



NEW HOPE
GROUP

G.5 Terrestrial Ecology





NEW HOPE
GROUP

G.5.1 Flora and Fauna Species List



Appendix G.5.1 – Flora and Fauna Species Lists

1.1 Fauna List – Revised Project Area

Family Name	Scientific Name	Common Name	Habitat	Previous Studies				
				A	B	C	D	E
MAMMALS								
PHASCOLARCTIDAE	<i>Phascolarctos cinereus</i>	Koala	1, 2	x		x		x
PHALANGERIDAE	<i>Trichosurus vulpecula</i>	Common Brushtail Possum	1	x		x		x
MACROPODIDAE	<i>Macropus giganteus</i>	Eastern Grey Kangaroo	1, 2	x		x		x
	<i>Macropus rufogriseus</i>	Red-necked Wallaby						x
	<i>Wallabia bicolor</i>	Swamp Wallaby	3			x		
MURIDAE	<i>Rattus fuscipes</i>	Bush Rat						x
	<i>Rattus rattus</i>	Black Rat*				x		x
	<i>Mus musculus</i>	House Mouse*		x		x		x
CANIDAE	<i>Canis familiaris</i>	Wild Dog						x
	<i>Vulpes vulpes</i>	Fox*	1, 2	x		x		x
FELIDAE	<i>Felis catus</i>	Feral Cat*	3	x		x		x
LEPORIDAE	<i>Lepus capensis</i>	Brown Hare*	2			x		x
	<i>Oryctolagus cuniculus</i>	Rabbit*	2					x
PTEROPODIDAE	<i>Pteropus poliocephalus</i>	Grey-headed Flying Fox (NV)				x		
EMBALLONURIDAE	<i>Saccolaimus flaviventris</i>	Yellow-bellied Sheath-tail-bat	1, 2	x		x		x
MOLOSSIDAE	<i>Mormopterus beccari</i>	Beccari's Freetail-bat	1, 2					x
	<i>Mormopterus sp. 3 (planiceps)</i>	Mastiff Bat	1, 2			x		
	<i>Austronomus australis</i>	White-striped Freetail-bat	1, 2					x

Family Name	Scientific Name	Common Name	Habitat	Previous Studies				
				A	B	C	D	E
VESPERTILIONIDAE	<i>Miniopterus schreibersii</i>	Large Bent-wing Bat	1, 2	x		x		
	<i>Nyctophilus sp.</i>	A Long-eared Bat	1, 2	x				
	<i>Chalinolobus gouldii</i>	Gould's Wattled Bat	1, 2	x		x		x
	<i>Chalinolobus nigrogriseus</i>					x		
	<i>Chalinolobus picatus</i>	Little Pied Bat (R)	1, 2					
	<i>Falsistrellus tasmaniensis</i>	Eastern False Pipistrelle	1, 2					
	<i>Scotorepens balstoni</i>	Inland Broad-nosed Bat						x
	<i>Scotorepens orion</i>	Eastern Broad-nosed Bat	1, 2			x		
	<i>Vespadelus darlingtoni</i>	Large Forest Bat		x				
	<i>Vespadelus vulturnus</i>	Little Forest Bat	1, 2			x		
REPTILES								
GECKKONIDAE	<i>Gehyra dubia</i>	Dubious Gecko	1					
	<i>Gehyra variegata</i>	A Gecko					x	
	<i>Heteronotia binoei</i>	Bynoes Gecko					x	
	<i>Hemidactylus frenatus</i>	Asian House Gecko						x
	<i>Oedura robusta</i>	Robust Velvet Gecko	1					
AGAMIDAE	<i>Pogona barbata</i>	Bearded Dragon	1	x			x	x
SCINCIDAE	<i>Anomalopus leuckartii</i>	A Worm Skink					x	
	<i>Anomalopus verreauxii</i>	A Worm Skink					x	
	<i>Cryptoblepharus carnabyi</i>	Fence Skink						x
	<i>Cryptoblepharus virgatus</i>	Fence Skink	1, 2, 3					
	<i>Egernia major</i>	Major Skink	1, 2, 3					x
	<i>Egernia striolata</i>	Tree Skink	1, 3					
	<i>Carlia foliorum</i>	Tree-base Litter	1				x	

Family Name	Scientific Name	Common Name	Habitat	Previous Studies				
				A	B	C	D	E
		Skink						
	<i>Carlia pectoralis</i>	-					x	
	<i>Carlia tetradactyla</i>	-					x	
	<i>Carlia vivax</i>	-					x	
	<i>Ctenotus robustus</i>	Eastern Striped Skink					x	
	<i>Lampropholis delicata</i>	Delicate Skink						x
	<i>Lerista fragilis</i>	Lerista					x	
	<i>Menetia greyii</i>						x	
	<i>Morethia boulengeri</i>	Morethia skink	1					
TYPHLOPIDAE	<i>Ramphotyphlops affinis</i>	Blind Snake					x	
	<i>Ramphotyphlops ligatus</i>	Blind Snake					x	
	<i>Ramphotyphlops nigrescens</i>	Blind Snake	1, 2					
ELAPIDAE	<i>Demansia psammophis</i>	Yellow-faced Whip Snake	2					
	<i>Pseudechis guttatus</i>	Spotted Black Snake					x	x
	<i>Pseudechis porphyriacus</i>	Red-bellied Black Snake					x	x
	<i>Pseudonaja textilis</i>	Eastern Brown Snake	2				x	x
	<i>Vermicella annulata</i>	Bandy-bandy	1					x
VARANIDAE	<i>Varanus varius</i>	Lace Monitor	1, 2, 3					x
AMPHIBIANS								
MYOBATRACHIDAE	<i>Bufo marinus</i>	Cane Toad*				x		
	<i>Limnodynastes fletcheri</i>	Barking Marsh Frog				x		
	<i>Limnodynastes tasmaniensis</i>	Spotted Grass Frog	4			x		
	<i>Limnodynastes ornatus</i>	Ornate burrowing Frog				x		

Family Name	Scientific Name	Common Name	Habitat	Previous Studies				
				A	B	C	D	E
HYLIDAE	<i>Litoria alboguttata</i>	Green-striped Frog				x		
	<i>Litoria caerulea</i>	Green Tree Frog				x		
	<i>Litoria nasuta</i>	Rocket Frog	4					
	<i>Litoria peronii</i>	Peron's Tree Frog		x				
	<i>Litoria rubella</i>	Desert Tree Frog				x		
BIRDS								
ANATIDAE	<i>Dendrocygna eytoni</i>	Plumed Whistling Duck		x	x	x		
	<i>Chenonetta jubata</i>	Australian Wood Duck	4	x	x	x		
	<i>Anas superciliosa</i>	Pacific Black Duck	4	x	x	x		
	<i>Anas gracilis</i>	Grey Teal			x	x		
	<i>Aythya australis</i>	Hardhead			x			
	<i>Malcorhynchus membranaceus</i>	Pink-eared Duck		x	x	x		
ANHINGIDAE	<i>Anhinga melanogaster</i>	Darter			x			
PODICIOEDIDAE	<i>Tachybaptus novaehollandiae</i>	Australasian Grebe			x	x		
PHALACROCORACIDAE	<i>Phalacrocorax sulcirostris</i>	Little Black Cormorant	4	x	x			
	<i>Phalacrocorax melanoleucos</i>	Little Pied Cormorant		x	x			
ARDEIDAE	<i>Ardea pacifica</i>	White-necked Heron		x	x			
	<i>Ardea ibis</i>	Cattle Egret (M)		x				
	<i>Egretta novaehollandiae</i>	White-faced Heron	3, 4	x	x	x		
	<i>Nycticorax caledonicus</i>	Nankeen Night Heron	3					
THRESKIORNITHIDAE	<i>Threskiornis molucca</i>	Australian White Ibis		x				
	<i>Threskiornis spinicollis</i>	Straw-necked Ibis	2	x	x	x		

Family Name	Scientific Name	Common Name	Habitat	Previous Studies				
				A	B	C	D	E
ACCIPITRIDAE	<i>Elanus notatus</i>	Black-shouldered Kite	2	x	x	x		
	<i>Accipiter fasciatus</i>	Brown Goshawk			x			
	<i>Aquila audax</i>	Wedge-tailed Eagle		x	x	x		
	<i>Hieraeetus morphnoides</i>	Little Eagle	2		x			
	<i>Milvus migrans</i>	Black Kite	1					x
FALCONIDAE	<i>Falco berigora</i>	Brown Falcon	3	x	x	x		
	<i>Falco longipennis</i>	Australian Hobby	1	x	x			x
	<i>Falco cenchroides</i>	Nankeen Kestrel	1, 2	x	x	x		
	<i>Falco subniger</i>	Black Falcon			x			
CHARADRIIDAE	<i>Vanellus miles</i>	Masked Lapwing		x	x	x		
COLUMBIDAE	<i>Columba livea*</i>	Feral Pigeon	2			x		
	<i>Geopelia striata</i>	Peaceful Dove		x		x		
	<i>Geopelia humeralis</i>	Bar-shouldered Dove	1	x	x	x		
	<i>Phaps chalcoptera</i>	Common Bronzewing				x		
	<i>Ocyphaps lophotes</i>	Crested Pigeon	1, 2, 3	x	x	x		x
CACATUIDAE	<i>Cacatua roseicapilla</i>	Galah	1, 2, 3	x	x	x		
	<i>Cacatua galerita</i>	Sulphur-crested Cockatoo	1	x				
	<i>Nymphicus hollandicus</i>	Cockatiel		x	x	x		
PSITTACIDAE	<i>Trichoglossus chlorolepidotus</i>	Scaly-breasted Lorikeet	1	x	x			
	<i>Platycercus adscitus</i>	Pale-headed Rosella	1, 2, 3	x	x	x		
	<i>Northiella haematogaster</i>	Blue Bonnett			x			
	<i>Neophema pulchella</i>	Turquoise Parrot						x
	<i>Psephotus haematonotus</i>	Red-rumped Parrot	1, 2	x	x	x		

Family Name	Scientific Name	Common Name	Habitat	Previous Studies				
				A	B	C	D	E
CUCULIDAE	<i>Cuculus pallidus</i>	Pallid Cuckoo	1					
	<i>Eudynamys scolopacea</i>	Common Koel				x		
	<i>Scythrops novaehollandiae</i>	Channel-billed Cuckoo				x		
CENTROPODIDAE	<i>Centropus phasianinus</i>	Pheasant Coucal	1			x		x
STRIGIDAE	<i>Ninox novaeseelandiae</i>	Southern Boobook	1	x	x			
TYTONIDAE	<i>Tyto alba</i>	Barn Owl		x	x	x		x
PODARGIDAE	<i>Podargus strigoides</i>	Tawny Frogmouth	1, 3	x	x	x		x
CAPRIMULGIDAE	<i>Eurostopodus mystacalis</i>	White-throated Nightjar			x			
HALCYONIDAE	<i>Dacelo novaeguineae</i>	Laughing Kookaburra	1, 3	x	x	x		
	<i>Todiramphus sanctus</i>	Sacred Kingfisher	3					
MALURIDAE	<i>Malurus cyaneus</i>	Superb Fairy-wren	3	x	x	x		
	<i>Malurus lamberti</i>	Variegated Fairy-wren	1		x	x		x
PARDALOTIDAE	<i>Pardalotus punctatus</i>	Spotted Pardalote			x			
	<i>Pardalotus striatus</i>	Striated Pardalote			x			
	<i>Gerygone olivacea</i>	White-throated Gerygone			x			
	<i>Acanthiza pusilla</i>	Brown Thornbill			x			
	<i>Acanthiza chrysorrhoa</i>	Yellow-rumped Thornbill	3		x			
	<i>Acanthiza nana</i>	Yellow Thornbill	3		x	x		
	<i>Smicronis brevirostris</i>	Weebill			x	x		
MELIPHAGIDAE	<i>Acanthagenys rufogularis</i>	Spiny-cheeked Honeyeater	3		x	x		
	<i>Plectorhyncha lanceolata</i>	Striped Honeyeater	3		x			
	<i>Philemon corniculatus</i>	Noisy Friarbird	3					

Family Name	Scientific Name	Common Name	Habitat	Previous Studies				
				A	B	C	D	E
	<i>Entomyzon cyanotis</i>	Blue-faced Honeyeater		x				
	<i>Manorina melanocephala</i>	Noisy Miner	1, 3	x	x	x		x
	<i>Lichmera indistincta</i>	Brown Honeyeater	3		x			
	<i>Grantiella picta</i>	Painted Honeyeater (R)	3					
PETROICIDAE	<i>Eopsaltria australis</i>	Eastern Yellow Robin		x				
POMATOSTOMIDAE	<i>Pomatostomus temporalis</i>	Grey-crowned Babbler		x	x	x		
PACHYCEPHALIDAE	<i>Pachycephala pectoralis</i>	Golden Whistler		x	x			
	<i>Pachycephala rufiventris</i>	Rufous Whistler	1		x			
DICRURIDAE	<i>Myiagra inquieta</i>	Restless Flycatcher	1	x	x			
	<i>Rhipidura leucophrys</i>	Willie Wagtail	1, 2, 3	x	x	x		
	<i>Rhipidura fuliginosa</i>	Grey Fantail		x	x			
	<i>Grallina cyanoleuca</i>	Magpie-lark	1, 2, 3	x	x	x		
	<i>Dicrurus hottentottus</i>	Spangled Drongo	1					
CAMPEPHAGIDAE	<i>Coracina novaehollandiae</i>	Black-faced Cuckoo-shrike	1, 3	x	x	x		
ORIOIDAE	<i>Oriolus sagittatus</i>	Olive-backed Oriole	1, 3	x	x	x		
ARTAMIDAE	<i>Cracticus torquatus</i>	Grey Butcherbird	1, 2	x	x	x		x
	<i>Cracticus nigrogularis</i>	Pied Butcherbird	1, 2	x	x	x		x
	<i>Gymnorhina tibicen</i>	Australian Magpie	1, 2	x	x	x		x
	<i>Strepera graculina</i>	Pied Currawong	1					x
CLIMACTERIDAE	<i>Climacteris picumnus</i>	Brown Treecreeper	1					x
CORVIDAE	<i>Corvus coronoides</i>	Australian Raven	1, 2		x			
	<i>Corvus orru</i>	Torresian Crow	1, 2	x	x	x		x
CORCORACIDAE	<i>Corcorax melanorhamphos</i>	White-winged Chough	1			x		x

Family Name	Scientific Name	Common Name	Habitat	Previous Studies				
				A	B	C	D	E
	<i>Struthidea cinerea</i>	Apostlebird	1			x		
MOTACILLIDAE	<i>Anthus novaeseelandiae</i>	Richard's Pipit	2	x		x		
PASSERIDAE	<i>Taeniopygia bichenovii</i>	Double-barred Finch	1, 2	x	x	x		
	<i>Taeniopygia guttata</i>	Zebra Finch	1, 2	x	x	x		
DICAEIDAE	<i>Dicaeum hirundinaceum</i>	Mistletoebird	3		x	x		
HIRUNDINIDAE	<i>Hirundo neoxena</i>	Welcome Swallow	2	x	x	x		
	<i>Hirundo nigricans</i>	Tree Martin	2		x	x		
SYLVIIDAE	<i>Acrocephalus stentoreus</i>	Clamorous Reed Warbler			x			
	<i>Cisticola exilis</i>	Golden-headed Cisticola	2	x	x			
ZOSTEROPIDAE	<i>Zosterops lateralis</i>	Silvereye		x	x			
STURNIDAE	<i>Sturnus vulgaris</i>	Common Starling*	1, 2	x	x	x		
	<i>Acridotheres tristis</i>	Common Myna*	1, 2	x	x			x

NOTES ON SYMBOLS USED IN THE TABLE
HABITATS

- 1 Woodland
- 2 Native and exotic grassland (including grazing & cropping land)
- 3 Riparian / Creek
- 4 In stream ponds and artificial dams

PREVIOUS ACLAND STUDIES

- A Woodward Clyde (1997)
- B Debus (1997)
- C Ison (1999)
- D SKM (2007)
- E SKM (2013)

1.2 Flora Species List – Revised Project Area

Family Name	Scientific Name	Common Name
FERNS		
ADIANTACEAE	<i>Cheilanthes sieberi</i> subsp. <i>sieberi</i>	Slender Cloak-fern
MARSILEACEAE	<i>Marsilea hirsuta</i>	Hairy Nardoo
FLOWERING PLANTS - DICOTYLEDONS		
ACANTHACEAE	<i>Brunoniella australis</i>	Blue Trumpet
AIZOACEAE	<i>Aptenia cordifolia</i>	Ice Plant
	<i>Tetragonia tetragonoides</i>	New Zealand Spinach
AMARANTHACEAE	<i>Alternanthera denticulata</i>	Lesser Joyweed
	<i>Alternanthera pungens</i>	Khaki Weed
	<i>Amaranthus cruentus</i>	Redshank
	<i>Amaranthus macarpus</i>	Dwarf Amaranth
	<i>Gomphrena celosioides</i>	Gomphrena Weed
	<i>Ptilotus exaltatus</i> var. <i>semilanatus</i>	Lambs Tails
ANACARDIACEAE	<i>Schinus molle</i> var. <i>areira</i>	Pepper tree
APIACEAE	<i>Apium leptophyllum</i>	Slender Celery
	<i>Cyclospermum leptophyllum</i>	
	<i>Hydrocotyle laxiflora</i>	
APOCYNACEAE	<i>Alstonia constricta</i>	Quinine Bush
	<i>Carissa ovata</i>	Currant Bush
	<i>Gomphocarpus fruticosus</i>	Narrow-leaved Cotton Bush
	<i>Marsdenia pleidiaenia</i>	Milk Vine
	<i>Parsonsia eucalyptophylla</i>	Gragaloo
	<i>Gomphocarpus Physocarpus*</i>	

Family Name	Scientific Name	Common Name
ASTERACEAE	<i>Acanthospermum hispidum</i>	Star Burr
	<i>Bidens pilosa</i>	Cobblers Peg
	<i>Brachyscome dentata</i>	
	<i>Calotis lappulacea</i>	Yellow Burr-daisy
	<i>Calotis scapigera</i>	Tufted Burr-daisy
	<i>Camptacra barbata</i>	
	<i>Cassinia laevis</i>	Cough Bush
	<i>Centaurea melitensis</i>	Cockspur Thistle
	<i>Centipida minima</i> var. <i>minima</i>	Spreading Sneeze Weed
	<i>Helichrysum semipapposum</i>	Yellow Buttons
	<i>Cirsium vulgare</i>	Spear Thistle
	<i>Conyza</i> spp.	Fleabane
	<i>Leiocarpa brevicompta</i>	
	<i>Schkuhria pinnata</i>	Dwarf Marigold
	<i>Solenogyne bellioides</i>	Bottle-daisy
	<i>Sonchus oleraceus</i>	Common Sow-thistle
	<i>Cyanthillium cinereum</i>	Vernonia
	<i>Vittadenia cuneata</i>	Fuzzweed
	<i>Vittadinia dissecta</i>	
	<i>Xanthium pungens</i>	Noogoora Burr
<i>Xanthium spinosum</i>	Bathurst Burr	
<i>Zinnia peruviana</i>	Zinnia	
	<i>Stemmacantha australis</i>	
BIGNONIACEAE	<i>Pandorea pandorana</i>	Wonga Vine
BORAGINACEAE	<i>Heliotropium amplexicaule</i>	Blue Heliotrope
BRASSICACEAE	<i>Capsella bursa-pastoris</i>	Shepherds Purse
	<i>Lepidium africanum</i>	Peppergrass
	<i>Rapistrum rugosum</i>	Turnip Weed

Family Name	Scientific Name	Common Name
CACTACEAE	<i>Opuntia stricta</i> var. <i>stricta</i>	Common Prickly Pear
	<i>Opuntia tomentosa</i>	Velvety Tree Pear
	<i>Eriocereus martinii</i>	<i>Harrisia cactus</i>
CAMPANULACEAE	<i>Wahlenbergia gracilis</i>	Sprawling Bluebell
	<i>Wahlenbergia queenslandica</i>	
CAPPARACEAE	<i>Apophyllum anomalum</i>	Broom Bush
	<i>Capparis arborea</i>	Coastal Native Orange
	<i>Capparis mitchellii</i>	Wild Orange
CASUARINACEAE	<i>Casuarina cristata</i>	Belah
CELASTRACEAE	<i>Cassine australis</i> var. <i>australis</i>	Red-fruited Olive Plum
	<i>Celastrus subspicatus</i>	Large-leaf Staff Vine
CHENOPODIACEAE	<i>Atriplex muelleri</i>	Annual Saltbush
	<i>Chenopodium auricomun</i>	Queensland Bluebush
	<i>Chenopodium album</i>	Fat Hen
	<i>Einadia nutans</i> subsp. <i>nutans</i>	Climbing Berry-saltbush
	<i>Enchylaena tomentosa</i>	Ruby Saltbush
	<i>Maireana aphylla</i>	Leafless Saltbush
	<i>Maireana microphylla</i>	Cotton Bush
	<i>Salsola kali</i> var. <i>kali</i>	Prickly Saltwort
	<i>Scleroaena ansiacanthoides</i>	Yellow Burr
	<i>Scleroaena birchii</i>	Galvanised Burr
	<i>Scleroaena muricata</i>	Black Rolypoly
	<i>Scleroaena tetracuspis</i>	Brigalow Burr
CONVOLVULACEAE	<i>Convolvulus erubescens</i>	Pink Bindweed
	<i>Dichondra repens</i>	Kidney Weed
	<i>Evolvulus alsinoides</i>	Tropical Speedwell
	<i>Polymeria longifolia</i>	

Family Name	Scientific Name	Common Name
CRASSULACEAE	<i>Bryophyllum tubiflorum</i>	Mother-of-millions
EUPHORBIACEAE	<i>Breynia oblongifolia</i>	Breynia
	<i>Croton phebaloides</i>	
	<i>Phyllanthus</i> spp.	Phyllanthus
	<i>Chamaesyce dallachyana</i>	
FABACEAE		
FABOIDEAE	<i>Crotalaria</i> spp	Rattlepod
	<i>Cullen tenax</i>	Emu Foot
	<i>Desmodium varians</i>	Slender Tick-trefoil
	<i>Glycine tabacina</i>	
	<i>Glycine tomentella</i>	Wooly Glycine
	<i>Indigofera linnaei</i>	Birdsville Indigo
	<i>Macroptilium atropurpureum</i>	Siratro
	<i>Macroptilium lathyroides</i>	Phasey Bean
	<i>Medicago polymorpha</i>	Burr Medic
	<i>Rhynchosia minima</i>	Rhynchosia
<i>Sesbania cannabina</i>	Sesbania Pea	
MIMOSOIDEAE	<i>Acacia complanata</i>	Flat-stemmed Wattle
	<i>Acacia dealbata</i> subsp. <i>dealbata</i>	Silver Wattle
	<i>Acacia decora</i>	
	<i>Acacia excelsa</i>	Ironwood
	<i>Acacia farnesiana</i>	Mimosa
	<i>Acacia harpophylla</i>	Brigalow
	<i>Acacia leiocalyx</i> subsp. <i>leiocalyx</i>	Curracabah
	<i>Acacia pendula</i>	Myall
	<i>Acacia salicina</i>	Sally Wattle
	<i>Acacia venulosa</i>	Veiny Wattle
	<i>Neptunia gracilis</i>	Native Sensitive Plant

Family Name	Scientific Name	Common Name
GERANIACEAE	<i>Geranium solanderi var. grande</i>	Native Geranium
HALORAGACEAE	<i>Halbragis stricta</i>	
LAMIACEAE	<i>Mentha saturioides</i>	Narrow Leaf Native Mint
	<i>Salvia reflexa</i>	Mint Weed
	<i>Spartothamnella juncea</i>	Bead Bush
	<i>Teucrium sp. Aff. argutum</i>	Lobed Teucrium
LORANTHACEAE	<i>Amyema quandang</i>	Grey Mistletoe
	<i>Lysiana subfalcata</i>	
MALVACEAE	<i>Abutilon oxycarpum</i>	Flannel Weed
	<i>Anoda cristata</i>	Anoda Weed
	<i>Hibiscus trinoum</i>	Bladder Ketmia
	<i>Malva parviflora</i>	Small-flower Mallow
	<i>Malvastrum americanum</i>	Spiked Malvastrum
	<i>Sida cordifolia</i>	Flannel Weed
	<i>Sida filiformis</i>	Fine Sida
	<i>Sida rhombifolia</i>	Paddys Lucerene
MYOPORACEAE	<i>Myoporum debile</i>	Winter Apple
	<i>Eremophila desteri</i>	Ellangowan Poison Bush
	<i>Eremophila mitchellii</i>	False Sandlewood
CAESALPINIACEAE	<i>Senna artemesioides</i>	Silver Cassia
MYRTACEAE		
EUCALYPTS	<i>Angophora floribunda</i>	Rough-barked Apple
	<i>Eucalyptus cambageana</i>	Dawson Gum
	<i>Eucalyptus conica</i>	Fuzzy Box
	<i>Eucalyptus orgadophylla</i>	Mountain Coolibah
	<i>Eucalyptus populnea</i>	Poplar Box
	<i>Eucalyptus tereticornis</i>	Forest Red Gum

Family Name	Scientific Name	Common Name
NYCTAGINACEAE	<i>Boerhavia dominii</i>	Tarvine
OLEACEAE	<i>Jasminum didymum</i>	Native Jasmine
	<i>Jasminum suavissimum</i>	Desert Jasmine
ONAGRACEAE	<i>Ludwigia peploides</i> subsp. <i>montevidensis</i>	Water Primrose
OXALIDACEAE	<i>Oxalis</i> spp.	Oxalis
PHYTOLACCACEAE	<i>Phytolacca octandra</i>	Inkweed
PITTOSPORACEAE	<i>Bursaria incana</i>	Prickly Pine
	<i>Pittosporum phylliraeoides</i>	Weeping Pittosporum
PLANTAGINACEAE	<i>Plantago</i> spp. <i>Plantago debilis</i>	Native Plantain
POLYGONACEAE	<i>Polygonum aviculare</i>	Variable-leaf Wireweed
	<i>Rumex brownii</i>	Swamp Dock
PORTULACACEAE	<i>Portulaca oleracea</i>	Pigweed
RANUNCULACEAE	<i>Clematis microphylla</i>	Small Leaved Clematis
RUTACEAE	<i>Flindersia collina</i>	Leopardwood
	<i>Flindersia dissosperma</i>	Scrub leopardwood
	<i>Geijera parviflora</i>	Wilga
	<i>Geijera salicifolia</i>	Brush Wilga
SANTALACEAE	<i>Choretrum pauciflorum</i>	Dwarf Sourbush
	<i>Santalum lanceolatum</i>	Northern Sandlewood
SAPINDACEAE	<i>Alectryon diversifolius</i>	Scrub Boonaree
	<i>Alectryon oleifolius</i>	Western Rosewood
	<i>Alectryon subdentatus</i>	
	<i>Dodonaea viscosa</i>	
	<i>Atalaya hemiglauca</i>	
SCROPHULARIACEAE	<i>Verbascum</i> spp.	Mullien

Family Name	Scientific Name	Common Name
SOLANACEAE	<i>Lycium ferocissimum</i>	African Boxthorn
	<i>Solanum</i> spp.	
	<i>Solanum americanum</i>	
	<i>Solanum ovalifolium</i>	
	<i>Solanum pseudocapsicum</i>	Jerusalem Cherry
STERCULIACEAE	<i>Brachychiton populneus</i>	Kurrajong
	<i>Brachychiton rupestris</i>	Bottle Tree
THYMELEACEAE	<i>Pimelea neo-angelica</i>	Poison Pimelea
	<i>Verbena bonariense</i>	
	<i>Pimelea curviflora</i> var. <i>gracilis</i>	
VERBENACEAE	<i>Phyla nodiflora</i>	Lippia
	<i>Verbena officinalis</i>	Common Verbena
	<i>Verbena aristigera</i>	Mayne's Pest
	<i>Verbena bonariense</i>	
	<i>Verbena tenuisecta</i>	Moss verbena
ZYGOPHYLLACEAE	<i>Tribulus terrestris</i>	Caltrop
FLOWERING PLANTS - MONOCOTYLEDONS		
ASPHODELACEAE	<i>Bulbine semibarbata</i>	
COMMELINACEAE	<i>Commelina ensifolia</i>	Western Wandering Dew
CYPERACEAE	<i>Carex inversa</i>	A Sedge
	<i>Cyperus gracilis</i>	Slender Flat Sedge
	<i>Cyperus rotundus</i>	Nutgrass
	<i>Eleocharis</i> spp.	Spike Rush
JUNCACEAE	<i>Juncus usitatus</i>	Common Rush
LOMANDRACEAE	<i>Lomandra</i> spp.	Mat-rush
LUZURIAGACEAE	<i>Eustrephus latifolius</i>	Wombat Berry
	<i>Geitonoplesium cymosum</i>	Scrambling Lily
ORCHIDACEAE	<i>Cymbidium canaliculatum</i>	Black Orchid

Family Name	Scientific Name	Common Name
PHORMIACEAE	<i>Dianella longifolia var. stupata</i>	Grassland Flax Lily
POACEAE	<i>Aristida calycina</i>	Wire Grass
	<i>Aristida latifolia</i>	Feathertop Wire Grass
	<i>Aristida leptopoda</i>	White Spear Grass
	<i>Aristida platychaeta</i>	Curled Wire Grass
	<i>Aristida ramosa</i>	Three-awned Spear Grass
	<i>Austrodanthonia bipartia</i>	Wallaby Grass
	<i>Austrostipa scabra</i>	Rough Spear Grass
	<i>Austrostipa ramosissima</i>	
	<i>Bothriochloa biloba</i>	
	<i>Bothriochloa bladhii</i>	Forest Blue Grass
	<i>Bothriochloa decipiens</i>	Pitted Blue Grass
	<i>Brachyachne convergens</i>	Common Native Couch
	<i>Bromus uniloides</i>	Prarie Grass
	<i>Cenchrus ciliaris</i>	Buffel Grass
	<i>Chloris divaricata</i>	Slender Chloris
	<i>Chloris gayana</i>	Rhodes Grass
	<i>Chloris truncata</i>	Windmill Grass
	<i>Chloris ventricosa</i>	Tall Windmill Grass
	<i>Cymbopogon refractus</i>	Barbed Wire Grass
	<i>Cynodon dactylon</i>	Common Couch
	<i>Dactyloctenium radulans</i>	Button Grass
	<i>Dichanthium sericeum</i> subsp. <i>sericeum</i>	Queensland Bluegrass
	<i>Digitaria didactyla</i>	
	<i>Digitaria porrecta</i>	
	<i>Diplachne fusca</i>	Brown Beetle Grass
	<i>Echinochloa colona</i>	Awnless Barnyard Grass

Family Name	Scientific Name	Common Name
	<i>Echinochloa crus-galli</i>	Barnyard Grass
	<i>Enneapogon nigricans</i>	Niggerheads
	<i>Enteropogon ramosus</i>	Curly Windmill Grass
	<i>Eragrostis brownii</i>	Brown's Lovegrass
	<i>Eragrostis cilianensis</i>	Stinkgrass
	<i>Eragrostis curvula</i>	African Lovegrass
	<i>Eragrostis parviflora</i>	Weeping Lovegrass
	<i>Eriochloa crebra</i>	
	<i>Homopholis belsonii</i>	Belson's Panic
	<i>Rhynchelytrum repens</i>	Red Natal Grass
	<i>Microlaena stipoides</i>	Native Rice Grass
	<i>Panicum buncei</i>	Native Panic
	<i>Panicum decompositum</i>	Native Millet
	<i>Panicum effusum</i>	Hairy Panic
	<i>Panicum maximum</i> var. <i>trichoglume</i>	Green Panic
	<i>Panicum queenslandicum</i>	Yabola Grass
	<i>Paspalidium caespitosum</i>	Brigalow Grass
	<i>Paspalidium globoideum</i>	Shot Grass
	<i>Paspalum dilatatum</i>	Paspalum
	<i>Pennisetum villosum</i>	
	<i>Setaria</i> spp.	Pigeon Grass
	<i>Sorghum halepense</i>	Johnson Grass
	<i>Sorghum vulgare</i>	Sorghum
	<i>Rhaponticum australe</i>	Native Cornflower
	<i>Sporobolus caroli</i>	Fairy Grass
	<i>Sporobolus indicus</i> var. <i>elongatus</i>	Slender Rats Tail Grass
	<i>Themeda avenacea</i>	Native Oatgrass

Family Name	Scientific Name	Common Name
	<i>Themeda triandra</i>	Kangaroo Grass
	<i>Tragus australianus</i>	Small Burrgrass
	<i>Urochloa panicoides</i>	Liverseed Grass
	<i>Lachnagrostis filliformis</i>	

spp. = several species of the one genus (sometimes occurring as a hybrid swarm)

sp. = unidentified species³

sp. aff. = unidentified species with characteristics similar to the indicated species or genus³

var. = variety

subsp. = subspecies

cv. = cultivar (i.e. a anthropogenic form of the species)

agg. = an aggregate of several yet to be defined species



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G.5.2 Terrestrial Ecology – Survey Guideline Comparison Table



New Acland Coal Mine Project EPBC Survey Effort Comparison

FAUNA	MNES	Guidelines	Survey effort guide	NACM Stage 2 EIS Flora - 1998 and 1999 Fauna - 1998 and 1999	NACM Stage 2 - targeted flora and fauna surveys 9-14 February 2007	NACM Stage 3 EIS 26 February - 2 March 2007 and 20 November 2008	Koala Survey 4-8 March 2013	October - November 2013 Fauna Surveys	Total Survey Effort	Guidelines Met?	Comments	Located During Survey
BIRDS												
Australian Painted Shrike/Painted Shrike - <i>Boratorula australis</i>	Vulnerable	SEWPAIC Survey guidelines for Australia's threatened birds	Surveys through suitable wetlands at dawn and dusk (spotlighting shortly after dusk may detect birds). Targeted stationary observations (10h-5d). Land-based area searches or line transects (10h-3d)	Dawn and dusk observation (incl. call lds). Opportunistic observations and spotlighting (4h/night)	30 min bird counts across three sites for three nights.	12 hrs over 3 days traversing waterway & flushing patches of appropriate habitat.		28.5 Hours	Yes		No	
Black-breasted Button-quail - <i>Turnix melanogaster</i>	Vulnerable	SEWPAIC Survey guidelines for Australia's threatened birds	Searches of suitable habitat (forested areas). Land-based area searches (15h-3d)	Dawn and dusk observation (incl. call lds). Opportunistic observations and spotlighting (4h/night)	30 min bird counts across three sites for three nights.	30-60 min searches by 2 ecologists on 8 days. Total 16 hrs.		32.5 Hours	Yes		No	
Black-throated Finch (southern) - <i>Phephila cinerea cinerea</i>	Endangered	SEWPAIC Survey guidelines for Australia's threatened birds	Survey suitable wetlands and swamps/woodland. Land-based area searches (10h-5d). Targeted searches (6h-2d)	Dawn and dusk observation (incl. call lds). Opportunistic observations and spotlighting (4h/night)	30 min bird counts across three sites for three nights.			16.5 Hours	Yes		No	
Cattle Egret - <i>Bubulcus ibis</i>	Migratory	SEWPAIC Survey guidelines for Australia's threatened birds	Search for their characteristic nests in tall forest; soaring birds can also be spotted from elevated locations. Area searches (8h-10d)	Dawn and dusk observation (incl. call lds). Opportunistic observations and spotlighting (4h/night)	30 min bird counts across three sites for three nights.	Habitat searches (9.5 hrs), plus 15 hours traversing waterway & floodplain and searching other clumps of trees. Total 74.5 hrs		91 Hours	Yes		No	
Red Goshawk - <i>Erythronotus olerius</i>	Vulnerable	SEWPAIC Survey guidelines for Australia's threatened birds	Surveys (pref. morning) in suitable habitat (wet, eucalypt forests with heavily flowering trees). Area searches (20h-10d). Targeted searches (20h-5d)	Dawn and dusk observation (incl. call lds). Opportunistic observations and spotlighting (4h/night)	30 min bird counts across three sites for three nights.	ecologists on 30 days (93.5 hrs). Plus 2 hours by 2 ecologists in wooded section of waterway (4 hours). Total 48.5 hrs.		60 Hours	Yes		No	
Regent Honeyeater - <i>Xanthomyza phrygane</i>	Endangered	SEWPAIC Survey guidelines for Australia's threatened birds	Surveys in grassy understoreys near permanent water. Area searches or transect surveys (15h-3d). Flushing surveys (10h-3d)	Dawn and dusk observation (incl. call lds). Opportunistic observations and spotlighting (4h/night)	30 min bird counts across three sites for three nights.			16.5 Hours	Yes		No	
Suitor Pigeon - <i>Geopelia scripta scripta</i>	Vulnerable	SEWPAIC Survey guidelines for Australia's threatened birds	Surveys of rank grasses in riparian areas; also within flocks of other species. Target searches of waterholes may be used. Broadband surveys (15h-5d). Targeted surveys (10h-4d)	Dawn and dusk observation (incl. call lds). Opportunistic observations and spotlighting (4h/night)	30 min bird counts across three sites for three nights.			16.5 Hours	Yes		No	
Star Finch (eastern and southern) - <i>Acrocephalus ruficauda</i>	Endangered	SEWPAIC Survey guidelines for Australia's threatened birds	Early morning and afternoon surveys of dry sclerophyll eucalypt forests and woodlands. Targeted searches of heavily flowering eucalypts may be useful. Area searches or transect surveys (10h-8d). Targeted surveys (20h-8d). Timing between March and July.	Dawn and dusk observation (incl. call lds). Opportunistic observations and spotlighting (4h/night)	30 min bird counts across three sites for three nights.			16.5 Hours	Yes		No	
Swift Parrot - <i>Lathamus discolor</i>	Endangered	SEWPAIC Survey guidelines for Australia's threatened birds	Spotlighting, line fishing and Electrofishing within suitable habitats. Fish more than dawn/dusk/night during the day in areas of low turbidity.	Spotlighting (4h/night)	Anabats at four sites for three nights, Spotlighting, 2 h/night for a total of 16 h.			40 Hours plus 16 trap nights	Yes		No	
FISH												
Murray Cod - <i>Maccullochella peelii</i>	Vulnerable	SEWPAIC Survey guidelines for Australia's threatened fish	Daytime searches for habitat resources and signs of activity (tracks, seats, etc.). Baited camera traps may be used. Observation of individuals.	Spotlighting (4h/night)	Spotlighting, 2 h/night for a total of 16 h, listening to calls.			28 Hours	Yes			
MAMMALS												
Brush-tailed Rock-wallaby - <i>Peropale penicillata</i>	Vulnerable	SEWPAIC Survey guidelines for Australia's threatened mammals	Day and night time surveys (walking transects, 100 m apart at night). Survey of vegetation and food plants.	Spotlighting (4h/night)	Anabats at four sites for three nights, Spotlighting, 2 h/night for a total of 16 h.			40 Hours plus 16 trap nights	Yes		No	
Grey-headed Flying Fox - <i>Pteropus poliocephalus</i>	Vulnerable	SEWPAIC Survey guidelines for Australia's threatened bats	Anabat with optional harp trapping	Anabat. Spotlighting (4h/night)				436 trap nights, 14 hours spotlighting	Yes		No	
Large-eared Pied Bat - <i>Large Pied Bat - <i>Chalinolobus dwyeri</i></i>	Vulnerable	SEWPAIC Survey guidelines for Australia's threatened bats	Daytime searches for habitat, seats and signs of activity. Soil plot surveys and baited camera traps. Integrated approach required with both direct (trapping, hair sampling, etc.) methods and signs of activity.									
Long-nosed potoroo (SE mainland) - <i>Potorous tridactylus tridactylus</i>	Vulnerable	SEWPAIC Survey guidelines for Australia's threatened mammals										

water that is at least 5 metres deep with high amounts of in stream wood, overhanging vegetation close to banks and heavy flow to reduce siltation (Curtis 2012).

Preferred habitat being in grassy riparian areas with suitable trees to provide suitable refuge from predators (Van Dyck & Strahan 2008; Curtis et al. 2012).

This species habitat preference is for thick vegetated areas including coastal heath and wet sclerophyll forests. This species also has a preference for areas with sandy soils (Van Dyck & Strahan 2008; Curtis et al. 2012).

Animals. CSIRO Publishing) [No]

Northern Quail - <i>Dasypus villosus</i> (Endangered)	SEWPA Survey guidelines for Australia's threatened mammals	Baited cage and Elliot trapping between May and August to avoid breeding (in QLD, for three consecutive nights). Optional: habitat searches, remote cameras, hair tubes, scat searches and spotlight surveys. Community liaison for additional records.	Animals followed by an appropriate level of trapping. Harp traps baited with a mixture of chicken and sheep manure and water bottles (20 trap nights, 5 nights). Minirets (20 trap nights, 5 nights).	Spotlighting (4h/night)	Animals followed by an appropriate level of trapping. Harp traps baited with a mixture of chicken and sheep manure and water bottles (20 trap nights, 5 nights). Minirets (20 trap nights, 5 nights).	396 trap nights, 14 hours spotlighting	Yes	Habitat preference for this species is a range of dry sclerophyll and vine thicket habitats with a strong association with rocky areas. Females have the higher preference for rocky areas (Van Dyck & Strahan 2008; Curtis et al. 2012).	No
South-eastern Long-eared Bat - <i>Nyctophilus corbeni</i> (Vulnerable)	SEWPA Survey guidelines for Australia's threatened bats		Anabat, Spotlighting (4h/night)	Anabat, Spotlighting (4h/night)	Anabat at four sites for three nights. Spotlighting, 2 h/night for a total of 16h.	16 trap nights, 28 hours	Yes		No
Bigalow Scaly-foot - <i>Paradeola orientalis</i> (Vulnerable)	SEWPA Survey guidelines for Australia's threatened reptiles. SEWPA-Draft Referral Guidelines for the Nationally Listed Bigalow Belt Reptiles	Opportunistic searches under rocks, logs, leaf litter, etc. Nocturnal searches of feeding locations (1.5/ha, 3-4 nights). Drift fence and funnel traps are also useful. Pitfall trapping.	Spotlighting (4h/night), active searches	Spotlighting (4h/night), active searches	Ten sites with 1 hr or both diurnal and nocturnal survey effort per site (20h total bucket nights). Pitfall trapping (5 buckets linked by drift fence for 4 nights - total of 60 bucket nights).	48 hours including 60 trap nights	Yes		No
Collared Pelican - <i>Dolomoea torquata</i> (Vulnerable)	SEWPA Survey guidelines for Australia's threatened reptiles. SEWPA-Draft Referral Guidelines for the Nationally Listed Bigalow Belt Reptiles	Turning rocks and raking litter in appropriate habitats (woodland sites with grassy understorey) most effective (pitfall trapping not very effective).	Spotlighting (4h/night), active searches	Spotlighting (4h/night), active searches	Ten sites with 1 hr or both diurnal and nocturnal survey effort per site (20h total bucket nights). Pitfall trapping (5 buckets linked by drift fence for 4 nights - total of 60 bucket nights).	48 hours including 120 trap nights	Yes		No
Eastern Earless Dragon - <i>Tympanocryptes pinguicula</i> (Endangered)	SEWPA Survey guidelines for Australia's threatened reptiles. SEWPA-Draft Referral Guidelines for the Nationally Listed Bigalow Belt Reptiles	None known to reliably detect the species. Recommended methods include active searching, pitfall trapping, road driving at night, spotlighting (1.5/ha, 3-4 nights) (all methods likely to yield low returns).	Spotlighting (4h/night), active searches	Spotlighting (4h/night), active searches	Ten sites with 1 hr or both diurnal and nocturnal survey effort per site (20h total bucket nights). Pitfall trapping (5 buckets linked by drift fence for 4 nights - total of 60 bucket nights).	48 hours including 120 trap nights	Yes		No
Five-clawed Worm-Skink - <i>Amphispiza melanogaster</i> (Vulnerable)	SEWPA Survey guidelines for Australia's threatened reptiles. SEWPA-Draft Referral Guidelines for the Nationally Listed Bigalow Belt Reptiles	Active searching and pitfall traps during wet periods. Artificial shelter (hay bale) sites.	Spotlighting (4h/night), active searches	Spotlighting (4h/night), active searches	Ten sites with 1 hr or both diurnal and nocturnal survey effort per site (20h total bucket nights). Pitfall trapping (5 buckets linked by drift fence for 4 nights - total of 60 bucket nights).	48 hours including 120 trap nights	Yes		No
Grassland Earless Dragon - <i>Tympanocryptes pinguicula</i> (Endangered)	SEWPA Survey guidelines for Australia's threatened reptiles	Pitfall trapping.	Spotlighting (4h/night), active searches	Spotlighting (4h/night), active searches	Elliot trapping c. 10 m apart for a min. of two consecutive nights. 375 trap nights in total. Spotlighting (4h/night), active searches	48 hours including 120 trap nights	Yes		No
FLORA									
Austral cornflower - <i>Rhoponticum australe</i> (Vulnerable)	Random meander techniques		Vegetation types in study area inspected and species lists compiled.	Vegetation types in study area inspected and species lists compiled.	Vegetation types in study area inspected and species lists compiled.		Yes	Previously known as <i>Stemmatantha australis</i>	Yes
Austral Toadflax - <i>Thesium australe</i> (Vulnerable)	Random meander techniques		Vegetation types in study area inspected and species lists compiled.	Vegetation types in study area inspected and species lists compiled.	Vegetation types in study area inspected and species lists compiled.		Yes		No
Belted Sarcophyllis - <i>Sarcophyllis beikoni</i> (Vulnerable)	Random meander techniques		Vegetation types in study area inspected and species lists compiled.	Vegetation types in study area inspected and species lists compiled.	Vegetation types in study area inspected and species lists compiled.		Yes		Yes
Finger panic grass - <i>Digitaria parviflora</i> (Endangered)	Random meander techniques		Vegetation types in study area inspected and species lists compiled.	Vegetation types in study area inspected and species lists compiled.	Vegetation types in study area inspected and species lists compiled.		Yes		No
Hawkweed - <i>Pezizaeae</i> (Vulnerable)	Random meander techniques		Vegetation types in study area inspected and species lists compiled.	Vegetation types in study area inspected and species lists compiled.	Vegetation types in study area inspected and species lists compiled.		Yes		No
King Blue-grass - <i>Dichanthium queenslandicum</i> (Vulnerable)	Random meander techniques		Vegetation types in study area inspected and species lists compiled.	Vegetation types in study area inspected and species lists compiled.	Vegetation types in study area inspected and species lists compiled.		Yes		No
Lobed bluegrass - <i>Bathrachium bilobum</i> (Vulnerable)	Random meander techniques		Vegetation types in study area inspected and species lists compiled.	Vegetation types in study area inspected and species lists compiled.	Vegetation types in study area inspected and species lists compiled.		Yes		No
Online - <i>Cordia pentaspatha</i> (Vulnerable)	Random meander techniques		Vegetation types in study area inspected and species lists compiled.	Vegetation types in study area inspected and species lists compiled.	Vegetation types in study area inspected and species lists compiled.		Yes		No
Sah's Backbane - <i>Sprellia penulimus</i> (Endangered)	Random meander techniques		Vegetation types in study area inspected and species lists compiled.	Vegetation types in study area inspected and species lists compiled.	Vegetation types in study area inspected and species lists compiled.		Yes		No
Stream Clematis - <i>Clematis fawcettii</i> (Vulnerable)	Random meander techniques		Vegetation types in study area inspected and species lists compiled.	Vegetation types in study area inspected and species lists compiled.	Vegetation types in study area inspected and species lists compiled.		Yes		No
Tall Vasey Shearery - <i>Holcus exaltatus</i> subsp. <i>velutina</i> (Vulnerable)	Random meander techniques		Vegetation types in study area inspected and species lists compiled.	Vegetation types in study area inspected and species lists compiled.	Vegetation types in study area inspected and species lists compiled.		Yes		No
Wandering Paper-press - <i>Leptidium pterispermum</i> (Endangered)	Random meander techniques		Vegetation types in study area inspected and species lists compiled.	Vegetation types in study area inspected and species lists compiled.	Vegetation types in study area inspected and species lists compiled.		Yes		No
THREATENED ECOLOGICAL COMMUNITIES									
Methodology for Survey and Mapping of Regional Ecosystems and Vegetation Communities in Queensland (Neldner et al. 2012)	Methodology for Survey and Mapping of Regional Ecosystems and Vegetation Communities in Queensland (Neldner et al. 2012)		Visual inspection and modified BiCondition survey: 100 m transect, 50 x 10 m plots and 5 x 1m x 1m quadrats to determine percentage cover and an assessment of the likelihood of the mapped area returning to "good native condition".	Visual inspection and modified BiCondition survey: 100 m transect, 50 x 10 m plots and 5 x 1m x 1m quadrats to determine percentage cover and an assessment of the likelihood of the mapped area returning to "good native condition".					
Bluegrass (<i>Dichanthium</i> spp.) dominant grasslands of the Bigalow Belt Bioregions (North and South)	Methodology for Survey and Mapping of Regional Ecosystems and Vegetation Communities in Queensland (Neldner et al. 2012)		The Threatened Ecological Communities listing advice was used as a guide to determine the presence of the community.	The Threatened Ecological Communities listing advice was used as a guide to determine the presence of the community.	The Threatened Ecological Communities listing advice was used as a guide to determine the presence of the community.		Yes		Yes
Bigalow <i>Macraea harpophylla</i> dominant and co-dominant	Methodology for Survey and Mapping of Regional Ecosystems and Vegetation Communities in Queensland (Neldner et al. 2012)		The Threatened Ecological Communities listing advice was used as a guide to determine the presence of the community.	The Threatened Ecological Communities listing advice was used as a guide to determine the presence of the community.	The Threatened Ecological Communities listing advice was used as a guide to determine the presence of the community.		Yes		Yes
Semi-evergreen vine thickets of the Bigalow Belt (North and South) and Nandawera Bioregions	Methodology for Survey and Mapping of Regional Ecosystems and Vegetation Communities in Queensland (Neldner et al. 2012)		The Threatened Ecological Communities listing advice was used as a guide to determine the presence of the community.	The Threatened Ecological Communities listing advice was used as a guide to determine the presence of the community.	The Threatened Ecological Communities listing advice was used as a guide to determine the presence of the community.		Yes		Yes

White Box-yellow Box Blakely's Red Gum Grassy Woodland and Derived Native Grassland	Methodology for Survey and Mapping of Regional Ecosystems and Vegetation Communities in Queensland (Neldner et al 2012)	The Threatened Ecological Communities listing advice was used as a guide to determine the presence of the community.	The Threatened Ecological Communities listing advice was used as a guide to determine the presence of the community.	The Threatened Ecological Communities listing advice was used as a guide to determine the presence of the community.	Yes	No
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GROUP

G.5.3 Biocondition Survey Results



Site number: A2108 - Bio 1 Date: 21/08/13		Benchmark (11.3.21) RE/Landtype (3), Bioregion (11)		BioCondition Plot Paddock with natural grass elements	
Attribute	Threshold	Weighting (%)	Value	Sub-score	Score
Large trees					
Eucalypts	n/a		no. Euc. 0	0	
Non-eucalypts	n/a n/a n/a n/a		no. non-Euc. 0 % of benchmark n/a	0 n/a	
Tree canopy height (m)					
Canopy	n/a		canopy (m) n/a	n/a	
Sub-canopy	n/a		% of benchmark n/a sub-canopy (m) n/a % of benchmark n/a	n/a n/a n/a	
Recruitment of canopy species (%)			% recruitment n/a % of benchmark n/a	n/a n/a	
Tree canopy cover (%)					
Canopy	n/a		% canopy cover n/a	n/a	
Sub-canopy	n/a		% of benchmark n/a % subcanopy cover n/a % of benchmark n/a	n/a n/a n/a	
Shrub cover (%)	1 %		% shrub cover 2.4 % of benchmark 240.0	2.4 240.0	
Coarse woody debris (m/ha)			m cwd n/a % of benchmark n/a	n/a n/a	
Native plant spp. richness					
Trees	0 spp.	10	no. tree spp. 0 % of benchmark 100.0	0 100.0	
Shrubs	3 spp.		no. shrub spp. 1 % of benchmark 33.3	1 33.3	
Grass	8 spp.		no. grass spp. 4 % of benchmark 50.0	4 50.0	2.5
Other/forbs	12 spp.		no. other/forb spp. 9 % of benchmark 75.0	9 75.0	2.5
Non-native plant cover (%)	0	10	% non-native plant cover 8	8	5
Native perennial grass cover (%)	51 %	5	% native grass cover 38 % of benchmark 74.5	38 74.5	3
Organic litter cover (%)	42 %	5	% organic litter cover 0 % of benchmark 0.0	0 0.0	0
Landscape context (fragmented)					
Patch size		10			
Context		5			
Connectivity		5			
Total Score		50			13
Adjusted Score (Grassland)					26
BioCondition Class					4

Site number: A2108 - Bio 2 Date: 21/08/13		RE/Landtype (8), Bioregion (11)		BioCondition Plot Grazed paddock dominated by Blue Grass	
Attribute	Threshold	Weighting (%)	Value	Sub-score	Score
Large trees		15	0	0	
Eucalypts	n/a		no. Euc.	0	
Non-eucalypts	n/a		no. non-Euc.	0	
Sub-canopy	n/a		% of benchmark	n/a	15
Canopy	n/a		canopy (m)	n/a	
Sub-canopy	n/a		% of benchmark	n/a	5
Canopy	n/a		sub-canopy (m)	n/a	
Sub-canopy	n/a		% of benchmark	n/a	
Recruitment of canopy species (%)	n/a	5	% recruitment	n/a	5
Canopy	n/a		% of benchmark	n/a	
Sub-canopy	n/a		% canopy cover	n/a	
Canopy	n/a		% of benchmark	n/a	5
Sub-canopy	n/a		% subcanopy cover	n/a	
Canopy	n/a		% of benchmark	n/a	
Shrub cover (%)	1 %	5	% shrub cover	0.0	3
Canopy	n/a		% of benchmark	0.0	
Coarse woody debris (m/ha)	n/a	5	m cwd	n/a	5
Canopy	n/a		% of benchmark	n/a	
Native plant spp. richness		20			
Trees	0 spp.		no. tree spp.	0	
Shrubs	3 spp.		% of benchmark	100.0	5
Grass	8 spp.		no. shrub spp.	1	
Other/forbs	12 spp.		% of benchmark	33.3	2.5
Trees			no. grass spp.	3	
Shrubs			% of benchmark	37.5	2.5
Grass			no. other/forb spp.	10	
Other/forbs			% of benchmark	83.3	2.5
Non-native plant cover (%)	0	10	% non-native plant cover	8	5
Native perennial grass cover (%)	51 %	5	% native grass cover	48	
Canopy			% of benchmark	94.1	3
Sub-canopy			% organic litter cover	0	
Canopy			% of benchmark	0.0	0
Landscape context (fragmented)		10			
Patch size		5			
Context		5			
Connectivity		5			
Total Score		100			58.5
Adjusted Score					CHANGE IF GRASSLA
BioCondition Class					1

Site number: A2208 - Bio 1 Date: 22/08/13		RE/Landtype (3), Bioregion (11)		BioCondition Plot Galgai's in area are frequent + wet species present. Paddock proposed for offset.	
Attribute	Threshold	Weighting (%)	Value	Sub-score	Score
Large trees			15	0	
Eucalypts	n/a		no. Euc.	0	
Non-eucalypts	n/a		no. non-Euc.	0	
	n/a		% of benchmark	n/a	15
	n/a				15
Tree canopy height (m)			5		
Canopy	n/a		canopy (m)	n/a	
	n/a		% of benchmark	n/a	5
Sub-canopy	n/a		sub-canopy (m)	n/a	
	n/a		% of benchmark	n/a	
Recruitment of canopy species (%)			5		
	n/a		% recruitment	n/a	
	n/a		% of benchmark	n/a	5
Tree canopy cover (%)			5		
Canopy	n/a		% canopy cover	n/a	
	n/a		% of benchmark	n/a	5
Sub-canopy	n/a		% subcanopy cover	n/a	
	n/a		% of benchmark	n/a	
Shrub cover (%)	1 %		5		
	n/a		% shrub cover	0.0	
	n/a		% of benchmark	0.0	3
Coarse woody debris (m/ha)			5		
	n/a		m cwd	n/a	
	n/a		% of benchmark	n/a	5
Native plant spp. richness			20		
Trees	0 spp.		no. tree spp.	0	
	3 spp.		% of benchmark	100.0	5
Shrubs	3 spp.		no. shrub spp.	0	
	8 spp.		% of benchmark	0.0	2.5
Grass	8 spp.		no. grass spp.	3	
	12 spp.		% of benchmark	37.5	2.5
Other/forbs	12 spp.		no. other/forb spp.	7	
			% of benchmark	58.3	2.5
Non-native plant cover (%)	0		10		
	51 %		% non-native plant cover	3	5
Native perennial grass cover (%)			5		
	42 %		% native grass cover	21	
			% of benchmark	41.2	3
Organic litter cover (%)			5		
			% organic litter cover	0	
			% of benchmark	0.0	0
Landscape context (fragmented)			10		
Patch size			5		
Context			5		
Connectivity			5		
Total Score			100		58.5
Adjusted Score					CHANGE IF GRASSLA
BioCondition Class					1

Site number: A2208 - Bio 2 Date: 22/08/13		RE/Landtype (3), Bioregion (11)		BioCondition Plot Paddock on alluvial	
Attribute	Threshold	Weighting (%)	Value	Sub-score	Score
Large trees		15	0		
Eucalypts	n/a		no. Euc.	0	
Non-eucalypts	n/a		no. non-Euc.	0	
Non-eucalypts	n/a		% of benchmark	n/a	15
Non-eucalypts	n/a				15
Tree canopy height (m)		5			
Canopy	n/a		canopy (m)	n/a	
Canopy	n/a		% of benchmark	n/a	5
Sub-canopy	n/a		sub-canopy (m)	n/a	
Sub-canopy	n/a		% of benchmark	n/a	
Recruitment of canopy species (%)		5			
Canopy	n/a		% recruitment	n/a	
Canopy	n/a		% of benchmark	n/a	5
Tree canopy cover (%)		5			
Canopy	n/a		% canopy cover	n/a	
Canopy	n/a		% of benchmark	n/a	5
Sub-canopy	n/a		% subcanopy cover	n/a	
Sub-canopy	n/a		% of benchmark	n/a	
Shrub cover (%)	1 %	5			
Canopy	n/a		% shrub cover	0.0	
Canopy	n/a		% of benchmark	0.0	3
Coarse woody debris (m/ha)		5			
Canopy	n/a		m cwd	n/a	
Canopy	n/a		% of benchmark	n/a	5
Native plant spp. richness		20			
Trees	0 spp.		no. tree spp.	0	
Trees	0 spp.		% of benchmark	100.0	5
Shrubs	3 spp.		no. shrub spp.	1	
Shrubs	3 spp.		% of benchmark	33.3	2.5
Grass	8 spp.		no. grass spp.	4	
Grass	8 spp.		% of benchmark	50.0	2.5
Other/forbs	12 spp.		no. other/forb spp.	5	
Other/forbs	12 spp.		% of benchmark	41.7	2.5
Non-native plant cover (%)	0	10			
Canopy	51 %		% non-native plant cover	3	
Canopy	51 %		% native grass cover	36	5
Canopy	51 %		% of benchmark	70.6	3
Organic litter cover (%)	42 %	5			
Canopy	42 %		% organic litter cover	0	
Canopy	42 %		% of benchmark	0.0	0
Landscape context (fragmented)		10			
Patch size		5			
Context		5			
Connectivity		5			
Total Score		100			58.5
Adjusted Score					CHANGE IF GRASSLA
BioCondition Class					1

Site number: A2208 - Bio 3 Date: 22/08/13		RE/Landtype (8/9), Bioregion (11)		BioCondition Plot	
Attribute	Threshold	Weighting (%)	Value	Sub-score	Score
Large trees		15	no. Euc. no. non-Euc.	0 0	
Eucalypts	n/a				
Non-eucalypts	n/a		% of benchmark	n/a	15
Tree canopy height (m)		5	canopy (m)	n/a	
Canopy	n/a		% of benchmark	n/a	5
Sub-canopy	n/a		sub-canopy (m)	n/a	
Recruitment of canopy species (%)	n/a		% of benchmark	n/a	5
Tree canopy cover (%)		5	% canopy cover	n/a	
Canopy	n/a		% of benchmark	n/a	5
Sub-canopy	n/a		% subcanopy cover	n/a	
Shrub cover (%)	1 %		% shrub cover	0.0	3
Coarse woody debris (m/ha)		5	m cwd	n/a	
% of benchmark	n/a			n/a	5
Native plant spp. richness		20	no. tree spp.	0	
Trees	0 spp.		% of benchmark	100.0	5
Shrubs	3 spp.		no. shrub spp.	2	
Grass	8 spp.		% of benchmark	66.7	2.5
Other/forbs	12 spp.		no. grass spp.	5	
			% of benchmark	62.5	2.5
			no. other/forb spp.	12	
			% of benchmark	100.0	2.5
Non-native plant cover (%)	0	10	% non-native plant cover	10	5
Native perennial grass cover (%)	51 %	5	% native grass cover	24	
Organic litter cover (%)	42 %	5	% of benchmark	47.1	3
			% organic litter cover	0	
			% of benchmark	0.0	0
Landscape context (fragmented)		10			
Patch size		5			
Context		5			
Connectivity		5			
Total Score		100			58.5
Adjusted Score					CHANGE IF GRASSLA
BioCondition Class					1

Site number: A2308 - Bio 3 Date: 23/08/13		RE/Landtype (3), Bioregion (11)		BioCondition Plot Paddock for potential grassland offset	
Attribute	Threshold	Weighting (%)	Value	Sub-score	Score
Large trees			15	0	
Eucalypts	n/a		no. Euc.	0	
Non-eucalypts	n/a		no. non-Euc.	0	
	n/a		% of benchmark	n/a	15
	n/a				15
Tree canopy height (m)			5		
Canopy	n/a		canopy (m)	n/a	
	n/a		% of benchmark	n/a	5
Sub-canopy	n/a		sub-canopy (m)	n/a	
	n/a		% of benchmark	n/a	
	n/a		% recruitment	n/a	
	n/a		% of benchmark	n/a	5
Recruitment of canopy species (%)					
Tree canopy cover (%)			5		
Canopy	n/a		% canopy cover	n/a	
	n/a		% of benchmark	n/a	5
Sub-canopy	n/a		% subcanopy cover	n/a	
	n/a		% of benchmark	n/a	
Shrub cover (%)	1 %		5		
			% shrub cover	0.0	
			% of benchmark	0.0	3
Coarse woody debris (m/ha)			5		
	n/a		m cwd	n/a	
	n/a		% of benchmark	n/a	5
Native plant spp. richness			20		
Trees	0 spp.		no. tree spp.	0	
			% of benchmark	100.0	5
Shrubs	3 spp.		no. shrub spp.	0	
			% of benchmark	0.0	2.5
Grass	8 spp.		no. grass spp.	3	
			% of benchmark	37.5	2.5
Other/forbs	12 spp.		no. other/forb spp.	17	
			% of benchmark	141.7	2.5
Non-native plant cover (%)	0		10		
			% non-native plant cover	8	5
Native perennial grass cover (%)	51 %		5		
			% native grass cover	0	
			% of benchmark	0.0	3
Organic litter cover (%)	42 %		5		
			% organic litter cover	8	
			% of benchmark	19.0	0
Landscape context (fragmented)					
Patch size		10			
Context		5			
Connectivity		5			
Total Score			100		58.5
Adjusted Score					CHANGE IF GRASSLA
BioCondition Class					1

Site number: A2208 - Bio 4 Date: 22/08/13		RE/Landtype (8/9), Bioregion (11)		BioCondition Plot Weedy paddock	
Attribute	Threshold	Weighting (%)	Value	Sub-score	Score
Large trees			15	0	
Eucalypts	n/a		no. Euc.	0	
Non-eucalypts	n/a		no. non-Euc.	0	
	n/a		% of benchmark	n/a	15
	n/a				15
Tree canopy height (m)			5		
Canopy	n/a		canopy (m)	n/a	
Sub-canopy	n/a		% of benchmark	n/a	5
	n/a		sub-canopy (m)	n/a	
	n/a		% of benchmark	n/a	
Recruitment of canopy species (%)			5		
	n/a		% recruitment	n/a	5
	n/a		% of benchmark	n/a	
Tree canopy cover (%)			5		
Canopy	n/a		% canopy cover	n/a	
Sub-canopy	n/a		% of benchmark	n/a	5
	n/a		% of benchmark	n/a	
	n/a		% subcanopy cover	n/a	
	n/a		% of benchmark	n/a	
Shrub cover (%)	1 %		5		
			% shrub cover	0.0	
			% of benchmark	0.0	3
Coarse woody debris (m/ha)			5		
	n/a		m cwd	n/a	
			% of benchmark	n/a	5
Native plant spp. richness			20		
Trees	0 spp.		no. tree spp.	0	
Shrubs	3 spp.		% of benchmark	100.0	5
Grass	8 spp.		no. shrub spp.	2	
Other/forbs	12 spp.		% of benchmark	66.7	2.5
			no. grass spp.	4	
			% of benchmark	50.0	2.5
			no. other/forb spp.	18	
			% of benchmark	150.0	2.5
Non-native plant cover (%)	0		10		
Native perennial grass cover (%)	51 %		% non-native plant cover	15	5
			% native grass cover	52	
			% of benchmark	102.0	3
Organic litter cover (%)	42 %		5		
			% organic litter cover	0	
			% of benchmark	0.0	0
Landscape context (fragmented)			10		
Patch size			5		
Context			5		
Connectivity			5		
Total Score			100		58.5
Adjusted Score					CHANGE IF GRASSLAI
BioCondition Class					1

Site number: A2308 - Bio 2 Date: 23/08/13		RE/Landtype (3), Bioregion (11)		BioCondition Plot Paddock dominated by <i>Eragrostis</i> sp. With Gilgais - offset proposed	
Attribute	Threshold	Weighting (%)	Value	Sub-score	Score
Large trees		15	0		
Eucalypts	n/a		no. Euc.	0	
Non-eucalypts	n/a		no. non-Euc.	0	
	n/a		% of benchmark	n/a	15
	n/a				15
Tree canopy height (m)		5			
Canopy	n/a		canopy (m)	n/a	
Sub-canopy	n/a		% of benchmark	n/a	5
	n/a		sub-canopy (m)	n/a	
	n/a		% of benchmark	n/a	
Recruitment of canopy species (%)		5	% recruitment	n/a	5
	n/a		% of benchmark	n/a	
Tree canopy cover (%)		5	% canopy cover	n/a	
Canopy	n/a		% of benchmark	n/a	5
Sub-canopy	n/a		% subcanopy cover	n/a	
	n/a		% of benchmark	n/a	
Shrub cover (%)	1 %	5	% shrub cover	0.0	
	n/a		% of benchmark	0.0	3
Coarse woody debris (m/ha)		5	m cwd	n/a	
	n/a		% of benchmark	n/a	5
Native plant spp. richness		20			
Trees	0 spp.		no. tree spp.	0	
Shrubs	3 spp.		% of benchmark	100.0	5
Grass	8 spp.		no. shrub spp.	0	
Other/forbs	12 spp.		% of benchmark	0.0	2.5
			no. grass spp.	2	
			% of benchmark	25.0	2.5
			no. other/forb spp.	12	
			% of benchmark	100.0	2.5
Non-native plant cover (%)	0	10	% non-native plant cover	4	5
Native perennial grass cover (%)	51 %	5	% native grass cover	0	
	42 %		% of benchmark	0.0	3
Organic litter cover (%)		5	% organic litter cover	9	
			% of benchmark	21.4	0
Landscape context (fragmented)		10			
Patch size		5			
Context		5			
Connectivity		5			
Total Score		100			58.5
Adjusted Score					CHANGE IF GRASSLAI
BioCondition Class					1

Site number: A2308 - Bio 1 Date: 23/08/13		RE/Landtype (3), Bioregion (11)		BioCondition Plot Bluegrass dominated (80%) paddock	
Attribute	Threshold	Weighting (%)	Value	Sub-score	Score
Large trees			15	0	
Eucalypts	n/a		no. Euc.	0	
Non-eucalypts	n/a		no. non-Euc.	0	
	n/a		% of benchmark	n/a	15
	n/a				
Tree canopy height (m)			5		
Canopy	n/a		canopy (m)	n/a	
	n/a		% of benchmark	n/a	5
Sub-canopy	n/a		sub-canopy (m)	n/a	
	n/a		% of benchmark	n/a	
Recruitment of canopy species (%)			5		
	n/a		% recruitment	n/a	
	n/a		% of benchmark	n/a	5
Tree canopy cover (%)			5		
Canopy	n/a		% canopy cover	n/a	
	n/a		% of benchmark	n/a	5
Sub-canopy	n/a		% subcanopy cover	n/a	
	n/a		% of benchmark	n/a	
Shrub cover (%)	1 %		5		
	n/a		% shrub cover	0.0	
	n/a		% of benchmark	0.0	3
Coarse woody debris (m/ha)			5		
	n/a		m cwd	n/a	
	n/a		% of benchmark	n/a	5
Native plant spp. richness			20		
Trees	0 spp.		no. tree spp.	0	
	3 spp.		% of benchmark	100.0	5
Shrubs	3 spp.		no. shrub spp.	0	
	8 spp.		% of benchmark	0.0	2.5
Grass	8 spp.		no. grass spp.	2	
	12 spp.		% of benchmark	25.0	2.5
Other/forbs	12 spp.		no. other/forb spp.	15	
			% of benchmark	125.0	2.5
Non-native plant cover (%)	0		10		
	51 %		% non-native plant cover	11	
	42 %		% native grass cover	0	5
			% of benchmark	0.0	3
Organic litter cover (%)			5		
			% organic litter cover	18	
			% of benchmark	42.9	0
Landscape context (fragmented)			10		
Patch size			5		
Context			5		
Connectivity			5		
Total Score			100		58.5
Adjusted Score					CHANGE IF GRASSLA
BioCondition Class					1

Site number: A2008 - Bio 1 Date: 20/08/13		RE/Landtype (21/3), Bioregion (11)		BioCondition Plot	
Attribute	Threshold	Weighting (%)	Value	Sub-score	Score
Large trees		15	no. Euc. no. non-Euc.	0 0	
Eucalypts	n/a				
Non-eucalypts	n/a				15
Tree canopy height (m)		5	% of benchmark	n/a	
Canopy	n/a		canopy (m)	n/a	
Sub-canopy	n/a		% of benchmark	n/a	5
Sub-canopy	n/a		sub-canopy (m)	n/a	
Sub-canopy	n/a		% of benchmark	n/a	
Recruitment of canopy species (%)		5	% recruitment	n/a	
Canopy	n/a		% of benchmark	n/a	5
Canopy	n/a		% canopy cover	n/a	
Canopy	n/a		% of benchmark	n/a	5
Sub-canopy	n/a		% subcanopy cover	n/a	
Sub-canopy	n/a		% of benchmark	n/a	
Shrub cover (%)	1 %	5	% shrub cover	0.0	
Canopy	n/a		% of benchmark	0.0	3
Sub-canopy	n/a		m cwd	n/a	
Sub-canopy	n/a		% of benchmark	n/a	5
Coarse woody debris (m/ha)					
Native plant spp. richness		20			
Trees	0 spp.		no. tree spp.	0	
Trees			% of benchmark	100.0	5
Shrubs	3 spp.		no. shrub spp.	1	
Shrubs			% of benchmark	33.3	2.5
Grass	8 spp.		no. grass spp.	5	
Grass			% of benchmark	62.5	2.5
Other/forbs	12 spp.		no. other/forb spp.	13	
Other/forbs			% of benchmark	108.3	2.5
Non-native plant cover (%)	0	10	% non-native plant cover	9	5
Native perennial grass cover (%)	51 %	5	% native grass cover	51	
Canopy			% of benchmark	100.0	3
Organic litter cover (%)	42 %	5	% organic litter cover	0	
Canopy			% of benchmark	0.0	0
Landscape context (fragmented)		10			
Patch size		5			
Context		5			
Connectivity		5			
Total Score		100			58.5
Adjusted Score					CHANGE IF GRASSLA
BioCondition Class					1

Site number: B200813BC1 Date: 20/08/13	Benchmark (11.8.5) RE/Landtype (8), Bioregion (11) Threshold	Weighting (%)	BioCondition Plot Open <i>Eucalyptus orgadophila</i> woodland w. shrubby <i>Opuntia tomentosa</i> understorey
Attribute		Value	Sub-score
Large trees		15	15
Eucalypts		no. non-Euc.	0
Non-eucalypts		% of benchmark	n/a
Tree canopy height (m)		5	16
Canopy		canopy (m)	5
Sub-canopy		% of benchmark	6
Recruitment of canopy species (%)		5	100
Canopy		% recruitment	5
Sub-canopy		% of benchmark	5
Tree canopy cover (%)		5	18.0
Canopy		% canopy cover	5
Sub-canopy		% of benchmark	5
Sub-canopy		% subcanopy cover	0
Sub-canopy		% of benchmark	5
Shrub cover (%)	%	5	17.0
Canopy		% shrub cover	#DN/0!
Sub-canopy		% of benchmark	3
Coarse woody debris (m/ha)		5	15
Canopy		m cwd	5
Sub-canopy		% of benchmark	5
Native plant spp. richness		20	
Trees	0 spp.	no. tree spp.	1
Shrubs	3 spp.	% of benchmark	100.0
Grass	8 spp.	no. shrub spp.	1
Other/forbs	12 spp.	% of benchmark	33.3
Other/forbs		no. grass spp.	4
Other/forbs		% of benchmark	50.0
Other/forbs		no. other/forb spp.	4
Other/forbs		% of benchmark	33.3
Non-native plant cover (%)	0	10	10
Canopy		% non-native plant cover	5
Sub-canopy		% native grass cover	69
Sub-canopy	51 %	% of benchmark	135.3
Native perennial grass cover (%)		5	3
Canopy		% of benchmark	3
Sub-canopy		% organic litter cover	28.8
Sub-canopy	42 %	% of benchmark	68.6
Organic litter cover (%)		5	0
Canopy		% of benchmark	0
Landscape context (fragmented)			
Patch size		10	
Context		5	
Connectivity		5	
Total Score		100	
Adjusted Score (Wooded Ecosystem)			58.5
BioCondition Class			58.5
			3

Site number: B210813BC1 Date: 21/08/13		Benchmark (11.9.5) RE/Landtype (9), Bioregion (11)		BioCondition Plot Dense medium-high woodland of <i>Casuarina cristata</i> with occasional stumps of former eucalypts, and sparse ground layer.	
Attribute	Threshold	Weighting (%)	Value	Sub-score	Score
Large trees			15		
Eucalypts	n/a cm (DBH) n/a /hectare			0	
Non-eucalypts	30 cm (DBH) 98 /hectare			0.0	0
Tree canopy height (m)					
Canopy	25	5	canopy (m) 12	3	3
Sub-canopy	8		% of benchmark 48.0	6	
			% of benchmark 75.0		
Recruitment of canopy species (%)	100	5	% recruitment 100	5	5
			% of benchmark 100		
Tree canopy cover (%)					
Canopy	59	5	% canopy cover 68.0		
Sub-canopy	48		% of benchmark 115.3	2.5	2.5
			% subcanopy cover 0		
			% of benchmark 0		
Shrub cover (%)	11 %	5	% shrub cover 0.0		
			% of benchmark 0.0		0
Coarse woody debris (m/ha)	16 m	5	m cwd 2		
			% of benchmark 12.5	2	2
Native plant spp. richness					
Trees	2 spp.	20	no. tree spp. 2		
Shrubs	10 spp.		% of benchmark 100.0	5	
Grass	4 spp.		no. shrub spp. 6		
Other/forbs	9 spp.		% of benchmark 60.0	2.5	
			no. grass spp. 4		
			% of benchmark 100.0	5	
			no. other/forb spp. 2		
			% of benchmark 22.2	0	12.5
Non-native plant cover (%)	0	10	% non-native plant cover 1	10	10
Native perennial grass cover (%)	4 %	5	% native grass cover 46		
			% of benchmark 1150.0	5	5
Organic litter cover (%)	66 %	5	% organic litter cover 50.8		
			% of benchmark 77.0	5	5
Landscape context (fragmented)					
Patch size		10			
Context		5			
Connectivity		5			
Total Score		100			45
Adjusted Score					45
BioCondition Class					3

Site number: A220813BC1 Date: 22/08/13		Benchmark (11.8.11) RE/Landtype (9), Bioregion (11)		BioCondition Plot Almost flat native grassland within patchy very open woodland of <i>Eucalyptus oragadophila</i> .	
Attribute	Threshold	Weighting (%)	Value	Sub-score	Score
Large trees					
Eucalypts	n/a cm (DBH) n/a /hectare		no. Euc. no. non-Euc.	1 0	
Non-eucalypts	n/a cm (DBH) n/a /hectare		% of benchmark	n/a	
Tree canopy height (m)	n/a		canopy (m)	0	
Canopy	n/a		% of benchmark	n/a	
Sub-canopy	n/a		sub-canopy (m)	0	
			% of benchmark	n/a	
Recruitment of canopy species (%)	n/a		% recruitment	0	
			% of benchmark	n/a	
Tree canopy cover (%)	n/a		% canopy cover	4.6	
Canopy	n/a		% of benchmark	n/a	
Sub-canopy	n/a		% subcanopy cover	3.9	
			% of benchmark	n/a	
Shrub cover (%)	n/a %		% shrub cover	0.0	
			% of benchmark	n/a	
Coarse woody debris (m/ha)	n/a m		m cwd	4.5	
			% of benchmark	n/a	
Native plant spp. richness		10			
Trees	n/a spp.		no. tree spp.	0	
			% of benchmark	n/a	
Shrubs	n/a spp.		no. shrub spp.	0	
			% of benchmark	n/a	
Grass	11 spp.		no. grass spp.	2	
			% of benchmark	18.2	0
Other/forbs	17 spp.		no. other/forb spp.	4	
			% of benchmark	23.5	0
Non-native plant cover (%)	0	10	% non-native plant cover	10	5
Native perennial grass cover (%)	43 %	5	% native grass cover	58	
			% of benchmark	134.9	5
Organic litter cover (%)	13 %	5	% organic litter cover	35	
			% of benchmark	269.2	3
Landscape context (fragmented)					
Patch size	10				
Context	5				
Connectivity	5				
Total Score		50			13
Adjusted Score					26
BioCondition Class					4

Site number: A220813BC2 Date: 22/08/13		Benchmark (11.8.5) RE/Landtype (8), Bioregion (11)		BioCondition Plot Very open woodland of <i>Eucalyptus orgadophila</i> with clumped understorey of <i>Ehretia membranifolia</i> .	
Attribute	Threshold	Weighting (%)	Value	Sub-score	Score
Large trees			10		
Eucalypts	n/a	15	no. Euc.	2	
Non-eucalypts	n/a		no. non-Euc.		
	n/a		% of benchmark	n/a	15
	n/a				
Tree canopy height (m)	n/a	5	canopy (m)	16	
Canopy	n/a		% of benchmark	n/a	5
Sub-canopy	n/a		sub-canopy (m)	10	
	n/a		% of benchmark	n/a	
Recruitment of canopy species (%)	n/a	5	% recruitment	50	
	n/a		% of benchmark	n/a	5
Tree canopy cover (%)	n/a	5	% canopy cover	14.0	
Canopy	n/a		% of benchmark	n/a	5
Sub-canopy	n/a		% subcanopy cover	5	
	n/a		% of benchmark	n/a	
Shrub cover (%)	1 %	5	% shrub cover	1.0	
	n/a		% of benchmark	100.0	3
Coarse woody debris (m/ha)	n/a	5	m cwd	44.5	
	n/a		% of benchmark	n/a	5
Native plant spp. richness		20			
Trees	0 spp.		no. tree spp.	2	
	3 spp.		% of benchmark	100.0	5
Shrubs	8 spp.		no. shrub spp.	4	
	12 spp.		% of benchmark	133.3	2.5
Grass			no. grass spp.	4	
			% of benchmark	50.0	2.5
Other/forbs			no. other/forb spp.	11	
			% of benchmark	91.7	2.5
Non-native plant cover (%)	0	10	% non-native plant cover	5	
Native perennial grass cover (%)	51 %	5	% native grass cover	26	
	42 %		% of benchmark	51.0	3
Organic litter cover (%)		5	% organic litter cover	59	
			% of benchmark	140.5	0
Landscape context (fragmented)					
Patch size	10				
Context	5				
Connectivity	5				
Total Score		100			58.5
Adjusted Score					CHANGE IF GRASSLA
BioCondition Class					1

Site number: A220813BC3 Date: 22/08/13		Benchmark (11.8.5) RE/Landtype (8), Bioregion (11)		BioCondition Plot Very open woodland to savannah of <i>Eucalyptus argadophila</i> with grassy understorey of frequent tree pear.	
Attribute	Threshold	Weighting (%)	Value	Sub-score	Score
Large trees		15	2		
Eucalypts	n/a		no. Euc.	0	
Non-eucalypts	n/a n/a n/a		% of benchmark	n/a	15
Tree canopy height (m)		5			
Canopy	n/a		canopy (m)	17	
Sub-canopy	n/a		% of benchmark	n/a	5
Recruitment of canopy species (%)		5			
Canopy	n/a		% recruitment	0	
Sub-canopy	n/a		% of benchmark	n/a	5
Tree canopy cover (%)		5			
Canopy	n/a		% canopy cover	21.0	
Sub-canopy	n/a		% of benchmark	n/a	5
Sub-canopy	n/a		% subcanopy cover	n/a	
Sub-canopy	n/a		% of benchmark	n/a	
Shrub cover (%)	1 %	5			
Canopy	n/a		% shrub cover	6.6	
Sub-canopy	n/a		% of benchmark	660.0	3
Coarse woody debris (m/ha)		5			
Canopy	n/a		m cwd	23	
Sub-canopy	n/a		% of benchmark	n/a	5
Native plant spp. richness		20			
Trees	1 spp.		no. tree spp.	1	
Shrubs	3 spp.		% of benchmark	100.0	5
Grass	8 spp.		no. shrub spp.	3	
Other/forbs	12 spp.		% of benchmark	100.0	2.5
Other/forbs			no. grass spp.	4	
Other/forbs			% of benchmark	50.0	2.5
Other/forbs			no. other/forb spp.	10	
Other/forbs			% of benchmark	83.3	2.5
Non-native plant cover (%)	0	10			
Canopy	51 %		% non-native plant cover	5	
Sub-canopy	42 %		% native grass cover	64	
Sub-canopy			% of benchmark	125.5	3
Organic litter cover (%)		5			
Canopy			% organic litter cover	27.6	
Sub-canopy			% of benchmark	65.7	0
Landscape context (fragmented)		10			
Patch size		5			
Context		5			
Connectivity		5			
Total Score		100			58.5
Adjusted Score					CHANGE IF GRASSLA
BioCondition Class					1

Site number: 2308BC1 Date: 23/08/13		Benchmark (???) RE/Landtype (3), Bioregion (11)		BioCondition Plot		
Attribute	Threshold	Weighting (%)	Value	Sub-score	Score	
Large trees			15	0		
Eucalypts	n/a		no. Euc.	0		
Non-eucalypts	n/a		no. non-Euc.	0		
	n/a		% of benchmark	n/a	15	15
	n/a					
Tree canopy height (m)	n/a	5	canopy (m)	n/a		
Canopy	n/a		% of benchmark	n/a	5	5
Sub-canopy	n/a		sub-canopy (m)	n/a		
	n/a		% of benchmark	n/a		
Recruitment of canopy species (%)	n/a	5	% recruitment	n/a		
	n/a		% of benchmark	n/a	5	5
Tree canopy cover (%)	n/a	5	% canopy cover	n/a		
Canopy	n/a		% of benchmark	n/a	5	5
Sub-canopy	n/a		% subcanopy cover	n/a		
	n/a		% of benchmark	n/a		
Shrub cover (%)	1 %	5	% shrub cover	3.8		
	n/a		% of benchmark	380.0	3	3
Coarse woody debris (m/ha)	n/a	5	m cwd	n/a		
	n/a		% of benchmark	n/a	5	5
Native plant spp. richness		20				
Trees	1 spp.		no. tree spp.	0		
			% of benchmark	0.0	5	5
Shrubs	3 spp.		no. shrub spp.	2		
			% of benchmark	66.7	2.5	2.5
Grass	8 spp.		no. grass spp.	5		
			% of benchmark	62.5	2.5	2.5
Other/forbs	12 spp.		no. other/forb spp.	7		
			% of benchmark	58.3	2.5	2.5
Non-native plant cover (%)	0	10	% non-native plant cover	7		
			% native grass cover	33	5	5
Native perennial grass cover (%)	51 %	5	% of benchmark	64.7	3	3
Organic litter cover (%)	42 %	5	% organic litter cover	47		
			% of benchmark	111.9	0	0
Landscape context (fragmented)						
Patch size		10				
Context		5				
Connectivity		5				
Total Score		100				58.5
Adjusted Score						CHANGE IF GRASSLAI
BioCondition Class						1

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NEW HOPE
GROUP

G.5.4 Vegetation Survey Data Sheets



SITE VEGETATION RECORDING FORM

Site Number	Structural Summary									
Project	Transect		Start		End		Ecologically Dominant Layer		G	
Date	Zone	Easting	Northing	Easting	Northing	Emergent	Med. Canopy Height	Range in strata height	Total Cover %	per Strata
Site ID (from June)	565	367407	6980528			Tree 1	10	10		
Locality	New Acland western side									
Site Description:	Top paddock located in the north-western section									
Vegetation Description	Almost flat native grassland within patchy very open woodland of Mountain Coolabah									
Survey Type (Secondary or Tertiary)	Mapped: Yes/ No		VM Status		Of Concern					
Recorders:	DERM RE		BD Status		Of Concern					
VMI Class (Remnant, Non remnant, HVR)	SKM RE		EPBC Status		Endangered					
EPBC (TEC Type)	Remnant									
	Bluegrass dominated grassland									
Community area: A: site only B: C:1-5 D: 5-20 E: 20-50 F: >50ha	Landform pattern		Landform element		Slope (°)		Aspect		Altitude	
D	F	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Geology Map Code	Land zone		Broad Vegetation Group BVG		Soil colour		Soil texture		Specht Code	
	8		30b	Brown	Black Soil (clay)					
STEM COUNT										
COVER (%)										
BASAL AREA										
BA Factor										
Ground layer dominance based from observation and 5.1x1m plots										
SPECIES	Cr en %	Misc	ID	E	T1	T2	T3	S1	S2	S2
<i>Eucalyptus argenteophylla</i>										
<i>Aristida latifolia</i>										
<i>Sporobolus</i> sp.									50	
<i>Geranium salanderi</i>									<1	
Asteraceae sp.									<1	
Apiaceae sp.									<1	
<i>Fabaceae</i> sp.									<1	
<i>Grisium vulgare</i> *									<1	
<i>Brassica</i> sp.*									<1	
<i>Opuntia</i> sp.*									<1	
<i>Gomphocarpus physocarpus</i> *									<1	
<i>Verbena aristigera</i> *									<1	
<i>Sonchus oleracea</i> *									<1	
<i>Oxalis corniculata</i> *									<1	
<i>Pantago lanceolatum</i> *									<1	
<i>Malvastrum americanum</i> *									<1	
Dead									0	
Litter									30	
Rock									0	
Bare Ground									5	
Cryptophytes									0	



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NEW HOPE
GROUP

G.5.5 Ecological Database Search Results





Queensland Government

Wildlife Online Extract

Search Criteria: Species List for a Specified Point

Species: All

Type: All

Status: All

Records: All

Date: All

Latitude: 27.331

Longitude: 151.6859

Distance: 5

Email: ssolley@globalskm.com

Date submitted: Friday 06 Sep 2013 11:39:28

Date extracted: Friday 06 Sep 2013 11:40:15

The number of records retrieved = 113

Disclaimer

As the DSITIA is still in a process of collating and vetting data, it is possible the information given is not complete. The information provided should only be used for the project for which it was requested and it should be appropriately acknowledged as being derived from Wildlife Online when it is used.

The State of Queensland does not invite reliance upon, nor accept responsibility for this information. Persons should satisfy themselves through independent means as to the accuracy and completeness of this information.

No statements, representations or warranties are made about the accuracy or completeness of this information. The State of Queensland disclaims all responsibility for this information and all liability (including without limitation, liability in negligence) for all expenses, losses, damages and costs you may incur as a result of the information being inaccurate or incomplete in any way for any reason.

Kingdom Class	Family	Scientific Name	Common Name	I	Q	A	Records
animals	amphibians		ruddy treefrog		C		1
animals	birds	<i>Litoria rubella</i>	yellow-rumped thornbill		C		5
animals	Acanthizidae	<i>Acanthiza chrysorrhoa</i>	yellow thornbill		C		2
animals	Acanthizidae	<i>Acanthiza nana</i>	black-shouldered kite		C		2
animals	Accipitridae	<i>Elanus axillaris</i>	wedge-tailed eagle		C		1
animals	Accipitridae	<i>Aquila audax</i>	pink-eared duck		C		1
animals	Anatidae	<i>Malacorhynchus membranaceus</i>	plumed whistling-duck		C		1
animals	Anatidae	<i>Dendrocygna eytoni</i>	Australian wood duck		C		1
animals	Anatidae	<i>Chenonetta jubata</i>	grey teal		C		3
animals	Anatidae	<i>Anas gracilis</i>	Pacific black duck		C		5
animals	Anatidae	<i>Anas superciliosa</i>	Australasian darter		C		3
animals	Anhingidae	<i>Anhinga novaehollandiae</i>	eastern great egret		C		2
animals	Ardeidae	<i>Ardea modesta</i>	white-necked heron		C		1
animals	Ardeidae	<i>Ardea pacifica</i>	white-faced heron		C		1
animals	Ardeidae	<i>Egretta novaehollandiae</i>	grey butcherbird		C		2
animals	Artamidae	<i>Cracticus torquatus</i>	Australian magpie		C		6
animals	Artamidae	<i>Cracticus tibicen</i>	pled butcherbird		C		4
animals	Artamidae	<i>Cracticus nigrogularis</i>	galah		C		5
animals	Cacatuidae	<i>Eolophus roseicapillus</i>	sulphur-crested cockatoo		C		1
animals	Cacatuidae	<i>Cacatua galerita</i>	cockatiel		C		7
animals	Cacatuidae	<i>Nymphicus hollandicus</i>	black-faced cuckoo-shrike		C		2
animals	Campephagidae	<i>Coracina novaehollandiae</i>	masked lapwing (southern subspecies)		C		1
animals	Charadriidae	<i>Vanellus miles novaehollandiae</i>	masked lapwing		C		1
animals	Charadriidae	<i>Vanellus miles</i>	golden-headed cisticola		C		1
animals	Cisticolidae	<i>Cisticola exilis</i>	bar-shouldered dove		C		2
animals	Columbidae	<i>Geopelia humeralis</i>	crested pigeon		C		1
animals	Columbidae	<i>Ocyphaps lophotes</i>	apostlebird		C		7
animals	Corcoracidae	<i>Struthidea cinerea</i>	Torresian crow		C		1
animals	Corvidae	<i>Corvus orru</i>	zebra finch		C		8
animals	Estrilidae	<i>Taeniopygia guttata</i>	red-browed finch		C		2
animals	Estrilidae	<i>Neochmia temporalis</i>	double-barred finch		C		1
animals	Estrilidae	<i>Taeniopygia bichenovii</i>	nankeen kestrel		C		4
animals	Falconidae	<i>Falco cenchroides</i>	peregrine falcon		C		1
animals	Falconidae	<i>Falco peregrinus</i>	Australian hobby		C		1
animals	Falconidae	<i>Falco longipennis</i>	laughing kookaburra		C		1
animals	Halcyonidae	<i>Dacelo novaeguineae</i>	superb fairy-wren		C		1
animals	Maluridae	<i>Malurus cyaneus</i>	variegated fairy-wren		C		7
animals	Maluridae	<i>Malurus lamberti</i>	noisy miner		C		2
animals	Meliphagidae	<i>Manorina melanocephala</i>	striped honeyeater		C		3
animals	Meliphagidae	<i>Plectorhyncha lanceolata</i>	spiny-cheeked honeyeater		C		4
animals	Meliphagidae	<i>Acanthagenys rufogularis</i>	magpie-lark		C		3
animals	Monarchidae	<i>Grallina cyanoleuca</i>	magpie-lark		C		4
animals	Nectariniidae	<i>Dicaeum hirundinaceum</i>	mistletoebird		C		3
animals	Pachycephalidae	<i>Pachycephala rufiventris</i>	rufous whistler		C		2
animals	Pardalotidae	<i>Pardalotus striatus</i>	striated pardalote		C		2
animals	Phalacrocoracidae	<i>Microcarbo melanoleucos</i>	little pied cormorant		C		3
animals	Phalacrocoracidae	<i>Phalacrocorax sulcirostris</i>	little black cormorant		C		2

Kingdom Class	Family	Scientific Name	Common Name	I	Q	A	Records
animals	Podicipedidae	<i>Tachybaptus novaehollandiae</i>	Australasian grebe		C		1
animals	Pomatostomidae	<i>Pomatostomus temporalis</i>	grey-crowned babbler		C		1
animals	Psittacidae	<i>Aprosmictus erythropterus</i>	red-winged parrot		C		2
animals	Psittacidae	<i>Trichoglossus chlorolepidotus</i>	scaly-breasted lorikeet		C		1
animals	Psittacidae	<i>Platycercus adscitus</i>	pale-headed rosella		C		3
animals	Psittacidae	<i>Psephotus haematonotus</i>	red-rumped parrot		C		3
animals	Rallidae	<i>Fulica atra</i>	Eurasian coot		C		1
animals	Rallidae	<i>Gallinula tenebrosa</i>	dusky moorhen		C		1
animals	Rhipiduridae	<i>Rhipidura leucophrys</i>	willie wagtail		C		6
animals	Strigidae	<i>Ninox strenua</i>	powerful owl		V		1
animals	Sturnidae	<i>Sturnus vulgaris</i>	common starling	Y			2
animals	Sturnidae	<i>Sturnus tristis</i>	common myna	Y			4
animals	Threskiornithidae	<i>Platalea flavipes</i>	yellow-billed spoonbill		C		1
animals	Threskiornithidae	<i>Threskiornis molucca</i>	Australian white ibis		C		1
animals	Threskiornithidae	<i>Threskiornis spinicollis</i>	straw-necked ibis		C		4
animals	Timaliidae	<i>Zosterops lateralis</i>	silveryeye		C		2
animals	Nymphalidae	<i>Melanitis leda bankia</i>	common evening-brown				1
animals	Pieridae	<i>Eurema hecabe phoebus</i>	large grass-yellow		C	V	1
animals	Phascolarctidae	<i>Phascolarctos cinereus</i>	koala		C		13
animals	Tachyglossidae	<i>Tachyglossus aculeatus</i>	short-beaked echidna		C		2
animals	Elapidae	<i>Furina diadema</i>	red-naped snake		C		1/1
animals	Elapidae	<i>Demansia psammophis</i>	yellow-faced whip snake		C		1
animals	Scincidae	<i>Tiliqua rugosa</i>			C		1
animals	Scincidae	<i>Lygisaurus foliorum</i>			C		1
animals	Scincidae	<i>Anomalopus verreauxii</i>			C		1
fungi	Parmeliaceae	<i>Parmotrema austrosinense</i>			C		1/1
fungi	Parmeliaceae	<i>Flavoparmelia rutidota</i>			C		1/1
fungi	Physciaceae	<i>Pyxine subcinerea</i>			C		1/1
fungi	Physciaceae	<i>Dirinaria confluens</i>			C		1/1
fungi	Teloschistaceae	<i>Teloschistes sieberianus</i>			C		1/1
plants	Apocynaceae	<i>Parsonia eucalyptophylla</i>	gargaloo		C		1/1
plants	Asteraceae	<i>Rhaponticum australe</i>			V	V	3/3
plants	Borraginaceae	<i>Buglossoides arvensis</i>	corn cromwell	Y			1/1
plants	Borraginaceae	<i>Ehretia membranifolia</i>	weeping koda		C		1/1
plants	Caesalpinaceae	<i>Senna coronilloides</i>			C		1/1
plants	Chenopodiaceae	<i>Sclerolaena tetracluspis</i>	brigalow burr		C		1/1
plants	Fabaceae	<i>Vicia monantha subsp. monantha</i>		Y			1/1
plants	Malvaceae	<i>Modiola caroliniana</i>	red-flowered mallow	Y			1/1
plants	Mimosaceae	<i>Acacia loroloba</i>	Ma Ma Creek wattle		C		1/1
plants	Myoporaceae	<i>Eremophila deserti</i>			C		1/1
plants	Portulacaceae	<i>Portulaca oleracea</i>		Y			1/1
plants	Rutaceae	<i>Melicope micrococca</i>	pigweed		C		1/1
plants	Rutaceae	<i>Geijera salicifolia</i>	white evodia		C		1/1
plants	Sapindaceae	<i>Alectryon oleifolius subsp. elongatus</i>	brush wilga		C		1/1
plants	Solanaceae	<i>Solanum ellipticum</i>	potato bush		C		1/1
plants	Zygophyllaceae	<i>Zygophyllum apiculatum</i>	gall weed		C		1/1

Kingdom Class	Family	Scientific Name	Common Name	I	Q	A	Records
plants	monocots	Asphodelaceae	<i>Aloe maculata</i>				1/1
plants	monocots	Orchidaceae	<i>Pterostylis</i>	Y	C		1/1
plants	monocots	Orchidaceae	<i>Pterostylis cynocephala</i>		C		1/1
plants	monocots	Poaceae	<i>Chloris truncata</i>		C		1/1
plants	monocots	Poaceae	<i>Chloris divaricata</i> var. <i>cynodontoides</i>		C		1/1
plants	monocots	Poaceae	<i>Austrostipa verticillata</i>		C		1/1
plants	monocots	Poaceae	<i>Eragrostis spartinooides</i>		C		1/1
plants	monocots	Poaceae	<i>Dinebra divaricatissima</i>		C		1/1
plants	monocots	Poaceae	<i>Eragrostis cillianensis</i>	Y			1/1
plants	monocots	Poaceae	<i>Eragrostis alveiformis</i>		C		1/1
plants	monocots	Poaceae	<i>Enteropogon acicularis</i>		C		1/1
plants	monocots	Poaceae	<i>Eragrostis tenuifolia</i>	Y			1/1
plants	monocots	Poaceae	<i>Rytidosperma indutum</i>		C		1/1
plants	monocots	Poaceae	<i>Enneapogon truncatus</i>		C		1/1
plants	monocots	Poaceae	<i>Paspalidium gracile</i>		C		1/1
plants	monocots	Poaceae	<i>Homopholis belsonii</i>		E	V	12/12
plants	monocots	Poaceae	<i>Eragrostis curvula</i>	Y			2/2
plants	monocots	Poaceae	<i>Chloris ventricosa</i>		C		1/1
plants	monocots	Poaceae	<i>Anthosachne scabra</i>		C		1/1
plants	monocots	Poaceae	<i>Diplachne fusca</i> var. <i>uninervis</i>	Y			1/1
plants	monocots	Poaceae	<i>Eragrostis longipedicellata</i>		C		1/1

CODES

I - Y indicates that the taxon is introduced to Queensland and has naturalised.

Q - Indicates the Queensland conservation status of each taxon under the *Nature Conservation Act 1992*. The codes are Extinct in the Wild (PE), Endangered (E), Vulnerable (V), Near Threatened (NT), Least Concern (C) or Not Protected ().

A - Indicates the Australian conservation status of each taxon under the *Environment Protection and Biodiversity Conservation Act 1999*. The values of EPBC are Conservation Dependent (CD), Critically Endangered (CE), Endangered (E), Extinct (EX), Extinct in the Wild (XW) and Vulnerable (V).

Records - The first number indicates the total number of records of the taxon for the record option selected (i.e. All, Confirmed or Specimens).

This number is output as 99999 if it equals or exceeds this value. The second number located after the / indicates the number of specimen records for the taxon. This number is output as 999 if it equals or exceeds this value.



EPBC Act Protected Matters Report

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected.

Information on the coverage of this report and qualifications on data supporting this report are contained in the caveat at the end of the report.

Information is available about [Environment Assessments](#) and the EPBC Act including significance guidelines, forms and application process details.

Report created: 12/09/13 10:56:32

[Summary](#)

[Details](#)

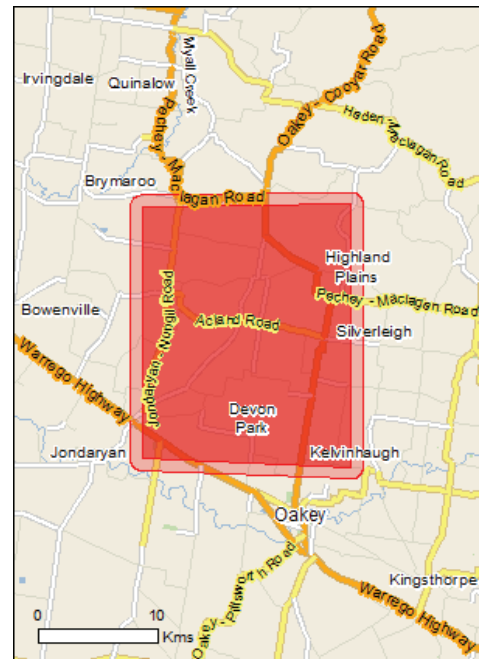
[Matters of NES](#)

[Other Matters Protected by the EPBC Act](#)

[Extra Information](#)

[Caveat](#)

[Acknowledgements](#)



This map may contain data which are
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[Coordinates](#)

Buffer: 1.0Km



Summary

Matters of National Environmental Significance

This part of the report summarises the matters of national environmental significance that may occur in, or may relate to, the area you nominated. Further information is available in the detail part of the report, which can be accessed by scrolling or following the links below. If you are proposing to undertake an activity that may have a significant impact on one or more matters of national environmental significance then you should consider the [Administrative Guidelines on Significance](#).

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance:	1
Great Barrier Reef Marine Park:	None
Commonwealth Marine Areas:	None
Listed Threatened Ecological Communities:	5
Listed Threatened Species:	27
Listed Migratory Species:	12

Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the environment anywhere.

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As [heritage values](#) of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place and the heritage values of a place on the Register of the National Estate.

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the environment anywhere.

A [permit](#) may be required for activities in or on a Commonwealth area that may affect a member of a listed threatened species or ecological community, a member of a listed migratory species, whales and other cetaceans, or a member of a listed marine species.

Commonwealth Land:	2
Commonwealth Heritage Places:	None
Listed Marine Species:	13
Whales and Other Cetaceans:	None
Critical Habitats:	None
Commonwealth Reserves:	None

Extra Information

This part of the report provides information that may also be relevant to the area you have nominated.

Place on the RNE:	2
State and Territory Reserves:	1
Regional Forest Agreements:	None
Invasive Species:	28
Nationally Important Wetlands:	None
Key Ecological Features (Marine)	None

Details

Matters of National Environmental Significance

Wetlands of International Importance (RAMSAR)	[Resource Information]
Name	Proximity
Narran lake nature reserve	Upstream from Ramsar

Listed Threatened Ecological Communities

 [[Resource Information](#)]

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Name	Status	Type of Presence
Brigalow (Acacia harpophylla dominant and co-dominant)	Endangered	Community known to occur within area
Coolibah - Black Box Woodlands of the Darling Riverine Plains and the Brigalow Belt South Bioregions	Endangered	Community may occur within area
Natural grasslands on basalt and fine-textured alluvial plains of northern New South Wales and southern Queensland	Critically Endangered	Community likely to occur within area
Semi-evergreen vine thickets of the Brigalow Belt (North and South) and Nandewar Bioregions	Endangered	Community likely to occur within area
Weeping Myall Woodlands	Endangered	Community likely to occur within area

Listed Threatened Species

 [[Resource Information](#)]

Name	Status	Type of Presence
Birds		
Anthochaera phrygia Regent Honeyeater [82338]	Endangered	Foraging, feeding or related behaviour may occur within area
Erythrotriorchis radiatus Red Goshawk [942]	Vulnerable	Species or species habitat known to occur within area
Geophaps scripta scripta Squatter Pigeon (southern) [64440]	Vulnerable	Species or species habitat likely to occur within area
Lathamus discolor Swift Parrot [744]	Endangered	Species or species habitat may occur within area
Poephila cincta cincta Black-throated Finch (southern) [64447]	Endangered	Species or species

Name	Status	Type of Presence
Rostratula australis Australian Painted Snipe [77037]	Endangered	habitat may occur within area Species or species habitat may occur within area
Fish		
Maccullochella peelii Murray Cod [66633]	Vulnerable	Species or species habitat may occur within area
Mammals		
Chalinolobus dwyeri Large-eared Pied Bat, Large Pied Bat [183]	Vulnerable	Species or species habitat may occur within area
Dasyurus hallucatus Northern Quoll [331]	Endangered	Species or species habitat may occur within area
Nyctophilus corbeni South-eastern Long-eared Bat [83395]	Vulnerable	Species or species habitat may occur within area
Petrogale penicillata Brush-tailed Rock-wallaby [225]	Vulnerable	Species or species habitat may occur within area
Phascolarctos cinereus (combined populations of Qld, NSW and the ACT) Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory) [85104]	Vulnerable	Species or species habitat known to occur within area
Potorous tridactylus tridactylus Long-nosed Potoroo (SE mainland) [66645]	Vulnerable	Species or species habitat may occur within area
Pteropus poliocephalus Grey-headed Flying-fox [186]	Vulnerable	Foraging, feeding or related behaviour known to occur within area
Plants		
Cadellia pentastylis Ooline [9828]	Vulnerable	Species or species habitat likely to occur within area
Dichanthium queenslandicum King Blue-grass [5481]	Endangered	Species or species habitat likely to occur within area
Digitaria porrecta Finger Panic Grass [12768]	Endangered	Species or species habitat likely to occur within area
Homopholis belsonii Belson's Panic [2406]	Vulnerable	Species or species habitat likely to occur within area
Picris evae Hawkweed [10839]	Vulnerable	Species or species habitat likely to occur within area
Rhaponticum australe Austral Cornflower, Native Thistle [22647]	Vulnerable	Species or species habitat likely to occur within area
Sarcophilus weinthalii Blotched Sarcophilus, Weinthals Sarcanth [12673]	Vulnerable	Species or species habitat likely to occur within area
Streblus pendulinus Siah's Backbone, Sia's Backbone, Isaac Wood [21618]	Endangered	Species or species habitat may occur within area

Name	Status	Type of Presence
Reptiles		
Anomalopus mackayi Five-clawed Worm-skink, Long-legged Worm-skink [25934]	Vulnerable	Species or species habitat likely to occur within area
Delma torquata Collared Delma [1656]	Vulnerable	Species or species habitat may occur within area
Egernia rugosa Yakka Skink [1420]	Vulnerable	Species or species habitat may occur within area
Furina dunmalli Dunmall's Snake [59254]	Vulnerable	Species or species habitat known to occur within area
Tympanocryptis pinguicolla Grassland Earless Dragon [66727]	Endangered	Species or species habitat likely to occur within area

Listed Migratory Species [[Resource Information](#)]

* Species is listed under a different scientific name on the EPBC Act - Threatened Species list.

Name	Threatened	Type of Presence
Migratory Marine Birds		
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area
Migratory Terrestrial Species		
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species habitat known to occur within area
Hirundapus caudacutus White-throated Needletail [682]		Species or species habitat likely to occur within area
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area
Monarcha melanopsis Black-faced Monarch [609]		Species or species habitat known to occur within area
Myiagra cyanoleuca Satin Flycatcher [612]		Species or species habitat known to occur within area
Rhipidura rufifrons Rufous Fantail [592]		Species or species habitat known to occur within area
Xanthomyza phrygia Regent Honeyeater [430]	Endangered*	Foraging, feeding or related behaviour may occur within area
Migratory Wetlands Species		
Ardea alba Great Egret, White Egret [59541]		Species or species habitat known to occur within area
Ardea ibis Cattle Egret [59542]		Species or species habitat likely to occur within area
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]		Species or species habitat may occur within area

Name	Threatened	Type of Presence
Rostratula benghalensis (sensu lato) Painted Snipe [889]	Endangered*	Species or species habitat may occur within area

Other Matters Protected by the EPBC Act

Commonwealth Land [\[Resource Information \]](#)

The Commonwealth area listed below may indicate the presence of Commonwealth land in this vicinity. Due to the unreliability of the data source, all proposals should be checked as to whether it impacts on a Commonwealth area, before making a definitive decision. Contact the State or Territory government land department for further information.

Name
Defence - HQ ARMY AVIATION CENTRE
Defence - SATELLITE AIRFIELD - OAKEY

Listed Marine Species [\[Resource Information \]](#)

* Species is listed under a different scientific name on the EPBC Act - Threatened Species list.

Name	Threatened	Type of Presence
Birds		
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area
Ardea alba Great Egret, White Egret [59541]		Species or species habitat known to occur within area
Ardea ibis Cattle Egret [59542]		Species or species habitat likely to occur within area
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]		Species or species habitat may occur within area
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species habitat known to occur within area
Hirundapus caudacutus White-throated Needletail [682]		Species or species habitat likely to occur within area
Lathamus discolor Swift Parrot [744]	Endangered	Species or species habitat may occur within area
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area
Monarcha melanopsis Black-faced Monarch [609]		Species or species

Name	Threatened	Type of Presence
Myiagra cyanoleuca Satin Flycatcher [612]		habitat known to occur within area
Pandion haliaetus Osprey [952]		Species or species habitat known to occur within area
Rhipidura rufifrons Rufous Fantail [592]		Species or species habitat may occur within area
Rostratula benghalensis (sensu lato) Painted Snipe [889]	Endangered*	Species or species habitat may occur within area

Extra Information

Places on the RNE [[Resource Information](#)]

Note that not all Indigenous sites may be listed.

Name	State	Status
Natural		
Jondaryan East Roadside Remnant Grassland	QLD	Indicative Place
Historic		
Jondaryan Post Office (former)	QLD	Indicative Place

State and Territory Reserves [[Resource Information](#)]

Name	State
Myall Park	QLD

Invasive Species [[Resource Information](#)]

Weeds reported here are the 20 species of national significance (WoNS), along with other introduced plants that are considered by the States and Territories to pose a particularly significant threat to biodiversity. The following feral animals are reported: Goat, Red Fox, Cat, Rabbit, Pig, Water Buffalo and Cane Toad. Maps from Landscape Health Project, National Land and Water Resources Audit, 2001.

Name	Status	Type of Presence
Birds		
Acridotheres tristis Common Myna, Indian Myna [387]		Species or species habitat likely to occur within area
Anas platyrhynchos Mallard [974]		Species or species habitat likely to occur within area
Columba livia Rock Pigeon, Rock Dove, Domestic Pigeon [803]		Species or species habitat likely to occur within area
Lonchura punctulata Nutmeg Mannikin [399]		Species or species habitat likely to occur within area
Passer domesticus House Sparrow [405]		Species or species habitat likely to occur within area

Name	Status	Type of Presence
Streptopelia chinensis Spotted Turtle-Dove [780]		Species or species habitat likely to occur within area
Sturnus vulgaris Common Starling [389]		Species or species habitat likely to occur within area
Turdus merula Common Blackbird, Eurasian Blackbird [596]		Species or species habitat likely to occur within area
Frogs		
Bufo marinus Cane Toad [1772]		Species or species habitat likely to occur within area
Rhinella marina Cane Toad [83218]		Species or species habitat likely to occur within area
Mammals		
Felis catus Cat, House Cat, Domestic Cat [19]		Species or species habitat likely to occur within area
Lepus capensis Brown Hare [127]		Species or species habitat likely to occur within area
Mus musculus House Mouse [120]		Species or species habitat likely to occur within area
Oryctolagus cuniculus Rabbit, European Rabbit [128]		Species or species habitat likely to occur within area
Rattus norvegicus Brown Rat, Norway Rat [83]		Species or species habitat likely to occur within area
Rattus rattus Black Rat, Ship Rat [84]		Species or species habitat likely to occur within area
Sus scrofa Pig [6]		Species or species habitat likely to occur within area
Vulpes vulpes Red Fox, Fox [18]		Species or species habitat likely to occur within area
Plants		
Asparagus africanus Climbing Asparagus, Climbing Asparagus Fern [66907]		Species or species habitat likely to occur within area
Genista monspessulana Montpellier Broom, Cape Broom, Canary Broom, Common Broom, French Broom, Soft Broom [20126]		Species or species habitat likely to occur within area
Lantana camara Lantana, Common Lantana, Kamara Lantana, Large-leaf Lantana, Pink Flowered Lantana, Red Flowered Lantana, Red-Flowered Sage, White Sage, Wild Sage [10892]		Species or species habitat likely to occur within area
Lycium ferocissimum African Boxthorn, Boxthorn [19235]		Species or species habitat likely to occur within area

Name	Status	Type of Presence
Opuntia spp. Prickly Pears [82753]		Species or species habitat likely to occur within area
Parthenium hysterophorus Parthenium Weed, Bitter Weed, Carrot Grass, False Ragweed [19566]		Species or species habitat likely to occur within area
Rubus fruticosus aggregate Blackberry, European Blackberry [68406]		Species or species habitat likely to occur within area
Salix spp. except S.babylonica, S.x calodendron & S.x reichardtii Willows except Weeping Willow, Pussy Willow and Sterile Pussy Willow [68497]		Species or species habitat likely to occur within area
Senecio madagascariensis Fireweed, Madagascar Ragwort, Madagascar Groundsel [2624]		Species or species habitat likely to occur within area
Solanum elaeagnifolium Silver Nightshade, Silver-leaved Nightshade, White Horse Nettle, Silver-leaf Nightshade, Tomato Weed, White Nightshade, Bull-nettle, Prairie-berry, Satansbos, Silver-leaf Bitter-apple, Silverleaf-nettle, Trompillo [12323]		Species or species habitat likely to occur within area

Coordinates

-27.226181 151.599799,-27.22435 151.756354,-27.400058 151.756354,-27.394571
151.599113,-27.226181 151.599113,-27.226181 151.599799

Caveat

The information presented in this report has been provided by a range of data sources as acknowledged at the end of the report.

This report is designed to assist in identifying the locations of places which may be relevant in determining obligations under the Environment Protection and Biodiversity Conservation Act 1999. It holds mapped locations of World Heritage and Register of National Estate properties, Wetlands of International Importance, Commonwealth and State/Territory reserves, listed threatened, migratory and marine species and listed threatened ecological communities. Mapping of Commonwealth land is not complete at this stage. Maps have been collated from a range of sources at various resolutions.

Not all species listed under the EPBC Act have been mapped (see below) and therefore a report is a general guide only. Where available data supports mapping, the type of presence that can be determined from the data is indicated in general terms. People using this information in making a referral may need to consider the qualifications below and may need to seek and consider other information sources.

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

For species where the distributions are well known, maps are digitised from sources such as recovery plans and detailed habitat studies. Where appropriate, core breeding, foraging and roosting areas are indicated under 'type of presence'. For species whose distributions are less well known, point locations are collated from government wildlife authorities, museums, and non-government organisations; bioclimatic distribution models are generated and these validated by experts. In some cases, the distribution maps are based solely on expert knowledge.

Only selected species covered by the following provisions of the EPBC Act have been mapped:

- migratory and
- marine

The following species and ecological communities have not been mapped and do not appear in reports produced from this database:

- threatened species listed as extinct or considered as vagrants
- some species and ecological communities that have only recently been listed
- some terrestrial species that overfly the Commonwealth marine area
- migratory species that are very widespread, vagrant, or only occur in small numbers

The following groups have been mapped, but may not cover the complete distribution of the species:

- non-threatened seabirds which have only been mapped for recorded breeding sites
- seals which have only been mapped for breeding sites near the Australian continent

Such breeding sites may be important for the protection of the Commonwealth Marine environment.