickets provided by Sydney Buses

Ticket	2010 Year (\$)	2011 Year (\$)	2012 Year (\$)	2013 Year (\$)
Single Ride Ticket				
1-2 Sections	2.00	1.98 x (1+ΔCPI ₁)	2.01 x (1+ΔCPI ₂)	2.04 x (1+ΔCPI₃)
3-5 Sections	3.30	3.34 x (1+ΔCPI ₁)	3.38 x (1+ΔCPI ₂)	3.43 x (1+ΔCPI₃)
6-9 Sections	4.30	4.38 x (1+ΔCPI ₁)	4.44 x (1+ΔCPI ₂)	4.50 x (1+ΔCPI₃)
10-15 Sections	5.10	5.21 x (1+ΔCPI ₁)	5.29 x (1+ΔCPI ₂)	5.36 x (1+ΔCPI₃)
16+ Sections	6.30	6.36 x (1+ΔCPI ₁)	6.45 x (1+ΔCPI ₂)	6.54 x (1+ΔCPI₃)
Other tickets				
BusTripper	13.00	13.24 x (1+ΔCPI ₁)	13.43 x (1+ΔCPI ₂)	13.62 x (1+ΔCPI₃)
Sports Special Single	3.30	3.34 x (1+ΔCPI ₁)	3.38 x (1+ΔCPI ₂)	3.43 x (1+ΔCPI₃)
Sports Special Return	5.80	5.84 x (1+∆CPI₁)	5.92 x (1+ΔCPI ₂)	6.01 x (1+ΔCPI₃)
Concession Fare only ticket				
School Term Pass	46.30	47.01 x (1+ΔCPI ₁)	47.68 x (1+ΔCPI ₂)	48.36 x (1+ΔCPI₃)

^a Children under the age of 4 years are entitled to travel free on all metropolitan and outer metropolitan bus services. **Note:** For the maximum fares for the DayTripper ticket and the Bus, Ferry, and Train Weekly TravelPasses, please refer to IPART Determination No. 5 of 2008. For the maximum fares for the Bus Weekly TravelPasses and the Bus and Ferry Weekly TravelPasses, please refer to IPART Determination No. 8 of 2009.

Sydney Metropolitan and Outer Metropolitan Bus Services (other than TravelPass Services) **IPART** 5

Schedule 2 – Maximum fares for Regulated Bus Services provided by Newcastle Buses

1 Application

This schedule sets the maximum fares for Regulated Bus Services provided by Newcastle Buses.

2 Maximum fares for Regulated Bus Services provided by Newcastle Buses

- (a) The maximum Adult Fare that may be charged by Newcastle Buses for any ticket listed in the first column of Table 2 is:
 - (1) for the 2010 Year, the corresponding fare for that ticket in the second column of Table 2;
 - (2) for the 2011 Year, the corresponding fare for that ticket in the third column of Table 2, rounded in accordance with the Rounding Rule;
 - (3) for the 2012 Year, the corresponding fare for that ticket in the fourth column of Table 2, rounded in accordance with the Rounding Rule; and
 - (4) for the 2013 Year, the corresponding fare for that ticket in the fifth column of Table 2, rounded in accordance with the Rounding Rule.
- (b) The maximum Concession Fare that may be charged by Newcastle Buses for any ticket listed in the first column of Table 2 is 50% of the relevant Adult Fare (calculated in accordance with subclause 2(a) of this schedule), rounded in accordance with the Concession Rounding Rule.

6 IPART Sydney Metropolitan and Outer Metropolitan Bus Services (other than TravelPass Services)

Table 2

Ticket	2010 Year	2011 Year	2012 Year	2013 Year	
	(\$)	(\$)	(\$)	(\$)	
Time-based Tickets					
1-hour duration	3.30	3.34 x (1+ΔCPI ₁)	3.38 x (1+ΔCPI ₂)	3.43 x (1+ΔCPI₃)	
4-hour duration	6.40	6.46 x (1+ΔCPI ₁)	6.55 x (1+ΔCPI ₂)	6.65 x (1+ΔCPI₃)	
23-hour duration	9.80	9.90 x (1+ΔCPI ₁)	10.04 x (1+ΔCPI ₂)	10.19 x (1+ΔCPI₃)	
TimeTen	26.80	27.20 x (1+ΔCPI ₁)	27.59 x (1+ΔCPI ₂)	27.99 x (1+ΔCPI₃)	

^a Children under the age of 4 years are entitled to travel free on all metropolitan and outer metropolitan bus services.
 Note: For the maximum fares for the DayTripper ticket and the Bus, Ferry, and Train Weekly TravelPasses, please refer to IPART Determination No. 5 of 2008. For the maximum fares for the Bus Weekly TravelPasses and the Bus and Ferry Weekly TravelPasses, please refer to IPART Determination No. 8 of 2009.

Sydney Metropolitan and Outer Metropolitan Bus Services (other than TravelPass Services) **IPART** 7

Schedule 3 Maximum fares for Regulated Bus Services provided by Private Bus Operators

1 Application

This schedule sets the maximum fares for Regulated Bus Services provided by Private Bus Operators.

2 Maximum fares for Regulated Bus Services provided by Private Bus Operators

2.1 Tickets listed in Table 3

- (a) The maximum Adult Fare that may be charged by Private Bus Operators for a ticket listed in the first column of Table 3 is:
 - (1) for the 2010 Year, the corresponding fare for that ticket in the second column of Table 3;
 - (2) for the 2011 Year, the corresponding fare for that ticket in the third column of Table 3, rounded in accordance with the Rounding Rule;
 - (3) for the 2012 Year, the corresponding fare for that ticket in the fourth column of Table 3, rounded in accordance with the Rounding Rule; and
 - (4) for the 2013 Year, the corresponding fare for that ticket in the fifth column of Table 3, rounded in accordance with the Rounding Rule.
- (b) The maximum Concession Fare that may be charged by Private Bus Operators for a ticket listed in the first column of Table 3 is 50% of the relevant Adult Fare (calculated in accordance with subclause 2.1(a) of this schedule), rounded in accordance with the Concession Rounding Rule.

8 IPART Sydney Metropolitan and Outer Metropolitan Bus Services (other than TravelPass Services)

Schedule 3 Maximum fares for Regulated Bus Services provided by Private Bus Operators

2.2 Private Bus Weekly

- (a) The maximum Adult Fare that may be charged by Private Bus Operators for a Private Bus Weekly is 8 times the relevant Adult Fare for a Single Ride Ticket (calculated in accordance with subclause 2.1(a) of this schedule)².
- (b) The maximum Concession Fare that may be charged by Private Bus Operators for a Private Bus Weekly is 50% of the relevant Adult Fare for a Private Bus Weekly (calculated in accordance with subclause 2.2(a) of this schedule).

Sydney Metropolitan and Outer Metropolitan Bus Services (other than TravelPass Services) IPART 9

² Assume for the purpose of this example only, for the 2011 Year, the ΔCPI₁ is 0.02, the Adult Fare for a Single Ride Ticket for 1-2 Sections calculated in accordance with subclause 2.1(a) is \$2.00, therefore the Adult Fare for a Private Bus Weekly for 1-2 Sections calculated in accordance with subclause 2.2(a) is \$16.00.

Table 3

Operator				
Ticket	2010 Year (\$)	2011 Year (\$)	2012 Year (\$)	2013 Year (\$)
Single Ride Ticket				
1-2 Sections	2.00	1.98 x (1+ΔCPI₁)	2.01 x (1+ΔCPI ₂)	2.04 x (1+ΔCPI₃)
3-5 Sections	3.30	3.34 x (1+∆CPI₁)	3.38 x (1+ΔCPI ₂)	3.43 x (1+ΔCPI₃)
6-9 Sections	4.30	4.38 x (1+ΔCPI ₁)	4.44 x (1+ΔCPI ₂)	4.50 x (1+ΔCPI₃)
10-15 Sections	5.10	5.21 x (1+ΔCPI ₁)	5.29 x (1+ΔCPI ₂)	5.36 x (1+ΔCPI₃)
16+ Sections	6.30	6.36 x (1+ΔCPI ₁)	6.45 x (1+ΔCPI ₂)	6.54 x (1+ΔCPI₃)

Table 3 Maximum Fares^a for Regulated Bus Services provided by a Private Bus Operator

^a Children under the age of 4 years are entitled to travel free on all metropolitan and outer metropolitan bus services.

10 IPART Sydney Metropolitan and Outer Metropolitan Bus Services (other than TravelPass Services)

Schedule 4 Maximum fares for T-Way Services provided by Western Sydney Buses

1 Application

This schedule sets the maximum fares for T-Way Services provided by Western Sydney Buses.

2 Maximum fares for T-Way Services provided by Western Sydney Buses

2.1 Tickets listed in Table 4

- (a) The maximum Adult Fare that may be charged by Western Sydney Buses for a ticket listed in the first column of Table 4 is:
 - for the 2010 Year, the corresponding fare for that ticket in the second column of Table 4;
 - (2) for the 2011 Year, the corresponding fare for that ticket in the third column of Table 4, rounded in accordance with the Rounding Rule;
 - (3) for the 2012 Year, the corresponding fare for that ticket in the fourth column of Table 4, rounded in accordance with the Rounding Rule; and
 - (4) for the 2013 Year, the corresponding fare for that ticket in the fifth column of Table 4, rounded in accordance with the Rounding Rule.
- (b) The maximum Concession Fare that may be charged by Western Sydney Buses for a ticket listed in the first column of Table 4 is 50% of the relevant Adult Fare (calculated in accordance with subclause 2.1(a) of this schedule), rounded in accordance with the Concession Rounding Rule.

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Schedule 4 Maximum fares for T-Way Services provided by Western Sydney Buses

2.2 T-WayTen

- (a) The maximum Adult Fare that may be charged by Western Sydney Buses for a T-WayTen is 8 times the relevant Adult Fare for a Single Ride Ticket (calculated in accordance with subclause 2.1(a) of this schedule)³.
- (b) The maximum Concession Fare that may be charged by Western Sydney Buses for a T-WayTen is 50% of the relevant Adult Fare for a T-WayTen (calculated in accordance with subclause 2.2(a) of this schedule).

³ Assume for the purpose of this example only, for the 2011 Year, the ΔCPI₁ is 0.02, the Adult Fare for a Single Ride Ticket for 1-2 Sections calculated in accordance with subclause 2.1(a) is \$2.00, therefore the Adult Fare for a T-WayTen for 1-2 Sections calculated in accordance with subclause 2.2(a) is \$16.00.

¹² IPART Sydney Metropolitan and Outer Metropolitan Bus Services (other than TravelPass Services)

Table 4

Ticket	2010 Year (\$)	2011 Year (\$)	2012 Year (\$)	2013 Year (\$)
Single Ride Ticket				
1-2 Sections	2.00	1.98 x (1+ΔCPI ₁)	2.01 x (1+ΔCPI ₂)	2.04 x (1+∆CPI₃)
3-5 Sections	3.30	3.34 x (1+ΔCPI ₁)	3.38 x (1+ΔCPI ₂)	3.43 x (1+ΔCPI₃)
6-9 Sections	4.30	4.38 x (1+ΔCPI ₁)	4.44 x (1+ΔCPI ₂)	4.50 x (1+ΔCPI₃)
10-15 Sections	5.10	5.21 x (1+ΔCPI ₁)	5.29 x (1+ΔCPI ₂)	5.36 x (1+ΔCPI₃)
16+ Sections	6.30	6.36 x (1+ΔCPI ₁)	6.45 x (1+ΔCPI ₂)	6.54 x (1+ΔCPI₃)
T-Way BusPlus Weekly				
1-2 Sections	14.80	15.01 x (1+ΔCPI ₁)	15.22 x (1+ΔCPI ₂)	15.44 x (1+ΔCPI₃)
3-5 Sections	27.40	27.83 x (1+ΔCPI ₁)	28.23 x (1+ΔCPI ₂)	28.63 x (1+ΔCPI₃)
6-9 Sections	39.00	39.61 x (1+ΔCPI ₁)	40.17 x (1+ΔCPI ₂)	40.75 x (1+∆CPI₃)
10-15 Sections	56.10	56.91 x (1+ΔCPI ₁)	57.72 x (1+ΔCPI ₂)	58.55 x (1+ΔCPI₃)
16+ Sections	71.20	72.23 x (1+ΔCPI ₁)	73.26 x (1+ΔCPI ₂)	74.31 x (1+ΔCPI₃)
T-Way Weekly				
North Zone	39.00	39.61 x (1+ΔCPI ₁)	40.17 x (1+ΔCPI ₂)	40.75 x (1+ΔCPI₃)
South Zone	39.00	39.61 x (1+ΔCPI ₁)	40.17 x (1+ΔCPI ₂)	40.75 x (1+ΔCPI₃)
North & South Zones	71.20	72.23 x (1+ΔCPI₁)	73.26 x (1+ΔCPI ₂)	74.31 x (1+ΔCPI₃)

Table 4 Maximum Fares^a for T-Way Services provided by Western Sydney Buses

Sydney Metropolitan and Outer Metropolitan Bus Services (other than TravelPass Services) **IPART** 13

1 Definitions

1.1 General definitions

In this determination:

2010 Commencement Date means the 2010 Commencement Date defined in clause 2(b) (Application of this determination) of the Preliminary section of this determination.

2011 Commencement Date means 1 January 2011 or such other date as specified by IPART.

2012 Commencement Date means 1 January 2012 or such other date as specified by IPART.

2013 Commencement Date means 1 January 2013 or such other date as specified by IPART.

2010 Termination Date means the date that is a day before the 2011 Commencement Date.

2011 Termination Date means the date that is a day before the 2012 Commencement Date.

2012 Termination Date means the date that is a day before the 2013 Commencement Date.

2013 Termination Date means the date that is a day before this determination is replaced.

2010 Year means the period commencing on the 2010 Commencement Date and ending on the 2010 Termination Date.

2011 Year means the period commencing on the 2011 Commencement Date and ending on the 2011 Termination Date.

2012 Year means the period commencing on the 2012 Commencement Date and ending on the 2012 Termination Date.

2013 Year means the period commencing on the 2013 Commencement Date and ending on the 2013 Termination Date.

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Adult Fare means the maximum fare that may be charged to a person who is aged 16 years or over.

Bus Service Contract means a contract with the Director-General of NSW Transport and Infrastructure under Division 3 of Part 3 of the Passenger Transport Act for the provision of a Regular Bus Service in a Contract Region.

BusTripper means a ticket that permits unlimited travel on all Sydney Bus Services until 4 am on:

- (a) the following day, where the ticket is purchased before midnight; or
- (b) the day of purchase, where the ticket is purchased on or after midnight.

Concession Fare means the maximum fare that may be charged to a person who:

- (a) is aged between 4 and 15 years; or
- (b) is aged 16 years or over and is the holder of a valid concession card of a type that has been approved by NSW Transport and Infrastructure.

Concession Rounding Rule means the rule for rounding concession ticket prices set out in clause 1.4 of Schedule 5 of this determination.

Contract Region means either an Outer Metro Bus Contract Region or a Metro Bus Contract Region.

Contract Region Map means the map attached as Appendix A to this determination.

GST means the Goods and Services Tax as defined in *A New Tax System* (*Goods and Services Tax*) *Act* 1999 (Cth).

IPART means the Independent Pricing and Regulatory Tribunal of New South Wales established under the IPART Act.

IPART Act means the *Independent Pricing and Regulatory Tribunal Act* 1992 (NSW).

Metro Bus Contract Regions means the regions numbered 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14 and 15 and labelled "Metro Bus Contract/Region" in the Contract Region Map.

Ministry of Transport means the New South Wales government department of that name which had primary responsibility for transport policy, planning and coordination prior to the formation of NSW Transport and Infrastructure.

Newcastle Bus Services means the bus services provided by Newcastle Buses.

Sydney Metropolitan and Outer Metropolitan Bus Services (other than TravelPass Services) IPART | 15

Newcastle Buses means the Newcastle Buses business owned and operated by the STA.

North Zone means that part of the T-Way between Prairiewood and Parramatta as indicated on the T-Way Map.

NSW Transport and Infrastructure means the New South Wales government department of that name established on 1 July 2009 with primary responsibility for transport policy, planning and coordination and includes a reference to the Ministry of Transport.

Outer Metro Bus Contract Regions means the regions numbered 1, 2, 3, 4, 5, 6, 7, 8, 9 and 10 and labelled "Outer Metro Bus Contract/Region" in the Contract Region Map.

Passenger Transport Act means the Passenger Transport Act 1990 (NSW).

Private Bus Operator means a bus operator (other than Sydney Buses, Newcastle Buses and Western Sydney Buses) who holds a Bus Service Contract.

Private Bus Weekly means a ticket that permits unlimited weekly travel within a specified number of Sections to and from a particular destination on the bus route specified on the ticket. Private Bus Weekly are available on services provided by the following Private Bus Operators, as amended from time to time: Hillsbus, Westbus, Busways, Veolia, Punchbowl Bus Co, Forest Coach Lines, Hopkinsons Metrobus, Crowthers Buslink, Maianbar and Bundeena Bus Service.

Regular Bus Service has the meaning given to that term in the Passenger Transport Act.

Regulated Bus Services means the services defined in clause 1.1(a) of the section of this determination entitled "Preliminary".

Rounding Rule means the rule for rounding ticket prices set out in clause 1.3 of Schedule 5 of this determination.

School Term Pass means a ticket that permits a school student to undertake unlimited travel by bus on a direct route between his or her home and school.

Section means a distance of approximately 1.6 kilometres into which a bus route is divided up for ticketing purposes.

Single Ride Ticket means a ticket that permits a single bus trip for a specified number of Sections.

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South Zone means that part of the T-Way between Prairiewood and Liverpool as indicated on the T-Way Map.

Sports Special Return means a ticket that permits return travel from key locations to and from a venue for events determined by Sydney Buses.

Sports Special Single means a ticket that permits travel one-way between key locations and a venue for events determined by Sydney Buses.

STA means the State Transit Authority of New South Wales constituted under the *Transport Administration Act 1988* (NSW).

Sydney Bus Services means the bus services provided by Sydney Buses.

Sydney Buses means the Sydney Buses business owned and operated by the STA.

Sydney Ferries means Sydney Ferries as constituted under the *Transport Administration Act* 1988 (NSW).

Sydney Ferries Services means the ferry services provided by Sydney Ferries.

Time-based Ticket means a ticket that permits unlimited travel on Newcastle Bus Services for a duration specified on the ticket.

TimeTen means a ticket that permits ten trips on Newcastle Bus Services, each trip allowing unlimited travel for a duration of up to one hour.

TravelTen means a ticket that permits 10 bus trips on Sydney Bus Services for a specified number of Sections.

T-Way means the rapid bus transitway that runs from Liverpool to Parramatta.

T-Way BusPlus Weekly means a ticket that permits unlimited weekly bus travel on the T-Way Services between specified start and finish points, when used in combination with CityRail services.

T-Way Map means the map attached as Appendix B to this determination.

T-Way Services means the rapid bus transitway services running on the T-Way.

T-WayTen means a ticket that permits 10 bus trips on T-Way Services for a specified number of Sections.

T-Way Weekly means a ticket that permits unlimited weekly bus travel on the T-Way Services for the zone(s) specified on the ticket.

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Western Sydney Buses means the body corporate constituted under section 33 of the *Transport Administration Act 1988* by the *Transport Administration (General) Amendment (Western Sydney Buses) Regulation 2002* and the *Transport Administration (General) Regulation 2005* to operate the T-Way Services.

1.2 Consumer Price Index

(a) CPI means the consumer price index All Groups index number for the, weighted average of eight capital cities, published by the Australian Bureau of Statistics, or if the Australian Bureau of Statistics does not or ceases to publish the index, then CPI will mean an index determined by IPART.

(b)
$$\Delta CPI_1 = \left(\frac{CPI_{Sep2010}}{CPI_{Sep2009}}\right) - 1$$

$$\Delta \text{CPI}_2 = \left(\frac{CPI_{Sep2011}}{CPI_{Sep2009}}\right) - 1$$

$$\Delta CPI_{3} = \left(\frac{CPI_{Sep2012}}{CPI_{Sep2009}}\right) - 1$$

each as calculated and notified by IPART.

(c) The subtext (for example CPI_{Sep 2009}) when used in relation to paragraph
 (b) above means the CPI for the September quarter in year 2009.

1.3 Rounding Rule

- (a) Where the Rounding Rule is specified to apply, an amount should be rounded to the nearest 10 cents.
- (b) For the avoidance of doubt, if an unrounded ticket price is equal to \$Y and 5*Z cents (where Z is equal to 1, 3, 5, 7, 9, 11, 13, 15, 17 or 19), then the rounded ticket price for that ticket will be \$Y and 5*(Z + 1) cents.

1.4 Concession Rounding Rule

- (a) Where the Concession Rounding Rule is specified to apply, an amount should be rounded down to the nearest 10 cents.
- (b) For the avoidance of doubt, if an unrounded ticket price is equal to \$Y and 5*Z cents (where Z is equal to 1, 3, 5, 7, 9, 11, 13, 15, 17 or 19), then the rounded ticket price for that ticket will be \$Y and 5*(Z 1) cents.

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2 Interpretation

2.1 General provisions

In this determination:

- (a) headings are for convenience only and do not affect the interpretation of this determination;
- (b) a reference to a schedule, annexure, clause or table is a reference to a schedule, annexure, clause or table in this determination;
- (c) words importing the singular include the plural and vice versa;
- (d) a reference to a law or statute includes all amendments or replacements of that law or statute;
- (e) a reference to a person includes a company, partnership, joint venture, association, corporation, other body corporate or government agency;
- (f) a reference to an officer includes a reference to the officer who replaces him or her, or who substantially succeeds to his or her powers or functions; and
- (g) a reference to a body, whether statutory or not:
 - (1) which ceases to exist; or
 - (2) whose powers or functions are transferred to another body,

is a reference to the body which replaces it or which substantially succeeds to its powers or functions.

2.2 Explanatory notes and clarification notice

- (a) Explanatory notes do not form part of this determination, but in the case of uncertainty may be relied on for interpretation purposes.
- (b) IPART may publish a clarification notice in the NSW Government Gazette to correct any manifest error in this determination as if that clarification notice formed part of this determination.

2.3 Fares inclusive of GST

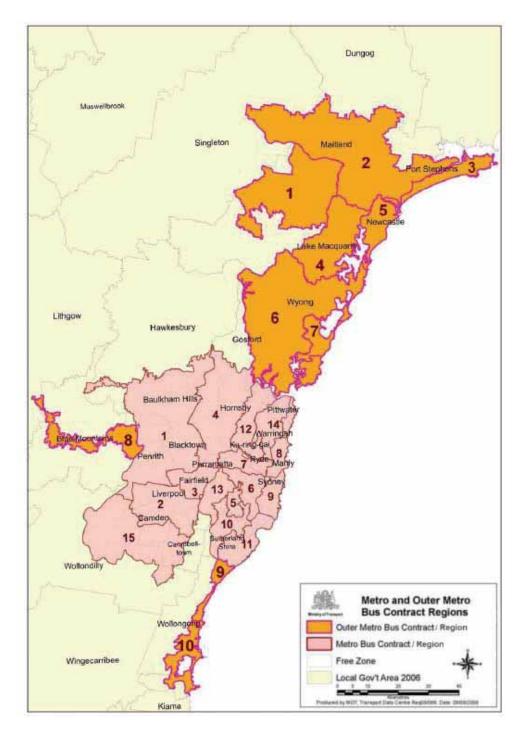
Fares specified in this determination include GST.

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Appendices

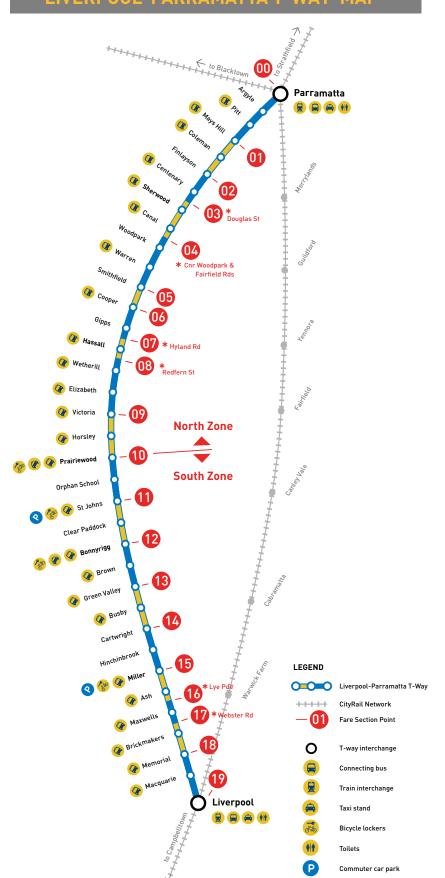
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B T-Way Map

Sydney Metropolitan and Outer Metropolitan Bus Services (other than TravelPass Services) IPART 25



LIVERPOOL-PARRAMATTA T-WAY MAP

Independent Pricing and Regulatory Tribunal

TravelPass Services – Sydney Buses, Newcastle Buses and Sydney Ferries

Determination No 8, 2009

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TravelPass Services – Sydney Buses, Newcastle Buses and Sydney Ferries **IPART iii**

Preliminary

1 Background

1.1 Sydney Buses and Newcastle Buses under the Passenger Transport Act

- (a) Section 28J(2) of Passenger Transport Act 1990 (NSW) (the Passenger Transport Act) permits IPART to conduct investigations and make reports to the Minister on the determination of the maximum fares for Regular Bus Services supplied under a Bus Service Contract. The Regular Bus Services provided by Sydney Buses and Newcastle Buses include TravelPass Services.
- (b) In making this determination, IPART has had regard to a broad range of matters, including the criteria set out in section 28J(5) of the Passenger Transport Act.

1.2 Sydney Ferries under the IPART Act

- (a) Section 11 of the *Independent Pricing and Regulatory Tribunal Act* 1992 (IPART Act) provides IPART with a standing reference to conduct investigations and make reports to the Minister on the determination of the pricing for a government monopoly service supplied by a government agency specified in Schedule 1 of the IPART Act.
- (b) Sydney Ferries (Sydney Ferries) is listed as a government agency for the purposes of Schedule 1 of the IPART Act. The services of Sydney Ferries declared as monopoly services under the *Independent Pricing and Regulatory Tribunal (Passenger Transport Services) Order 1998* are regular passenger services (within the meaning of the Passenger Transport Act) provided by Sydney Ferries, excluding services supplied in accordance with the ticket known as the "SydneyPass".

[Note: The Order applies to Sydney Ferries by operation of clause 135, Schedule 7 of the *Transport Administration Act* 1988]

- (c) The declared monopoly services include the TravelPass Services. Accordingly, IPART may determine the maximum prices for the TravelPass Services.
- (d) IPART has fixed a maximum price for the TravelPass Services. In making this determination, IPART has had regard to a broad range of matters, including the criteria set out in section 15(1) of the IPART Act.
- (e) By section 18(2) of the IPART Act, Sydney Ferries may not fix a price below that determined by IPART without the approval of the Treasurer.

TravelPass Services – Sydney Buses, Newcastle Buses and Sydney Ferries **IPART** | 1

Preliminary

2 Application of this determination

This determination:

- (a) sets the maximum fares for TravelPass Services;
- (b) commences on the later of 3 January 2010 and the date that it is published in the NSW Government Gazette (**2010 Commencement Date**); and
- (c) applies from the 2010 Commencement Date to the 2013 Termination Date.

3 Replacement of Determination No. 7 of 2008

(a) From the 2010 Commencement Date, this determination replaces:

- (1) that part of Schedule 1 of Determination No. 7 of 2008 which relates to bus travelpasses and bus and ferry travelpasses; and
- (2) that part of Schedule 2 of Determination No. 7 of 2008 which relates to travelpasses.
- (b) The replacement in this clause 3 does not affect anything done or omitted to be done, or rights or obligations accrued, under that part of Determination No. 7 of 2008 listed in clause 3(a) above.

4 Schedules

- (a) Schedule 1 and the table in that schedule set out the maximum prices that may be charged for Bus TravelPass Services.
- (b) Schedule 2 and the tables in that schedule set out the maximum prices that may be charged for Bus and Ferry TravelPass Services.
- (c) Schedule 3 sets out definitions and interpretation provisions.

2 IPART TravelPass Services – Sydney Buses, Newcastle Buses and Sydney Ferries

Schedule 1 Maximum prices for Bus TravelPass Services

1 Application

This schedule sets the maximum fares for Bus TravelPass Services provided by Sydney Buses.

2 Maximum fares for Bus TravelPass Services by Sydney Buses

- (a) The maximum Adult Fare that may be charged by Sydney Buses for the ticket listed in the first column of Table 1 is:
 - (1) for the 2010 Year, the corresponding fare for that ticket in the second column of Table 1;
 - (2) for the 2011 Year, the corresponding fare for that ticket in the third column of Table 1, rounded in accordance with the TravelPass Rounding Rule;
 - (3) for the 2012 Year, the corresponding fare for that ticket in the fourth column of Table 1, rounded in accordance with the TravelPass Rounding Rule; and
 - (4) for the 2013 Year, the corresponding fare for that ticket in the fifth column of Table 1, rounded in accordance with the TravelPass Rounding Rule.
- (b) The maximum Concession Fare that may be charged by Sydney Buses for any ticket listed in the first column of Table 1 is 50% of the relevant Adult Fare (calculated in accordance with subclause 2(a) above).

TravelPass Services – Sydney Buses, Newcastle Buses and Sydney Ferries IPART 3

Table 1

Ticket	2010 Year (\$)	2011 Year (\$)	2012 Year (\$)	2013 Year (\$)
Bus TravelPass [♭]				
Two-Zone Bus TravelPass	35.00	35.44 x (1+ΔCPI ₁)	35.94 x (1+ΔCPl ₂)	36.46 x (1+ΔCPI₃)

a Children under the age of 4 years are entitled to travel free on all metropolitan and outer metropolitan bus services.

b Quarterly TravelPass = 11 x fare for the relevant TravelPass calculated in accordance with clause 2 of this schedule. Yearly TravelPass = 40 x fare for the relevant TravelPass calculated in accordance with clause 2 of this schedule. For the maximum fares for the DayTripper ticket and the Bus, Ferry, and Train Weekly TravelPasses, please refer to IPART Determination No. 5 of 2008. For the maximum fares for the other Regular Bus Services provided by Sydney Buses, please refer to IPART Determination No. 7 of 2009.

4 IPART TravelPass Services – Sydney Buses, Newcastle Buses and Sydney Ferries

Schedule 2 Maximum prices for Bus and Ferry TravelPass Services

1 Application

This schedule sets the maximum prices for Bus and Ferry TravelPass Services provided by Sydney Buses, Sydney Ferries and Newcastle Buses.

2 Maximum prices for Bus and Ferry TravelPass Services by Sydney Buses and Sydney Ferries

- (a) The maximum Adult Fare that may be charged by Sydney Buses and Sydney Ferries for a ticket listed in the first column of Table 2 is:
 - (1) for the 2010 Year, the corresponding fare for that ticket in the second column of Table 2;
 - (2) for the 2011 Year, the corresponding fare for that ticket in the third column of Table 2, rounded in accordance with the TravelPass Rounding Rule;
 - (3) for the 2012 Year, the corresponding fare for that ticket in the fourth column of Table 2, rounded in accordance with the TravelPass Rounding Rule; and
 - (4) for the 2013 Year, the corresponding fare for that ticket in the fifth column of Table 2, rounded in accordance with the TravelPass Rounding Rule.
- (b) The maximum Concession Fare that may be charged by Sydney Buses for any ticket listed in the first column of Table 2 is 50% of the relevant Adult Fare (calculated in accordance with subclause 2(a) above).

3 Maximum prices for Bus and Ferry TravelPass Services by Newcastle Buses

- (a) The maximum Adult Fare that may be charged by Newcastle Buses for a ticket listed in the first column of Table 3 is:
 - (1) for the 2010 Year, the corresponding fare for that ticket in the second column of Table 3;
 - (2) for the 2011 Year, the corresponding fare for that ticket in the third column of Table 3, rounded in accordance with the TravelPass Rounding Rule;

TravelPass Services – Sydney Buses, Newcastle Buses and Sydney Ferries **IPART** 5

Schedule 2 Maximum prices for Bus and Ferry TravelPass Services

- (3) for the 2012 Year, the corresponding fare for that ticket in the fourth column of Table 3, rounded in accordance with the TravelPass Rounding Rule; and
- (4) for the 2013 Year, the corresponding fare for that ticket in the fifth column of Table 3, rounded in accordance with the TravelPass Rounding Rule.
- (b) The maximum Concession Fare that may be charged by Newcastle Buses for any ticket listed in the first column of Table 3 is 50% of the relevant Adult Fare (calculated in accordance with subclause 3(a) above).

6 IPART TravelPass Services – Sydney Buses, Newcastle Buses and Sydney Ferries

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Tables 2 and 3

Table 2 Maximum Fares^a for Bus and Ferry TravelPasses provided by Sydney Buses and Sydney Ferries

Ticket	2010 Year (\$)	2011 Year (\$)	2012 Year (\$)	2013 Year (\$)
Bus and Ferry Trave	elPass⁵			
Blue Bus and Ferry TravelPass	35.00	35.44 x (1+ΔCPI₁)	35.94 x (1+ΔCPI₂)	36.46 x (1+ΔCPI₃)
Orange Bus and Ferry TravelPass	44.00	44.82 x (1+ΔCPI ₁)	45.46 x (1+ΔCPI₂)	46.11 x (1+ΔCPI₃)
Pittwater Bus and Ferry TravelPass	60.00	60.45 x (1+∆CPI₁)	61.32 x (1+ΔCPI ₂)	62.20 x (1+ΔCPI₃)

a Children under the age of 4 years are entitled to travel free on all metropolitan and outer metropolitan bus services.

b Quarterly TravelPass = 11 x fare for the relevant TravelPass calculated in accordance with clause 2 of this schedule. Yearly TravelPass = 40 x fare for the relevant TravelPass calculated in accordance with clause 2 of this schedule. For the maximum fares for the DayTripper ticket and the Bus, Ferry, and Train Weekly TravelPasses, please refer to IPART Determination No. 5 of 2008.

Table 3	Maximum Fares ^a for	TravelPasses provided	by Newcastle Buses
---------	---------------------------------------	-----------------------	--------------------

Ticket	2010 Year	2011 Year	2012 Year	2013 Year
	(\$)	(\$)	(\$)	(\$)
TravelPass⁵				
Newcastle Orange				
TravelPass	35.00	35.44 x (1+∆CPI₁)	35.94 x (1+∆CPI₂)	36.46 x (1+∆CPI₃)

b Quarterly TravelPass = 11 x fare for the relevant TravelPass calculated in accordance with clause 3 of this schedule. Yearly TravelPass = 40 x fare for the relevant TravelPass calculated in accordance with clause 3 of this schedule. For the maximum fares for the Bus, Ferry, and Train Weekly TravelPasses for Newcastle, please refer to IPART Determination No. 5 of 2008.

TravelPass Services – Sydney Buses, Newcastle Buses and Sydney Ferries **IPART** 7

1 Definitions

1.1 General definitions

In this determination:

2010 Commencement Date means the 2010 Commencement Date defined in clause 2(b) (Application of this determination) of the Preliminary section of this determination.

2011 Commencement Date means 1 January 2011 or such other date as specified by IPART.

2012 Commencement Date means 1 January 2012 or such other date as specified by IPART.

2013 Commencement Date means 1 January 2013 or such other date as specified by IPART.

2010 Termination Date means the date that is a day before the 2011 Commencement Date.

2011 Termination Date means the date that is a day before the 2012 Commencement Date.

2012 Termination Date means the date that is a day before the 2013 Commencement Date.

2013 Termination Date means the date that is a day before this determination is replaced.

2010 Year means the period commencing on the 2010 Commencement Date and ending on the 2010 Termination Date.

2011 Year means the period commencing on the 2011 Commencement Date and ending on the 2011 Termination Date.

2012 Year means the period commencing on the 2012 Commencement Date and ending on the 2012 Termination Date.

2013 Year means the period commencing on the 2013 Commencement Date and ending on the 2013 Termination Date.

8 IPART TravelPass Services – Sydney Buses, Newcastle Buses and Sydney Ferries

Adult Fare means the maximum fare that may be charged to a person who is aged 16 years or over.

Blue Bus and Ferry TravelPass means a weekly ticket that permits:

- (a) unlimited travel on Sydney Bus Services in the areas highlighted in red in the Sydney Buses TravelPass Map; and
- (b) unlimited travel on Sydney Ferries Services highlighted in red in the Sydney Ferries TravelPass Map,

for the period specified on the ticket.

Bus and Ferry TravelPass means either:

- (a) a ticket that permits travel on Sydney Bus Services in a specified area and specified Sydney Ferry Services for a period specified on the ticket; or
- (b) a Newcastle Orange TravelPass.

Bus and Ferry TravelPass Services means either:

- (a) the Sydney Bus Services and the Sydney Ferries Services provided under a Bus and Ferry TravelPass; or
- (b) the Newcastle Bus Services and the Stockton Ferry Service provided under a Bus and Ferry TravelPass.

Bus Service Contract means a contract with the Director-General of NSW Transport and Infrastructure under Division 3 of Part 3 of the Passenger Transport Act for the provision of a Regular Bus Service in a Contract Region.

Bus TravelPass means a ticket that permits travel on Sydney Bus Services in a specified area for a period specified on the ticket.

Bus TravelPass Services means the Sydney Bus Services provided under a Bus TravelPass.

Concession Fare means the maximum fare that may be charged to a person who:

- (a) is aged between 4 and 15 years; or
- (b) is aged 16 years or over and is the holder of a valid concession card of a type that has been approved by NSW Transport and Infrastructure.

Contract Region means either an Outer Metro Bus Contract Region or a Metro Bus Contract Region.

Contract Region Map means the map attached as Appendix C to this determination.

TravelPass Services – Sydney Buses, Newcastle Buses and Sydney Ferries **IPART** 9

GST means the Goods and Services Tax as defined in *A New Tax System* (Goods and Services Tax) Act 1999 (Cth).

IPART means the Independent Pricing and Regulatory Tribunal of New South Wales established under the IPART Act.

IPART Act means the *Independent Pricing and Regulatory Tribunal Act* 1992 (NSW).

Metro Bus Contract Regions means the regions numbered 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14 and 15 and labelled "Metro Bus Contract/Region" in the Contract Region Map.

Ministry of Transport means the New South Wales government department of that name which had primary responsibility for transport policy, planning and coordination prior to the formation of NSW Transport and Infrastructure.

Newcastle Buses means the Newcastle Buses business owned and operated by the STA.

Newcastle Bus Services means the bus services provided by Newcastle Buses.

Newcastle Orange TravelPass means a weekly ticket that permits:

- (a) unlimited travel on all Newcastle Bus Services; and
- (b) unlimited travel on the Stockton Ferry Service,

for the period specified on the ticket.

NSW Transport and Infrastructure means the New South Wales government department of that name established on 1 July 2009 with primary responsibility for transport policy, planning and coordination and includes a reference to the Ministry of Transport.

Orange Bus and Ferry TravelPass means a weekly ticket that permits:

- (a) unlimited travel on Sydney Bus Services in the areas highlighted in red and green in the Sydney Buses TravelPass Map; and
- (b) unlimited travel on all Sydney Ferries Services (excluding harbour cruises or special event services) highlighted in red or green in the Sydney Ferries TravelPass Map,

for the period specified on the ticket.

Passenger Transport Act means the Passenger Transport Act 1990 (NSW).

Pittwater Bus and Ferry TravelPass means a weekly ticket that permits:

10 IPART TravelPass Services – Sydney Buses, Newcastle Buses and Sydney Ferries

- (a) unlimited travel on Sydney Bus Services in the areas highlighted in red, green and purple in the Sydney Buses TravelPass map; and
- (b) unlimited travel on all Sydney Ferries Services (excluding harbour cruises or special event services) highlighted in red or green in the Sydney Ferries TravelPass Map,

for the period specified on the ticket.

Quarterly TravelPass means a ticket that permits travel on specified services in a specified area over a period of three months.

Regular Bus Service has the meaning given to that term in the Passenger Transport Act.

STA means the State Transit Authority of New South Wales constituted under the *Transport Administration Act 1988* (NSW).

Stockton Ferry Service means the ferry service provided by the Newcastle Buses between Stockton and Newcastle.

Sydney Bus Services means the bus services provided by Sydney Buses.

Sydney Buses means the Sydney Buses business owned and operated by the STA.

Sydney Buses TravelPass Map means the map attached as Appendix A to this determination.

Sydney Bus Zones means the zones set out in the Sydney Buses TravelPass Map.

Sydney Ferries means Sydney Ferries as constituted under the *Transport Administration Act* 1988 (NSW).

Sydney Ferries Services means the ferry services provided by Sydney Ferries.

Sydney Ferries TravelPass Map means the map attached as Appendix B to this determination.

TravelPass means a ticket that permits travel on specified services in a specified area for a period specified on the ticket.

TravelPass Rounding Rule means the rule for rounding TravelPass ticket prices set out in clause 1.3 of Schedule 3 of this determination.

TravelPass Services means the Bus TravelPass Services and/or the Bus and Ferry TravelPass Services.

TravelPass Services – Sydney Buses, Newcastle Buses and Sydney Ferries **IPART** 11

Two-Zone Bus TravelPass means a TravelPass that permits unlimited travel on Sydney Bus Services within and between adjacent Sydney Bus Zones in the Sydney metropolitan area (excluding Zone 1) for the period specified on the ticket.

Yearly TravelPass means a ticket that permits travel on specified services in a specified area over a period of one year.

1.2 Consumer Price Index

(a) CPI means the consumer price index All Groups index number for the, weighted average of eight capital cities, published by the Australian Bureau of Statistics, or if the Australian Bureau of Statistics does not or ceases to publish the index, then CPI will mean an index determined by IPART.

(b)
$$\Delta CPI_1 = \left(\frac{CPI_{Sep2010}}{CPI_{Sep2009}}\right) - 1$$

$$\Delta CPI_2 = \left(\frac{CPI_{Sep2011}}{CPI_{Sep2009}}\right) - 1$$

$$\Delta CPI_{3} = \left(\frac{CPI_{Sep2012}}{CPI_{Sep2009}}\right) - 1$$

each as calculated and notified by IPART.

(c) The subtext (for example CPI_{Sep 2009}) when used in relation to paragraph
 (b) above means the CPI for the September quarter in year 2009.

1.3 TravelPass Rounding Rule

- (a) Where the TravelPass Rounding Rule is specified to apply, an amount should be rounded to the nearest dollar.
- (b) For the avoidance of doubt, if an unrounded ticket price is equal to \$Y and 50 cents, then the rounded ticket price for that ticket will be \$(Y+1).

12 IPART TravelPass Services – Sydney Buses, Newcastle Buses and Sydney Ferries

Schedule 3 Definitions and interpretation

2 Interpretation

2.1 General provisions

In this determination:

- (a) headings are for convenience only and do not affect the interpretation of this determination;
- (b) a reference to a schedule, annexure, clause or table is a reference to a schedule, annexure, clause or table in this determination;
- (c) words importing the singular include the plural and vice versa;
- (d) a reference to a law or statute includes all amendments or replacements of that law or statute;
- (e) a reference to a person includes a company, partnership, joint venture, association, corporation, other body corporate or government agency;
- (f) a reference to an officer includes a reference to the officer who replaces him or her, or who substantially succeeds to his or her powers or functions; and
- (g) a reference to a body, whether statutory or not:
 - (1) which ceases to exist; or
 - (2) whose powers or functions are transferred to another body,

is a reference to the body which replaces it or which substantially succeeds to its powers or functions.

2.2 Explanatory notes and clarification notice

- (a) Explanatory notes do not form part of this determination, but in the case of uncertainty may be relied on for interpretation purposes.
- (b) IPART may publish a clarification notice in the NSW Government Gazette to correct any manifest error in this determination as if that clarification notice formed part of this determination.

2.3 Fares inclusive of GST

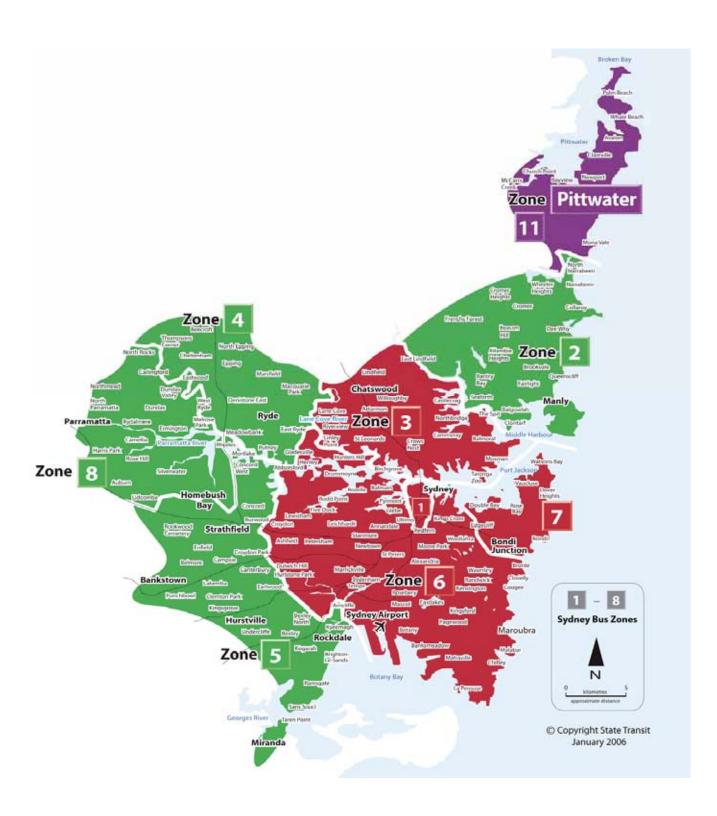
Fares specified in this determination include GST.

TravelPass Services – Sydney Buses, Newcastle Buses and Sydney Ferries IPART | 13

Appendices

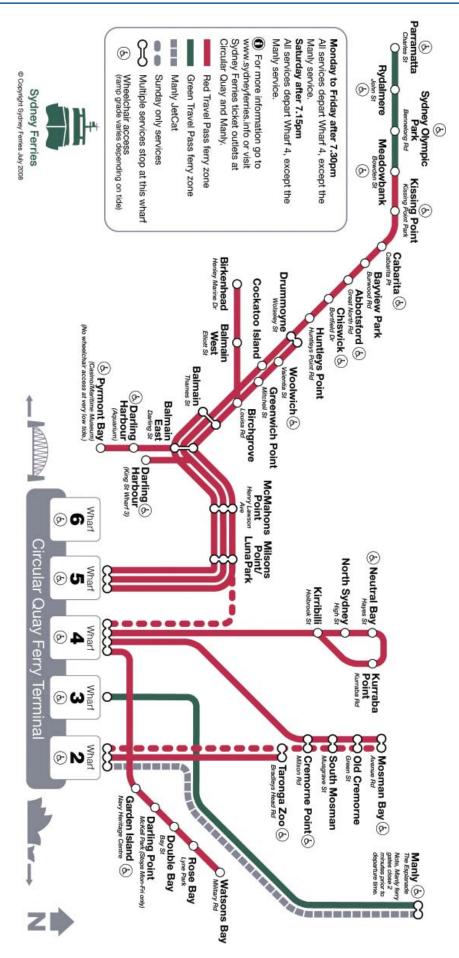
A Sydney Buses TravelPass Map

TravelPass Services – Sydney Buses, Newcastle Buses and Sydney Ferries **IPART 17**



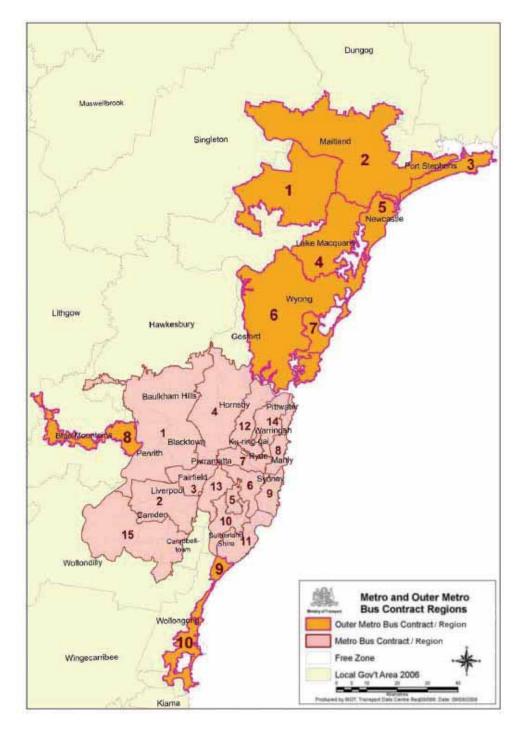
B Sydney Ferries TravelPass Map

TravelPass Services – Sydney Buses, Newcastle Buses and Sydney Ferries **IPART** 19



C Contract Region Map

TravelPass Services – Sydney Buses, Newcastle Buses and Sydney Ferries **IPART** 21



NEW SOUTH WALES GOVERNMENT GAZETTE No. 207



Independent Pricing and Regulatory Tribunal

Stockton Ferry Service

Determination No. 9, 2009

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Stockton Ferry Service IPART iii

Preliminary

1 Background

- (a) The Newcastle Buses and Ferries Services division of the STA provides a ferry service in Newcastle (**Stockton Ferry Service**).
- (b) Section 11 of the IPART Act provides IPART with a standing reference to conduct investigations and make reports to the Minister on the determination of the pricing of a government monopoly service supplied by a government agency specified in Schedule 1 of the IPART Act.
- (c) The STA is listed as a government agency for the purposes of Schedule 1 of the IPART Act. The services of the STA declared as monopoly services (Monopoly Services) under the Independent Pricing and Regulatory Tribunal (Passenger Transport Services) Order 1998 are the regular passenger services (within the meaning of the Passenger Transport Act 1990) supplied by the STA but excluding the following:
 - services supplied in accordance with the ticket known as the "Sydney Pass";
 - (2) the bus service known as the "Airport Express"; and
 - (3) the bus service known as the "Sydney Explorer", the bus service known as the "Bondi & Bay Explorer" and any other similar bus services operating in any other areas.
- (d) The Monopoly Services include the Stockton Ferry Service. Accordingly, IPART may determine maximum prices for the Stockton Ferry Service.
- (e) In accordance with section 13A of the IPART Act, IPART has fixed the maximum price for the Stockton Ferry Service.
- (f) In investigating and reporting on the pricing of the Stockton Ferry Service, IPART has had regard to a broad range of matters, including the criteria set out in section 15(1) of the IPART Act.
- (g) By section 18(2) of the IPART Act, the STA may not fix a price below that determined by IPART for the Stockton Ferry Service without the approval of the Treasurer.

Stockton Ferry Service IPART 1

Preliminary

2 Application of this determination

This determination:

- (a) fixes the maximum prices that the STA may charge for the Stockton Ferry Service;
- (b) commences on the later of 3 January 2010 and the date that it is published in the NSW Government Gazette (**Commencement Date**); and
- (c) applies from the Commencement Date to the date on which this determination is replaced.

3 Replacement of Determination No. 6 of 2008

This determination replaces Determination No. 6 of 2008 from the Commencement Date. The replacement does not affect anything done or omitted to be done, or rights or obligations accrued, under Determination No. 6 of 2008 prior to its replacement.

4 Schedules

- (a) The maximum prices that the STA may charge for the Stockton Ferry Service are set out in Table 1 in Schedule 1.
- (b) Definitions and interpretation provisions used in this determination are set out in Schedule 2.

2 IPART Stockton Ferry Service

Schedule 1 - Maximum prices

1 Application

This schedule sets the maximum prices that the STA may charge for the Stockton Ferry Service.

2 Maximum prices for the Stockton Ferry Service

The maximum prices that may be charged by the STA for the Stockton Ferry Service are set out in Table 1.

Table 1 Maximum prices for the Stockton Ferry Service^a

Ticket	Adult Fare (\$)	Concession Fare (\$)
Stockton Ferry - single ticket	2.30	1.10

a Children aged below 4 years are entitled to travel free on the Stockton Ferry Service.

Stockton Ferry Service IPART 3

Schedule 2 - Definitions and interpretation

1 Definitions

In this determination:

Adult Fare means the fare payable by a person who is aged 16 years or over.

Commencement Date means the Commencement Date as defined in clause 2(b) of the section of this determination entitled "Preliminary".

Concession Fare means the fare payable by:

- (a) a person who is aged between 4 and 15 years; or
- (b) a person who is aged 16 years or over and is the holder of a valid concession card of a type that has been approved by NSW Transport and Infrastructure.

GST means the Goods and Services Tax as defined in *A New Tax System* (*Goods and Services Tax*) *Act* 1999 (Cth).

IPART means the Independent Pricing and Regulatory Tribunal of New South Wales established under the IPART Act.

IPART Act means the *Independent Pricing and Regulatory Tribunal Act* 1992 (NSW).

Ministry of Transport means the New South Wales government department of that name which had primary responsibility for transport policy, planning and coordination prior to the formation of NSW Transport and Infrastructure.

Monopoly Services means the Monopoly Services defined in clause 1(c) of the section of this determination entitled "Preliminary".

NSW Transport and Infrastructure means the New South Wales government department of that name established on 1 July 2009 with primary responsibility for transport policy, planning and coordination and includes a reference to the Ministry of Transport.

STA means the State Transit Authority constituted under the *Transport Administration Act* 1988 (NSW).

Stockton Ferry Service has the meaning given to that term in clause 1(a) of the section of this determination entitled "Preliminary".

4 IPART Stockton Ferry Service

Schedule 2 – Definitions and interpretation

2 Interpretation

2.1 General provisions

In this determination:

- (a) headings are for convenience only and do not affect the interpretation of this determination;
- (b) a reference to a schedule, clause or table is a reference to a schedule, clause or table to this determination;
- (c) words importing the singular include the plural and vice versa;
- (d) a reference to a law or statute includes all amendments or replacements of that law or statute;
- (e) a reference to an officer includes a reference to the officer who replaces him or her, or who substantially succeeds to his or her powers or functions; and
- (f) a reference to a body, whether statutory or not:
 - (1) which ceases to exist; or
 - (2) whose powers or functions are transferred to another body,

is a reference to the body which replaces it or which substantially succeeds to its powers or functions.

2.2 Explanatory notes and clarification notice

- (a) Explanatory notes or footnotes do not form part of this determination, but in the case of uncertainty may be relied on for interpretation purposes.
- (b) IPART may publish a clarification notice in the NSW Government Gazette to correct any manifest error in this determination as if that clarification notice formed part of this determination.

2.3 Prices inclusive of GST

Prices specified in this determination include GST.

Stockton Ferry Service IPART 5

PROFESSIONAL STANDARDS ACT 1994

Notification Pursuant to Section 13

PURSUANT to section 13 of the Professional Standards Act 1994, I authorise the publication of the Instrument amending the Professional Surveyors' Occupational Association Scheme (NSW).

Dated 16 December 2009.

JOHN HATZISTERGOS, Attorney General

Professional Standards Act 1994 (New South Wales)

INSTRUMENT AMENDING THE PROFESSIONAL SURVEYORS' OCCUPATIONAL ASSOCIATION SCHEME

PREAMBLE

- A. The Professional Surveyors' Occupational Association NSW Incorporated (PSOA) is an occupational association.
- B. The Professional Surveyors' Occupational Association Scheme (the scheme) commenced on 12 November 2007.
- C. This instrument of amendment is prepared by PSOA for the purposes of amending the Professional Surveyors' Occupational Association Scheme.

AMENDMENT TO THE SCHEME

1.0 This instrument to amend the Professional Surveyors' Occupational Association Scheme is prepared under the *Professional Standards Act 1994* (NSW) (the Act) by the Professional Surveyors' Occupational Association NSW Incorporated (PSOA) whose business address is PO Box A1155 Sydney South 1235.

Preamble to the scheme

- 1.1 In recital B of the Preamble, replace the word "appointed" with the word "constituted", thus: "PSOA has made an application to the Professional Standards Council, constituted under the *Professional Standards Act 1994* (NSW) (the Act), for a scheme under the Act.
- 1.2 In recital D of the Preamble, replace the phrase "...Other Persons as defined in ss18, 19, 20 and 20A of the Act" with "...to certain other persons by operation of the Act."
- 1.3 Omit recital F and in its place insert the following paragraph:

F. The scheme shall be in force after its commencement until 11 November 2012, unless otherwise extended, or it is revoked, or otherwise ceases operation or to have effect.

1.4 Insert recital G after recital F, thus:

The scheme is intended to operate as a scheme of New South Wales, the Australian Capital Territory, the Northern Territory, Queensland and Victoria

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Persons to whom the scheme applies

1.5 In clause 2.2 of the scheme, delete the phrase "The scheme applies to persons by virtue of sections 18, 19, 20 and 20A..." with "This scheme will also apply to certain other persons by operation..."

Limitation of liability

Definitions

1.6 Omit Clause 3.4 of the scheme from "category A member" and in its place insert the following:

3.4 Relevant definitions for the purpose of this clause are as follows:

.....

"category A member" means a person who is a member of PSOA to whom the scheme applies and who is:

(a) a body corporate whose total annual fee income for the most recent financial year is less than \$2,500,000;

(b) an individual or body corporate who is a member of a partnership, where the total annual fee income of such partnership for the most recent financial year is less than \$2,500,000; or

(c) a sole trader whose total annual fee income for the most recent financial year is less than \$2,500,000.

"category B member" means a person who is a member of PSOA to whom the scheme applies and who is:

(a) a body corporate whose total annual fee income for the most recent financial year is \$2,500,000 or more, but is less than \$5,000,000;

(b) an individual or body corporate who is a member of a partnership, where the total annual fee income of such partnership for the most recent financial year is \$2,500,000 or more, but less than \$5,000,000; or

(c) a sole trader whose total annual fee income for the most recent financial year is \$2,500,000 or more, but less than \$5,000,000.

"category C member" means a person who is a member of PSOA to whom the scheme applies and who is:

(a) a body corporate whose total annual fee income for the most recent financial year is \$5,000,000 or more;

(b) an individual or body corporate who is a member of a partnership, where the total annual fee income of such partnership for the most recent financial year is \$5,000,000 or more; or

(c) a sole trader whose total annual fee income for the most recent financial year is \$5,000,000 or more.

1.7 Insert clause 3.5:

"This scheme only affects liability for damages arising from a single cause of action to the extent to which the liability results in damages exceeding \$1,000,000."

Conferral of discretionary authority

1.8 Omit Clause 4.1 of the scheme and in its place insert the following:

4.1 Pursuant to s24 of the Act, this scheme confers on PSOA a discretionary authority to specify, on application by a member of PSOA to whom the scheme applies, a higher monetary ceiling (maximum amount of liability) not exceeding \$10 million, than would otherwise apply under the scheme in all cases or in any specified case or class of case.

Application

1.9 Insert heading "5 <u>Application</u>" after clause 4.1, and thereafter insert clause 5.1:

"The scheme will operate as a scheme of New South Wales, the Australian Capital Territory, the Northern Territory, Queensland and Victoria."

Duration

- 1.10 Heading "5 <u>Duration</u>" will become heading "6 <u>Duration</u>" by virtue of insertion of the new heading "5 <u>Application</u>". Clause 5.1 will likewise become clause 6.1.
- 1.11 Omit clause 6.1 (as above) and in its place insert the following:

6.1 The scheme shall be in force after its commencement until 11 November 2012, unless otherwise extended, or it is revoked, or otherwise ceases operation or to have effect.

COMMENCEMENT

2.0 The amendment will commence in New South Wales on the date immediately following the date of its publication in the Government Gazette.

The amended scheme is included as attachment A.

Attachment A

Professional Standards Act 1994 (New South Wales)

PROFESSIONAL SURVEYORS' OCCUPATIONAL ASSOCIATION SCHEME

PREAMBLE

- A. The Professional Surveyors' Occupational Association NSW Incorporated (PSOA) is an occupational association.
- B. PSOA has made an application to the Professional Standards Council, constituted under the *Professional Standards Act 1994* (NSW) (the Act), for a scheme under the Act.
- C. The scheme is prepared by PSOA for the purposes of limiting occupational liability to the extent to which such liability may be limited under the Act.
- D. The scheme propounded by PSOA is to apply to all members of the PSOA and to certain other persons by operation of the Act.
- E. PSOA has furnished the Council with a detailed list of the risk management strategies intended to be implemented in respect of its members and the means by which those strategies are intended to be implemented.
- F. The scheme shall be in force after its commencement until 11 November 2012, unless otherwise extended, or it is revoked, or otherwise ceases operation or to have effect.
- G. The scheme is intended to operate as a scheme of New South Wales, the Australian Capital Territory, the Northern Territory, Queensland and Victoria

THE PSOA SCHEME

1. Occupational Association

1.1 The PSOA scheme (the scheme) is a scheme under the *Professional Standards Act 1994* (NSW) (the Act) prepared by the Professional Surveyors' Occupational Association NSW Incorporated (PSOA) whose business address is Level 6, 321 Pitt Street, Sydney NSW.

2. Persons to whom the scheme applies

- **2.1** The scheme applies to all members of the PSOA who or which comply with the requirements of the PSOA and the insurance requirements set out in 3.1.
- **2.2** The scheme will also apply to certain other persons by operation of the Act.
- **2.3** The scheme also applies to all persons to whom the scheme applied under clause 2.1 or 2.2 at the time of any act or omission giving rise to occupational liability.

3. Limitation of Liability

- **3.1** If a person who was, at the time of the act or omission giving rise to occupational liability, a category A member or a category B member or a category C member against whom a proceeding relating to occupational liability is brought is able to satisfy the court that such member has the benefit of an insurance policy or policies:
 - a) of a kind which complies with the standards determined by PSOA,
 - b) insuring such member against that occupational liability, and
 - c) under which the amount payable in respect of the occupational liability relating to the cause of action (including any amount payable by way of excess under or in relation to the policy) is not less than the amount of the monetary ceiling (maximum amount of liability) specified in clause 3.2 hereof as applying to such members at the time at which the act or omission giving rise to the cause of action occurred, the person is not liable in damages in relation to that cause of action above the amount so specified.
- **3.2** The monetary ceiling (maximum amount of liability) required for the purposes of limitation of liability under this scheme at the time at which the act or omission giving rise to the cause of action occurred is to be determined according to the following table:

Class	Description	Monetary Ceiling (Maximum amount of liability)
1	Category A member	\$1,000,000
2	Category B member	\$2,000,000
3	Category C member	\$5,000,000

- **3.3** This scheme limits the occupational liability in respect of a cause of action founded on an act or omission occurring during the period when the scheme was in force of any person to whom the scheme applied at the time the act or omission occurred.
- **3.4** Relevant definitions for the purpose of this clause are as follows:

"total annual fee income" means the amount charged during a financial year for services provided by or on behalf of:

- a) a body corporate who is a member of PSOA,
- b) a partnership some of whose members are members of PSOA to whom the scheme applies, or
- c) a sole trader who is a member of PSOA to whom this scheme applies.

"financial year" means a financial accounting period ending 30 June.

"category A member" means a person who is a member of PSOA to whom the scheme applies and who is:

- a) a body corporate whose total annual fee income for the most recent financial year is less than \$2,500,000;
- b) an individual or body corporate who is a member of a partnership, where the total annual fee income of such partnership for the most recent financial year is less than \$2,500,000; or

Attachment A

c) a sole trader whose total annual fee income for the most recent financial year is less than \$2,500,000.

"category B member" means a person who is a member of PSOA to whom the scheme applies and who is:

- a) a body corporate whose total annual fee income for the most recent financial year is \$2,500,000 or more, but is less than \$5,000,000;
- b) an individual or body corporate who is a member of a partnership , where the total annual fee income of such partnership for the most recent financial year is \$2,500,000 or more, but less than \$5,000,000; or
- c) a sole trader whose total annual fee income for the most recent financial year is \$2,500,000 or more, but less than \$5,000,000.

"category C member" means a person who is a member of PSOA to whom the scheme applies and who is:

- a) a body corporate whose total annual fee income for the most recent financial year is \$5,000,000 or more;
- b) an individual or body corporate who is a member of a partnership, where the total annual fee income of such partnership for the most recent financial year is \$5,000,000 or more; or
- c) a sole trader whose total annual fee income for the most recent financial year is \$5,000,000 or more.
- **3.5** This scheme only affects liability for damages arising from a single cause of action to the extent to which the liability results in damages exceeding \$1,000,000.

4 Conferral of discretionary authority

4.1 Pursuant to s24 of the Act, this scheme confers on PSOA a discretionary authority to specify, on application of a member of PSOA to whom the scheme applies and in relation to that person, a higher monetary ceiling (maximum amount of liability) not exceeding \$10 million, than would otherwise apply under the scheme in relation to the person either in all cases or in any specified case or class of case.

5 Application

5.1 The scheme will operate as a scheme of New South Wales, the Australian Capital Territory, the Northern Territory, Queensland and Victoria.

6 <u>Duration</u>

6.1 The scheme shall be in force after its commencement until 11 November 2012, unless otherwise extended, or it is revoked, or otherwise ceases operation or to have effect.

WORKERS COMPENSATION (SURGEON FEES) ORDER 2010

under the Workers Compensation Act 1987

I, Robert Gray, Acting Chief Executive Officer of the WorkCover Authority of New South Wales, make the following Order pursuant to section 61 (2) of the *Workers Compensation Act 1987*.

Dated this 16th day of December 2009

ROBERT GRAY Acting Chief Executive Officer WorkCover Authority

Explanatory Note

Treatment by a surgeon is a medical or related treatment covered under the *Workers Compensation Act 1987*. This Order sets the maximum fees for which an employer is liable under the Act for treatment by a surgeon of an injured worker's work-related injury.

(Note: Treatment by orthopaedic surgeons is covered by the *Workers Compensation (Orthopaedic Surgeon Fees)* Order 2010, gazetted to take effect from 1 January 2010. However, maximum fees under this Order may apply to procedures carried out by orthopaedic surgeons which are covered by the *Workers Compensation (Orthopaedic Surgeon Fees)* Order 2010).

The effect of the Order is to prevent a surgeon from recovering from the injured worker or employer any extra charge for treatments covered by the Order.

The Order adopts the items listed as Surgical Procedures in the *List of Medical Services and Fees* published by the Australian Medical Association (AMA).

Schedule A to this Order provides for maximum fees for which an employer is liable under the Act for treatment by a surgeon of an injured worker's work-related injury.

Schedule B outlines rules that must be followed when billing for items used in hand surgery. Table 1 in Schedule B details items that are not applicable to hand surgery procedures. Table 2 in Schedule B details items with restricted application for hand surgery and where clinical justification is required that they are reasonably necessary given the circumstances of the case.

Workers Compensation (Surgeon Fees) Order 2010

1. Name of Order

This Order is the Workers Compensation (Surgeon Fees) Order 2010.

2. Commencement

This Order commences on 1 January 2010.

3. Definitions

In this Order:

Aftercare Visits has the same meaning as in the AMA List and are covered by the surgical procedure fee during the first six weeks following the date of surgery or until wound healing has occurred. However unrelated visits or incidental reasons for visits that are not regarded as routine aftercare should be explained with accounts rendered. The consulting surgeon will issue a "certificate" detailing the worker's fitness for work and anticipated aftercare, on discharge from hospital or after the first post injury consultation.

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After Hours Consultations means call-outs to a public or private hospital or a private home for urgent cases before 8.00am or after 6:00pm. This fee is not to be utilised where a consultation is conducted for non-urgent cases outside of these hours.

Assistant at Operation means a medically qualified surgical assistant, but only where an assistant's fee is allowed for in the Commonwealth Medical Benefits Schedule, or where indicated in the WorkCover schedule or approved in advance by the insurer. An assistant fee is only applicable for surgical procedures EA010 to MY115.

AMA List means the document entitled *List of Medical Services and Fees* published by the Australian Medical Association and dated 1 November 2009.

the Act means the Workers Compensation Act 1987.

Extended Initial Consultation means a consultation involving significant multiple trauma or complex "red flag" spinal conditions (systemic pathology, carcinoma, infection, fracture or nerve impingement) involving a lengthy consultation and extensive physical examination.

GST has the same meaning as in the A New Tax System (Goods and Services Tax) Act 1999 of the Commonwealth.

Initial consultation and report covers the first consultation and the report to the referring General Practitioner and insurer.

The report will contain:

- the patient's diagnosis and present condition;
- the patient's likely fitness for pre-injury work or for alternate duties;
- the need for treatment or additional rehabilitation; and
- collateral conditions that are likely to impact on the management of the worker's condition (in accordance with privacy considerations).

Receipt of this information and "certificates" post treatment will provide sufficient information for insurers, employers and rehabilitation providers to develop management plans.

Instrument Fee covers procedures where the surgeon supplies all the equipment or a substantial number of specialised instruments in exceptional circumstances and must be justified. This fee does not apply for all operations or if only incidental instruments (non critical) are supplied by the surgeon. Routine items such as loupes are not included.

Multiple Operations or Injuries refers to situations that require two or more operations or for the treatment of two or more injuries carried out at the same time. The fee for the main operation or injury is to be paid in full as per Schedule A and 75% of the charge specified in Schedule A for each additional operation or injury is payable, unless specifically listed in the Schedule as a multiple procedure item.

New Tax System Price Exploitation Law means:

- (a) the *New Tax System Price Exploitation Code* as applied as a law of New South Wales by the *Price Exploitation Code (New South Wales) Act* 1999; and
- (b) Part VB of the Trade Practices Act 1974 of the Commonwealth.

Opinion on File Request includes retrieval of file from whatever source, reading time, and reporting where a request for such an opinion has been made in writing to the surgeon by the insurer/lawyer. Fees for this service will not be pre-paid in whole or part.

Revision Surgery refers to a procedure carried out to revise earlier surgery. This attracts a fee of 50% of the amount for the principal procedure in the initial surgery and the fee payable for the new procedure, except where the new procedure is specified as a revision procedure in the AMA list.

Surgical procedures are those listed in the AMA list but does not include the cost of bandages, dressings, plaster of Paris bandages, splints, metallic fixation agents, and prosthetic implants which may be charged in addition to the fee set out in the Schedule A, if purchased by the surgeon. The fee for surgical procedures includes aftercare visits.

Subsequent Consultation is a consultation not included in the normal aftercare that applies following surgery. The cost of the latter is included in the fee for the surgical procedure.

Surgeon means a medical practitioner who is currently a Fellow of the Australasian College of Surgeon or who is recognised by Medicare Australia as a specialist. It includes a surgeon who is a staff member at a public hospital providing services at the hospital.

4. Application of Order

This Order applies to treatment provided on or after the commencement of this Order, whether it relates to an injury received before, on or after that date.

5. Maximum fees for treatment by surgeon

- (1) The maximum fee amount for which an employer is liable under the Act for treatment of an injured worker by a surgeon, being treatment of a type specified in Column 1 of Schedule A to this Order, is the corresponding amount specified in Column 3 of that Schedule.
- (2) A fee charged by a surgeon for a patient's treatment (including the management of fractures and other conditions) will be in addition to the fee in Schedule A for the original examination and report.

5. Goods and Services Tax

- (1) An amount fixed by this Order may be increased by the amount of any GST payable in respect of the service to which the cost relates, and the cost so increased is taken to be the amount fixed by this Order.
- (2) This clause does not permit a medical practitioner to charge or recover, in respect of GST payable in respect of a service, an amount that is greater than:
 - (a) 10% of the maximum amount payable under this Order to the medical practitioner in respect of the medical or related treatment apart from this clause, or
 - (b) the amount permitted under the New Tax System Price Exploitation Law, whichever is the lesser.

Schedule A Maximum fees for surgeons

Note: To bill an AMA item number a surgeon must be confident they have fulfilled the service requirements as specified in the item descriptor. Where a comprehensive item number is used, separate items should not be claimed for any of the individual items included in the comprehensive service.

Where only one service is rendered, only one item should be billed. Where more than one service is rendered on one occasion of service, the appropriate item for each discrete service may be billed, provided that each item fully meets the item descriptor. Where an operation comprises a combination of procedures which are commonly performed together and for which there is an AMA item that specifically describes the combination of procedures then only that item should be billed. The invoice should cover the total episode of treatment.

Incorrect use of an item may result in WorkCover taking action to recover money that has been incorrectly received.

Item	Column 1 Type of service	Column 2 AMA Item(s)	Column 3 Maximum amount
Consul	tations		
1.	Initial consultation and report	AC500 (MBS 104) AC600 (MBS6007)	\$261.50
2.	Extended initial consultation and report	AC500 (MBS104) AC600 (MBS6007)	\$360.30
3.	Subsequent consultation	AC510 (MBS 105) AC610 (MBS6009)	\$180.20
4.	After hours consultation		\$151.10 in addition to consultation fee
Proced	ures		
5.	Surgical procedures	EA010 (MBS 30001) to MY115 (MBS 50130)	150% of AMA Schedule fee
6.	Instrument fee	WCO003	\$180.20
7.	Assistant at operation	MZ900	\$302.20 or 20% of the total fee for surgical procedures, whichever is greater
8.	Multiple operations or injuries		Primary operation is to be paid in full, and additional operations at 75% of scheduled fee
9.	Aftercare visits		As per AMA Schedule fee

Insurer/lawyer requests

- 10. Opinion on file request
- 11. Telephone requests
- 12. Lost reports and reprints
- 13. Treating specialist reports (where additional information that is not related to the routine injury management of the patient, is requested by either party to a potential or current dispute).
- 14. Fees for providing copies of clinical notes and records

\$180.20

\$34.90 per 3-5 minute phone call

\$122.10 per report

Please refer to the Workplace Injury Management and Workers Compensation (Medical Examinations and Reports) Order 2010

Please refer to the Workers Compensation (Medical Practitioners Fees) Order 2010 – Section 4(5)

Schedule B Billing items used in hand surgery

Table 1: Item numbers and descriptors no longer applicable to hand surgery procedures

CMBS item code	AMA item code	Descriptor	Reason for decline
Nil	CV082	MINOR NERVE BLOCK (specify type) to provide post operative pain relief (this does not include subcutaneous infiltration)	The MBS does not allow a claim for nerve blocks performed either as the primary anaesthetic technique, or as a method of postoperative analgesia. The item number for anaesthesia itself is considered to cover such blocks.
45051	MG540	CONTOUR RECONSTRUCTION for pathological deformity, insertion of foreign implant (non biological but excluding injection of liquid or semisolid material) by open operation	This relates to the insertion of foreign implant for pathological deformity by an open operation ie facial reconstruction and was not intended for usage in hand surgery.
45445	MH480	FREE GRAFTING (split skin) as inlay graft to 1 defect including elective dissection using a mould (including insertion of and removal of mould)	The appropriate item number is 45448, MH490.
47954	MR170	TENDON, repair of, not being a service to which another item in this Group applies	This item is from the orthopaedic group of item numbers. There already exist appropriate item numbers in the hand surgery section.

47966	MR210	TENDON OR LIGAMENT TRANSFER, not being a service to which another item in this Group applies	This item is from the orthopaedic group of item numbers. There already exist appropriate item numbers in the hand surgery section.
47969	MR220	TENOSYNOVECTOMY, not being a service to which another item in this Group applies	This item is from the orthopaedic group of item numbers. There already exist appropriate item numbers in the hand surgery section.
47972	MR230	TENDON SHEATH, open operation for teno-vaginitis, not being a service to which another item in this Group applies	This item is from the orthopaedic group of item numbers. There already exist appropriate item numbers in the hand surgery section.
48403	MS015	PHALANX OR METATARSAL, osteotomy or osteectomy of, with internal fixation	This item is from the orthopaedic group of item numbers and relates to foot surgery only. There already exist appropriate item numbers in the hand surgery section.
50103	MY015	JOINT, arthrotomy of, not being a service to which another item in this Group applies	This item is from the orthopaedic group of item numbers. There already exist appropriate item numbers in the hand surgery section.
50104	MY025	JOINT, synovectomy of, not being a service to which another item in this Group applies	This item is from the orthopaedic group of item numbers. There already exist appropriate item numbers in the hand surgery section.
50109	MY045	JOINT, arthrodesis of, not being a service to which another item in this Group applies	This item is from the orthopaedic group of item numbers. There already exist appropriate item numbers in the hand surgery section.
50127	MY105	JOINT OR JOINTS, arthroplasty of, by any technique not being a service to which another item applies	This item is from the orthopaedic group of item numbers. There already exist appropriate item numbers in the hand surgery section.
	900001	Workcover certificate	This is for general practitioners and not treating specialists.

CMBS item code	AMA item code	Descriptor	Clinical indication
105	AC510	Each attendance SUBSEQUENT to the first	Follow up consultations will not
		in a single course of	be paid within the 6
		treatment	week period following
			a procedure as this is included in
			normal aftercare.
30023	EA075	WOUND OF SOFT	This item applies to heavily
		TISSUE, traumatic, deep	contaminated wounds and removal of
		or extensively contaminated,	devitalized tissue in deep wounds. The majority of clean lacerations in
		debridement of, under	acute hand injuries will attract item
		general anaesthesia or	number EA095/30029.
		regional or field nerve	Debridements are also not applicable
		block, including suturing	when removing percutaneous wire
		of that wound when	fixation.
		performed (Assist.)	There will be a limit of one
			debridement per digit.
39330	LN810	NEUROLYSIS by open	This item is not for the identification
		operation without	of nerves during surgical exposure. It
		transposition, not being a service associated with a	is not to be used in combination with LN700.
		service to which Item	This item is not to be used in
		TLN740 applies	conjunction with MU400: Wrist
			carpal tunnel release (division of
			transverse carpal ligament) by open
			procedure. However, LN810 and
			MU400 can be used together for
			combined open carpal tunnel release
			and cubital tunnel release surgery. This item is not to be used in
			conjunction with ML235 Tendon
			sheath of hand/wrist open operation
			for stenosing tenovaginitis.
39312	LN 740	NEUROLYSIS, internal	This item is never indicated in acute
		(interfascicular) neurolysis	trauma. It is rarely indicated in
		of using microsurgical	elective surgery and is reserved for
		techniques	use in revision nerve decompression
			surgery. This item is not to be used
			in conjunction with MU400: Wrist
			carpal tunnel release (division of transverse carpal ligament), by open
			procedure.
45203	MH115	SINGLE STAGE LOCAL	This item is rarely indicated in the
		FLAP, where indicated to	hand and wrist as a large defect will
		repair 1 defect,	not be readily amenable to a local flap
		complicated or large, and	reconstruction. It is not to be used for
		excluding flap for male	suturing of traumatic skin flaps.
		pattern baldness and	
		excluding H-flap or double advancement flap	
		advancement hap	

Table 2: Item numbers with restricted application for hand surgery – clinical justification required

45206	MH125	SINGLE STAGE LOCAL FLAP where indicated to repair 1 defect, on eyelid, nose, lip, ear, neck, hand, thumb, finger or genitals, excluding H-flap or double advancement flap	This item is not to be used for suturing lacerations and for "exposure" flaps, such as Bruner incisions for access to a flexor tendon injury.
45500	MJ025	MICROVASCULAR REPAIR using microsurgical techniques, with restoration of continuity of artery or vein of distal extremity or digit	This item relates to microvascular repair of an artery or vein. This item will not be paid for repair of dorsal veins with volar skin intact, branches of digital arteries, branches of radial/ulnar vessels and venae comitantes of major arteries. Microvascular repairs distal to the metacarpophalangeal joint will also require clinical documentation of appropriate surgical technique utilising an operating microscope.
45501/45502	MJ030/MJ035	MICROVASCULAR ANASTOMOSIS of artery using microsurgical techniques, for re- implantation of limb or digit/ MICROVASCULAR ANASTOMOSIS of vein using microsurgical techniques, for re- implantation of limb or digit	These items specifically relate to replantation of limb and digit i.e. The amputated portion must be completely detached.
45563	MJ245	NEUROVASCULAR ISLAND FLAP, including direct repair of secondary cutaneous defect if performed, excluding flap for male pattern baldness	This item is for a true island flap, elevated on a neurovascular pedicle for an existing traumatic defect. This item is not to be claimed for VY advancement flaps where 45206/MH125 is applicable.
46396	ML345	PHALANX or METACARPAL of the hand, osteotomy or osteectomy of	This item is applicable for removing excess bone formation in an <i>intact</i> bone. This is no longer to be applied to removal of loose pieces of bone in trauma or bone shortening for terminalisation or replantation. This is part of the debridement and is included in EA075/30023 if applicable.

46420	ML425	Extensor tendon or hand	This item should not be claimed for
40420	WIL425	or wrist, primary repair	repair of an extensor tendon split as
		· · · · · · · · · · · · · · · · · · ·	part of access to phalangeal
			fractures/osteotomies.
46450/46453	ML535/ML545	EXTENSOR TENDON,	These items are applicable for freeing
		TENOLYSIS OF, following tendon injury,	tendons from scar following previous
		repair or graft	surgery or trauma. They are not indicated in an acute hand injury.
		FLEXOR TENDON,	ML545 cannot be claimed in
		TENOLYSIS OF,	conjunction with release of trigger
		following tendon injury,	finger.
		repair or graft	
46504	ML765	NEUROVASCULAR	These items are only to be used for a
		ISLAND FLAP, for pulp innervation	heterodigital neurovascular island flap used to resurface pulp loss (e.g.
		limervation	Littler flap, first dorsal metacarpal
			artery or Kite flap).
46513/46516	ML795/ML805	Digital nail of finger or	This item should not be used in
		thumb removal of	association with nailbed repair
4.5700			(46486/ML665 or 46489/ML675)
46522	ML825	FLEXOR TENDON SHEATH OF FINGER	This item is applicable only for
		OR THUMB - open	drainage of suppurative flexor tenosynovitis
		operation and drainage for	It does not apply to washout of flexor
		infection	sheath in acute injury
47920	MR088	BONE GROWTH	This is only indicated where a
		STIMULATOR, insertion	mechanical bone growth stimulator has been inserted. It is not for the
		of	insertion of OP1 or other bone
			morphogenic proteins in the setting of
			hand surgery
47921	MR090	ORTHOPAEDIC PIN OR	This item cannot be claimed when the
		WIRE, insertion of, as an	k-wire has been used as part of
48400	MS005	independent procedure PHALANX,	fracture fixation. This item is only applicable to
40400	1013003	METATARSAL,	sesamoidectomy.
		ACCESSORY BONE OR	
		SESAMOID BONE,	
		osteotomy or osteectomy	
		of, excluding services to	
		which Item MX660 or MX670 applies	
47927	MR110	BURIED WIRE, PIN OR	This item applies for removal of
		SCREW, 1 or more of,	<i>buried</i> k-wire. Where a k-wire or
		which were inserted for	wires cross more than 2 bones, only 1
		internal fixation purposes,	item number is claimable.
		removal of, in the operating theatre of a	
		hospital or approved day	
		hospital facility - per bone	
50106	MY035	JOINT, stabilisation of,	This item is applicable for
		involving 1 or more of:	stabilization of CMC joints only.
		repair of capsule, repair of	
		ligament or internal	
		fixation, not being a service to which another	
		item in this Group applies	

WORKERS COMPENSATION (CHIROPRACTIC FEES) ORDER 2010

under the

Workers Compensation Act 1987

I, Robert Gray, Acting Chief Executive Officer of the WorkCover Authority of New South Wales, pursuant to section 61 of the *Workers Compensation Act 1987*, make the following Order.

Dated this 16th day of December 2009

ROBERT GRAY Acting Chief Executive Officer WorkCover Authority

Explanatory Note

Treatment by a registered chiropractor is one of the categories of medical and related treatment covered under the Workers Compensation Act 1987. This Order sets the maximum fees for which an employer is liable under the Act for treatment by a chiropractor of an injured worker's work related injury.

Schedule A to this Order provides for maximum fees for chiropractors generally. Schedule B to this Order provides higher maximum fee levels for WorkCover approved chiropractors. WorkCover approved chiropractors have participated in training courses approved or run by WorkCover.

This Order makes provision for chiropractic management plans and the approval by workers compensation insurers of certain chiropractic services.

1. Name of Order

This Order is the Workers Compensation (Chiropractic Fees) Order 2010.

2. Commencement

This Order commences on 1 January 2010.

3. Definitions

In this Order:

Case Conference means a face-to-face meeting or teleconference with the nominated treating doctor, workplace rehabilitation provider, employer, insurer and/or worker to discuss a worker's return to work plan and / or strategies to improve a worker's ability to return to work. File notes of case conferences are to be documented in the chiropractor's records indicating discussion and outcomes. This information may be required for invoicing purposes. Discussions between treating doctors and practitioners relating to treatment are considered a normal interaction between referring doctor and practitioner and are not to be charged as a case conference item.

Chiropractor means a chiropractor registered under the Chiropractors Act 2001 or a person who is licensed or registered as a chiropractor under the law in force in another State or Territory.

Chiropractic Management Plan means a document used by the chiropractor to indicate treatment timeframes and anticipated outcomes for an injured worker to the relevant workers compensation insurer.

A chiropractic management plan provides the mechanism to request approval from the relevant workers compensation insurer for treatment beyond:

(a) the initial eight (8) consultations (when an injured worker has not attended for any previous treatment of a physical nature for this injury) or

(b) the initial consultation/treatment (when an injured worker has attended for previous treatment of a physical nature for this injury).

A chiropractic management plan can request approval for up to an additional eight (8) chiropractic consultations unless otherwise approved by the insurer.

A copy of the form developed by WorkCover for the chiropractic management plan is at Appendix 1 of the Chiropractors' Guide to WorkCover NSW.

Complex treatment: means treatment related to complex pathology and clinical presentation including, but not limited to, extensive burns, complicated hand injuries involving multiple joints and tissues and some complex neurological conditions, spinal cord injuries, head injuries and major trauma. Provision of complex treatment requires preapproval from the insurer. It is expected that only a small number of claimants will require treatment falling within this category.

Group/class intervention occurs where a chiropractor delivers a common service to more than one person at the same time. Examples are exercise and education groups. Maximum class size is six (6) participants. A chiropractic management plan is required for each worker participant.

GST has the same meaning as in the New Tax System (Goods and Services Tax) Act 1999 (Cth).

Home visit applies in cases where, due to the effects of the injuries sustained, the worker is unable to travel. The home visit must be the best and most cost-effective option allowing the chiropractor to travel to the worker's home to deliver treatment. Provision of home treatment requires pre-approval from the insurer.

Initial consultation and treatment means the first session provided by the chiropractor in respect of an injury which includes:

- history taking,
- physical assessment,
- diagnostic formulation,
- goal setting and planning treatment,
- treatment/service,
- clinical recording,
- communication with referrer, and
- preparation of a Chiropractic Management Plan when indicated.

New Tax System Price Exploitation Law means

a. the New Tax System price Exploitation Code as applied as a law of New South Wales by the Price Exploitation Code (New South Wales) Act 1999, and

b. Part VB of the Trade Practices Act 1974 (Cth).

Normal practice means premises in or from which a chiropractor regularly operates a chiropractic practice and treats patients. It also includes facilities where service may be delivered on a regular or contract basis.

Report Writing occurs when a chiropractor is requested to compile a written report providing details of the worker's treatment, progress and work capacity. The insurer must provide pre-approval for such a service.

Standard consultation and treatment means treatment sessions provided subsequent to the initial session and includes:

• re-assessment,

• treatment/service,

- clinical recording, and
- preparation of a Chiropractic Management Plan.

The Act means the Workers Compensation Act 1987.

Travel occurs when the most appropriate clinical management of the patient requires the chiropractor to travel away from their normal practice. Travel costs do not apply where the chiropractor provides contracted service to facilities such as a private hospital, hydrotherapy pool, workplace or gymnasium. The insurer must provide pre-approval for such a service.

Two distinct areas means where two separate compensable injuries or conditions are assessed and treated and where treatment applied to one condition does not affect the symptoms of the other injury e.g. neck condition plus post fracture wrist. It does not include a condition with referred symptoms to another area.

WorkCover means the WorkCover Authority of New South Wales.

WorkCover approved chiropractor means a chiropractor who has participated in the WorkCover Training Courses and any other course approved by WorkCover (if any) for the purpose of this Order.

Work Related Activity assessment, consultation and treatment means a one hour session provided on a one to one basis for Work Related Activity delivered to a patient that is new to the practice and includes:

- review of the previous treatment,
- assessment of current condition including functional status,
- goal setting,
- treatment / work related activity planning,
- clinical recording,
- communication with key parties, and
- preparation of a management plan when indicated.

4. Application of Order

This Order applies to treatment provided on or after 1 January 2010 whether it relates to an injury received before, on or after that date.

5. Repeal

The Workers Compensation (Chiropractic Fees) Order 2009 is repealed.

6. Maximum fees for chiropractic treatment generally

- (1) The maximum fee amount for which an employer is liable under the Act for treatment of an injured worker by a chiropractor, being treatment of a type specified in Column 1 of Schedule A to this Order, is the corresponding amount specified in Column 2 of that Schedule.
- (2) If it is reasonably necessary for a chiropractor to provide treatment of a type specified in any of items CHX005, CHX006, CHX071, CHX072 or CHX073 in Schedule A at the worker's home, the maximum fee amount for which an employer would otherwise be liable under the Act for that type of treatment is increased by an amount calculated at the rate per kilometre (for the number of kilometres of travel reasonably involved) specified for item CHX009 in Column 2 of Schedule A.
- (3) This clause does not apply to treatment by a WorkCover approved chiropractor.

7. Higher maximum fees for treatment by WorkCover approved chiropractors

(1) The maximum fee amount for which an employer is liable under the Act for treatment of an injured worker by a chiropractor, who is a WorkCover approved chiropractor, being treatment of a type specified in Column 1 of Schedule B to this Order, is the corresponding amount specified in Column 2 of that Schedule.

(2) If it is reasonably necessary for a chiropractor to provide treatment of a type specified in any of items CHA005, CHA006, CHA071, CHA072 or CHA073 in Schedule B at the worker's home, the maximum fee amount for which an employer would otherwise be liable under the Act for that type of treatment is increased by an amount calculated at the rate per kilometre (for the number of kilometres of travel reasonably involved) specified for item CHA009 in Column 2 of Schedule B.

8. Goods and Services Tax

- (1) An amount fixed by this Order may be increased by the amount of any GST payable in respect of the service to which the cost relates, and the cost so increased is taken to be the amount fixed by this Order.
- (2) This clause does not permit a physiotherapist to charge or recover, in respect of GST payable in respect of a service, an amount that is greater than:
 - (a) 10% of the maximum amount payable under this Order to the physiotherapist in respect of the medical or related treatment apart from this clause, or
 - (b) the amount permitted under the New Tax System Price Exploitation Law, whichever is the lesser.

SCHEDULE A Maximum fees for Chiropractors generally

Note: Incorrect use of an item may result in WorkCover taking action to recover money that has been incorrectly received.

Item		
	Type of Treatment	Maximum Amount (\$)
Normal Practice		
CHX001	Initial consultation and treatment	50
CHX002	Standard consultation and treatment	40
CHX031	Initial consultation and treatment of two (2) distinct areas	75
CHX032	Standard consultation and treatment of two (2) distinct areas	60
CHX033	Complex treatment	80
CHX010	Group/class intervention	30/participant
CHX004	Spine X-rays performed by a chiropractor	99.20
Home Visit		
CHX005	Initial consultation and treatment	62
CHX006	Standard consultation and treatment	50
CHX071	Initial consultation and treatment of two (2)	94
	distinct areas	
CHX072	Standard consultation and treatment of two (2)	75
	distinct areas	
CHX073 Complex treatment		100
Other		
CHX081	CHX081 Case conference	
CHX082	Report writing	100 (maximum)
CHX009	Travel Travel	

SCHEDULE B Maximum fees for WorkCover approved Chiropractors

Item	Column 1	Column 2
	Type of Treatment	Maximum Amount (\$)
Normal Practice		
CHA001	Initial consultation and treatment	75.60
CHA002	Standard consultation and treatment	64.00
CHA031	Initial consultation and treatment of two (2)	113.90
	distinct areas	
CHA032	Standard consultation and treatment of two (2)	96.50
	distinct areas	
CHA033	Complex treatment	127.90
CHA010	Group/class intervention	45.40 /participant
CHA004	Spine X-rays performed by a chiropractor	115.30
Home Visit		
CHA005	Initial consultation and treatment	93.00
CHA006	Standard consultation and treatment	74.40
CHA071	Initial consultation and treatment of two (2)	137.20
	distinct areas	
CHA072	Standard consultation and treatment of two (2)	117.40
	distinct areas	
CHA073	Complex treatment	151.10
Other		
CHA081	CHA081 Case conference, Report writing	
		151.10 (maximum)
CHA082	CHA082 Work Related Activity assessment, consultation	
	and treatment	
CHA009	Travel	1.40/kilometre

Notes on Schedules A and B

- (i) Chiropractic treatment of an injured worker is covered under the Act if the treatment is reasonably necessary as a result of his or her work injury.
- (ii) The treatments to which this Order applies do not include hospital treatment (as defined in section 59 of the Act) or occupational rehabilitation services provided by an accredited provider of such services (as defined in the same section).
- (iii) Where it is reasonably necessary for a chiropractor to make a Home Visit covered by items CHX005, CHX006, CHX071, CHX072 or CHX073 in Schedule A or items CHA005, CHA006, CHA071, CHA072 or CHA073 in Schedule B, the hourly rate for those items does not apply to the time spent traveling to or from that place. See item CHX009 in Schedule A and item CHA009 in Schedule B for amounts allowed for travel reasonably involved in making Home Visits.

WORKERS COMPENSATION (COUNSELLING FEES) ORDER 2010 under the Workers Compensation Act 1987

I, Robert Gray, Acting Chief Executive Officer of the WorkCover Authority of New South Wales, pursuant to section 61 of the *Workers Compensation Act 1987*, make the following Order.

Dated this 16th day of December 2009.

ROBERT GRAY Acting Chief Executive Officer WorkCover Authority

Explanatory Note

Treatment by a counsellor is one of the categories of medical and related treatment covered under the *Workers Compensation Act* 1987. This Order sets the maximum fees for which an employer is liable under the Act for treatment by counsellor of an injured worker's work related injury.

This Order makes provision for Psychology/Counselling Management Plans and the approval by workers compensation insurers of certain counselling services. No fees are payable to non-WorkCover approved counsellors.

Workers Compensation (Counselling Fees) Order 2010

1. Name of Order

This order is the Workers Compensation (Counselling Fees) Order 2010.

2. Commencement

This Order commences on 1 January 2010.

3. Definitions

In this Order:

Case Conference means a face-to-face meeting or teleconference with the nominated treating doctor, workplace rehabilitation provider, employer, insurer and/or worker to discuss a worker's return to work plan and / or strategies to improve a worker's ability to return to work. File notes of case conferences are to be documented in the counsellor's records indicating discussion and outcomes. This information may be required for invoicing purposes. Discussions between treating doctors and practitioners relating to treatment are considered a normal interaction between referring doctor and practitioner and are not to be charged as a case conference item.

Counselling services refers to all counselling services delivered by a WorkCover approved counsellor and each service is to be billed according to Schedule A.

Counsellor means a WorkCover approved counsellor.

Group intervention occurs where a counsellor delivers a common service to more than one person at the same time, for example; Group Therapy. Maximum class size is six (6) participants. A Psychology/Counselling Management Plan is required for each worker.

GST has the same meaning as in the New Tax System (Goods and Services Tax) Act 1999 of the Commonwealth.

Initial consultation means the first session provided by the WorkCover approved counsellor in respect of an injury and may include: -

- history taking
- assessment
- goal setting and treatment planning
- treatment
- clinical recording
- communication with referrer and insurer.

The service is 1:1 for the entire session.

New Tax System Price Exploitation Law means

- (a) the New Tax System price Exploitation Code as applied as a law of New South Wales by the *Price Exploitation Code (New South Wales) Act* 1999, and
- (b) Part VB of the Trade Practices Act 1974 of the Commonwealth

Psychology/Counselling Management Plan means the document used by the counsellor to indicate treatment timeframe and anticipated outcomes for an injured worker to the relevant workers compensation insurer. A psychology/counselling management plan provides the mechanism to request approval from the relevant workers compensation insurer for up to six (6) consultations after the first six sessions have been provided.

Report Writing occurs when a counsellor is requested to compile a written report, other than the Management Plan, providing details of the worker's treatment, progress and work capacity. The insurer must provide pre-approval for such a service.

Standard consultation means a session provided subsequent to the initial consultation by the WorkCover approved counsellor in respect of an injured worker and may include:

- reassessment
- treatment
- clinical recording and preparation of a management plan (if required)

The service is 1:1 for the entire session.

The Act means the Workers Compensation Act 1987.

Travel occurs when the most appropriate management of the injured worker requires the counsellor to travel away from their normal practice. Travel costs do not apply where the counsellor provides contracted service to facilities such as a private hospital or workplace. The insurer must provide pre-approval for such a service.

WorkCover means the WorkCover Authority of New South Wales.

WorkCover approved means a counsellor who has, either before or after the commencement of this Order, by a date notified by WorkCover, been approved by WorkCover to provide counselling services for the purpose of this Order.

4. Application of Order

This Order applies to treatment provided on or after 1 January 2010, whether it relates to an injury received before, on or after that date.

5. Maximum fees for counselling services

(1) The maximum fee amount for which an employer is liable under the Act for treatment of an injured worker by a counsellor, being treatment of a type specified in Column 1 of Schedule A to this Order, is the corresponding amount specified in Column 2 of that Schedule.

(2) If it is reasonably necessary for a counsellor to provide treatment of a type specified in any of items 1, 2 or 4 in Schedule A at a place other than the usual practice, the maximum fee amount for which an employer would otherwise be liable under the Act for that type of treatment is increased by an amount calculated at the rate per kilometer (for the number of kilometers of travel reasonably involved) specified for item 14 in Column 2 of Schedule A.

6. Goods and Services Tax

- 1) The maximum fee amount for which an employer is liable under the Act in respect of the treatment types specified in Schedule A to this Order may be increased by the amount of any GST payable in respect of the service, and the cost as so increased is taken to be the amount fixed by this Order.
- 2) This clause does not permit a counsellor to charge or recover, in respect of GST payable in respect of a service, an amount that is greater than:

(a) 10% of the maximum amount that would otherwise be payable under this Order to the counsellor in respect of the medical or related treatment, or

(b) the amount permitted under the New Tax System Price Exploitation Law, whichever is the lesser.

Schedule A Maximum fees for counsellors

Note: Incorrect use of an item may result in WorkCover taking action to recover money that has been incorrectly received. No fees are payable to non-WorkCover approved counsellors.

Item	Column 1	Column 2
	Type of Treatment	Maximum
		Amount (\$)
PSY001	Initial consultation	180
PSY002	Standard consultation	150
PSY003	Report Writing	150/hour (max 1 hour)
PSY004	Case Conferencing	150/hour pro rata
PSY005	Travel	1.40 per kilometre
PSY006	Group	45/participant

WORKERS COMPENSATION (EXERCISE PHYSIOLOGY FEES) ORDER 2010 under the Workers Compensation Act 1987

I, Robert Gray, Acting Chief Executive Officer of the WorkCover Authority of New South Wales, pursuant to section 61 of the *Workers Compensation Act 1987*, make the following Order.

Dated this 16th day of December 2009

ROBERT GRAY Acting Chief Executive Officer WorkCover Authority

Explanatory Note

Treatment by a remedial gymnast is one of the categories of medical and related treatment covered under the *Workers Compensation Act* 1987. For the purposes of this Order, the term remedial gymnast is interchangeable with exercise physiologist. This Order sets the maximum fees for which an employer is liable under the Act for treatment by an exercise physiologist of an injured worker's work related injury.

This Order makes provision for exercise physiology management plans and the approval by workers compensation insurers of certain exercise physiology services.

Workers Compensation (Exercise Physiology Fees) Order 2010

1. Name of Order

This order is the Workers Compensation (Exercise Physiology Fees) Order 2010.

2. Commencement

This Order commences on 1 January 2010.

3. Definitions

In this Order:

Case Conference means a face-to-face meeting or teleconference with the nominated treating doctor, workplace rehabilitation provider, employer, insurer and/or worker to discuss a worker's return to work plan and / or strategies to improve a worker's ability to return to work. File notes of case conferences are to be documented in the exercise physiologist's records indicating discussion and outcomes. This information may be required for invoicing purposes. Discussions between treating doctors and practitioners relating to treatment are considered a normal interaction between referring doctor and practitioner and are not to be charged as a case conference item.

Group/class intervention occurs where an exercise physiologist delivers the same service that is, the same exercise and instruction, to more than one person at the same time. Maximum class size is six (6) participants. An Exercise Physiology Management Plan is required for each worker.

GST has the same meaning as in the New Tax System (Goods and Services Tax) Act 1999 of the Commonwealth.

Initial consultation and treatment means the first session provided by the exercise physiologist in respect of an injury which is of one hour duration, provided on a 1:1 basis and includes: -

- history taking
- physical assessment

- goal setting and planning treatment
- treatment/service
- clinical recording
- communication with referrer
- preparation of a management plan when indicated.

New Tax System Price Exploitation Law means

- (a) the New Tax System price Exploitation Code as applied as a law of New South Wales by the *Price Exploitation Code (New South Wales) Act* 1999, and
- (b) Part VB of the Trade Practices Act 1974 of the Commonwealth

Normal practice means premises in or from which an exercise physiologist regularly operates an exercise physiology practice and treats patients. It also includes facilities where service may be delivered on a regular or contract basis such as a hydrotherapy pool, gymnasium, private hospital or workplace.

Exercise physiologist means a WorkCover approved exercise physiologist.

Exercise physiology management plan means the document used by the exercise physiologist to indicate treatment timeframe and anticipated outcomes for an injured worker to the relevant workers compensation insurer. An exercise physiology management plan provides the mechanism to request approval from the relevant workers compensation insurer for up to 8 consultations. If treatment is ongoing a further exercise physiology management plan must be submitted and approved before treatment can be delivered and in each such case approval can only be given for up to 8 consultations.

Exercise physiology services refers to all services delivered by a WorkCover approved exercise physiologist and each service is to be billed according to Schedule A. Exercise physiology services are limited to exercise prescription, instruction and supervision.

Reduced supervision treatment occurs where an exercise physiologist delivers a service, which may or may not be the exact same exercise and instruction, to more than one person at the same time. Maximum number of persons per session is 3, with the exercise physiologist-to-patient ratio being one-to-one for at least 30% of the session time.

Report writing occurs when an exercise physiologist is requested to compile a written report providing details of the worker's treatment, progress and work capacity. The insurer must provide pre-approval for such a service.

Standard consultation and treatment means one-to-one treatment sessions for one hour provided subsequent to the initial session and includes:-

- re-assessment
- treatment
- recording of notes and
- preparation of a exercise physiology management plan when indicated.

The Act means the Workers Compensation Act 1987.

Travel occurs when the most appropriate management of the patient requires the exercise physiologist to travel away from their normal practice. Travel costs do not apply where the exercise physiologist provides contracted service to facilities such as a private hospital, hydrotherapy pool, workplace or gymnasium. The insurer must provide pre-approval for such a service.

WorkCover means the WorkCover Authority of New South Wales.

WorkCover approved means an exercise physiologist who has, either before or after the commencement of this Order, by a date notified by WorkCover, been approved by WorkCover to provide exercise physiology services for the purpose of this Order.

4. Application of Order

This Order applies to treatment provided on or after 1 January 2010, whether it relates to an injury received before, on or after that date.

5. Maximum fees for exercise physiology treatment

- (1) The maximum fee amount for which an employer is liable under the Act for treatment of an injured worker by a exercise physiologist, being treatment of a type specified in Column 1 of Schedule A to this Order, is the corresponding amount specified in Column 2 of that Schedule.
- (2) If it is reasonably necessary for a exercise physiologist to provide treatment of a type specified in any of items 7 to 11 in Schedule A at a place other than the usual practice, the maximum fee amount for which an employer would otherwise be liable under the Act for that type of treatment is increased by an amount calculated at the rate per kilometre (for the number of kilometres of travel reasonably involved) specified for item 14 in Column 2 of Schedule A.

6. Goods and Services Tax

- 1) The maximum fee amount for which an employer is liable under the Act in respect of the treatment types specified in Schedule A to this Order may be increased by the amount of any GST payable in respect of the service, and the cost as so increased is taken to be the amount fixed by this Order.
- 2) This clause does not permit an exercise physiologist to charge or recover, in respect of GST payable in respect of a service, an amount that is greater than:

(a) 10% of the maximum amount that would otherwise be payable under this Order to the exercise physiologist in respect of the medical or related treatment, or

(b) the amount permitted under the New Tax System Price Exploitation Law, whichever is the lesser.

Schedule A Maximum fees for exercise physiologists

Note: Incorrect use of an item may result in WorkCover taking action to recover money that has been incorrectly received.

Item	Column 1	Column 2
	Type of Treatment	Maximum
		Amount (\$)
EPA001	Initial consultation and treatment	120.70
EPA002	Standard consultation and treatment	120.70
EPA003	Reduced supervision treatment	52.70
EPA004	Group/class intervention	38.40/participant
EPA005	Additional expenses	As agreed with insurer
EPA006	Case conference	120.70/hour
EPA007	Report writing	120.70 (maximum)
EPA008	Travel	1.40/kilometre

WORKERS COMPENSATION (HEARING AIDS FEES) ORDER 2010

under the

Workers Compensation Act 1987

I, Robert Gray, Acting Chief Executive Officer of the WorkCover Authority of New South Wales, pursuant to section 61 of the *Workers Compensation Act 1987*, make the following Order.

Dated this 16th day of December 2009

ROBERT GRAY Acting Chief Executive Officer WorkCover Authority

EXPLANATORY NOTE

Workers in NSW with noise-induced hearing loss can request hearing aids. Treatment by a hearing service provider is one of the categories of medical and related treatment covered under the *Workers Compensation Act 1987*. This Order sets the maximum fees for which an employer is liable under the Act for provision of treatment and hearing aids by a hearing service provider to an injured worker who has suffered hearing loss due to a work related injury.

Schedule A to this Order provides for maximum fees for the provision of treatment and hearing aids by a hearing service provider, as defined in the Order. Schedule B outlines the procedure that must be followed when obtaining hearing aids and/or treatment by a hearing service provider.

Workers Compensation (Hearing Aids Fees) Order 2010

1. Name of Order

This Order is the Workers Compensation (Hearing Aids Fees) Order 2010

2. Commencement

This Order commences on 1 May 2010.

3. Definitions

In this order:

Audiologists are university graduates with tertiary qualifications in audiology who specialise in the assessment, prevention and non-medical management of hearing impairment and associated disorders of communication. Audiologists are required to be a member or be eligible for full membership or either the Audiological Society of Australia (ASA) or ordinary membership of the Australian College of Audiology (ACAud).

Audiometrists hold a qualification from a registered training organisation such as TAFE NSW followed by on-the-job training. Audiometrists also specialise in the non-medical assessment and management of communication difficulties caused by hearing loss. Audiometrists are required to be a member or be eligible for membership of the Australian College of Audiology (ACAud).

GST has the same meaning as in the New Tax System (Goods and Services Tax) Act 1999 of the Commonwealth.

Hearing needs assessment includes obtaining a clinical history, hearing assessment as per Australian Standard 1269.4/05, determination of communication goals, recommendation of hearing aid and clinical rationale for hearing aid.

Hearing aids are non-implantable electronic instruments designed and manufactured to provide amplification for people with a hearing loss.

Hearing service provider refers to providers approved by WorkCover NSW to provide hearing aids to injured workers. A list of WorkCover approved hearing service providers are found at <u>www.workcover.nsw.gov.au</u> or by phoning 13 10 50.

Hearing rehabilitation includes education of the injured worker in appropriate use of hearing aid to meet their needs.

New Tax System Price Exploitation Law means

a. the New Tax System Price Exploitation Code as applied as a law of New South Wales by the *Price Exploitation Code (New South Wales) Act* 1999, and

b. Part VB of the Trade Practices Act 1974 of the Commonwealth.

The Act means the Workers Compensation Act 1987.

WorkCover means the WorkCover Authority of New South Wales.

3. Application of Order

This Order applies to provision of hearing aids and treatment by a hearing service provider provided on or after the date of commencement, whether it relates to an injury received before, on or after that date.

4. Fees

The fee amounts for which an employer is liable under the Act for provision of treatment and hearing aids by a hearing service provider to an injured worker as specified in Schedule A are those listed in Schedule A.

5. Goods and Services Tax

- (1) An amount fixed by this Order may be increased by the amount of any GST payable in respect of the service to which the cost relates, and the cost so increased is taken to be the amount fixed by this Order.
- (2) This clause does not permit a hearing service provider to charge or recover, in respect of GST payable in respect of a service, an amount that is greater than:
 - (a) 10% of the maximum amount payable under this Order to the hearing service provider in respect of the medical or related treatment apart from this clause, or
 - (b) the amount permitted under the New Tax System Price Exploitation Law, whichever is the lesser.

Schedule A Maximum fees for hearing aids and services

Note: Incorrect use of an item may result in WorkCover taking action to recover money that has been incorrectly received. No fees are payable to a non-WorkCover approved hearing service provider.

Item	Service description	Maximum amount
A ID 001		(excl GST)
AID 001	Hearing needs assessment – Audiologist	\$170.00
	Hearing needs assessment – Audiometrist	\$140.00
	Supply of hearing aid	\$2000.00 per aid.
	Handling fee (monaural or binaural Hearing aid/s) payable	\$250.00
	upon supply of Hearing aid	
	Fitting of hearing aid/s, including:	\$600.00 (monaural)
	• Fitting	\$1000.00 (binaural)
	 trial of hearing aid for 30 days 	
	• all necessary hearing rehabilitation for the injured worker	
	within the first 12 months following supply and fitting	
	• maintenance as per the manufacturer's warranty.	
	Paid only once per worker in any five year period unless	
	prior approval obtained from insurer.	
	Hearing review	\$120.00
	Only applicable 12 months after supply.	
	Hearing aid repairs	Up to \$330.00
	Payable only if a copy of manufacturer's invoice for repairs is	
	provided.	
	12 months hearing aid battery supply.	\$100.00 per Hearing aid
	Fitting and supply of hearing aid/s greater than the gazetted	
	fee	
	In exceptional circumstances, e.g. specific work demands, application may be made to the Insurer for WorkCover approval of a hearing aid/s that exceeds the gazetted fee	

Schedule B WorkCover NSW procedures for the provision of aids

Workers in NSW with noise-induced hearing loss can request hearing aids and the procedures for obtaining them are outlined below.

OVERVIEW

Medical support for the provision of hearing aids

The initial provision of a hearing aid is supported when the worker has been paid for permanent impairment (hearing loss) and the WorkCover-trained permanent impairment assessor recommends a hearing aid.

The replacement of a hearing aid is supported when the worker's general practitioner confirms the worker's need for a replacement hearing aid.

Selection of hearing aid

The worker selects a hearing service provider from the WorkCover-approved list of providers.

The provider completes a Hearing needs assessment and a quote for the fitting and supply of a hearing aid - wholesale price plus service costs in line with WorkCover gazetted fees. The assessment and quote are submitted to the insurer.

Insurer approval

The insurer checks entitlement and quotes against the WorkCover gazetted fees and advises regarding approval of the fitting and supply of the hearing aid.

Fitting and supply of hearing aid

Once approved, the worker is fitted and supplied with the recommended hearing aid for a 30-day trial. If the trial is successful, the hearing service provider advises the insurer and invoices for the fitting and supply of the hearing aid. If the trial is unsuccessful, the provider advises the insurer and invoices for the hearing needs assessment only.

Review of hearing aid

After 12 months use, the worker visits the hearing service provider for a review of their hearing aid. If the worker requires ongoing use of their hearing aid, the hearing service provider will supply batteries to cover a further 12 months. Following this, additional batteries and minor maintenance, not covered by the manufacturer's warranty, can be obtained from any WorkCover approved hearing service provider as required.

PROCEDURES

1 WORKER

- 1.1 When a hearing aid is **initially** recommended following a permanent impairment assessment, the worker chooses a WorkCover approved hearing service provider and arranges a hearing needs assessment and quote for the fitting and supply of the hearing aid.
- 1.2 If a hearing aid needs **replacement** the worker must visit their general practitioner (GP) to confirm the use of the hearing aid and complete a WorkCover declaration form (available from <u>www.workcover.nsw.gov.au</u> or 13 10 50). The worker must then visit a WorkCover approved hearing service provider to get a quote for the replacement. The hearing service provider will then forward the quote and declaration form to the insurer.
- 1.3 Once approved by the insurer, the worker attends the WorkCover approved hearing service provider for the fitting and supply of the hearing aid.
- 1.4 After 12 months use, the worker visits a WorkCover approved hearing service provider for a review of their hearing aid. If the worker requires ongoing use of their hearing aid, the hearing service provider will supply batteries to cover a further 12 months. Following this, additional batteries and minor maintenance, not covered by the manufacturer's warranty, can be obtained from any WorkCover approved hearing service provider as required (to a maximum of \$100/year per hearing aid). The worker is required to sign and date the invoice for the supply of batteries or maintenance.

2 HEARING SERVICE PROVIDER

- 2.1 This procedure applies to the provision of both an initial and a replacement hearing aid. For a replacement hearing aid, the worker's GP is required to complete a WorkCover declaration form to confirm the need for them. This must be forwarded to the insurer with the quote for a replacement hearing aid.
- 2.2 All hearing service providers must be WorkCover approved. The application to become a WorkCover-approved hearing service provider outlines the criteria that must be met.
- 2.3 A quote must be forwarded to the insurer and approval from the insurer sought before the fitting and supply of a hearing aid. The quote must include:
 - i. the worker's contact details,
 - ii. a full description of the hearing aid selected from the WorkCover approved hearing aid wholesale price list to a maximum of \$2000.00 per hearing aid,
 - iii. an outline of how the hearing aid meets the test of 'reasonably necessary' for the injured worker in overcoming the effect of the hearing impairment,
 - iv. the audiogram the recommendations are based upon,
 - v. details of the person who provided the assessment and quote,

- vi. hearing service provider details including ABN,
- vii. service fees in accordance with the Workers Compensation (Hearing Aids Fees) Order, including handling and fitting fee, and
- viii. 12 months supply of batteries in accordance with the Workers Compensation (Hearing Aids Fees) Order 2010.
- 2.4 Once approved by the insurer, a hearing aid can be fitted and supplied by the hearing service provider.
- 2.5 A hearing aid is provided for an initial trial period of up to 30 days.
- 2.6 After a successful trial, the hearing service provider will obtain confirmation of this from the worker, advise the insurer, GP and ear, nose and throat (ENT) specialist of the outcome, and invoice for the supply and fitting of the hearing aids in accordance with the Workers Compensation (Hearing Aids Fees) Order 2010.
- 2.7 If the worker has not persisted with the use of a hearing aid at 30 days, the hearing service provider can submit an invoice for the hearing needs assessment in accordance with the Workers Compensation (Hearing Aids Fees) Order 2010.
- 2.8 In accordance with Section 60A of the *Workers Compensation Act 1987*, the worker is not liable to pay, and a hearing service provider is not entitled to recover from the worker or employer, any amount that exceeds the Workers Compensation (Hearing Aids Fees) Order 2010.
- 2.9 The hearing service provider must provide outcome measures (e.g. Client Oriented Scale of Improvement COSI) to the insurer with the invoice to confirm the benefit of any hearing aid provided.
- 2.10The worker may visit a hearing service provider after 12 months use of their hearing aid for a review. If the worker requires ongoing use of their hearing aid, the hearing service provider will supply batteries to cover a further 12 months. Following this, additional batteries and minor maintenance, not covered by the manufacturer's warranty, can be obtained from any WorkCover approved hearing service provider as required (to a maximum of \$100/year per hearing aid). The worker is required to sign and date the invoice to confirm the supply of batteries or maintenance. The hearing service provider can then submit the invoice to the insurer for payment.

3 INSURER

- 3.1 When a hearing aid is recommended for, or requested by, a worker, the insurer will provide the worker with written information regarding the provision of hearing aids that is in accordance with the process outlined in these guidelines.
- 3.2 When considering a request for hearing aids, the insurer will check:
 - **i.** medical support for the hearing aid i.e. recommendation from the permanent impairment assessment for initial hearing aid or confirmation from the GP that a replacement hearing aid is needed, as indicated on a completed declaration form,
 - ii. that the quoted hearing aid is on the WorkCover approved wholesale hearing aid price list and does not exceed the maximum \$2000.00 per hearing aid in accordance with the Workers Compensation (Hearing Aids Fees) Order 2010, and
 - iii. that the hearing service provider is WorkCover approved.
- 3.3 If necessary, the insurer will contact the worker to confirm the worker wants the hearing aid.
- 3.4 When the request for a hearing aid is deemed reasonably necessary, the insurer will approve a trial (30 days) of the quoted hearing aid.

- 3.5 The insurer will pay the hearing service provider for the supply and fitting of the hearing aid, and 12 months supply of batteries when a trial of a hearing aid is confirmed as successful (by the provision of outcome measures from the provider) and the worker confirms receipt of the invoiced hearing aid. The claim can then be closed.
- 3.6 After 12 months use, the worker may visit a hearing service provider for a review of their hearing aid. If the worker requires ongoing use of their hearing aid, the hearing service provider will supply batteries to cover a further 12 months. The worker is required to sign and date the invoice to confirm supply of batteries. The claim is reopened to manage the costs associated with the hearing aid review and supply of batteries and is then closed.
- 3.7 Following the process outlined above, the worker can obtain additional batteries and minor maintenance, not covered by the manufacturer's warranty, from any WorkCover approved hearing service provider as required (to a maximum of \$100/year per hearing aid). The worker is required to sign and date the invoice to confirm supply of batteries. The hearing service provider will then submit the invoice to the insurer for payment. These costs will be managed in a 'dummy' claim so that individual claims do not require reopening.
- 3.8 Any question regarding the quoted hearing aid should be clarified with the hearing service provider. If further hearing loss is suspected, the insurer may refer to an ENT specialist (WorkCover trained) for a review of the worker's hearing needs.
- 3.9 If an insurer receives a request for a hearing aid that exceeds the gazetted fee because of the exceptional circumstances of the worker, e.g. specific work demands, the insurer must forward their recommendation to WorkCover's Provider and Injury Management Services for consideration.

4 GENERAL PRACTITIONER (GP)

- 4.1 The worker will visit their GP if a replacement hearing aid is required. The GP will review the worker's use of the hearing aid and, if replacement is necessary to the worker's functioning in the community, complete the WorkCover declaration form so the worker can obtain a quote for a replacement hearing aid from a WorkCover approved hearing service provider.
- 4.2 If the GP believes there is possible further work-related hearing loss, they will refer to an ENT specialist (WorkCover trained) for review and advise the insurer of the referral.

5 ENT SPECIALIST (WORKCOVER TRAINED ASSESSOR OF PERMANENT IMPAIRMENT)

5.1 The ENT specialist (WorkCover trained) will provide a report in accordance with the WorkCover *Guides for the evaluation of permanent impairment* and a recommendation if provision of a hearing aid will assist in overcoming the worker's hearing deficit. The worker submits this report in support of their initial claim, or in support of another claim for further hearing loss.

6 REQUEST FOR REPLACEMENT HEARING AID RECEIVED FROM A SOLICITOR

- 6.1 Under section 60 of the1987 Act, employers of injured workers are liable for the cost of medical and related treatment that is reasonably necessary. Treatment ordered by a legal practitioner does not generally satisfy this requirement. Usually, treatment is only capable of being reasonably necessary when it is ordered, or supported by, a medical practitioner, unless the insurer has other authoritative evidence of the need for such treatment. Accordingly, an insurer is not generally liable for the cost of treatment ordered by a legal practitioner.
- 6.2 If a request for a replacement hearing aid is received from a solicitor representing an injured worker, the insurer must advise the solicitor in writing that they will now contact the worker directly to determine their needs. The insurer will then notify the worker of the information received from the solicitor and follow procedures described in these guidelines.

6.3 Solicitors cannot recover legal costs in relation to maintenance of a hearing aid, the supply of batteries or the replacement of a hearing aid. The only costs that are recoverable in relation to a claim for compensation are those set out in Schedule 6 of the *Workers Compensation Regulation 2003*.

7 CLAIM CLOSURE

As outlined in the WorkCover *Guides for claiming compensation benefits*, a claim may be closed when a decision is made that the worker has no ongoing entitlement to benefits and this decision is not being disputed. Factors to be considered include:

- i. worker has achieved optimal return to work and health outcomes,
- ii. all payments have been made, and
- iii. no recovery action is current.

Prior to closing a claim, the worker is to be notified in writing giving the reason for the decision and that the claim may be reopened if necessary.

For further information, contact WorkCover's Provider & Injury Management Services on **1 800 801 905** or visit <u>provider.services@workcover.nsw.gov.au</u>.

ADDITIONAL DEFINITIONS

Insurer an insurer within the meaning of the *Workers Compensation Act 1987* and the *Workplace Injury Management and Workers Compensation Act 1998* and includes Scheme agents and self and specialised insurers.

Reasonably Necessary includes:

- 1. *appropriateness* i.e. have the capacity to lessen the effects of the injury, cure, alleviate or retard progressive deterioration
- 2. *availability of alternatives* i.e. consideration of all other options and if other options would substantially alleviate the problem
- 3. *cost* i.e. there must be a positive cost benefit e.g. if a hearing aid or treatment is provided at high cost but with minimal effectiveness it may not be considered reasonably necessary where an effective alternative exists at a much lower cost
- 4. *effectiveness* (actual or potential) i.e. the degree to which the consequences of the injury can be alleviated
- 5. *acceptance* i.e. whether or not a particular hearing aid or treatment has been used in similar cases or is generally accepted by clinical peers.

WORKPLACE INJURY MANAGEMENT AND WORKER'S COMPENSATION (INDEPENDENT CONSULTANTS) FEES ORDER 2010

under the

Workplace Injury Management and Workers Compensation Act 1998

I, Robert Gray, Acting Chief Executive Officer of the WorkCover Authority of New South Wales make the following Order pursuant to section 339 of the *Workplace Injury Management and Workers Compensation Act 1998*.

Dated this 16th day of December 2009

ROBERT GRAY Acting Chief Executive Officer WorkCover Authority

1. Name of Order

This order is the Workplace Injury Management and Workers Compensation (Independent Consultants) Fees Order 2010.

2. Commencement

This Order commences on 1 January 2010.

3. Definitions

In this Order:

The Act means the Workplace Injury Management and Workers Compensation Act 1998; and

GST means the goods and services tax payable under the GST Law; and

GST Law has the same meaning as in the A New Tax System (Goods and Services Tax) Act 1999 (Cth).

Independent Consultant means an allied health practitioner appointed by WorkCover for the purposes of providing independent consultations; and

Independent Consultation means a review of the treatment provided by an allied health practitioner in consultation with the treating allied health practitioner for the purposes of determining whether treatment is reasonably necessary and may include review of relevant documentation, discussion with the allied health practitioner, interview and examination of the injured worker and provision of a report.

4. Application of Order

This order only applies to independent physiotherapy, psychology, chiropractic and osteopathy consultants services provided on or after 1 January 2010, whether it relates to an injury received before, on or after that date.

5. Fees for Independent Consultants

(a) This clause applies to maximum fees which may be charged and recovered by independent consultants.

(b) For the purposes of section 339 of the Act, the maximum fee for provision of services in respect of the provision of any report for use in connection with a claim for compensation or an appearance as a witness in proceedings before the Workers Compensation Commission or a court in connection with a claim for compensation is as set out in Schedule 1.

6. Goods and Services Tax

- (1) An amount fixed by this Order may be increased by the amount of any GST payable in respect of the service to which the cost relates, and the cost so increased is taken to be the amount fixed by this Order.
- (2) This clause does not permit a medical practitioner to charge or recover, in respect of GST payable in respect of a service, an amount that is greater than:
 - i. 10% of the maximum amount payable under this Order to the medical practitioner in respect of the medical or related treatment apart from this clause,
 - ii. the amount permitted under the New Tax System Price Exploitation Law, whichever is the lesser.

Schedule 1

Note: Incorrect use of an item may result in WorkCover taking action to recover money that has been incorrectly received.

Service description Fee	Maximum fee (\$)
Independent Consultation (may include	\$177.90 per hour
assessment, interview, examination, discussion	
and report)	
Cancellation with notice of 2 business days or	\$89.00
more	
Non-attendance or cancellation with less than 2	\$177.90
business days notice	

WORKPLACE INJURY MANAGEMENT AND WORKERS COMPENSATION (INJURY MANAGEMENT CONSULTANTS) ORDER 2010

under the Workplace Injury Management and Workers Compensation Act 1998

I, Robert Gray, Acting Chief Executive Officer of the WorkCover Authority of New South Wales, make the following Order pursuant to section 339 of the *Workplace Injury Management and Workers Compensation Act 1998*.

Dated this 16th day of December 2009

ROBERT GRAY Acting Chief Executive Officer WorkCover Authority

Workplace Injury Management and Workers Compensation (Injury Management Consultants) Order 2010

Part 1 Preliminary

1. Name of Order

This order is the Workplace Injury Management and Workers Compensation (Injury Management Consultants) Order 2010.

2. Commencement

This Order commences on 1 January 2010.

3. Definitions

In this order:

the Act means the Workplace Injury Management and Workers Compensation Act 1998; and

GST means the goods and services tax payable under the GST Law; and

GST Law has the same meaning as in the A New Tax System (Goods and Services Tax) Act 1999 (Cth).

4. Application of order

This order only applies to medical practitioners registered under the *Medical Practice Act 1992*, who are appointed by the WorkCover Authority of New South Wales as injury management consultants under section 45A of the Act.

Part 2 Fees for injury management consultants

5. Fees for Injury Management Consultants

a) For the purposes of section 339 of the Act, the maximum hourly fee for the provision of services by an injury management consultant in respect of the provision of any report for use in connection with a claim for compensation or work injury damages and an appearance as a witness in proceedings before the Workers Compensation Commission or a court in connection with a claim for compensation or work injury damages is as set out in Schedule 1; and

- b) An injury management consultant may not charge for more than 3 hours of work in the absence of express written agreement from the relevant insurer or the Workers Compensation Commission.
- c) An injury management consultant may charge a cancellation fee specified in item IIN 106 where a worker provides 2 days' notice of cancellation.
- d) An injury management consultant may charge a cancellation fee specified in item IIN107 where a worker provides less than 2 days' notice of cancellation or fails to attend their scheduled appointment without notice.
- e) An injury management consultant's report is to be provided to the referrer within 10 working days of the examination, or in the case where no examination has been conducted, within 10 working days of the request having been received, or within a different timeframe if agreed between the parties.

6. Goods and Services Tax

- (1) An amount fixed by this Order may be increased by the amount of any GST payable in respect of the service to which the cost relates, and the cost so increased is taken to be the amount fixed by this Order.
 - (2) This clause does not permit an injury management consultant to charge or recover, in respect of GST payable in respect of a service, an amount that is greater than:
 - i. 10% of the maximum amount payable under this Order to the medical practitioner in respect of the medical or related treatment apart from this clause,
 - ii. the amount permitted under the New Tax System Price Exploitation Law, whichever is the lesser.

Schedule 1

Payment Classification Code	Service description	Fee
IIN 105	Assessments, examinations, discussions and report	\$267.30 per hour to a maximum of 3 hours unless authorised by the insurer or Workers Compensation Commission.
IIN 106	Cancellation with 2 days notice	\$133.70
IIN 107	Cancellation with less than 2 days notice or non attendance at scheduled appointment	\$267.30

Rates for Injury Management Consultants

WORKPLACE INJURY MANAGEMENT AND WORKERS COMPENSATION (MEDICAL EXAMINATIONS AND REPORTS) ORDER 2010

under the

Workplace Injury Management and Workers Compensation Act 1998

I, Robert Gray Acting Chief Executive Officer of the WorkCover Authority of New South Wales, make the following Order pursuant to section 339 of the *Workplace Injury Management and Workers Compensation Act 1998*.

Dated this 16th day of December 2009

ROBERT GRAY Acting Chief Executive Officer WorkCover Authority

Workplace Injury Management and Workers Compensation (Medical Examinations and Reports) Order 2010

Part 1 Preliminary

1. Name of Order

This order is the Workplace Injury Management and Workers Compensation (Medical Examinations and Reports) Order 2010.

2. Commencement

This Order commences on 1 January 2010.

3. Definitions

In this Order:

the Act means the Workplace Injury Management and Workers Compensation Act 1998;

Approved Medical Specialist means an approved medical specialist appointed by the President of the Workers Compensation Commission conducting an examination as part of dispute resolution proceedings at the Workers Compensation Commission. Schedules 3 and 4 of this Order apply.

GST means the goods and services tax payable under the GST Law;

GST Law has the same meaning as in the *A New Tax System* (*Goods and Services Tax*) *Act* 1999 (*Cth*);

Guidelines mean the *WorkCover Guidelines on Independent Medical Examinations and Reports* in effect from 1 May 2009; and

Late attendance means that the worker or interpreter arrives unreasonably late, to the degree that a full examination is prevented from being conducted in the time allocated.

Medical Examination Report means an examination and report completed by an independent medical examiner or a treating medical practitioner where additional information is required by either party to a current or potential dispute. This does not include reports on the routine management of the worker's injury. Fees for this type of communication are included in the relevant treatment fees order.

Medical Examination Reports may be requested to assist decision making on any part of the claim when the management reports available do not adequately address the issue. Schedules 1 and 2 of this Order apply. Medical Examination Reports are categorised as follows:

- a. Standard Reports are reports relating solely to a single event or injury in relation to-
 - Causation; or
 - Fitness for work; or
 - Treatment; or
 - Simple permanent impairment assessment of one body system.
- b. Moderately Complex Reports are-
 - reports relating to issues involving a combination of two of the following:
 - o Causation
 - o Fitness for Work
 - o Treatment
 - o Simple permanent impairment assessment of one body system
 - or
 - reports of simple permanent impairment assessment of two body systems or more than one injury to a single body system
- c. Complex Reports are -
 - reports relating to issues involving a combination of 3 or more of the following:
 - o Causation
 - Fitness for Work
 - o Treatment
 - Permanent impairment assessment of one body system
 - or
 - A complex method of permanent impairment assessment on single body system or multiple injuries involving more than one body system.

4. Application of order

This Order only applies to services provided by medical practitioners registered under the *Medical Practice Act 1992*.

Part 2 Fees for medical assessments

5. Fees for medical assessments

For the purposes of section 339 of the Act, the maximum fees for the provision by health service providers of any report for use in connection with a claim for compensation or work injury damages and an appearance as a witness in proceedings before the Workers Compensation Commission or a court in connection with a claim for compensation or work injury damages is as follows:

- a) In the case of a medical examination by a general practitioner, the rate set out in Schedule 1,
- b) In the case of a medical examination by a medical specialist, the rate set out in Schedule 2,
- c) In the case of a medical examination carried out by an approved medical specialist on referral by the Workers Compensation Commission, the rate set out in Schedule 3,

d) In the case of a medical examination carried out by an approved medical specialist, the rate set out in Schedule 4.

6. Goods and Services Tax

- (1) An amount fixed by this Order may be increased by the amount of any GST payable in respect of the service to which the cost relates, and the cost so increased is taken to be the amount fixed by this Order.
- (2) This clause does not permit a medical practitioner to charge or recover, in respect of GST payable in respect of a service, an amount that is greater than:
 - i. 10% of the maximum amount payable under this Order to the medical practitioner in respect of the medical or related treatment apart from this clause,
 - ii. the amount permitted under the New Tax System Price Exploitation Law, whichever is the lesser.

7. Payments under schedules 1 and 2

- (1) The party requesting a report as listed in these schedules is to either:
 - a. Agree the category of report being requested with the doctor and confirm the request in writing indicating that payment will be made within 10 days of receipt of a properly completed report and invoice; or
 - b. Pay in accordance with a contractual arrangement between the medical practice and the referring body on receipt of a properly completed tax invoice.

The contractual arrangement cannot agree to a fee above the maximum fee prescribed in this Order.

Schedules 1 and 2 apply to reports obtained for the purpose of proving or disproving an entitlement or the extent of an entitlement to workers compensation or work injury damages. Schedules 1 and 2 do not apply to medical or related treatment reports. Fees for those reports are fixed under section 61 of the *Workers Compensation Act 1987*.

(2) Fees fixed in these schedules are recoverable only where the conditions for payment as set out in Part C of Schedule 6 of the *Workers Compensation Regulation 2003* have been complied with.

Part C item 4 (which applies to treating medical practitioners reports) provides:

"If a claim or dispute is resolved whether before or after proceedings commenced:

Claimant (a) nil fee payable, unless paragraph (b) applies, or

(b) fee allowed in accordance with any applicable fee order where:

(i) request for report made to insurer; and

(ii) either:

- insurer does not provide report within 14 days, or
- report supplied by insurer does not address the report requirements of the claimant, and

(iii) report is served on insurer

Insurer:

(a) fee allowed in accordance with any applicable fee order"

Part C item 6 (which applies to clinical notes and records), provides conditions for payment in similar terms as above for item 4, but the period of time for an insurer to provide clinical records is fixed at 7 days.

In accordance with section 339 of the *Workplace Injury Management and Workers Compensation Act 1998*, a medical practitioner is not entitled to be paid or recover any fee for providing a service that exceeds the fee fixed under this Order.

Rates for Medical Examination by General Practitioners

Payment Classification Code	Service description	Fee
IMG001 or WIG001	Examination and report in accordance with the Guidelines - standard case (see definition of medical examination)	\$463.50
IMG002 or WIG002	Examination conducted with the assistance of an interpreter and report in accordance with Guidelines – standard case (see definition of medical examination)	\$517.70
IMG005 or WIG005	Non-attendance or cancellation with less than 7 days notice	\$113.40
IMG006 or WIG006	File review	\$343.10
IMG007 or WIG007	Supplementary report where additional information is provided and requested	\$228.80
IMG008 or WIG008	Update examination and report of worker previously reviewed, where there is no intervening incident	\$289.00
IMG009 or WIG009	Travel	Reimbursed in accordance with the travelling allowances set out in Table 1 (Allowances) to Part B (Monetary Rates) of the Crown Employees (Public Service Conditions of Employment) Award 2002

Rates for Medical Examination by Medical Specialists

Payment Classification Code	Service description	Fee
IMS001 or WIS001	Examination and report in accordance with the Guidelines - standard case (see definition of medical examination)	\$626.40
IMS002 or WIS002	Examination conducted with the assistance of an interpreter and report in accordance with Guidelines – standard case (see definition of medical examination)	\$782.10
IMS003 or WIS003	ENT report (includes audiological testing)	\$626.40
IMS031 or WIS 031	ENT report when examination has been conducted with the assistance of an interpreter and report in accordance with Guidelines (includes audiological testing)	\$782.10
IMS004 or WIS004	Examination and report in accordance with the Guidelines - moderate complexity (see definition of medical examination)	\$938.90
IMS005 or WIS005	Examination conducted with the assistance of an interpreter and report in accordance with Guidelines – moderate complexity (see definition of medical examination)	\$1,095.80
IMS006 or WIS006	Examination and report in accordance with Guidelines – complex case (see definition of medical examination)	\$1,245.70
IMS007 or WIS007	Examination and report in accordance with Guidelines – complex case (see definition of medical examination) with the assistance of an Interpreter.	\$1,559.50
IMS008 or WIS008	Examination and report in accordance with the Guidelines – psychiatric	\$1,095.80
IMS091 or WIS091	Cancellation with 2 days notice	\$156.90

IMS092 or WIS092	Cancellation with less than 2 working days notice, non attendance at scheduled appointment or unreasonably late attendance by worker or interpreter that prevents full examination being conducted	\$313.80
IMS010 or WIS010	File review	\$469.50
IMS011 or WIS011	Supplementary report where additional information is provided and requested	\$312.60
IMS012 or WIS012	Update examination and report of worker previously reviewed, where there is no intervening incident	\$463.70
IMS013 or WIS013	Travel	Reimbursed in accordance with the travelling allowances set out in Table 1 (Allowances) to Part B (Monetary Rates) of the <i>Crown Employees (Public</i> <i>Service Conditions of</i> <i>Employment) Award 2002</i>

Rates for Approved Medical Specialists

These rates are payable to an Approved Medical Specialist on referral from the Workers Compensation Commission for the purpose of resolving a dispute

Service description	Fee
Examination and report in accordance with Workers Compensation Commission standards – standard case	\$1,119.10
Examination and report in accordance with Workers Compensation Commission standards - multiple medical assessments e.g. for permanent impairment and general medical disputes	\$1,499.00
Ear, nose and throat, includes audiological testing	1,311.90
Examination and report in accordance with the Workers Compensation Commission standards -Psychiatric	\$1,872.00
Cancellation with less than 7 calendar days notice	\$373.00
Non-attendance or cancellation with less than 2 working days notice	\$746.10
Consolidation of medical assessment certificates by lead assessor	\$373.00
Re-examination + medical assessment certificate or reconsideration at request of Commission	\$560.10
When interpreter present at examination	Plus \$191.80
Miscellaneous Fee at the discretion of the Registrar or delegate	\$373.00 per hour
Travel	Reimbursed in accordance with the travelling allowances set out in Table 1 (Allowances) to Part B (Monetary Rates) of the <i>Crown</i> <i>Employees</i> (<i>Public Service</i> <i>Conditions of Employment</i>) <i>Award 2002.</i>

Rates for Approved Medical Specialists on Appeal Panels

These rates are payable to an Approved Medical Specialist when participating as a member of an Appeal Panel at the Workers Compensation Commission.

Service description	Fee
Assessment, initial telephone conference and decision on papers	\$746.10
Examination of worker and report by AMS	Fee as per Schedule 3 applies
Cancellation with less than 7 calendar days notice	\$373.00
Non-attendance or cancellation with less than 2 working days notice	\$746.10
Assessment, telephone conference, appeal hearing and decision	\$1,684.90
Additional Hearing or teleconference when convened by arbitrator	\$373.00 per hour
Travel	Reimbursed in accordance with the travelling allowances set out in Table 1 (Allowances) to Part B (Monetary Rates) of the <i>Crown</i> <i>Employees</i> (<i>Public Service</i> <i>Conditions of Employment</i>) <i>Award 2002</i>

WORKERS COMPENSATION (MEDICAL PRACTITIONER FEES) ORDER 2010

under the Workers Compensation Act 1987

I, Robert Gray, Acting Chief Executive Officer of the WorkCover Authority of New South Wales, make the following Order pursuant to subsection 61 (2) of the *Workers Compensation Act 1987*.

Dated this 16th day of December 2009

ROBERT GRAY Acting Chief Executive Officer WorkCover Authority

Explanatory Note

Treatment by a registered medical practitioner is one of the categories of medical or related treatment covered under the *Workers Compensation Act 1987*. This Order sets the maximum fees for which an employer is liable under the Act for treatment by medical practitioners of an injured worker's work-related injury.

The effect of the Order is to prevent medical practitioners from recovering from the injured worker any extra charge for treatments covered by the Order.

The Order does not apply to services provided by specialist surgeons.

The Order adopts the List of Medical Services and Fees published by the Australian Medical Association.

Workers Compensation (Medical Practitioner Fees) Order 2010

1. Name of Order

This Order is the Workers Compensation (Medical Practitioner Fees) Order 2010.

2. Commencement

This Order commences on 1 January 2010.

3. Definitions

In this Order:

After hours services applies in an emergency where the clinic is not normally open at that time, and urgent treatment is provided. This fee is not to be utilised in the situation where a consultation is conducted within the advertised hours of a clinic.

AMA List means the document entitled *List of Medical Services and Fees* published by the Australian Medical Association and dated 1 November 2009.

Assistant at Operation means a medically qualified surgical assistant, but only where an assistant's fee is allowed for in the Commonwealth Medical Benefits Schedule, or where indicated in the WorkCover schedule or approved in advance by the insurer. An assistant fee is only applicable for surgical procedures EA010 to MY115.

The Act means the Workers Compensation Act 1987.

GST has the same meaning as in the A New Tax System (Goods and Services Tax) Act 1999 of the Commonwealth.

New Tax System Price Exploitation Law means:

- a the *New Tax System Price Exploitation Code* as applied as a law of New South Wales by the *Price Exploitation Code (New South Wales) Act 1999;* and
- b Part VB of the Trade Practices Act 1974 of the Commonwealth.

Specialist Surgeon means a medical practitioner who holds a fellowship of the Royal Australian College of Surgeons.

4. Application of Order

This Order applies to treatment provided on or after the commencement of this Order, whether it relates to an injury received before, on or after that date.

5. Maximum fees for medical practitioners

- (1) This clause applies to medical and related treatment provided by a medical practitioner in respect of which a fee is specified in the AMA List, except:
 - (a) Medical services identified in the AMA List by AMA numbers AC500, AC510, AC520, AC530, AC600 and AC610 (Professional Attendances by a Specialist), if these medical services are provided by a specialist surgeon;
 - (b) Medical services identified in the AMA List by AMA Numbers EA010 to MZ705 (Surgical Operations) if these medical services are provided by a specialist surgeon;
 - (c) Medical services identified in the AMA List by AMA Number MZ900 (assistant surgeon's fee);
 - (d) Medical services identified in the AMA List by AMA numbers OP200, OP210 and OP220 (magnetic resonance imaging – MRI).
- (2) The maximum amount payable for magnetic resonance imaging (MRI) is \$700 for a single region or 2 contiguous regions, and \$1050 for more than 2 contiguous regions.
- (3) The maximum amount payable for a medical certificate is \$20.00.
- (4) The maximum hourly rate payable to a General Practitioner is \$226.80. The maximum hourly rate payable to a specialist is \$313.80. The hourly rate may cover, for example, case conferences, and visits to worksites.
- (5) The maximum fee for providing copies of medical records (including specialists notes and reports) is \$30 (for 33 pages or less) and an additional \$1.00 per page if more than 33 pages.
- (6) Subject to subclauses (1), (2), (3), (4), (5), and clause 6 (Nil fee for certain medical services), the maximum amount for which an employer is liable under the Act for any claim for medical or related treatment to which this clause applies is the fee listed, in respect of the medical or related treatment concerned, in the AMA List.

n number a surgeon must be confident they have fulfilled the

Note: To bill an AMA item number a surgeon must be confident they have fulfilled the service requirements as specified in the item descriptor. Where a comprehensive item number is used, separate items should not be claimed for any of the individual items included in the comprehensive service.

Incorrect use of an item may result in WorkCover taking action to recover money that has been incorrectly received.

6. Specialist Consultations

The initial specialist consultation fee includes the first consultation and report to the referring General Practitioner copied to the insurer.

The report will contain:

- The patient's diagnosis and present condition
- The patient's likely fitness for pre-injury work or alternate duties
- The need for treatment or additional rehabilitation; and
- Collateral conditions that are likely to impact on the management of the worker's condition (in accordance with privacy considerations)

Additional reports that do not relate to the routine management of a worker's injury attract an additional fee as per The Workplace Injury Management and Workers Compensation (Medical Examination and Reports) Order 2010.

7. Nil fee for certain medical services

The AMA List includes items that are not relevant to medical services provided to injured workers. As such, the fee set for the following items is nil:

- (a) All time based General Practitioner fees items (Medical services identified in the AMA List by AMA numbers AA190 AA320)
- (b) Enhanced primary care items (Medical services identified in the AMA List by AMA numbers AA500 – AA850)
- (c) Telehealth items (Medical services identified in the AMA List by AMA numbers AP050 – AP105)

8. Goods and Services Tax

- (1) An amount fixed by this Order may be increased by the amount of any GST payable in respect of the service to which the cost relates, and the cost so increased is taken to be the amount fixed by this Order.
- (2) This clause does not permit a medical practitioner to charge or recover, in respect of GST payable in respect of a service, an amount that is greater than:
 - i. 10% of the maximum amount payable under this Order to the medical practitioner in respect of the medical or related treatment apart from this clause,
 - ii. the amount permitted under the New Tax System Price Exploitation Law, whichever is the lesser.

WORKERS COMPENSATION (OSTEOPATHY FEES) ORDER 2010

under the

Workers Compensation Act 1987

I, Robert Gray, Acting Chief Executive Officer of the WorkCover Authority of New South Wales, pursuant to section 61 of the *Workers Compensation Act 1987*, make the following Order.

Dated this 16th day of December 2009

ROBERT GRAY Acting Chief Executive Officer WorkCover Authority

Explanatory Note

Treatment by a registered osteopath is one of the categories of medical and related treatment covered under the Workers Compensation Act 1987. This Order sets the maximum fees for which an employer is liable under the Act for treatment by an osteopath of an injured worker's work related injury.

Schedule A to this Order provides for maximum fees for osteopaths generally. Schedule B to this Order provides higher maximum fee levels for WorkCover approved osteopaths. WorkCover approved osteopaths have participated in training courses approved or run by WorkCover.

This Order makes provision for osteopathy management plans and the approval by workers compensation insurers of certain osteopathy services.

Workers Compensation (Osteopathy Fees) Order 2010

1. Name of Order

This Order is the Workers Compensation (Osteopathy Fees) Order 2010.

2. Commencement

This Order commences on 1 January 2010.

3. Definitions

In this Order:

Case Conference means a face-to-face meeting or teleconference with the nominated treating doctor, workplace rehabilitation provider, employer, insurer and/or worker to discuss a worker's return to work plan and / or strategies to improve a worker's ability to return to work. File notes of case conferences are to be documented in the osteopath's records indicating discussion and outcomes. This information may be required for invoicing purposes. Discussions between treating doctors and practitioners relating to treatment are considered a normal interaction between referring doctor and practitioner and are not to be charged as a case conference item.

Complex treatment means treatment related to complex pathology and clinical presentation including, but not limited to, extensive burns, complicated hand injuries involving multiple joints and tissues and some complex neurological conditions, spinal cord injuries, head injuries and major trauma. Provision of complex treatment requires preapproval from the insurer. It is expected that only a small number of claimants will require treatment falling within this category.

Group/class intervention occurs where a osteopath delivers a common service to more than one person at the same time. Examples are exercise and education groups. Maximum class size is 6 participants. An osteopathy management plan is required for each worker participant.

GST has the same meaning as in the New Tax System (Goods and Services Tax) Act 1999 (Cth).

Home visit applies in cases where, due to the effects of the injuries sustained, the worker is unable to travel. The home visit must be the best and most cost-effective option allowing the osteopath to travel to the worker's home to deliver treatment. Provision of home treatment requires pre-approval from the insurer.

Initial consultation and treatment means the first session provided by the osteopath in respect of an injury which includes:

- history taking,
- physical assessment,
- diagnostic formulation,
- goal setting and planning treatment,
- treatment/service,
- clinical recording,
- communication with referrer, and
- preparation of a management plan when indicated.

New Tax System Price Exploitation Law means:

- (a) the New Tax System price Exploitation Code as applied as a law of New South Wales by the Price Exploitation Code (New South Wales) Act 1999, and
- (b) Part VB of the Trade Practices Act 1974 (Cth).

Normal practice means premises in or from which an osteopath regularly operates a osteopathy practice and treats patients. It also includes facilities where service may be delivered on a regular or contract basis such as a gymnasium, private hospital or workplace.

Osteopath means a registered osteopath.

Osteopathy management plan means the document used by the osteopath to indicate treatment timeframe and anticipated outcomes for an injured worker to the relevant workers compensation insurer. An osteopathy management plan provides the mechanism to request approval from the relevant workers compensation insurer for treatment beyond:

- (a) the initial 8 consultations (when an injured worker has not attended for any previous treatment of a physical nature for this injury) or
- (b) the initial consultation/treatment (when an injured worker has attended for previous treatment of a physical nature for this injury).

An osteopathy management plan can request approval for up to an additional 8 osteopathy consultations unless otherwise approved by the insurer.

Osteopathy services refers to all services delivered by a registered osteopath and each service is to be billed according to Schedule A.

Report Writing occurs when an osteopath is requested to compile a written report providing details of the worker's treatment, progress and work capacity. The insurer must provide pre-approval for such a service.

Standard consultation and treatment means treatment sessions provided subsequent to the initial session and includes:

• re-assessment,

• intervention/treatment,

- · clinical recording, and
- preparation of a Osteopathy Management Plan when indicated.

The Act means the Workers Compensation Act 1987.

Travel occurs when the most appropriate clinical management of the patient requires the osteopath to travel away from their normal practice. Travel costs do not apply where the osteopath provides contracted service to facilities such as a private hospital, workplace or gymnasium. The insurer must provide pre-approval for such a service.

2 distinct areas means where 2 separate compensable injuries or conditions are assessed and treated and where treatment applied to one condition does not affect the symptoms of the other injury e.g. neck condition plus post fracture wrist. It does not include a condition with referred symptoms to another area.

WorkCover means the WorkCover Authority of New South Wales.

WorkCover approved means an osteopath who has, either before or after the commencement of this Order, by a date notified by WorkCover, participated in the WorkCover Training Courses and any other course approved by WorkCover (if any) for the purpose of this Order.

Work Related Activity assessment, consultation and treatment means a one hour session provided on a one to one basis for work related activity delivered to a patient that is new to the practice and includes:

- review of the previous treatment,
- assessment of current condition including functional status,
- goal setting,
- treatment and work related activity planning
- clinical recording,
- communication with key parties, and
- preparation of a management plan when indicated.

4. Application of Order

This Order applies to treatment provided on or after 1 January 2010 whether it relates to an injury received before, on or after that date.

5. Maximum fees for osteopathy treatment generally

- (1) The maximum fee amount for which an employer is liable under the Act for treatment of an injured worker by a osteopath, being treatment of a type specified in Column 1 of Schedule A to this Order, is the corresponding amount specified in Column 2 of that Schedule.
- (2) If it is reasonably necessary for a osteopath to provide treatment of a type specified in any of items OSX007 to OSX011 in Schedule A at the worker's home, the maximum fee amount for which an employer would otherwise be liable under the Act for that type of treatment is increased by an amount calculated at the rate per kilometre (for the number of kilometres of travel reasonably involved) specified for item OSX014 in Column 2 of Schedule A.
- (3) This clause does not apply to treatment by a WorkCover approved osteopath.

6. Higher maximum fees for WorkCover approved osteopaths

(1) The maximum fee amount for which an employer is liable under the Act for treatment of an injured worker by a osteopath, who is a WorkCover approved osteopath, being treatment of a type specified in Column 1 of Schedule B to this Order, is the corresponding amount specified in Column 2 of that Schedule.

(2) If it is reasonably necessary for a osteopath to provide treatment of a type specified in any of items OSA007 to OSA011 in Schedule B at the worker's home, the maximum fee amount for which an employer would otherwise be liable under the Act for that type of treatment is increased by an amount calculated at the rate per kilometre (for the number of kilometres of travel reasonably involved) specified for item OSA014 in Column 2 of Schedule B.

7. Goods and Services Tax

- (1) An amount fixed by this Order may be increased by the amount of any GST payable in respect of the service to which the cost relates, and the cost so increased is taken to be the amount fixed by this Order.
- (2) This clause does not permit a physiotherapist to charge or recover, in respect of GST payable in respect of a service, an amount that is greater than:
 - (a) 10% of the maximum amount payable under this Order to the physiotherapist in respect of the medical or related treatment apart from this clause, or
 - (b) the amount permitted under the New Tax System Price Exploitation Law, whichever is the lesser.

SCHEDULE A Maximum fees for Osteopaths generally

Note: Incorrect use of an item may result in WorkCover taking action to recover money that has been incorrectly received.

Item	Column 1	Column 2
	Type of Treatment	Maximum Amount (\$)
Normal Practice		
OSX001	Initial consultation and treatment	50
OSX002	Standard consultation and treatment	40
OSX003	Initial consultation and treatment of two (2)	75
	distinct areas	
OSX004	Standard consultation and treatment of two (2)	60
	distinct areas	
OSX005	Complex treatment	80
OSX006	Group/class intervention	30/participant
Home Visit		
OSX007	Initial consultation and treatment	62
OSX008	Standard consultation and treatment	50
OSX009	Initial consultation and treatment of two (2)	94
	distinct areas	
OSX010	Standard consultation and treatment of two (2)	75
	distinct areas	
OSX011	Complex treatment	100
Other		
OSX012	Case conference	100/hour
OSX013	Report writing	100 (maximum)
OSX014	Travel	1.00 per kilometre

SCHEDULE B Maximum fees for WorkCover approved Osteopaths

Item	Column 1	Column 2
	Type of Treatment	Maximum Amount (\$)
Normal Practice		
OSA001	Initial consultation and treatment	75.60
OSA002	Standard consultation and treatment	64.00
OSA003	Initial consultation and treatment of two (2) distinct areas	113.90
OSA004	Standard consultation and treatment of two (2) distinct areas	96.50
OSA005	Complex treatment	127.90
OSA006	Group/class intervention	45.40 /participant
Home Visit		
OSA007	Initial consultation and treatment	93.00
OSA008	Standard consultation and treatment	74.40
OSA009	Initial consultation and treatment of two (2) distinct areas	137.20
OSA010	Standard consultation and treatment of two (2) distinct areas	118.40
OSA011	Complex treatment	151.10
Other	-	
OSA012	Case conference, Report writing	151.10/hour 151.10 (maximum)
OSA013	Work Related Activity assessment, consultation and treatment	151.10 (maximum)
OSA014	Travel	1.40/kilometre

WORKERS COMPENSATION (PHYSIOTHERAPY FEES) ORDER 2010

under the

Workers Compensation Act 1987

I, Robert Gray, Acting Chief Executive Officer of the WorkCover Authority of New South Wales, pursuant to section 61 of the *Workers Compensation Act 1987*, make the following Order.

Dated this 16th day of December 2009

ROBERT GRAY Chief Executive Officer WorkCover Authority

Explanatory Note

Treatment by a registered physiotherapist is one of the categories of medical and related treatment covered under the Workers Compensation Act 1987. This Order sets the maximum fees for which an employer is liable under the Act for treatment by a physiotherapist of an injured worker's work related injury.

Schedule A to this Order provides for maximum fees for physiotherapists generally. Schedule B to this Order provides higher maximum fee levels for WorkCover approved physiotherapists. WorkCover approved physiotherapists have participated in training courses approved or run by WorkCover.

This Order makes provision for physiotherapy management plans and the approval by workers compensation insurers of certain physiotherapy services.

Workers Compensation (Physiotherapy Fees) Order 2010

1. Name of Order

This Order is the Workers Compensation (Physiotherapy Fees) Order 2010.

2. Commencement

This Order commences on 1 January 2010.

3. Definitions

In this Order:

The Act means the Workers Compensation Act 1987.

Case Conference means a face-to-face meeting or teleconference with the nominated treating doctor, workplace rehabilitation provider, employer, insurer and/or worker to discuss a worker's return to work plan and / or strategies to improve a worker's ability to return to work. File notes of case conferences are to be documented in the physiotherapist's records indicating discussion and outcomes. This information may be required for invoicing purposes. Discussions between treating doctors and practitioners relating to treatment are considered a normal interaction between referring doctor and practitioner and are not to be charged as a case conference item.

Complex treatment means treatment related to complex pathology and clinical presentation including, but not limited to, extensive burns, complicated hand injuries involving multiple joints and tissues and some complex neurological conditions, spinal cord injuries, head injuries and major trauma. Provision of complex treatment requires preapproval from the insurer. It is expected that only a small number of claimants will require treatment falling within this category.

Group/class intervention occurs where a physiotherapist delivers a common service to more than one person at the same time. Examples are aquatic physiotherapy classes and exercise groups. Maximum class size is six (6) participants. A physiotherapy management plan is required for each worker participant.

GST has the same meaning as in the New Tax System (Goods and Services Tax) Act 1999 (Cth).

Home visit applies in cases where, due to the effects of the injuries sustained, the worker is unable to travel. The home visit must be the best and most cost-effective option allowing the physiotherapist to travel to the worker's home to deliver treatment. Provision of home treatment requires pre-approval from the insurer.

Initial consultation and treatment means the first session provided by the physiotherapist in respect of an injury which includes:

- history taking,
- physical assessment,
- diagnostic formulation,
- goal setting and planning treatment,
- treatment/service,
- clinical recording,
- communication with referrer, and
- preparation of a management plan when indicated.

New Tax System Price Exploitation Law means:

a. the New Tax System price Exploitation Code as applied as a law of New South Wales by the Price Exploitation Code (New South Wales) Act 1999, and

b. Part VB of the Trade Practices Act 1974 (Cth).

Normal practice means premises in or from which a physiotherapist regularly operates a physiotherapy practice and treats patients. It also includes facilities where service may be delivered on a regular or contract basis such as a hydrotherapy pool, gymnasium, private hospital or workplace.

Physiotherapist means a registered physiotherapist.

Physiotherapy management plan means the document used by the physiotherapist to indicate treatment timeframe and anticipated outcomes for an injured worker to the relevant workers compensation insurer. A Physiotherapy Management Plan provides the mechanism to request approval from the relevant workers compensation insurer for treatment beyond:

(a) the initial eight (8) consultations (when an injured worker has not attended for any previous treatment of a physical nature for this injury) or

(b) the initial consultation/treatment (when an injured worker has attended for previous treatment of a physical nature for this injury).

A physiotherapy management plan can request approval for up to an additional eight (8) physiotherapy consultations unless otherwise approved by the insurer.

Physiotherapy services refers to all services delivered by a registered physiotherapist and each service is to be billed according to the Fee Schedule. Physiotherapy services may include, but are not limited to, acupuncture, aquatic physiotherapy, Pilates exercise, massage and exercise instruction.

Report Writing occurs when a physiotherapist is requested to compile a written report providing details of the worker's treatment, progress and work capacity. The insurer must provide pre-approval for such a service.

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Standard consultation and treatment means treatment sessions provided subsequent to the initial session and includes:

- re-assessment,
- intervention/treatment,
- clinical recording, and
- preparation of a Physiotherapy Management Plan when indicated.

Travel occurs when the most appropriate clinical management of the patient requires the physiotherapist to travel away from their normal practice. Travel costs do not apply where the Physiotherapist provides contracted service to facilities such as a private hospital, hydrotherapy pool, workplace or gymnasium. The insurer must provide pre-approval for such a service.

Two (2) distinct areas means where two (2) entirely separate compensable injuries or conditions are assessed and treated and where treatment applied to one condition does not affect the symptoms of the other injury e.g. neck condition plus post fracture wrist. It does not include a condition with referred symptoms to another area.

WorkCover means the WorkCover Authority of New South Wales.

WorkCover approved means a physiotherapist who has, either before or after the commencement of this Order, by a date notified by WorkCover, participated in the WorkCover Training Courses and any other course approved by WorkCover (if any) for the purpose of this Order.

Work related activity assessment, consultation and treatment means a one hour session provided on a one to one basis for a work related activity delivered to a patient that is new to the practice and includes:

- review of the previous treatment,
- assessment of current condition including functional status,
- goal setting,
- treatment planning / work related activity planning,
- · clinical recording,
- communication with key parties, and
- preparation of a management plan when indicated.

4. Application of Order

This Order applies to treatment provided on or after 1 January 2010 whether it relates to an injury received before, on or after that date.

5. Maximum fees for physiotherapy treatment generally

- (1) The maximum fee amount for which an employer is liable under the Act for treatment of an injured worker by a physiotherapist, being treatment of a type specified in Column 1 of Schedule A to this Order, is the corresponding amount specified in Column 2 of that Schedule.
- (2) If it is reasonably necessary for a physiotherapist to provide treatment of a type specified in any of items PTX007 to PTX011 in Schedule A at the worker's home, the maximum fee amount for which an employer would otherwise be liable under the Act for that type of treatment is increased by an amount calculated at the rate per kilometre (for the number of kilometres of travel reasonably involved) specified for item PTX014 in Column 2 of Schedule A.
- (3) This clause does not apply to treatment by a WorkCover approved physiotherapist.

6. Higher maximum fees for WorkCover approved physiotherapists

- (1) The maximum fee amount for which an employer is liable under the Act for treatment of an injured worker by a physiotherapist, who is a WorkCover approved physiotherapist, being treatment of a type specified in Column 1 of Schedule B to this Order, is the corresponding amount specified in Column 2 of that Schedule.
- (2) If it is reasonably necessary for a physiotherapist to provide treatment of a type specified in any of items PTA007 to PTA011 in Schedule B at the worker's home, the maximum fee amount for which an employer would otherwise be liable under the Act for that type of treatment is increased by an amount calculated at the rate per kilometre (for the number of kilometres of travel reasonably involved) specified for item PTA014 in Column 2 of Schedule B.

7. Goods and Services Tax

- (1) An amount fixed by this Order may be increased by the amount of any GST payable in respect of the service to which the cost relates, and the cost so increased is taken to be the amount fixed by this Order.
- (2) This clause does not permit a physiotherapist to charge or recover, in respect of GST payable in respect of a service, an amount that is greater than:
 - (a) 10% of the maximum amount payable under this Order to the physiotherapist in respect of the medical or related treatment apart from this clause, or
 - (b) the amount permitted under the New Tax System Price Exploitation Law, whichever is the lesser.

SCHEDULE A Maximum fees for Physiotherapists generally

Note:Incorrect use of an item may result in WorkCover taking action to recover money that has been incorrectly received.

Item		
	Type of Treatment	Maximum Amount (\$)
Normal Practice		
PTX001	Initial consultation and treatment	50
PTX002	Standard consultation and treatment	40
PTX003	Initial consultation and treatment of two (2)	75
	distinct areas	
PTX004	Standard consultation and treatment of two (2)	60
	distinct areas	
PTX005	Complex treatment	80
PTX006	Group/class intervention	30/participant
Home Visit		
PTX007	Initial consultation and treatment	62
PTX008	Standard consultation and treatment	50
PTX009	Initial consultation and treatment of two (2)	94
	distinct areas	
PTX010	Standard consultation and treatment of two (2)	75
	distinct areas	
PTX011	Complex treatment	100
Other		
PTX012	Case conference	100/hour
PTX013	Report writing 100 (maximum)	
PTX014	Travel	1.00 per kilometre

SCHEDULE B Maximum fees for WorkCover approved Physiotherapists

Item	Column 1	Column 2
	Type of Treatment	Maximum Amount (\$)
Normal Practice		
PTA001	Initial consultation and treatment	75.60
PTA002	Standard consultation and treatment	64.00
PTA003	Initial consultation and treatment of two (2) distinct areas	113.90
PTA004	Standard consultation and treatment of two (2) distinct areas	96.50
PTA005	Complex treatment	127.90
PTA006	Group/class intervention	45.40 /participant
Home Visit		
PTA007	Initial consultation and treatment	93.00
PTA008	Standard consultation and treatment	74.40
PTA009	Initial consultation and treatment of two (2) distinct areas	137.20
PTA010	Standard consultation and treatment of two (2) distinct areas	117.40
PTA011	Complex treatment	151.10
Other		
PTA012	Case conference, Report writing	151.10 /hour 151.10 (maximum)
PTA013	Work Related Activity assessment, consultation and treatment	151.10 (maximum)
PTA014	Travel	1.40/kilometre

- intervention/treatment,
- clinical recording, and
- preparation of a Physiotherapy Management Plan when indicated.

WORKERS COMPENSATION (PHYSIOTHERAPY FEES) ORDER 2010

under the

Workers Compensation Act 1987

I, Robert Gray, Acting Chief Executive Officer of the WorkCover Authority of New South Wales, pursuant to section 61 of the *Workers Compensation Act 1987*, make the following Order.

Dated this 16th day of December 2009

ROBERT GRAY Chief Executive Officer WorkCover Authority

Explanatory Note

Treatment by a registered physiotherapist is one of the categories of medical and related treatment covered under the Workers Compensation Act 1987. This Order sets the maximum fees for which an employer is liable under the Act for treatment by a physiotherapist of an injured worker's work related injury.

Schedule A to this Order provides for maximum fees for physiotherapists generally. Schedule B to this Order provides higher maximum fee levels for WorkCover approved physiotherapists. WorkCover approved physiotherapists have participated in training courses approved or run by WorkCover.

This Order makes provision for physiotherapy management plans and the approval by workers compensation insurers of certain physiotherapy services.

Workers Compensation (Physiotherapy Fees) Order 2010

1. Name of Order

This Order is the Workers Compensation (Physiotherapy Fees) Order 2010.

2. Commencement

This Order commences on 1 January 2010.

3. Definitions

In this Order:

The Act means the Workers Compensation Act 1987.

Case Conference means a face-to-face meeting or teleconference with the nominated treating doctor, workplace rehabilitation provider, employer, insurer and/or worker to discuss a worker's return to work plan and / or strategies to improve a worker's ability to return to work. File notes of case conferences are to be documented in the physiotherapist's records indicating discussion and outcomes. This information may be required for invoicing purposes. Discussions between treating doctors and practitioners relating to treatment are considered a normal interaction between referring doctor and practitioner and are not to be charged as a case conference item.

Complex treatment means treatment related to complex pathology and clinical presentation including, but not limited to, extensive burns, complicated hand injuries involving multiple joints and tissues and some complex neurological conditions, spinal cord injuries, head injuries and major trauma. Provision of complex treatment requires preapproval from the insurer. It is expected that only a small number of claimants will require treatment falling within this category.

Group/class intervention occurs where a physiotherapist delivers a common service to more than one person at the same time. Examples are aquatic physiotherapy classes and exercise groups. Maximum class size is six (6) participants. A physiotherapy management plan is required for each worker participant.

GST has the same meaning as in the New Tax System (Goods and Services Tax) Act 1999 (Cth).

Home visit applies in cases where, due to the effects of the injuries sustained, the worker is unable to travel. The home visit must be the best and most cost-effective option allowing the physiotherapist to travel to the worker's home to deliver treatment. Provision of home treatment requires pre-approval from the insurer.

Initial consultation and treatment means the first session provided by the physiotherapist in respect of an injury which includes:

- history taking,
- physical assessment,
- diagnostic formulation,
- goal setting and planning treatment,
- treatment/service,
- clinical recording,
- communication with referrer, and
- preparation of a management plan when indicated.

New Tax System Price Exploitation Law means:

a. the New Tax System price Exploitation Code as applied as a law of New South Wales by the Price Exploitation Code (New South Wales) Act 1999, and

b. Part VB of the Trade Practices Act 1974 (Cth).

Normal practice means premises in or from which a physiotherapist regularly operates a physiotherapy practice and treats patients. It also includes facilities where service may be delivered on a regular or contract basis such as a hydrotherapy pool, gymnasium, private hospital or workplace.

Physiotherapist means a registered physiotherapist.

Physiotherapy management plan means the document used by the physiotherapist to indicate treatment timeframe and anticipated outcomes for an injured worker to the relevant workers compensation insurer. A Physiotherapy Management Plan provides the mechanism to request approval from the relevant workers compensation insurer for treatment beyond:

(a) the initial eight (8) consultations (when an injured worker has not attended for any previous treatment of a physical nature for this injury) or

(b) the initial consultation/treatment (when an injured worker has attended for previous treatment of a physical nature for this injury).

A physiotherapy management plan can request approval for up to an additional eight (8) physiotherapy consultations unless otherwise approved by the insurer.

Physiotherapy services refers to all services delivered by a registered physiotherapist and each service is to be billed according to the Fee Schedule. Physiotherapy services may include, but are not limited to, acupuncture, aquatic physiotherapy, Pilates exercise, massage and exercise instruction.

Report Writing occurs when a physiotherapist is requested to compile a written report providing details of the worker's treatment, progress and work capacity. The insurer must provide pre-approval for such a service.

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Standard consultation and treatment means treatment sessions provided subsequent to the initial session and includes:

- re-assessment,
- intervention/treatment,
- clinical recording, and
- preparation of a Physiotherapy Management Plan when indicated.

Travel occurs when the most appropriate clinical management of the patient requires the physiotherapist to travel away from their normal practice. Travel costs do not apply where the Physiotherapist provides contracted service to facilities such as a private hospital, hydrotherapy pool, workplace or gymnasium. The insurer must provide pre-approval for such a service.

Two (2) distinct areas means where two (2) entirely separate compensable injuries or conditions are assessed and treated and where treatment applied to one condition does not affect the symptoms of the other injury e.g. neck condition plus post fracture wrist. It does not include a condition with referred symptoms to another area.

WorkCover means the WorkCover Authority of New South Wales.

WorkCover approved means a physiotherapist who has, either before or after the commencement of this Order, by a date notified by WorkCover, participated in the WorkCover Training Courses and any other course approved by WorkCover (if any) for the purpose of this Order.

Work related activity assessment, consultation and treatment means a one hour session provided on a one to one basis for a work related activity delivered to a patient that is new to the practice and includes:

- review of the previous treatment,
- assessment of current condition including functional status,
- goal setting,
- treatment planning / work related activity planning,
- · clinical recording,
- communication with key parties, and
- preparation of a management plan when indicated.

4. Application of Order

This Order applies to treatment provided on or after 1 January 2010 whether it relates to an injury received before, on or after that date.

5. Maximum fees for physiotherapy treatment generally

- (1) The maximum fee amount for which an employer is liable under the Act for treatment of an injured worker by a physiotherapist, being treatment of a type specified in Column 1 of Schedule A to this Order, is the corresponding amount specified in Column 2 of that Schedule.
- (2) If it is reasonably necessary for a physiotherapist to provide treatment of a type specified in any of items PTX007 to PTX011 in Schedule A at the worker's home, the maximum fee amount for which an employer would otherwise be liable under the Act for that type of treatment is increased by an amount calculated at the rate per kilometre (for the number of kilometres of travel reasonably involved) specified for item PTX014 in Column 2 of Schedule A.
- (3) This clause does not apply to treatment by a WorkCover approved physiotherapist.

6. Higher maximum fees for WorkCover approved physiotherapists

- (1) The maximum fee amount for which an employer is liable under the Act for treatment of an injured worker by a physiotherapist, who is a WorkCover approved physiotherapist, being treatment of a type specified in Column 1 of Schedule B to this Order, is the corresponding amount specified in Column 2 of that Schedule.
- (2) If it is reasonably necessary for a physiotherapist to provide treatment of a type specified in any of items PTA007 to PTA011 in Schedule B at the worker's home, the maximum fee amount for which an employer would otherwise be liable under the Act for that type of treatment is increased by an amount calculated at the rate per kilometre (for the number of kilometres of travel reasonably involved) specified for item PTA014 in Column 2 of Schedule B.

7. Goods and Services Tax

- (1) An amount fixed by this Order may be increased by the amount of any GST payable in respect of the service to which the cost relates, and the cost so increased is taken to be the amount fixed by this Order.
- (2) This clause does not permit a physiotherapist to charge or recover, in respect of GST payable in respect of a service, an amount that is greater than:
 - (a) 10% of the maximum amount payable under this Order to the physiotherapist in respect of the medical or related treatment apart from this clause, or
 - (b) the amount permitted under the New Tax System Price Exploitation Law, whichever is the lesser.

SCHEDULE A Maximum fees for Physiotherapists generally

Note:Incorrect use of an item may result in WorkCover taking action to recover money that has been incorrectly received.

Item	Column 1	Column 2
	Type of Treatment	Maximum Amount (\$)
Normal Practice		
PTX001	Initial consultation and treatment	50
PTX002	Standard consultation and treatment	40
PTX003	Initial consultation and treatment of two (2)	75
	distinct areas	
PTX004	Standard consultation and treatment of two (2)	60
	distinct areas	
PTX005	Complex treatment	80
PTX006	Group/class intervention	30/participant
Home Visit		
PTX007	Initial consultation and treatment	62
PTX008	Standard consultation and treatment	50
PTX009	Initial consultation and treatment of two (2) 94	
	distinct areas	22
PTX010	Standard consultation and treatment of two (2) distinct areas	75
PTX011	Complex treatment 100	
Other		
PTX012	Case conference	100/hour
PTX013	Report writing 100 (maximum)	
PTX014	Travel 1.00 per kilometre	

SCHEDULE B Maximum fees for WorkCover approved Physiotherapists

Item	Column 1	Column 2
	Type of Treatment	Maximum Amount (\$)
Normal Practice		
PTA001	Initial consultation and treatment	75.60
PTA002	Standard consultation and treatment	64.00
PTA003	Initial consultation and treatment of two (2) distinct areas	113.90
PTA004	Standard consultation and treatment of two (2) distinct areas	96.50
PTA005	Complex treatment	127.90
PTA006	Group/class intervention	45.40 /participant
Home Visit		
PTA007	Initial consultation and treatment	93.00
PTA008	Standard consultation and treatment	74.40
PTA009	Initial consultation and treatment of two (2) distinct areas	137.20
PTA010	Standard consultation and treatment of two (2) distinct areas	117.40
PTA011	Complex treatment	151.10
Other		
PTA012	Case conference, Report writing	151.10 /hour
		151.10 (maximum)
PTA013	Work Related Activity assessment, consultation and treatment	151.10 (maximum)
PTA014	Travel	1.40/kilometre

- intervention/treatment,
- clinical recording, and
- preparation of a Physiotherapy Management Plan when indicated.

Workers Compensation (Remedial Massage Therapy Services Fees) Order 2010) under the Workers Compensation Act 1987

I, Robert Gray, Acting Chief Executive Officer of the WorkCover Authority of New South Wales, pursuant to section 61 of the *Workers Compensation Act 1987*, make the following Order.

Dated this 16th day of December 2009

ROBERT GRAY Acting Chief Executive Officer WorkCover Authority

Explanatory Note

Treatment by a "masseur" is one of the categories of medical and related treatment covered under the *Workers Compensation Act* 1987. For the purposes of this Order, the term masseur is interchangeable with remedial massage therapist. This Order sets the maximum fees for which an employer is liable under the Act for reasonably necessary treatment by a WorkCover approved remedial massage therapist of an injured worker's work related injury.

Workers Compensation (Remedial Massage Therapy Services Fees) Order 2010

1. Name of Order

This Order is the Workers Compensation (Remedial Massage Therapy Services Fees) Order 2010.

2. Commencement

This Order commences on 1 January 2010.

3. Definitions

In this order:

GST has the same meaning as in the New Tax System (Goods and Services Tax) Act 1999 of the Commonwealth.

Remedial Massage Therapist means a remedial massage therapist or a masseur.

New Tax System Price Exploitation Law means

a. the New Tax System Price Exploitation Code as applied as a law of New South Wales by the *Price Exploitation Code (New South Wales) Act* 1999, and

b. Part VB of the Trade Practices Act 1974 of the Commonwealth.

The Act means the Workers Compensation Act 1987.

WorkCover means the WorkCover Authority of New South Wales.

WorkCover approved means a remedial massage therapist who, at the time when the services are provided, is approved by WorkCover to provide remedial massage therapy services.

4. Application of Order

This Order applies to treatment provided on or after the date of commencement, whether it relates to an injury received before, on or after that date.

5. Maximum fees for remedial massage therapy

- (1) The maximum fee amount for which an employer is liable under the Act for treatment of an injured worker by a remedial massage therapist, being treatment of a type specified in Column 1 of Schedule A to this Order, is the corresponding amount specified in Column 2 of that Schedule.
- (2) No fees are payable by or on behalf of an employer for treatment provided by a person who is not a WorkCover approved remedial massage therapist.

6. Goods and Services Tax

- (1) An amount fixed by this Order may be increased by the amount of any GST payable in respect of the service to which the cost relates, and the cost as so increased is taken to be the amount fixed by this Order.
- (2) This clause does not permit a remedial massage therapist to charge or recover, in respect of GST payable in respect of a service, an amount that is greater than:

(a) 10% of the maximum amount that would otherwise be payable under this Order to the remedial massage therapist in respect of the medical or related treatment, or

(b) the amount permitted under the New Tax System Price Exploitation Law, whichever is the lesser.

Schedule A

1.

Note: Incorrect use of an item may result in WorkCover taking action to recover money that has been incorrectly received.

Maximum fees for WorkCover approved remedial massage therapists Column 1 Column 2

Item	Type of Treatment	Maximum Amount (\$)
RMA 001	Consultation and treatment (60 minutes duration)	\$65.80 (excl GST)
RMA 002	Consultation and treatment (45 minutes duration)	\$49.40 (excl GST)
RMA 003	Consultation and treatment (30 minutes duration)	\$32.90 (excl GST)

WORKERS COMPENSATION (ORTHOPAEDIC SURGEON FEES) ORDER 2010

under the Workers Compensation Act 1987

I, Robert Gray, Acting Chief Executive Officer of the WorkCover Authority of New South Wales, make the following Order pursuant to section 61 (2) of the *Workers Compensation Act 1987*.

Dated this 16th day of December 2009

ROBERT GRAY Chief Executive Officer WorkCover Authority

Explanatory Note

Treatment by an orthopaedic surgeon is a medical or related treatment covered under the *Workers Compensation Act* 1987. This Order sets the maximum fees for which an employer is liable under the Act for treatment by an orthopaedic surgeon of an injured worker's work-related injury.

The effect of the Order is to prevent an orthopaedic surgeon from recovering from the injured worker or employer any extra charge for treatments covered by the Order.

The Order adopts the items listed as Orthopaedic Procedures in the *List of Medical Services and Fees* published by the Australian Medical Association (AMA).

Schedule A to this Order provides for maximum fees for which an employer is liable under the Act for treatment by an orthopaedic surgeon of an injured worker's work-related injury.

Schedule B outlines rules that must be followed when billing for items used in hand surgery. Table 1 in Schedule B details items that are not applicable to hand surgery procedures. Table 2 in Schedule B details items with restricted application for hand surgery and where clinical justification is required that they are reasonably necessary given the circumstances of the case.

Workers Compensation (Orthopaedic Surgeon Fees) Order 2010

1. Name of Order

This Order is the Workers Compensation (Orthopaedic Surgeon Fees) Order 2010.

2. Commencement This Order commences on 1 January 2010.

3. Definitions

In this Order:

Aftercare Visits has the same meaning as in the AMA List and is covered by the surgical procedure fee during the 1^{st} 6 weeks following the date of surgery or until wound healing has occurred. However unrelated visits or incidental reasons for visits that are not regarded as routine aftercare should be explained with accounts rendered. The consulting surgeon will issue a "certificate" detailing the worker's fitness for work and anticipated aftercare, on discharge from hospital or after the first post injury consultation.

After Hours Consultations means call-outs to a public or private hospital or a private home for urgent cases before 8.00am or after 6:00pm. This fee is not to be utilised where a consultation is conducted for non-urgent cases outside of these hours.

Assistant at Operation means a medically qualified surgical assistant, but only where an assistant's fee is allowed for in the Commonwealth Medical Benefits Schedule, or where indicated in the WorkCover schedule or approved in advance by the insurer. An assistant fee is only applicable for surgical procedures EA010 to MY115.

AMA List means the document entitled *List of Medical Services and Fees* published by the Australian Medical Association and dated 1 November 2009.

the Act means the Workers Compensation Act 1987.

Extended Initial Consultation means a consultation involving significant multiple trauma or complex "red flag" spinal conditions (systemic pathology, carcinoma, infection, fracture or nerve impingement) involving a lengthy consultation and extensive physical examination.

GST has the same meaning as in the A New Tax System (Goods and Services Tax) Act 1999 of the Commonwealth.

Initial consultation and report covers the first consultation and the report to the referring General Practitioner and insurer.

The report will contain:

- the patient's diagnosis and present condition;
- the patient's likely fitness for pre-injury work or for alternate duties;
- the need for treatment or additional rehabilitation; and
- collateral conditions that are likely to impact on the management or the worker's condition (in accordance with privacy considerations).

Receipt of this information and "certificates" post treatment will provide sufficient information for insurers, employers and rehabilitation providers to develop management plans.

Instrument Fee covers procedures where the surgeon supplies all the equipment or a substantial number of specialised instruments in exceptional circumstances and must be justified. This fee does not apply for all operations or if only incidental instruments (non critical) are supplied by the surgeon. Routine items such as loupes are not included.

Multiple Operations or Injuries refers to situations that require two or more operations or for the treatment of two or more injuries carried out at the same time. The fee for the main operation or injury is to be paid in full as per Schedule A and 75% of the charge specified in Schedule A for each additional operation or injury is payable, unless specifically listed in the Schedule as a multiple procedure item.

New Tax System Price Exploitation Law means:

- (a) the *New Tax System Price Exploitation Code* as applied as a law of New South Wales by the *Price Exploitation Code (New South Wales) Act* 1999; and
- (b) Part VB of the *Trade Practices Act* 1974 of the Commonwealth.

Opinion on File Request includes retrieval of file from whatever source, reading time, and reporting where a request for such an opinion has been made in writing to the orthopaedic surgeon by the insurer/lawyer. Fees for this service will not be pre-paid in whole or part.

6435

Orthopaedic procedures are those listed in the AMA list but does not include the cost of bandages, dressings, plaster of Paris bandages, splints, metallic fixation agents, and prosthetic implants which may be charged in addition to the fee set out in the Schedule A, if purchased by the surgeon. The fee for orthopaedic procedures includes aftercare visits.

Orthopaedic surgeon means a medical practitioner who is currently a Fellow of the Australian Orthopaedic Association or who is recognised by Medicare Australia as a specialist in orthopaedic surgery. It includes an orthopaedic surgeon who is a staff member at a public hospital providing services at the hospital.

Revision Surgery refers to a procedure carried out to correct earlier surgery. This attracts a fee of 50% of the amount for the principal procedure in the initial surgery and the fee payable for the new procedure, except where the new procedure is specified as a revision procedure in the AMA list.

Subsequent Consultation is a consultation not included in the normal aftercare that applies following surgery. The cost of the latter is included in the fee for the orthopaedic procedure.

4. Application of Order

This Order applies to treatment provided on or after the commencement of this Order, whether it relates to an injury received before, on or after that date.

5. Maximum fees for treatment by orthopaedic surgeon

- (1) The maximum fee amount for which an employer is liable under the Act for treatment of an injured worker by an orthopaedic surgeon, being treatment of a type specified in Column 1 of Schedule A to this Order, is the corresponding amount specified in Column 3 of that Schedule.
- (2) A fee charged by an orthopaedic surgeon for a patient's treatment (including the management of fractures and other conditions) will be in addition to the fee in Schedule A for the original examination and report.

6. Goods and Services Tax

- (1) An amount fixed by this Order may be increased by the amount of any GST payable in respect of the service to which the cost relates, and the cost so increased is taken to be the amount fixed by this Order.
- (2) This clause does not permit a medical practitioner to charge or recover, in respect of GST payable in respect of a service, an amount that is greater than:
 - (a) 10% of the maximum amount payable under this Order to the medical practitioner in respect of the medical or related treatment apart from this clause, or
 - (b) the amount permitted under the New Tax System Price Exploitation Law, whichever is the lesser.

Schedule A

Maximum fees for orthopaedic surgeons

Note: To bill an AMA item number a surgeon must be confident they have fulfilled the service requirements as specified in the item descriptor. Where a comprehensive item number is used, separate items should not be claimed for any of the individual items included in the comprehensive service.

Where only one service is rendered, only one item should be billed. Where more than one service is rendered on one occasion of service, the appropriate item for each discrete service may be billed, provided that each item fully meets the item descriptor. Where an operation comprises a combination of procedures which are commonly performed together and for which there is an AMA item that specifically describes the combination of procedures then only that item should be billed. The invoice should cover the total episode of treatment.

Incorrect use of an item may result in WorkCover taking action to recover money that has been incorrectly received.

Item	Column 1 Type of service	Column 2 AMA Item(s)	Column 3 Maximum amount
Consul	tations		
1.	Initial consultation and report	AC500 (MBS 104)	\$261.50
2.	Extended initial consultation and report	AC500 (MBS104)	\$360.30
3.	Subsequent consultation	AC510 (MBS 105)	\$180.20
4.	After hours consultation		\$151.10 in addition to consultation fee
Proced 5.	ures Orthopaedic procedures	ML005 (MBS	150% of AMA Schedule
		46300) to MY115 (MBS 50130)	
6.	Instrument fee	WCO003	\$180.20
7.	Assistant at operation	MZ900	\$302.20or 20% of the total fee for surgical procedures, whichever is greater
8.	Multiple operations or injuries		Primary operation is to be paid in full, and additional operations at 75% of scheduled fee
9.	Aftercare visits		As per AMA Schedule

Insurer/lawyer requests

- 10. Opinion on file request
- 11. Telephone requests
- 12. Lost reports and reprints
- 13. Treating Specialist Report (where additional information that is not related to the routine injury management of the patient, is requested by either party to a potential or current dispute)
- 14. Fees for providing copies of clinical notes and records

\$34.90 per 3-5 minute phone call

\$122.10 per report

\$180.20

Please refer to the Workplace Injury Management and Workers Compensation (Medical Examinations and Reports) Order 2010

Please refer to the Workers Compensation (Medical Practitioners Fees) Order 2010 – clause 4(5)

Schedule B

Billing items used in hand surgery

Table 1: Item numbers and descriptors no longer applicable to hand surgery procedures

CMBS item code	AMA item code	Descriptor	Reason for decline
Nil	CV082	MINOR NERVE BLOCK (specify type) to provide post operative pain relief (this does not include subcutaneous infiltration)	The MBS does not allow a claim for nerve blocks performed either as the primary anaesthetic technique, or as a method of postoperative analgesia. The item number for anaesthesia itself is considered to cover such blocks.
45051	MG540	CONTOUR RECONSTRUCTION for pathological deformity, insertion of foreign implant (non biological but excluding injection of liquid or semisolid material) by open operation	This relates to the insertion of foreign implant for pathological deformity by an open operation ie facial reconstruction and was not intended for usage in hand surgery.
45445	MH480	FREE GRAFTING (split skin) as inlay graft to 1 defect including elective dissection using a mould (including insertion of and removal of mould)	The appropriate item number is 45448, MH490.
47954	MR170	TENDON, repair of, not being a service to which another item in this Group applies	This item is from the orthopaedic group of item numbers. There already exist appropriate item numbers in the hand surgery section.

47966	MR210	TENDON OR LIGAMENT TRANSFER, not being a service to which another item in this Group applies	This item is from the orthopaedic group of item numbers. There already exist appropriate item numbers in the hand surgery section.
47969	MR220	TENOSYNOVECTOMY, not being a service to which another item in this Group applies	This item is from the orthopaedic group of item numbers. There already exist appropriate item numbers in the hand surgery section.
47972	MR230	TENDON SHEATH, open operation for teno-vaginitis, not being a service to which another item in this Group applies	This item is from the orthopaedic group of item numbers. There already exist appropriate item numbers in the hand surgery section.
48403	MS015	PHALANX OR METATARSAL, osteotomy or osteectomy of, with internal fixation	This item is from the orthopaedic group of item numbers and relates to foot surgery only. There already exist appropriate item numbers in the hand surgery section.
50103	MY015	JOINT, arthrotomy of, not being a service to which another item in this Group applies	This item is from the orthopaedic group of item numbers. There already exist appropriate item numbers in the hand surgery section.
50104	MY025	JOINT, synovectomy of, not being a service to which another item in this Group applies	This item is from the orthopaedic group of item numbers. There already exist appropriate item numbers in the hand surgery section.
50109	MY045	JOINT, arthrodesis of, not being a service to which another item in this Group applies	This item is from the orthopaedic group of item numbers. There already exist appropriate item numbers in the hand surgery section.
50127	MY105	JOINT OR JOINTS, arthroplasty of, by any technique not being a service to which another item applies	This item is from the orthopaedic group of item numbers. There already exist appropriate item numbers in the hand surgery section.
	900001	Workcover certificate	This is for general practitioners and not treating specialists.

CMBS item code	AMA item code	Descriptor	Clinical indication
105	AC510	Each attendance	Follow up
		SUBSEQUENT to the first	consultations will not
		in a single course of	be paid within the 6
		treatment	week period following
			a procedure as this is included in
			normal aftercare.
30023	EA075	WOUND OF SOFT	This item applies to heavily
		TISSUE, traumatic, deep	contaminated wounds and removal of
		or extensively	devitalized tissue in deep wounds.
		contaminated,	The majority of clean lacerations in
		debridement of, under	acute hand injuries will attract item
		general anaesthesia or	number EA095/30029.
		regional or field nerve block, including suturing	Debridements are also not applicable
		of that wound when	when removing percutaneous wire fixation.
		performed (Assist.)	There will be a limit of one
		performed (Assist.)	debridement per digit.
39330	LN810	NEUROLYSIS by open	This item is not for the identification
57550	LINOIO	operation without	of nerves during surgical exposure. It
		transposition, not being a	is not to be used in combination with
		service associated with a	LN700.
		service to which Item	This item is not to be used in
		TLN740 applies	conjunction with MU400: Wrist
		11	carpal tunnel release (division of
			transverse carpal ligament) by open
			procedure. However, LN810 and
			MU400 can be used together for
			combined open carpal tunnel release
			and cubital tunnel release surgery.
			This item is not to be used in
			conjunction with ML235 Tendon
			sheath of hand/wrist open operation
20212	x x = 40		for stenosing tenovaginitis.
39312	LN 740	NEUROLYSIS, internal	This item is never indicated in acute
		(interfascicular) neurolysis	trauma. It is rarely indicated in
		of using microsurgical techniques	elective surgery and is reserved for use in revision nerve decompression
		techniques	surgery. This item is not to be used
			in conjunction with MU400: Wrist
			carpal tunnel release (division of
			transverse carpal ligament), by open
			procedure.
45203	MH115	SINGLE STAGE LOCAL	This item is rarely indicated in the
		FLAP, where indicated to	hand and wrist as a large defect will
		repair 1 defect,	not be readily amenable to a local flap
		complicated or large, and	reconstruction. It is not to be used for
		excluding flap for male	suturing of traumatic skin flaps.
		pattern baldness and	
		excluding H-flap or double	
		advancement flap	

Table 2: Item numbers with restricted application for hand surgery – clinical justification required

45206	MH125	SINGLE STAGE LOCAL	This item is not to be used for
		FLAP where indicated to repair 1 defect, on eyelid, nose, lip, ear, neck, hand, thumb, finger or genitals, excluding H-flap or double advancement flap	suturing lacerations and for "exposure" flaps, such as Bruner incisions for access to a flexor tendon injury.
45500	MJ025	MICROVASCULAR REPAIR using microsurgical techniques, with restoration of continuity of artery or vein of distal extremity or digit	This item relates to microvascular repair of an artery or vein. This item will not be paid for repair of dorsal veins with volar skin intact, branches of digital arteries, branches of radial/ulnar vessels and venae comitantes of major arteries. Microvascular repairs distal to the metacarpophalangeal joint will also require clinical documentation of appropriate surgical technique utilising an operating microscope.
45501/45502	MJ030/MJ035	MICROVASCULAR ANASTOMOSIS of artery using microsurgical techniques, for re- implantation of limb or digit/ MICROVASCULAR ANASTOMOSIS of vein using microsurgical techniques, for re- implantation of limb or digit	These items specifically relate to replantation of limb and digit i.e. The amputated portion must be completely detached.
45563	MJ245	NEUROVASCULAR ISLAND FLAP, including direct repair of secondary cutaneous defect if performed, excluding flap for male pattern baldness	This item is for a true island flap, elevated on a neurovascular pedicle for an existing traumatic defect. This item is not to be claimed for VY advancement flaps where 45206/MH125 is applicable.
46396	ML345	PHALANX or METACARPAL of the hand, osteotomy or osteectomy of	This item is applicable for removing excess bone formation in an <i>intact</i> bone. This is no longer to be applied to removal of loose pieces of bone in trauma or bone shortening for terminalisation or replantation. This is part of the debridement and is included in EA075/30023 if applicable.
46420	ML425	Extensor tendon or hand or wrist, primary repair	This item should not be claimed for repair of an extensor tendon split as part of access to phalangeal fractures/osteotomies.
46450/46453	ML535/ML545	EXTENSOR TENDON, TENOLYSIS OF, following tendon injury, repair or graft FLEXOR TENDON, TENOLYSIS OF, following tendon injury, repair or graft	These items are applicable for freeing tendons from scar following previous surgery or trauma. They are not indicated in an acute hand injury. ML545 cannot be claimed in conjunction with release of trigger finger.

46504	ML765	NEUROVASCULAR	These items are only to be used for a
		ISLAND FLAP, for pulp	heterodigital neurovascular island
		innervation	flap used to resurface pulp loss (e.g.
			Littler flap, first dorsal metacarpal artery or Kite flap).
46513/46516	ML795/ML805	Digital nail of finger or	This item should not be used in
+0515/+0510	WIL / JJ/WIL 00J	thumb removal of	association with nailbed repair
			(46486/ML665 or 46489/ML675)
46522	ML825	FLEXOR TENDON	This item is applicable only for
		SHEATH OF FINGER	drainage of suppurative flexor
		OR THUMB - open	tenosynovitis
		operation and drainage for	It does not apply to washout of flexor
		infection	sheath in acute injury
47920	MR088	BONE GROWTH	This is only indicated where a
		STIMULATOR, insertion	mechanical bone growth stimulator
		of	has been inserted. It is not for the
			insertion of OP1 or other bone
			morphogenic proteins in the setting of
			hand surgery
47921	MR090	ORTHOPAEDIC PIN OR	This item cannot be claimed when the
		WIRE, insertion of, as an	k-wire has been used as part of
48400	MC005	independent procedure	fracture fixation.
48400	MS005	PHALANX, METATARSAL,	This item is only applicable to sesamoidectomy.
		ACCESSORY BONE OR	sesanoidectomy.
		SESAMOID BONE,	
		osteotomy or osteectomy	
		of, excluding services to	
		which Item MX660 or	
		MX670 applies	
47927	MR110	BURIED WIRE, PIN OR	This item applies for removal of
		SCREW, 1 or more of,	<i>buried</i> k-wire. Where a k-wire or
		which were inserted for internal fixation purposes,	wires cross more than 2 bones, only 1 item number is claimable.
		removal of, in the	tem number is claimable.
		operating theatre of a	
		hospital or approved day	
		hospital facility - per bone	
50106	MY035	JOINT, stabilisation of,	This item is applicable for
		involving 1 or more of:	stabilization of CMC joints only.
		repair of capsule, repair of	
		ligament or internal	
		fixation, not being a	
		service to which another	
		item in this Group applies	

PRIVATE ADVERTISEMENTS

COUNCIL NOTICES

BEGA VALLEY SHIRE COUNCIL

Upgrade to Boat Ramp Jetty, Merimbula

Tender No. 21/09

BEGA VALLEY SHIRE COUNCIL is seeking tenders for the construction of a replacement jetty located at the causeway boat ramp in Merimbula.

The works covered by the contract include:

• Demolition of the existing jetty and the construction of a replacement jetty.

You can obtain a copy of the tender documents at a cost of \$25 from Council's office in Zingel Place, Bega, or phone Customer Service on (02) 6499 2222.

Tenders will be accepted until the close of business on 5 February 2010, and can either be hand delivered to Council's office in Zingel Place, Bega or mailed to: 21/09 Upgrade to Boat Ramp Jetty, Merimbula, Tender Box, Bega Valley Shire Council, PO Box 492, Bega NSW 2550.

The lowest, or any tender will not necessarily be accepted.

Nominations close: Friday, 5 February 2010. [4995]

BEGA VALLEY SHIRE COUNCIL

Upgrade to Main Public Jetty, Merimbula

Tender No. 13/09

BEGA VALLEY SHIRE COUNCIL is seeking tenders for the staged construction of a replacement of the main public jetty in Merimbula.

The works covered by the contract include:

- Stage 1 will be the demolition and construction of a replacement T-Head.
- Stage 2 will be the demolition and construction of a replacement Walkway.

Tenderers are invite to submit a price for Stage 1 & 2 separately or concurrently.

You can obtain a copy of the tender documents at a cost of \$25 from Council's office in Zingel Place, Bega, or phone Customer Service on (02) 6499 2222.

Tenders will be accepted until the close of business on 5 February 2010 and can either be hand delivered to Council's office in Zingel Place, Bega or mailed to: 13/09 Upgrade to Main Public Jetty Merimbula, Tender Box, Bega Valley Shire Council, PO Box 492, Bega NSW 2550.

The lowest, or any tender will not necessarily be accepted.

Nominations close: Friday, 5 February 2010. [4996]

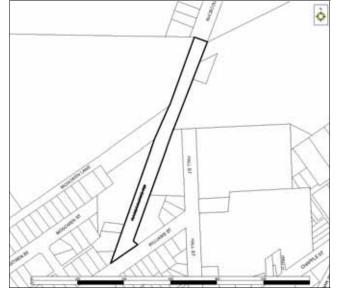
BROKEN HILL CITY COUNCIL

Roads Act 1993, Section 162

NOTICE is hereby given that Council has renamed the following road:

Existing Road Name/Location

Racecourse Road north easterly from Williams Street to a line between the north eastern corner of R75968 for Plantation notified 5 June 1953 and the south western corner of Lot 1 in DP 91101 as shown in the diagram. New Road Name Buck Street



Authorised by a resolution of the Council on 29 July 2009. F. ZAKNICH, General Manager, Broken Hill City Council, PO Box 448, Broken Hill NSW 2880. [4997]

COONAMBLE SHIRE COUNCIL

Management Plan for Coonamble Common

Presented to Commoners: 13 October 2009 On public display until: 15 January 2010

Description of Common:

Reserve 65624 for Commonage notified in *Government Gazette* 22 November 1935 (Folio 4547)

Addition to Reserve 65624 for Commonage notified in *Government Gazette* 26 February 1965 (Folio 619)

That land described as Lot 7005 in DP1056400

Comprising 805 hectares vacant open grazing land with stock yards and associated infrastructure.

Common Trust:

Coonamble Common Trust notified in *Government Gazette* 26 March 1993 – Trustees: Coonamble Shire Council.

Purpose for which Common may be used:

Provision of good quality grazing for livestock owned by town commoners in accordance with seasonal conditions.

With the approval of the majority of commoners at an annual general meeting, cropping conducted by Coonamble Shire Council.

Those entitled to use the Common:

Persons who have applied and been accepted as "Commoners" in accordance with the Commons Management Act 1989 and meeting the following provisions:

- Live within the land district in which the Common is located and do not hold more than 20 hectares of land within that land district;
- Are not enrolled as a commoner of another Common;
- Meet any other membership requirements set out in the notice which established the Common.

Those responsible for the maintenance of the Common and the methods by which it is to be maintained:

The Trustees shall be responsible for ensuring the maintenance of the Common, including the control of pests and noxious weeds, subject to sufficient funds being available for the operations of the Trust.

A Common Ranger shall be employed to control and administer the use of the Common, including the limiting of grazing during long, dry periods.

Where funding becomes available pasture improvement shall be carried out.

Those responsible for the cost of maintenance of the Common:

Users of the Common shall pay fees as set, from time to time, by the Trust Board and approved at a general meeting of Commoners.

Key Actions:

- (1) Maintain manageable stocking rates reducing impact on pasture levels and maximising grazing use.
- (2) Carry out pasture improvement programs subject to budgetary constraints as approved by the Trustees.
- (3) Conduct frequent inspections to determine the incidence of noxious weeds and pests and implement any necessary eradication programs.
- (4) Conduct frequent inspections of fencing, stockyards and watering points to ensure they are in serviceable condition, subject to budgetary constraints.
- (5) The Common will only be opened or closed by the authority of the General Manager or his nominee.
- (6) Compliance with the terms and provisions of the Commons Management Act 1989.

Annual Fee:

An annual fee of \$5.00 was set by Commoners at the annual meeting held on 13 October, 2009. This annual fee must be paid by Commoners before 31 August in each year for the ensuing year. Any commoners who do not pay this fee will be removed from the list of eligible voters for the annual general meeting.

Review of this Management Plan:

The Trustees shall assess the outcomes associated with any actions required within this Plan and report to the annual general meeting of Commoners accordingly.

This Plan may only be altered by a majority vote of those in attendance at a duly constituted general meeting of Commoners. [4998]

EUROBODALLA SHIRE COUNCIL,

Roads Act 1993

Naming of Road

NOTICE is hereby given that Eurobodalla Shire Council, in pursuance of section 162 of the Roads Act 1993 has named the following unnamed road at Mogo:

Name	Location
Dhurga Way	Running east off Park Street and
	directly behind Boomerang Meeting Place.
(Ref No. E05.9	(4999) [4999]

(Ref No. E05.9211)

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

The Lakes Way

Name

Starting at the Pacific Highway, approximately, 3kms north east of Bulahdelah, then generally running in an easterly direction via Bungwahl, renaming Forster Street, Carrington Street, Mayne Street, and Victoria Street within Bungwahl village, then northerly to the intersection of Mark Street and Head Street, Forster and Manning Street, Tuncurry (but not renaming these streets), then from the intersection of Grey Gum Road, Tuncurry in a northerly direction to the LGA boundary.

KEMPSEY SHIRE COUNCIL

Roads Act 1993, Section 10

Dedication of Land as Public Road

NOTICE is hereby given that in accordance with the provisions of section 10 of the Roads Act 1993, the land held by Council as described in the Schedule below is hereby dedicated as public road. DAVID RAWLINGS, General Manager, Kempsey Shire Council, PO Box 78, West Kempsey NSW 2440. File LA 14347.

SCHEDULE

All those parcels of land being Lots 3, 4 and 6, Deposited Plan 849470, Parish of Yarrabandini, County Dudley being part of Chain-O-Ponds Road at Collombatti. [5001]

^[5000]

LAKE MACQUARIE CITY COUNCIL

Naming of Roads

LAKE MACQUARIE CITY COUNCIL advises that in accordance with Section 162.1 of the Roads Act 1993 and Part 2 Division 2 Clause 9 Roads Regulations 2008 it has named the following roads

Location	Name
Subdivision of land off Blue Wren	Wainman Drive
Drive and Avondale Road	McCullough Street
Cooranbong	Sisley Drive
	Spinebill Street
	Wattlebird Avenue
	Dollarbird Lane
	Bowerbird Avenue
	Figbird Street
	Red Robin Road
	Whistler Lane

No objections to the proposed names were received within the advertising period. BRIAN BELL, General Manager, Lake Macquarie City Council, Box 1906, Hunter Region Mail Centre, NSW 2310. [5002]

PARKES SHIRE COUNCIL

ROADS ACT 1993

Dedication of Land as Public Road

NOTICE is hereby given by Parkes Shire Council pursuant to section 10 of the Roads Act 1993 that the land as described in the Schedule 1 below is hereby dedicated as public road. Dated at Parkes, 16 December 2009. A McCormack, General Manager, Parkes Shire Council, PO Box 337, Parkes NSW 2870.

SCHEDULE 1

Lot 1 in Deposited Plan 1116186 [5003]

TAMWORTH REGIONAL COUNCIL

Roads Act 1993

ORDER

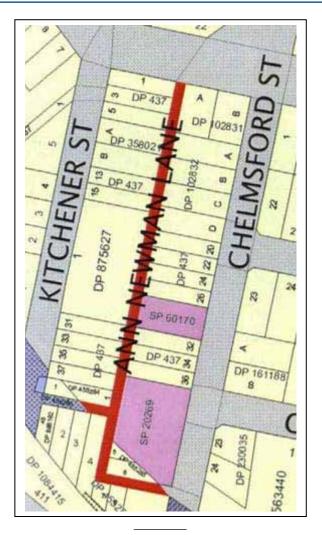
Dedication of Land as public road

PURSUANT to the provisions of Section 16, Roads Act 1993, the land specified in Schedule 1 is dedicated as a public road to the Roads Authority specified in Schedule 2 hereunder, as from the date of publication of this notice. GLENN INGLIS, General Manager, Tamworth Regional Council, 437 Peel Street (PO Box 555), Tamworth, NSW, 2340.

SCHEDULE 1

Parish – Tamworth; County – Inglis; Land District – Tamworth; L.G.A. – Tamworth Regional Council

Land set aside for road in DP 437 (part of the residue of Certificate of Title Vol. 28 Fol. 206) East Tamworth known locally as Ann Newman Lane (being the highlighted section in red shown in the diagram below).



SCHEDULE 2

Parish – Tamworth; County – Inglis; Land District – Tamworth; L.G.A. – Tamworth Regional Council

Roads Authority: Tamworth Regional Council. [5004]

ESTATE NOTICES

NOTICE of intended distribution of estate – Any person having any claim upon the estate of KEITH WILLIAM MASTERS, late of Miranda, in the State of New South Wales, who died on 19 September 2009, must send particulars of his claim to the Substituted Executors, RAYMOND KEITH MASTERS and JOHN CHARLES MASTERS, the Instituted Executrix, ENID JOYCE MASTERS having predeceased the Testator, care of Newnhams Solicitors, 233 Castlereagh Street, Sydney, within one calendar month from publication of this notice. After that time the Substituted Executors may distribute the assets of the estate having regard only to the claims of which at the time of distribution they have notice. Probate was granted in New South Wales on 4 December 2009. [5005]

COMPANY NOTICES

NOTICE of Special Resolution – WERRINA HOLDINGS PTY LTD A.C.N. 000 781 591. – At a general meeting of members of Werrina Holdings Pty Ltd duly convened and held at 22 Bridge Street, Moree NSW on 15 December 2009, the following Special Resolution was duly passed: "That the company be wound up as a members' voluntary liquidation, and that the Assets of the Company be distributed in whole or part to the members in specie should the liquidator so desire and that Mr Mark Henry Johnson of C & W Partners, Chartered Accountants be appointed liquidator." C & W PARTNERS, Chartered Accountants, 22 Bridge Street, P O Box 201, Moree NSW 2400. tel: (02) 6759 1000. [5006]

NOTICE under the Corporations Act Section 427 (1B). – Notice of appointment of a company under control. – A.I.P.T. No. 6 Pty Limited, ACN 109 048 204 (Receiver & Manager Appointed). – I, Robert Michael Brennan of Suite 71, 14 Narabang Way, Belrose NSW 2085, was appointed Receiver and Manager of the abovenamed company on 10 December 2009, by a secured creditor pursuant to the powers contained in the Deed of Charge. Dated 10 December 2009. ROBERT BRENNAN, Receiver and Manager. [5007]

NOTICE of voluntary liquidation. - The Corporations Law and in the matter of KENSAIL PTY LIMITED, ACN 089 632 100. – Notice is hereby given that at an extraordinary general meeting of the members of the company duly convened and held on 11 December 2009, the following resolutions were passed: That the company be wound up voluntarily and that Ms Flora MacDonald be appointed liquidator for the purpose of such winding up. Creditors of the company are required to prove their debts or claims within one month from the date of publication of this notice. Failing which they will be excluded from any distribution made and from objecting to any such distribution. Formal Proof of Debt forms are available on application to the Liquidator. Dated 15 December 2009. F. MACDONALD, Liquidator, Level 2, 131 Clarence Street, Sydney NSW 2000 (GPO Box 4684, Sydney NSW 2001), tel.: (02) 9299 6521. [5008]

NOTICE of voluntary liquidation. - The Corporations Law and in the matter of BEWDLEY PTY LIMITED, ACN 008 508 245. – Notice is hereby given that at an extraordinary general meeting of the members of the company duly convened and held on 16 December 2009, the following resolutions were passed: That the company be wound up voluntarily and that Ms Flora MacDonald be appointed liquidator for the purpose of such winding up. Creditors of the company are required to prove their debts or claims within one month from the date of publication of this notice. Failing which they will be excluded from any distribution made and from objecting to any such distribution. Formal Proof of Debt forms are available on application to the Liquidator. Dated 16 December 2009. F. MACDONALD, Liquidator, Level 2, 131 Clarence Street, Sydney NSW 2000 (GPO Box 4684, Sydney NSW 2001), tel.: (02) 9299 6521. [5009]

OTHER NOTICES

PUBLIC NOTICE

Proposed termination of Strata Plan 7196 being property situated at 1 Kensington Street, Kogarah, New South Wales

Notice to Send in Claims

NOTICE is given of an intention to apply to the Registrar-General for an order terminating the above Strata Scheme and the consequent winding up of the Strata Scheme pursuant to section 51A of the Strata Titles (Freehold Development) Act 1973.

Any person having any claim against the Strata Scheme, or any estate or interest in or claim against any of the lots comprised in the Strata Plan, is required on or before 23 December 2009, to send particulars of the estate or claim to HALL CHADWICK ACCOUNTANTS, c.o. Gadens Lawyers, 77 Castlereagh Street, Sydney NSW 2000. (Attention: Sarkis Khoury). [5010]