

Appendix 2: Species Predicted and Requiring Survey

SPECIES PREDICTED

Common Name	Species Name	TSC Act	EPBC Act	Present on Site
Barking Owl	<i>Ninox connivens</i>	V	-	
Black-chinned Honeyeater (eastern subspecies)	<i>Melithreptus gularis gularis</i>	V	-	
Brown Treecreeper (eastern subspecies)	<i>Climacteris picumnus victoriae</i>	V	-	
Bush Stone-curlew	<i>Burhinus grallarius</i>	E	-	
Diamond Firetail	<i>Stagonopleura guttata</i>	V	-	
Eastern Bentwing-bat	<i>Miniopterus schreibersii oceanensis</i>	V	-	
Eastern Cave Bat	<i>Vespadelus troughtoni</i>	V	-	
Eastern False Pipistrelle	<i>Falsistrellus tasmaniensis</i>	V	-	
Eastern Freetail-bat	<i>Mormopterus norfolkensis</i>	V	-	
Eastern Pygmy-possum	<i>Cercartetus nanus</i>	V	-	
Glossy Black-cockatoo	<i>Calyptorhynchus lathami</i>	V	-	
Golden-tipped Bat	<i>Kerivoula papuensis</i>	V	-	
Greater Broad-nosed Bat	<i>Scoteanax rueppellii</i>	V	-	
Grey-crowned Babbler (eastern subspecies)	<i>Pomatostomus temporalis temporalis</i>	V	-	
Grey-headed Flying-fox	<i>Pteropus poliocephalus</i>	V	V	Foraging Habitat
Koala	<i>Phascolarctos cinereus</i>	V	-	
Large-footed Myotis	<i>Myotis macropus (formally Myotis adversus)</i>	V	-	
Little Bentwing-bat	<i>Miniopterus australis</i>	V	-	
Little Lorikeet	<i>Glossopsitta pusilla</i>	V	-	
Long-nosed Potoroo	<i>Potorous tridactylus</i>	V	V	
Masked Owl	<i>Tyto novaehollandiae</i>	V	-	Yes
Painted Honeyeater	<i>Grantiella picta</i>	V	-	
Powerful Owl	<i>Ninox strenua</i>	V	-	Yes
Regent Honeyeater	<i>Xanthomyza phrygia</i>	CE	E	
Rose-crowned Fruit-dove	<i>Ptilinopus regina</i>	V	-	
Scarlet Robin	<i>Petroica boodang</i>	V	-	
Sooty Owl	<i>Tyto tenebricosa</i>	V	-	
Speckled Warbler	<i>Pyrrholaemus saggitatus</i>	V	-	
Spotted-tailed Quoll	<i>Dasyurus maculatus</i>	V	E	
Squirrel Glider	<i>Petaurus norfolcensis</i>	V	-	Yes
Stephens' Banded Snake	<i>Hoplocephalus stephensii</i>	V	-	
Superb Fruit-dove	<i>Ptilinopus superbus</i>	V	-	
Swift Parrot	<i>Lathamus discolor</i>	E	E	
Turquoise Parrot	<i>Neophema pulchella</i>	V	-	
Yellow-bellied Glider	<i>Petaurus australis</i>	V	-	
Yellow-bellied Sheath-tail-bat	<i>Saccolaimus flaviventris</i>	V	-	

Biodiversity Certification Assessment of Warnervale Town Centre

SPECIES REQUIRING SURVEY

Common Name	Species Name	TSC Act	EPBC Act	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Surveyed at Correct Time	Present on Site
Black Bittern	<i>Ixobrychus flavicollis</i>	V	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Y	
Black-necked Stork	<i>Ephippiorhynchus asiaticus</i>	E	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Y	
Broad-headed Snake	<i>Hoplocephalus bungaroides</i>	E	V			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Y	
Brush-tailed Phascogale	<i>Phascogale tapoatafa</i>	V	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Y	
Comb-crested Jacana	<i>Irediparra gallinacea</i>	V	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Y	
Common Planigale	<i>Planigale maculata</i>	V	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Y	
Eastern Chestnut Mouse	<i>Pseudomys gracilicaudatus</i>	V	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Y	
Gang-gang Cockatoo	<i>Callocephalon fimbriatum</i>	V	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Y	
Giant Barred Frog	<i>Mixophyes iteratus</i>	E	E	Yes	Yes	Yes	Yes	Yes					Yes	Yes	Yes	Y	
Giant Burrowing Frog	<i>Heleioporus australiacus</i>	V	V	Yes	Yes	Yes	Yes	Yes				Yes	Yes	Yes	Yes	Y	
Green and Golden Bell Frog	<i>Litoria aurea</i>	E	V	Yes	Yes	Yes					Yes	Yes	Yes	Yes	Yes	Y	
Green-thighed Frog	<i>Litoria brevipalmata</i>	V	-	Yes	Yes	Yes							Yes	Yes	Yes	Y	
Grey-headed Flying-fox (Breeding Habitat)	<i>Pteropus poliocephalus</i> (Breeding Habitat)	V	V	Yes	Yes	Yes	Yes	Yes				Yes	Yes	Yes	Yes	Y	
Large-footed Myotis (Breeding Habitat)	<i>Myotis macropus</i> (formally <i>Myotis adwersus</i>) (Breeding Habitat)	V	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Y	
Little Eagle	<i>Hieraetus morphnoides</i>	V	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Y	
Littlejohn's Tree Frog	<i>Litoria littlejohni</i>	V	V	Yes	Yes							Yes	Yes	Yes	Yes	Y	
Osprey	<i>Pandion haliaetus</i>	V	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Y	
Pale-headed Snake	<i>Hoplocephalus bitorquatus</i>	V	-	Yes	Yes	Yes	Yes						Yes	Yes	Yes	Y	
Parma Wallaby	<i>Macropus parma</i>	V	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Y	

Biodiversity Certification Assessment of Warnervale Town Centre

Common Name	Species Name	TSC Act	EPBC Act	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Surveyed at Correct Time	Present on Site
Red-crowned Toadlet	<i>Pseudophryne australis</i>	V	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Y	
Square-tailed Kite	<i>Lophoictinia isura</i>	V	-	Yes	Yes	Yes						Yes	Yes	Yes	Yes	Y	
Stuttering Barred Frog	<i>Mixophyes balbus</i>	E	V	Yes	Yes	Yes	Yes	Yes				Yes	Yes	Yes	Yes	Y	
Wallum Froglet	<i>Crinia tinnula</i>	V	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes				Yes	Y	Yes
Biconvex Paperbark	<i>Melaleuca biconvexa</i>	V	V	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Y	
Black-eyed Susan	<i>Tetradlea juncea</i>	V	V						Yes	Yes	Yes	Yes	Yes	Yes	Yes	Y	
Bynoe's Wattle	<i>Acacia bynoeana</i>	E	V	Yes	Yes	Yes						Yes	Yes	Yes	Yes	Y	
Caladenia porphyrea	<i>Caladenia porphyrea</i>	E	-									Yes	Yes			Y	
Cut-leaf Mint-bush	<i>Prostanthera askania</i>	E	E									Yes	Yes	Yes	Yes	Y	
Diuris bracteata	<i>Diuris bracteata</i>	E	E								Yes	Yes				Y	
Eucalyptus parramattensis subsp. parramattensis - population, Wyong and Lake Macquarie local government areas	<i>Eucalyptus parramattensis subsp. parramattensis - population, Wyong and Lake Macquarie local government areas</i>	EP	V	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Y	
Grove's Paperbark	<i>Melaleuca groveana</i>	V	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Y	
Heath Winklewort	<i>Rutidosis heterogama</i>	V	V	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Y	Yes
Leafless Tongue Orchid	<i>Cryptostylis hunteriana</i>	V	V	Yes	Yes									Yes	Yes	Y	
Maunderia triglochinoides	<i>Maunderia triglochinoides</i>	V	-	Yes	Yes	Yes								Yes	Yes	Y	
Netted Bottlebrush	<i>Callistemon linearifolius</i>	V	-	Yes	Yes	Yes						Yes	Yes	Yes	Yes	Y	
Rough Double Tail	<i>Diuris praecox</i>	V	V							Yes	Yes					N- Reconnaissance only	

Biocertification Assessment of Warnervale Town Centre

Common Name	Species Name	TSC Act	EPBC Act	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Surveyed at Correct Time	Present on Site
Small-flower Grevillea	<i>Grevillea parviflora</i> subsp. <i>parviflora</i>	V	V	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Y	
Tessellated Spider Orchid	<i>Caladenia/Arachnorchis tessellata</i>	E	V									Yes	Yes			Y	
Tetralthea glandulosa	<i>Tetralthea glandulosa</i>	V	V							Yes	Yes	Yes	Yes	Yes		Y	
Thick-leaf Star-hair	<i>Astrotricha crassifolia</i>	V	V	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Y	
Variable Midge Orchid	<i>Genoplesium insignis</i>	E	-									Yes	Yes			Y	
White-flowered Wax Plant	<i>Cynanchum elegans</i>	E	E	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Y	
Wyong Sun Orchid	<i>Thelymitra</i> sp. 'Adorata' (B. Branwhite JAJ1030) J. Jeanes ined.	CE	-									Yes	Yes			Y	



ELA transects/plots and targeted flora survey (Bell and Murray 2004)
 Targeted flora and fauna survey (Bell and Murray 2004)
 Targeted flora survey (Bell and Murray 2004)
 Site reconnaissance (Bell and Murray 2004)

Biocertification Assessment of Warnervale Town Centre

Appendix 3: Flora Species List

Note:

1. Families are group under the headings Pteridophytes, Gymnosperms, Dicotyledons, Monocotyledons and Bryophytes
2. An "*" before species indicates exotic species, # indicates non-local native
3. A sample flora assemblage obtained from a short term survey, such as the present one, cannot be considered comprehensive, but rather indicative of the actual flora assemblage.
4. Not all species can be accurately identified in a 'snapshot' survey due to seasonal absence of flowering or fruiting material.

Family	Species	Common name	33	34	35	36	37	38	39	40	41	42	43	Meander
1. Pteridophytes														
Dennstaedtiaceae	<i>Hypolepis muelleri</i>	Harsh Ground Fern								X				
	<i>Pteridium esculentum</i>	Bracken			X		X							
Lindsaeaceae	<i>Lindsaea linearis</i>	Screw Fern			X									
Sinopteridaceae	<i>Cheilanthes sieberi</i> subsp. <i>sieberi</i>	Rock Fern	X								X			
2. Gymnosperms														
3. Dicotyledons														
Acanthaceae	<i>Brunoniella australis</i>	Blue Trumpet, Blue Yam						X						
	<i>Brunoniella pumilio</i>	Dwarf Blue Trumpet	X		X									
Apiaceae	<i>Actinotus minor</i>	Lesser Flannel Flower												X
	<i>Centella asiatica</i>	Pennywort									X			
	<i>Hydrocotyle peduncularis</i>	Pennywort		X										
Apocynaceae	<i>Marsdenia rostrata</i>	Common Milkvine					X							
	<i>Parsonia straminea</i>	Common Silkpod, Monkey Rope	X		X				X	X				
Asteraceae	* <i>Bidens pilosa</i>	Farmer's Friend, Cobblers Pegs					X					X		
	<i>Brachyscome linearifolia</i>		X											
	* <i>Gamochaeta spicata</i>	Purple Cudweed		X		X								X
	* <i>Hypochoeris radicata</i>	Catsear, False Dandelion		X				X				X	X	
	<i>Lagenophera stipitata</i>	Blue Bottle-daisy	X											
	* <i>Senecio madagascariensis</i>	Fireweed, Madagascar Ragwort		X			X							X
	* <i>Sonchus asper</i>	Prickly Sow-thistle		X										
	<i>Vernonia cinerea</i>		X								X			
Caryophyllaceae	<i>Cerastium glomeratum</i>	Mouse-ear Chickweed		X										
Casuarinaceae	<i>Allocasuarina</i>	Black She-Oak				X	X	X	X	X		X		

Biocertification Assessment of Warnervale Town Centre

Family	Species	Common name	33	34	35	36	37	38	39	40	41	42	43	Meander
	<i>littoralis</i>													
	<i>Allocasuarina torulosa</i>	Forest She-oak	X		X									
Dilleniaceae	<i>Hibbertia aspera</i>	Rough Guinea-flower			X			X	X	X		X		
	<i>Hibbertia scandens</i>	Twining Guinea-flower									X			
Droseraceae	<i>Drosera binata</i>	Forked Sundew	X											
	<i>Drosera peltata</i>	Pale Sundew								X	X			
Ericaceae - Styphelioideae	<i>Epacris pulchella</i>				X	X			X		X			
	<i>Leucopogon juniperinus</i>	Long-flowered Beard-heath	X											
	<i>Lissanthe strigosa</i>	Peach Heath				X								
	<i>Phyllanthus hirtellus</i>	Thyme Spurge	X		X			X	X	X	X	X	X	
Fabaceae Caesalpinioideae	* <i>Senna pendula</i> var. <i>glabrata</i>	Senna											X	
Fabaceae Faboideae	<i>Bossiaea obcordata</i>	Spiny Bossiaea					X							
	<i>Daviesia squarrosa</i>					X		X						
	<i>Desmodium rhytidophyllum</i>	Tick-trefoil					X							
	<i>Dillwynia retorta</i>	Eggs-and-bacon Pea, Parrot Pea					X	X						
	<i>Glycine clandestina</i>	Twining Glycine									X			
	<i>Glycine microphylla</i>		X				X							
	<i>Gompholobium grandiflorum</i>	Wedge-pea					X							
	<i>Hardenbergia violacea</i>	False Sarsaparilla				X	X	X			X		X	
	* <i>Medicago</i> sp.	Medic		X									X	
	<i>Mirbelia rubifolia</i>							X	X					
	<i>Podolobium scandens</i>	Netted Shaggy Pea		X		X		X	X		X		X	
	<i>Pultenaea paleacea</i>					X								
	<i>Pultenaea villosa</i>					X		X			X			
	* <i>Trifolium repens</i>	White Clover		X									X	
	<i>Acacia longifolia</i>	Sydney Golden Wattle			X									
	<i>Acacia</i> sp.						X	X						
	<i>Acacia stricta</i>	Hop Wattle					X							
	<i>Acacia terminalis</i> subsp. <i>angustifolia</i>	Sunshine Wattle												X
	<i>Goodenia hederacea</i>	Ivy Goodenia, Forest Goodenia						X						
	<i>Goodenia heterophylla</i>					X								
Haloragaceae	<i>Gonocarpus teucrioides</i>	Raspwort	X	X	X	X		X	X	X	X	X	X	
Lauraceae	<i>Cassytha glabella</i>	Devil's Twine, Dodder-laurel			X					X		X		
Lobeliaceae	<i>Pratia purpurascens</i>	Whiteroot	X	X	X					X	X	X		
Loganiaceae	<i>Mitrasacme polymorpha</i>	Mitre Weed				X								
Myrtaceae	<i>Angophora costata</i>	Smooth-barked Apple		X	X	X	X	X		X		X	X	
	# <i>Callistemon</i>	Weeping		X										

Biocertification Assessment of Warnervale Town Centre

Family	Species	Common name	33	34	35	36	37	38	39	40	41	42	43	Meander
	<i>viminalis</i>	Bottlebrush												
	<i>Corymbia gummifera</i>	Red Bloodwood			X		X	X				X		
	<i>Corymbia maculata</i>	Spotted Gum	X						X		X		X	
	<i>Eucalyptus capitellata</i>	Brown Stringybark		X	X	X			X	X		X	X	
	<i>Eucalyptus eugenioides</i>	Thin-leaved Stringybark	X						X					
	<i>Eucalyptus fibrosa</i>	Broad-leaved Red Ironbark	X			X		X	X		X			
	<i>Eucalyptus globoidea</i>	White Stringybark	X			X					X			
	<i>Eucalyptus paniculata</i>	Grey Ironbark	X											
	<i>Eucalyptus pilularis</i>	Blackbutt					X					X		
	<i>Eucalyptus racemosa</i>	Snappy Gum, Scribbly Gum												X
	<i>Eucalyptus siderophloia</i>	Grey Ironbark												X
	<i>Leptospermum polygalifolium</i> subsp. <i>polygalifolium</i>	Yellow Tea-tree			X		X			X				
	<i>Melaleuca nodosa</i>	Ball Honey-myrtle	X						X	X	X	X		
	<i>Melaleuca sieberi</i>									X		X		
Oleaceae	* <i>Ligustrum sinense</i>	Small-Leaved Privet, Chinese Privet											X	
Oxalidaceae	<i>Oxalis perennans</i>	Oxalis	X											
Passifloraceae	* <i>Passiflora edulis</i>	Passionfruit					X							
Pittosporaceae	<i>Billardiera scandens</i>	Appleberry, Dumplings, Snotberry	X		X		X	X	X			X		
	<i>Bursaria spinosa</i>	Australian Boxthorn	X											
	<i>Pittosporum undulatum</i>	Sweet Pittosporum	X		X					X		X		
Plantaginaceae	* <i>Plantago lanceolata</i>	Plantain, Ribwort		X									X	
Polygalaceae	<i>Comesperma ericinum</i>	Heath Milkwort				X								
	<i>Banksia serrata</i>	Saw Banksia, Old Man Banksia					X							X
	<i>Banksia spinulosa</i> var. <i>collina</i>	Hill Banksia			X			X						
	<i>Lambertia formosa</i>	Mountain Devil, Honey-flower			X									
	<i>Lomatia silaifolia</i>	Native Parsley, Crinklebush					X							
	<i>Persoonia linearis</i>	Narrow-leaf Geebung					X							
Rubiaceae	<i>Opercularia diphylla</i>	Stinkweed					X							
	<i>Opercularia varia</i>	Stinkweed	X			X		X	X		X	X	X	
Santalaceae	<i>Exocarpos cupressiformis</i>	Cherry Ballart, Native Cherry												X
Stylidiaceae	<i>Stylidium graminifolium</i>	Grass-leaf Triggerplant				X								
Thymelaeaceae	<i>Pimelea linifolia</i>	Rice Flower	X				X		X		X			
Verbenaceae	* <i>Lantana camara</i>	Lantana	X				X	X			X	X		
Violaceae	<i>Viola betonicifolia</i>	Showy Violet	X											
4. Monocotyledons														

Biocertification Assessment of Warnervale Town Centre

Family	Species	Common name	33	34	35	36	37	38	39	40	41	42	43	Meander
Anthericaceae	<i>Caesia parviflora</i>	Pale Grass Lily	X											
Arecaceae	* <i>Laxmannia gracilis</i>	Slender Wire Lily	X			X					X			
Asparagaceae	* <i>Phoenix canariensis</i>	Canary Island Date										X		
	* <i>Asparagus aethiopicus</i>	Asparagus Fern									X			
Colchicaceae	<i>Asparagus asparagoides</i>	Bridal Creeper										X		
Cyperaceae	<i>Burchardia umbellata</i>	Milkmaids			X	X							X	
	<i>Baumea</i> sp.									X				
	<i>Carex inversa</i>	Knob Sedge						X				X	X	
	<i>Cyathochaeta diandra</i>						X							
	<i>Cyperus polystachyos</i>			X										
	<i>Gahnia clarkei</i>	Saw-sedge			X						X	X		
	<i>Gahnia radula</i>									X				
	<i>Isolepis</i> sp.	Club-rush		X										
	<i>Lepidosperma gunnii</i>										X			
	<i>Lepidosperma laterale</i>	Variable Sword-sedge	X		X	X		X	X		X	X		
	<i>Ptilothrix deusta</i>				X	X		X	X	X		X	X	
Hypoxidaceae	<i>Schoenus</i> sp.				X									
Iridaceae	<i>Hypoxis hygrometrica</i>	Golden Star, Golden Weather-glass				X								
	<i>Patersonia glabrata</i>	Native Iris, Leafy Purple-flag			X									
Juncaceae	<i>Patersonia sericea</i>	Native Iris, Silky Purple-flag			X	X		X	X	X	X			
Lomandraceae	<i>Juncus continuus</i>			X									X	
	<i>Lomandra filiformis</i> subsp. <i>filiformis</i>	Wattle Mat-rush			X	X	X	X			X	X	X	
	<i>Lomandra glauca</i>	Pale Mat-rush			X	X	X		X	X	X	X		
	<i>Lomandra longifolia</i>	Spiny-headed Mat-rush	X					X		X		X		
	<i>Lomandra multiflora</i>	Many-flowered Mat-rush	X		X	X		X	X	X	X			
Orchidaceae	<i>Lomandra obliqua</i>				X	X		X					X	
	<i>Acianthus fornicatus</i>	Gnat Orchid	X											
	<i>Caladenia catenata</i>	Pink Fingers	X		X				X	X	X			
	<i>Caladenia</i> sp.				X									
	<i>Caladenia carnea</i>	Pink Fingers												X
	<i>Calochilus campestris</i>	Copper Beard-orchid							X					
	<i>Calochilus robertsonii</i>	Purplish Beard-orchid						X		X	X		X	
	<i>Chiloglottis</i> sp.		X											
	<i>Cryptostylis erecta</i>	Tartan Tongue Orchid								X				
	<i>Cryptostylis subulata</i>	Large Tongue-orchid, Cow Orchid				X		X						
	<i>Cymbidium suave</i>	Native Cymbidium												X

Biocertification Assessment of Warnervale Town Centre

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	<i>Microtis parviflora</i>	Slender Onion Orchid												X
	<i>Microtis</i> sp.												X	
	<i>Prasophyllum elatum</i>	Tall Leek Orchid												X
	<i>Pterostylis nutans</i>	Nodding Greenhood	X											
	<i>Thelymitra carnea</i>	Tiny Sun Orchid, Pink Sun Orchid												X
	<i>Thelymitra malvina</i>													X
	<i>Thelymitra nuda</i>	Plain Sun Orchid												X
Phormiaceae	<i>Thelymitra</i> sp.	Sun Orchid											X	
	<i>Dianella caerulea</i>	Blue Flax-lily			X									
Phormiaceae	<i>Dianella caerulea</i> var. <i>producta</i>	Blue Flax-lily	X	X			X	X	X	X	X	X	X	
Poaceae	* <i>Dianella revoluta</i>	Blue Flax-lily, Spreading Flax-lily	X		X	X		X						
	<i>Andropogon virginicus</i>	Whisky Grass, Broomsedge		X		X						X	X	
	<i>Aristida ramosa</i>	Purple Wiregrass										X		
	<i>Aristida vagans</i>	Threeawn Speargrass					X	X	X	X	X	X		
	<i>Aristida warburgii</i>	Wiregrass									X		X	
	<i>Austrodanthonia racemosa</i>	Wallaby Grass				X		X						
	* <i>Austrostipa</i> sp.	Speargrass	X		X		X		X					
	* <i>Axonopus fissifolius</i>	Narrow-leaved Carpet Grass		X										X
	<i>Briza maxima</i>	Quaking Grass												X
	<i>Dichelachne micrantha</i>	Shorthair Plumegrass	X					X						
	<i>Digitaria parviflora</i>	Smallflower Finger Grass	X				X					X		
	<i>Echinopogon caespitosus</i>	Tufted Hedgehog Grass								X	X			
	<i>Entolasia stricta</i>	Wiry Panic	X	X	X	X	X	X	X	X	X	X	X	
	<i>Eragrostis brownii</i>	Brown's Lovegrass	X			X					X	X	X	
	<i>Eragrostis leptostachya</i>	Paddock Lovegrass	X											
	<i>Imperata cylindrica</i>	Blady Grass	X		X		X		X			X	X	
	* <i>Joycea pallida</i>	Red-anther Wallaby Grass	X		X	X		X				X	X	
	<i>Lolium perenne</i>	Perennial Ryegrass		X										
	<i>Microlaena stipoides</i>	Meadow Rice-grass, Weeping Grass		X	X	X	X							
	<i>Oplismenus aemulus</i>	Broad-leaved Basket Grass					X							
	<i>Panicum simile</i>	Two-colour Panic				X		X		X				
	* <i>Paspalidium distans</i>	Spreading Panicgrass							X		X	X		
	* <i>Paspalum urvillei</i>	Vasey Grass		X										
	* <i>Pennisetum clandestinum</i>	Kikuyu		X										
	<i>Sporobolus africanus</i>	Parramatta Grass												X
Restionaceae	<i>Themeda australis</i>	Kangaroo	X	X	X	X	X	X	X	X	X	X	X	X

Biocertification Assessment of Warnervale Town Centre

Family	Species	Common name	33	34	35	36	37	38	39	40	41	42	43	Meander
		Grass												
	<i>Lepyrodia scariosa</i>	Scale-rush								X				
Xanthorrhoeaceae	<i>Smilax glycyphylla</i>	Sweet Sarsaparilla			X									
	<i>Xanthorrhoea media</i>	Grass Tree					X		X	X		X	X	
	<i>Xanthorrhoea resinifera</i>	Grass-tree			X	X		X						

Biocertification Assessment of Warnervale Town Centre

Appendix 4: Landscape Tg Calculations

Veg Type	Veg Type Name	Common Name	Scientific Name	Tg Value
HU514	Blackbutt - Turpentine open forest of the foothills of the North Coast	Eastern Bentwing-bat	Miniopterus schreibersii oceanensis	0.75
HU514	Blackbutt - Turpentine open forest of the foothills of the North Coast	Eastern False Pipistrelle	Falsistrellus tasmaniensis	0.45
HU514	Blackbutt - Turpentine open forest of the foothills of the North Coast	Eastern Freetail-bat	Mormopterus norfolkensis	0.45
HU514	Blackbutt - Turpentine open forest of the foothills of the North Coast	Eastern Pygmy-possum	Cercartetus nanus	0.5
HU514	Blackbutt - Turpentine open forest of the foothills of the North Coast	Glossy Black-cockatoo	Calyptorhynchus lathami	0.55
HU514	Blackbutt - Turpentine open forest of the foothills of the North Coast	Golden-tipped Bat	Kerivoula papuensis	0.4
HU514	Blackbutt - Turpentine open forest of the foothills of the North Coast	Greater Broad-nosed Bat	Scoteanax rueppellii	0.45
HU514	Blackbutt - Turpentine open forest of the foothills of the North Coast	Grey-headed Flying-fox	Pteropus poliocephalus	0.93
HU514	Blackbutt - Turpentine open forest of the foothills of the North Coast	Koala	Phascolarctos cinereus	0.83
HU514	Blackbutt - Turpentine open forest of the foothills of the North Coast	Large-footed Myotis	Myotis macropus (formally Myotis adversus)	0.4
HU514	Blackbutt - Turpentine open forest of the foothills of the North Coast	Little Bentwing-bat	Miniopterus australis	0.75
HU514	Blackbutt - Turpentine open forest of the foothills of the North Coast	Little Lorikeet	Glossopsitta pusilla	0.58
HU514	Blackbutt - Turpentine open forest of the foothills of the North Coast	Long-nosed Potoroo	Potorous tridactylus	0.75
HU514	Blackbutt - Turpentine open forest of the foothills of the North Coast	Masked Owl	Tyto novaehollandiae	0.33
HU514	Blackbutt - Turpentine open forest of the foothills of the North Coast	Powerful Owl	Ninox strenua	0.33
HU514	Blackbutt - Turpentine open forest of the foothills of the North Coast	Regent Honeyeater	Xanthomyza phrygia	0.75
HU514	Blackbutt - Turpentine open forest of the foothills of the North Coast	Spotted-tailed Quoll	Dasyurus maculatus	0.35
HU514	Blackbutt - Turpentine open forest of the foothills of the North Coast	Squirrel Glider	Petaurus norfolcensis	0.45
HU514	Blackbutt - Turpentine open forest of the foothills of the North Coast	Stephens' Banded Snake	Hoplocephalus stephensii	0.3
HU514	Blackbutt - Turpentine open forest of the foothills of the North Coast	Swift Parrot	Lathamus discolor	0.75
HU514	Blackbutt - Turpentine open forest of the foothills of the North Coast	Yellow-bellied Glider	Petaurus australis	0.43
HU514	Blackbutt - Turpentine open forest of the foothills of the North Coast	Yellow-bellied Sheath-tail-bat	Saccolaimus flaviventris	0.45
			Average	0.54
HU621	Smooth-barked Apple - Red Bloodwood open forest on coastal plains on the Central Coast, Sydney Basin	Barking Owl	Ninox connivens	0.33
HU621	Smooth-barked Apple - Red Bloodwood open forest on coastal plains on the Central Coast, Sydney Basin	Black-chinned Honeyeater (eastern subspecies)	Melithreptus gularis gularis	0.75
HU621	Smooth-barked Apple - Red Bloodwood open forest on coastal plains on the Central Coast, Sydney Basin	Brown Treecreeper (eastern subspecies)	Climacteris picumnus victoriae	0.5
HU621	Smooth-barked Apple - Red Bloodwood open forest on coastal plains on the Central Coast, Sydney Basin	Bush Stone-curlew	Burhinus grallarius	0.4
HU621	Smooth-barked Apple - Red Bloodwood open forest on coastal plains on the Central Coast, Sydney Basin	Eastern Bentwing-bat	Miniopterus schreibersii oceanensis	0.75
HU621	Smooth-barked Apple - Red Bloodwood open forest on coastal plains on the Central Coast, Sydney Basin	Eastern False Pipistrelle	Falsistrellus tasmaniensis	0.45

Biocertification Assessment of Warnervale Town Centre

Veg Type	Veg Type Name	Common Name	Scientific Name	Tg Value
HU621	Smooth-barked Apple - Red Bloodwood open forest on coastal plains on the Central Coast, Sydney Basin	Eastern Freetail-bat	Mormopterus norfolkensis	0.45
HU621	Smooth-barked Apple - Red Bloodwood open forest on coastal plains on the Central Coast, Sydney Basin	Eastern Pygmy-possum	Cercartetus nanus	0.5
HU621	Smooth-barked Apple - Red Bloodwood open forest on coastal plains on the Central Coast, Sydney Basin	Glossy Black-cockatoo	Calyptorhynchus lathami	0.55
HU621	Smooth-barked Apple - Red Bloodwood open forest on coastal plains on the Central Coast, Sydney Basin	Golden-tipped Bat	Kerivoula papuensis	0.4
HU621	Smooth-barked Apple - Red Bloodwood open forest on coastal plains on the Central Coast, Sydney Basin	Greater Broad-nosed Bat	Scoteanax rueppellii	0.45
HU621	Smooth-barked Apple - Red Bloodwood open forest on coastal plains on the Central Coast, Sydney Basin	Grey-crowned Babbler (eastern subspecies)	Pomatostomus temporalis temporalis	0.75
HU621	Smooth-barked Apple - Red Bloodwood open forest on coastal plains on the Central Coast, Sydney Basin	Grey-headed Flying-fox	Pteropus poliocephalus	0.93
HU621	Smooth-barked Apple - Red Bloodwood open forest on coastal plains on the Central Coast, Sydney Basin	Koala	Phascolarctos cinereus	0.83
HU621	Smooth-barked Apple - Red Bloodwood open forest on coastal plains on the Central Coast, Sydney Basin	Large-footed Myotis	Myotis macropus (formally Myotis adversus)	0.4
HU621	Smooth-barked Apple - Red Bloodwood open forest on coastal plains on the Central Coast, Sydney Basin	Little Bentwing-bat	Miniopterus australis	0.75
HU621	Smooth-barked Apple - Red Bloodwood open forest on coastal plains on the Central Coast, Sydney Basin	Little Lorikeet	Glossopsitta pusilla	0.58
HU621	Smooth-barked Apple - Red Bloodwood open forest on coastal plains on the Central Coast, Sydney Basin	Masked Owl	Tyto novaehollandiae	0.33
HU621	Smooth-barked Apple - Red Bloodwood open forest on coastal plains on the Central Coast, Sydney Basin	Painted Honeyeater	Grantiella picta	0.75
HU621	Smooth-barked Apple - Red Bloodwood open forest on coastal plains on the Central Coast, Sydney Basin	Powerful Owl	Ninox strenua	0.33
HU621	Smooth-barked Apple - Red Bloodwood open forest on coastal plains on the Central Coast, Sydney Basin	Regent Honeyeater	Xanthomyza phrygia	0.75
HU621	Smooth-barked Apple - Red Bloodwood open forest on coastal plains on the Central Coast, Sydney Basin	Scarlet Robin	Petroica boodang	0.6
HU621	Smooth-barked Apple - Red Bloodwood open forest on coastal plains on the Central Coast, Sydney Basin	Spotted-tailed Quoll	Dasyurus maculatus	0.35
HU621	Smooth-barked Apple - Red Bloodwood open forest on coastal plains on the Central Coast, Sydney Basin	Squirrel Glider	Petaurus norfolcensis	0.45
HU621	Smooth-barked Apple - Red Bloodwood open forest on coastal plains on the Central Coast, Sydney Basin	Swift Parrot	Lathamus discolor	0.75
HU621	Smooth-barked Apple - Red Bloodwood open forest on coastal plains on the Central Coast, Sydney Basin	Turquoise Parrot	Neophema pulchella	0.55
HU621	Smooth-barked Apple - Red Bloodwood open forest on coastal plains on the Central Coast, Sydney Basin	Yellow-bellied Glider	Petaurus australis	0.43
HU621	Smooth-barked Apple - Red Bloodwood open forest on coastal plains on the Central Coast, Sydney Basin	Yellow-bellied Sheath-tail-bat	Saccolaimus flaviventris	0.45

Biocertification Assessment of Warnervale Town Centre

Veg Type	Veg Type Name	Common Name	Scientific Name	Tg Value
			Average	0.55
HU631	Spotted Gum - Grey Ironbark open forest on the foothills of the Central Coast, Sydney Basin	Barking Owl	Ninox connivens	0.33
HU631	Spotted Gum - Grey Ironbark open forest on the foothills of the Central Coast, Sydney Basin	Black-chinned Honeyeater (eastern subspecies)	Melithreptus gularis gularis	0.75
HU631	Spotted Gum - Grey Ironbark open forest on the foothills of the Central Coast, Sydney Basin	Brown Treecreeper (eastern subspecies)	Climacteris picumnus victoriae	0.5
HU631	Spotted Gum - Grey Ironbark open forest on the foothills of the Central Coast, Sydney Basin	Bush Stone-curlew	Burhinus grallarius	0.4
HU631	Spotted Gum - Grey Ironbark open forest on the foothills of the Central Coast, Sydney Basin	Diamond Firetail	Stagonopleura guttata	0.75
HU631	Spotted Gum - Grey Ironbark open forest on the foothills of the Central Coast, Sydney Basin	Eastern Bentwing-bat	Miniopterus schreibersii oceanensis	0.75
HU631	Spotted Gum - Grey Ironbark open forest on the foothills of the Central Coast, Sydney Basin	Eastern Cave Bat	Vespadelus troungtoni	0.75
HU631	Spotted Gum - Grey Ironbark open forest on the foothills of the Central Coast, Sydney Basin	Eastern False Pipistrelle	Falsistrellus tasmaniensis	0.45
HU631	Spotted Gum - Grey Ironbark open forest on the foothills of the Central Coast, Sydney Basin	Eastern Freetail-bat	Mormopterus norfolkensis	0.45
HU631	Spotted Gum - Grey Ironbark open forest on the foothills of the Central Coast, Sydney Basin	Eastern Pygmy-possum	Cercartetus nanus	0.5
HU631	Spotted Gum - Grey Ironbark open forest on the foothills of the Central Coast, Sydney Basin	Glossy Black-cockatoo	Calyptorhynchus lathami	0.55
HU631	Spotted Gum - Grey Ironbark open forest on the foothills of the Central Coast, Sydney Basin	Golden-tipped Bat	Kerivoula papuensis	0.4
HU631	Spotted Gum - Grey Ironbark open forest on the foothills of the Central Coast, Sydney Basin	Greater Broad-nosed Bat	Scoteanax rueppellii	0.45
HU631	Spotted Gum - Grey Ironbark open forest on the foothills of the Central Coast, Sydney Basin	Grey-crowned Babbler (eastern subspecies)	Pomatostomus temporalis temporalis	0.75
HU631	Spotted Gum - Grey Ironbark open forest on the foothills of the Central Coast, Sydney Basin	Grey-headed Flying-fox	Pteropus poliocephalus	0.93
HU631	Spotted Gum - Grey Ironbark open forest on the foothills of the Central Coast, Sydney Basin	Koala	Phascolarctos cinereus	0.83
HU631	Spotted Gum - Grey Ironbark open forest on the foothills of the Central Coast, Sydney Basin	Large-footed Myotis	Myotis macropus (formally Myotis adversus)	0.4
HU631	Spotted Gum - Grey Ironbark open forest on the foothills of the Central Coast, Sydney Basin	Little Bentwing-bat	Miniopterus australis	0.75
HU631	Spotted Gum - Grey Ironbark open forest on the foothills of the Central Coast, Sydney Basin	Little Lorikeet	Glossopsitta pusilla	0.58
HU631	Spotted Gum - Grey Ironbark open forest on the foothills of the Central Coast, Sydney Basin	Masked Owl	Tyto novaehollandiae	0.33
HU631	Spotted Gum - Grey Ironbark open forest on the foothills of the Central Coast, Sydney Basin	Painted Honeyeater	Grantiella picta	0.75

Biocertification Assessment of Warnervale Town Centre

Veg Type	Veg Type Name	Common Name	Scientific Name	Tg Value
HU631	Spotted Gum - Grey Ironbark open forest on the foothills of the Central Coast, Sydney Basin	Powerful Owl	Ninox strenua	0.33
HU631	Spotted Gum - Grey Ironbark open forest on the foothills of the Central Coast, Sydney Basin	Regent Honeyeater	Xanthomyza phrygia	0.75
HU631	Spotted Gum - Grey Ironbark open forest on the foothills of the Central Coast, Sydney Basin	Scarlet Robin	Petroica boodang	0.6
HU631	Spotted Gum - Grey Ironbark open forest on the foothills of the Central Coast, Sydney Basin	Speckled Warbler	Pyrrholaemus saggitatus	0.4
HU631	Spotted Gum - Grey Ironbark open forest on the foothills of the Central Coast, Sydney Basin	Spotted-tailed Quoll	Dasyurus maculatus	0.35
HU631	Spotted Gum - Grey Ironbark open forest on the foothills of the Central Coast, Sydney Basin	Squirrel Glider	Petaurus norfolcensis	0.45
HU631	Spotted Gum - Grey Ironbark open forest on the foothills of the Central Coast, Sydney Basin	Swift Parrot	Lathamus discolor	0.75
HU631	Spotted Gum - Grey Ironbark open forest on the foothills of the Central Coast, Sydney Basin	Turquoise Parrot	Neophema pulchella	0.55
HU631	Spotted Gum - Grey Ironbark open forest on the foothills of the Central Coast, Sydney Basin	Yellow-bellied Glider	Petaurus australis	0.43
HU631	Spotted Gum - Grey Ironbark open forest on the foothills of the Central Coast, Sydney Basin	Yellow-bellied Sheath-tail-bat	Saccolaimus flaviventris	0.45
			Average	0.56
HU633	Swamp Mahogany swamp forest on coastal lowlands of the North Coast and northern Sydney Basin	Barking Owl	Ninox connivens	0.33
HU633	Swamp Mahogany swamp forest on coastal lowlands of the North Coast and northern Sydney Basin	Brown Treecreeper (eastern subspecies)	Climacteris picumnus victoriae	0.5
HU633	Swamp Mahogany swamp forest on coastal lowlands of the North Coast and northern Sydney Basin	Bush Stone-curlew	Burhinus grallarius	0.4
HU633	Swamp Mahogany swamp forest on coastal lowlands of the North Coast and northern Sydney Basin	Eastern Bentwing-bat	Miniopterus schreibersii oceanensis	0.75
HU633	Swamp Mahogany swamp forest on coastal lowlands of the North Coast and northern Sydney Basin	Eastern False Pipistrelle	Falsistrellus tasmaniensis	0.45
HU633	Swamp Mahogany swamp forest on coastal lowlands of the North Coast and northern Sydney Basin	Eastern Freetail-bat	Mormopterus norfolkensis	0.45
HU633	Swamp Mahogany swamp forest on coastal lowlands of the North Coast and northern Sydney Basin	Eastern Pygmy-possum	Cercartetus nanus	0.5
HU633	Swamp Mahogany swamp forest on coastal lowlands of the North Coast and northern Sydney Basin	Glossy Black-cockatoo	Calyptorhynchus lathami	0.55
HU633	Swamp Mahogany swamp forest on coastal lowlands of the North Coast and northern Sydney Basin	Golden-tipped Bat	Kerivoula papuensis	0.4
HU633	Swamp Mahogany swamp forest on coastal lowlands of the North Coast and northern Sydney Basin	Greater Broad-nosed Bat	Scoteanax rueppellii	0.45
HU633	Swamp Mahogany swamp forest on coastal lowlands of the North Coast and northern Sydney Basin	Grey-headed Flying-fox	Pteropus poliocephalus	0.93

Biocertification Assessment of Warnervale Town Centre

Veg Type	Veg Type Name	Common Name	Scientific Name	Tg Value
HU633	Swamp Mahogany swamp forest on coastal lowlands of the North Coast and northern Sydney Basin	Koala	Phascolarctos cinereus	0.83
HU633	Swamp Mahogany swamp forest on coastal lowlands of the North Coast and northern Sydney Basin	Large-footed Myotis	Myotis macropus (formally Myotis adversus)	0.4
HU633	Swamp Mahogany swamp forest on coastal lowlands of the North Coast and northern Sydney Basin	Little Bentwing-bat	Miniopterus australis	0.75
HU633	Swamp Mahogany swamp forest on coastal lowlands of the North Coast and northern Sydney Basin	Little Lorikeet	Glossopsitta pusilla	0.58
HU633	Swamp Mahogany swamp forest on coastal lowlands of the North Coast and northern Sydney Basin	Long-nosed Potoroo	Potorous tridactylus	0.75
HU633	Swamp Mahogany swamp forest on coastal lowlands of the North Coast and northern Sydney Basin	Regent Honeyeater	Xanthomyza phrygia	0.75
HU633	Swamp Mahogany swamp forest on coastal lowlands of the North Coast and northern Sydney Basin	Rose-crowned Fruit-dove	Ptilinopus regina	0.75
HU633	Swamp Mahogany swamp forest on coastal lowlands of the North Coast and northern Sydney Basin	Sooty Owl	Tyto tenebricosa	0.33
HU633	Swamp Mahogany swamp forest on coastal lowlands of the North Coast and northern Sydney Basin	Spotted-tailed Quoll	Dasyurus maculatus	0.35
HU633	Swamp Mahogany swamp forest on coastal lowlands of the North Coast and northern Sydney Basin	Squirrel Glider	Petaurus norfolcensis	0.45
HU633	Swamp Mahogany swamp forest on coastal lowlands of the North Coast and northern Sydney Basin	Stephens' Banded Snake	Hoplocephalus stephensii	0.3
HU633	Swamp Mahogany swamp forest on coastal lowlands of the North Coast and northern Sydney Basin	Superb Fruit-dove	Ptilinopus superbus	0.75
HU633	Swamp Mahogany swamp forest on coastal lowlands of the North Coast and northern Sydney Basin	Swift Parrot	Lathamus discolor	0.75
HU633	Swamp Mahogany swamp forest on coastal lowlands of the North Coast and northern Sydney Basin	Yellow-bellied Glider	Petaurus australis	0.43
HU633	Swamp Mahogany swamp forest on coastal lowlands of the North Coast and northern Sydney Basin	Yellow-bellied Sheath-tail-bat	Saccolaimus flaviventris	0.45
			Average	0.55

Biocertification Assessment of Warnervale Town Centre

Appendix 5: Transect/Plot Data

WARNERVALE TOWN CENTRE

Vegetation Zone: Blackbutt - Turpentine open forest of the foothills of the North Coast/Good

PlotName	NPS	NOS	NMS	NGCG	NGCS	NGCO	EPC	NTH	OR	FL	Longitude	Latitude	Zone
Plot 37	34	30	1	16	0	32	0	0	1	82	356861	6321410	56
Plot 42	33	32.5	10.7	30	0	6	0	2	1	0	357069	6321177	56

Vegetation Zone: Smooth-barked Apple - Red Bloodwood open forest on coastal plains on the Central Coast, Sydney Basin/Poor

PlotName	NPS	NOS	NMS	NGCG	NGCS	NGCO	EPC	NTH	OR	FL	Longitude	Latitude	Zone
Plot 34	15	10.5	0	4	0	2	82	1	1	1	356796	6320853	56
Plot 43	25	29	0	10	0	6	44	0	1	0	357179	6321145	56

Vegetation Zone: Smooth-barked Apple - Red Bloodwood open forest on coastal plains on the Central Coast, Sydney Basin/Moderate

PlotName	NPS	NOS	NMS	NGCG	NGCS	NGCO	EPC	NTH	OR	FL	Longitude	Latitude	Zone
Plot 36	38	21.5	10.5	2	2	58	0	1	1	2	357349	6321083	56
Plot 40	33	24	12.25	6	0	50	0	0	1	20	356894	6320833	56

Vegetation Zone: Smooth-barked Apple - Red Bloodwood open forest on coastal plains on the Central Coast, Sydney Basin/Good

PlotName	NPS	NOS	NMS	NGCG	NGCS	NGCO	EPC	NTH	OR	FL	Longitude	Latitude	Zone
Plot 35	43	15.5	12	20	4	56	0	0	1	40	356875	6321035	56
Plot 38	39	29	9.5	44	0	20	0	0	1	39	357014	6321474	56

Vegetation Zone: Spotted Gum - Grey Ironbark open forest on the foothills of the Central Coast, Sydney Basin/Moderate

PlotName	NPS	NOS	NMS	NGCG	NGCS	NGCO	EPC	NTH	OR	FL	Longitude	Latitude	Zone
Plot 41	38	19.5	10	36	0	8	0	0	1	0	357587	6321300	56

Vegetation Zone: Spotted Gum - Grey Ironbark open forest on the foothills of the Central Coast, Sydney Basin/Good

PlotName	NPS	NOS	NMS	NGCG	NGCS	NGCO	EPC	NTH	OR	FL	Longitude	Latitude	Zone
Plot 33	46	24.5	23	40	0	24	0	0	1	16	356298	6321231	56
Plot 39	31	30	12	74	2	8	0	0	1	6	356206	6320946	56

Appendix 6: WTC Credit Calculations

ECOSYSTEM CREDITS

Vegetation Zone Id	Vegetation type name	Vegetation Formation	Condition (low or moderate/ good)	Ancillary codes (optional)	Current Site Value Score for vegetation zone	Change in Site Value in certified areas (loss)	Landscape Tg	Predicted Site Value with conservation measures (pre)	Change in site value with conservation measures	10% current SV past good management
1	Blackbutt - Turpentine open forest of the foothills of the North Coast	Dry sclerophyll forests (shrubby sub-formation)	MG	Good	87.0	0.0	0.54	87	10.0	8.7
2	Smooth-barked Apple - Red Bloodwood open forest on coastal plains on the Central Coast, Sydney Basin	Dry sclerophyll forests (shrubby sub-formation)	MG	Poor	31.0	0.0	0.16	31	20.0	3.1
3	Smooth-barked Apple - Red Bloodwood open forest on coastal plains on the Central Coast, Sydney Basin	Dry sclerophyll forests (shrubby sub-formation)	MG	Moderate	65.0	0.0	0.35	78	13.0	6.5
4	Smooth-barked Apple - Red Bloodwood open forest on coastal plains on the Central Coast, Sydney Basin	Dry sclerophyll forests (shrubby sub-formation)	MG	Good	83.0	0.0	0.55	77	14.0	6.3
5	Spotted Gum - Grey Warbark open forest on the foothills of the Central Coast, Sydney Basin	Dry sclerophyll forests (shrubby sub-formation)	MG	Moderate	56.0	0.0	0.56	59	3.0	5.6
6	Spotted Gum - Grey Warbark open forest on the foothills of the Central Coast, Sydney Basin	Dry sclerophyll forests (shrubby sub-formation)	MG	Good	75.0	0.0	0.56	77	2.0	7.6

Assess Change in Landscape Value			
Landscape Value score for impacts of biodiversity certification			
1000 ha assessment circle name	1000 ha circle scaling factor	% NV remaining in 1000ha assessment circle (pre)	Current Landscape Value
1	1	15	31
Future Landscape Value score (post biodiversity certification)			
% NV remaining in 1000ha assessment circle (post)	Connectivity (post biodiversity certification)	Change (loss) in Landscape value score	Area Proposed for biodiversity certification
13	0	18	56.6
Landscape Value score for conservation measures			
Score for area of land proposed as a conservation measure	Connectivity value score	Adjacent remnant area score	Area of Conservation Measures
2.2	6	10	12.2

Biodiversity Certification Assessment of Wannasdale Town Centre

Area Summary											
Total area		68.8									
Total area proposed for biodiversity certification (ha)		56.6									
Total area proposed for conservation measures (ha)		12.2									
Vegetation Zone Id	Vegetation type name	Vegetation Formation	Condition (low or moderate, good)	Ancillary code (optional)	Area of vegetation zone (ha)	Area of vegetation zone to be certified (ha)	Area of vegetation zone in conservation measures	Ecosystem Credits required for certification	Credits Created for funded and managed offset	Credits Created for managed offset	Credits Created for planning instrument offset
1	Blackbutt - Turpentine open forest of the foothills of the North Coast	Wet sclerophyll forests (grassy sub-forests)	VG	Good	4.7	3.7	1	166	8	8	2
2	Smooth-barked Apple - Red Bloodwood open forest on coastal plains of the Central Coast, Sydney Basin	Dry sclerophyll forests (shrubby sub-forests)	VG	Poor	12.5	11.5	1	214	10	9	2
3	Smooth-barked Apple - Red Bloodwood open forest on coastal plains of the Central Coast, Sydney Basin	Dry sclerophyll forests (shrubby sub-forests)	VG	Moderate	20.4	18.9	1.5	943	13	12	3
4	Smooth-barked Apple - Red Bloodwood open forest on coastal plains of the Central Coast, Sydney Basin	Dry sclerophyll forests (shrubby sub-forests)	VG	Good	8.4	8.4	0	278	0	0	0
5	Spotted Gum - Grey Ironbark open forest on the foothills of the Central Coast, Sydney Basin	Dry sclerophyll forests (timber grasses)	VG	Moderate	8.4	7.2	1.2	212	7	6	2
6	Spotted Gum - Grey Ironbark open forest on the foothills of the Central Coast, Sydney Basin	Dry sclerophyll forests (timber grasses)	VG	Good	14.4	8.3	7.5	262	46	42	12
Totals					68.8	56.6	12.2	1776	85	76	21

SPECIES CREDITS

Species Name	Tg	Individuals/Area to be certified	Individuals/Area in conservation measures	Credits Required	Credits Created for funded and managed offset	Credits Created for managed offset	Credits Created for planning instrument offset
Wallum froglet	0.75	0.05	0.13	1	1	1	0

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