

## APPENDIX 1.0 BMR KEY AREAS FOR TERRESTRIAL BIODIVERSITY

The following is a brief synopsis of some of the more important key areas in the BMR. It is not an exhaustive analysis and those interested should refer to information built into the SEQ and BB Biodiversity Planning Assessments for additional information on regional key area based on flora, fauna and landscape expert panel assessments.

### 1. **Rodds Peninsula - Eurimbula – Round Hill Head – Baffle Creek** Miriam Vale, Rodds Bay 1: 100 000

This is a large tract of coastal and subcoastal remnant vegetation in the northern part of SEQ bioregion that is of State significance as one of two bioregional corridors linking SEQ with central parts of BB to the north. The tract has a very high diversity of Regional ecosystem ranging from mangroves, heaths, banks and melaleuca woodlands, eucalypt woodlands/open forests through to Araucarian microphyll vineforest AMVF. Threatened species include the tusked frog, glossy black-cockatoo, red goshawk, powerful owl, grey-headed flying-fox, false water-rat and the plant *Cupaniopsis shirleyana* (wedge-leaf tuckeroo).

### 2. **Deepwater** Miriam Vale 1: 100 000

This is a large relatively intact coastal wallum and wetland drainage system occurring at the northern end of SEQ bioregion. It has been identified as one of the least disturbed representations of coastal acid freshwater wetland in Queensland. The catchment contains at least 16 amphibian, 33 reptile, 188 bird and 32 mammal species, as well as at least 490 plant species. A number of *at risk* Regional ecosystem are represented (3 Endangered and 11 Of concern REs) and the tract provides habitat for threatened species including Coxen's fig parrot, powerful owl and the plants *Cupaniopsis shirleyana* and *Germainia capitata*.

### 3. **Bulburin – Warro – Bania** Calliope, Miriam Vale, Monto, Rosedale, Eidsvold, Mt Perry 1: 100 000

This upland tract links subcoastal remnant vegetation north of Monduran with high altitude wet sclerophyll forests and Araucarian microphyll vineforest of Kroombit Tops to the north west and remnant Tertiary surfaces to the south. Threatened species include the fauna: tusked frog, black-breasted button-quail, squatter pigeon (southern subspecies), glossy black-cockatoo, powerful owl, plumed frogmouth, imperial hairstreak (northern subspecies), koala, spotted-tailed quoll (southern subspecies) and long-nosed potoroo; and the plants: *Cycas megacarpa*, *Xanthostemon oppositifolius* (Southern penda), *Macadamia janseni*, *Medicosma elliptica* and *Cupaniopsis shirleyana*

### 4. **Cania Gorge – Coomingleh** Scoria, Monto 1: 100 000

This aggregate is part of a significant tract linking the brigalow belt with southeast Queensland bioregions. It includes representations of semi-evergreen vine-thicket which is an Endangered Regional Ecosystem under EPBC Act. Eucalypt woodland/forests provide important habitat for arboreal mammals including koala, squirrel glider, greater glider and yellow-bellied glider (Sth subsp.). Brush-tailed phascogales and peregrine falcons also present. Threatened plants include *Acacia calantha*, *A. islana*, *A. polybotrya*, *Boronia palasepala*, *Comesperma patentifolium*, *Eucalyptus corynodes* *Trymalium minutiflorum*. Narrow endemic taxa include: *Grevillea hockingsii*, *Pomaderris coominglehensis*,

*Zieria* sp. Coominglah and *Solanum* sp (Coominglah). There are disjunct populations of *Hakea fraseri* and *Callistemon formosus* and species at range limits include *Olearia gravis* and *Kunzea flavescens*

**5. Yarrol Scrub / Old Cannindah east of Monto** Monto 1: 100 000

Vegetation (woodland and vine thicket) on limestone and remnant Tertiary surface (land zone 5) near SEQ-BBS boundary east of Monto. Geomorphic/geological variation - rainforest on land zone 5 and limestone and remnant woodland on limestone are spatially restricted. Rare taxon *Actephila sessilifolia*.

**6. Littabella - Monduran** Rosedale, Bundaberg 1: 100 000

This key area involves lowland coastal and subcoastal remnant vegetation located between Bundaberg and Agnes Water – 1770 and sits in a landscape which is becoming increasingly fragmented due to development pressure. Threatened species include the wallum froglet, tusked frog, koala and ghost bat and the plants *Acacia attenuata* and *Cupaniopsis shirleyana* (wedge-leaf tuckeroo)

**7. Mon Repos Pasturage Reserve** Bundaberg 1: 100 000

Remnant of *E. tereticornis* – *C. intermedia* forest on basalt, microphyll rainforest characteristic of the Woongara Scrub, paperbark swamp and beach ridge vegetation near coast at Bargara. Largest surviving patch of vegetation on the basalt area east of Bundaberg which has been extensively cleared and modified for sugar cane and urban development. Narrow endemic and EVR taxa including *Clausena smyrreliana* (based on local knowledge not specimen-backed record) and *Cupaniopsis shirleyana* (V). Near southern limits of range of *Aidia racemosa*.

**8. Woongarra Scrub remnant** Bundaberg 1: 100 000

The Woongarra Scrub was the local name given to a large patch of rainforest on deep red soils derived from young basalt flows near Bundaberg. The rainforest was cleared for sugar cane. Currently there are a few small remnants which are mostly regrowth – nevertheless, they contain species thought to be representative of the original rainforest. The largest or one of the largest patches of rainforest associated with the area known as the Woongarra Scrub.

**9. Burrum Coast (Kinkuna – Woodgate – Burrum Heads)** Childers, Pinalba 1: 100 000

Burrum Coast is a mosaic landscape of coastal mudflat, beach-ridge, dune and alluvial landscapes with mangrove communities, marine couch grassland, heaths and low woodlands, beach scrub and littoral rainforest. There are two main geological components viz. a deeply weathered remnant Tertiary surface (Elliot Formation) and a coastal plain of Quaternary alluvium including Holocene (<10,000 years old) dunes. This is the largest example of mainland Holocene-Pleistocene stranded beach ridges south of Townsville. The area is species rich with numerous scheduled EVR taxa including black-breasted button-quail, Coxen's fig-parrot and ground parrot and the plants *Acacia baueri* subsp. *baueri*, *Eucalyptus hallii* (Goodwood gum), *Macrozamia lomandroides* and *Macrozamia pauli-guilielmi*.

**10. Takura Heights – Dundowran** Pinalba 1:100 000

Remnant microphyll – notophyll rainforest on beach ridges, remnant Tertiary surfaces and basalt in the Hervey Bay area. Mix of floristic elements including taxa at or near southern limits of range (*Pleiogynium timorense*, *Aglaia sapindina*, *Aidia racemosa*), southern Queensland notophyll species characteristic of higher rainfall areas (eg *Argyrodendron trifoliolatum*, *Rhodamnia acuminata*, *Syzygium francisii*), coastal or littoral rainforest elements (eg *Emmenosperma cunninghamii*) and dry rainforest species characteristic of the northern half of SEQ. Narrow endemic taxon (*Clausena smyrreliana*) and *Quassia bidwillii* (V). The tropical paperbark *Melaleuca dealbata* is near its southern limits of range here.

**11. Cherwell River – Wongi – Walliebum** Pinalba, Childers, Biggenden 1: 100 000

Extensive tract of eucalypt and melaleuca woodlands and banksias swamps on mostly State land in the central eastern part of the BMR. It includes representation of riverine gallery rainforest (RE 12.3.1) which is endangered ecosystem and permanent wetlands (Wongi Waterholes) which provide specialized habitat for species like acid frogs in an otherwise drier environment.. Threatened species include giant barred frog, spotted-tailed quoll (southern subspecies), grey-headed flying-fox, black-breasted button-quail, glossy black-cockatoo and powerful owl and the plants *Cycas megacarpa* and *Macrozamia pauli-guilielmi*.

**12. Goodnight Scrub – Cordalba** Mt Perry, Childers 1: 100 000

This aggregate provides continuity between lowland, fragmented remnant vegetation on deeply weathered soils and upland volcanic areas of Araucarian microphyll vineforest at Goodnight Scrub. Rare species include the green thighed frog, square-tailed kite and the plant *Rhodamnia pauciovulata*. Endangered RE 12.5.11, *Syncarpia glomulifera* open forest on complex remnant Tertiary surfaces and Tertiary sedimentary rocks, is a geographically restricted RE of the Cordalba area. Currently there is no representation in NPs.

**13. Boolbunda, Hogback and Gongeriboo Ranges near Mt Perry** Mt Perry 1: 100 000

Rugged upland area with several peaks 680-750 m. Vegetation includes eucalytus forest, montane heath and heath-woodland, notophyll-type gully rainforest and patches of Araucarian microphyll rainforest. EVR taxa (*Eucalyptus decolor* R, *Triplarina volcanica* subsp. *borealis* P, *Zieria* sp. Mt Larcom V, *Cycas megacarpa* V, *Acomis acoma* R). Disjunct and/or regional-endemic taxa e.g. *Syncarpia glomulifera*, *Synoum glandulosum*, *Ehretia acuminata*, *E. decolor*, *Triplarina volcanica* subsp. *borealis*, *Leucopogon* sp. Boolbunda Rock, *Callitris rhomboidea*. Southern limit of *Clerodendrum longiflorum* var *glabrum* and inland occurrence of *Grevillea banksi*

**14. Fraser Island – Cooloola Sandmass** Waddy Pt, Happy Valley, Pinalba, Wide Bay, Maryborough, Laguna Bay, Gympie 1: 100 000

This area extends from Fraser Island to the Cooloola sandmass. The area contains the oldest and largest number of independent coastal dune systems recorded in the world and the world's largest and highest perched dune lakes. The Fraser Island section is listed as a World Heritage Area and there have been proposals to extend the WHA to include the

entire key area. The area adjoins the Great Sandy Straits Ramsar listed wetland. The very high diversity of Regional ecosystem support a large number of rare and threatened species including wallum rocketfrog, wallum sedgefrog, red goshawk, black-breasted button-quail, glossy black-cockatoo, Coxen's fig-parrot, ground parrot, powerful owl, plumed frogmouth, southern emu-wren, Illidge's ant-blue, spotted-tailed quoll (southern subspecies), long-nosed potoroo, eastern long-eared bat, false water-rat.; and the threatened plants *Acacia attenuata*, *Acacia baueri subsp. baueri*, *Archidendron lovelliae* (bacon wood), *Eucalyptus conglomerata* (swamp stringybark), *Eucalyptus hallii* (Goodwood gum), *Habenaria harroldii*, *Persoonia prostrata*, *Acronychia littoralis* (scented acronychia), *Boronia keysii* (Key's boronia) and *Macrozamia pauli-guilielmi*.

**15. Maryborough – Poona - Boonooroo** Maryborough 1: 100 000

A large tract of coastal lowland wallum linking the Mary River and Great Sandy Straits. Extensive melaleuca woodlands, wet heaths and sedgelands interspersed with mixed eucalypt woodland/open forest on low rises. Threatened species include false water-rat, wallum rocketfrog, wallum sedgefrog, buff-breasted button-quail and ground parrot and the plants *Acacia attenuata*, *Boronia keysii*, *Habenaria harroldii*, *Macrozamia pauli-guilielmi*, and *Prasophyllum exilis*.

**16. Wide Bay Military Training Area - Great Sandy Straits** Maryborough 1: 100 000

The training area covers almost all of the catchments of Kauri, Teebar and Snapper Creeks. The estuaries of these creeks contain mangrove forests, claypans and salt flats. Seagrass beds are located just offshore and freshwater wetlands are extensive. The site is noted for its avian fauna (250 species of birds recorded). It is also habitat for Ground Parrots and the Water Mouse (formerly False Water Rat). The entire Great Sandy Strait (including Tin Can Bay) is listed as a Ramsar wetland. It is the largest area of tidal swamps within the south-east Queensland bioregion and is one of only three double-ended sand passage estuaries in Queensland. The Strait is an exceptionally important feeding ground for migratory shorebirds. It provides feeding grounds for dugong and turtles and is an important nursery and feeding ground for prawns and fish. The mangrove communities represent a transition between temperate and tropical fauna.

**17. Mt Grassy** Maryborough 1: 100 000

Remnant microphyll – notophyll rainforest within a heavily modified landscape. EVR taxa including *Quassia bidwillii* V, *Rhodamnia pauciovulata* R, *Parsonsia lenticellata* R; mix of coastal rainforest taxa and dry rainforest taxa such as *Archidendropsis thozetiana*; western limit of range of *Agathis robusta*.

**18. Tinana Creek Corridor** Maryborough, Gympie 1: 100 000

Remnant eucalyptus forest and rainforest along Tinana Creek south of Maryborough. Tinana Creek drains the northern section of Cooloola and elements of the lowland, fringing rainforests of Cooloola have spread down Tinana Creek (eg *Agathis robusta*). The rainforest is rapidly invading the understorey of eucalyptus forest in places. Riparian corridor with elements of Cooloola rainforest vegetation such as *Agathis robusta*. EVR taxa including *Quassia bidwillii* V

**19. Mt Walsh – Boompa – Grongah** Biggenden, Gayndah 1: 100 000

Diverse range of habitats including closed forest/scrub (semi-evergreen vine thicket (SEVT), araucarian microphyll vine forest (AMVF) and araucarian notophyll vine forest (ANVF)) and eucalypt woodland/open forest (ironbark, spotted gum and yellow stringybark). Numerous EVR species including spotted-tailed quoll (southern subspecies) and pebble mound mouse, red goshawk, glossy black cockatoo and powerful owl, as well as plants *Cycas megacarpa*, *Macrozamia pauli-guilielmi*, *Daviesia discolor*, *Triplarina imbricate* and *Zieria* sp. (Binjour P.I.Forster PIF14134).

**20. Walla Range west of Coalstoun Lakes** Gayndah 1: 100 000

Low mountain range formed on Tertiary basalt at Coalstoun Lakes. Vegetation consists of dry sclerophyll forest and microphyll rainforest on metamorphics and granitoid rocks. Contains eucalypt forest and microphyll rainforest species more typical of areas further east (e.g. *Acacia irrorata*, *Eucalyptus major*, *Planchonella queenslandica*). Records for EVR taxa including the Endangered plant *Zieria* sp. Binjour E, Vulnerable plant *Pomaderris clivicola* and Rare plants *Bertya pedicellata*, *Cycas megacarpa*, *Olearia gravis* and *Zieria granulata* var. *adenodata*. Disjunct occurrence of the tall shrub *Phebalium squamulosum* subsp. *squamulosum*.

**21. Barambah Creek Gorge** Gayndah 1: 100 000

Rugged country on volcanics (landzone 12) containing the incised watercourse of Barambah Creek, a major tributary of the Burnett River. Geomorphic/geological variation with characteristic vegetation that is quite different from adjacent areas viz. shrubby open forests and woodlands of ironbarks and bloodwoods with special flora values including narrow endemic taxon (*Hibiscus* sp. nov), rare taxon (*Notelaea pungens*), easternmost distribution of Brigalow Belt taxa such as *Corymbia watsoniana* and *Eucalyptus apothalassica*.

**22. Gurgeena-Nour Nour Aggregation (incl Binjour)** Eidsvold, Mundubbera, Murgon, Kingaroy 1: 100 000

Remnant subcoastal Tertiary plateaux (land zone 5) in central and south Burnett heavily fragmented by clearing for agriculture. Open forests are tall (35m) compared with adjacent vegetation on different geology, due to the deep soils. Common species include: pink bloodwood, long-fruited grey gum, white mahogany, spotted gum Yarraman ironbark and Gympie messmate; Araucarian microphyll vineforests also occur as an Endangered community type under the EPBC Act. Hotspots for EVR taxa including the Endangered plants *Acacia rubricola*, *Fontainea fugax*, *Lasiopetalum* sp. Proston, *Pomaderris clivicola* and *Zieria* sp. Binjour and Vulnerable plants: *Acacia wardellii*, *Cadellia pentastylis*, *Trymalium minutiflorum* and *Zieria* sp. Mongorilby. Powerful owls (Vulnerable) also recorded.

**23. Barakula – Allies Creek – Beeron** Mundubbera, Barakula, Boondooma 1: 100 000

Includes semi-evergreen vine thickets which are Endangered under the EPBC Act. Numerous EVR taxa including the Endangered *Eucalyptus broviniensis* and Vulnerable brigalow scaly-foot, black-breasted button-quail, glossy black-cockatoo and Vulnerable plants *Acacia grandifolia*, *Denhamia parvifolia*, *Eucalyptus taurina*, *E. virens* and *Ochrosperma obovatum*. Beeron Holding: is a granite isolate with narrow endemic taxa (*Acacia porcata*, *A.*

*eremophiloides*, *Bertya* sp. Beeron, *Commersonia* sp. Beeron, *Corymbia petalophylla* and *Newcastelia velutina*; and disjunct endemics *Acacia grandifolia* and *Notelaea pungens*.

**24. Serpentinite east of Kilkivan** Goomeri 1: 100 000

Area delineated due to geomorphic/geological variation: localised occurrence of serpentinite geology with characteristic vegetation quite different from adjacent areas. *Eucalyptus crebra*, *Corymbia erythrophloia*, *C. clarksoniana*, *E. tereticornis* woodland on serpentinite; understorey grassy with patches of *Xanthorrhoea glauca* and *Leptospermum microcarpum*.

**25. Oakview – Wrattens – Kandanga – Yabba** Goomeri, Nanango 1: 100 000

Large area of principally State Forest with open forest and woodland on metamorphics ± interbedded volcanics including woodland with *Xanthorrhoea johnsonii* on serpentinite (landzone 11); mixed eucalypt open forest and semi-evergreen vine thicket (SEVT), araucarian complex microphyll (AMVF) and notophyll vine forest (ANVF) on Mesozoic to Proterozoic igneous rocks (landzone 12); with smaller areas of semi-evergreen vine thicket on sedimentary rocks (landzone 9-10). Threatened species include the animals: tusked frog, cascade treefrog, black-breasted button-quail, red goshawk, glossy black-cockatoo, powerful owl, plumed frogmouth and koala; and the plant: *Marsdenia coronata* (slender milkvine)

**26. Conondales – Kenilworth – Mapleton – Imbil - Amamoor** Gympie, Nambour 1: 100 000

Similar regional ecosystems to KA25. Threatened species include the animals: tusked frog, Fleay's barred frog, giant barred frog, southern gastric brooding frog, southern dayfrog, cascade treefrog, red goshawk, glossy black-cockatoo, Coxen's fig-parrot, powerful owl, plumed frogmouth, eastern bristlebird and koala; and the plants: *Marsdenia coronata* (slender milkvine), *Picris evae*, *Sophora fraseri* (brush sophora) and *Macadamia ternifolia* (bopple nut).

**27. Bunya Mountains - Yarraman** Kingaroy 1: 100 000

Complex notophyll vine forest (CNVF) with *Araucaria* spp., Araucarian complex microphyll vine forest (AMVF) and narrow-leaved ironbark – Qld blue gum woodland on Cainozoic igneous rocks, Qld bluegum woodland to open forest on alluvial plains and gum-topped box/lemon-scented gum open forest on sedimentary rocks. Threatened species include the animals: tusked frog, Fleay's barred frog, giant barred frog, black-breasted button-quail, glossy black-cockatoo, Coxen's fig-parrot, powerful owl, plumed frogmouth, spotted-tailed quoll (southern subspecies), koala (southeast Queensland bioregion) and collared delma; and the plants: *Clematis fawcettii* and *Thesium australe* (toadflax).

## APPENDIX 2.0 BMR ENDANGERED AND OF CONCERN REGIONAL ECOSYSTEMS

### 1. ENDANGERED REGIONAL ECOSYSTEMS

#### Southeast Queensland Bioregion

- |    |            |                                                                                                                                                               |
|----|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1  | 12.1.1     | <i>Casuarina glauca</i> open forest on margins of marine clay plains                                                                                          |
| 2  | 12.3.1     | Gallery rainforest (notophyll vine forest) on alluvial plains                                                                                                 |
| 3  | 12.3.3     | <i>Eucalyptus tereticornis</i> woodland to open forest on alluvial plains                                                                                     |
| 4  | 12.3.10    | <i>Eucalyptus populnea</i> woodland on alluvial plains                                                                                                        |
| 5  | 12.5.2     | <i>Eucalyptus tereticornis</i> , <i>Corymbia intermedia</i> on remnant Tertiary surfaces, usually near coast. Usually deep red soils                          |
| 6  | 12.5.6     | <i>Eucalyptus siderophloia</i> , <i>E. propinqua</i> , <i>E. microcorys</i> and/or <i>E. pilularis</i> tall open forest on remnant Tertiary surfaces. Usually |
| 7  | 12.5.11    | <i>Syncarpia glomulifera</i> open forest on complex of remnant Tertiary surface and Tertiary sedimentary rocks                                                |
| 8  | 12.8.21    | Semi-evergreen vine thicket with <i>Brachychiton rupestris</i> on Cainozoic igneous rocks. Southern half of bioregion                                         |
| 9  | 12.8.22    | Semi-evergreen vine thicket with <i>Brachychiton australis</i> on Cainozoic igneous rocks. Northern half of bioregion                                         |
| 10 | 12.8.23    | <i>Acacia harpophylla</i> open forest on Cainozoic igneous rocks                                                                                              |
| 11 | 12.8.24    | <i>Corymbia citriodora</i> open forest on Cainozoic igneous rocks especially trachyte                                                                         |
| 12 | 12.9-10.8  | <i>Eucalyptus melanophloia</i> , <i>E. crebra</i> woodland on sedimentary rocks                                                                               |
| 13 | 12.9-10.15 | Semi-evergreen vine thicket with <i>Brachychiton rupestris</i> on sedimentary rocks                                                                           |
| 14 | 12.9-10.16 | Araucarian microphyll to notophyll vine forest on sedimentary rocks                                                                                           |
| 15 | 12.11.16   | Tall open forest with <i>Eucalyptus cloeziana</i> on metamorphics ± interbedded volcanics                                                                     |
| 16 | 12.12.26   | <i>Acacia harpophylla</i> open forest on Mesozoic to Proterozoic igneous rocks                                                                                |

#### Brigalow Belt bioregion

- |    |                |                                                                                                                    |
|----|----------------|--------------------------------------------------------------------------------------------------------------------|
| 1  | 11.3.1         | <i>Acacia harpophylla</i> and/or <i>Casuarina cristata</i> open forest on alluvial plains                          |
| 2  | 11.3.21        | <i>Dichanthium sericeum</i> and/or <i>Astrebla</i> spp. grassland on alluvial plains. Cracking clay soils          |
| 3  | 11.4.3/11.4.3a | <i>Acacia harpophylla</i> and/or <i>Casuarina cristata</i> shrubby open forest on Cainozoic clay plains            |
| 4  | 11.5.15        | Semi-evergreen vine thicket on Cainozoic sand plains/remnant surfaces                                              |
| 5  | 11.5.17        | <i>Eucalyptus tereticornis</i> woodland in depressions on Cainozoic sand plains/remnant surfaces                   |
| 6  | 11.9.4         | Semi-evergreen vine thicket on Cainozoic fine grained sedimentary rocks                                            |
| 7  | 11.9.5         | <i>Acacia harpophylla</i> and/or <i>Casuarina cristata</i> open forest on Cainozoic fine-grained sedimentary rocks |
| 8  | 11.11.14       | <i>Acacia harpophylla</i> open forest on deformed and metamorphosed sediments and interbedded volcanics            |
| 9  | 11.12.17       | <i>Eucalyptus populnea</i> woodland on igneous rocks. Colluvial lower slopes                                       |
| 10 | 11.12.21       | <i>Acacia harpophylla</i> open forest on igneous rocks. Colluvial lower slopes                                     |

### 2. OF CONCERN REGIONAL ECOSYSTEMS

#### Southeast Queensland Bioregion

- |   |          |                                                                                                           |
|---|----------|-----------------------------------------------------------------------------------------------------------|
| 1 | 12.02.01 | Notophyll vine forest on parabolic high dunes                                                             |
| 2 | 12.02.02 | Microphyll/notophyll vine forest on beach ridges                                                          |
| 3 | 12.02.03 | Araucarian vine forest on parabolic high dunes                                                            |
| 4 | 12.02.04 | <i>Syncarpia hillii</i> , <i>Lophostemon confertus</i> tall open to closed forest on parabolic high dunes |

|    |             |                                                                                                                                                                                                                                                                                                                                                                                                              |
|----|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5  | 12.02.05    | Corymbia spp., Banksia integrifolia, Callitris columellaris, Acacia spp. open forest to low closed forest on beach ridges in southern half of bioregion                                                                                                                                                                                                                                                      |
| 6  | 12.02.07    | Melaleuca quinquenervia or M. viridiflora open forest to woodland on sand plains                                                                                                                                                                                                                                                                                                                             |
| 7  | 12.02.16    | Sand blows largely devoid of vegetation                                                                                                                                                                                                                                                                                                                                                                      |
| 8  | 12.03.05    | Melaleuca quinquenervia tall open forest on coastal alluvial plains                                                                                                                                                                                                                                                                                                                                          |
| 9  | 12.03.08    | Swamps with Cyperus spp., Schoenoplectus spp. and Eleocharis spp.                                                                                                                                                                                                                                                                                                                                            |
| 10 | 12.03.11    | Tall woodland to tall open-forest of Eucalyptus siderophloia, Corymbia intermedia, E. tereticornis ± Angophora leiocarpa, E. exserta, E. grandis, Lophostemon suaveolens, C. trachyphloia, C. tessellaris, C. citriodora, E. latisinensis, E. tindaliae, E. racemosa, Melaleuca quinquenervia and M. viridiflora on Quaternary alluvial plains and drainage lines along coastal lowlands south of Bundaberg. |
| 11 | 12.03.12    | Eucalyptus latisinensis or E. exserta, Melaleuca viridiflora on alluvial plains                                                                                                                                                                                                                                                                                                                              |
| 12 | 12.03.13    | Closed heathland on seasonally waterlogged alluvial plains near coast                                                                                                                                                                                                                                                                                                                                        |
| 13 | 12.03.14    | Banksia aemula woodland on alluvial plains near coast                                                                                                                                                                                                                                                                                                                                                        |
| 14 | 12.03.15    | Corymbia intermedia, Syncarpia glomulifera open forest on granite outwash                                                                                                                                                                                                                                                                                                                                    |
| 15 | 12.05.05    | Eucalyptus portuensis, Corymbia intermedia woodland on remnant Tertiary surfaces. Usually deep red soils                                                                                                                                                                                                                                                                                                     |
| 16 | 12.05.08    | Eucalyptus hallii woodland on complex of remnant Tertiary surface and Tertiary sedimentary rocks                                                                                                                                                                                                                                                                                                             |
| 17 | 12.05.09    | Sedgeland to heathland in low lying areas on complex of remnant Tertiary surface and Tertiary sedimentary rocks                                                                                                                                                                                                                                                                                              |
| 18 | 12.05.12    | Eucalyptus racemosa, E. latisinensis ± Corymbia gummifera, C. intermedia, E. bancroftii woodland with healthy understorey on remnant Tertiary surfaces                                                                                                                                                                                                                                                       |
| 19 | 12.07.01    | Eucalyptus dura, Corymbia trachyphloia woodland on jump-ups                                                                                                                                                                                                                                                                                                                                                  |
| 20 | 12.07.02    | Eucalyptus rhombica, Corymbia trachyphloia woodland on jump-ups                                                                                                                                                                                                                                                                                                                                              |
| 21 | 12.08.07    | Simple microphyll fern thicket with Acmena smithii on Cainozoic igneous rocks                                                                                                                                                                                                                                                                                                                                |
| 22 | 12.08.08    | Eucalyptus saligna or E. grandis tall open forest on Cainozoic igneous rocks                                                                                                                                                                                                                                                                                                                                 |
| 23 | 12.08.09    | Lophostemon confertus tall open forest on Cainozoic igneous rocks                                                                                                                                                                                                                                                                                                                                            |
| 24 | 12.08.13    | Araucarian complex microphyll vine forest on Cainozoic igneous rocks                                                                                                                                                                                                                                                                                                                                         |
| 25 | 12.08.15    | Poa labillardieri grassland on Cainozoic igneous rocks                                                                                                                                                                                                                                                                                                                                                       |
| 26 | 12.08.19    | Montane shrubland on Cainozoic igneous rocks                                                                                                                                                                                                                                                                                                                                                                 |
| 27 | 12.08.20    | Shrubby woodland with Eucalyptus racemosa or E. dura on Cainozoic igneous rocks                                                                                                                                                                                                                                                                                                                              |
| 28 | 12.08.25    | Open forest with Eucalyptus acmenoides or E. helidonica on Cainozoic igneous rocks especially trachyte                                                                                                                                                                                                                                                                                                       |
| 29 | 12.09-10.01 | Tall shrubby open forest often with Eucalyptus resinifera, E. grandis, Corymbia intermedia on sedimentary rocks. Coastal                                                                                                                                                                                                                                                                                     |
| 30 | 12.09-10.03 | Eucalyptus moluccana on sedimentary rocks                                                                                                                                                                                                                                                                                                                                                                    |
| 31 | 12.09-10.07 | Eucalyptus crebra woodland on sedimentary rocks                                                                                                                                                                                                                                                                                                                                                              |
| 32 | 12.09-10.09 | Low shrubby woodland to shrubland on lithosols derived from sandstone in coastal parts. Main species vary but can include Angophora woodsiana, Eucalyptus latisinensis, Allocasuarina littoralis.                                                                                                                                                                                                            |
| 33 | 12.09-10.10 | Melaleuca nodosa low open forest on sedimentary rocks                                                                                                                                                                                                                                                                                                                                                        |
| 34 | 12.09-10.20 | Eucalyptus montivaga open forest on sedimentary rocks                                                                                                                                                                                                                                                                                                                                                        |
| 35 | 12.09-10.22 | Closed sedgeland/shrubland on sedimentary rocks Coastal parts                                                                                                                                                                                                                                                                                                                                                |
| 36 | 12.09-10.23 | Eucalyptus melanoleuca open forest on sedimentary rocks                                                                                                                                                                                                                                                                                                                                                      |
| 37 | 12.11.09    | Eucalyptus tereticornis open forest on metamorphics ± interbedded volcanics. Higher altitudes                                                                                                                                                                                                                                                                                                                |
| 38 | 12.11.13    | Semi-evergreen vine thicket on metamorphics ± interbedded volcanics; northern half of bioregion                                                                                                                                                                                                                                                                                                              |
| 39 | 12.11.14    | Eucalyptus crebra, E. tereticornis woodland on metamorphics ± interbedded volcanics                                                                                                                                                                                                                                                                                                                          |
| 40 | 12.11.15    | Woodland with Xanthorrhoea sp. on serpentinite                                                                                                                                                                                                                                                                                                                                                               |
| 41 | 12.11.19    | Eucalyptus fibrosa open forest on metamorphics ± interbedded volcanics                                                                                                                                                                                                                                                                                                                                       |
| 42 | 12.11.21    | Allocasuarina luehmannii, Melaleuca nervosa woodland on metamorphics ± interbedded volcanics                                                                                                                                                                                                                                                                                                                 |

- 43 12.12.01 Simple notophyll vine forest usually with abundant *Archontophoenix cunninghamiana* ("gully vine forest") on Mesozoic to Proterozoic igneous rocks
- 44 12.12.03 Tall forest complex with *Corymbia citriodora*, *Eucalyptus siderophloia* or *E. crebra* or *E. decolor*, *E. major* and/or *E. longirostrata*, *E. acmenoides* or *E. portuensis* on Mesozoic to Proterozoic igneous rocks
- 45 12.12.06 *Eucalyptus montivaga* tall open forest on Mesozoic to Proterozoic igneous rocks
- 46 12.12.08 *Eucalyptus melanophloia* woodland on Mesozoic to Proterozoic igneous rocks
- 47 12.12.09 Shrubby woodland with *Eucalyptus dura* on rocky peaks on Mesozoic to Proterozoic igneous rocks
- 48 12.12.10 Shrubland of rocky peaks on Mesozoic to Proterozoic igneous rocks
- 49 12.12.12 *Eucalyptus tereticornis*, *E. crebra* or *E. siderophloia*, *Lophostemon suaveolens* open forest on granite
- 50 12.12.14 Shrubby woodland of rocky near coastal areas on Mesozoic to Proterozoic igneous rocks
- 51 12.12.17 Semi-evergreen vine thicket on Mesozoic to Proterozoic igneous rocks; south of bioregion
- 52 12.12.18 Semi-evergreen vine thicket on Mesozoic to Proterozoic igneous rocks; north of bioregion
- 53 12.12.19 Vegetation complex of rocky headlands, predominantly but not exclusively on Mesozoic to Proterozoic igneous rocks
- 54 12.12.20 *Eucalyptus saligna* tall open forest on Mesozoic to Proterozoic igneous rocks
- 55 12.12.21 *Corymbia intermedia*, *E. exserta* woodland on Mesozoic to Proterozoic igneous rocks
- 56 12.12.22 *Eucalyptus decolor*, *E. portuensis* or *E. acmenoides* open forest on Mesozoic to Proterozoic igneous rocks
- 57 12.12.24 *Angophora leiocarpa*, *Eucalyptus crebra* woodland on Mesozoic to Proterozoic igneous rocks
- 58 12.12.25 *Eucalyptus fibrosa* subsp. *fibrosa* tall woodland to open forest on Mesozoic to Proterozoic igneous rocks
- 59 12.12.27 *Corymbia trachyphloia*, *Eucalyptus crebra* and *Callitris endlicheri* woodland on Mesozoic to Proterozoic igneous rocks
- 60 12.12.28 *Eucalyptus moluccana* tall open forest on Mesozoic to Proterozoic igneous rocks
- Brigalow Belt bioregion**
- 61 11.03.02 *Eucalyptus populnea* woodland on alluvial plains
- 62 11.03.04 *Eucalyptus tereticornis* and/or *Eucalyptus* spp. tall woodland on alluvial plains
- 63 11.05.13 *Eucalyptus populnea* ± *Acacia aneura* ± *E. melanophloia* woodland on Cainozoic sand plains/remnant surfaces
- 64 11.09.07 *Eucalyptus populnea*, *Eremophila mitchellii* shrubby woodland on Cainozoic fine-grained sedimentary rocks
- 65 11.09.10 *Acacia harpophylla*, *Eucalyptus populnea* open forest on Cainozoic fine-grained sedimentary rocks
- 66 11.10.08 Semi-evergreen vine thicket in sheltered habitats on Cainozoic medium to coarse-grained sedimentary rocks
- 67 11.11.10 *Eucalyptus melanophloia* woodland on deformed and metamorphosed sediments and interbedded volcanics
- 68 11.12.20 *Corymbia* spp., *Eucalyptus baileyana*, *E. dura*, *E. exserta* woodland on igneous rocks. Hills

**APPENDIX 3.0 PRESUMED EXTINCT, ENDANGERED AND VULNERABLE PLANTS  
IN THE BMR**

NCA = listed under Queensland *Nature Conservation Act 1992*; EPBC = listed under Australian Government *Environmental Protection & Biodiversity Conservation Act 1999*; PE/EX = Presumed Extinct; E = Endangered; V = Vulnerable; R = Rare. END = level of endemism: Q = Qld; A = Australia; I = International; U = Unknown

| SCIENTIFIC NAME                                          | NCA | EPBC | END | SCIENTIFIC NAME                          | NCA | EPBC | END |
|----------------------------------------------------------|-----|------|-----|------------------------------------------|-----|------|-----|
| <i>Personia prostrata</i>                                | PE  | EX   | Q   | <i>Romnaldia strobilacea</i>             | V   | V    | U   |
| <i>Cycas megacarpa</i>                                   | E   | E    | U   | <i>Cryptocarya foetida</i>               | V   | V    | U   |
| <i>Macrozamia lomandroides</i>                           | E   | E    | Q   | <i>Clematis fawcettii</i>                | V   | V    | U   |
| <i>Macrozamia pauli-guilielmi</i>                        | E   | E    | Q   | <i>Graptophyllum ilicifolium</i>         | V   | V    | U   |
| <i>Habenaria harroldii</i>                               | E   |      | U   | <i>Parsonsia kroombitensis</i>           | V   |      | U   |
| <i>Phaius australis</i>                                  | E   | E    | QA  | <i>Parsonsia larcomensis</i>             | V   | V    | U   |
| <i>Phaius tancarvilleae</i>                              | E   | E    | QAI | <i>Marsdenia coronata</i>                | V   | V    | U   |
| <i>Pterostylis chaetophora</i>                           | E   |      | U   | <i>Marsdenia paludicola</i>              | V   | V    | Q   |
| <i>Sarcophilus fitzgeraldii</i>                          | E   | V    | QA  | <i>Stemmacantha australis</i>            | V   | V    | U   |
| <i>Sarcophilus weinthalii</i>                            | E   | V    | QA  | <i>Allocasuarina rigida subsp. exsul</i> | V   |      | U   |
| <i>Graptophyllum reticulatum</i>                         | E   | E    | Q   | <i>Denhamia parvifolia</i>               | V   | V    | U   |
| <i>Xerothamnella herbacea</i>                            | E   | E    | Q   | <i>Baloghia marmorata</i>                | V   | V    | U   |
| <i>Parsonsia sankowskyana</i>                            | E   |      | U   | <i>Fontainea rostrata</i>                | V   | V    | U   |
| <i>Leucopogon sp. (Coolmunda D.Halford Q1635)</i>        | E   | E    | Q   | <i>Fontainea venosa</i>                  | V   | V    | U   |
| <i>Bertya sp. (Beerong Holding P.I.Forster+ PIF5753)</i> | E   | E    | Q   | <i>Ricinocarpos speciosus</i>            | V   |      | U   |
| <i>Fontainea fugax</i>                                   | E   |      | U   | <i>Daviesia discolor</i>                 | V   | V    | U   |
| <i>Plectranthus omissus</i>                              | E   | E    | Q   | <i>Sophora fraseri</i>                   | V   | V    | U   |
| <i>Plectranthus torrenicola</i>                          | E   | E    | Q   | <i>Cooperookia scabridiuscula</i>        | V   | V    | U   |
| <i>Acacia porcata</i>                                    | E   | E    | Q   | <i>Haloragis exalata subsp. velutina</i> | V   | V    | U   |
| <i>Acacia rubricola</i>                                  | E   |      | U   | <i>Newcastelia velutina</i>              | V   | V    | U   |
| <i>Austromyrtus gonoclada</i>                            | E   | E    | Q   | <i>Prostanthera palustris</i>            | V   |      | U   |
| <i>Eucalyptus conglomerata</i>                           | E   | E    | Q   | <i>Owenia cepiodora</i>                  | V   | V    | U   |
| <i>Eucalyptus pachycalyx subsp. waajensis</i>            | E   |      | U   | <i>Acacia attenuata</i>                  | V   | V    | U   |
| <i>Eucalyptus sp. (Brovina A.R.Bean 11911)</i>           | E   |      | U   | <i>Acacia barakulensis</i>               | V   |      | U   |
| <i>Micromyrtus patula</i>                                | E   |      | U   | <i>Acacia baueri subsp. baueri</i>       | V   |      | U   |
| <i>Jasminum jenniae</i>                                  | E   |      | U   | <i>Acacia eremophiloides</i>             | V   | V    | U   |
| <i>Macadamia janseni</i>                                 | E   | E    | U   | <i>Acacia perangusta</i>                 | V   | V    | U   |
| <i>Triunia robusta</i>                                   | E   | E    | Q   | <i>Acacia pubifolia</i>                  | V   | V    | U   |
| <i>Pomaderris clivicola</i>                              | E   | V    | U   | <i>Acacia tingoorensis</i>               | V   |      | U   |
| <i>Pomaderris coomingalensis</i>                         | E   |      | U   | <i>Acacia wardellii</i>                  | V   | V    | U   |
| <i>Acronychia littoralis</i>                             | E   | E    | QA  | <i>Archidendron lovelliae</i>            | V   | V    | U   |
| <i>Zieria sp. (Binjour P.I.Forster PIF14134)</i>         | E   |      | U   | <i>Calytrix gurulumdensis</i>            | V   | V    | U   |
| <i>Zieria sp. (Brolga Park A.R.Bean 1002)</i>            | E   | E    | U   | <i>Eucalyptus hallii</i>                 | V   | V    | Q   |
| <i>Alectryon ramiflorus</i>                              | E   | E    | Q   | <i>Eucalyptus taurina</i>                | V   |      | Q   |
| <i>Cossinia australiana</i>                              | E   | E    | Q   | <i>Eucalyptus virens</i>                 | V   | V    | Q   |
| <i>Pouteria eerwah</i>                                   | E   | E    | Q   | <i>Homoranthus decumbens</i>             | V   | V    | U   |
| <i>Lasiopetalum sp. (Proston J.A.Baker 17)</i>           | E   |      | U   | <i>Leptospermum venustum</i>             | V   |      | U   |
| <i>Macrozamia crassifolia</i>                            | V   | V    | U   | <i>Micromyrtus vernicosa</i>             | V   |      | U   |
| <i>Macrozamia parcifolia</i>                             | V   | V    | U   | <i>Ochrosperma obovatum</i>              | V   |      | U   |
| <i>Arthraxon hispidus</i>                                | V   | V    | U   | <i>Syzygium hodgkinsoniae</i>            | V   | V    | U   |
| <i>Bothriochloa bunyensis</i>                            | V   | V    | U   | <i>Xanthostemon oppositifolius</i>       | V   | V    | U   |
| <i>Germainia capitata</i>                                | V   | V    | U   | <i>Comesperma oblongatum</i>             | V   | V    | U   |
| <i>Paspalidium grandispiculatum</i>                      | V   | V    | U   | <i>Floydia praealta</i>                  | V   | V    | U   |
|                                                          |     |      |     | <i>Grevillea hockingsii</i>              | V   |      | U   |
|                                                          |     |      |     | <i>Macadamia integrifolia</i>            | V   | V    | U   |

| <b>SCIENTIFIC NAME</b>                                        | <b>NCA</b> | <b>EPBC</b> | <b>END</b> |
|---------------------------------------------------------------|------------|-------------|------------|
| <i>Macadamia ternifolia</i>                                   | V          | V           | U          |
| <i>Macadamia tetraphylla</i>                                  | V          | V           | U          |
| <i>Trymalium minutiflorum</i>                                 | V          | V           | U          |
| <i>Boronia keysii</i>                                         | V          | V           | U          |
| <i>Boronia</i> sp. (Aranbanga<br>Creek P.Grimshaw+<br>PG2597) | V          |             | U          |
| <i>Medicosma elliptica</i>                                    | V          | V           | U          |
| <i>Zieria</i> sp. (Monogorilby<br>P.I.Forster PIF1004)        | V          | V           | U          |
| <i>Zieria</i> sp. (Mt Larcom<br>N.Gibson TO18)                | V          |             | U          |
| <i>Thesium australe</i>                                       | V          | V           | U          |
| <i>Cupaniopsis shirleyana</i>                                 | V          | V           | U          |
| <i>Quassia bidwillii</i>                                      | V          | V           | U          |
| <i>Commersonia</i> sp. (Beeron<br>P.I.Forster PIF4658)        | V          |             | U          |
| <i>Cadellia pentastylis</i>                                   | V          | V           | U          |

**APPENDIX 4.0 PRESUMED EXTINCT, ENDANGERED AND VULNERABLE  
TERRESTRIAL FAUNA IN THE BMR**

NCA = listed under Queensland *Nature Conservation Act 1992*; EPBC = listed under Australian Government *Environmental Protection & Biodiversity Conservation Act 1999*; PE/EX = Presumed Extinct; E = Endangered; V = Vulnerable; R = Rare. END = level of endemism: Q = Queensland; A = Australia; I = International.

| CLASS    | FAMILY          | SCIENTIFIC                          | COMMON NAME                           | NCA | EPBC | END |
|----------|-----------------|-------------------------------------|---------------------------------------|-----|------|-----|
| Aves     | Psittacidae     | <i>Psephotus pulcherrimus</i>       | paradise parrot                       | PE  | EX   | QA  |
| Mammalia | Dasyuridae      | <i>Dasyurus geoffroii geoffroi</i>  | western quoll                         | PE  | V    | QA  |
| Amphibia | Myobatrachidae  | <i>Mixophyes fleayi</i>             | Fleay's barred frog                   | E   | E    | QA  |
| Amphibia | Myobatrachidae  | <i>Mixophyes iteratus</i>           | giant barred frog                     | E   | E    | QA  |
| Amphibia | Myobatrachidae  | <i>Rheobatrachus silus</i>          | southern gastric brooding frog        | E   | EX   | Q   |
| Amphibia | Myobatrachidae  | <i>Taudactylus diurnus</i>          | southern dayfrog                      | E   | EX   | Q   |
| Aves     | Accipitridae    | <i>Erythrotriorchis radiatus</i>    | red goshawk                           | E   | V    | QA  |
| Aves     | Laridae         | <i>Sterna albifrons</i>             | little tern                           | E   |      | QAI |
| Aves     | Meliphagidae    | <i>Xanthomyza phrygia</i>           | regent honeyeater                     | E   | E    | QA  |
| Aves     | Pardalotidae    | <i>Dasyornis brachypterus</i>       | eastern bristlebird                   | E   | E    | QA  |
| Aves     | Psittacidae     | <i>Cyclopsitta diophthalma cox</i>  | Coxen's fig-parrot                    | E   | E    | QA  |
| Insecta  | Nymphalidae     | <i>Argyreus hyperbius inconsta</i>  | Australian fritillary                 | E   |      | QA  |
| Amphibia | Hylidae         | <i>Litoria freycineti</i>           | wallum rocketfrog                     | V   |      | QA  |
| Amphibia | Hylidae         | <i>Litoria olongburensis</i>        | wallum sedgefrog                      | V   | V    | QA  |
| Amphibia | Hylidae         | <i>Litoria pearsoniana</i>          | cascade treefrog                      | V   |      | QA  |
| Amphibia | Myobatrachidae  | <i>Crinia tinnula</i>               | wallum froglet                        | V   |      | QA  |
| Amphibia | Myobatrachidae  | <i>Taudactylus pleione</i>          | Kroombit tinkerfrog                   | V   | V    | Q   |
| Aves     | Atrichornithida | <i>Atrichornis rufescens</i>        | rufous scrub-bird                     | V   |      | QA  |
| Aves     | Burhinidae      | <i>Esacus neglectus</i>             | beach stone-curlew                    | V   |      | QAI |
| Aves     | Cacatuidae      | <i>Calyptorhynchus lathami</i>      | glossy black-cockatoo                 | V   |      | QA  |
| Aves     | Columbidae      | <i>Geophaps scripta scripta</i>     | squatter pigeon (southern subsp)      | V   | V    | QA  |
| Aves     | Maluridae       | <i>Stipiturus malachurus</i>        | southern emu-wren                     | V   |      | QA  |
| Aves     | Passeridae      | <i>Poephila cincta cincta</i>       | black-throated finch (white-rumped)   | V   | V    | QA  |
| Aves     | Phaethontidae   | <i>Phaethon rubricauda</i>          | red-tailed tropicbird                 | V   |      | QAI |
| Aves     | Podargidae      | <i>Podargus ocellatus plumifer</i>  | plumed frogmouth                      | V   |      | QA  |
| Aves     | Psittacidae     | <i>Pezoporus wallicus wallicus</i>  | ground parrot                         | V   |      | QA  |
| Aves     | Strigidae       | <i>Ninox strenua</i>                | powerful owl                          | V   |      | QA  |
| Aves     | Turnicidae      | <i>Turnix melanogaster</i>          | black-breasted button-quail           | V   | V    | QA  |
| Aves     | Turnicidae      | <i>Turnix olivii</i>                | buff-breasted button-quail            | V   | E    | Q   |
| Insecta  | Lycaenidae      | <i>Acrodipsas illidgei</i>          | Illidge's ant-blue                    | V   |      | QA  |
| Insecta  | Lycaenidae      | <i>Jalmenus evagoras eubulus</i>    | imperial hairstreak (northern subsp)  | V   |      | QA  |
| Insecta  | Papilionidae    | <i>Ornithoptera richmondia</i>      | Richmond birdwing                     | V   |      | QA  |
| Mammalia | Dasyuridae      | <i>Dasyurus maculatus maculatus</i> | spotted-tailed quoll (southern subsp) | V   | V    | QA  |
| Mammalia | Emballonuridae  | <i>Taphozous australis</i>          | coastal sheattail bat                 | V   |      | QAI |
| Mammalia | Hipposideridae  | <i>Hipposideros semoni</i>          | Semon's leaf-nosed bat                | V   | E    | QAI |
| Mammalia | Megadermatidae  | <i>Macroderma gigas</i>             | ghost bat                             | V   |      | QA  |
| Mammalia | Muridae         | <i>Pseudomys oralis</i>             | Hastings River mouse                  | V   | E    | QA  |
| Mammalia | Muridae         | <i>Xeromys myoides</i>              | false water-rat                       | V   | V    | QAI |
| Mammalia | Potoroidae      | <i>Potorous tridactylus tridac</i>  | long-nosed potoroo                    | V   | V    | QA  |
| Reptilia | Elapidae        | <i>Furina dunmali</i>               | Dunmall's snake                       | V   | V    | Q   |
| Reptilia | Pygopodidae     | <i>Delma torquata</i>               | collared delma                        | V   | V    | Q   |

| <b>CLASS</b> | <b>FAMILY</b>  | <b>SCIENTIFIC</b>                 | <b>COMMON NAME</b>           | <b>NCA</b> | <b>EPBC</b> | <b>END</b> |
|--------------|----------------|-----------------------------------|------------------------------|------------|-------------|------------|
| Reptilia     | Pygopodidae    | <i>Paradelma orientalis</i>       | brigalow scaly-foot          | V          | V           | Q          |
| Reptilia     | Scincidae      | <i>Egernia rugosa</i>             | yakka skink                  | V          | V           | Q          |
| Mammalia     | Vespertilionid | <i>Chalinolobus dwyeri</i>        | large-eared pied bat         | R          | V           | QA         |
| Reptilia     | Scincidae      | <i>Coeranoscincus reticulatus</i> | three-toed snake-tooth skink | R          | V           | QA         |

## APPENDIX 5.0 LEGISLATION AND POLICY RELEVANT TO TERRESTRIAL BIODIVERSITY MANAGEMENT

The following sets out the legislative policy framework affecting biodiversity planning and management in the BMR as it exists at various levels of government and influence viz. international through to local.

### International

Australia is signatory to a number of international agreements, including:

1. Convention on Biological Diversity;
2. Ramsar Convention on Wetlands;
3. Convention for the Protection of the World Cultural and Natural Heritage;
4. Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention);
5. Convention on Conservation of Nature in the South Pacific (Apia Convention);
6. Convention on International Trade in Endangered Species on Wild Fauna and Flora (CITES);
7. Japan Australia Migratory Bird Agreement (JAMBA); and
8. China Australia Migratory Bird Agreement (CAMBA).

### National

The Commonwealth Government has undertaken a range of initiatives to meet its international obligations to sustainably manage and conserve our biodiversity. The main national driver is the 1996 National Strategy for the Conservation of Australian Biodiversity Diversity signed by the Commonwealth Government and all State and Territory Governments. This document was reviewed in 2001.

The 1997 Council of Australian Governments (COAG) Agreement on Commonwealth/State Roles and Responsibility for the Environment provides a model for the integration of Commonwealth-State legislation through a mechanism of Commonwealth accreditation of State processes (Queensland Parliamentary Library 1999). An agreement between the Australian Government and the State of Queensland has now been signed (13 August 2004) relating to environmental assessment under section 45 of the Australian Government *Environment Protection and Biodiversity Conservation Act 1999*.

Other main national factors that influence biodiversity include:

- Environmental Protection and Biodiversity Conservation Act 1999;
- Natural Heritage Trust Funding program;
- National Action Plan for Salinity and Water Quality;
- Australia State of Environment reporting;
- Australia's Land and Water Resource Audit; and
- Nationally funded Cooperative Research Centres.

More information about these programs have been included in Appendix X.

### State

A number of State-level regulatory, planning and economic measures currently guide the planning and management of Queensland's biological resources, including:

- The *Nature Conservation Act 1992* provides for the protection and management of valuable terrestrial ecosystems and protected species of plants and animals.
- The *Vegetation Management Act 1999*, the *Fisheries Act 1994* and the *Water Act 2000* provides a regulatory regime for the management of vegetation clearing, water and fisheries resources use.

- Planning for sustainable use of Queensland's fish species and management of aquatic and marine habitat for fish species is regulated by the Fisheries Act 1994.
- The *Water Act 2000* regulates the management of Queensland's water resources, vital to the ecological integrity of Queensland's terrestrial, aquatic and marine ecosystems and species.
- The *Marine Parks Act 1992* (Marine Act) establishes a framework for the identification, gazettal and management of protected areas as Marine Parks and the protection of marine species. The Marine Act works in conjunction with the Marine Parks Regulations 1990 to establish a multiple-use management and permit system for activities within marine parks. Activities within marine parks might typically involve collecting marine products or commercial whale watching.
- The *Coastal Protection and Management Act 1995* (Coastal Act) aims to provide for the protection, conservation, rehabilitation and management of the coast. The Coastal Act establishes the Coastal Protection Advisory Council and regional consultative groups to advise the Minister about the need for special coastal zoning, development of coastal plans and preventive and remedial measures for coastal management. State and regional coastal management plans are fundamental tools that can be developed with public participation to implement the objectives of the Coastal Act.

Other State legislation required particular industries to apply for licences, meet conditions of licences or other requirements to achieve sustainable management and the protection of Queensland's biodiversity. For example, the Environmental Protection Act 1994, in relation to the mining industry and activities that are classified as level 1 or 2 "environmentally relevant activities".

More information about current State level planning and management see Part 3 and Appendix X.

### **Regional**

The extension of the Natural Heritage Trust and the National Action Plan for Salinity and Water Quality (NAP) will provide a strategic emphasis on integrated community-based natural resources management and the environmental planning and implementation.

In addition, State legislation such as the Vegetation Management Act 1999 and the Coastal Protection and Management Act 1995 require the development of regional plans for vegetation management on freehold land, including codes applying to that particular region, and regional coastal management plans.

### **Local**

The *Integrated Planning Act 1997* (IPA) provide for planning by Local Government, and makes provision for the use of planning schemes. Other measures adopted at the local government level to sustainably manage Queensland's biodiversity include trust owned land, environmental levies, council by-laws, and more.

The *Nature Conservation Act 1994* (NC Act) provides for the voluntary conservation of vegetation through nature refuges. Landholders can enter into a voluntary conservation agreement with the Queensland Parks and Wildlife Service to protect areas of significant conservation value on their property as a nature refuge.

*Land for Wildlife* is a voluntary, non-binding property registration scheme, which encourages and assists landholders to provide habitats for wildlife on their property. Landowners register private land as areas of high conservation value. Those landowners then receive expert information and practical advice on wildlife management. The program operates in 62 Local Council areas mainly along the East Coast but also in South-West Queensland, Cape York and around Longreach.

The *Draft Rural Leasehold Land Review* will require the development and implementation of property resource management plans as a standard lease requirement for all new term and perpetual leases.

**Indigenous involvement**

An important aspect of Indigenous involvement in biodiversity is the recognition, continuity and use of traditional ecological or ethno-biological knowledge. Indigenous people have maintained biodiversity for many thousands of years before European occupation. The National Strategy for the Conservation of Australia's Biological Diversity recognised that an important means of protecting and managing biodiversity is the discovery, documentation and continuity of the knowledge of Australia's Indigenous peoples (Department of Environment and Heritage 2001).

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**Table 1. Asset Management Mechanisms for Terrestrial Biodiversity (‘Biodiversity Toolkit’)**

| How the policy mechanism operates | Type of policy mechanism                               | Examples                                                                                                                                                                                                                 |
|-----------------------------------|--------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Compel                            | Zoning regulations                                     | <ul style="list-style-type: none"> <li>• IPA Planning Schemes and Local Area Plans;</li> <li>• IDAS assessment &amp; approval conditions (incl. conservation offsets)</li> <li>• Council By-laws</li> </ul>              |
|                                   | Resource based regulations                             | <ul style="list-style-type: none"> <li>• Management of Crown and Council-Owned Lands</li> <li>• Rural Leasehold Land Strategy</li> <li>• Wildlife regulations e.g. native cut flower &amp; foliage harvesting</li> </ul> |
|                                   | EPBC Act controlled actions                            |                                                                                                                                                                                                                          |
|                                   | Safe harbour/duty of care agreements                   | <ul style="list-style-type: none"> <li>• Statutory covenants under Land Act 1994 and Land Title Act 1994</li> </ul>                                                                                                      |
|                                   | Orders, Permits and Licences                           | <ul style="list-style-type: none"> <li>• Interim Conservation Orders</li> <li>• Permits / Licences</li> <li>• Compliance monitoring</li> <li>• <i>Local Govt</i> Vegetation protection ordinances (VPO)</li> </ul>       |
| Compel/Coerce                     | Facilitating change of ownership                       | <ul style="list-style-type: none"> <li>•</li> </ul>                                                                                                                                                                      |
|                                   | Land acquisition                                       | <ul style="list-style-type: none"> <li>• Protected Area Estate acquisition &amp; management</li> <li>• SEQFA implementation</li> </ul>                                                                                   |
|                                   | Performance bond                                       |                                                                                                                                                                                                                          |
|                                   | Accredited licensing schemes                           |                                                                                                                                                                                                                          |
| Induce                            | Bonus development rights                               | <ul style="list-style-type: none"> <li>• increased security in tenure via rolling leases &amp; ‘top ups’</li> </ul>                                                                                                      |
|                                   | Direct and devolved grants                             | <ul style="list-style-type: none"> <li>• Local govt environmental or green levy</li> <li>• Queensland Biodiversity Tender</li> <li>• Nature Refuges (some)</li> </ul>                                                    |
|                                   | Rate rebates/concessions                               | <ul style="list-style-type: none"> <li>• Cooloola Shire VCA agreement scheme</li> </ul>                                                                                                                                  |
|                                   | Ongoing management payments                            |                                                                                                                                                                                                                          |
|                                   | Removal of perverse land management and tax incentives |                                                                                                                                                                                                                          |
|                                   | Tax incentives                                         |                                                                                                                                                                                                                          |

WORKING DRAFT ONLY – NOT GOVERNMENT POLICY

| How the policy mechanism operates | Type of policy mechanism                                 | Examples                                                                                                                                                                                        |
|-----------------------------------|----------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                   | Mitigation banking, and other tradeable rights systems   |                                                                                                                                                                                                 |
|                                   | Third party independently assessed accreditation systems |                                                                                                                                                                                                 |
|                                   | Industry Codes of Practice                               | <i>Codes of Practice incorporating sustainability and eco-efficiency principles</i>                                                                                                             |
| Facilitate                        | Management advice and assistance                         | <i>EPA/QPWS, NRM&amp;E &amp; DPI&amp;F extension services</i><br>Property Management Plans<br>Local govt advice & nurseries<br>Community group advice e.g. GA                                   |
|                                   | Conservation covenants and Land for wildlife schemes     | <ul style="list-style-type: none"> <li>• Nature Refuges</li> <li>• Qld Trust for Nature Revolving Fund</li> <li>• Coordinated Conservation Areas</li> <li>• <i>Land for Wildlife</i></li> </ul> |
|                                   | Capacity building in NGOs                                | <ul style="list-style-type: none"> <li>• Extension services</li> <li>• Nature Search</li> </ul>                                                                                                 |
|                                   | Recognition of important sites                           |                                                                                                                                                                                                 |
|                                   | Wildlife ranching                                        |                                                                                                                                                                                                 |
|                                   | Eco-tourism promotions                                   | <ul style="list-style-type: none"> <li>• Queensland Tourism Awards (for Eco-tourism)</li> </ul>                                                                                                 |

WORKING DRAFT ONLY – NOT GOVERNMENT POLICY

| <b>Strategic Planning Initiatives and Policy Drivers</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                |  |
|----------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| National Strategies and Programs                         | <ul style="list-style-type: none"> <li>• <i>National Local Government Biodiversity Strategy</i> (Thorman 1999)</li> <li>• National Biodiversity Strategy</li> <li>• National Weeds Strategy</li> <li>• National Ecotourism Accreditation Program</li> <li>• Natural Heritage Trust funded programs</li> <li>• <i>National Framework for the Management and Monitoring of Australia's Native Vegetation</i> (ANZECC)</li> </ul> |  |
| State/Regional Plans                                     | <ul style="list-style-type: none"> <li>• Queensland Biodiversity Policy Framework &amp; Queensland Biodiversity Targets</li> <li>• Biodiversity Planning Assessments &amp; BAMB</li> <li>• Community Based Management Plans for Traditional Hunting</li> </ul>                                                                                                                                                                 |  |
| Protected Area Estate                                    | <ul style="list-style-type: none"> <li>• Park Management Plans</li> <li>• Fire Management Plans</li> <li>• Weed Management Plans</li> </ul>                                                                                                                                                                                                                                                                                    |  |
| Property Plans                                           | <ul style="list-style-type: none"> <li>• Property Management Plans</li> <li>• Land &amp; Water Management Plans</li> <li>• Indigenous access and use agreements</li> </ul>                                                                                                                                                                                                                                                     |  |
| Species Management Plans                                 | <ul style="list-style-type: none"> <li>• Threatened Species Recovery Plans</li> <li>• Species Management Profiles</li> </ul>                                                                                                                                                                                                                                                                                                   |  |