



BaT project

Appendix F Ecology



Contents

Appendix F. Ecology.....	1
F.1 Flora	1
F.2 Fauna	6

Appendix F. Ecology

F.1 Flora

Table F-1 Likelihood of occurrence of threatened flora species within the study corridor

Family	Species	Status ¹	Distribution	Habitat preference	Likelihood
Asteraceae	<i>Picris conyzoides</i>	V, V	<i>Picris conyzoides</i> occurs within South East Queensland, between the Gold Coast in the south to Gympie in the north and as far west as Warwick and Crow's Nest (AOLA, 2014). The type specimen for <i>Picris conyzoides</i> was collected from Kangaroo Point, Brisbane in 1934 (Holzapfel and Walter 1993, AOLA 2014), with the collection remark 'a very abundant weed on vacant allotments' (AOLA, 2014).	Within the Brisbane area, this species was recorded along, or in close proximity to the Brisbane River. It has also been collected in an open eucalypt forest and a cultivated paddock north of Brisbane (AOLA, 2014).	Unlikely (Historic records (1934) are recorded within the study corridor, however, it is very unlikely suitable habitat remains in these highly urbanised areas. All parkland areas are well maintained e.g. mown and fertilised lawns, and subject to high human disturbance).
Brassicaceae	Wandering pepper-cress (<i>Lepidium peregrinum</i>)	-, E	<i>Lepidium peregrinum</i> was originally listed as extinct under the <i>Endangered Species Protection Act 1992</i> , but was rediscovered on the banks of Tenterfield Creek, Clifton, NSW (Scarlett, 1997). In Queensland, two herbarium specimens of <i>Lepidium peregrinum</i> exist, collected from the Bunya Mountains and Logan River/Tamborine Mountains area (Scarlett, 1997). However, threatened species searches of the New England Tableland (McIntyre et al. 1993), Darling Downs and Bunya Mountains (Fensham, 1998 and pers. comm; Fensham and Fairfax, cited in Scarlett, 1997) did not record this species (Scarlett, 1997). In 2001 targeted searches confirmed it occurred at nine scattered refugia in north-eastern New South Wales and south-eastern Queensland (TSSC, 2003).	Based on its recorded range in Queensland, this species occurs in upland areas between 700 to 1000m with a rainfall range of 800 to 1000mm per year (Scarlett, 1997).	Unlikely (based on rarity in Queensland, lack of proximal records and no suitable habitat)

Family	Species	Status ¹	Distribution	Habitat preference	Likelihood
Casuarinaceae	Dwarf heath casuarina (<i>Allocasuarina defungens</i>)	-, E	<i>Allocasuarina defungens</i> occurs from Raymond Terrace to Byron Bay in the North-Central Rivers (NSW) Natural Resource Management Region (Benwell and Steed, 1997).	This species grows mostly in tall heath on sand, and also on clay soils and sandstone (DEH, 2012).	Unlikely (based on lack of proximal records and no suitable habitat)
Euphorbiaceae	Bahrs Scrub Fontainea (<i>Fontainea venosa</i>)	V, V	<i>Fontainea venosa</i> has been recorded in Queensland between Beenleigh, south of Brisbane, north to Koolkooroon Creek in the Boyne Valley (AOLA, 2014). The main recorded population occur south west of Beenleigh, Brooyar State Forest east of Gympie, and the Koolkooroom Creek population in the Boyne Valley (AOLA, 2014).	This species occurs in Araucarian microphyll vine forest with an annual rainfall of 1000mm on alluvial soils along creeks (TSSC, 2008).	Unlikely (based on no suitable habitat)
Lauraceae	Stinking Cryptocarya (<i>Cryptocarya foetida</i>)	V, V	<i>Cryptocarya foetida</i> occurs in coastal South East Queensland, south of the Gold Coast, and north-east New South Wales south to Illuka (DEH, 2012).	This species occurs in littoral rainforest usually on sandy soils, with mature trees also known from basalt soils (DEH, 2012)	Unlikely (no suitable habitat)
Moraceae	Siah's backbone (<i>Streblus pendulinus</i>)	-, E	<i>Streblus pendulinus</i> is endemic to Australia and occurs from Cape York Peninsula and north-east Queensland and southwards as far as south-eastern New South Wales (CSIRO, 2010).	<i>Streblus pendulinus</i> grows in rainforest, gallery forest and drier, more seasonal rainforest (CSIRO, 2010).	Unlikely (no suitable habitat)

Family	Species	Status ¹	Distribution	Habitat preference	Likelihood
Myrtaceae	Angle-stemmed Myrtle (<i>Gossia gonoclada</i>)	E, E	<i>Gossia gonoclada</i> is known from nine sites between the Logan and Brisbane Rivers, South East Queensland (<i>Austromyrtus gonoclada</i> Recovery Team, 2001). One additional record is identified from Keppel Bay, Port Alma, south east of Rockhampton (AOLA, 2014). One record of this species was recorded in 1863 near Kangaroo Point (AOLA, 2014), but is unlikely to be present today.	This species occurs in remnant lowland riparian rainforest, below the peak flood level on alluvial terraces along permanent watercourses (<i>Austromyrtus gonoclada</i> Recovery Team, 2001).	Unlikely (no suitable habitat, due to development and clearing around the Brisbane River).
Oleaceae	Cooneana olive (<i>Notelaea ipsviciensis</i>)	E, CE	<i>Notelaea ipsviciensis</i> is known from three populations in the Ipswich area of southern Queensland. Total extent of occurrence is less than 2km ² (TSSC, 2008).	<i>Notelaea ipsviciensis</i> grows as an understorey plant in open woodlands, and is primarily associated with eucalypt-dominated dry sclerophyll communities situated on poor, sandstone-based soils (TSSC, 2008).	Unlikely (no suitable habitat)
Orchidaceae	Lesser swamp orchid (<i>Phaius australis</i>)	E, E	South East Queensland and northern New South Wales (DoE, 2014).	<i>Phaius australis</i> is commonly associated with coastal wet heath/sedgeland wetlands, swampy grassland or swampy forest and often where broad-leaved paperbark or swamp Mahogany grows. It is typically restricted to swamp-forest margins, where it occurs in swamp sclerophyll forest, swampy rainforest, or fringing open forest (DoE, 2014).	Unlikely (no suitable habitat)

Family	Species	Status ¹	Distribution	Habitat preference	Likelihood
Poaceae	Hairy-joint grass (<i>Arthraxon hispidus</i>)	V, V	<i>Arthraxon hispidus</i> has been recorded throughout Queensland and on the northern tablelands and north coast of New South Wales (DECC NSW, 2005 and Bostock and Holand cited in TSSC, 2008). In Queensland, records have identified species as far north as Port Douglas and as far south as Carnarvon National Park, however, most occurrences occur south of Noosa in South East Queensland (TSSC, 2008).	In Queensland, this species has been recorded from freshwater springs on coastal foredunes, in shaded gullies, on creek banks, and on sandy alluvium in creek beds in open forest (Queensland CRA/RFA Steering Committee 1997, 1998 cited in TSSC, 2008)	Unlikely (no suitable habitat and no proximal records).
Proteaceae	Macadamia nut (<i>Macadamia integrifolia</i>)	V, V	<i>Macadamia integrifolia</i> occurs from Mt Bauple, near Gympie, to Currumbin Valley in the Gold Coast Hinterland, South East Queensland (TSSC, 2008).	This species occurs in remnant rainforest, including complex mixed notophyll forest, and prefers partially open areas such as rainforest edges (Ryan, 2006).	Unlikely (no suitable habitat)
Rutaceae	Three-leaved bosistoa, heart-leaved bosistoa (<i>Bosistoa transversa</i>)	- , V	<i>Bosistoa transversa</i> is known from Richmond River, NSW, to Mt Larcom near Gladstone, Queensland (TSSC, 2008).	<i>Bosistoa transversa</i> grows in wet sclerophyll forest, dry sclerophyll forest and rainforest up to 300m. In association with <i>Argyrodendron trifoliolatum</i> , <i>Syzygium hodgkinsoniae</i> , <i>Endiandra pubens</i> , <i>Dendrocnide photinophylla</i> , <i>Acmena ingens</i> , <i>Diploglottis australis</i> and <i>Diospyros mabacea</i> (TSSC, 2008).	Unlikely (no suitable habitat).

Family	Species	Status ¹	Distribution	Habitat preference	Likelihood
Rutaceae	Mt Berryman phebalium (<i>Phebalium distans</i>)	E, CE	<i>Phebalium distans</i> is endemic to South East Queensland. Populations are only known from near Mt Berryman and Mt Jones Plateau, near Kingaroy (TSSC, 2008).	It always grows in semi-evergreen vine thicket on red volcanic soils, or in communities adjacent to this vegetation type (TSSC, 2008).	Unlikely (lack of suitable habitat)
Sapindaceae	Wedge-leaf tuckeroo (<i>Cupaniopsis shirleyana</i>)	V, V	<i>Cupaniopsis shirleyana</i> occurs in South East Queensland between Brisbane and Curtis Island (AOLA, 2014).	It grows in dry rainforest and scrubby urbanised areas on moderate to steep slopes, scree-slope gullies and rocky stream channels at elevations of 60-550m (TSSC, 2008).	Unlikely (One historic record (1880) occurs within the Brisbane City area (AOLA, 2014), however not within the study corridor, no suitable habitat remains in the study corridor).
Sparrmanniaceae	Native jute (<i>Corchorus cunninghamii</i>)	E, E	<i>Corchorus cunninghamii</i> was previously found from Brisbane down to Lismore in NSW, however, more recent fieldwork (Halford, 1995) indicated that there were only four locations with extant <i>C. cunninghamii</i> populations, these were at Brookfield, Ormeau and Wongawallan, Queensland and Toonumbar, NSW (Halford, 1995 cited in Saunders, 2001). Since 1995, populations have also been identified at Brisbane Forest Park and Mount Cotton (Saunders, 2001).	This species generally occurs on upper hill slopes or hillcrests with a south-easterly aspect in association with subtropical rainforest-open eucalypt forest ecotone (Halford, 1995 and Simmonds, 2000 cited in Saunders, 2001).	Unlikely (no suitable habitat)

¹ Conservation status under the EPBC and NCA respectively, where:

CE – Critically Endangered

E – Endangered

V – Vulnerable

R – Rare

NT – Near Threatened

F.2 Fauna

Table F-2 Likelihood of occurrence of threatened fauna species within a 5km buffer around the study corridor

Species	Status ¹	Distribution	Habitat preference	Likelihood
Amphibians				
Tusked frog (<i>Adelotus brevis</i>)	-, V	Disjunct distribution, occurring in the Clarke Range (mid-eastern Queensland), then from Shoalwater Bay south along the coast to Moss Vale (mid-eastern New South Wales), and inland to Blackdown Tableland and Carnarvon Gorge. Common only at latitudes of <400m asl (Hines et al. 2004).	Found in wet forest and dry forest environs usually along streams, but also around dams. Breeding takes place in streams and ponds (Hines et al. 2004).	Unlikely (no suitable habitat)
Birds				
Regent honeyeater (<i>Anthochaera phrygia</i>)	E, E	Widespread but with an extremely patchy distribution. Its range extends from south-east Queensland to central Victoria. Most sightings originate from a few sites in north-east Victoria, along the western slopes of the Great Dividing Range in New South Wales, and the Central Coast in New South Wales (Menkhurst et al. 1999, DoE 2014a).	Most records are from box-ironbark eucalypt associations, and it seems the species' prefers wetter, more fertile sites within these associations, such as along creek flats, broad river valleys and lower slopes (Menkhurst et al. 1999).	Unlikely (no suitable habitat, no records in area)
Australasian bittern (<i>Botaurus poiciloptilus</i>)	E, -	Occurs from South East Queensland to south-east South Australia, Tasmania and in the southwest of Western Australia. In Queensland, the bittern occurs in the far south-east; north to Baralaba and west to Wyandra, although in most years it is probably confined to a few coastal swamps. Rarely recorded in Queensland, and possibly survives only in protected areas such as the Cooloola and Fraser regions (DoE 2014b).	Occurs mainly in densely vegetated freshwater wetlands and, rarely, in estuaries or tidal wetlands. Favours wetlands with tall dense vegetation, where it forages in still, shallow water up to 0.3m deep, often at the edges of pools or waterways, or from platforms or mats of vegetation over deep water. Prefers permanent and seasonal freshwater habitats, particularly those dominated by sedges, rushes and/or reeds (eg <i>Phragmites</i> , <i>Cyperus</i> , <i>Eleocharis</i> , <i>Juncus</i> , <i>Typha</i> , <i>Baumea</i> , <i>Bolboschoenus</i>) or cutting grass (<i>Gahnia</i>) growing over muddy or peaty substrate (DoE 2014b).	Unlikely (no suitable habitat)

Species	Status ¹	Distribution	Habitat preference	Likelihood
Coxen's fig-parrot (<i>Cyclopsitta diophthalma coxeni</i>)	E, E	Poorly known. Core distribution extends from Gympie in south-eastern Queensland to the Richmond River in north-eastern New South Wales, and west to the Bunya Mountains, Main Range and Koreelah Range. In Queensland, the most recent reliable records are from near Imbil, Kin Kin Creek, Upper Pinbarren Creek, Montville, the Maleny area, Mount Glorious, Main Range National Park and Lamington National Park (Coxen's Fig Parrot Recovery Team 2001, DoE 2014e).	In the past, most abundant in lowland sub-tropical rainforests. Recent records from subtropical rainforest, dry rainforest, littoral and developing littoral rainforest, sub-littoral mixed scrub, riparian corridors in woodland, open woodland and otherwise cleared land, and urbanised and agricultural areas with fig trees (Coxen's Fig Parrot Recovery Team 2001)	Unlikely (no suitable habitat)
Eastern bristlebird (<i>Dasyornis brachypterus</i>)	E, E	Occurs in three geographically-separate regional populations. The first occurs in south-eastern Queensland and north-eastern New South Wales, and consists of extant local populations at Conondale Range National Park, Main Range National Park, Mount Barney National Park, Lamington National Park, Border Ranges National Park, Grady's Creek and Gibraltar Range National Park. The second occurs on the central coast of NSW, the third in south-eastern New South Wales and eastern Victoria (OEH 2012).	Found in habitats with a variety of species compositions, but which are defined by a similar structure of low, dense, ground or understorey vegetation (OEH 2012).	Unlikely (no suitable habitat)
Red goshawk (<i>Erythrociorchis radiatus</i>)	V, E	Sparingly distributed across coastal and sub-coastal Australia, from the western Kimberly to northern New South Wales. Appears to have been contraction in range in recent years. Occasionally recorded from gorge country in central Australia and western Queensland (Ryan 2006, Curtis et al. 2012, DERM 2012, DoE 2014i).	Occupies a range of habitats, although primarily found in extensive areas of coastal and sub-coastal open forest and woodland supporting a mosaic of vegetation types. Favoured areas contain permanent water, are relatively fertile and biologically rich with large population of birds. Rarely seen away from large areas of intact vegetation. Nests are typically within tall trees less than one kilometre from permanent water (Ryan 2006, Curtis et al. 2012, DERM 2012, DoE 2014i).	Unlikely (no suitable habitat)

Species	Status ¹	Distribution	Habitat preference	Likelihood
Squatter pigeon (<i>Geophaps scripta scripta</i>)	V, V	Distribution extends from the Lynd-Burdekin divide in central Queensland, west to Charleville and Longreach, and east to the coast from Proserpine to Port Curtis. Localised populations in south east Queensland (Curtis et al. 2012, DoE 2014k).	Typically occurs in grassy woodlands and open forests dominated by eucalypts, commonly observed in habitats in reasonable proximity to water (Curtis et al. 2012, DoE 2014k).	Unlikely (no suitable habitat)
Swift parrot (<i>Lathamus discolor</i>)	E, E	Breeds in Tasmania, migrates to mainland Australia in autumn, where it is semi-nomadic during winter, foraging in dry woodlands mostly in Victoria and New South Wales. Smaller but significant numbers have been recorded regularly in south-eastern Queensland and occasionally in the Australian Capital Territory and south eastern South Australia (Saunders and Tzaros 2011).	Key habitats for the species in northern New South Wales and south-eastern Queensland are <i>Eucalyptus crebra</i> , <i>E. tereticornis</i> or <i>E. melliodora</i> forest, while on the western slopes <i>E. sideroxylon</i> and <i>E. microcarpa</i> are commonly utilized. Swift parrots actively select medium to large trees in which to forage (Saunders and Tzaros 2011).	Unlikely (no suitable habitat)
Red-tailed tropicbird (<i>Phaethon rubricauda</i>)	-, V	Occurs in tropical waters of the Indian and Pacific Oceans. In Australia, the red-tailed tropicbird occurs from the south west corner of Western Australia, along the entire western and northern coast to Cape York, with scattered records along the east and south coasts. Storm-wrecked birds have been reported further inland (Garnett and Crowley 2000).	Pelagic species that inhabits tropical, marine waters. Prefers waters of between 24 and 30°C but will occasionally follow warm currents into cooler waters. Nests are located on isolated islands, stacks, atolls and cays in inaccessible locations such as cliffs (NPWS NSW 1999, Garnett and Crowley 2000).	Unlikely (no suitable habitat)
Black-throated finch (<i>Poephila cincta cincta</i>)	E, E	Historically this species' range extended from north-east New South Wales to the Atherton Tablelands. Currently it is known from two strongholds in the Townsville region and from scattered locations throughout central Queensland (Black-throated Finch Recovery Team et al. 2007, Garnett et al. 2011).	Typically occurs in grassy open woodlands and forests dominated by Eucalyptus, Corymbia, Melaleuca and Acacia often in the vicinity of water courses and occasionally in tussock grasslands or freshwater wetlands. Requires access to seeding grasses, water and trees providing suitable nesting habitat. Probably requires a mosaic of different habitat types in which to find seed during the wet season (Black-throated Finch Recovery Team et al. 2007, Garnett et al. 2011).	Unlikely (no suitable habitat)

Species	Status ¹	Distribution	Habitat preference	Likelihood
Australian painted snipe (<i>Rostratula australis</i>)	E, V	Has been recorded from wetlands in all Australian states, however, is most common in eastern Australia, especially the Murray-Darling Basin. Individuals are nomadic, and there is some evidence of partial migration from south-eastern wetlands to coastal central and northern Queensland in autumn and winter (Garnett et al. 2011, Curtis et al. 2012, DoE 2014n).	Inhabits shallow, well vegetated, temporary or infrequently filled wetlands, which may have associated trees, shrubs or samphire. Occasionally inhabits brackish wetlands, saltmarsh or claypans. Typical sites include those with rank emergent tussocks of grass, sedges, rushes, reeds or samphire, often with clumps of <i>Muehlenbeckia</i> or sometimes <i>Melaleuca</i> . Feeds on seeds and invertebrates from the water's edge (Garnett et al. 2011, DoE 2014n)	Unlikely (no suitable habitat)
Black-breasted button-quail (<i>Turnix melanogaster</i>)	V, V	South-east Queensland from Byfield in the north to the Border Ranges rainforest in the south, generally east of the Great Dividing Range, although there are records from Palm Grove National Park and Barakula State Forest, 300km inland (Mathieson and Smith 2009, Garnett et al. 2011).	Inhabits periodically water-stressed rainforests, vine thickets and Brachychiton scrubs that may incorporate brigalow and belah, low thickets or woodlands with a dense understorey but little ground cover (typically dominated by <i>Acacia</i> sp), and vine scrubs and Acacia thickets in littoral situations (Mathieson and Smith 2009).	Unlikely (no suitable habitat)
Insects				
Illidge's ant-blue (<i>Acrodipsas illidgei</i>)	-, V	Illidge's ant-blue appears to be confined to a handful of sites associated with Mary Heads, Beaver Rock, Maroom, Redland Bay and Point Halloran in South East Queensland, and Brunswick Heads in northern New South Wales (Beale and Zalucki 1995).	This myrmecophagus species is found in mangroves and adjacent <i>Allocasuarina glauca</i> habitats, where the host ant <i>Crematogaster</i> sp. is found (Beale and Zalucki 1995).	Unlikely (no suitable habitat)
Richmond birdwing (<i>Ornithoptera richmondi</i>)	-, V	The species' distribution once extended from Grafton New South Wales to Maryborough in South East Queensland. Its current distribution is largely restricted to two main areas, from Coorabara to Caboolture in South East Queensland, and from Ormeau and Mount Tamborine on the Gold Coast to Wardell in north-east New South Wales. It	Richmond birdwing butterflies are associated with moist subtropical rainforests where their two larval food plants (<i>Pararistolochia praevenosa</i> and <i>P. laheyana</i>) occur. Adults feed on the nectar of a number of native rainforest trees, but will also utilise some exotic species. Habitats are nearly always on rich soils, such as those of volcanic or	Unlikely (no suitable habitat)

Species	Status ¹	Distribution	Habitat preference	Likelihood
		occasionally occurs and breeds in the Brisbane area (DEHP 2012).	alluvial origin (Wildlife Queensland 2013).	
Mammals				
Large-eared pied bat (<i>Chalinolobus dwyeri</i>)	V, V	Poorly known distribution. Most extensive part of distribution occurs in NSW in association with the sandstone escarpments of the Sydney basin and north-west slopes. In Queensland the species is found in areas with extensive cliffs and caves, primarily in the central Queensland sandstone belt associated with the Carnarvon Ranges, Blackdown Tableland and Cania Gorge. Records from south-east Queensland suggest that high elevation areas of rhyolite, trachyte and basalt may be similarly important (Churchill 2008, Curtis et al. 2012, DoE 2014c).	The species is most commonly recorded from dry sclerophyll forest; however there are also records from rainforest, wet sclerophyll forests and Callitris-dominated forest. Known to roost in caves, crevices and pock-holes in cliffs, in fairy martin (<i>Petrochelidon ariel</i>) nests and mines. Tree roosts may also be used. Fertile wooded valley habitat in close proximity to sandstone cliffs appear to be particularly important to this species (Churchill 2008, DERM 2011, Curtis et al. 2012, DoE 2014c).	Unlikely (no suitable habitat)
Northern quoll (<i>Dasyurus hallucatus</i>)	E, -	Previously occurred across most of the northern third of Australia, has suffered extensive range reduction, and is now discontinuously distributed across northern Australia, with core populations in rocky and/or high rainfall areas. May occur throughout central Queensland, a number of populations are known to occur in areas such as the uplands associated with the Carnarvon Ranges, Expedition National Park, and around Springsure (Woinarski et al. 2008, Hill and Ward 2010, DoE 2014f).	Northern quolls do not have highly specific habitat requirements, and occur in a variety of habitats across their range. Most quoll populations are now associated with rocky or rugged upland areas. Recent surveys throughout Queensland suggest that northern quolls are more likely to be present in areas of high relief that have shallower soils, greater boulder cover, less fire impact and that are closer to permanent water (Woinarski et al. 2008, Hill and Ward 2010, DoE 2014f).	Unlikely (no suitable habitat, no known populations in region)
Spot-tailed quoll (<i>Dasyurus maculatus maculatus</i>)	E, -	Distribution extends from central Queensland (around Gladstone) to South Australia and Tasmania (DoE 2014g).	Occurs in large tracts of vine-forest, wet and dry sclerophyll forests and woodlands. Uses boulder piles, fallen logs and standing tree hollows as shelter sites (Belcher et al. 2008, Curtis et al. 2012, DoE 2014g)	Unlikely (no suitable habitat)

Species	Status ¹	Distribution	Habitat preference	Likelihood
Koala (<i>Phascolarctos cinereus</i>)	V, V	Eastern Australia, extending from north Queensland to eastern South Australia. Its distribution is strongly linked to the presence and abundance of eucalypt (and some non-eucalypt) food plants (Martin et al. 2008, Curtis et al. 2012)	Inhabits eucalypt forests and woodlands. The species of eucalypt and the extent of tree cover are the most important habitat characteristics, although water regime and soil fertility may also be important (Martin et al. 2008, Curtis et al. 2012)	Unlikely (no suitable habitat)
Long-nosed potoroo (<i>Potorous tridactylus tridactylus</i>)	V, V	Distribution extends from Victoria through New South Wales to Queensland. In Queensland the species has been recorded at Many Peaks Range, south-east of Gladstone, Bellthorpe near Beerwah and in the Border Ranges. It has also been seen at Bulburin, south-west of Miriam Vale (DoE 2014l).	Limited information available on the species' habitat in Queensland, with no consistent pattern evident. Can be found in wet eucalypt forests to coastal heaths and scrubs. The main factors appear to be access to some form of dense vegetation for shelter and the presence of an abundant supply of fungi for food (DoE 2014l).	Unlikely (no suitable habitat)
Grey-headed flying-fox (<i>Pteropus poliocephalus</i>)	V, -	The distribution of the grey-headed flying-fox extends along coastal eastern Australia from Rockhampton, Queensland, through New South Wales to Victoria, roughly extending to the 800mm isohyet. There are rare records of individuals west to Adelaide SA, south to Flinders Island Tasmania, and north to Mackay, Queensland (Churchill 2008, DECCW 2009, Curtis et al. 2012, DoE 2014m).	Utilise a wide range of forest and woodland communities, depending on availability of fruit and flowers (Churchill 2008, Eby and Law 2008, DECCW 2009, Curtis et al. 2012, DoE 2014m).	Confirmed
Water mouse (<i>Xeromys myoides</i>)	V, V	The water mouse occurs in a series of disjunct populations, and has been recorded in the Northern Territory, Queensland and Papua New Guinea. In Queensland the species occurs on the south central coast and in the south-east. In the south-east the species occurs from the Coomera River to Hervey Bay, including Fraser Island and the islands of Moreton Bay (DERM 2010, DoE 2014o).	In South East Queensland habitat for the water mouse includes mangrove communities and adjacent sedgelands, grassland and freshwater wetlands. The most productive zone appears to be between the supralittoral bank, in which the mouse nests, and the first 100m into the mangroves, which provide microhabitat features important to the mouse, such as tidal pools, channels, crab holes, pneumatophores, crevices in bark and around roots, hollows in standing and fallen timber, suspended drifts of twigs and leaves,	Unlikely (no suitable habitat)

Species	Status ¹	Distribution	Habitat preference	Likelihood
			and driftwood (DERM 2010, DoE 2014o).	
Reptiles				
Three-toed snake-tooth skink <i>(Coeranoscincus reticulatus)</i>	V, NT	Occurs in the ranges and lowlands between Cooloola in south-eastern Queensland and Grafton in north-eastern New South Wales. Known localities in Qld: Emuvale, Tambourine Mountain, Beechmont, Lamington National Park, Binna Burra, south-east of Maleny, Cooloola State Forest and Cunningham's Gap National Park (DoE 2014d).	Found mostly in closed forest and possibly open layered Eucalyptus forest, generally on loamy basaltic soils, but also found in closed forest overlying silica sand dunes at Cooloola (DoE 2014d).	Unlikely (no suitable habitat)
Collared delma <i>(Delma torquata)</i>	V, V	Confined to south east Queensland and north-east New South Wales, distribution is thought to extend to Rockhampton on the Queensland coast, up to Dysart, west to Augathella, then south east to Deepwater in New South Wales, then north east to the New South Wales coast north of Ballina. Due to its specific habitat requirements, the species occurs as a number of fragmented populations within this distribution (Richardson 2006, DSEWPC 2011, DoE 2014h).	The species inhabits eucalypt-dominated woodlands and open-forests on alluvium, undulating country on fine-grained sedimentary rocks and sandstone ranges. Common canopy species include: poplar box (<i>Eucalyptus populnea</i>), brigalow (<i>Acacia harpophylla</i>), lemon-scented gum (<i>Corymbia citriodora</i>), silver-leaved ironbark (<i>Eucalyptus melanophloia</i>), Moreton Bay ash (<i>Corymbia tessellaris</i>) and gum top box (<i>Eucalyptus moluccana</i>). A number of microhabitat components appear to be essential, these include: rocks, logs, bark and other coarse woody debris, and mats of leaf litter (30-100mm thick) (Richardson 2006, DSEWPC 2011, DoE 2014h).	Unlikely (no suitable habitat)

Species	Status ¹	Distribution	Habitat preference	Likelihood
Dunmall's snake (<i>Furina dunmalli</i>)	V, V	Confined to the Brigalow Belt bioregion of south-eastern Queensland and north-eastern New South Wales (DSEWPC 2011, Curtis et al. 2012, DoE 2014j).	Typically found in vegetation communities dominated by brigalow and other Acacia (<i>A. burrowii</i> , <i>A. leiocalyx</i>), cypress pine (<i>Callitris</i> sp.), bulloak (<i>Allocasuarina luehmannii</i>), belah, and dry sclerophyll forest, usually on black clay and clay loam soils. Has also been recorded from various lemon-scented gum, ironbark (<i>E. melanophloia</i> , <i>Eucalyptus crebra</i>), white cypress and bulloak open forest and woodland communities on sandstone derived soils. The majority of records are from between 200 and 500m altitude (DSEWPC 2011, Curtis et al. 2012, DoE 2014j).	Unlikely (no suitable habitat)

¹ Conservation status under the EPBC and NCA respectively, where:

CE – Critically Endangered

E – Endangered

V – Vulnerable

R – Rare

NT – Near Threatened