

Epping Road widening between Essex Street and Blaxland Road, Epping

Appendix F Likelihood of occurrence assessment of threatened and migratory biota

November 2015

Appendix F – Likelihood of occurrence assessment of threatened and migratory biota

Threatened ecological communities

Scientific name	TSC status	EPBC status	combined source	Habitat description	LOO	Notes
Agnes Banks Woodland in the Sydney Basin Bioregion	E3		Community known to occur within 10 km (OEH 2014a)	Most remnants occur near Agnes Banks in Penrith LGA, on eastern bank of the Hawkesbury River. Occurs on aeolian sands overlaying Tertiary alluviums. Structure varies from low woodland on higher ridges to sedgeland in low-lying depressions. Characteristic species include <i>Eucalyptus sclerophylla</i> , <i>Angophora bakeri</i> and <i>Banksia serrata</i> .	Absent	Community not present in study area.
Blue Gum High Forest of the Sydney Basin Bioregion	E4B	CE	Community likely to occur within 10 km (DotE 2014a)	Occurs on the Hornsby Plateau, north eastern edge of the Cumberland Plain with most remnants in Hornsby, Ku-ring-gai and Baulkham Hills LGAs. Typically occurs in high rainfall areas on fertile soils derived from Wianamatta shale. Grades into Sydney Turpentine-Ironbark Forest at lower rainfall areas. Moist, tall open forest characterised by <i>Eucalyptus saligna</i> and <i>E. pilularis</i> . Usually has small tree layer of <i>Pittosporum undulatum</i> , <i>Elaeocarpos reticulatus</i> and <i>Allocasuarina torulosa</i> over a low, open shrub layer and an understorey of grasses, herbs and ferns.	Absent	Community not present in study area.
Blue Mountains Shale Cap Forest in the Sydney Basin Bioregion	E3	CE	Community known to occur within 10 km (OEH 2014a)	Found on deep fertile soils formed on Wianamatta Shale, on moist sheltered sites at lower to middle altitudes of the Blue Mountains and Wollemi areas. Extensive occurrences of shale are at Springwood, Berambing to Kurrajong Heights, Mountain Lagoon and Colo Heights. Characteristic tree species of this ecological community are <i>Eucalyptus deanei</i> , <i>E. cypellocarpa</i> and <i>Syncarpia glomulifera</i> . The structure of the community was originally tall open forest to open forest, depending on site conditions and history, but as a result of partial clearance may now exist as woodland or as groups of remnant trees.	Absent	Community not present in study area.
Castlereagh Scribbly Gum Woodland in the Sydney Basin Bioregion	V2		Community known to occur within 10 km (OEH 2014a)	Occurs almost exclusively on soils derived from Tertiary alluvium, or on sites located on adjoining shale or Holocene alluvium, with known occurrences in the Bankstown, Blacktown, Campbelltown, Hawkesbury, Liverpool and Penrith LGAs. Typically on sandy soils and on slightly higher ground than Castlereagh Ironbark Forest or Shale Gravel Transition Forest (Tozer 2003). Dominated by <i>Eucalyptus parramattensis</i> subsp. <i>parramattensis</i> , <i>Angophora bakeri</i> and <i>E. sclerophylla</i> . A small tree stratum of <i>Melaleuca decora</i> is sometimes present, generally in areas with poorer drainage. It has a well-developed sclerophyllous shrub stratum over a diverse range of forbs.	Absent	Community not present in study area.

Scientific name	TSC status	EPBC status	combined source	Habitat description	LOO	Notes
Coastal Saltmarsh in the New South Wales North Coast, Sydney Basin and South East Corner Bioregions	E3	V	Community known to occur within 10 km (OEH 2014a)	Occurs on landward side of mangrove stands in intertidal zones along the shores of estuaries and lagoons that are permanently or intermittently open to the sea. Characterised by <i>Baumea juncea</i> , <i>Juncus kraussii</i> , <i>Sarcocornia quinqueflora</i> , <i>Sporobolus virginicus</i> , <i>Triglochin striata</i> , <i>Isolepis nodosa</i> , <i>Samolus repens</i> , <i>Selliera radicans</i> , <i>Suaeda australis</i> and <i>Zoysia macrantha</i> , with occasional scattered mangroves occurring throughout the saltmarsh. Saltpans and tall reeds may also occur.	Absent	Community not present in study area.
Coastal Upland Swamp in the Sydney Basin Bioregion	E3		Community known to occur within 10 km (OEH 2014a)	Includes open graminoid heath, sedgeland and tall scrub associated with periodically waterlogged soils on the Hawkesbury sandstone plateaus. Generally associated with soils that are acidic and vary from yellow or grey mineral sandy loams with a shallow organic horizon to highly organic spongy black peat soils with pallid subsoils. May include tall open scrubs, tall closed scrubs, closed heaths, open graminoid heaths, sedgelands and fernlands.	Absent	Community not present in study area.
Cooks River/Castlereagh Ironbark Forest in the Sydney Basin Bioregion	E3		Community known to occur within 10 km (OEH 2014a)	Occurs on the Cumberland Plain with the most extensive stands in Castlereagh and Holsworthy areas. Smaller remnants in Kemps Creek area and eastern section of the Cumberland Plain. Ranges from open forest to low woodland, with a canopy dominated by <i>Eucalyptus fibrosa</i> and <i>Melaleuca decora</i> along with other species of eucalypt. Dense shrubby understorey of <i>Melaleuca nodosa</i> , <i>Lissanthe strigosa</i> and <i>Fabaceae sp</i> over sparse ground layer of grasses and herbs.	Absent	Community not present in study area.
Cumberland Plain Woodland in the Sydney Basin Bioregion	E4B	CE	Community known to occur within 10 km (OEH 2014a)	Grassy woodland/forest endemic to the hills and plains of the Cumberland Plain. Canopy typically dominated by <i>Eucalyptus moluccana</i> and <i>E. tereticornis</i> , with <i>E. crebra</i> , <i>Corymbia maculata</i> and <i>E. eugenoides</i> occurring less frequently. Shrub layer dominated by <i>Bursaria spinosa</i> , and grasses such as <i>Themeda australis</i> and <i>Microlaena stipoides var stipoides</i> .	Absent	Community not present in study area.
Duffys Forest Ecological Community in the Sydney Basin Bioregion	E3		Community known to occur within 10 km (OEH 2014a)	Extensively fragmented distribution, occurring primarily within Warringah, and Kuring-gai Local Government Areas (LGA) with minor occurrences in the Pittwater, Manly and Hornsby LGAs. Occurs in association with shale lenses and lateritic soils in Hawkesbury Sandstone. Rock outcrops are usually absent from this community, except on the fringes, where it adjoins typical sandstone vegetation, generally characterised by extensive sandstone outcrops. Situated on ridgetops, plateaus and upper slopes, but may also occur on mid-slopes or benches downslope of Sydney Sandstone Ridgetop Woodland.	Absent	Community not present in study area.
Eastern Suburbs Banksia Scrub in the Sydney Basin Bioregion	E3	E	Community known to occur within 10 km (OEH 2014a)	Surviving stands total 146 hectares. Found in the LGA's of Botany, Randwick, Waverly and Manly. Occurs in disjunct patches of nutrient poor aeolian dune sand (OEH 2013). Predominantly a sclerophyllous heath or scrub community with some remnants containing small patches of woodland (OEH 2013).	Absent	Community not present in study area.

Scientific name	TSC status	EPBC status	combined source	Habitat description	LOO	Notes
Freshwater Wetlands on Coastal Floodplains of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions	E3		Community known to occur within 10 km (OEH 2014a)	Occurs in coastal areas subject to periodic flooding with standing fresh water for at least part of the year. Typically on silts, muds or humic loams below 20 m elevation in low-lying parts of floodplains, alluvial flats, depressions, drainage lines, backswamps, lagoons and lakes. Structure and composition varies spatially and temporally depending on the water regime, though is usually dominated by herbaceous plants and has few woody species.	Absent	Community not present in study area.
Hygrocybeae Community of Lane Cove Bushland Park in the Sydney Basin Bioregion	E4B		Community known to occur within 10 km (OEH 2014a)	Hygrocybeae Community of Lane Cove Bushland Park is an assemblage of more than 20 species of fungi in the family Hygrophoraceae (Fungi, Basidiomycota, Agaricales, Hygrophoraceae; OEH 2014). Restricted to a core zone along Gore Creek catchment and Lane Cove LGA. Most of the species live in warm temperate gallery rainforest centred on the banks of the north-eastern arm of Gore Creek and its tributaries in Lane Cove Bushland Park (OEH 2014).	Absent	Community not present in study area.
Littoral Rainforest in the New South Wales North Coast, Sydney Basin and South East Corner Bioregions	E3	CE	Community known to occur within 10 km (OEH 2014a)	Occurs along the NSW coast, usually within 2 km of the ocean on a variety of substrates. Variable structure and composition, typically with closed canopy. Generally rainforest species with vines a major component.	Absent	Community not present in study area.
Lowland Rainforest in the NSW North Coast and Sydney Basin Bioregions	E3	CE	Community known to occur within 10 km (OEH 2014a)	Occurs north of the Hawkesbury River to the Qld border. Associated with a range of high-nutrient geological substrates, notably basalts and fine-grained sedimentary rocks, on coastal plains and plateaux, footslopes and foothills. Includes subtropical rainforest and related, structurally complex forms of dry rainforest. In undisturbed state has a closed canopy with high tree diversity. A range of plant growth forms are present in Lowland Rainforest, including palms, vines and vascular epiphytes. Scattered eucalypt emergents (e.g. <i>Eucalyptus grandis</i> , <i>E. saligna</i>) may occasionally be present.	Absent	Community not present in study area.
Moist Shale Woodland in the Sydney Basin Bioregion	E3	CE	Community known to occur within 10 km (OEH 2014a)	Occurs on clay soils from Wianamatta Shale in the southern half of the Cumberland Plain, and is intermediate between Cumberland Plain Woodland and Western Sydney Dry Rainforest. Similar to Cumberland Plain Woodland but with more mesic shrub understorey. Dominant canopy trees include Forest Red Gum (<i>Eucalyptus tereticornis</i>), Grey Box (<i>E. moluccana</i>), Narrow-leaved Ironbark (<i>E. crebra</i>) and Spotted Gum (<i>Corymbia maculate</i>). Small trees, such as Hickory Wattle (<i>Acacia implexa</i>) and Sydney Green Wattle (<i>A. parramattensis ssp parramattensis</i>) are also common. The shrub layer includes <i>Breynia oblongifolia</i> , Hairy Clerodendrum (<i>Clerodendrum tomentosum</i>) and Indian Weed (<i>Siegesbeckia orientalis ssp orientalis</i>).	Absent	Community not present in study area.

Scientific name	TSC status	EPBC status	combined source	Habitat description	LOO	Notes
Pittwater and Wagstaffe Spotted Gum Forest in the Sydney Basin Bioregion	E3		Community known to occur within 10 km (OEH 2014a)	Occurs entirely within Pittwater LGA on the Barrenjoey Peninsula and Western Pittwater Foreshores (OEH 2013). Remnants are typically small and on private properties and council reserves. Associated with shale derived soils and high rainfall on lower hill slopes on the Narrabeen Group. Structural form - typically open forest but may now exist as woodland or remnant trees (OEH 2013)	Absent	Community not present in study area.
River-Flat Eucalypt Forest on Coastal Floodplains of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions	E3		Community known to occur within 10 km (OEH 2014a)	Occurs on flats, drainage lines and river terraces of coastal floodplains where flooding is periodic and soils generally rich in silt, lack deep humic layers and have little or no saline (salt) influence. Occurs south from Port Stephens in the NSW North Coast, Sydney Basin and South East Corner bioregions. Characterised by a tall open canopy layer of eucalypts with variable species composition.	Absent	Community not present in study area.
Shale gravel Transition Forest in the Sydney Basin Bioregion	E3	CE	Community known to occur within 10 km (OEH 2014a)	Primarily in the northern section of the Cumberland Plain, also found in Liverpool/Holsworthy, Bankstown, Yennora, Villawood and Kemps Creek areas. Occurs primarily where shallow deposits from ancient river systems overlay shale soils, but also associated with localised concentrations of iron-hardened gravel. Open forest with canopy dominated by <i>Eucalyptus fibrosa</i> , <i>E. moluccana</i> and <i>E. tereticornis</i> , often with small tree layer of <i>Melaleuca decora</i> over a sparse shrub layer. Grades into Cumberland Plain Woodland where the influence of gravel soil declines, and into Cooks River/Castlereagh Ironbark Forest or Castlereagh Scribbly Gum Woodland where gravel deposits are thick.	Absent	Community not present in study area.
Shale/Sandstone Transition Forest	E3	E	Community likely to occur within 10 km (DotE 2014a)	Occurs on the edges of the Cumberland Plain where clay soils on shale intergrade with sandstone soils or where shale caps overlay sandstone. Species composition variable depending on soil influences. Dominant tree species include <i>Eucalyptus tereticornis</i> , <i>E. punctata</i> , <i>E. globoidea</i> , <i>E. eugenioides</i> , <i>E. fibrosa</i> and <i>E. crebra</i> . Areas with a low sandstone influence have an understorey closer to Cumberland Plain Woodland.	Absent	Community not present in study area.
Southern Sydney sheltered forest on transitional sandstone soils in the Sydney Basin Bioregion	E3		Community known to occur within 10 km (OEH 2014a)	Restricted to sheltered heads and upper slopes of gullies on transitional zones where sandstone outcrops may exist, but where soils are influenced by lateral movement of moisture, nutrients and sediment from more fertile substrates in an area bounded by Hurstville, Carss Park, Bundeena, Otford, Stanwell Tops, Darkes Forest, Punchbowl Creek and Menai. Open forest dominated by <i>Angophora costata</i> , <i>Eucalyptus piperita</i> and occasional <i>E. pilularis</i> over scattered sub-canopy trees, a diverse shrub layer and well-developed groundcover of ferns, forbs, grasses and graminoids. Variable species composition.	Absent	Community not present in study area.

Scientific name	TSC status	EPBC status	combined source	Habitat description	LOO	Notes
Subtropical and Temperate Coastal Saltmarsh		V	Community likely to occur within 10 km (DotE 2014a)	Restricted to sheltered heads and upper slopes of gullies on transitional zones where sandstone outcrops may exist, but where soils are influenced by lateral movement of moisture, nutrients and sediment from more fertile substrates in an area bounded by Hurstville, Carss Park, Bundeena, Otford, Stanwell Tops, Darkes Forest, Punchbowl Creek and Menai. Open forest dominated by <i>Angophora costata</i> , <i>Eucalyptus piperita</i> and occasional <i>E. pilularis</i> over scattered subcanopy trees, a diverse shrub layer and well-developed groundcover of ferns, forbs, grasses and graminoids. Variable species composition.	Absent	Community not present in study area.
Swamp Oak Floodplain Forest of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions	E3		Community known to occur within 10 km (OEH 2014a)	Typically occurs below 20 m asl on waterlogged or periodically inundated flats, drainage lines, lake margins and estuarine fringes on coastal floodplains of NSW. Associated with grey-black clay-loams and sandy loams, saline or sub-saline groundwater. Structure variable from open forests to scrubs or reedlands with scattered trees. Canopy dominated by <i>Casuarina glauca</i> (north of Bermagui) or <i>Melaleuca ericifolia</i> (south of Bermagui). Understorey characterised by frequent occurrences of vines, a sparse cover of shrubs, and a continuous groundcover of forbs, sedges, grasses and leaf litter.	Absent	Community not present in study area.
Swamp Sclerophyll Forest on Coastal Floodplains of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions	E3		Community known to occur within 10 km (OEH 2014a)	Usually occurs below 20 m asl (sometimes up to 50 m). Associated with humic clay loams and sandy loams, on waterlogged or periodically inundated alluvial flats and drainage lines associated with coastal floodplains. Characterised by open to dense tree layer of eucalypts and paperbarks, with trees up to or higher than 25 m. Includes areas of fern land and tall reed or sedge land, where trees are sparse or absent.	Absent	Community not present in study area.
Sydney Freshwater Wetlands in the Sydney Basin Bioregion	E3		Community known to occur within 10 km (OEH 2014a)	Occurs on sand dunes and low-nutrient sandplains along coastal areas in Sydney Basin bioregion. Known from Lake Macquarie, Wyong, Gosford, Pittwater, Warringah, Woollahra, Waverly, Botany, Rockdale, Randwick, Sutherland and Wollongong LGA's. Largely restricted to freshwater swamps and swales and depressions on sand dunes and low nutrient sandplains (OEH 2013).	Absent	Community not present in study area.
Themeda grassland on seacliffs and coastal headlands in the NSW North Coast, Sydney Basin and South East Corner Bioregions	E3		Community known to occur within 10 km (OEH 2014a)	<i>Themeda australis</i> is the dominant species in the community. Found on a range of substrates. <i>Themeda australis</i> is an extremely widespread species, but in this community it may have a distinctive appearance, being prostrate and having glaucous leaves. <i>Banksia integrifolia</i> subsp. <i>integrifolia</i> , <i>Westringia fruticosa</i> and <i>Acacia sophorae</i> occurs as an emergent shrub or as a dense cover where they have recruited over grasslands. Smaller shrubs occur often as prostrate to dwarf forms.	Absent	Community not present in study area.
Turpentine-Ironbark	E3	CE	Community likely to	Occurs on the Cumberland Plain, with most remnants in Baulkham Hills,	Absent	Community not

Scientific name	TSC status	EPBC status	combined source	Habitat description	LOO	Notes
Forest in the Sydney Basin Bioregion			occur within 10 km (DotE 2014a)	Hawkesbury, Hornsby, Ku-ring-gai, Parramatta, Ryde, Sutherland and Wollondilly LGAs. Open forest characterised by <i>Syncarpia glomulifera</i> , <i>Eucalyptus punctata</i> , <i>Eucalyptus paniculata</i> and <i>E. eugenoides</i> . In areas of high rainfall (over 1050 mm per annum) <i>E. saligna</i> is more dominant. Sparse shrub stratum of <i>Pittosporum undulatum</i> and <i>Polyscias sambucifolia</i> .		present in study area.
Western Sydney Dry Rainforest in the Sydney Basin Bioregion	E3	CE	Community known to occur within 10 km (OEH 2014a)	Restricted to hilly country where it occurs on clay soils derived from Wianamatta shale on sheltered lower slopes and gullies. Very restricted and occurs mostly in the Razorback Range near Picton. Outlying occurrences at Grose Vale and Cattai. Canopy trees include <i>Melaleuca styphelioides</i> , <i>Acacia implexa</i> and <i>Alectryon subcinereus</i> . Shrub layer includes rainforest species <i>Notolaea longifolia</i> , <i>Clerodendrum tomentosum</i> and <i>Pittosporum revolutum</i> . The shrub layer combines with vines to form dense thickets in sheltered locations.	Absent	Community not present in study area.

Threatened flora species

Scientific name	Common name	TSC status	EPBC status	combined source	Habitat description	LOO	Notes
<i>Acacia bynoeana</i>	Bynoe's Wattle	E1,P	V	Species or species' habitat likely to occur within 10 km (DotE 2014a)	Endemic to central eastern NSW, currently known from only 34 locations, many of only 1-5 plants. Grows mainly in heath/ dry sclerophyll forest on sandy soils, prefers open, sometimes slightly disturbed sites such as trail margins, road edges, and in recently burnt open patches. Flowers September to March, and fruit matures in November.	Nil	No suitable habitat within the highly modified and landscaped vegetation in the study area.
<i>Acacia pubescens</i>	Downy Wattle	V,P	V	6 records within 10 km (OEH 2014a); Species or species' habitat likely to occur within 10 km (DotE 2014a)	Occurs mainly in Bankstown-Fairfield-Rookwood and Pitt Town areas, with outliers at Barden Ridge, Oakdale and Mountain Lagoon. Grows on alluviums, shales and shale/sandstone intergrades. Soils characteristically gravelly, often with ironstone. Occurs in open woodland and forest, in communities including Cooks River/ Castlereagh Ironbark Forest, Shale/ Gravel Transition Forest and Cumberland Plain Woodland. Flowers August to October.	Unlikely	No suitable habitat within the highly modified and landscaped vegetation in the study area.
<i>Acacia terminalis subsp. terminalis</i>	Sunshine Wattle	E1,P	E	Species or species' habitat may occur within 10 km (DotE 2014a)	Occurs in near-coastal areas from northern shores of Sydney Harbour south to the northern and western shores of Botany Bay. Occurs on sandy soil on creek banks, hillslopes of in shallow soil in rock crevices and sandstone platforms on cliffs. Grows in scrub and open eucalypt woodland or forest (Bremner and Goeth 2010).	Nil	No suitable habitat within the highly modified and landscaped vegetation in the study area.
<i>Allocasuarina glareicola</i>		E1,P	E	Species or species' habitat may occur within 10 km (DotE 2014a)	Primarily restricted to small populations in and around Castlereagh NR (NW Cumberland Plain), but with an outlier population at Voyager Point, Liverpool. Also reported from Holsworthy Military Area. Grows on tertiary alluvial gravels, with yellow clayey subsoil and lateritic soil. Occurs in Castlereagh open woodland.	Nil	No suitable habitat within the highly modified and landscaped vegetation in the study area.
<i>Asterolasia elegans</i>		E1,P	E	Species or species' habitat likely to occur within 10 km (DotE 2014a)	Occurs north of Sydney, in the Baulkham Hills, Hawkesbury and Hornsby LGAs, may also occur in the western part of Gosford LGA. 7 known populations. Occurs on Hawkesbury sandstone, commonly amongst rocky outcrops and boulders in sheltered forests on mid- to lower slopes and valleys.	Nil	No suitable habitat within the highly modified and landscaped vegetation in the study area.

Scientific name	Common name	TSC status	EPBC status	combined source	Habitat description	LOO	Notes
<i>Caladenia tessellata</i>	Thick Lip Spider Orchid	E1,P,2	V	Species or species' habitat likely to occur within 10 km (DotE 2014a)	Occurs from Central Coast NSW to southern VIC. Mostly coastal but extends inland to Braidwood in southern NSW. In NSW grows in grassy dry sclerophyll woodland on clay loam or sandy soils, and less commonly in heathland on sandy loam soils (Duncan 2010).	Nil	No suitable habitat within the highly modified and landscaped vegetation in the study area.
<i>Callistemon linearifolius</i>	Netted Bottle Brush	V,P,3		4 records within 10 km (OEH 2014a)	Recorded from the Georges to Hawkesbury Rivers in Sydney, and north to Nelson Bay. There is also a recent record from the northern Illawarra. In Sydney, recent records are limited to the Hornsby Plateau area near the Hawkesbury River. Grows in dry sclerophyll forest on the coast and adjacent ranges.	Unlikely	No suitable habitat within the highly modified and landscaped vegetation in the study area.
<i>Camarophyllopsis kearneyi</i>		E1,P		1 record within 10 km (OEH 2014a)	Apparently limited to the Lane Cove Bushland Park. The above-ground fruiting structures are not present all year round.	Unlikely	No suitable habitat within the highly modified and landscaped vegetation in the study area.
<i>Cryptostylis hunteriana</i>	Leafless Tongue Orchid	V,P,2	V	Species or species' habitat likely to occur within 10 km (DotE 2014a)	Occurs in coastal areas from East Gippsland to southern Queensland. Habitat preferences not well defined. Grows mostly in coastal heathlands, margins of coastal swamps and sedgeland, coastal forest, dry woodland, and lowland forest. Prefers open areas in the understorey and is often found in association with <i>Cryptostylis subulata</i> and the <i>Cryptostylis erecta</i> . Soils include moist sands, moist to dry clay loam and occasionally in accumulated eucalypt leaves. Flowers November-February.	Nil	No suitable habitat within the highly modified and landscaped vegetation in the study area.
<i>Darwinia biflora</i>		V,P	V	230 records within 10 km (OEH 2014a); Species or species' habitat likely to occur within 10 km (DotE 2014a)	Known from north and north-western Sydney, in the Ryde, Baulkham Hills, Hornsby and Ku-Ring-Gai LGAs. Grows on the edges of weathered shale-capped ridges, at the intergrade with Hawkesbury Sandstone. Occurs in woodland, open forest and scrub/heath. Associated overstorey species include Eucalyptus haemastoma, Corymbia gummifera and/or E. squamosa.	Unlikely	No suitable habitat within the highly modified and landscaped vegetation in the study area.

Scientific name	Common name	TSC status	EPBC status	combined source	Habitat description	LOO	Notes
<i>Darwinia peduncularis</i>		V,P		14 records within 10 km (OEH 2014a)	Disjunct populations in coastal NSW with isolated populations in the Blue Mountains. Recorded from Brooklyn, Berowra, Galston Gorge, Hornsby, Bargo River, Glen Davis, Mount Boonbourwa and Kings Tableland. Usually grows in dry sclerophyll forest on hillsides and ridges, on or near rocky outcrops on sandy, well drained, low nutrient soil over sandstone.	Unlikely	No suitable habitat within the highly modified and landscaped vegetation in the study area.
<i>Deyeuxia appressa</i>		E1,P	E	Species or species' habitat likely to occur within 10 km (DotE 2014a)	Known only from two pre-1942 records in Sydney, at Saltpan Creek and Killara. May be extinct in the wild. Thought to occur in moist conditions.	Nil	No suitable habitat within the highly modified and landscaped vegetation in the study area.
<i>Dillwynia tenuifolia</i>	Dillwynia tenuifolia Sieber ex D.C. in the Baulkham Hills local government area	E2,V,P		1 record within 10 km (OEH 2014a)	Bounded by Western Road, Elizabeth Drive, Devonshire Road and Cross Street, Kemps Creek in the Liverpool Local Government Area. This population occurs on a small outlier of the Berkshire Park Soil Landscape; the site supports a transition from Castlereagh	Unlikely	No suitable habitat within the highly modified and landscaped vegetation in the study area.
<i>Epacris purpurascens</i> var. <i>purpurascens</i>		V,P		99 records within 10 km (OEH 2014a)	Occurs from Gosford in the north, Narrabeen in the east, Silverdale in the west and Avon Dam vicinity in the South. Grows in a range of sclerophyll forest, scrubs and swamps, most of which have a strong shale soil influence.	Unlikely	No suitable habitat within the highly modified and landscaped vegetation in the study area.
<i>Eucalyptus camfieldii</i>	Camfield's Stringybark	V,P	V	14 records within 10 km (OEH 2014a); Species or species' habitat likely to occur within 10 km (DotE 2014a)	Occurs from Raymond Terrace to Waterfall, with populations known from Norah Head (Tuggerah Lakes), Peats Ridge, Mt Colah, Elvina Bay Trail (West Head), Terrey Hills, Killara, North Head, Menai and the Royal NP. Occurs in exposed situations on sandstone plateaus, ridges and slopes near the coast, often on the boundary of tall coastal heaths or low open woodland. It grows in shallow sandy soils overlying Hawkesbury sandstone.	Unlikely	No suitable habitat within the highly modified and landscaped vegetation in the study area.

Scientific name	Common name	TSC status	EPBC status	combined source	Habitat description	LOO	Notes
<i>Eucalyptus nicholii</i>	Narrow-leaved Black Peppermint	V,P	V	7 records within 10 km (OEH 2014a)	Naturally occurs only in New England Tablelands from Nundle to north of Tenterfield. Widely planted as urban street tree. Grows in dry grassy woodland, on shallow and infertile soils, mainly on granite.	Unlikely	Outside of the species natural range
<i>Eucalyptus scoparia</i>	Wallangarra White Gum	E1,P	V	1 record within 10 km (OEH 2014a)	Occurs mostly in Queensland with only three known occurrences in NSW near Tenterfield. In NSW it is found on well-drained granitic hilltops, slopes and outcrops, often as scattered trees in open forest and woodland.	Unlikely	Outside of the species natural range
<i>Galium australe</i>	Tangled Bedstraw	E1,P		6 records within 10 km (OEH 2014a)	In NSW currently known from 13 locations between Sydney and Eden, with an outlying record from Byabarra on the north coast. Range of habitats in NSW including a valley floor, alluvial soil beside a creek, heathland in a rocky gully, and the top of an escarpment above a creek. In other states known from a range of near-coastal habitats.	Unlikely	No suitable habitat within the highly modified and landscaped vegetation in the study area.
<i>Genoplesium baueri</i>	Bauer's Midge Orchid	E1,P,2		1 record within 10 km (OEH 2014a); Species or species' habitat known to occur within 10 km (DotE 2014a)	Occurs from Ulladulla to Port Stephens, with only 13 known extant populations. Grows in sparse sclerophyll forest and moss gardens over sandstone	Unlikely	No suitable habitat within the highly modified and landscaped vegetation in the study area.
<i>Grammitis stenophylla</i>	Narrow-leaf Finger Fern	E1,P,3		2 records within 10 km (OEH 2014a)	Occurs along the coast of NSW and as far west as Narrabri. Grows in small colonies in moist places, usually near streams, on rocks and in trees in rainforest and moist eucalypt forest.	Unlikely	No suitable habitat within the highly modified and landscaped vegetation in the study area.
<i>Haloragodendron lucasii</i>		E1,P	E	19 records within 10 km (OEH 2014a); Species or species' habitat likely to occur within 10 km (DotE 2014a)	Known from 9 sites in a 10 km range in the Gordon-Hornsby area. Occurs on Hawkesbury Sandstone in moist sandy loam soil. Prefers sheltered aspects and gentle slopes below cliff lines near creeks in low open woodland or open forest. Distribution correlated with high soil moisture and phosphorus levels.	Unlikely	No suitable habitat within the highly modified and landscaped vegetation in the study area.

Scientific name	Common name	TSC status	EPBC status	combined source	Habitat description	LOO	Notes
<i>Hibbertia superans</i>		E1,P		43 records within 10 km (OEH 2014a)	Occurs from Castle Hill to South Maroota, and an isolated population near Kempsey. Grows on sandstone ridgetops often near the shale/sandstone boundary, in open woodland and heathland. Prefers open /disturbed areas, such as tracksides.	Unlikely	No suitable habitat within the highly modified and landscaped vegetation in the study area.
<i>Hygrocybe anomala</i> var. <i>ianthimarginata</i>		V,P		1 record within 10 km (OEH 2014a)	Recorded from the Lane Cove LGA and the Royal and Blue Mountains NPs. Inhabits gallery warm temperate forests dominated by <i>Acmena smithii</i> , <i>Backhousia myrtifolia</i> , <i>Glochidion ferdinandi</i> and <i>Pittosporum undulatum</i> . Associated with alluvial sandy soils, in soil, humus, moss or rotten wood.	Unlikely	No suitable habitat within the highly modified and landscaped vegetation in the study area.
<i>Hygrocybe aurantipes</i>		V,P		1 record within 10 km, last recorded 1990 (OEH 2014a)	Recorded from the Lane Cove LGA, Blue Mountains NP (Mt Wilson) and Hazelbrook. Inhabits gallery warm temperate forests dominated by <i>Acmena smithii</i> , <i>Backhousia myrtifolia</i> , <i>Glochidion ferdinandi</i> and <i>Pittosporum undulatum</i> . Associated with alluvial sandy soils, in soil, humus, moss or rotten wood.	Unlikely	No suitable habitat within the highly modified and landscaped vegetation in the study area.
<i>Hygrocybe austropratensis</i>		E1,P		1 record within 10 km (OEH 2014a)	Recorded from Lane Cove Bushland Park. Inhabits gallery warm temperate forests dominated by <i>Acmena smithii</i> , <i>Backhousia myrtifolia</i> , <i>Glochidion ferdinandi</i> and <i>Pittosporum undulatum</i> . Associated with alluvial sandy soils, in soil, humus, moss or rotten wood.	Unlikely	No suitable habitat within the highly modified and landscaped vegetation in the study area.
<i>Hygrocybe lanecovens</i>		E1,P		1 record within 10 km (OEH 2014a)	Recorded from Lane Cove Bushland Park. Inhabits gallery warm temperate forests dominated by <i>Acmena smithii</i> , <i>Backhousia myrtifolia</i> , <i>Glochidion ferdinandi</i> and <i>Pittosporum undulatum</i> . Associated with alluvial sandy soils, in soil, humus, moss or rotten wood.	Unlikely	No suitable habitat within the highly modified and landscaped vegetation in the study area.

Scientific name	Common name	TSC status	EPBC status	combined source	Habitat description	LOO	Notes
<i>Hygrocybe reesia</i>		V,P		1 record within 10 km (OEH 2014a)	Recorded from Lane Cove Bushland Park, Blue Mountains National Park (Hazelbrook area) and in Tasmania. Inhabits gallery warm temperate forests dominated by <i>Acmena smithii</i> , <i>Backhousia myrtifolia</i> , <i>Glochidion ferdinandi</i> and <i>Pittosporum undulatum</i> . Associated with alluvial sandy soils, in soil, humus, moss or rotten wood.	Unlikely	No suitable habitat within the highly modified and landscaped vegetation in the study area.
<i>Hygrocybe rubronivea</i>		V,P		1 record within 10 km (OEH 2014a)	Recorded from Lane Cove Bushland Park. Inhabits gallery warm temperate forests dominated by <i>Acmena smithii</i> , <i>Backhousia myrtifolia</i> , <i>Glochidion ferdinandi</i> and <i>Pittosporum undulatum</i> . Associated with alluvial sandy soils, in soil, humus, moss or rotten wood.	Unlikely	No suitable habitat within the highly modified and landscaped vegetation in the study area.
<i>Lasiopetalum joyceae</i>		V,P	V	2 records within 10 km (OEH 2014a)	Occurs on Hornsby Plateau between Berrilee and Duffys Forest, south of the Hawkesbury. Grows on lateritic to shaley ridgetops, in heath on sandstone.	Unlikely	No suitable habitat within the highly modified and landscaped vegetation in the study area.
<i>Leptospermum deanei</i>		V,P	V	9 records within 10 km, last recorded 1992 (OEH 2014a); Species or species' habitat likely to occur within 10 km (DotE 2014a)	Occurs in NW Sydney, in the Hornsby, Warringah, Ku-ring-gai and Ryde LGAs. Grows in woodland on lower hill slopes or near creeks, in sandy alluvial soil or sand over sandstone. Occurs in riparian scrub, woodland and open forest.	Unlikely	No suitable habitat within the highly modified and landscaped vegetation in the study area.
<i>Melaleuca biconvexa</i>	Biconvex Paperbark	V,P	V	Species or species' habitat likely to occur within 10 km (DotE 2014a)	Scattered, disjunct populations in coastal areas from Jervis Bay to Port Macquarie, with most populations in the Gosford-Wyong areas. Grows in damp places, often near streams or low-lying areas on alluvial soils of low slopes or sheltered aspects.	Nil	No suitable habitat within the highly modified and landscaped vegetation in the study area.

Scientific name	Common name	TSC status	EPBC status	combined source	Habitat description	LOO	Notes
<i>Melaleuca deanei</i>	Deane's Paperbark	V,P	V	21 records within 10 km (OEH 2014a); Species or species' habitat likely to occur within 10 km (DotE 2014a)	Occurs from Nowra- St Albans and west to the Blue Mountains, with most records in Ku-ring-gai / Berowra and Holsworthy/Wedderburn areas. Mostly grows on broad flat ridgetops, dry ridges and slopes and strongly associated with low nutrient sandy loam soils, sometimes with ironstone. Grows in heath- open forest, often in sandstone ridgetop woodland communities.	Unlikely	No suitable habitat within the highly modified and landscaped vegetation in the study area.
<i>Pelargonium sp. Striatellum</i>	Omeo Storksbill	E1,P	E	Species or species' habitat may occur within 10 km (DotE 2014a)	A tufted perennial forb known from only 3 locations in NSW, with two on lake-beds on the basalt plains of the Monaro and one at Lake Bathurst. It has a narrow habitat that is usually just above the high-water level of irregularly inundated or ephemeral lakes, in the transition zone between surrounding grasslands or pasture and the wetland or aquatic communities.	Nil	No suitable habitat within the highly modified and landscaped vegetation in the study area.
<i>Persoonia hirsuta</i>	Hairy Geebung	E1,P,3	E	Species or species' habitat likely to occur within 10 km (DotE 2014a)	Occurs within the Blue Mountains, Southern Highlands and Sydney coastal regions from Hilltop to Glen Davis and Royal NP to Gosford. Population within the Hills Shire particularly important due to high density of plants. Grows on sandy soils in dry sclerophyll open forest, woodland and heath on sandstone up to 600 m above sea level.	Nil	No suitable habitat within the highly modified and landscaped vegetation in the study area.
<i>Persoonia mollis subsp. maxima</i>		E1,P	E	2 records within 10 km (OEH 2014a); Species or species' habitat known to occur within 10 km (DotE 2014a)	Occurs in an approx. 5.75 x 7.5 km area in the Hornsby Heights-Mt Colah area. Grows in sheltered aspects of deep gullies or on the steep upper hillsides of narrow gullies on Hawkesbury Sandstone. These habitats support relatively moist, tall forest vegetation communities, often with mesic influences	Unlikely	No suitable habitat within the highly modified and landscaped vegetation in the study area.
<i>Persoonia nutans</i>	Nodding Geebung	E1,P	E	1 record within 10 km, last recorded 1990 (OEH 2014a)	Occurs from Richmond to Macquarie Fields on the Cumberland Plain. Grows only on aeolian and alluvial sediments in sclerophyll forest and woodland vegetation communities. Largest populations occur in Agnes Banks Woodland or Castlereagh Scribbly Gum Woodland.	Unlikely	No suitable habitat within the highly modified and landscaped vegetation in the study area.

Scientific name	Common name	TSC status	EPBC status	combined source	Habitat description	LOO	Notes
<i>Pimelea curviflora</i> var. <i>curviflora</i>		V,P	V	12 records within 10 km (OEH 2014a); Species or species' habitat known to occur within 10 km (DotE 2014a)	Confined to area between north Sydney in the south and Maroota in the north-west. Former range extended to Parramatta River including Five Dock, Bellevue Hill and Manly. Grows on shaley/lateritic soils over sandstone and shale/sandstone transition soils on ridgetops and upper slopes amongst woodlands. Often grows amongst dense grasses and sedges. Flowers October to May.	Unlikely	No suitable habitat within the highly modified and landscaped vegetation in the study area.
<i>Pimelea spicata</i>	Spiked Rice-flower	E1,P	E	Species or species' habitat likely to occur within 10 km (DotE 2014a)	Disjunct populations within the Cumberland Plain (from Mount Annan and Narellan Vale to Freemans Reach and Penrith to Georges Hall) and Illawarra (from Mt Warrigal to Gerroa) (DEC 2005). In the Cumberland Plain region, restricted to areas which support or historically supported Cumberland Plain Woodland. Grows on well-structured clay soils derived from Wianamatta Shale. In the Illawarra, grows on variable soils in close proximity to the coast on hills or coastal headlands. Inhabits coastal woodland or grassland with emergent shrubs (DEC 2005).	Nil	No suitable habitat within the highly modified and landscaped vegetation in the study area.
<i>Pomaderris prunifolia</i>	P. prunifolia in the Parramatta, Auburn, Strathfield and Bankstown Local Government Areas	E2		3 records within 10 km (OEH 2014a)	Known from only 3 sites within population range: at Rydalmere, within Rookwood Cemetery and at The Crest of Bankstown. At Rydalmere occurs along a road reserve near a creek, among grass species on sandstone. At Rookwood Cemetery occurs in small gully of degraded Cooks River / Castlereagh Ironbark Forest on shale soils.	Unlikely	Outside of the listed population extent
<i>Prostanthera marifolia</i>	Seaforth Mintbush	E4A,P,3	CE	Species or species' habitat may occur within 10 km (DotE 2014a)	Only known from a 2 x 2 km area in Seaforth, N Sydney. Associated with the endangered Duffys Forest ecological community. Grows on deeply weathered clay-loam soils associated with ironstone and scattered shale lenses.	Nil	No suitable habitat within the highly modified and landscaped vegetation in the study area.

Scientific name	Common name	TSC status	EPBC status	combined source	Habitat description	LOO	Notes
<i>Pterostylis saxicola</i>	Sydney Plains Greenhood	E1,P,2	E	Species or species' habitat may occur within 10 km (DotE 2014a)	Occurs in western Sydney between Picton and Freemans Reach. Grows in small pockets of shallow soil in depressions on sandstone rock shelves above cliff lines. Associated vegetation above these rock shelves is sclerophyll forest or woodland on shale or shale/sandstone transition soils.	Nil	No suitable habitat within the highly modified and landscaped vegetation in the study area.
<i>Streblus pendulinus</i>	Siah's Backbone		E	Species or species' habitat likely to occur within 10 km (DotE 2014a)	Siah's Backbone occurs from Cape York Peninsula to Milton, south-east New South Wales (NSW), as well as Norfolk Island (ATRP 2010; Jessup 2003; The Royal Botanic Gardens and Domain Trust 2011). Siah's Backbone is found in warmer rainforests, chiefly along watercourses. The species grows in well-developed rainforest, gallery forest and drier, more seasonal rainforest (ATRP 2010).	Nil	No suitable habitat within the highly modified and landscaped vegetation in the study area.
<i>Syzygium paniculatum</i>	Magenta Lilly Pilly	E1,P	V	18 records within 10 km (OEH 2014a); Species or species' habitat likely to occur within 10 km (DotE 2014a)	Occurs in narrow coastal strip from Bulahdelah to Conjola State Forest. Grows in rainforest on sandy soils or stabilised Quaternary sand dunes at low altitudes in coastal areas, often in remnant littoral or gallery rainforests.	Unlikely	No suitable habitat within the highly modified and landscaped vegetation in the study area.
<i>Tetradlea glandulosa</i>		V,P		95 records within 10 km (OEH 2014a)	Restricted to The Hills, Gosford, Hawkesbury, Hornsby, Ku-ring-gai, Pittwater, Ryde, Warringah, and Wyong LGAs. Associated with shale-sandstone transition habitat (shale-cappings over sandstone). Occupies ridgetops, upper-slopes and to a lesser extent mid-slope sandstone benches. Soils generally shallow, yellow, clayey/sandy loam, commonly with lateritic fragments. Vegetation varies from heath to open forest and is broadly equivalent to Sydney Sandstone Ridgetop Woodland community.	Unlikely	No suitable habitat within the highly modified and landscaped vegetation in the study area.
<i>Wilsonia backhousei</i>	Narrow-leaved Wilsonia	V,P		89 records within 10 km (OEH 2014a)	In NSW it is scattered along the coast with a northern limit of Wamberal, N of Sydney. Most extensive stands at Jervis Bay. Grows on the margins of saltmarshes and lakes.	Unlikely	No suitable habitat within the highly modified and landscaped vegetation in the study area.

Scientific name	Common name	TSC status	EPBC status	combined source	Habitat description	LOO	Notes
<i>Zannichellia palustris</i>		E1,P		4 records within 10 km (OEH 2014a)	Known from the Lower Hunter and Sydney Olympic Park. A submerged aquatic plant that grows in fresh or slightly saline water.	Unlikely	No suitable habitat within the highly modified and landscaped vegetation in the study area.

Threatened fauna species

Class	Scientific name	Common name	TSC status	EPBC status	combined source	Habitat description	LOO	Notes
Amphibia	<i>Litoria aurea</i>	Green and Golden Bell Frog	E1,P	V	11769 records within 10 km (OEH 2014a); Species or species' habitat known to occur within 10 km (DotE 2014a)	Formerly occurred from Brunswick Heads to Victoria, but >80% populations now extinct. Inhabits marshes, natural and artificial freshwater to brackish wetlands, dams and in stream wetlands. Prefers sites containing cumbungi (<i>Typha spp.</i>) or spike rushes (<i>Eleocharis spp.</i>), which are unshaded and have a grassy area and/or rubble as shelter/refuge habitat nearby. <i>Gambusia holbrooki</i> is a key threat as they feed on green and Golden Bell Frog eggs and tadpoles.	Unlikely	No suitable habitat within the study area.
Amphibia	<i>Litoria littlejohni</i>	Littlejohn's Tree Frog	V,P	V	Species or species' habitat may occur within 10 km (DotE 2014a)	Occurs on plateaus and eastern slopes of the Great Dividing Range south from Watagan State Forest. Occurs along permanent rocky streams with thick fringing vegetation associated with eucalypt woodlands and heaths among sandstone outcrops, hunting either in shrubs or on the ground.	Nil	No suitable habitat within the study area.
Amphibia	<i>Heleioporus australiacus</i>	Giant Burrowing Frog	V,P	V	Species or species' habitat likely to occur within 10 km (DotE 2014a)	Occurs along the coast and eastern slopes of the Great Dividing Range south from Wollemi National Park. Appears to exist as 2 populations with a 100km gap in records between Jervis Bay and Eden. Northern population occurs on sandy soils supporting heath, woodland or open forest. Breeds in ephemeral to intermittent streams with persistent pools. Only infrequently moves to breeding sites, most commonly found on ridges away from creeks, several hundred metres from water.	Nil	No suitable habitat within the study area.
Amphibia	<i>Mixophyes balbus</i>	Stuttering Frog	E1,P,2	V	Species or species' habitat likely to occur within 10 km (DotE 2014a)	Occurs along the east coast of Australia. Has undergone a massive range reduction particularly in the south of its range: within the Sydney Basin, White (2008a) located only 3 populations south of Sydney (Macquarie Pass and Mt Werong) and Daly et al. (2002, in White 2008a) found only 2 extant populations between Macquarie Pass and Victoria. Inhabits rainforest and wet, tall, open forest. Shelter in deep leaf litter and thick understorey vegetation on the forest floor. Feeds on insects and smaller frogs, breeding in	Nil	No suitable habitat within the study area.

Class	Scientific name	Common name	TSC status	EPBC status	combined source	Habitat description	LOO	Notes
						streams during summer after heavy rain. The species does not occur in areas where the riparian vegetation has been disturbed or where there have been significant upstream human impacts (Mahony et al 1997).		
Amphibia	<i>Pseudophryne australis</i>	Red-crowned Toadlet	V,P		84 records within 10 km (OEH 2014a)	Restricted to Sydney Basin, from Nowra to Pokolbin and west to Mt Victoria. Inhabits heathland and open woodland on Hawkesbury and Narrabeen Sandstones, within 100m of ridgelines. Breeds in ephemeral feeder creeks or flooded depressions, requiring unpolluted water between 5.5 and 6.5 pH. Shelters under rocks, amongst masses of dense vegetation or leaf litter. Populations restricted to immediate vicinity of breeding areas.	Unlikely	No suitable habitat within the study area.
Aves	<i>Circus assimilis</i>	Spotted Harrier	V,P		2 records within 10 km (OEH 2014a)	Occurs throughout Australian mainland, except in densely forested or wooded habitats of the coast, escarpment and ranges, and rarely in Tasmania. Individuals disperse widely in NSW and comprise a single population. Inhabits grassy open woodland including acacia and mallee remnants, inland riparian woodland, grassland and shrub steppe (e.g. chenopods). Most commonly in native grassland, but also in agricultural land, foraging over open habitats including edges of inland wetlands. Builds a stick nest in a tree and lays eggs in spring (or sometimes autumn).	Unlikely	No suitable habitat within the study area.
Aves	<i>Hieraaetus morphnoides</i>	Little Eagle	V,P		8 records within 10 km (OEH 2014a)	Occurs throughout NSW except most densely forested parts of the Dividing Range escarpment. Occupies habitats rich in prey within open eucalypt forest, woodland or open woodland. Sheoak or acacia woodlands and riparian woodlands of interior NSW are also used. For nest sites it requires a tall living tree within a remnant patch, where pairs build a large stick nest in winter and lay in early spring.	Unlikely	No suitable habitat within the study area.

Class	Scientific name	Common name	TSC status	EPBC status	combined source	Habitat description	LOO	Notes
Aves	<i>Lophoictinia isura</i>	Square-tailed Kite	V,P,3		2 records within 10 km (OEH 2014a)	Occurs across NSW, resident in North, northeast and along west-flowing rivers. Summer breeding migrant to southeast of state. Inhabits a variety of habitats including woodlands and open forests, with preference for timbered watercourses. Favours productive forests on the coastal plain, box-ironbark-gum woodlands on the inland slopes, and Coolibah/River Red Gum on the inland plains. In Sydney area nests in mature living trees within 100m of ephemeral/ permanent watercourse. Large home range > 100 km ² .	Unlikely	No suitable habitat within the study area.
Aves	<i>Pandion cristatus</i>	Eastern Osprey	V,P,3		2 records within 10 km, last recorded 1993 (OEH 2014a)	Favours coastal areas, especially the mouths of large rivers, lagoons and lakes. They feed on fish over clear, open water. Breeding takes place from July to September in NSW, with nests being built high up in dead trees or in dead crowns of live trees, usually within one kilometre of the sea, though there are a handful of records from inland areas.	Unlikely	No suitable habitat within the study area.
Aves	<i>Nettapus coromandelianus</i>	Cotton Pygmy-Goose	E1,P		4 records within 10 km, last recorded 1992 (OEH 2014a)	Small surface-feeding duck with a goose-like bill. Prefers freshwater lakes, lagoons, swamps and dams, particularly those vegetated with waterlilies and other floating and submerged aquatic vegetation. Uses standing dead trees with hollows close to water for roosting and breeding.	Unlikely	No suitable habitat within the study area.
Aves	<i>Stictonetta naevosa</i>	Freckled Duck	V,P		1 record within 10 km, last recorded 1985 (OEH 2014a)	Breeds in large, ephemeral swamps in the Murray-Darling, particularly along the Paroo and Lachlan Rivers and other Riverina rivers. In drier times moves to more permanent waters. Disperses during extensive inland droughts and may be found in coastal areas during such times. Prefers freshwater swamps/creeks with dense Cumbungi, Lignum or tea-tree. Nests in dense vegetation at or near water level.	Unlikely	No suitable habitat within the study area.
Aves	<i>Botaurus poiciloptilus</i>	Australasian Bittern	E1,P	E	3 records within 10 km (OEH 2014a); Species or species' habitat known to occur within 10 km	Widespread but uncommon over most NSW except the northwest. Favours permanent freshwater wetlands with tall dense reedbeds particularly <i>Typha</i> spp. and <i>Eleocharis</i> spp., with adjacent shallow, open water for foraging. Roosts during the day amongst dense reeds or rushes and feeds mainly at night on frogs, fish,	Unlikely	No suitable habitat within the study area.

Class	Scientific name	Common name	TSC status	EPBC status	combined source	Habitat description	LOO	Notes
					(DotE 2014a)	yabbies, spiders, insects and snails.		
Aves	<i>Ixobrychus flavicollis</i>	Black Bittern	V,P		5 records within 10 km (OEH 2014a)	Occurs from southern NSW to Cape York and the Kimberley, and southwest WA. Inhabits terrestrial and estuarine wetlands, generally in areas of permanent water and dense vegetation. May occur in flooded grassland, forest, woodland, rainforest and mangroves as long as there is permanent water. Roosts by day in trees or within reeds on the ground. Nests in branches overhanging water and breeds from December to March.	Unlikely	No suitable habitat within the study area.
Aves	<i>Callocephalon fimbriatum</i>	Gang-gang Cockatoo population in the Hornsby and Kuring-gai Local Government Areas	E2,V,P,3		87 records within 10 km (OEH 2014a)	Largely confined to area bounded by Thornleigh and Wahroonga in the north, Epping and North Epping in the south, Beecroft and Cheltenham in the west and Turramurra/ South Turramurra to the east. Last known breeding population in the Sydney Metropolitan area. Habitat as above.	Unlikely	No suitable habitat within the study area.
Aves	<i>Calyptorhynchus lathami</i>	Glossy Black-Cockatoo, Riverina population	E2,V,P,2		16 records within 10 km (OEH 2014a)	Widespread but uncommon from coast to southern tablelands and central western plains. Feeds almost exclusively on the seeds of <i>Allocasuarina</i> species. Prefers woodland and open forests, rarely away from <i>Allocasuarina</i> . Roost in leafy canopy trees, preferably eucalypts, usually <1km from feeding site. Nests in large (approx. 20cm) hollows in trees, stumps or limbs, usually in Eucalypts (Higgins 1999).	Unlikely	No suitable habitat within the study area.
Aves	<i>Charadrius leschenaultii</i>	Greater Sandplover	V,P	C,J,K	1 record within 10 km, last recorded 1991 (OEH 2014a)	Does not breed in Australia. In NSW, recorded between the northern rivers and the Illawarra, with most records coming from the Clarence and Richmond estuaries. Occurs mainly on sheltered sandy, shelly or muddy beaches or estuaries with large intertidal mudflats or sandbanks. Roosts during high tide on sandy beaches and rocky shores; forage on wet ground at low tide.	Unlikely	No suitable habitat within the study area.

Class	Scientific name	Common name	TSC status	EPBC status	combined source	Habitat description	LOO	Notes
Aves	<i>Ephippiorhynchus asiaticus</i>	Black-necked Stork	E1,P		1 record within 10 km (OEH 2014a)	In NSW, becomes increasingly uncommon south of the Northern Rivers region, and rarely occurs south of Sydney. Breeding recorded as far south as Buladelah, though most breeding in NSW occurs in the north-east. Primarily inhabits permanent freshwater wetlands and surrounding vegetation including swamps, floodplains, watercourses and billabongs, freshwater meadows, wet heathland, farm dams and shallow floodwaters. Will also forage in inter-tidal shorelines, mangrove margins and estuaries. Feeds in shallow, still water. Breeds during summer, nesting in or near a freshwater swamp.	Unlikely	No suitable habitat within the study area.
Aves	<i>Ptilinopus superbus</i>	Superb Fruit-Dove	V,P		7 records within 10 km (OEH 2014a)	Occurs mainly north from NE NSW, much less common further south and largely confined to pockets of habitat south to Moruya. Vagrants occur south to VIC and TAS. Inhabits rainforest and closed forests, may also forage in eucalypt or acacia woodland with fruit-bearing trees. Nests 5-30 m above ground in rainforest/rainforest edge tree and shrub species. Part of the population migratory/nomadic.	Unlikely	No suitable habitat within the study area.
Aves	<i>Dasyornis brachypterus</i>	Eastern Bristlebird	E1,P	E	Species or species' habitat likely to occur within 10 km (DotE 2014a)	Occurs in three disjunct areas of south-eastern Australia: southern Queensland/northern NSW, the Illawarra Region and in the vicinity of the NSW/Victorian border. Illawarra population comprises an estimated 1600 birds, mainly from Barren Grounds Nature Reserve, Budderoo National Park and the Jervis Bay area. Habitat characterised by dense, low vegetation including heath and open woodland with a heathy understorey. The fire history of habitat is important, and the Illawarra and southern populations reach maximum densities in habitat that have not been burnt for over 15 years.	Nil	No suitable habitat within the study area.

Class	Scientific name	Common name	TSC status	EPBC status	combined source	Habitat description	LOO	Notes
Aves	<i>Falco subniger</i>	Black Falcon	V,P		1 record within 10 km, last recorded 1990 (OEH 2014a)	The Black Falcon is widely, but sparsely, distributed in New South Wales, mostly occurring in inland regions. Some reports of 'Black Falcons' on the tablelands and coast of New South Wales are likely to be referable to the Brown Falcon. Occurs in plains, grasslands, foothills, timbered watercourses, wetland environs, crops, and occasionally over towns and cities. Breeding occurs along timbered waterways in in land areas.	Unlikely	No suitable habitat within the study area.
Aves	<i>Sternula albifrons</i>	Little Tern	E1,P	C,J,K	5 records within 10 km (OEH 2014a)	In NSW occurs mainly north of Sydney, with smaller numbers south to VIC. Almost exclusively coastal, preferring sheltered environments; may occur several kilometres from the sea in harbours, inlets and rivers. Nests in low dunes or sandy beaches just above high tide mark near estuary mouths/ adjacent to coastal lakes and islands. Forage in shallow waters of estuaries, coastal lagoons and lakes, also along open coasts, less often at sea, and usually within 50 m of shore.	Unlikely	No suitable habitat within the study area.
Aves	<i>Sternula nereis nereis</i>	Australian Fairy Tern		V	Species or species' habitat may occur within 10 km (DotE 2014a)	Occurs along NSW coast. Inhabit offshore, estuarine or lake islands, wetlands, beaches and spits. Nests on coral shingle on continental islands or coral cays, on sandy islands and beaches inside estuaries and on open sandy beaches.	Nil	No suitable habitat within the study area.
Aves	<i>Anthochaera phrygia</i>	Regent Honeyeater	E4A,P	E	1 record within 10 km (OEH 2014a); Species or species' habitat known to occur within 10 km (DotE 2014a)	In NSW confined to two known breeding areas: the Capertee Valley and Bundarra-Barraba region. Non-breeding flocks occasionally seen in coastal areas foraging in flowering Spotted Gum and Swamp Mahogany forests, presumably in response to drought. Inhabits dry open forest and woodlands, particularly Box-Ironbark woodland and riparian forests of River Sheoak, with an abundance of mature trees, high canopy cover and abundance of mistletoes.	Unlikely	No suitable habitat within the study area.

Class	Scientific name	Common name	TSC status	EPBC status	combined source	Habitat description	LOO	Notes
Aves	<i>Epthianura albifrons</i>	White-fronted Chat population in the Sydney Metropolitan Catchment Management Area	E2,V,P		414 records within 10 km (OEH 2014a)	There are two isolated sub-populations of White-fronted Chats currently known from the Sydney Metropolitan CMA: at Newington Nature Reserve and at Towra Point NR. This species is unlikely to cross the 25km separating these areas, or the greater distances separating other colonies outside the CMA.	Unlikely	No suitable habitat within the study area.
Aves	<i>Daphoenositta chrysoptera</i>	Varied Sittella	V,P		4 records within 10 km (OEH 2014a)	Sedentary, occurs across NSW from the coast to the far west. Inhabits eucalypt forests and woodlands, especially rough-barked species and mature smooth-barked gums with dead branches, mallee and Acacia woodland. Sensitive to habitat isolation and loss of structural complexity, and adversely affected by dominance of Noisy Miners. Cleared agricultural land is potentially a barrier to movement. Builds a cup-shaped nest of plant fibres and cobwebs in an upright tree fork high in the living tree canopy, and often re-uses the same fork or tree in successive years.	Unlikely	No suitable habitat within the study area.
Aves	<i>Petroica boodang</i>	Scarlet Robin	V,P		5 records within 10 km (OEH 2014a)	In NSW occurs from coast to inland slopes. Breeds in drier eucalypt forests and temperate woodlands, often on ridges and slopes, within open understorey of shrubs and grasses and sometimes in open areas. In autumn and winter it migrates to more open habitats such as grassy open woodland or paddocks with scattered trees. Abundant logs and coarse woody debris are important habitat components.	Unlikely	No suitable habitat within the study area.

Class	Scientific name	Common name	TSC status	EPBC status	combined source	Habitat description	LOO	Notes
Aves	<i>Petroica phoenicea</i>	Flame Robin	V,P		1 record within 10 km (OEH 2014a)	Breeds in upland moist eucalypt forests and woodlands, often on ridges and slopes, in areas of open understorey. Migrates in winter to more open lowland habitats such as grassland with scattered trees and open woodland on the inland slopes and plains. Forages from low perches, feeding on invertebrates taken from the ground, tree trunks, logs and other coarse woody debris. Fallen logs and coarse woody debris are important habitat components. Open cup nest of plant fibres and cobweb is often built near the ground in a sheltered niche, ledge or shallow cavity in a tree, stump or bank.	Unlikely	No suitable habitat within the study area.
Aves	<i>Glossopsitta pusilla</i>	Little Lorikeet	V,P		15 records within 10 km (OEH 2014a)	Occurs from coast to western slopes of the Great Dividing Range. Inhabits dry, open eucalypt forests and woodlands. Occurrence is positively associated with patch size, and with components of habitat complexity including canopy cover, shrub cover, ground cover, logs, fallen branches and litter. Feed primarily on profusely-flowering eucalypts and a variety of other species including melaleucas and mistletoes. On the western slopes and tablelands <i>Eucalyptus albens</i> and <i>E. melliodora</i> are particularly important food sources for pollen and nectar respectively. Mostly nests in small (opening approx. 3cm) hollows in living, smooth-barked eucalypts, especially <i>Eucalyptus viminalis</i> , <i>E. blakelyi</i> and <i>E. dealbata</i> . Most breeding records are from the western slopes.	Unlikely	No suitable habitat within the study area.
Aves	<i>Lathamus discolor</i>	Swift Parrot	E1,P,3	E	15 records within 10 km (OEH 2014a); Species or species' habitat likely to occur within 10 km (DotE 2014a)	Migratory, travelling to the mainland from March to October. Breeds in Tasmania from September to January. On the mainland, it mostly occurs in the southeast foraging on winter flowering eucalypts and lerps, with records of the species between Adelaide and Brisbane. Principal over-winter habitat is box-ironbark communities on the inland slopes and plains. <i>Eucalyptus robusta</i> , <i>Corymbia maculata</i> and <i>C. gummifera</i> dominated coastal forests are also important habitat.	Unlikely	No suitable habitat within the study area.

Class	Scientific name	Common name	TSC status	EPBC status	combined source	Habitat description	LOO	Notes
Aves	<i>Polytelis swainsonii</i>	Superb Parrot	V,P,3	V	3 records within 10 km, last recorded 1986 (OEH 2014a)	Occurs as a single population in the South-west Slopes and Riverina bioregions. Two core breeding areas: between Cowra and Yass – Grenfell, Cootamundra and Coolac in the SW Slopes, and along the Murray, Edward and Murrumbidgee Rivers in the Riverina. Birds breeding in the SW slopes migrate north to the Namoi/Gwydir Rivers for winter. Inhabits Box Gum, Box – Cypress Pine and Boree woodlands and River Red Gum Forest. Nest in hollow trees, in tall riparian River Red Gum communities (Riverina area) or open Box Gum woodland or isolated paddock trees (SW Slopes). Mainly forages in grassy box woodlands, up to 10 km from breeding sites.	Unlikely	No suitable habitat within the study area.
Aves	<i>Rostratula australis</i>	Australian Painted Snipe	E1,P	E	2 records within 10 km (OEH 2014a); Species or species' habitat likely to occur within 10 km (DotE 2014a)	Normally found in permanent or ephemeral shallow inland wetlands, either freshwater or brackish. Nests on the ground amongst tall reed-like vegetation near water. Feeds on mudflats and the water's edge taking insects, worm and seeds. Prefers fringes of swamps, dams and nearby marshy areas with cover of grasses, lignum, low scrub or open timber.	Unlikely	No suitable habitat within the study area.
Aves	<i>Calidris ferruginea</i>	Curlew Sandpiper	E1,P	C,J,K	351 records within 10 km (OEH 2014a)	Breeds in N Hemisphere. In Australia generally occupies littoral and estuarine habitats. In NSW mainly found in intertidal mudflats on sheltered coasts. Roosts on beaches, spits or islands on the coast/in wetlands, or in saltmarsh on rocky shores.	Unlikely	No suitable habitat within the study area.
Aves	<i>Limicola falcinellus</i>	Broad-billed Sandpiper	V,P	C,J,K	1 record within 10 km, last recorded 1982 (OEH 2014a)	Breeds in the northern hemisphere. In the non-breeding season most common in north and north west of Australia, but is a regular visitor in small numbers to the NSW coast from Ballina to Shoalhaven Heads. Occurs on sheltered parts of the coast, favouring estuarine mudflats but also occasionally in saltmarshes, freshwater lagoons, salt works and sewerage farms. Forage on exposed mudflats or wet sand.	Unlikely	No suitable habitat within the study area.

Class	Scientific name	Common name	TSC status	EPBC status	combined source	Habitat description	LOO	Notes
Aves	<i>Limosa limosa</i>	Black-tailed Godwit	V,P	C,J,K	12 records within 10 km (OEH 2014a)	The Black-tailed Godwit is a migratory wading bird that breeds in Mongolia and Eastern Siberia and flies to Australia for the southern summer, arriving in August and leaving in March. In NSW, it is most frequently recorded at Kooragang Island (Hunter River estuary), with occasional records elsewhere along the north and south coast, and inland. Records in western NSW indicate that a regular inland passage is used by the species, as it may occur around any of the large lakes in the western areas during summer, when the muddy shores are exposed. It is usually found in sheltered bays, estuaries and lagoons with large intertidal mudflats and/or sandflats. It has also been found around muddy lakes and swamps, wet fields and sewerage treatment works.	Unlikely	No suitable habitat within the study area.
Aves	<i>Xenus cinereus</i>	Terek Sandpiper	V,P	C,J,K	1 record within 10 km (OEH 2014a)	The two main sites for this species in NSW are the Richmond River and Hunter River estuaries. Inhabits coastal mudflats, lagoons, creeks and estuaries. Favours mudbanks and sandbanks near mangroves, also observed on rocky pools and reefs and up to 10 km inland around brackish pools. Roost communally in mangroves or dead trees. Forages in open intertidal mudflats.	Unlikely	No suitable habitat within the study area.
Aves	<i>Ninox connivens</i>	Barking Owl	V,P,3		9 records within 10 km (OEH 2014a)	Occurs from coast to inland slopes and plains, though is rare in dense, wet forests east of the Great Dividing Range and sparse in higher parts of the tablelands and in the arid zone. Inhabits eucalypt woodlands, open forest, swamp woodlands, and, especially in inland areas, timber along watercourses. Roosts along creek lines in dense, tall understorey foliage (e.g. in <i>Acacia</i> and <i>Casuarina</i>), or dense eucalypt canopy. Nests in hollows of large, old eucalypts including <i>Eucalyptus camaldulensis</i> , <i>Eucalyptus albens</i> , <i>Eucalyptus polyanthemos</i> and <i>Eucalyptus blakelyi</i> . Birds and mammals important prey during breeding. Territories range from 30 to 200 hectares.	Unlikely	No suitable habitat within the study area.

Class	Scientific name	Common name	TSC status	EPBC status	combined source	Habitat description	LOO	Notes
Aves	<i>Ninox strenua</i>	Powerful Owl	V,P,3		158 records within 10 km (OEH 2014a)	Occurs from the coast to the western slopes. Solitary and sedentary species. Inhabits a range of habitats from woodland and open sclerophyll forest to tall open wet forest and rainforest. Prefers large tracts of vegetation. Nests in large tree hollows (> 0.5 m deep), in large eucalypts (DBH 80-240 cm) that are at least 150 years old. Pairs have high fidelity to a small number of hollow-bearing nest trees and defend a large home range of 400 - 1,450 ha. Forages within open and closed woodlands as well as open areas.	Unlikely	No suitable habitat within the study area.
Aves	<i>Tyto longimembris</i>	Eastern Grass Owl	V,P,3		1 record within 10 km, last recorded 1982 (OEH 2014a)	Most common in N and NE Australia, but recorded in all mainland states. In NSW most likely to be resident in the NE. Inhabit areas of tall grass, including grass tussocks, in swampy areas, grassy plains, swampy heath, and in cane grass or sedges on flood plains. Nests on the ground in trodden grass, and are often accessed by tunnels through vegetation.	Unlikely	No suitable habitat within the study area.
Aves	<i>Tyto novaehollandiae</i>	Masked Owl	V,P,3		2 records within 10 km (OEH 2014a)	Occurs across NSW except NW corner. Most common on the coast. Inhabits dry eucalypt woodlands from sea level to 1100 m. Roosts and breeds in large (>40cm) hollows and sometime caves in moist eucalypt forested gullies. Hunts along the edges of forests and roadsides. Home range between 500 ha and 1000 ha. Prey mostly terrestrial mammals but arboreal species may also be taken.	Unlikely	No suitable habitat within the study area.
Mammalia	<i>Cercartetus nanus</i>	Eastern Pygmy-possum	V,P		1 record within 10 km (OEH 2014a)	Occurs along the east coast of NSW, and inland to the Pillaga, Dubbo, Parkes and Wagga Wagga. Inhabits range of habitats from coastal heath and woodland through open and closed forests, subalpine heath and rainforest (Tulloch and Dickman 1995). Inhabits rainforest, sclerophyll forests and heath. Banksia spp. and myrtaceous shrubs and trees are favoured food sources and nesting subject sites in drier habitats. Diet mostly pollen and nectar from Banksia spp., Eucalyptus spp., Callistemon spp. and insects (Ward and Turner 2008). Nests in hollows in trees, under the bark of Eucalypts, forks of tea-trees, abandoned bird nests and	Unlikely	No suitable habitat within the study area.

Class	Scientific name	Common name	TSC status	EPBC status	combined source	Habitat description	LOO	Notes
						Xanthorrhoea bases (Ward and Turner 2008, Tulloch and Dickman 2006).		
Mammalia	<i>Dasyurus maculatus</i>	Spotted-tailed Quoll	V,P	E	7 records within 10 km (OEH 2014a); Species or species' habitat known to occur within 10 km (DotE 2014a)	Inhabits a range of environments including rainforest, open forest, woodland, coastal heath and inland riparian forest, from the sub-alpine zone to the coastline. Den sites are in hollow-bearing trees, fallen logs, small caves, rock crevices, boulder fields and rocky-cliff faces. Females occupy home ranges of up to 750 ha and males up to 3,500 ha, usually traversed along densely vegetated creek lines.	Unlikely	No suitable habitat within the study area.
Mammalia	<i>Saccolaimus flaviventris</i>	Yellow-bellied Sheathtail-bat	V,P		6 records within 10 km (OEH 2014a)	Migrates from tropics to SE Aus in summer. Forages across a range of habitats including those with and without trees, from wet and dry sclerophyll forest, open woodland, Acacia shrubland, mallee, grasslands and desert. Roosts communally in large tree hollows and buildings (Churchill 2008).	Unlikely	No suitable habitat within the study area.
Mammalia	<i>Petrogale penicillata</i>	Brush-tailed Rock-wallaby	E1,P	V	Species or species' habitat may occur within 10 km (DotE 2014a)	Occurs from the Shoalhaven north to the Queensland border. Now mostly extinct west of the Great Dividing Range, except in the Warrumbungles and Mt Kaputar. Occurs on rocky escarpments, outcrops and cliffs with a preference for complex structures with fissures, caves and ledges facing north. Diet consists of vegetation in adjacent to rocky areas eating grasses and forbs as well as the foliage and fruits of shrubs and trees.	Nil	No suitable habitat within the study area.
Mammalia	<i>Mormopterus norfolkensis</i>	Eastern Freetail-bat	V,P		13 records within 10 km (OEH 2014a)	Occurs in dry sclerophyll forest and woodland east of the Great Dividing Range. Forages in natural and artificial openings in vegetation, typically within a few kilometres of its roost. Roosts primarily in tree hollows but also recorded from man-made structures or under bark (Churchill 2008).	Unlikely	No suitable habitat within the study area.

Class	Scientific name	Common name	TSC status	EPBC status	combined source	Habitat description	LOO	Notes
Mammalia	<i>Pseudomys novaehollandiae</i>	New Holland Mouse	P	V	Species or species' habitat likely to occur within 10 km (DotE 2014a)	Occurs in disjunct, coastal populations from Tasmania to Queensland. In NSW inhabits a variety of coastal habitats including heathland, woodland, dry sclerophyll forest with a dense shrub layer and vegetated sand dunes (Wilson and Bradtke 1999). Populations may recolonise/ increase in size in regenerating native vegetation after wildfire, clearing and sandmining. Presence strongly correlated with understorey vegetation density, and high floristic diversity in regenerating heath (Lock and Wilson 1999).	Nil	No suitable habitat within the study area.
Mammalia	<i>Isoodon obesulus obesulus</i>	Southern Brown Bandicoot (eastern)	E1,P	E	Species or species' habitat likely to occur within 10 km (DotE 2014a)	Occurs mainly in 2 areas: Ku-ring-gai Chase and Garigal National Parks N of Sydney, and far SE NSW including Ben Boyd National Park, East Boyd State Forest, Nadgee Nature Reserve, Nadgee State Forest, South East Forest and Yambulla State Forest but also occurs between these areas. Inhabits scrubby vegetation, including heath, shrubland, and heathy forest and woodland. Often associated with well-drained soils and dry heathland communities, and prefers periodically burnt areas as this increases insect abundance.	Nil	No suitable habitat within the study area.
Mammalia	<i>Perameles nasuta</i>	Long-nosed Bandicoot population in inner western Sydney	E2,P		2 records within 10 km (OEH 2014a)	Occurs within Marrickville and Canada Bay LGAs, and may also occur in the Canterbury, Ashfield and Leichhardt LGAs. Shelter mostly under older houses and buildings, and forage in parkland and backyards.	Unlikely	No suitable habitat within the study area.
Mammalia	<i>Petaurus australis</i>	Yellow-bellied Glider population on the Bago Plateau	E2,V,P		1 record within 10 km (OEH 2014a)	Occurs along the east coast to the western slopes of the Great Dividing Range. Inhabits a variety of forest types but prefers tall mature eucalypt forest with high rainfall and rich soils. Relies on large hollow-bearing trees for shelter and nesting, with family groups of 2-6 typically denning together. In southern NSW its preferred habitat at low altitudes is moist gullies and creek flats in mature coastal forests. Mostly feeds on sap, nectar and honeydew.	Unlikely	No suitable habitat within the study area.

Class	Scientific name	Common name	TSC status	EPBC status	combined source	Habitat description	LOO	Notes
Mammalia	<i>Phascolarctos cinereus</i> (combined populations of Qld, NSW and the ACT)	Koala	V,P	V	Species or species' habitat known to occur within 10 km (DotE 2014a)	Occurs from coast to inland slopes and plains. Restricted to areas of preferred feed trees in eucalypt woodlands and forests. Home range varies depending on habitat quality, from < 2 to several hundred hectares.	Nil	No suitable habitat within the study area.
Mammalia	<i>Pteropus poliocephalus</i>	Grey-headed Flying-fox	V,P	V	1010 records within 10 km (OEH 2014a); Roosting habitat known to occur within 10 km (DotE 2014a)	Roosts in camps within 20 km of a regular food source, typically in gullies, close to water and in vegetation with a dense canopy. Forages in subtropical and temperate rainforests, tall sclerophyll forests and woodlands, heaths, swamps and street trees, particularly in eucalypts, melaleucas and banksias. Highly mobile with movements largely determined by food availability (Eby and Law 2008). Will also forage in urban gardens and cultivated fruit crops.	Possible	No roosting habitat present. May forage within garden vegetation within the study area on occasion in response to specific fruiting or flowering events, however no habitat important for any stage of the species' lifestyle is present within the study area, and removal of fragmented and isolated garden vegetation would not result in any impact to this highly mobile species.

Class	Scientific name	Common name	TSC status	EPBC status	combined source	Habitat description	LOO	Notes
Mammalia	<i>Chalinolobus dwyeri</i>	Large-eared Pied Bat	V,P	V	1 record within 10 km, last recorded 1992 (OEH 2014a); Species or species' habitat known to occur within 10 km (DotE 2014a)	Occurs from the coast to the western slopes of the divide. Largest numbers of records from sandstone escarpment country in the Sydney Basin and Hunter Valley (Hoye and Schulz 2008). Roosts in caves and mines and most commonly recorded from dry sclerophyll forests and woodlands. An insectivorous species that flies over the canopy or along creek beds (Churchill 2008). In southern Sydney appears to be largely restricted to the interface between sandstone escarpments and fertile valleys.	Unlikely	No suitable habitat within the study area.
Mammalia	<i>Falsistrellus tasmaniensis</i>	Eastern False Pipistrelle	V,P		6 records within 10 km (OEH 2014a)	Occurs on southeast coast and ranges. Prefers tall (>20m) and wet forest with dense understorey. Absent from small remnants, preferring continuous forest but can move through cleared landscapes and may forage in open areas. Roosts in hollow trunks of Eucalypts, underneath bark or in buildings. Forages in gaps and spaces within forest, with large foraging range (12km foraging movements recorded) (Churchill 2008, Law et al 2008).	Unlikely	No suitable habitat within the study area.
Mammalia	<i>Miniopterus australis</i>	Little Bentwing-bat	V,P		3 records within 10 km (OEH 2014a)	Occurs from Cape York to Sydney. Inhabits rainforests, wet and dry sclerophyll forests, paperbark swamps and vine thickets. Only one maternity cave known in NSW, shared with Eastern Bentwing-bats at Willi Willi, near Kempsey. Outside breeding season roosts in caves, tunnels and mines and has been recorded in a tree hollow on one occasion. Forages for insects beneath the canopy of well-timbered habitats (Churchill 2008, Hoye and Hall 2008).	Unlikely	No suitable habitat within the study area.

Class	Scientific name	Common name	TSC status	EPBC status	combined source	Habitat description	LOO	Notes
Mammalia	<i>Miniopterus schreibersii oceanensis</i>	Eastern Bentwing-bat	V,P		91 records within 10 km (OEH 2014a)	Generally occurs east of the Great Dividing Range along NSW coast (Churchill 2008). Inhabits various habitats from open grasslands to woodlands, wet and dry sclerophyll forests and rainforest. Essentially a cave bat but may also roost in road culverts, stormwater tunnels and other man-made structures. Only 4 known maternity caves in NSW, near Wee Jasper, Bungonia, Kempsey and Texas. Females may travel hundreds of kilometres to the nearest maternal colony (Churchill 2008).	Unlikely	No suitable habitat within the study area.
Mammalia	<i>Myotis macropus</i>	Southern Myotis	V,P		4 records within 10 km (OEH 2014a)	Mainly coastal but may occur inland along large river systems. Usually associated with permanent waterways at low elevations in flat/undulating country, usually in vegetated areas. Forages over streams and watercourses feeding on fish and insects from the water surface. Roosts in a variety of habitats including caves, mine shafts, hollow-bearing trees, stormwater channels, buildings, under bridges and in dense foliage, typically in close proximity to water (Campbell 2011). Breeds November or December (Churchill 2008)	Unlikely	No suitable habitat within the study area.
Mammalia	<i>Scoteanax rueppellii</i>	Greater Broad-nosed Bat	V,P		4 records within 10 km (OEH 2014a)	Occurs on the east coast and Great Dividing Range. Inhabits a variety of habitats from woodland to wet and dry sclerophyll forests and rainforest, also remnant paddock trees and timber-lined creeks, typically below 500m asl. Forages in relatively uncluttered areas, using natural or man-made openings in denser habitats. Usually roosts in tree hollows or fissures but also under exfoliating bark or in the roofs of old buildings. Females congregate in maternal roosts in suitable hollow trees (Hoye and Richards 2008, Churchill 2008).	Unlikely	No suitable habitat within the study area.

Class	Scientific name	Common name	TSC status	EPBC status	combined source	Habitat description	LOO	Notes
Reptilia	<i>Varanus rosenbergi</i>	Rosenberg's Goanna	V,P		6 records within 10 km (OEH 2014a)	In NSW mainly occurs on the mid coast region from Wollemi NP to Nowra; the ACT and Goulburn regions and the South-west Slopes. Inhabits coastal heathlands, wet and dry sclerophyll forests, woodlands and mallee communities. Termite mounds are an important habitat feature: eggs are laid in the mounds in summer and incubate till spring, when the young dig themselves out. Young may return to the mound as a refuge for some months, while adults shelter in burrows dug under rocks or logs, or in rock crevices, hollow logs or even rabbit burrows (Sass 2008).	Unlikely	No suitable habitat within the study area.

Migratory species

Scientific name	Common name	TSC status	EPBC status	Combined source	Habitat description	LOO	Notes
<i>Actitis hypoleucos</i>	Common Sandpiper	P	C,J,K	76 records within 10 km (OEH 2014a)	Does not breed in Australia. When in Australia it is found on all coastlines and in inland areas, but is concentrated in the north and west with important areas in WA, the NT and Qld. Utilises a wide range of coastal and inland wetlands with varying salinity levels.	Unlikely	No suitable habitat within the study area.
<i>Apus pacificus</i>	Fork-tailed Swift	P	C,J,K	5 records within 10 km (OEH 2014a)	Recorded in all regions of NSW. Non-breeding, and almost exclusively aerial while in Australia. Occurs over urban and rural areas as well as areas of native vegetation.	Unlikely	No suitable habitat within the study area.
<i>Ardea ibis</i>	Cattle Egret	P	C,J	120 records within 10 km (OEH 2014a)	Occurs across NSW. Principal breeding sites are the central east coast from Newcastle to Bundaberg. Also breeds in major inland wetlands in north NSW (notably the Macquarie Marshes). Occurs in tropical and temperate grasslands, wooded lands and terrestrial wetlands. Uses predominately shallow, open and fresh wetlands with low emergent vegetation and abundant aquatic flora. Sometimes observed in swamps with tall emergent vegetation and commonly use areas of tall pasture in moist, low-lying areas.	Unlikely	No suitable habitat within the study area.
<i>Ardea modesta</i>	Eastern Great Egret	P		415 records within 10 km (OEH 2014a)	Occurs across NSW. Within NSW there are breeding colonies within the Darling Riverine Plains and Riverina regions and minor colonies across its range including the north and north-east of the state. Reported from a wide range of wetland habitats (for example inland and coastal, freshwater and saline, permanent and ephemeral, open and vegetated, large and small, natural and artificial).	Unlikely	No suitable habitat within the study area.
<i>Arenaria interpres</i>	Ruddy Turnstone	P	C,J,K	7 records within 10 km (OEH 2014a)	Breeds in N Hemisphere. In non-breeding season, widespread in most coastal regions of Australia with occasional inland records. Strongly prefers rocky shores or beaches with large seaweed deposits.	Unlikely	No suitable habitat within the study area.
<i>Calidris acuminata</i>	Sharp-tailed Sandpiper	P	C,J,K	611 records within 10 km (OEH 2014a)	Spends the non-breeding season in Australia with small numbers occurring regularly in New Zealand. Most of the population migrates to Australia, mostly to the south-east and are widespread in both inland and coastal locations and in both freshwater and saline habitats. Many inland records are of birds on passage. In Australasia, prefers muddy edges of shallow fresh or brackish wetlands, with inundated or emergent sedges, grass, saltmarsh or other low vegetation. Breeds in northern Siberia.	Unlikely	No suitable habitat within the study area.

Scientific name	Common name	TSC status	EPBC status	Combined source	Habitat description	LOO	Notes
<i>Calidris canutus</i>	Red Knot	P	C,J,K	15 records within 10 km (OEH 2014a)	Breeds in N Hemisphere. Occurs in coastal areas around Australia, with important sites in VIC, SA, WA, NT and Qld. Mainly inhabits intertidal mudflats, sandflats and sandy beaches. Occasionally seen in terrestrial saline wetlands but rarely in freshwater wetlands. Forage in soft substrates in intertidal areas.	Unlikely	No suitable habitat within the study area.
<i>Calidris ferruginea</i>	Curlew Sandpiper	E1,P	C,J,K	351 records within 10 km (OEH 2014a)	Breeds in N Hemisphere. In Australia generally occupies littoral and estuarine habitats. In NSW mainly found in intertidal mudflats on sheltered coasts. Roosts on beaches, spits or islands on the coast/in wetlands, or in saltmarsh on rocky shores.	Unlikely	No suitable habitat within the study area.
<i>Calidris melanotos</i>	Pectoral Sandpiper	P	J,K	40 records within 10 km (OEH 2014a)	Widespread but scattered records across NSW, east of the divide and in the Riverina and Lower Western regions. Breeds in the N Hemisphere. In Australasia, prefers shallow fresh to saline wetlands and is found at coastal lagoons, estuaries, bays, swamps, lakes, inundated grasslands, saltmarshes, river pools, creeks, floodplains and artificial wetlands. Usually in coastal or near-coastal habitats, and prefers wetlands with open mudflats and low emergent or fringing vegetation such as grass or samphire.	Unlikely	No suitable habitat within the study area.
<i>Calidris ruficollis</i>	Red-necked Stint	P	C,J,K	47 records within 10 km (OEH 2014a)	Distributed along most of the Australian coastline with large densities on the Victorian and Tasmanian coasts. Breeds in Siberia and sporadically in north and west Alaska. In Australasia, mostly found in coastal areas, including in sheltered inlets, bays, lagoons and estuaries with intertidal mudflats, often near spits, islets and banks and, sometimes, on protected sandy or coralline shores. Occasionally they have been recorded on exposed or ocean beaches, and sometimes on stony or rocky shores, reefs or shoals.	Unlikely	No suitable habitat within the study area.
<i>Charadrius bicinctus</i>	Double-banded Plover	P		3 records within 10 km, last recorded 1987 (OEH 2014a)	Found in both coastal and inland areas. During the non-breeding season, it is common in eastern and southern Australia. Breeds only in New Zealand. Found on littoral, estuarine and fresh or saline terrestrial wetlands and also saltmarsh, grasslands and pasture. It occurs on muddy, sandy, shingled or sometimes rocky beaches, bays and inlets, harbours and margins of fresh or saline terrestrial wetlands such as lakes, lagoons and swamps, shallow estuaries and rivers.	Unlikely	No suitable habitat within the study area.

Scientific name	Common name	TSC status	EPBC status	Combined source	Habitat description	LOO	Notes
<i>Charadrius leschenaultii</i>	Greater Sand-plover	V,P	C,J,K	1 record within 10 km, last recorded 1991 (OEH 2014a)	Does not breed in Australia. In NSW, recorded between the northern rivers and the Illawarra, with most records coming from the Clarence and Richmond estuaries. Occurs mainly on sheltered sandy, shelly or muddy beaches or estuaries with large intertidal mudflats or sandbanks. Roosts during high tide on sandy beaches and rocky shores; forage on wet ground at low tide.	Unlikely	No suitable habitat within the study area.
<i>Chlidonias leucopterus</i>	White-winged Black Tern	P	C,J,K	1 record within 10 km, last recorded 1990 (OEH 2014a)	Breeds in N Hemisphere, and one breeding record in NZ. In NSW, widespread east of the Great Divide, mainly north from Wollongong but with scattered records further south. Mostly inhabits a wide range of fresh, brackish or saline wetlands, which may be open or with floating emergent or marginal vegetation. Rarely occur on inland wetlands. Mainly forages aerially over water or muddy/ sandy wetland edges and adjacent habitats.	Unlikely	No suitable habitat within the study area.
<i>Gallinago hardwickii</i>	Latham's Snipe	P	C,J,K	495 records within 10 km (OEH 2014a)	Occurs along the coast and west of the great dividing range. Non breeding visitor to Australia. Inhabit permanent and ephemeral wetlands up to 2000 m asl. Typically in open, freshwater wetlands with low, dense vegetation (incl. swamps, flooded grasslands and heathlands). Can also occur in saline/brackish habitats and in modified or artificial habitats close to human activity.	Unlikely	No suitable habitat within the study area.
<i>Haliaeetus leucogaster</i>	White-bellied Sea-Eagle	P	C	205 records within 10 km (OEH 2014a); Breeding habitat known to occur within 10 km (DotE 2014a)	Primarily coastal but may extend inland over major river systems. Breeds close to water, mainly in tall open forest/woodland but also in dense forest, rainforest, closed scrub or remnant trees. Usually forages over large expanses of open water, but also over open terrestrial habitats (e.g. grasslands).	Unlikely	No suitable habitat within the study area.
<i>Hirundapus caudacutus</i>	White-throated Needletail	P	C,J,K	46 records within 10 km (OEH 2014a); Species or species' habitat known to occur within 10 km (DotE 2014a)	Recorded along NSW coast to the western slopes and occasionally from the inland plains. Breeds in northern hemisphere. Almost exclusively aerial while in Australia. Occur above most habitat types, but are more frequently recorded above more densely vegetated habitats (rainforest, open forest and heathland) than over woodland or treeless areas.	Unlikely	No suitable habitat within the study area.

Scientific name	Common name	TSC status	EPBC status	Combined source	Habitat description	LOO	Notes
<i>Hydroprogne caspia</i>	Caspian Tern	P	C,J	3 records within 10 km (OEH 2014a)	Found in coastal and inland areas. In NSW, widespread east of the divide, mainly in coastal regions as well as the Riverina and Western regions, with occasional records elsewhere. Breeding has been recorded in the Menindee Lakes. Mostly found in sheltered coastal embayments, preferring areas with sandy or muddy margins. Usually forages in open wetlands, including lakes and rivers.	Unlikely	No suitable habitat within the study area.
<i>Limicola falcinellus</i>	Broad-billed Sandpiper	V,P	C,J,K	1 record within 10 km, last recorded 1982 (OEH 2014a)	Breds in the northern hemisphere. In the non-breeding season most common in north and north west of Australia, but is a regular visitor in small numbers to the NSW coast from Ballina to Shoalhaven Heads. Occurs on sheltered parts of the coast, favouring estuarine mudflats but also occasionally in saltmarshes, freshwater lagoons, salt works and sewerage farms. Forage on exposed mudflats or wet sand.	Unlikely	No suitable habitat within the study area.
<i>Limosa lapponica</i>	Bar-tailed Godwit	P	C,J,K	801 records within 10 km (OEH 2014a)	Has been recorded in the coastal areas of all Australian states. It is widespread in the Torres Strait and along the east and south-east coasts of Queensland, NSW and Victoria, including the offshore islands. Breeds in the north of Scandinavia, Russia and north-west Alaska. Found mainly in coastal habitats such as large intertidal sandflats, banks, mudflats, estuaries, inlets, harbours, coastal lagoons and bays.	Unlikely	No suitable habitat within the study area.
<i>Limosa limosa</i>	Black-tailed Godwit	V,P	C,J,K	12 records within 10 km (OEH 2014a)	A migratory wading bird that breeds in Mongolia and Eastern Siberia and flies to Australia for the southern summer, arriving in August and leaving in March. In NSW, it is most frequently recorded at Kooragang Island (Hunter River estuary), with occasional records elsewhere along the north and south coast, and inland. It is usually found in sheltered bays, estuaries and lagoons with large intertidal mudflats and/or sandflats. It has also been found around muddy lakes and swamps, wet fields and sewerage treatment works.	Unlikely	No suitable habitat within the study area.
<i>Merops ornatus</i>	Rainbow Bee-eater	P	J	1 record within 10 km (OEH 2014a); Species or species' habitat may occur within 10 km (DotE 2014a)	Distributed across much of mainland Australia, and several near-shore islands. Occurs mainly in open forests and woodlands, shrublands, and in various cleared or semi-cleared habitats, including farmland and areas of human habitation. It usually occurs in open, cleared or lightly-timbered areas that are often, but not always, located in close proximity to permanent water.	Unlikely	No suitable habitat within the study area.

Scientific name	Common name	TSC status	EPBC status	Combined source	Habitat description	LOO	Notes
<i>Monarcha melanopsis</i>	Black-faced Monarch	P		34 records within 10 km (OEH 2014a); Species or species' habitat known to occur within 10 km (DotE 2014a)	Found along the coast of eastern Australia, becoming less common further south. Found in rainforests, eucalypt woodlands, coastal scrub and damp gullies. It may be found in more open woodland when migrating. Resident in the north of its range, but is a summer breeding migrant to coastal south-eastern Australia, arriving in September and returning northwards in March. It may also migrate to Papua New Guinea in autumn and winter.	Unlikely	No suitable habitat within the study area.
<i>Myiagra cyanoleuca</i>	Satin Flycatcher	P		8 records within 10 km (OEH 2014a); Species or species' habitat known to occur within 10 km (DotE 2014a)	In NSW widespread on and east of the Great Divide, sparsely scattered on the western slopes, very occasional records on the western plains. Inhabit heavily vegetated gullies in eucalypt-dominated forests and taller woodlands, often near wetlands and watercourses. On migration, occur in coastal forests, woodlands, mangroves and drier woodlands and open forests. Generally not in rainforests.	Unlikely	No suitable habitat within the study area.
<i>Numenius madagascariensis</i>	Eastern Curlew	P	C,J,K	29 records within 10 km (OEH 2014a)	Within Australia, the species has a primarily coastal distribution. The species is found in all states, particularly the north, east, and south-east regions including Tasmania. Breeds in Russia and north-eastern China. Most commonly associated with sheltered coasts, especially estuaries, bays, harbours, inlets and coastal lagoons, with large intertidal mudflats or sandflats, often with beds of seagrass. Occasionally, the species occurs on ocean beaches (often near estuaries), and coral reefs, rock platforms, or rocky islets. The birds are often recorded among saltmarsh and on mudflats fringed by mangroves, and sometimes use the mangroves. The birds are also found in saltworks and sewage farms.	Unlikely	No suitable habitat within the study area.
<i>Numenius phaeopus</i>	Whimbrel	P	C,J,K	2 records within 10 km, last recorded 1991 (OEH 2014a)	A regular migrant to Australia and New Zealand, with a primarily coastal distribution. There are also scattered inland records in all regions. It is found in all states but is more common in the north. It is found along almost the entire coast of Queensland and NSW. Breeds in north and west Alaska, Eurasia and Iceland. Often found on the intertidal mudflats of sheltered coasts. It is also found in harbours, lagoons, estuaries and river deltas, often those with mangroves, but also open, un-vegetated mudflats. It is occasionally found on sandy or rocky beaches, on coral or rocky islets, or on intertidal reefs and platforms.	Unlikely	No suitable habitat within the study area.

Scientific name	Common name	TSC status	EPBC status	Combined source	Habitat description	LOO	Notes
<i>Pandion cristatus</i>	Eastern Osprey	V,P,3		2 records within 10 km, last recorded 1993 (OEH 2014a)	Favours coastal areas, especially the mouths of large rivers, lagoons and lakes. They feed on fish over clear, open water. Breeding takes place from July to September in NSW, with nests being built high up in dead trees or in dead crowns of live trees, usually within one kilometre of the sea, though there are a handful of records from inland areas.	Unlikely	No suitable habitat within the study area.
<i>Philomachus pugnax</i>	Ruff	P	C,J,K	3 records within 10 km, last recorded 1991 (OEH 2014a)	Breeds in N Hemisphere. In Australia the Ruff is found on generally fresh, brackish of saline wetlands with exposed mudflats at the edges. It is found in terrestrial wetlands including lakes, swamps, pools, lagoons, tidal rivers, swampy fields and flood plains.	Unlikely	No suitable habitat within the study area.
<i>Plegadis falcinellus</i>	Glossy Ibis	P	C	44 records within 10 km (OEH 2014a)	Occurs throughout eastern and northern Australia, east of the Kimberley and Eyre Peninsula. Largest areas of prime habitat are inland and northern floodplains, with largest numbers in the Top End and Channel Country. Preferred habitats are fresh water marshes at the edges of lakes and rivers, lagoons, flood-plains, wet meadows, swamps, reservoirs, sewage ponds, rice-fields and cultivated areas under irrigation. Breeds at limited locations, with most records from the Murray Darling Basin (NSW), western Riverina (VIC), south-east (SA), Channel Country (Qld/ SA) and lower Ord/Keep Rivers (WA).	Unlikely	No suitable habitat within the study area.
<i>Pluvialis fulva</i>	Pacific Golden Plover	P	C,J,K	304 records within 10 km (OEH 2014a)	Breeds in N hemisphere. In Australia occurs mainly in coastal areas but also recorded inland. Important sites in NSW include the Hunter and Shoalhaven River estuaries. Usually occur on beaches, mudflats and sandflats in sheltered areas.	Unlikely	No suitable habitat within the study area.
<i>Pluvialis squatarola</i>	Grey Plover	P	C,J,K	2 records within 10 km, last recorded 1992 (OEH 2014a)	Breed in the N Hemisphere. Widespread on Australian coast in the non-breeding season. Occur almost entirely in coastal areas, usually in sheltered embayments with mud or sandflats and occasionally on rocky coasts or near-coastal lakes and swamps. Very occasionally recorded further inland. Forage on exposed mudflats and beaches.	Unlikely	No suitable habitat within the study area.
<i>Rhipidura rufifrons</i>	Rufous Fantail	P		64 records within 10 km (OEH 2014a); Species or species' habitat known to occur within 10 km (DotE 2014a)	Found along NSW coast and ranges. Inhabits rainforest, dense wet forests, swamp woodlands and mangroves. During migration, it may be found in more open habitats or urban areas (Birds Australia 2008).	Unlikely	No suitable habitat within the study area.

Scientific name	Common name	TSC status	EPBC status	Combined source	Habitat description	LOO	Notes
<i>Rostratula australis</i>	Australian Painted Snipe	E1,P	E	2 records within 10 km (OEH 2014a)	Normally found in permanent or ephemeral shallow inland wetlands, either freshwater or brackish. Nests on the ground amongst tall reed-like vegetation near water. Feeds on mudflats and the water's edge taking insects, worm and seeds. Prefers fringes of swamps, dams and nearby marshy areas with cover of grasses, lignum, low scrub or open timber.	Unlikely	No suitable habitat within the study area.
<i>Sterna hirundo</i>	Common Tern	P	C,J,K	31 records within 10 km (OEH 2014a)	Non-breeding migrant to Australia. Widespread and common along the east coast from SE Qld to Victoria, though less often recorded south of Port Hacking. Utilise marine, pelagic and coastal habitats, but are commonly observed in near-coastal waters, on ocean beaches, platforms and headlands and in sheltered waters (bays, harbours and estuaries). Forage in marine environments and near-coastal terrestrial wetlands. Roost on beaches, rock platforms, islands and banks of estuaries and lagoons.	Unlikely	No suitable habitat within the study area.
<i>Sternula albifrons</i>	Little Tern	E1,P	C,J,K	5 records within 10 km (OEH 2014a)	In NSW occurs mainly north of Sydney, with smaller numbers south to VIC. Almost exclusively coastal, preferring sheltered environments; may occur several kilometres from the sea in harbours, inlets and rivers. Nests in low dunes or sandy beaches just above high tide mark near estuary mouths/ adjacent to coastal lakes and islands. Forage in shallow waters of estuaries, coastal lagoons and lakes, also along open coasts, less often at sea, and usually within 50 m of shore.	Unlikely	No suitable habitat within the study area.
<i>Symposiachrus trivirgatus</i>	Spectacled Monarch	P		1 record within 10 km, last recorded 1986 (OEH 2014a)	The Spectacled Monarch is found in coastal north-eastern and eastern Australia, including coastal islands, from Cape York, Queensland to Port Stephens, New South Wales. It is much less common in the south. Prefers thick understorey in rainforest, wet gullies and waterside vegetation as well as mangroves.	Unlikely	No suitable habitat within the study area.
<i>Tringa brevipes</i>	Grey-tailed Tattler	P	C,J,K	3 records within 10 km (OEH 2014a)	Non-breeding visitor to Australia. In NSW occurs along the coast from the Queensland border south to Tilba Lake, and has been recorded as far south as Gippsland. In NSW it is recorded more frequently north of Sydney. Found on sheltered coasts with reefs and rock platforms or with intertidal mudflats. Inland records are rare. Forages in shallow water in intertidal areas. Usually roosts in the branches of mangroves or rocks which may be partly submerged. Also rarely recorded in dense shrubs, on driftwood or sand dunes.	Unlikely	No suitable habitat within the study area.

Scientific name	Common name	TSC status	EPBC status	Combined source	Habitat description	LOO	Notes
<i>Tringa glareola</i>	Wood Sandpiper	P	C,J,K	2 records within 10 km, last recorded 1991 (OEH 2014a)	Breeds in N Hemisphere. Occurs in largest numbers in NW Australia, with all sites of national importance within WA. In NSW there are records east of the Divide north from Nowra, and inland from the upper and lower Western regions. Uses well-vegetated, shallow, freshwater wetlands and are typically associated with wetlands supporting emergent aquatic plants or grass and taller fringing vegetation such as dense reeds/rushes, shrubs or trees. Also frequent flooded grasslands and irrigated crops. Rarely in brackish wetlands or saltmarsh. Known from artificial wetlands.	Unlikely	No suitable habitat within the study area.
<i>Tringa nebularia</i>	Common Greenshank	P	C,J,K	171 records within 10 km (OEH 2014a)	Does not breed in Australia, but occurs in all types of wetlands. In NSW has been recorded in most coastal regions and is widespread west of the Great Dividing Range, particularly in the north-west, Macquarie Marshes and areas between the Lachlan and Murray Rivers and Darling River drainage basin. The Hunter River estuary is an internationally important site for the species. In coastal areas typically occurs in sheltered habitats with large mudflats and saltmarsh, mangroves or seagrass.	Unlikely	No suitable habitat within the study area.
<i>Tringa stagnatilis</i>	Marsh Sandpiper	P	C,J,K	38 records within 10 km (OEH 2014a)	Breeds in N Hemisphere. Occurs in coastal and inland wetlands, including freshwater and estuarine habitats, throughout Australia. All regions of NSW but particularly central and south coasts and western slopes and plains. Sites of national importance in NSW include Parkes wetlands, Macquarie Marshes and Tullakool Evaporation Ponds.	Unlikely	No suitable habitat within the study area.
<i>Xenus cinereus</i>	Terek Sandpiper	V,P	C,J,K	1 record within 10 km (OEH 2014a)	The two main sites for this species in NSW are the Richmond River and Hunter River estuaries. Inhabits coastal mudflats, lagoons, creeks and estuaries. Favours mudbanks and sandbanks near mangroves, also observed on rocky pools and reefs and up to 10 km inland around brackish pools. Roost communally in mangroves or dead trees. Forages in open intertidal mudflats.	Unlikely	No suitable habitat within the study area.

NSW status		EPBC Act status	
Code	Definition	Code	Definition
P	Native fauna protected under the NPW Act	V	Vulnerable
P13	Native flora protected under the NPW Act	E	Endangered
V	Vulnerable under the TSC Act	CE	Critically endangered
E1	Endangered under the TSC Act		
E2	Endangered Population under the TSC Act		
E3	Endangered Ecological Community under the TSC Act		
E4	Extinct under the TSC Act		
E4A	Critically endangered under the TSC Act		
E4B	Critically Endangered Ecological Community under the TSC Act		