

LOCAL STRUCTURE PLAN
PROPOSED INTEGRATED TOURIST
RESORT
LOT 101(NO.777) TEATREE ROAD
BINDOON

ENVIRONMENTAL ASSESSMENT

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ENVIRONMENTAL

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1 INTRODUCTION

1.1 Background

Lot 101 (No.777) Teatree Road, Bindoon is located in the Shire of Chittering approximately 60 km north-north-east of the Perth Central Business District (Figure 1). Lot 101 has a total land area of 475 hectares and is bound by Teatree Road to the north, Brennan Road to the east and undeveloped bushland to the south and west (Figure 2).

The north-east corner of Lot 101, comprising an area of 50 hectares (herein referred to as the site), was recently rezoned to 'Special Use' by Amendment 61 to Shire of Chittering Local Planning Scheme No.6, to allow for the development of an integrated tourist resort in accordance with an approved Structure Plan. The proposed resort will include 46 residential resort homes, short-stay villas / serviced apartments, communal open space and guest facilities. Amendment 61 to Local Planning Scheme No.6 included the balance of Lot 101 in the 'Environmental Conservation' zone.

PGV Environmental was commissioned by NXT, the proponent of the tourist resort, to undertake an Environmental Assessment of the site, being the north-east 50ha portion of Lot 101 (the site).

1.2 Scope of Work

The Environmental Assessment was undertaken as a desktop assessment of the key environmental attributes of the site, a level 1 fauna survey and a detailed site flora and vegetation survey. The Environmental Assessment included the following:

- Physical characteristics including a description of:
 - Landform;
 - Drainage and water bodies; and
 - Geological, hydrogeological and hydrological characteristics;
- Recent and present land use including:
 - Assessment of current and historical activities; and
 - Surrounding land uses;
- Flora and Vegetation
- Fauna Survey
- Heritage
- Implications, if any, under Western Australian policies and legislation including the *Environmental Protection Act 1986* and the Commonwealth EPBC Act.

2 EXISTING ENVIRONMENT

2.1 Site Description

The site is situated in the locality of Bindoon, in the Shire of Chittering, approximately 60 kilometres north-north-east of the Perth central area. The site is located 7.5km west-south-west of Bindoon townsite, at the south west corner of Teatree Road and Brennan Road. The intersection of Teatree Road and Great Northern Highway is 7.7 kilometres to the east (Figure2).

The legal description for the site is Lot 101 on Plan 17335, Certificate of Title Volume 1869 Folio 841 (Appendix 1).

2.2 Land Use

Review of historical aerial photography shows that the site has largely been unchanged since 1981 (the oldest historical aerial photography publicly available) (Plates 1 and 2). Three small fires have occurred on the site and fire breaks have been created along Teatree Road in later years.

The land to the north and east is used for rural (farming) purposes. A farmhouse on the property to the north is positioned approximately 200 metres from the northern boundary of the site. The land to the south and west of Lot 101 is vegetated and unused for any known purposes.

Plate 1: Aerial Photography from 1981 (Landgate, 2019)

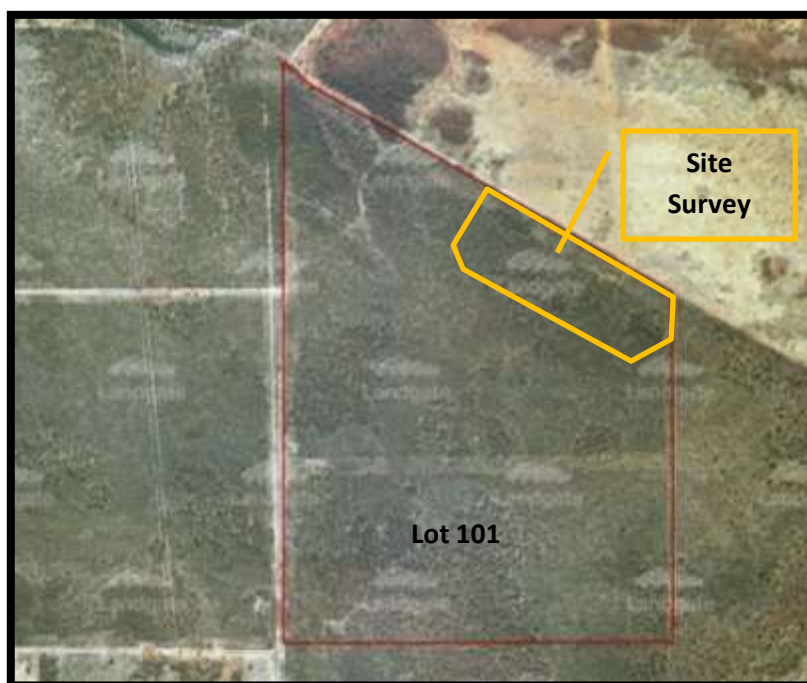
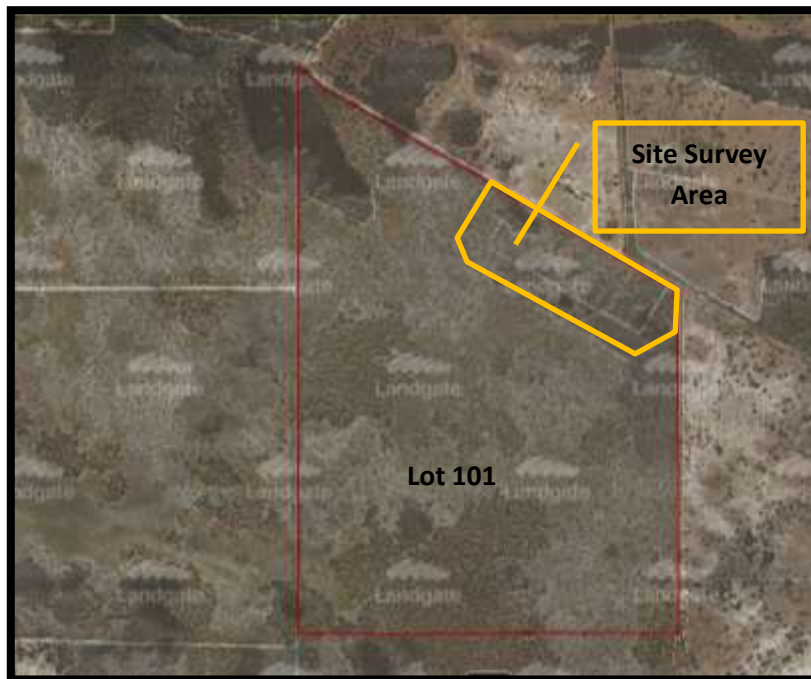


Plate 2: Aerial Photography from 2017 (Landgate, 2019)



2.3 Topography

The site is undulating with an elevation of approximately 140m Australian Height Datum (AHD) in the north-west corner and 190m AHD in the south-east corner (Figure 2). A low ridge extends across the middle of the site at 180m AHD and grades down to 160m AHD and back up to the highest point at approximately 190m AHD.

2.4 Geology and Soils

The site is on the Mogumber System which are located on gently undulating plateau made up of colluvium from weathered sandstone. The unit is made up of gentle to moderate sloping sandplain, varying from pale to yellow clayey sand with gravel and laterised ridges (DPIRD, 2019).

The Department of Primary Industry and Regional Development (DPIRD) have mapped the following soil subsystems on Lot 101. The location of the soil subsystems is shown on Plate 3:

- Mogumber 1 Subsystem (222Mb_1) which are undulating broad crests and very gentle upper slopes (<10%) with common lateritic duricrust outcrop and shallow gravelly sands;
- Mogumber 3 Subsystem (222Mb_3) which are gently inclined undulating slopes and minor drainage head-waters consisting of deep grey siliceous or bleached sand; and
- Mogumber 4 Subsystem (222Mb_4) which are gently to moderately inclined slopes (<10%) with shallow gravelly sands and few areas of lateritic outcrop (DPIRD, 2019).
- Mogumber 8 Subsystem (222Mb_8) which are undulating rises and low hills and some breakaways. Shallow coarse gravelly white and pale yellow sands that overly duricrust.
- Dandaragan Karamel Phase 1 (222DaKM1) which are gently undulating dunes. Pale yellow, to yellowish brown sand. Maybe gravelly and/or weakly clayey below a metre (DPIRD, 2019).

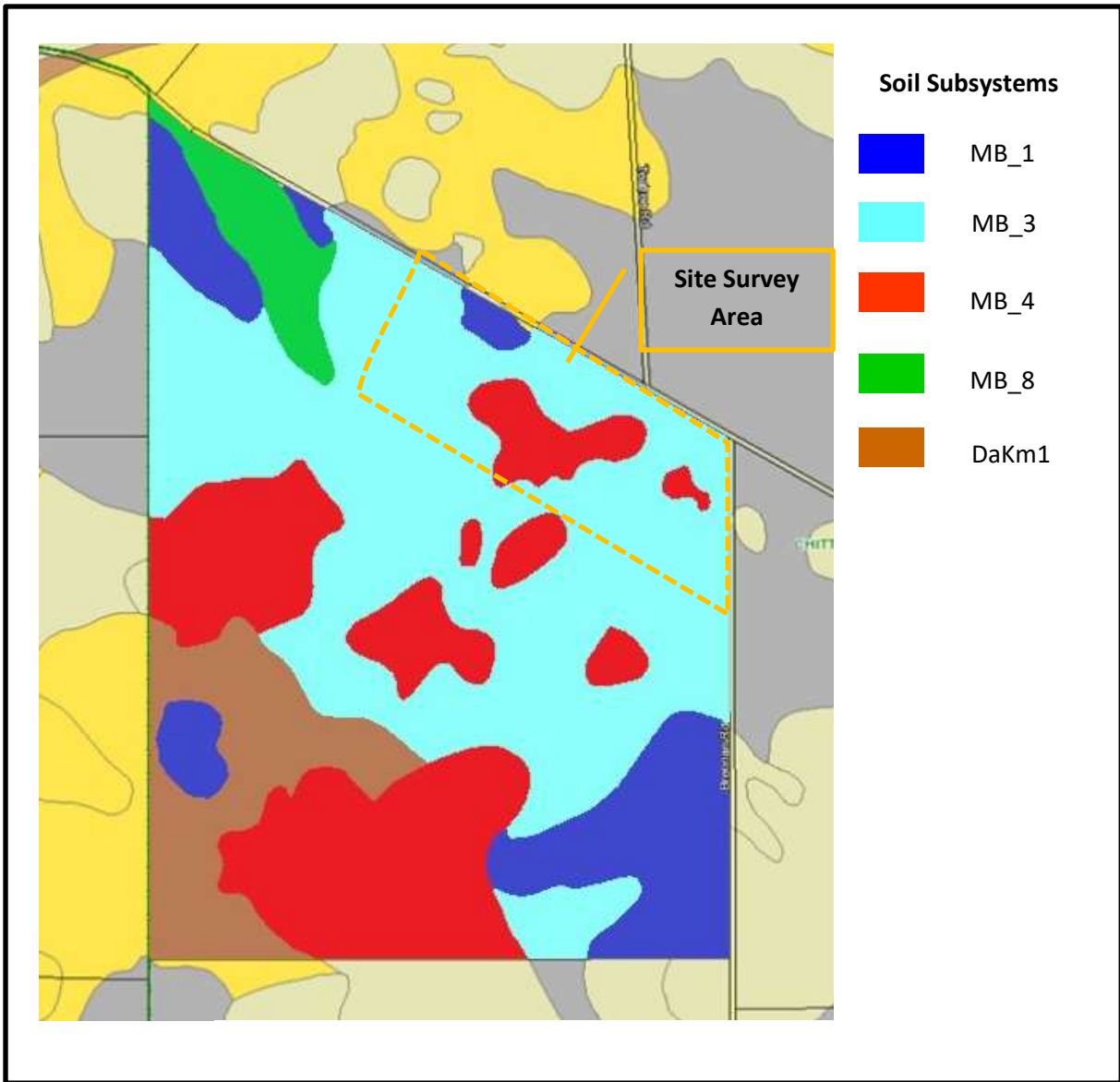


Plate 3: Source: Soil Landscape Mapping (DPIRD, 2019)

The Department of Primary Industry and Regional Development (DPIRD) has undertaken broadscale land capability modeling across the south west of Western Australia. The land capability assessment provides a general guide and is modeled at a broad resolution (upto 25ha in some cases), therefore site assessment may be required to verify the modeled data (DPIRD, 2005).

Table 1 below details the key attributes that may impact on the capability of the three soil subsystems mapped on the site.

Table 1: Soil subsystems Capability Assessment (DPIRD, 2019)

Sub Soil system	Phosphorous Export Risk	Subsurface Acidification Risk	Water Erosion Risk	Water Repellence Risk	Microbial Purification
MB_1	10-30% of map unit has a high to	>70% of map unit has a high subsurface acidification	3-10% of map unit has a high to extreme	<3% of map unit has a high water	>70% of the map unit has a very low to low rating

	extreme export risk	risk or is presently acid	water erosion risk	repellence risk	
MB_3	>70% of map unit has a high to extreme export risk	>70% of map unit has a high subsurface acidification risk or is presently acid	3-10% of map unit has a high to extreme water erosion risk	>70% of map unit has a high water repellence risk	10-30% of the map unit has a very low to low rating
MB_4	3-10% of map unit has a high to extreme export risk	>70% of map unit has a high subsurface acidification risk or is presently acid	<3% of map unit has a high to extreme water erosion risk	<3% of map unit has a high water repellence risk	>70% of the map unit has a very low to low rating

2.5 Hydrology

Groundwater is at depth and there are no surface expressions of groundwater on the site (DWER, 2019).

There are no wetlands or water courses on the site (SLIP, 2019).

2.6 Heritage

2.6.1 Aboriginal Heritage

The Aboriginal Heritage Database (AHD) Enquiry System identifies a Registered Aboriginal Heritage Site (Place ID 20008) that extends across the northern portion of the site. The site is named Gingin Brook Waggyl Site and is listed as a Historical, Mythological, Camp, Hunting Place, Plant Resource, Water Source.

During the rezoning for the site, the Department of Planning, Lands and Heritage (DPLI) confirmed that the proposed works are within the boundary of Place ID 20008 but not within the boundary as administered by the AHD. Therefore, based on the information held by the AHD and the spatial data submitted by the Shire of Chittering no approvals under the *Aboriginal Heritage Act (1972)* would be required (Shire of Chittering, 2017).

2.6.2 European Heritage

Heritage sites can be listed under the following lists/registers:

- World Heritage Sites;
- National Heritage Sites;
- Commonwealth Heritage Sites;
- Sites on the register of the National Estate;
- Sites on the Western Australian Heritage Council Register; and
- Sites listed in the Shire of Chittering Heritage Inventory List.

There are no listed Heritage Sites or Interim Heritage Sites on the site (National Map, 2019; Heritage Council of Western Australia, 2019; DoEE, 2019).

3 Flora and Vegetation

3.1 Methodology

A Detailed Flora and Vegetation Survey was undertaken in accordance with EPA Technical Guidance *Flora and Vegetation Surveys for Environmental Impact Assessment* (EPA, 2016a). Desktop studies were undertaken to identify potential threatened species and communities that may occur on the site. A site survey was conducted by Dr Paul van der Moezel of PGV Environmental on 5 September 2019. The inspection included traversing the site on foot.

The Flora and Vegetation Survey Report is attached at Appendix 2 and a summary of the findings are provided below.

3.2 Vegetation

3.2.1 Vegetation Complexes

Vegetation complexes are a very broad mapping unit based on landform and soils type. The vegetation complexes mapped on the site are Karamal Complex-South in the western part of the site and the Mogumber Complex-South to the east (Hedde *et al.*, 1980). The complexes are described below:

- Mogumber Complex-South is an Open woodland of *Eucalyptus calophylla* (Marri), with some admixture of *Eucalyptus marginata* (Jarrah) and a second storey of *Eucalyptus tottiana* (Pricklybark) - *Banksia attenuata* (Candlestick Banksia) - *Banksia menziesii* (Firewood Banksia) - *Banksia ilicifolia* (Holly-leaved Banksia).
- Karamal Complex-South is described as Open forest of *Eucalyptus marginata* (Jarrah) - *Corymbia calophylla* (Marri) with second storey of *Banksia grandis* (Bull Banksia).

The vegetation on the site is more representative of the Mogumber Complex-South. The Karamal Complex-South contains a second storey of *Banksia grandis* and there was only one recorded individual of this species recorded on the site. The site also contained *Eucalyptus tottiana*, *Banksia attenuata* and *Banksia menziesii*, more typical to the Mogumber Complex-South.

3.2.2 Vegetation Types

Six vegetation types were mapped and described on the site (Table 2). A full description of the vegetation types is provided in Appendix 2.

Table 2: Site Vegetation Types

Vegetation Type	
Et	<i>Eucalyptus tottiana</i> Low Open Woodland over <i>Hibbertia hypericoides</i> / <i>Eremaea pauciflora</i> / <i>Astroloma xerophyllum</i> Closed Low Heath
EtNf	<i>Eucalyptus tottiana</i> / <i>Nuytsia floribunda</i> Low Open Woodland over <i>Allocasuarina humilis</i> / <i>Hibbertia hypericoides</i> / <i>Synaphea spinulosa</i> / <i>Astroloma xerophyllum</i> / <i>Calytrix leschenaultii</i> Closed Heath
BmBaEt	<i>Banksia menziesii</i> / <i>B. attenuata</i> / <i>Eucalyptus tottiana</i> Low Woodland over <i>Conospermum stoechadis</i> / <i>Jacksonia floribunda</i> / <i>Adenanthos cygnorum</i> Open Shrubland over <i>Eremaea pauciflora</i> / <i>Leucopogon polymorphus</i> / <i>Astroloma xerophyllum</i> / <i>Calytrix leschenaultii</i> Open Low Heath

EmCc	<i>Eucalyptus marginata/ Corymbia calophylla</i> Low Woodland over <i>Daviesia angulata</i> Shrubland over <i>Hibbertia hypericoides/ Leucopogon polymorphus/ Xanthorrhoea preissii/ Synaphea spinulosa/ Grevillea synapheae/ Acacia pulchella</i> Open Low Heath
EmCcBs	<i>Eucalyptus marginata/ Corymbia calophylla</i> Low Woodland over <i>Banksia sessilis/ Daviesia angulata</i> Open Heath over <i>Hibbertia hypericoides/Leucopogon polymorphus/Xanthorrhoea preissii</i> Open Low Heath
Em	<i>Eucalyptus marginata</i> Low Open Woodland over <i>Jacksonia floribunda/ Xanthorrhoea preissii</i> Open Shrubland over <i>Calothamnus sanguineus/ Hibbertia hypericoides/ Leucopogon polymorphus/ Astroloma xerophyllum/ Calytrix leschenaultii</i> Closed Low Heath

3.2.3 Vegetation Condition

The condition of the vegetation was assessed according to the system devised by Keighery and described in Bush Forever (Government of Western Australia, 2000) (Table 3).

Table 3: Vegetation Condition Rating Scale

Condition	Description
Pristine	Pristine or nearly so, no obvious signs of disturbance.
Excellent	Vegetation structure intact, disturbance affecting individual species and weeds are non-aggressive species.
Very Good	Vegetation structure altered, obvious signs of disturbance. For example, disturbance to vegetation structure caused by repeated fires, the presence of some more aggressive weeds, dieback, logging and grazing.
Good	Vegetation structure significantly altered by very obvious signs of multiple disturbance. Retains basic vegetation structure or ability to regenerate it. For example, disturbance to vegetation structure caused by very frequent fires, the presence of some very aggressive weeds at high density, partial clearing, dieback and grazing.
Degraded	Basic vegetation structure severely impacted by disturbance. Scope for regeneration but not to a state approaching good condition without intensive management. For example, disturbance to vegetation structure caused by very frequent fires, the presence of very aggressive weeds, partial clearing, dieback and grazing.
Completely Degraded	The structure of the vegetation is no longer intact and the area is completely or almost completely without native species. These are often described as 'parkland cleared' with the flora comprising weed or crop species with isolated native trees or shrubs.

Source: Government of Western Australia, 2000.

The site contains intact native vegetation that has not been previously cleared (Plates 4 and 5). The vegetation on the site is considered to be in Pristine condition due to the lack of disturbance and very low coverage of weed species.



Plate 4: Pristine Rated Vegetation on sandy soils



Plate 5: Pristine Rated Vegetation on lateritic soils

3.3 Flora

A total of 123 plant species were recorded during the flora survey (Appendix 2). This total consisted of 119 native species and 4 (3.3%) introduced species. The number and percentage of introduced species is very low and is a reflection of the overall Pristine condition of the vegetation.

The total number of species is moderate for the size of the survey area (50ha).

The plant Families with the highest representation of species were Proteaceae (Banksia family – 19 species all native), Fabaceae (Wattle and Pea family – 16 species, all native), Myrtaceae (Myrtle family – 14 species all native) and Ericaceae (Heath family – 9 species, all native).

There were no Threatened (Declared Rare species recorded on the site.

One Priority species, *Tetratheca pilifera*, was recorded in very low numbers at one location on the site. *Tetratheca pilifera* is a spreading shrub up to 0.3m tall and occurs on gravelly soils east and north-east of Perth. At the site it was recorded on outcropping laterite in Jarrah/Marri and Parrot Bush (*Banksia sessilis*) vegetation.

3.4 Conservation Significance of Flora and Vegetation

3.4.1 Flora

One Priority 3 species, *Tetratheca pilifera*, was recorded in very low numbers at one location on the site.

Priority 3 species are those that are known from several locations, and the species does not appear to be under imminent threat. The low number of plants on the site is not likely to be considered an important population.

3.4.2 Vegetation

Vegetation Complexes

The conservation significance of vegetation complexes can be determined based on the Beard vegetation types. The conservation significance is based on the percentage of the original extent of the vegetation type remaining. The amount remaining of each of the complexes mapped on the site is outlined in Table 4.

Table 4: Percentage Remaining of Beard Vegetation Types

Vegetation Type	Description	Original Extent (ha) (WALGA, 2013)	% Remaining (WALGA, 2013)	% Remaining in the Shire of Chittering (DBCA, 2019)
Mogumber Complex-South	Open woodland of <i>Eucalyptus calophylla</i> (Marri), with some admixture of <i>Eucalyptus marginata</i> (Jarrah) and a second storey of <i>Eucalyptus todtiana</i> (Pricklybark) - <i>Banksia attenuata</i> (Candlestick Banksia) - <i>Banksia menziesii</i> (Firewood Banksia) - <i>Banksia ilicifolia</i> (Holly-leaved Banksia)	13985.52	40.20	42.92
Karamal Complex-South	Open forest of <i>Eucalyptus marginata</i> (Jarrah) - <i>Corymbia calophylla</i> (Marri) with second storey of <i>Banksia grandis</i> (Bull Banksia)	24016.67	63.40	52.89

Table 4 shows that the percentage remaining of Mogumber Complex-South is greater than 40% and Karamal Complex-South is greater than 50% (WALGA, 2013).

The percentage protection is above the 30% minimum criteria for vegetation complexes in the Perth and Peel Region Constrained Areas for retention of vegetation complexes State-wide as outlined in the EPA Position Statement No. 2 *Environmental Protection of Native Vegetation in Western Australia*.

The vegetation complexes mapped on the site are not considered endangered or regionally significant. Any clearing that might occur on the site in the future would not reduce the extent remaining to below 30%.

Threatened and Priority Ecological Communities

The vegetation type BmBaEt contains *Banksia attenuata* and *B. menziesii* and is in Pristine condition and is therefore considered part of the *Banksia Woodlands of the Swan Coastal Plain Threatened Ecological Community* (TEC) as listed under the Commonwealth EPBC Act. The site contains around 9ha of the BmBaEt vegetation type.

The Banksia Woodland of the Swan Coastal Plain are listed at the State level as a Priority 3 Ecological Community. The BmBaEt vegetation type on the site is also identified more specifically as the 'Banksia Woodland of the Gingin area restricted to soils dominated by yellow to orange sands' which is a Priority 2 Ecological Community.

The vegetation types Et and EtNf that do not contain Banksia trees or, if present are very sparse. These vegetation types are therefore not considered part of the Banksia Woodland TEC and State listed PEC due to the absence or very low density of Banksia Trees.

The other vegetation types are not part of any Threatened or Priority Ecological Communities.

4 Fauna

4.1 Methodology

A Level 1 Fauna Survey was undertaken in accordance with EPA Technical Guidance *Fauna Surveys for Environmental Impact Assessment* (EPA, 2016b). Desktop studies were undertaken to identify habitats and potential threatened species that may occur on the site. A site inspection including traversing the site on foot was conducted by PGV Environmental on 9 September 2019. The Vegetation and Fauna report is provided at Appendix 2 and a summary of the fauna findings is provided below.

4.2 Fauna Habitat

The fauna habitat on the site is described as an Open Woodland habitat. The Open Woodland Habitat has vegetation in Pristine condition with the structure of the vegetation intact. The vegetation has linkage to other areas of bushland therefore the habitat is considered to be High Quality Fauna Habitat (Plate 6).



Plate 6: Open Woodland Fauna Habitat

4.3 Conservation Significant Species

The Open Woodland Habitat provides foraging habitat for Carnaby's Black Cockatoos (*Calyptorhynchus latirostris*), particularly the Banksia trees and shrubs, Jarrah and Marri trees as well as some other Proteaceous shrubs (Valentine and Stock, 2008; Groom, 2011). The EmCc, EmCcBs and BmBaEt vegetation types have tree species suitable for foraging. These vegetation types comprise around 28ha of the site.

The Jarrah and Marri trees were all young trees up to 5m high with no old trees that are suitable for nesting either currently or in the near future. As a result, the habitat on the site for Carnaby's Cockatoo is considered foraging habitat only and not roosting or breeding habitat.

The South-western Brush-tailed Phascogale (*Phascogale tapoatafa wambenger*) (Schedule 6 – Conservation Dependant) was identified as having habitat on the site. The Southern Brown Bandicoot, Quenda (*Isoodon fusciventer*) (Priority 4) could potentially occur on the site. The dense vegetation is suitable for Bandicoots. The Rainbow Bee-eater (*Merops ornatus*), listed Marine under the EPBC Act, may potentially utilise some sections of the site as part of a much larger home range though only likely to occur infrequently.

4.4 Pest Fauna

The site is likely to contain rabbits, feral cats, foxes, rats and mice.

4.5 Biodiversity Value

The EPA's (2002) *Terrestrial Biological Surveys as an Element of Biodiversity Protection Position Statement No. 3* indicated an ecological assessment of a site must consider its biodiversity value at the genetic, species and ecosystem levels; and its ecological functional value at the ecosystem level. The ecosystem on the site is largely undisturbed however does have a road and is located in a rural area. Therefore, the fauna assemblage would be somewhat modified from pre-European settlement. There is likely to be introduced feral species such as foxes, cats and rabbits.

5 ENVIRONMENTAL ASSESSMENT

5.1 Proposed Development

The proposed development on the site is for a resort, residential and short stay accommodation. The proposed resort will include 46 residential resort homes, short-stay villas/ serviced apartments, communal open space and guest facilities. Communal open space around the perimeter of the site will provide a low fuel zone for fire management purposes. The draft structure plan for the development of the site is provided at Appendix 3.

The balance portion of Lot 101 to the south and west will be retained for conservation.

The site is not listed as a Contaminated Site and previous land use is not an impediment to development.

5.2 Existing and Past Land Use

The site has remained native bushland until the present time apart from some internal firebreaks. The site is not listed as a Contaminated Site and, accordingly, the previous land use is not an impediment to development.

5.3 Surrounding Land Use

The site is surrounded by agricultural land to the north and to a lesser extent to the east. The remainder of the site is surrounded by native vegetation.

The surrounding land use is not an impediment to development, however the development will need to comply with the site's Bushfire Management Plan.

5.4 Geology and Soils

The soil landscape mapped on the site is the Mogumber System which is characterised by poor deep pale sandy soils and some areas of ironstone gravel. These soils have a high risk of phosphorous export and low capability for microbial purification.

The soils on the site do not provide an impediment to the development of the site. The soils in the location of the resort wastewater treatment facility should be tested for phosphorous retention ability, water repellence and soil microbial purification prior to construction so mitigation measures for effluent disposal can be put in place if required.

5.5 Hydrology

There are no issues in relation to development above groundwater areas and there are no expressions of surface water on the site or within 50m of the site that would constrain development.

The soils on the site have a risk of water erosion occurring. Storm water management will be required to be addressed in accordance with *Better Urban Water Management* (WAPC, 2008). The site Urban Water Management Plan required prior to construction will need to address stormwater management

and mitigate any potential water erosion issues from overland flows into native vegetation on the balance of Lot 101.

5.6 Flora and Vegetation

The Flora and Vegetation survey found the following:

- The site contains around 50ha of native vegetation in Pristine condition consisting of almost equal amounts of vegetation occurring on sandy soil and lateritic soils;
- No Threatened flora were recorded on the site;
- One Priority 3 species, *Tetratheca pilifera*, was recorded in low numbers at one location on the site. Priority 3 species by definition are those known from several locations and the species does not appear to be under imminent threat. The low number of plants of this species on site is not likely to be considered an important population. Priority plant species do not have statutory weight under the State EP Act or Commonwealth EPBC Act;
- The two vegetation complexes are not endangered or regionally significant. Any clearing that might occur on the site in the future would not reduce the extent remaining to below 30%;
- The Banksia Woodland (BmBaEt vegetation type) is part of the Banksia Woodlands of the Swan Coastal Plain Threatened Ecological Community (TEC) listed under the Commonwealth EPBC Act. Approximately 9ha occurs on site and is proposed to be cleared. Any proposed clearing of the TEC will require a referral under the EPBC Act;
- The BmBaEt vegetation type on the site is also identified more specifically as the 'Banksia Woodland of the Gingin area restricted to soils dominated by yellow to orange sands' which is a Priority 2 Ecological Community.

Development of the site will result in the clearing of all the vegetation in the 50ha development site apart from some trees that may be able to be retained on lots or in the communal open space subject to the Bushfire Management Plan.

5.7 Fauna

The level 1 fauna survey found the following:

- The site is described as an open woodland habitat type and is considered to be "High" quality fauna habitat due to the pristine condition of the vegetation;
- The site provides approximately 28ha of foraging habitat for EPBC listed Black Cockatoos. The vegetation suitable for foraging consists of Banksia trees and shrubs, Jarrah and Marri trees as well as some other Proteaceous shrubs (Valentine and Stock, 2008; Groom, 2011). The EmCc, EmCcBs and BmBaEt vegetation types have tree species suitable for foraging;
- The Jarrah and Marri trees were all young trees up to 5m high with no old trees that are suitable for nesting either currently or in the near future. As a result, the habitat on the site for Carnaby's Cockatoo is considered foraging habitat only and not roosting or breeding habitat.
- The Southern Brown Bandicoot (*Isodon fusciventer*) (Priority 4) and South-western Brush-tailed Phascogale (*Phascogale tapoatafa wambenger*) (Schedule 6 – Conservation Dependant) could potentially occur on the site; and

- The Rainbow Bee-eater (*Merops ornatus*), listed Marine under the EPBC Act, may potentially utilise some sections of the site as part of a much larger home range though only likely to occur infrequently.

Development of the site will impact on fauna through clearing of fauna habitat. A fauna relocation management plan is recommended prior to development to ensure that mammals and reptiles are relocated to the adjacent conservation areas. It is likely that the fauna relocation management plan will be a condition of subdivision.

5.8 Heritage

There are no constraints to development in relation to Aboriginal or European heritage.

6 Environmental Approvals

6.1 EP Act

The rezoning of the site to develop was referred to the EPA under Section 48A of the EP Act (Shire of Chittering Town Planning Scheme 6 – Amendment 61. The referral was examined, and preliminary investigations and inquiries were conducted by the EPA. The EPA decision was ‘Not Assessed – Advice Given’ under Part IV of EP Act (Advice given) (Appendix 4).

In its decision to not assess the Amendment the EPA recommended that:

- The requirement for a Conservation Covenant over the portion of Lot 101 that is outside of the development area should remain in the scheme. This requirement should only be removed if this portion of the lot is transferred to the State for conservation;
- the 50ha development area should be located so that it remains as one consolidated area and minimises fragmentation of vegetation; and
- the Department of Planning (now DPLH) liaise with the Shire of Chittering to develop appropriate mechanisms or scheme provisions to ensure that any extraction of water for future development does not impact on the environmental assets of the lot.

The proposed development is consistent with the EPA’s recommendations.

For the purposes of Part IV of the EP Act, the scheme is defined as an assessed scheme. Based on the above decision of the EPA the clearing of native vegetation should not require a clearing permit under the EP Act as a schedule 6, clause 2 exemption can be applied in this case.

In PGV Environmental’s experience the DWER may not agree that the site has been assessed by the EPA with the Section 48A decision and may still suggest a clearing permit will be required. PGV Environmental recommend that the DWER should be consulted early to resolve the requirements around the clearing permit process.

6.2 EPBC Act

The clearing of native vegetation from the site will impact on the Banksia Woodlands of the Swan Coastal TEC and habitat for Carnaby’s Black Cockatoo.

The site contains around 9ha of the Banksia Woodland TEC and 28ha of Carnaby’s Black Cockatoo foraging habitat that would be cleared for development.

- Prior to development, the proposal will need to be referred under the *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act) as the clearing threshold for a significant impact for both the Banksia Woodland TEC and Carnaby’s Black Cockatoo habitat will be exceeded;
- The Referral process takes 20 business days to determine if a formal assessment will be required. If the decision of the Department of the Environment and Energy is to formally assess the proposal, the timeframe is likely to be 6-8 months to get a decision.

PGV Environmental considers that the proposed clearing will highly likely require a full assessment under the EPBC Act.

The assessment of the proposed development will include the retention of the balance of Lot 101 in a conservation covenant as an offset to the clearing. The balance of Lot 101 has up to 200ha of Banksia Woodland TEC and 400ha of Carnaby's Black Cockatoo habitat in Pristine condition and should adequately offset the clearing of 9ha of Banksia Woodland TEC and 28ha of Carnaby's Black Cockatoo habitat on the development site.

7 CONCLUSION AND RECOMMENDATIONS

7.1 Conclusion

The proposed development of the north-east portion of Lot 101 will result in the clearing of around 50ha of native vegetation. The vegetation has value in its Pristine condition, presence of a Threatened Ecological Community and foraging habitat for Carnaby's Black Cockatoos. The clearing will be offset by the retention of a far greater amount of vegetation, TEC and Carnaby's Cockatoo habitat on the balance of Lot 101 (425ha) in an "Environment Conservation" zone under the Shire of Chittering TPS 6. The balance of Lot 101 will have a conservation covenant placed over it to provide future protection.

The development is consistent with the recommendations of the EPA in its decision to not assess advice the proposed rezoning and development of Lot 101.

7.2 Recommendations

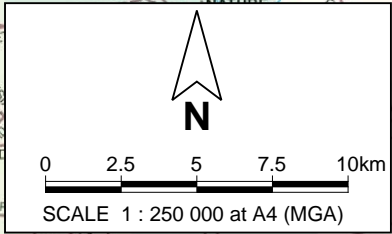
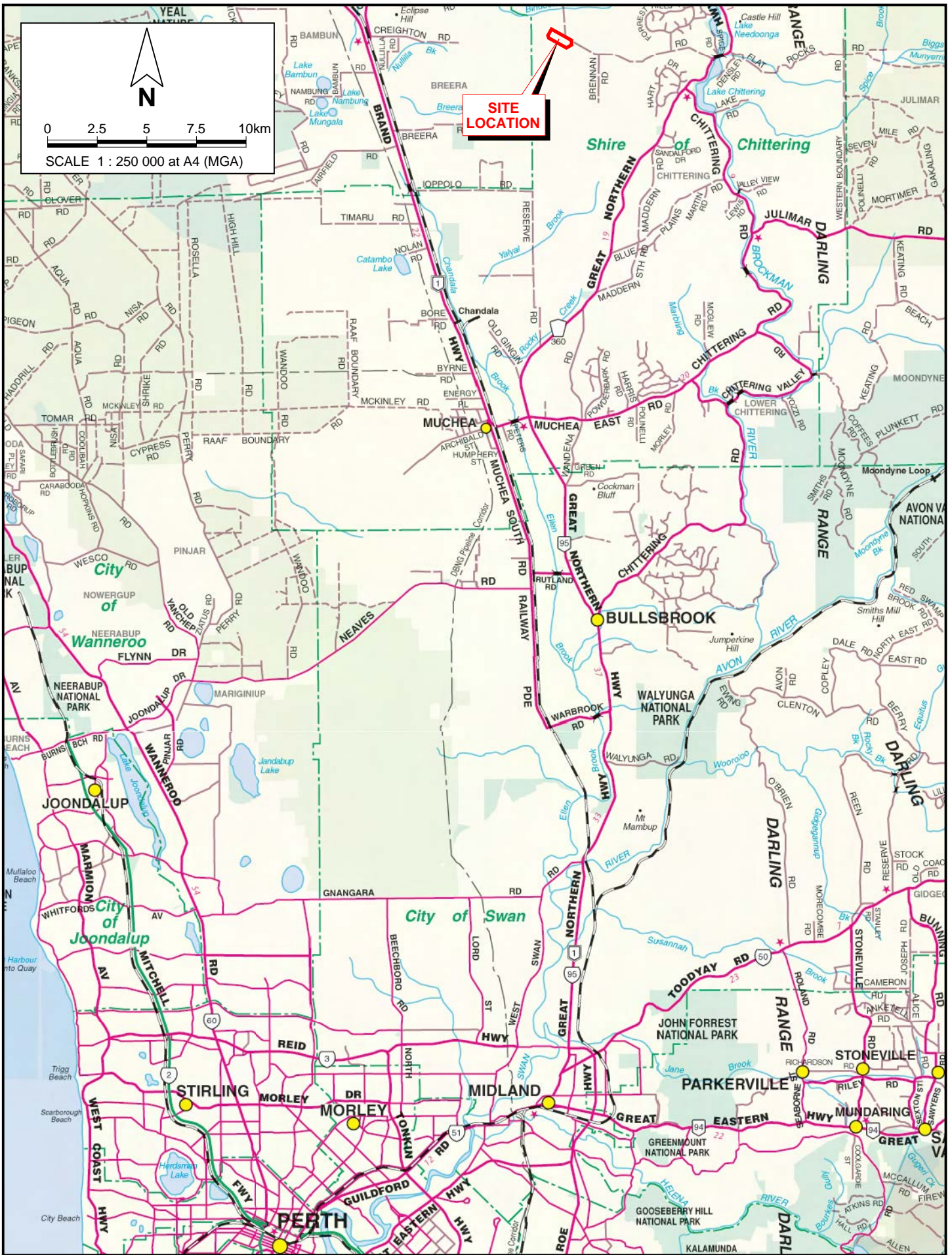
PGV Environmental recommends the following:

- Consultation with DWER to resolve any issues around any requirement for a clearing permit for the development;
- The proposal will need to be referred under the EPBC Act due to the impact on:
 - Black Cockatoos; and
 - Banksia Woodlands of the Swan Coastal Plain.
- The balance of Lot 101 to be retained as a conservation covenant will require a management plan to protect it from any potential indirect or direct impacts from the development.

8 REFERENCES

- Department of Primary Industries and Regional Development (DPIRD) (2019) Natural Resource Information. Accessed September 2019 <http://maps.agric.wa.gov.au/nrm-info/> Government of Western Australia, Perth.
- Department of the Environment and Energy (DoEE) (2019) Protected Matters Search Tool. <http://www.environment.gov.au/cgi-bin/sprat/public/publicthreatenedlist.pl>
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FIGURES



SITE LOCATION

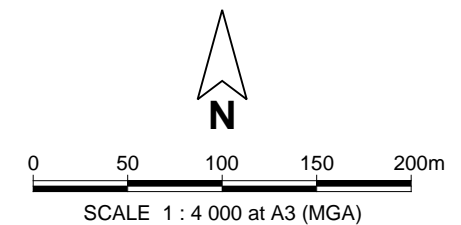
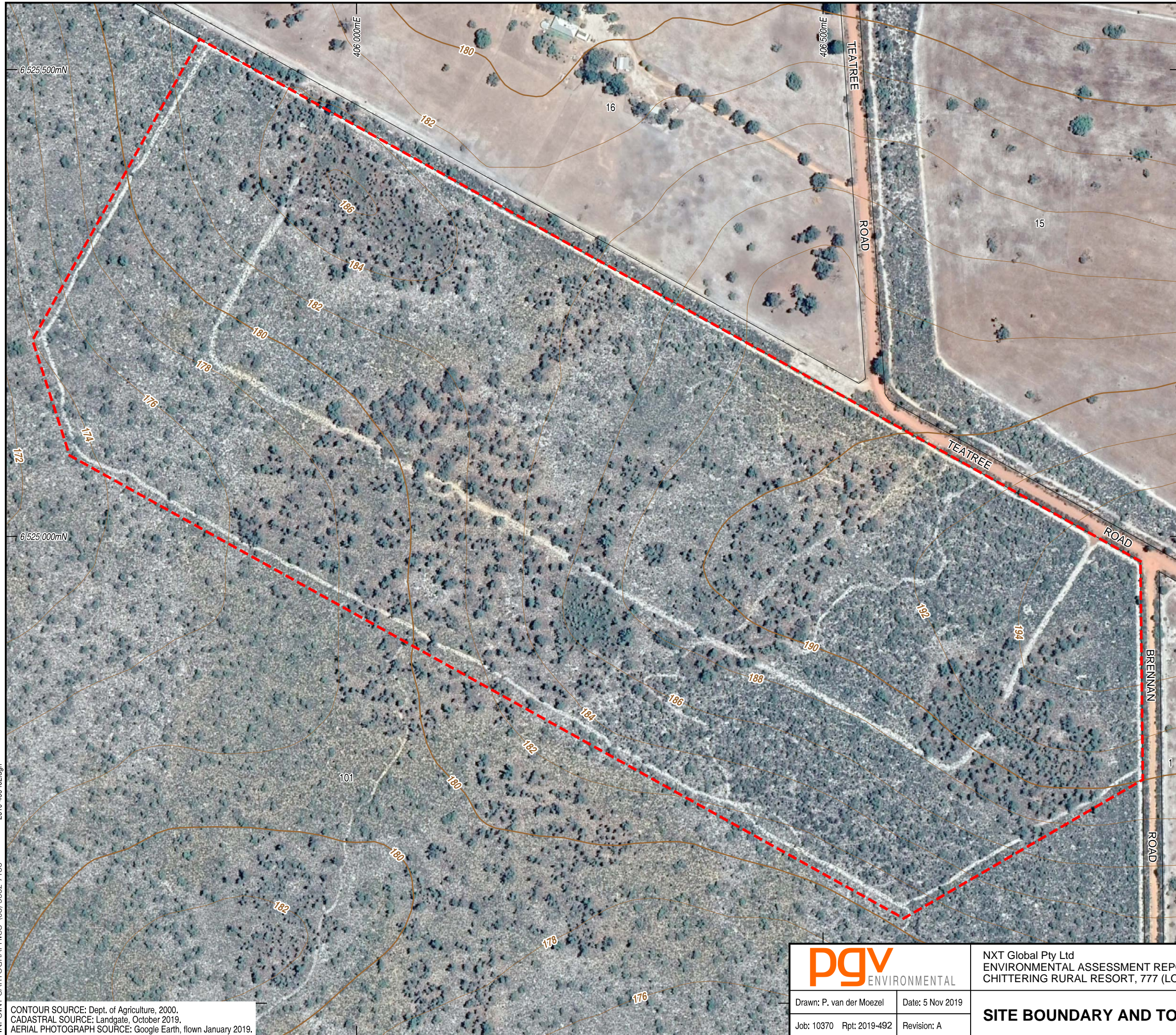
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Job: 10370 Rpt: 2019-492	Revision: A

NXT Global Pty Ltd
 ENVIRONMENTAL ASSESSMENT REPORT
 CHITTERING RURAL RESORT, 777 (LOT 101) TEATREE ROAD, CHITTERING

SITE LOCATION

Figure 1



- Legend**
- - - Site Boundary
 - Cadastral Boundary
 - Topographic Contour

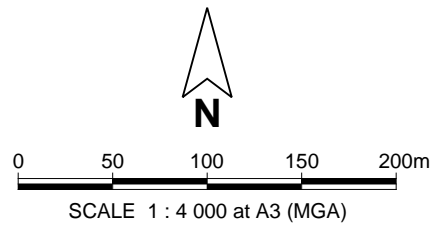
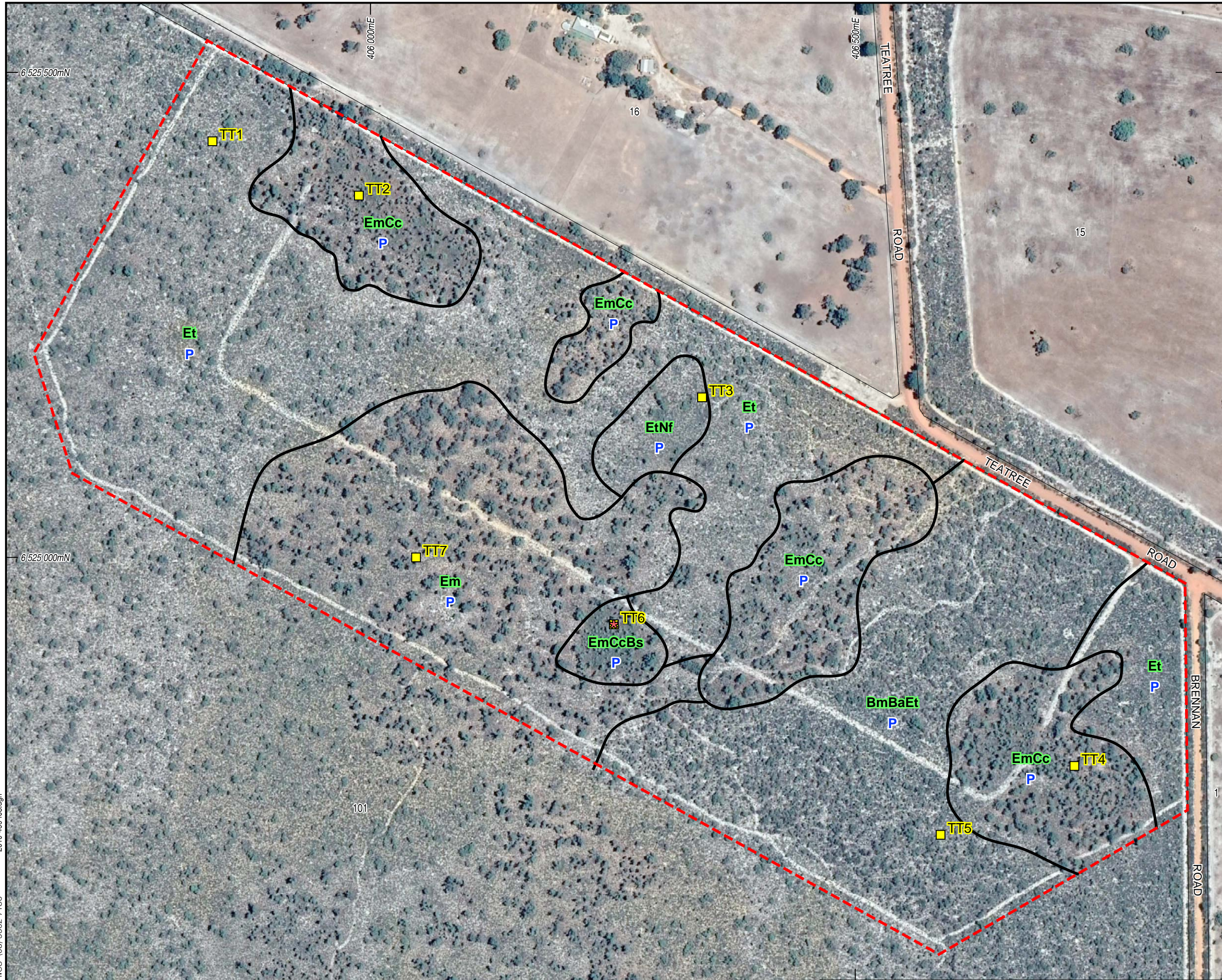
2019-466-102.dgn
PINPOINT CARTOGRAPHICS (08) 9562 7136

CONTOUR SOURCE: Dept. of Agriculture, 2000.
 CADASTRAL SOURCE: Landgate, October 2019.
 AERIAL PHOTOGRAPH SOURCE: Google Earth, flown January 2019.

pgv ENVIRONMENTAL	
Drawn: P. van der Moezel	Date: 5 Nov 2019
Job: 10370 Rpt: 2019-492	Revision: A

NXT Global Pty Ltd ENVIRONMENTAL ASSESSMENT REPORT CHITTERING RURAL RESORT, 777 (LOT 101) TEATREE ROAD, CHITTERING	
SITE BOUNDARY AND TOPOGRAPHY	

Figure 2



- Legend**
- - - Site Boundary
 - Cadastral Boundary
 - Quadrat Location
 - Vegetation Type Boundary
 - Et Vegetation Type
 - P Vegetation Condition
- Priority Flora**
- ✱ *Tetradlea pilifera* - P3

Vegetation Types

Et
Eucalyptus totidiana Low Open Woodland over *Hibbertia hypericoides*/*Eremaea pauciflora*/*Astroloma xerophyllum* Closed Low Heath

EtNf
Eucalyptus totidiana/*Nuytsia floribunda* Low Open Woodland over *Allocasuarina humilis*/*Hibbertia hypericoides*/*Synaphea spinulosa*/*Astroloma xerophyllum*/*Calytrix leschenaultii* Closed Heath

BmBaEt
Banksia menziesii/*B. attenuata*/*Eucalyptus totidiana* Low Woodland over *Conospermum stoechadis*/*Jacksonia floribunda*/*Adenanthos cygnorum* Open Shrubland over *Eremaea pauciflora*/*Leucopogon polymorphus*/*Astroloma xerophyllum*/*Calytrix leschenaultii* Open Low Heath

EmCc
Eucalyptus marginata/*Corymbia calophylla* Low Woodland over *Daviesia angulata* Shrubland over *Hibbertia hypericoides*/*Leucopogon polymorphus*/*Xanthorrhoea preissii*/*Synaphea spinulosa*/*Grevillea synapheae*/*Acacia pulchella* Open Low Heath

EmCcBs
Eucalyptus marginata/*Corymbia calophylla* Low Woodland over *Banksia sessilis*/*Daviesia angulata* Open Heath over *Hibbertia hypericoides*/*Leucopogon polymorphus*/*Xanthorrhoea preissii* Open Low Heath

Em
Eucalyptus marginata Low Open Woodland over *Jacksonia floribunda*/*Xanthorrhoea preissii* Open Shrubland over *Calothamnus sanguineus*/*Hibbertia hypericoides*/*Leucopogon polymorphus*/*Astroloma xerophyllum*/*Calytrix leschenaultii* Closed Low Heath

Vegetation Condition
(SOURCE: Bush Forever, Govt. of W.A., 2000)

P - Pristine
Pristine or nearly so, no obvious signs of disturbance.

2019-466-403.dgn
PINPOINT CARTOGRAPHICS (08) 9562 7136

CADASTRAL SOURCE: Landgate, October 2019.
AERIAL PHOTOGRAPH SOURCE: Google Earth, flown January 2019.

pgv ENVIRONMENTAL		NXT Global Pty Ltd ENVIRONMENTAL ASSESSMENT REPORT CHITTERING RURAL RESORT, 777 (LOT 101) TEATREE ROAD, CHITTERING	
Drawn: P. van der Moezel	Date: 26 Nov 2019	VEGETATION	
Job: 10370 Rpt: 2019-492	Revision: A		

Figure 3

APPENDIX 1

WESTERN



AUSTRALIA

REGISTER NUMBER 101/P17335	
DUPLICATE EDITION 2	DATE DUPLICATE ISSUED 13/3/2003

RECORD OF CERTIFICATE OF TITLE
UNDER THE TRANSFER OF LAND ACT 1893

VOLUME
1869FOLIO
841

The person described in the first schedule is the registered proprietor of an estate in fee simple in the land described below subject to the reservations, conditions and depth limit contained in the original grant (if a grant issued) and to the limitations, interests, encumbrances and notifications shown in the second schedule.



REGISTRAR OF TITLES

LAND DESCRIPTION:

LOT 101 ON PLAN 17335

REGISTERED PROPRIETOR:
(FIRST SCHEDULE)

MONTBROOK PTY LTD OF 1 KEYS CLOSE, MINDARIE KEYS

(T G240262) REGISTERED 29/7/1996

LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS:
(SECOND SCHEDULE)

- EXCEPT AND RESERVING METALS, MINERALS, GEMS AND MINERAL OIL SPECIFIED IN TRANSFER 25983/1964.
- I393835 MORTGAGE TO BANK OF WESTERN AUSTRALIA LTD REGISTERED 25/2/2003.

Warning: A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required.
* Any entries preceded by an asterisk may not appear on the current edition of the duplicate certificate of title.
Lot as described in the land description may be a lot or location.

-----END OF CERTIFICATE OF TITLE-----

STATEMENTS:

The statements set out below are not intended to be nor should they be relied on as substitutes for inspection of the land and the relevant documents or for local government, legal, surveying or other professional advice.

SKETCH OF LAND: 1869-841 (101/P17335)
PREVIOUS TITLE: 1462-767
PROPERTY STREET ADDRESS: 777 TEATREE RD, BINDOON.
LOCAL GOVERNMENT AUTHORITY: SHIRE OF CHITTERING

PLAN 17335

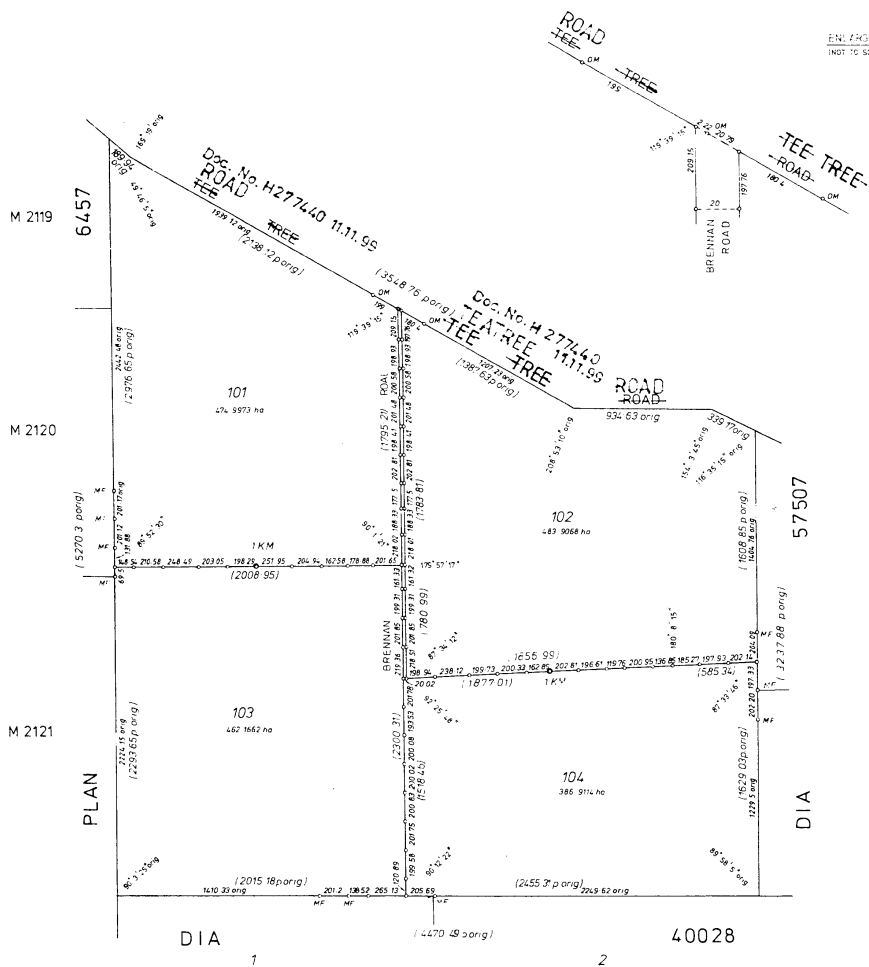
APPENDIX 1
P 017335 F 01



SUBDIVISION OF LOT M 2104 OF SWAN LOCATION 1371



TOTAL AREA = 1813.1233 ha.
FB 58409
PLAN 6492(1)
INDEX PLAN 8445
C/T 1462-767



ENLARGEMENT
NOT TO SCALE

IN ORDER FOR DEALINGS

August 6, sec 22(3) 16A.
for ELT 4/9/99

<p>CERTIFICATE</p> <p>I hereby certify that this survey was performed by me personally (or under my own personal supervision, inspection and field check) in strict accordance with the Licensed Surveyors (Guidance of Surveyors) Regulations, 1961.</p> <p>Date 15-9-1989</p> <p><i>[Signature]</i> Licensed Surveyor.</p>	<p>Approved by Town-Planning Board</p> <p>79204</p> <p><i>[Signature]</i> Chairman.</p> <p>Date 14/11/89</p>	<p>SCALE</p> <p>ALL DISTANCES ARE IN METRES</p> <p>Approved. APPROVED Inspector of Plans and Surveys. Date 22-3-90</p> <p>Examined P. BRIDGEMAN 43880 DKT DIA 29814</p>	<p>OFFICE OF TITLES</p> <p>Registered</p> <p>5248 15/11/89</p> <p>PLAN No. 17335</p>
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APPENDIX 2

PROPOSED INTEGRATED TOURIST RESORT, LOT 1 (NO.777) TEATREE ROAD, BINDOON

FLORA, VEGETATION AND FAUNA SURVEY

Prepared for: NXT Global Pty Ltd

Report Date: 13 December 2019

Version: 2

Report No. 2019-466

The logo for PGV Environmental is located at the bottom of the page. It features the letters 'PGV' in a large, bold, white sans-serif font. Below 'PGV', the word 'ENVIRONMENTAL' is written in a smaller, white, all-caps sans-serif font. The background of the logo area is a vibrant orange with a subtle, curved white line above it, and a pattern of fine, radiating lines in a lighter shade of orange.

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Appendix 2:	Naturemap Report
Appendix 3:	Protected Matters Search Tool Report
Appendix 4:	Conservation Codes

Appendix 5: TEC/PEC Database Search

Appendix 6: Flora List

Appendix 7: Quadrat Data

Appendix 8: DBCA Fauna Database Search

1 INTRODUCTION

1.1 Background

Lot 101 (No. 777) Teatree Road, Bindoon (the site) is located in the Shire of Chittering approximately 63km north-north-east of the Perth Central Business District (Figure 1). Lot 101 has a total area of 475ha and is bound by Tea Tree Road to the north-east, Brennan Road to the east and undeveloped bushland to the south and west (Figure 2).

The north-east corner of Lot 101, comprising an area of 50ha (the site) was rezoned under the Shire of Chittering Local Planning Scheme 6 Amendment No. 61 to 'Special Use' that allow for the development of an integrated tourist resort in accordance with an approved Structure Plan. The proposed resort will include up to 46 residential resort homes, short-stay villas/service apartments, communal open space and guest facilities. Amendment 61 includes the balance of Lot 101 in an 'Environmental Conservation' zone.

PGV Environmental was commissioned by NXT Global to undertake a Flora, Vegetation and Fauna Survey of the site.

1.2 Scope of Works

The Flora and Vegetation Survey was a Detailed Flora and Vegetation Survey in accordance with the *EPA Technical Guidance: Flora and Vegetation Surveys* (EPA, 2016). The survey includes the following:

- Desktop search and review of the Department of Biodiversity, Conservation and Attractions (DBCA) Naturemap database;
- A search of the Commonwealth Government's Protected Matters Search Tool to identify species potentially occurring within the area that are protected under the *Environment Protection and Biodiversity Conservation (EPBC) Act 1999*;
- Examination of historic and recent aerial photography and contour and soil maps to provisionally identify vegetation types and condition;
- Field survey using quadrats to record native and introduced species as well as a thorough site walkover of any areas of native vegetation;
- Recording of any significant plant species using a hand-held GPS;
- Description and mapping of vegetation types and vegetation condition; and
- Compilation of a flora list.

A Level 1 Fauna Survey was undertaken in accordance with EPA Technical Guidance *Fauna Surveys for Environmental Impact Assessment* (EPA, 2016b) including:

- A search of the DBCA Databases and Naturemap for the general area for Threatened and Priority Species;
- A search of the Commonwealth Government's Protected Matters Search Tool to identify species potentially occurring within the area that are protected under the Environment Protection and Biodiversity Conservation (EPBC) Act 1999 or international migratory bird agreements (JAMBA/CAMBA);

- A description of the fauna habitats on the site from the site walkover; and
- An assessment of the significance of the site for conservation significant species in a local and regional context.

2 EXISTING ENVIRONMENT

2.1 Land Use

2.1.1 Historical Land Use

Historical photography shows that the site was vegetated in 1981 (the oldest historical aerial photography available) (Plate 1).

Plate 1: Aerial Photography from 1981 (Landgate, 2019)



A fire burnt the eastern end of the site in 2010 and firebreaks were installed accordingly (Plate 2).

Plate 2: Aerial Photography from 2010 (Landgate, 2019)



Another fire burnt the western part of the site in 2013. The site has remained unchanged since the fires.

2.1.2 Current Land Use

The site is currently not used and is completely vegetated apart from some firebreaks.

2.2 Topography

The site is undulating with an elevation of approximately 176 to 194m Australian Height Datum (AHD) (Figure 2). The site generally falls away to the south.

2.3 Geology and Soils

The site is on the Mogumber System which are located on gently undulating plateau made up of colluvium from weathered sandstone. The unit is made up of gentle to moderate sloping sandplain, varying from pale to yellow clayey sand with gravel and laterised ridges (DPIRD, 2019).

The soils mapped on the site are:

- Mogumber 1 Subsystem (222Mb_1) which are undulating broad crests and very gentle upper slopes (<10%) with common lateritic duricrust outcrop and shallow gravelly sands;
- Mogumber 3 Subsystem (222Mb_3) which are gently inclined undulating slopes and minor drainage head-waters consisting of deep grey siliceous or bleached sand; and
- Mogumber 4 Subsystem (222Mb_4) which are gently to moderately inclined slopes (<10%) with shallow gravelly sands and few areas of lateritic outcrop (DPIRD, 2019).

2.4 Hydrology

Groundwater is at depth and there are no surface expressions of groundwater on the site (DWER, 2019). There are no wetlands or water courses on the site.

3 FLORA AND VEGETATION

3.1 Methodology

A Detailed Flora and Vegetation Survey was undertaken in accordance with EPA Technical Guidance *Flora and Vegetation Surveys for Environmental Impact Assessment* (EPA, 2016a). Desktop studies were undertaken to identify potential threatened species and communities that may occur on the site. A site survey was conducted by Dr Paul van der Moezel of PGV Environmental on 5 September 2019. The inspection included traversing the site on foot.

3.2 Desktop Studies

3.2.1 Flora Database Searches

A search of the DBCA Threatened Flora Databases: the WA Herbarium database (WAHerb and the Threatened (Declared Rare) and Priority Flora Species List (TFPL)) (Appendix 1) and Naturemap (DBCA, 2019) (Appendix 2) identifies Conservation Significant species that have been recorded within a 10km radius of the site. A search of the EPBC Act Protected Matters Search Tool (DoEE, 2019) (Appendix 3) identifies species that are listed as Endangered, Threatened or Priority under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) could potentially have habitat within a 5km radius of the site. The results from these database searches are shown in Table 1.

Table 1: Conservation Significant Flora Identified in Database Searches

Species	Common Name	Conservation Status in WA	Status Under EPBC Act 1999
<i>Calectasia cyanea</i>	Blue Tinsel Lily	Schedule 1	Critically Endangered
<i>Drakaea elastica</i>	Glossy-leafed Hammer Orchid	Schedule 1	Endangered
<i>Eucalyptus x balanites</i>	Cadda Road Mallee	Schedule 1	Endangered
<i>Thelymitra dedmaniarum</i>	Cinnamon Sun-orchid	Schedule 1	Endangered
<i>Conospermum densiflorum</i> subsp. <i>unicephalatum</i>	One-headed Smokebush	Schedule 2	Endangered
<i>Diplolaena andrewsii</i>	Native Wild Rose	Schedule 2	Endangered
<i>Eucalyptus leprophloia</i>	Scaly-butt Mallee	Schedule 2	Endangered
<i>Grevillea curviloba</i> subsp. <i>incurva</i>	Narrow curved-leaf Grevillea	Schedule 2	Endangered
<i>Thelymitra stellata</i>	Star Sun-orchid	Schedule 2	Endangered
<i>Chamelaucium</i> sp. Gingin (N.G. Marchant 6)	Gingin Wax	Schedule 3	Endangered
<i>Eleocharis keigheryi</i>	Keighery's Eleocharis	Schedule 3	Vulnerable
<i>Grevillea corrugata</i>		Schedule 3	Endangered
<i>Ptychosema pusillum</i>	Dwarf Pea	Schedule 3	Vulnerable
<i>Lechenaultia magnifica</i>	Irwin Leschenaultia	Priority 1	
<i>Senecio gilbertii</i>		Priority 1	
<i>Cyanicula ixioides</i> subsp. <i>candida</i>		Priority 2	
<i>Gastrolobium nudum</i>		Priority 2	
<i>Hibbertia glomerata</i> subsp. <i>ginginensis</i>		Priority 2	
<i>Leucopogon squarrosus</i> subsp. <i>trigynus</i>		Priority 2	

Species	Common Name	Conservation Status in WA	Status Under EPBC Act 1999
<i>Millotia tenuifolia</i> var. <i>laevis</i>		Priority 2	
<i>Tetraria</i> sp. Chandala (G.J. Keighery 17055)		Priority 2	
<i>Acacia anarthros</i>		Priority 3	
<i>Acacia cummingiana</i>		Priority 3	
<i>Acacia drummondii</i> subsp. <i>affinis</i>		Priority 3	
<i>Acacia oncinophylla</i> subsp. <i>oncinophylla</i>		Priority 3	
<i>Acacia pulchella</i> var. <i>reflexa</i> acuminate bracteole variant (R.J. Cumming 882)		Priority 3	
<i>Adenanthos cygnorum</i> subsp. <i>chamaephyton</i>		Priority 3	
<i>Halgania corymbosa</i>		Priority 3	
<i>Isotropis cuneifolia</i> subsp. <i>glabra</i>		Priority 3	
<i>Leucopogon allittii</i>		Priority 3	
<i>Persoonia rudis</i>		Priority 3	
<i>Styphelia filifolia</i>		Priority 3	
<i>Tetradlea pilifera</i>		Priority 3	
<i>Verticordia rutilastra</i>		Priority 3	
<i>Verticordia serrata</i> var. <i>linearis</i>		Priority 3	
<i>Caladenia speciosa</i>	Sandplain White Spider Orchid	Priority 4	
<i>Calothamnus pachystachyus</i>		Priority 4	
<i>Hibbertia miniata</i>	Orange Hibbertia	Priority 4	
<i>Hypolaena robusta</i>		Priority 4	
<i>Oxymyrrhine coronata</i>		Priority 4	
<i>Persoonia sulcata</i>		Priority 4	
<i>Stylidium longitubum</i>	Jumping Jacks	Priority 4	

Definitions of the Conservation Codes are in Appendix 4.

Table 2 lists the likelihood that any of the conservation significant species identified in the database searches could occur on the site based on the soil types and vegetation condition.

Table 2: Likelihood of Identified Significant Flora Species Occurring on the Site

Scientific Name	Common Name	Habitat*	Likelihood to occur on the site
<i>Calectasia cyanea</i>	Blue Tinsel Lily	The Blue Tinsel Lily prefers white, grey or yellow sand or gravel.	Possible – targeted in survey
<i>Drakaea elastica</i>	Glossy-leafed Hammer Orchid	The Glossy-leafed Hammer Orchid prefers low-lying situations adjoining winter-wet swamps. This species does not survive in disturbed areas.	Highly Unlikely – no wetland habitat
<i>Eucalyptus x balanites</i>	Cadda Road Mallee	The Cadda Road Mallee prefers sandy soils with lateritic gravel.	Possible – targeted in survey

Scientific Name	Common Name	Habitat*	Likelihood to occur on the site
<i>Thelymitra dedmaniarum</i>	Cinnamon Sun-orchid	Cinnamon sun orchid is known from only two locations in the Gidgegannup area. It is confined to open wandoo woodland on red-brown sandy loam associated with dolerite and granite outcropping (DEC, 2012a).	Highly Unlikely – no granite or dolerite habitat
<i>Conospermum densiflorum</i> subsp. <i>unicephalatum</i>	One-headed Smokebush	The One-headed Smokebush occurs on clay soils in low-lying areas.	Highly Unlikely – no low-lying habitat
<i>Diplolaena andrewsii</i>	Native Wild Rose	The Native Wild Rose occurs on loam, clay in association with granite outcrops and hillsides.	Highly Unlikely – no granite habitat
<i>Eucalyptus leprophloia</i>	Scaly-butt Mallee	Scaly-butt Mallee occurs on white or grey sand over laterite on valley slopes.	Possible – targeted in survey
<i>Grevillea curviloba</i> subsp. <i>incurva</i>	Narrow curved-leaf Grevillea	Narrow curved-leaf Grevillea prefers sand, sandy loam in winter-wet heath.	Highly Unlikely – no wetland habitat
<i>Thelymitra stellata</i>	Star Sun-orchid	The Star Sun-orchid prefers sand, gravel or lateritic loam.	Possible – targeted in survey
<i>Chamelaucium</i> sp. Gingin (N.G. Marchant 6)	Gingin Wax	Gingin wax grows in white/yellow sand supporting open low woodland.	Possible – targeted in survey
<i>Eleocharis keigheryi</i>	Keighery's Eleocharis	Keighery's Eleocharis occurs in clay, sandy loam and is emergent in freshwater: creeks, claypans.	Highly Unlikely – no wetland habitat
<i>Grevillea corrugata</i>		<i>Grevillea corrugata</i> occurs in gravelly loam on roadsides.	Possible – targeted in survey
<i>Ptychosema pusillum</i>	Dwarf Pea	Dwarf Pea occurs in sand on rises.	Possible – targeted in survey
<i>Lechenaultia magnifica</i>	Irwin Leschenaultia	Irwin Leschenaultia occurs in brown, grey, yellow or white sand, brown sandy loam, laterite on slopes and flats.	Possible – targeted in survey
<i>Senecio gilbertii</i>		<i>Senecio gilbertii</i> grows in peaty sand near swamps on slopes.	Highly Unlikely – no wetland habitat
<i>Cyanicula ixiooides</i> subsp. <i>candida</i>		<i>Cyanicula ixiooides</i> subsp. <i>candida</i> grows in sand, laterite, gravel.	Possible – targeted in survey
<i>Gastrolobium nudum</i>		<i>Gastrolobium nudum</i> grows in red-brown clay, brown loam, gravel, laterite, granite on flats, slopes, hilltops, ridges, valleys, breakaways.	Possible – targeted in survey

Scientific Name	Common Name	Habitat*	Likelihood to occur on the site
<i>Hibbertia glomerata</i> subsp. <i>ginginensis</i>		<i>Hibbertia glomerata</i> subsp. <i>ginginensis</i> occurs in sand, brown clay, laterite near roadsides.	Possible – targeted in survey
<i>Leucopogon squarrosus</i> subsp. <i>trigynus</i>		<i>Leucopogon squarrosus</i> subsp. <i>trigynus</i> occurs in Bassendean sands (Hislop, 2011).	Highly Unlikely – no Bassendean habitat
<i>Millotia tenuifolia</i> var. <i>laevis</i>		<i>Millotia tenuifolia</i> var. <i>laevis</i> grows in granite or laterite soils.	Possible – targeted in survey
<i>Tetraria</i> sp. Chandala (G.J. Keighery 17055)		<i>Tetraria</i> sp. Chandala is recorded from a mound spring in peaty sand (Western Australian Herbarium, 2005).	Highly Unlikely – no mound spring habitat
<i>Acacia anarthros</i>		<i>Acacia anarthros</i> grows in lateritic gravelly soils on slopes.	Possible – targeted in survey
<i>Acacia cummingiana</i>		<i>Acacia cummingiana</i> grows in grey or yellow sand, lateritic gravel on sandplains, lateritic breakaways.	Possible – targeted in survey
<i>Acacia drummondii</i> subsp. <i>affinis</i>		<i>Acacia drummondii</i> subsp. <i>affinis</i> grows in lateritic gravelly soils.	Possible – targeted in survey
<i>Acacia oncinophylla</i> subsp. <i>oncinophylla</i>		<i>Acacia oncinophylla</i> subsp. <i>oncinophylla</i> occurs in granitic soils	Highly Unlikely – no granite habitat
<i>Acacia pulchella</i> var. <i>reflexa</i> acuminate bracteole variant (R.J. Cumming 882)		<i>Acacia pulchella</i> var. <i>reflexa</i> acuminate bracteole variant prefers sandy loam or sandy clay over laterite in woodland.	Possible – targeted in survey
<i>Adenanthos cygnorum</i> subsp. <i>chamaephyton</i>		<i>Adenanthos cygnorum</i> subsp. <i>chamaephyton</i> occurs in grey sand, lateritic gravel.	Possible – targeted in survey
<i>Halgania corymbosa</i>		<i>Halgania corymbosa</i> prefers gravelly soils, soils over granite.	Possible – targeted in survey
<i>Isotropis cuneifolia</i> subsp. <i>glabra</i>		<i>Isotropis cuneifolia</i> subsp. <i>glabra</i> grows in sand, clay loam on winter-wet flats.	Highly Unlikely – no wetland habitat
<i>Leucopogon allittii</i>		<i>Leucopogon allittii</i> grows in sand over gravel	Possible – targeted in survey
<i>Persoonia rudis</i>		<i>Persoonia rudis</i> occurs in white, grey or yellow sand, often over laterite.	Possible – targeted in survey

Scientific Name	Common Name	Habitat*	Likelihood to occur on the site
<i>Styphelia filifolia</i>		<i>Styphelia filifolia</i> occurs in sandy soils of the coastal plain (with one known occurrence from the northern Darling Scarp), usually in Banksia or Jarrah woodland and in low-lying situations (Hislop and Lelièvre, 2017).	Highly Unlikely – no low-lying habitat
<i>Tetratheca pilifera</i>		<i>Tetratheca pilifera</i> occurs in gravelly soils.	Possible – targeted in survey
<i>Verticordia rutilastra</i>		<i>Verticordia rutilastra</i> occurs in sand and lateritic gravel on hills.	Possible – targeted in survey
<i>Verticordia serrata</i> var. <i>linearis</i>		<i>Verticordia serrata</i> var. <i>linearis</i> grows in white sand, gravel in open woodland.	Possible – targeted in survey
<i>Caladenia speciosa</i>	Sandplain White Spider Orchid	Sandplain White Spider Orchid occurs in white, grey or black sand.	Possible – targeted in survey
<i>Calothamnus pachystachyus</i>		<i>Calothamnus pachystachyus</i> grows in lateritic soils, often gravelly on ridges, road verges.	Possible – targeted in survey
<i>Hibbertia miniata</i>	Orange Hibbertia	Orange Hibbertia prefers lateritic gravelly soils.	Possible – targeted in survey
<i>Hypolaena robusta</i>		<i>Hypolaena robusta</i> grows in white sand on sandplains.	Possible – targeted in survey
<i>Oxymyrrhine coronata</i>		<i>Oxymyrrhine coronata</i> occurs in lateritic gravel.	Possible – targeted in survey
<i>Persoonia sulcata</i>		<i>Persoonia sulcata</i> occurs in lateritic or granitic soils.	Possible – targeted in survey
<i>Stylidium longitubum</i>	Jumping Jacks	Jumping Jacks prefer sandy clay, clay in seasonal wetlands.	Highly Unlikely – No suitable granite habitat

* sourced from Florabase as well as the PaWS database searches unless otherwise denoted

3.2.2 TEC/PEC Database Searches

A search of DBCA's Threatened (TEC) and Priority Ecological Communities (PEC) database was conducted within a radius of 5km around the site (06-0919EC) (Appendix 5). Two Priority Ecological Communities were identified that are a federally listed TEC. The communities identified in the database searches are outlined in Table 3.

Table 3: TEC and PECs identified in database searches within 5km of the site

Number	Description	Conservation Status in Western Australia	Status under the EPBC Act
Banksia yellow-orange sands	Banksia woodland of the Gingin area restricted to soils dominated by yellow to orange sands	Priority 2	Endangered as part of the Banksia WL SCP
Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered

3.3 Survey Conditions

The conditions that the survey was undertaken in are presented in Table 4 in order to assess the adequacy of the survey. In summary, there were no constraints to the survey.

Table 4: Statement of Botanical Survey Conditions

Issue	Constraints (Y/N)*	Comment
Competency/experience of the consultant conducting the survey	No	Dr Paul van der Moezel has extensive botanical survey experience in the Perth Metropolitan Region.
Proportion of the flora identified [^]	No	The timing of the survey in early September was optimal to record most of the native species.
Sources of information (historic/recent or new data)	No	The flora of the area is well documented.
Proportion of the task achieved and further work that may need to be undertaken	No	No follow-up survey required as no Threatened Flora expected to occur in other seasons.
Timing/weather/season/cycle	No	The spring survey was optimal for most flora species.
Disturbances (Fire)	No	The fire age of the vegetation was >5 years.
Intensity of survey (e.g. In retrospect was the intensity adequate)	No	Approximately 7 hours spent walking the site. Access was fairly easy through the understorey. Site coverage was therefore considered good.
Completeness (e.g. was relevant area fully surveyed)	No	
Resources (e.g. degree of expertise available for plant identification)	No	Experienced botanist undertook most plant identifications on site with some specimens taken for later identification in the office and Perth Reference Herbarium.
Remoteness and/or access problems	No	Easily accessible site in the Perth Metropolitan Region.
Availability of contextual (e.g. bioregional) information for the study area.	No	Bush Forever and WALGA statistics on remnant bushland.

*Constraints have been rated as Significant, Moderate or No constraints

[^]Fungi and nonvascular flora (e.g. algae, mosses and liverworts) were not specifically surveyed for during the survey.

3.4 Flora

A total of 123 plant species were recorded during the flora survey (Appendix 6). This total consisted of 119 native species and 4 (3.3%) introduced species. The number and percentage of introduced species is very low and is a reflection of the overall Pristine condition of the vegetation.

The total number of species is moderate for the size of the survey area (50ha).

The plant Families with the highest representation of species were Proteaceae (Banksia family – 19 species all native), Fabaceae (Wattle and Pea family – 16 species, all native), Myrtaceae (Myrtle family – 14 species all native) and Ericaceae (Heath family – 9 species, all native).

There were no Threatened (Declared Rare species recorded on the site.

One Priority species, *Tetratheca pilifera*, was recorded in very low numbers at one location on the site. *Tetratheca pilifera* is a spreading shrub up to 0.3m tall and occurs on gravelly soils east and north-east of Perth. At the site it was recorded on outcropping laterite in Jarrah/Marri and Parrot Bush (*Banksia sessilis*) vegetation.

Plate 3: *Tetratheca pilifera* P3 (FloraBase, 2019)



3.5 Vegetation

3.5.1 Vegetation Complexes

Vegetation complexes are a very broad mapping unit based on landform and soils type. The vegetation complexes mapped on the site are Karamal Complex-South in the western part of the site and the Mogumber Complex-South to the east (Heddlé *et al.*, 1980). The complexes are described below:

- Mogumber Complex-South is an Open woodland of *Eucalyptus calophylla* (Marri), with some admixture of *Eucalyptus marginata* (Jarrah) and a second storey of *Eucalyptus todtiana* (Pricklybark) - *Banksia attenuata* (Candlestick Banksia) - *Banksia menziesii* (Firewood Banksia) - *Banksia ilicifolia* (Holly-leaved Banksia).
- Karamal Complex-South is described as Open forest of *Eucalyptus marginata* (Jarrah) - *Corymbia calophylla* (Marri) with second storey of *Banksia grandis* (Bull Banksia).



The vegetation on the site is more representative of the Mogumber Complex-South. The Karamal Complex-South contains a second storey of *Banksia grandis* and there was only one recorded individual of this species recorded on the site. The site also contained *Eucalyptus todtiana*, *Banksia attenuata* and *Banksia menziesii*, more typical to the Mogumber Complex-South.



3.5.2 Vegetation Types



Vegetation types are a finer level of vegetation description and mapping used for small scale sites, such as the survey area. Vegetation types are described based on the structure of the vegetation (eg. woodland, heath) and the dominant species in each structure.

Six vegetation types were described and mapped on the site (Figure 3). The vegetation types are described in Table 5. Quadrat Data are in Appendix 7.

Table 5: Vegetation Types on the Site

Vegetation Type	Description	Photograph
<p>Et <i>Eucalyptus todtiana</i> Low Open Woodland over <i>Hibbertia hypericoides</i>/<i>Eremaea pauciflora</i>/<i>Astroloma xerophyllum</i> Closed Low Heath</p>	<p>This vegetation type was the main vegetation on the sandy soils on the western half of the site that was burnt in 2013. <i>Eucalyptus todtiana</i> were scattered over a low heath commonly consisting of <i>Hibbertia hypericoides</i>, <i>Eremaea pauciflora</i>, <i>Astroloma xerophyllum</i>, <i>Conostylis setigera</i> and <i>Stylidium piliferum</i>. Banksia trees were absent. There was no evidence of large stands of dead Banksia trees as a result of the 2013 fire. There was also very little re-growth of Banksia seedlings.</p> <p>Quadrat TT1 is representative of this vegetation type.</p>	
<p>EtNf <i>Eucalyptus todtiana</i>/<i>Nuytsia floribunda</i> Low Open Woodland over <i>Allocasuarina humilis</i>/<i>Hibbertia hypericoides</i>/<i>Synaphea spinulosa</i>/<i>Astroloma xerophyllum</i>/<i>Calytrix leschenaultii</i> Closed Heath</p>	<p>A small patch of this vegetation type occurred on sandy soils in the mid-northern part of the site. The vegetation is similar to the Et type but also contains <i>Nuytsia floribunda</i> (Christmas Tree) as a co-dominant tree. Banksia trees were absent and no regrowth of Banksia was observed. The low heath vegetation was also slightly different to the Et type with <i>Allocasuarina humilis</i> very common with <i>Hibbertia hypericoides</i>, <i>Synaphea spinulosa</i>, <i>Daviesia nudiflora</i>, <i>Stirlingia latifolia</i> and <i>Hypocalymma xanthopetalum</i>.</p> <p>Quadrat TT3 is representative of this vegetation type.</p>	

Vegetation Type	Description	Photograph
<p>BmBaEt <i>Banksia menziesii</i>/<i>B. attenuata</i>/<i>Eucalyptus todtiana</i> Low Woodland over <i>Conospermum stoechadis</i>/<i>Jacksonia floribunda</i>/<i>Adenanthos cygnorum</i> Open Shrubland over <i>Eremaea pauciflora</i>/<i>Leucopogon polymorphus</i>/<i>Astroloma xerophyllum</i>/<i>Calytrix leschenaultii</i> Open Low Heath</p>	<p>This vegetation type occurred on the sandy soils in the eastern part of the site that was burnt in 2010. <i>Banksia menziesii</i>, <i>B. attenuata</i> and <i>Eucalyptus todtiana</i> trees were up to 4m in height and around 25% overall cover. The understorey was low and open with common species <i>Eremaea pauciflora</i>, <i>Astroloma xerophyllum</i>, <i>Conospermum stoechadis</i> and <i>Scholtzia involucrata</i>.</p> <p>Quadrat TT5 is representative of this vegetation type.</p>	
<p>EmCc <i>Eucalyptus marginata</i>/<i>Corymbia calophylla</i> Low Woodland over <i>Daviesia angulata</i> Shrubland over <i>Hibbertia hypericoides</i>/<i>Leucopogon polymorphus</i>/<i>Xanthorrhoea preissii</i>/<i>Synaphea spinulosa</i>/<i>Grevillea synapheae</i>/<i>Acacia pulchella</i> Open Low Heath</p>	<p>This vegetation type was the main vegetation occurring on shallow lateritic soil. Jarrah and Marri were both present, in differing proportions at each of the four areas mapped. The trees were low, around 4-5m and mostly young. The understorey was 0.5-1.5m high with common species including <i>Daviesia angulata</i>, <i>Hibbertia hypericoides</i>, <i>Leucopogon polymorphus</i>, <i>Xanthorrhoea preissii</i>, <i>Synaphea spinulosa</i>, <i>Grevillea synapheae</i> and <i>Acacia pulchella</i>.</p> <p>Quadrats TT2 and TT4 are representative of this vegetation type.</p>	

Vegetation Type	Description	Photograph
<p>EmCcBs <i>Eucalyptus marginata</i>/ <i>Corymbia calophylla</i> Low Woodland over <i>Banksia</i> <i>sessilis</i>/<i>Daviesia angulata</i> Open Heath over <i>Hibbertia</i> <i>hypericoides</i>/<i>Leucopogon</i> <i>polymorphus</i>/<i>Xanthorrhoea</i> <i>preissii</i> Open Low Heath</p>	<p>A small section of this vegetation occurred on lateritic soil in the south-central part of the site. The vegetation structure and composition were very similar to the EmCc vegetation type with the exception of <i>Banksia sessilis</i> (Parrot Bush) being very common in this unit.</p> <p>Quadrat TT6 is representative of this vegetation type</p>	
<p>Em <i>Eucalyptus marginata</i> Low Open Woodland over <i>Jacksonia floribunda</i>/ <i>Xanthorrhoea preissii</i> Open Shrubland over <i>Calothamnus sanguineus</i>/ <i>Hibbertia hypericoides</i>/ <i>Leucopogon polymorphus</i>/ <i>Astroloma xerophyllum</i>/ <i>Calytrix leschenaultii</i> Closed Low Heath</p>	<p>This vegetation type occurred on sandy soils with no surface expression of the underlying shallow laterite. Jarrah occurred in low density up to 6m with Marri absent in this unit. <i>Jacksonia floribunda</i> and <i>Xanthorrhoea preissii</i> were common tall shrub species up to 1.4m high with smaller heath species including <i>Calothamnus sanguineus</i>, <i>Hibbertia hypericoides</i>, <i>Leucopogon polymorphus</i>, <i>Astroloma xerophyllum</i> and <i>Calytrix leschenaultii</i></p> <p>Quadrat TT7 is representative of this vegetation type</p>	

3.5.3 Vegetation Condition

The condition of the vegetation was assessed according to the system devised by Keighery and described in Bush Forever (Government of Western Australia, 2000) (Table 6).

Table 6: Vegetation Condition Rating Scale.

Condition	Description
Pristine	Pristine or nearly so, no obvious signs of disturbance.
Excellent	Vegetation structure intact, disturbance affecting individual species and weeds are non-aggressive species.
Very Good	Vegetation structure altered, obvious signs of disturbance. For example, disturbance to vegetation structure caused by repeated fires, the presence of some more aggressive weeds, dieback, logging and grazing.
Good	Vegetation structure significantly altered by very obvious signs of multiple disturbance. Retains basic vegetation structure or ability to regenerate it. For example, disturbance to vegetation structure caused by very frequent fires, the presence of some very aggressive weeds at high density, partial clearing, dieback and grazing.
Degraded	Basic vegetation structure severely impacted by disturbance. Scope for regeneration but not to a state approaching good condition without intensive management. For example, disturbance to vegetation structure caused by very frequent fires, the presence of very aggressive weeds, partial clearing, dieback and grazing.
Completely Degraded	The structure of the vegetation is no longer intact and the area is completely or almost completely without native species. These are often described as 'parkland cleared' with the flora comprising weed or crop species with isolated native trees or shrubs.

Source: Government of Western Australia, 2000.

The site contains intact native vegetation that has not been previously cleared.

The vegetation on the whole site is considered to be in Pristine condition due to the lack of disturbance and very low coverage of weed species.

3.6 Conservation Significance of Flora and Vegetation

3.6.1 Flora

One Priority 3 species, *Tetratheca pilifera*, was recorded in very low numbers at one location on the site.

Priority 3 species are those that are known from several locations, and the species does not appear to be under imminent threat. The low number of plants on the site is not likely to be considered an important population.

3.6.2 Vegetation

Vegetation Complexes

The conservation significance of vegetation complexes can be determined based on the Beard vegetation types. The conservation significance is based on the percentage of the original extent of the vegetation type remaining. The amount remaining of each of the complexes mapped on the site is outlined in Table 7.

Table 7: Percentage Remaining of Beard Vegetation Types

Vegetation Type	Description	Original Extent (ha) (WALGA, 2013)	% Remaining (WALGA, 2013)	% Remaining in the Shire of Chittering (DBCA, 2019)
Mogumber Complex-South	Open woodland of <i>Eucalyptus calophylla</i> (Marri), with some admixture of <i>Eucalyptus marginata</i> (Jarrah) and a second storey of <i>Eucalyptus todtiana</i> (Pricklybark) - <i>Banksia attenuata</i> (Candlestick Banksia) - <i>Banksia menziesii</i> (Firewood Banksia) - <i>Banksia ilicifolia</i> (Holly-leaved Banksia)	13985.52	40.20	42.92
Karamal Complex-South	Open forest of <i>Eucalyptus marginata</i> (Jarrah) - <i>Corymbia calophylla</i> (Marri) with second storey of <i>Banksia grandis</i> (Bull Banksia)	24016.67	63.40	52.89

Table 7 shows that the percentage remaining of Mogumber Complex-South is greater than 40% and Karamal Complex-South is greater than 50% (WALGA, 2013).

The percentage protection is above the 30% minimum criteria for vegetation complexes in the Perth and Peel Region Constrained Areas for retention of vegetation complexes State-wide as outlined in the EPA Position Statement No. 2 *Environmental Protection of Native Vegetation in Western Australia*.

The vegetation complexes mapped on the site are not considered endangered or regionally significant. Any clearing that might occur on the site in the future would not reduce the extent remaining to below 30%.

Threatened and Priority Ecological Communities

The vegetation type BmBaEt contains *Banksia attenuata* and *B. menziesii* and is in Pristine condition and is therefore considered part of the Banksia Woodlands of the Swan Coastal Plain Threatened Ecological Community (TEC) as listed under the Commonwealth EPBC Act. The site contains around 9ha of the BmBaEt vegetation type.

The Banksia Woodland of the Swan Coastal Plain are listed at the State level as a Priority 3 Ecological Community. The BmBaEt vegetation type on the site is also identified more specifically as the 'Banksia Woodland of the Gingin area restricted to soils dominated by yellow to orange sands' which is a Priority 2 Ecological Community.

The vegetation types Et and EtNf do not contain Banksia trees or, if present are very sparse. These vegetation types are therefore not considered part of the Banksia Woodland TEC and State listed PEC due to the absence or very low density of Banksia trees.

The other vegetation types are not part of any Threatened or Priority Ecological Communities.

4 FAUNA

4.1 Methodology

A Level 1 Fauna Survey was undertaken in accordance with EPA Technical Guidance *Fauna Surveys for Environmental Impact Assessment* (EPA, 2016b). Desktop studies were undertaken to identify habitats and potential threatened species that may occur on the site. A site reconnaissance was conducted by PGV Environmental on 9 September 2019. The inspection included traversing the site on foot.

4.2 Desktop Studies

Desktop studies were undertaken to identify conservation significant species potentially present on the site. A search of the DBCA Database in a 5km radius from the site (Appendix 8), Naturemap database in a radius 10km from the site (Appendix 2) and the EPBC Act Protected Matters Search Tool (Appendix 3) in a 5km radius from the site identified threatened species of fauna previously recorded in the search area or potentially having habitat in the search area (Table 8).

Table 8: List of Fauna Species Identified from Fauna Database Searches

Scientific Name	Common Name	Conservation Status, WA	Status under EPBC Act
<i>Calidris ferruginea</i>	Curlew Sandpiper	Schedule 1 - CR	Critically Endangered
<i>Numenius madagascariensis</i>	Eastern Curlew	Schedule 1 - CR	Critically Endangered
<i>Calyptorhynchus latirostris</i>	Carnaby's Black Cockatoo	Schedule 2 - EN	Endangered
<i>Galaxiella nigrostriata</i>	Black-stripe Minnow	Schedule 2 - EN	Endangered
<i>Rostratula australis</i> (<i>Rostratula benghalensis australis</i>)	Australian Painted Snipe	Schedule 2 - EN	Endangered Marine/ Migratory
<i>Calyptorhynchus banksii naso</i>	Forest Red-tailed Black-Cockatoo	Schedule 3 - VU	Vulnerable
<i>Dasyurus geoffroii</i>	Chuditch, Western Quoll	Schedule 3 - VU	Vulnerable
<i>Galaxiella munda</i>	Mud Minnow, Western Dwarf Galaxias	Schedule 3 - VU	
<i>Leipoa ocellata</i>	Mallee Fowl	Schedule 3 - VU	Vulnerable
<i>Westralunio carteri</i>	Carter's Freshwater Mussel	Schedule 3 - VU	Vulnerable
<i>Actitis hypoleucos</i>	Common Sandpiper	Schedule 5 - IA	Marine/ Migratory
<i>Apus pacificus</i>	Fork-tailed Swift	Schedule 5 - IA	Marine/Migratory
<i>Calidris acuminata</i>	Sharp-tailed Sandpiper	Schedule 5 - IA	Marine/ Migratory
<i>Calidris melanotos</i>	Pectoral Sandpiper	Schedule 5 - IA	Marine/ Migratory
<i>Motacilla cinerea</i>	Grey Wagtail	Schedule 5 - IA	Migratory/ Marine

Scientific Name	Common Name	Conservation Status, WA	Status under EPBC Act
<i>Pandion cristatus</i> (<i>Pandion haliaetus</i>)	Osprey	Schedule 5 - IA	Marine/ Migratory
<i>Tringa nebularia</i>	Common Greenshank	Schedule 5 - IA	Marine/ Migratory
<i>Phascogale tapoatafa wambenger</i>	South-western Brush-tailed Phascogale, Wambenger	Schedule 6 - CD	
<i>Ardea alba</i>	Great Egret, White Egret		Marine
<i>Ardea ibis</i>	Cattle Egret		Marine
<i>Merops ornatus</i>	Rainbow Bee-eater		Marine
<i>Haliaeetus leucogaster</i>	White-bellied Sea-eagle		Marine
<i>Idiosoma mccllementsorum</i>	Julimar Shield-backed Trapdoor Spider	Priority 2	
<i>Isoodon fusciventer</i>	Southern Brown Bandicoot, Quenda	Priority 4	
<i>Oxyura australis</i>	Blue-billed Duck	Priority 4	

Fauna are classified under five different Priority codes and rare and endangered fauna are classified under the *Wildlife Conservation (Specially Protected Fauna) Notice 2014* into five schedules of taxa. These are outlined in Appendix 4.

4.3 Fauna Habitat

The fauna habitat was described on the site reconnaissance visit. The habitat on the site is described as a woodland habitat.

Plate 4: Open Woodland Fauna Habitat



Fauna habitat can be assessed using a number of factors including, the size of the habitat, the level of habitat connectivity, availability of specific resources (e.g. tree hollows) and overall vegetation quality. The habitat was assessed according to the following categories:

High Quality Fauna Habitat – These areas closely approximate the vegetation mix and quality that would have been in the area prior to any disturbance. The habitat has connectivity with other habitats and is likely to contain the most natural vertebrate fauna assemblage.

Very Good Fauna Habitat - These areas show minimal signs of disturbance (e.g. grazing, clearing, fragmentation, weeds) and generally retain many of the characteristics of the habitat if it had not been disturbed. The habitat has connectivity with other habitats and fauna assemblages in these areas are likely to be minimally affected by disturbance.

Good Fauna Habitat – These areas showed signs of disturbance (e.g. grazing, clearing, fragmentation, weeds) but generally retain many of the characteristics of the habitat if it had not been disturbed. The habitat has connectivity with other habitats and fauna assemblages in these areas are likely to be affected by disturbance.

Disturbed Fauna Habitat – These areas showed signs of significant disturbance. Many of the trees, shrubs and undergrowth are cleared. These areas may be in the early succession and regeneration stages. Areas may show signs of significant grazing, contain weeds or have been damaged by vehicle or machinery. Habitats are fragmented or have limited connectivity with other fauna habitats. Fauna assemblages in these areas are likely to differ significantly from what might be expected in the area had the disturbance not occurred.

Highly Degraded Fauna Habitat – These areas often have a significant loss of vegetation, an abundance of weeds, and a large number of vehicle tracks or are completely cleared. Limited or no fauna habitat connectivity. Faunal assemblages in these areas are likely to be significantly different to what might have been in the area pre-disturbance. (Coffey Environments, 2009).

The Open Woodland Habitat has vegetation in Pristine condition with the structure of the vegetation intact. The vegetation has linkage to other areas of bushland therefore the habitat is considered to be High Quality Fauna Habitat.

4.4 Conservation Significant Species

Outlined below in Table 7 is a short description of the preferred habitat for each of the species that were identified in the DBCA Database Search (Appendix 8), NatureMap Species Report (Appendix 2) and the EPBC Protected Matters Search Tool (Appendix 3) in Table 6. The preferred habitat has been compared to the habitats on the site described above and the likelihood of each species to be present was determined.

Table 9: Preferred Habitat of Conservation Significant Fauna Species

Scientific Name	Common Name	Habitat*	Likelihood of occurring on the site
<i>Calidris ferruginea</i>	Curlew Sandpiper	Curlew Sandpipers mainly occur on intertidal mudflats in sheltered coastal areas, such as estuaries, bays, inlets and lagoons, and also around non-tidal swamps, lakes and lagoons near the coast, and ponds in saltworks and sewage farms.	No – not coastal habitat
<i>Numenius madagascariensis</i>	Eastern Curlew	The Eastern Curlew is 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.	No – this species is marine and pelagic
<i>Calyptorhynchus latirostris</i>	Carnaby's Black Cockatoo	Carnaby's Cockatoo is found in the south-west of Australia from Kalbarri through to Ravensthorpe. It has a preference for feeding on the seeds of <i>Banksia</i> , <i>Hakea</i> , <i>Eucalyptus</i> , <i>Grevillea</i> , <i>Pinus</i> and <i>Allocasuarina</i> spp. It is nomadic often moving toward the coast after breeding. It breeds in tree hollows that are 2.5 - 12m above the ground and have an entrance 23-30cm with a depth of 1-2.5m. Nesting mostly occurs in smooth-barked trees (e.g. Salmon Gum, Wandoo, Red Morrell) (SEWPac, 2012).	Likely to be intermittently present – the site contains foraging habitat for this species
<i>Galaxiella nigrostriata</i>	Black-stripe Minnow	The Blackstriped Dwarf Galaxias is found only in coastal wetlands of south-west Western Australia. During summer when ephemeral pools dry out, Blackstriped Dwarf Galaxias burrow into the moist soil below and aestivate until the rains return in autumn (Fishes of Australia, 2015).	No – no wetland habitat
<i>Rostratula australis</i> (<i>Rostratula benghalensis australis</i>)	Australian Painted Snipe	The Australian Painted Snipe has been recorded at wetlands in all states of Australia but is most common in eastern Australia. It generally inhabits shallow terrestrial freshwater (occasionally brackish) wetlands, including temporary and permanent lakes, swamps and claypans. It also uses inundated or waterlogged grassland or saltmarsh, dams, rice crops, sewage farms and bore drains. Typical sites include a cover of vegetation, including grasses.	No – no wetland habitat

Scientific Name	Common Name	Habitat*	Likelihood of occurring on the site
<i>Calyptorhynchus banksii naso</i>	Forest Red-tailed Black-Cockatoo	Forest Red-tailed Black Cockatoos frequent the humid to sub-humid south-west of Western Australia from Gingin in the north, to Albany in the south and west to Cape Leeuwin and Bunbury (SEWPaC, 2012). It nests in tree hollows with a depth of 1-5m, that are predominately Marri (<i>Corymbia calophylla</i>), Jarrah (<i>Eucalyptus marginata</i>) and Karri (<i>Eucalyptus diversicolor</i>) and it feeds primarily on the seeds of Marri.	No – out of the range for this species
<i>Dasyurus geoffroii</i>	Chuditch, Western Quoll	The Chuditch have been known to occupy a wide range of habitats including woodlands, dry sclerophyll forests, riparian vegetation, beaches and deserts. They are opportunistic feeders, and forage on the ground at night, feeding on invertebrates, small mammals, birds and reptiles.	Possibly present on the site
<i>Galaxiella munda</i>	Mud Minnow, Western Dwarf Galaxias	Mud Minnow occurs in mud, freshwater.	No – no wetland habitat
<i>Leipoa ocellata</i>	Mallee Fowl	Mallee fowl have been found in mallee regions of southern Australia from approximately the 26th parallel of latitude southwards in mallee bushland.	No – not mallee habitat
<i>Westralunio carteri</i>	Carter's Freshwater Mussel	Carter's Freshwater Mussel is South-West Western Australia's only freshwater mussel (Murdoch University & SERCUL, 2012). Carter's Freshwater Mussel occurs in freshwater streams, rivers, reservoirs and lakes (ICUN, 2015b) and is intolerant to dehydration for more than three days and salinity (Murdoch University & SERCUL, 2012).	No – no wetland habitat
<i>Actitis hypoleucos</i>	Common Sandpiper	The Common Sandpiper is mostly found around muddy margins or rocky shores. Generally the species forages in shallow water and on bare soft mud at the edges of wetlands.	No – no wetland habitat
<i>Apus pacificus</i>	Fork-tailed Swift	The Fork-tailed Swift is almost exclusively aerial and is not known to breed in Australia. They are seen in inland plains but sometimes above foothills or in coastal areas. They often occur over cliffs and beaches and also over islands and sometimes well out to sea. They also occur over settled areas, including towns, urban areas and cities. <i>Apus pacificus</i> subsp. <i>pacificus</i> is the only subspecies to migrate to Australia.	No – not coastal habitat – possibly could fly over the site but unlikely to land

Scientific Name	Common Name	Habitat*	Likelihood of occurring on the site
<i>Calidris acuminata</i>	Sharp-tailed Sandpiper	The Sharp-tailed Sandpiper prefers muddy edges of shallow fresh or brackish wetlands, with inundated or emergent sedges, grass, saltmarsh or other low vegetation.	No – no wetland habitat
<i>Calidris melanotos</i>	Pectoral Sandpiper	The Pectoral Sandpiper 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.	No – no wetland habitat
<i>Motacilla cinerea</i>	Grey Wagtail	The Grey Wagtail is mostly recorded in coastal areas in Western Australia (ALA, 2015) however is widespread. There is non-breeding habitat only in Australia and the species has a strong association with water, particularly rocky substrates along water courses but also lakes and marshes.	No – not coastal habitat
<i>Pandion cristatus</i> (<i>Pandion haliaetus</i>)	Osprey	Ospreys occur in littoral and coastal habitats and terrestrial wetlands of tropical and temperate Australia and offshore islands. They feed on fish, especially mullet where available, and rarely take molluscs, crustaceans, insects, reptiles, birds and mammals.	No – not coastal habitat
<i>Tringa nebularia</i>	Common Greenshank	The Common Greenshank is a wader and does not breed in Australia. This species can be found in many types of wetlands and has the widest distribution of any shorebird in Australia. This species typically feeds on molluscs, crustaceans, insects, and occasionally fish and frogs.	No – no wetland habitat
<i>Phascogale tapoatafa wambenger</i>	South-western Brush-tailed Phascogale, Wambenger	Southern Brush-tailed Phascogales are arboreal marsupials which require tree hollows in suitable woodland or forest and rely on abundant invertebrate prey to sustain populations (Pescott, 2012).	Possibly occur on the site
<i>Ardea alba</i>	Great Egret, White Egret	The Eastern Great Egret has been reported in a wide range of wetland habitats and usually frequents shallow waters. This species feeds on fish, insects, crustaceans, molluscs, frogs, lizards, snakes and small birds and mammals.	No – no wetland habitat
<i>Ardea ibis</i>	Cattle Egret	The Cattle Egret occurs in tropical and temperate grasslands, wooded lands and terrestrial wetlands with breeding in Western Australia recorded in the far north in Wyndham in colonies in wooded swamps such as mangrove forest. This species forages away from water on low lying grasslands, improved pastures and croplands generally in areas that have livestock eating insects, frog, lizards and small mammals.	No - no wetland or pasture habitat

Scientific Name	Common Name	Habitat*	Likelihood of occurring on the site
<i>Merops ornatus</i>	Rainbow Bee-eater	Populations of the Rainbow Bee-eater that breed in northern Australia are considered to be resident, and in many northern localities the Rainbow Bee-eater is present throughout the year. The Rainbow Bee-eater nests in a burrow dug in the ground. It is found across the better-watered parts of WA including islands preferring lightly wooded, sandy country near water.	Possible intermittent visitor to the site
<i>Haliaeetus leucogaster</i>	White-bellied Sea-eagle	The White-bellied Sea-Eagle is found in coastal habitats with large areas of open water, especially those close to the sea-shore. This species feeds opportunistically on a variety of fish, birds, reptiles, mammals and crustaceans, and on carrion and offal.	No – not coastal habitat
<i>Idiosoma mcclementsorum</i>	Julimar Shield-backed Trapdoor Spider	Julimar Shield-backed Trapdoor Spider has a highly restricted distribution in the northern Jarrah Forest bioregion of south-western Western Australia, from Chittering Lakes, Julimar, and Toodyay north to Gillingarra on a sandy substrates overlaying laterite (Rix <i>et al.</i> , 2018).	Highly Unlikely – this species has limited range and has not been recorded within 5km of the site
<i>Isoodon fusciventer</i>	Southern Brown Bandicoot, Quenda	Southern Brown Bandicoots are small grey marsupials that prefer dense scrub (up to one metre high). Their diet includes invertebrates (including earthworms, adult beetles and their larvae), underground fungi, subterranean plant material, and very occasionally, small vertebrates (DEC, 2012b).	Possibly present on the site
<i>Oxyura australis</i>	Blue-billed Duck	The Blue-billed Duck is found on terrestrial wetlands in temperate regions, that are freshwater to saline, and may be natural or artificial. It nests in rushes, sedges, Lignum <i>Muehlenbeckia cunninghamii</i> and paperbark <i>Melaleuca</i> (Birdlife International, 2015). The species is almost completely aquatic, and is seldom seen on land. Non-breeding flocks, often with several hundred individuals, congregate on large, deep open freshwater dams and lakes in autumn. The daylight hours are spent alone in small concealed bays within vegetation or communally in large exposed rafts far from the shore (Birds in Backyards, 2015).	No – no permanent water on the site

* Habitat descriptions from DoEE (2016) SPRAT Database unless otherwise denoted

The Open Woodland Habitat provides foraging habitat for Carnaby's Black Cockatoos (*Calyptorhynchus latirostris*), particularly the Banksia trees and shrubs, Jarrah and Marri trees as well as some other Proteaceous shrubs (Valentine and Stock, 2008; Groom, 2011). The EmCc, EmCcBs and

BmBaEt vegetation types have tree species suitable for foraging. These vegetation types comprise around 28ha of the site.

The Jarrah and Marri trees were all young trees up to 5m high with no old trees that are suitable for nesting either currently or in the near future. As a result, the habitat on the site for Carnaby's Cockatoo is considered foraging habitat only and not roosting or breeding habitat.

The South-western Brush-tailed Phascogale (*Phascogale tapoatafa wambenger*) (Schedule 6 – Conservation Dependant) was identified as having habitat on the site. The Southern Brown Bandicoot, Quenda (*Isoodon fusciventer*) (Priority 4) could potentially occur on the site. The dense vegetation is suitable for Bandicoots. The Rainbow Bee-eater (*Merops ornatus*), listed Marine under the EPBC Act, may potentially utilise some sections of the site as part of a much larger home range though only likely to occur infrequently.

4.5 Pest Fauna

The site is likely to contain rabbits, feral cats, foxes, rats and mice.

4.6 Biodiversity Value

The EPA's (2002) *Terrestrial Biological Surveys as an Element of Biodiversity Protection Position Statement No. 3* indicated an ecological assessment of a site must consider its biodiversity value at the genetic, species and ecosystem levels; and its ecological functional value at the ecosystem level. The vegetation on the site is largely undisturbed, however there is likely to be introduced feral species such as foxes, cats and rabbits which would have modified the fauna assemblage from pre-European settlement.

5 SUMMARY AND CONCLUSION

5.1 Summary

The Flora, Vegetation and Fauna survey of the north-east portion of Lot 101 Teatree Road, Bindoon found the following:

- The site contains around 50ha of native vegetation in Pristine condition consisting of almost equal amounts of vegetation occurring on sandy soil and lateritic soils;
- A total of 123 plant species were recorded in the flora survey with 119 native species and 4 (3.3%) introduced species. No Threatened flora were recorded on the site. One Priority 3 species, *Tetratheca pilifera*, was recorded on lateritic soils in one location. The population of a few individuals would not be considered a significant population due to the small size;
- The vegetation type containing *Banksia attenuata* and *B. menziesii* has conservation significance as part of the Commonwealth EPBC Act listed Banksia Woodlands of the Swan Coastal Plain TEC and the State PEC for Banksia woodlands. The site contains around 9ha of the Banksia Woodland TEC;
- Clearing any of the Banksia woodland will require approval under both State and Commonwealth legislation;
- The fauna habitat on the site is considered High Quality Fauna Habitat and contains approximately 28ha of foraging habitat suitable for Carnaby's Black Cockatoo (*Calyptorhynchus latirostris*) which is listed as Endangered under the EPBC Act as well as habitat for the South-western Brush-tailed Phascogale and the Southern Brown Bandicoot (*Isoodon fusciventer*);
- Any clearing of Black Cockatoo habitat will require referral and likely assessment under the Commonwealth EPBC Act;

5.2 Conclusion

Any application to clear vegetation, including Banksia Woodland TEC and Carnaby's Black Cockatoo habitat, should be considered with regards to the vegetation and zoning over the balance 425ha portion of Lot 101.

The balance portion of Lot 101 appears from aerial photography to contain vegetation in similar Pristine condition as the 50ha portion, and a similar mix of vegetation on sandy soils and Jarrah/Marri woodland on lateritic soils. As a result, it is estimated that there could be up to 200ha of Banksia Woodland TEC and 400ha of Carnaby's Black Cockatoo habitat on the balance portion of Lot 101.

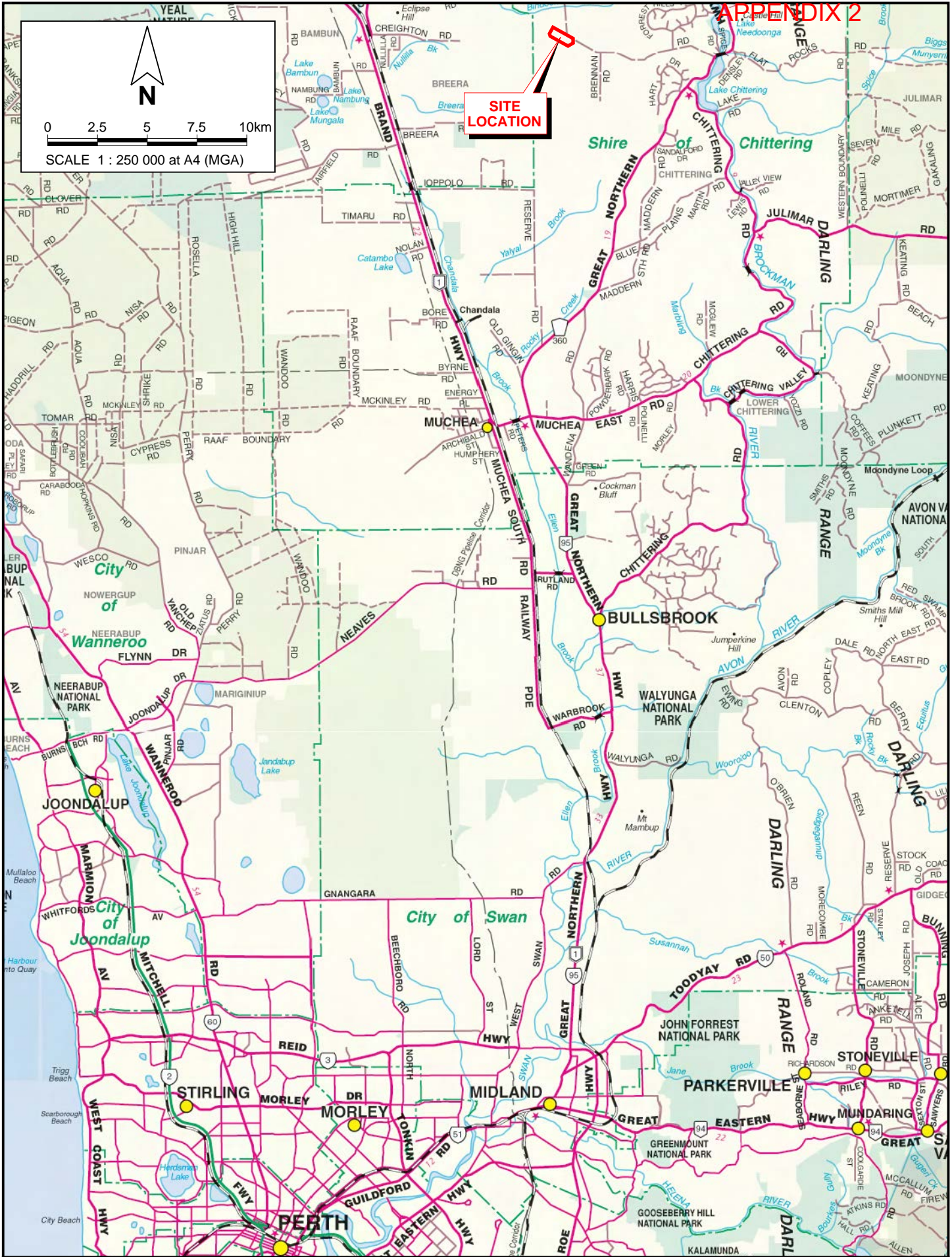
The balance portion of Lot 101 is zoned 'Environmental Conservation' under the Shire of Chittering Local Planning Scheme with scheme provisions requiring a Conservation Covenant and Environmental Management Plan. Clearing of the 50ha portion is therefore considered an appropriate environmental outcome for Lot 101.

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FIGURES



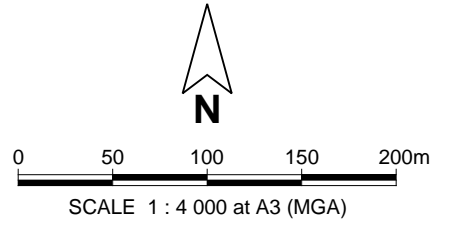
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pgv ENVIRONMENTAL	
Drawn: P. van der Moezel	Date: 5 Nov 2019
Job: 10370 Rpt: 2019-466	Revision: A

NXT Global Pty Ltd
 FLORA, VEGETATION AND FAUNA SURVEY
 PROPOSED INTEGRATED TOURIST RESORT, LOT 1 (NO.777) TEATREE ROAD, BINDOON

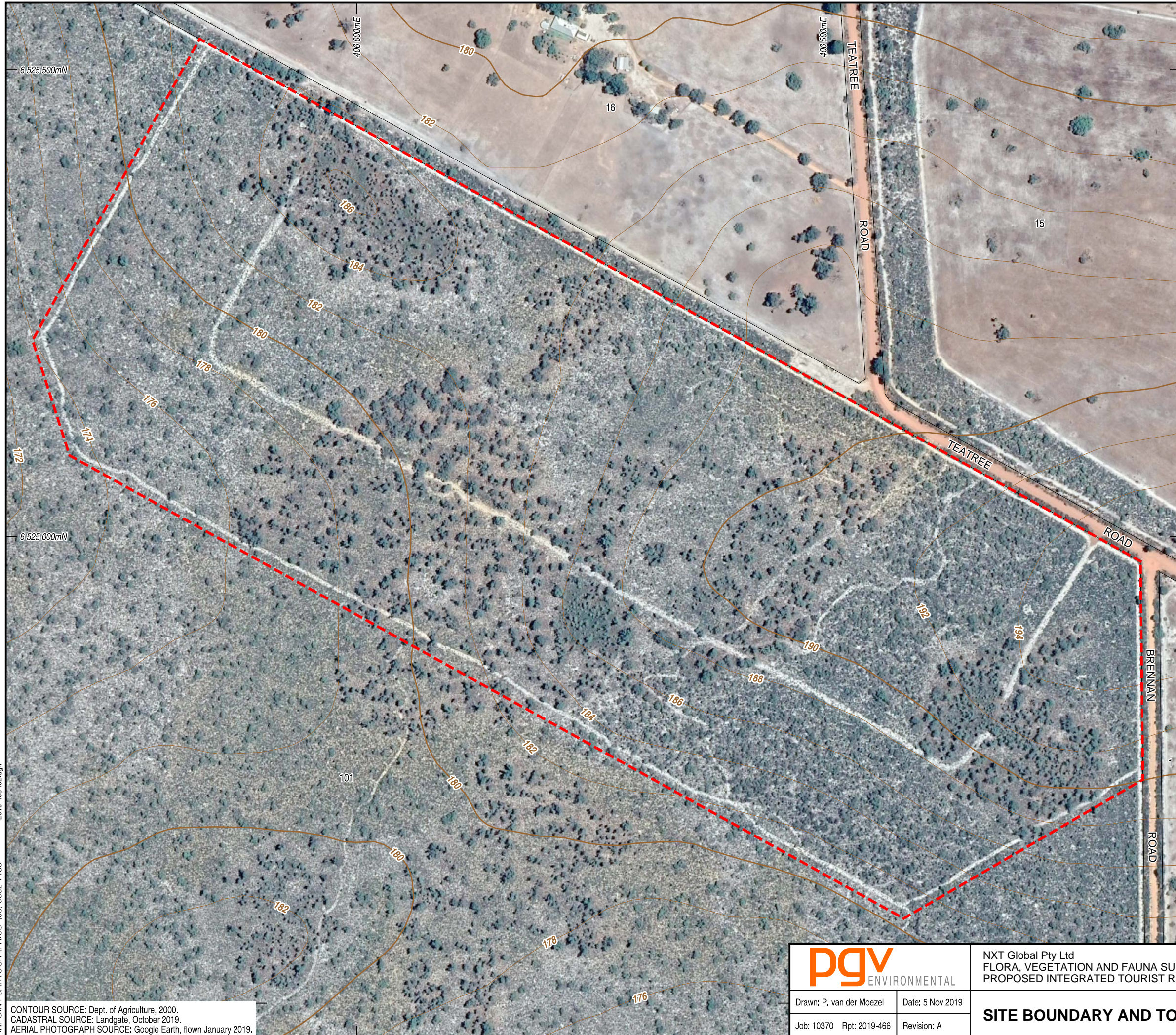
SITE LOCATION

Figure 1



Legend

- - - Site Boundary
- Cadastral Boundary
- Topographic Contour



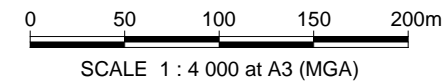
2019-466-102.dgn
PINPOINT CARTOGRAPHICS (08) 9562 7136

CONTOUR SOURCE: Dept. of Agriculture, 2000.
 CADASTRAL SOURCE: Landgate, October 2019.
 AERIAL PHOTOGRAPH SOURCE: Google Earth, flown January 2019.

		NXT Global Pty Ltd FLORA, VEGETATION AND FAUNA SURVEY PROPOSED INTEGRATED TOURIST RESORT, LOT 1 (NO.777) TEATREE ROAD, BINDOON	
		Drawn: P. van der Moezel Job: 10370 Rpt: 2019-466	Date: 5 Nov 2019 Revision: A

SITE BOUNDARY AND TOPOGRAPHY

Figure 2



Legend

- - - Site Boundary
- Cadastral Boundary
- Quadrat Location
- Vegetation Type Boundary
- Et Vegetation Type
- P Vegetation Condition

Priority Flora

- ✱ *Tetradlea pilifera* - P3

Vegetation Types

Et
Eucalyptus tottiana Low Open Woodland over *Hibbertia hypericoides*/*Eremaea pauciflora*/*Astroloma xerophyllum* Closed Low Heath

EtNf
Eucalyptus tottiana/*Nuytsia floribunda* Low Open Woodland over *Allocasuarina humilis*/*Hibbertia hypericoides*/*Synaphea spinulosa*/*Astroloma xerophyllum*/*Calytrix leschenaultii* Closed Heath

BmBaEt
Banksia menziesii/*B. attenuata*/*Eucalyptus tottiana* Low Woodland over *Conospermum stoechadis*/*Jacksonia floribunda*/*Adenanthos cygnorum* Open Shrubland over *Eremaea pauciflora*/*Leucopogon polymorphus*/*Astroloma xerophyllum*/*Calytrix leschenaultii* Open Low Heath

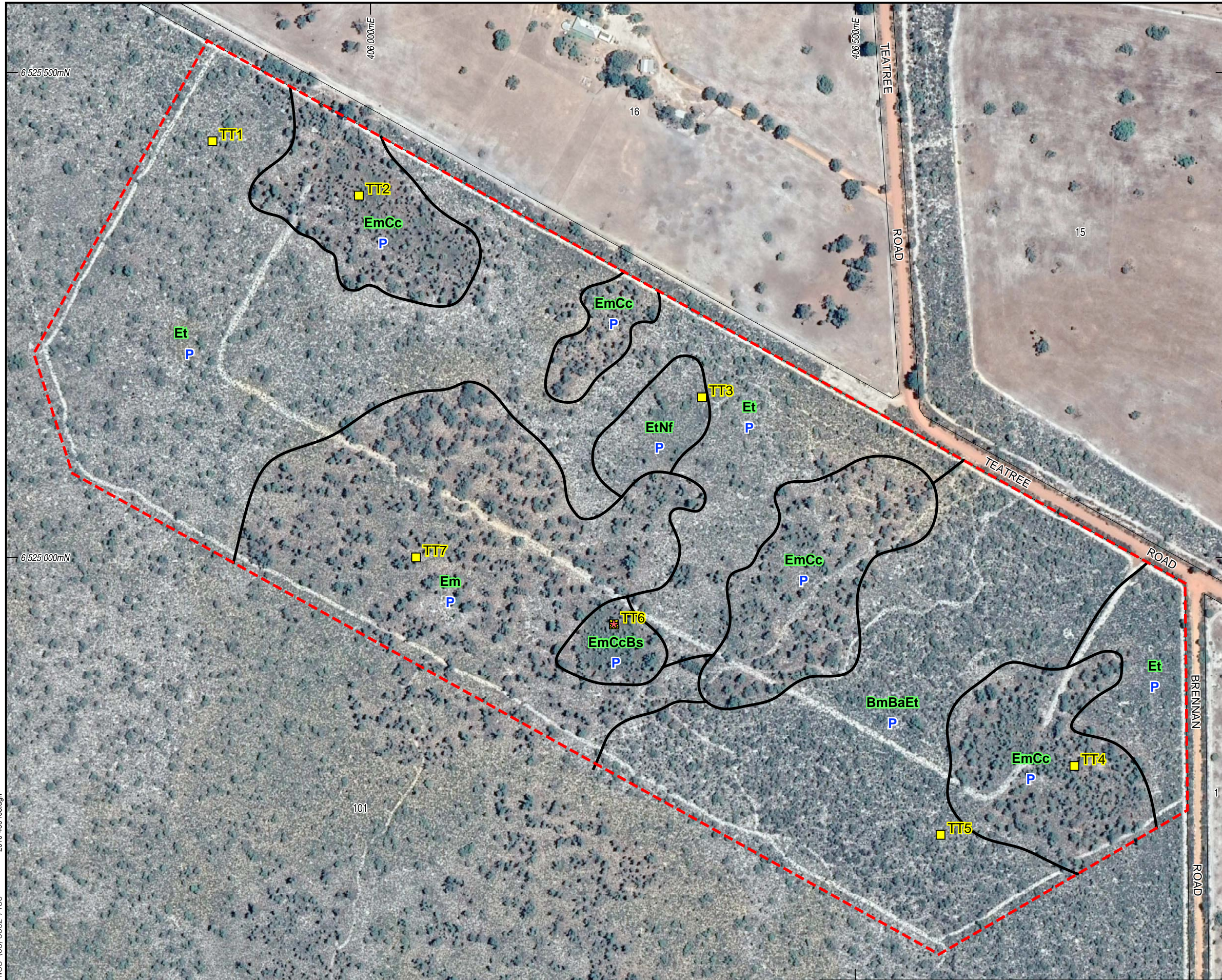
EmCc
Eucalyptus marginata/*Corymbia calophylla* Low Woodland over *Daviesia angulata* Shrubland over *Hibbertia hypericoides*/*Leucopogon polymorphus*/*Xanthorrhoea preissii*/*Synaphea spinulosa*/*Grevillea synapheae*/*Acacia pulchella* Open Low Heath

EmCcBs
Eucalyptus marginata/*Corymbia calophylla* Low Woodland over *Banksia sessilis*/*Daviesia angulata* Open Heath over *Hibbertia hypericoides*/*Leucopogon polymorphus*/*Xanthorrhoea preissii* Open Low Heath

Em
Eucalyptus marginata Low Open Woodland over *Jacksonia floribunda*/*Xanthorrhoea preissii* Open Shrubland over *Calothamnus sanguineus*/*Hibbertia hypericoides*/*Leucopogon polymorphus*/*Astroloma xerophyllum*/*Calytrix leschenaultii* Closed Low Heath

Vegetation Condition
 (SOURCE: Bush Forever, Govt. of W.A., 2000)

P - Pristine
 Pristine or nearly so, no obvious signs of disturbance.



2019-466-403.dgn
PINPOINT CARTOGRAPHICS (08) 9562 7136

CADASTRAL SOURCE: Landgate, October 2019.
 AERIAL PHOTOGRAPH SOURCE: Google Earth, flown January 2019.

pgv ENVIRONMENTAL		NXT Global Pty Ltd FLORA, VEGETATION AND FAUNA SURVEY PROPOSED INTEGRATED TOURIST RESORT, LOT 1 (NO.777) TEATREE ROAD, BINDOON	
Drawn: P. van der Moezel	Date: 6 Nov 2019	VEGETATION	
Job: 10370 Rpt: 2019-466	Revision: A		

Figure 3

APPENDIX 1

DBCA Flora Database Search

APPENDIX 2

FID	Sheet	NameID	Taxon	Cons_C ode	Plant_Desc	Site	Vegetation	Frequency	Notes	Locality	Geo_Met hod	Precision	Date
221	1645404	3210	Acacia anarthros	3		Hilltop, moist brown loam over laterite.	Open wandoo woodland with scrub beneath.		Abundance: 10 + plants	E roadverge opposite grael extension area of Udmung Brooke reserve, N of Bindoon & 700 m S of junction with Hay Flat road on Great Northern Highway	AUTO	3	27/06/1991
1223	8359784	14066	Acacia cummingiana	3	Spreading, sprawling, multi stemmed shrub with yellow flowers. 4 nerved, a flattish stem prominently ribbed above and below.	Hilltop. Dry white sand.	Scattered marri, Eucalyptus todtiana, Banksia grandis and Nuytsia floribunda with Stirlingia latifolia, Daviesia incrassata, Synaphea spinulosa, Calothamnus sanguineus, Xanthorrhoea preissii.	Counted 38 plants over 200 m NS and 40 EW.		Reserve Road, Muchea/Chittering: road verges 0.7 km N from Yalyal Brook crossing	GPS	1	29/05/2012
1680	319244	11229	Acacia drummondii subsp. affinis	3	Shrub to 0.6 m tall; flower heads slightly drooping.	On hillside in latetitic gravel.				22.5 km from Bullsbrook East towards Chittering	AUTO	3	2/08/1973
1694	7215134	11229	Acacia drummondii subsp. affinis	3		On high ground between the highway and lake.	Remnant woodland. Contiguous with fringing vegetation on lake. Understorey varies from very open with few weeds to patches of thick Watsonia.		Condition is very good to good. Significant management would be required to eradicate the Watsonia infestation.	Site 7, Great Northern Highway, S of Bindoon	TOPO	3	/09/2005

APPENDIX 2

FID	Sheet	NameID	Taxon	Cons_Code	Plant_Desc	Site	Vegetation	Frequency	Notes	Locality	Geo_Method	Precision	Date
3430	342750	14927	Acacia pulchella var. reflexa acuminata bracteole variant (R.J. Cumming 882)	3	Spreading bush 0.3 m; flowers yellow.	Road verge.	Eucalyptus calophylla-wandoo woodland.	Common.	Abundance: Common.	8 km (5 miles) from Bindoon towards Toodyay	AUTO	3	5/09/1981
4854	7215126	11336	Adenanthos cygnorum subsp. chamaephyton	3		On slope above the highway, adjacent to totally cleared paddock.	Isolated remnant woodland. Good understorey diversity remains. Weedy species are present here but are not dominant.		Condition is excellent to very good.	Site 10, Great Northern Highway, S of Bindoon	TOPO	3	/09/2005
4856	1616188	11336	Adenanthos cygnorum subsp. chamaephyton	3	Sprawling shrub; 30 cm x 1.6 m diameter.	Low upland, well drained; shallow grey sand over laterite, some duricrust exposed.	Low Heath C over Low Heath D (Scheme of Muir 1977); Allocasuarina humilis, Calothamnus sanguineus, Hibbetia hypericoides.		Abundance: common.	Private Property, 6.4 km at 250degrees from Bindoon	MAN	1	24/11/1990
14058	8289220	35776	Chamelaucium sp. Gingin (N.G. Marchant 6)	T	Erect open branching shrub with white flowers. Height: to ca 1.8 m.	Slope. Dry white/grey sand.	Banksia woodland.	locally common.		loppolo Nature Reserve, loppolo Road, Chittering	GPS	1	20/10/2010
14059	8153337	35776	Chamelaucium sp. Gingin (N.G. Marchant 6)	T	Shrub to 1.5 m. Flowers white/pink.	Undulating. Yellow sand.	With Banksia sp., Hibbertia sp., Jacksonia.			Population occurs on Western Firebreak of Breera Road Nature Reserve and into adjacent Private Property (Eastern boundary)	GPS	1	19/12/2008
14060	3261484	35776	Chamelaucium sp. Gingin (N.G. Marchant 6)	T	Open shrub to 1 m, flowers white.	Crest of scarp, white sand.	Open low woodland of Eucalyptus todtiana over scrub to 3 m of Adenanthos cygnorum. Conospermum stoechadis, Macrozamia riedlei, Anigozanthos manglesii, Jacksonia stenbergiana, Hibbertia huegelii.	20+ mature plants.		loppolo road, at 4.1 km E of Brand Highway and c. 14 km S of Gingin	TOPO	3	22/09/1992

APPENDIX 2

FID	Sheet	NameID	Taxon	Cons_Code	Plant_Desc	Site	Vegetation	Frequency	Notes	Locality	Geo_Method	Precision	Date
14061	4237609	35776	Chamelaucium sp. Gingin (N.G. Marchant 6)	T		Hilltop. W aspect. Dry white/brown sand.	Scrub over Open Low Scrub B with Jacksonia sternbergiana, Adenanthos cygnorum, Conospermum stoechadis.		Abundance: 76 plants.	Ippolo Road, 4.1 km E of Brand Highway, Chittering/Gingin Shire	MAN	0	20/11/1995
14062	8008574	35776	Chamelaucium sp. Gingin (N.G. Marchant 6)	T	Shrub to 1.5 m. Flowers white/pink.	Undulating plain. Sand yellow.	With Banksia sp., Gompholobium sp., Hibbertia sp., Jacksonia sp.			Traps set along northern firebreak of Breera Road Nature Reserve	GPS	1	21/11/2008
14063	7782160	35776	Chamelaucium sp. Gingin (N.G. Marchant 6)	T	Erect shrub, with white flowers. Height and width 1 m.	Slope, dry red-brown gravel.	No associated species.	1 plant.	Landholder have fenced individual plant.	Lot 439 Breera Road, Gingin, lot number on front entry gate shown as 451, plants located on the W boundary track approx 36 m SSW of house near Western Power Pole	GPS	1	3/09/2007
14065	7576196	35776	Chamelaucium sp. Gingin (N.G. Marchant 6)	T						Ippolo road between Muchea and Gingin	UNK	3	16/09/1987
14066	8161305	35776	Chamelaucium sp. Gingin (N.G. Marchant 6)	T	Shrub 2 m tall x 1.2 m wide. Pale pink buds and white flowers.	Yellow sand.	Jacksonia sternbergiana, Adenanthos cygnorum, Corymbia calophylla, Hibbertia hypericoides.	over 50 plants.		248 Breera Gora, Gingin	GPS	1	17/10/2008
14067	7934475	35776	Chamelaucium sp. Gingin (N.G. Marchant 6)	T	Shrub to 1.5 m. Flowers white.	Undulating plain with yellow sand.	Banksia woodland with Banksia spp., Eucalyptus calophylla, Hibbertia sp., Jacksonia sp. and Macrozamia riedlei.			Breera Road, 3.2 km E of the Brand Highway (N of Muchea)	GPS	1	12/12/2007

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FID	Sheet	NameID	Taxon	Cons_Code	Plant_Desc	Site	Vegetation	Frequency	Notes	Locality	Geo_Method	Precision	Date
14068	8656827	35776	Chamelaucium sp. Gingin (N.G. Marchant 6)	T	Shrub.	Slope. Dry brown, yellow-orange gravelly sand.	Opne low woodland A over low woodland B over heath over low heath C over open herbs. Banksia menziesii, Banksia attenuata, Jacksonia sternbergiana, Adenanthos cygnorum, Allocasuarina humilis, Xanthorrhoea preissii, Hibbertia sp., Les	526 plants.	Plants in flower. Population in excellent condition, plants ranging from seedlings to mature adults. Population 3a.	Breera Road Reserve. Population extends from c. 3.1 km E of Brand Highway and Breera Road junction to c. 4.1 km. Plants occur on both sides of the road	GPS	1	19/10/2009
14069	8656789	35776	Chamelaucium sp. Gingin (N.G. Marchant 6)	T	Shrub.	Slope. Dry yellow-brown, yellow-orange sand/gravel.	Low Woodland over Heath over Sedges over Herbs. Corymbia calophylla, Banksia grandis, Banksia attenuata, Banksia sessilis, Jacksonia sternbergiana, Adenanthos cygnorum, Xanthorrhoea preissii, Allocasuarina humilis, Hibbertia hypericoides, Ptilotus sp..	320 mature plants and seedlings.	Plants in flower at time of survey. Population 3b.	Firebreak, Lot 1003 Breera Road, Gingin	GPS	1	18/11/2009

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FID	Sheet	NameID	Taxon	Cons_C ode	Plant_Desc	Site	Vegetation	Frequency	Notes	Locality	Geo_Met hod	Precision	Date
14070	8656797	35776	Chamelaucium sp. Gingin (N.G. Marchant 6)	T	Shrub.	Slope. Dry brown, yellow- orange gravelly sand.	Opne low woodland A over low woodland B over heath over low heath C over open herbs. Banksia menziesii, Banksia attenuata, Jacksonia sternbergiana, Adenanthos cygnorum, Allocastrum humilis, Xanthorrhoea preissii, Hibbertia sp., Les	526 plants.	Plants in flower. Population in excellent condition, plants ranging from seedlings to mature adults. Population 3a.	Breera Road Reserve. Population extends from c. 3.1 km E of Brand Highway and Breera Road junction to c. 4.1 km. Plants occur on both sides of the road	GPS	1	19/10/2009
14071	4151348	35776	Chamelaucium sp. Gingin (N.G. Marchant 6)	T	Erect and straggly shrub up to 2 m high x 1 m wide. Full flower. Conspicuous.	Lower slope of scarp. Dry and covered with leaf litter. Yellow sand.	Low woodland, Banksia scaevola, Xanthorrhoea.		Abundance: > 30 plants on road verges. Population extends S side 10 m wide, N side 3 m wide. Probably disturbance opportunist as grows where soil has been disturbed for road and fence construction.	3.3 km E Brand Highway on Breera road, S of Gingin	GPS	1	5/10/1995

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FID	Sheet	NameID	Taxon	Cons_Code	Plant_Desc	Site	Vegetation	Frequency	Notes	Locality	Geo_Method	Precision	Date
14072	4262069	35776	Chamelaucium sp. Gingin (N.G. Marchant 6)	T	Shrub to 1.5 m. Flowers white.	Undulating plain. Yellow sand.	Remnant woodland with Eucalyptus calophylla, Macrozamia riedlei, Jacksonia, Hibbertia, Banksia spp.		Abundance: 300+ plants.	3.3 km E of Brand Highway on Breera Road, N and S verges	GPS	1	22/11/1995
14073	4135768	35776	Chamelaucium sp. Gingin (N.G. Marchant 6)	T	Shrub to 1.5 m. Flowers white.	Undulating plain. Yellow sand.	Remnant woodland with Eucalyptus calophylla, Macrozamia riedlei, Jacksonia, Hibbertia, Banksia spp.		Abundance: 300+ plants in area 2-10 m.	3.3 km E of Brand Highway on Breera Road - N and S verges	GPS	1	9/12/1995
14074	4262018	35776	Chamelaucium sp. Gingin (N.G. Marchant 6)	T	Shrub with bright green leaves. Flowers white, buds tinged pink.	Hilltop/rise. White sand.	With Jacksonia sternbergiana, Adenanthos cygnorum, Macrozamia riedlei, Scaevola sp.			4.1 km E of Brand Highway on Ippolo Road, N road verge	MAN	0	22/11/1995
15909	847917	13827	Cyanicula ixioides subsp. candida	2	Predominantly white form with the odd blue form.		Eucalyptus wandoo and E. calophylla woodland over formerly mid-dense Hakea, herbs regenerating. Burnt summer 1985/86.		Abundance: several hundred flowers.	9 km NNE of Bindoon, access off Stevenson Road	MAN	0	21/09/1986
27410	4360761	14319	Grevillea corrugata	T	Robust shrub 2-5 m high, white flowers.	In gravelly loam.	Beside road in eucalypt forest. Disturbed verge.	frequent.		Julimar road, 1.3 km from Chittering road, c. 10 km S of Bindoon	MAN	0	4/10/1992
27412	4360745	14319	Grevillea corrugata	T	Robust shrub 2-5 m high, white flowers.	In gravelly loam.	Beside road in eucalypt forest. Disturbed verge.	frequent.		Julimar road, 1.3 km from Chittering road, c. 10 km S of Bindoon	MAN	0	4/10/1992
27413	4360753	14319	Grevillea corrugata	T	Robust shrub 2-5 m high, white flowers.	In gravelly loam.	Beside road in eucalypt forest. Disturbed verge.	frequent.		Julimar road, 1.3 km from Chittering road, c. 10 km S of Bindoon	MAN	0	4/10/1992
31131	3072924	19775	Hibbertia glomerata subsp. ginginensis	2	Shrub ca 0.5 m high; foliage grey.		In Eucalyptus-Dryandra-Xanthorrhoea woodland.			15.6 km from Gingin toward Bindoon (at Moora-Mogumber turnoff)	MAN	0	28/09/1968
31132	3072940	19775	Hibbertia glomerata subsp. ginginensis	2	Ca 0.15 m high.		In Eucalyptus-Dryandra-Xanthorrhoea woodland.		Specimens from different plants.	15.6 km from Gingin toward Bindoon (at Moora - Mogumber turnoff)	MAN	0	28/09/1968

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FID	Sheet	NameID	Taxon	Cons_C ode	Plant_Desc	Site	Vegetation	Frequency	Notes	Locality	Geo_Met hod	Precision	Date
31137	4377818	19775	Hibbertia glomerata subsp. ginginensis	2	Erect compact shrub 30 cm x 40 cm, flowers yellow.	Brown clay lateritic soil.	Forest.		Abundance: frequent.	15 km E of Gingin	GPS	1	14/09/1995
31254	1131494	5145	Hibbertia miniata	4						Bindoon	MAN	3	8/10/1945
31257	1131524	5145	Hibbertia miniata	4						Bindoon	MAN	3	8/10/1945
31258	1131486	5145	Hibbertia miniata	4						Bindoon	MAN	3	8/10/1945
31262	1131540	5145	Hibbertia miniata	4						Bindoon	MAN	3	8/10/1945
31266	1131508	5145	Hibbertia miniata	4						Bindoon	MAN	3	8/10/1945
31269	1131516	5145	Hibbertia miniata	4						Bindoon	MAN	3	8/10/1945
31270	1131532	5145	Hibbertia miniata	4						Bindoon	MAN	3	8/10/1945
31271	1130447	5145	Hibbertia miniata	4						Bindoon	MAN	3	15/09/1941
31272	1130455	5145	Hibbertia miniata	4						40 - 67 mile pegs, Geraldton Highway. [Between Muchea and Wannamal, 64 - 108 km along the Midlands Road].	MAN	4	5/09/1957
32174	7525842	17622	Hypolaena robusta	4	Erect plant with brown flowers.	Slope. Dry, white-grey sand.	Heath fringed by Jarrah, Marri and Banksia grandis.	100 plants.		Ashworth Road, Mooliabeenee, R 24560/2342, 3.3 km W of Cullala Road then 50 m S	GPS	1	21/10/2006
32192	7835299	17622	Hypolaena robusta	4		Sand, flat, private property.	Low Open Woodland of Eucalyptus todtiana and Banksia attenuata.		Proposed excavation for landfill, healthy population in flower.	Lot 26 Ioppolo Road, Dandaragan Plateau	GPS	1	12/10/2007
34442	6904351	20527	Lechenaultia magnifica	1	Erect, branching shrub with white to pale blue flowers. Height ca 50 cm. Early flowering stage.	Slope with dry white grey sand.	Banksia menziesii and Eucalyptus todtiana with sandplain shrubs on disturbed roadside edges.	scattered.		Mooliabeenee-Gingin Road, Mooliabeenee, 2 km E of Peterson Rise	GPS	1	23/10/2004
35200	8124728	6354	Leucopogon allittii	3	Erect shrub 1.9 m high x 0.8 m wide. Flowers white held at right angles to stem or pendulous, leaves stiff and pungent held horizontal.	Gentle slope, outcrop. Soil surface dry, with some stones on surface. Yellow - grey clayey sand over laterite.	Calothamnus sanguineus, Hibbertia hypericoides.	rare.	Area burnt in summer of 1995/96 or 1996/97.	Lot 451 Breera Road Gingin, S side in jarrah outcrop area near heath area	UNK	2	21/06/2009

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FID	Sheet	NameID	Taxon	Cons_Code	Plant_Desc	Site	Vegetation	Frequency	Notes	Locality	Geo_Method	Precision	Date
38150	8897549	14337	<i>Millotia tenuifolia</i> var. <i>laevis</i>	2	Annual herb, 0.1 m tall. White-yellow flowers, plants dry and dehiscent.	Slope. Yellow sand.	Low woodland of <i>Eucalyptus todtiana</i> , <i>Banksia attenuata</i> and <i>B.</i> <i>menziesii</i> over mid sparse shrubland of <i>Allocasuarina humilis</i> and <i>Xanthorrhoea preissii</i> , <i>Hibbertia hypericoides</i> and <i>Melaleuca</i> <i>trichophylla</i> over low open sedgeland of <i>Mesomelaena</i> <i>pseudostygia</i> .	420 +		C. 7 km E of Brand Highway and 11.5 km NNE of Muchea, on E firebreak, 550 m S of N firebreak/extension of Ioppolo Road	GPS	1	9/10/2015
38152	8897565	14337	<i>Millotia tenuifolia</i> var. <i>laevis</i>	2	Annual herb, 0.1 m high. White-yellow flowers, plants dry and dehiscent.	Slope. Yellow sand.	Mid woodland of <i>Eucalyptus marginata</i> and <i>Corymbia calophylla</i> over tall isolated clumps of shrubs of <i>Adenanthos</i> <i>cygnorum</i> over low open shrubland of <i>Astroloma</i> <i>xerophyllum</i> , <i>Hibbertia</i> <i>hypericoides</i> , <i>Leucopogon</i> <i>conostephioides</i> and <i>Stirlingia latifolia</i> over low	460 +		C. 6 km E of the Brand Highway and 11.8 km NNE of Muchea, 40 m S of Ioppolo Road and 50 m W of Reserve Road	GPS	1	9/10/2015
38153	8897557	14337	<i>Millotia tenuifolia</i> var. <i>laevis</i>	2	Annual herb, 0.1 m high. White-yellow flowers, plants dry and dehiscent.	Slope. Yellow sand.	Low isolated clumps on trees of <i>Banksia</i> <i>attenuata</i> , <i>B. grandis</i> and <i>Corymbia calophylla</i> over mid open shrubland of <i>Allocasuarina humilis</i> and <i>Xanthorrhoea preissii</i> over low open shrubland of <i>Calothamnus</i> <i>sanguineus</i> , <i>Eremaea</i> <i>pauciflora</i> and <i>Hibbertia</i> <i>hypericoi</i>	1350 +		C. 5.7 km E of Brand Highway, 10.7 km NNE of Muchea, 950 m S of Ioppolo Road and 100 m W of Reserve Road	GPS	1	9/10/2015

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FID	Sheet	NameID	Taxon	Cons_Code	Plant_Desc	Site	Vegetation	Frequency	Notes	Locality	Geo_Method	Precision	Date
39562	8766622	2271	<i>Persoonia rudis</i>	3	Straggly shrub 0.6 m high and 1.1 m wide. Flowers yellow. Young shoots pale green and woolly.	Slope, grey over yellow sand. Burnt in summer of 1995/1996 or 1996/1997.	Mesomelaena pseudostygia and mixed shrubs.	rare.		Lot 451, Breera Road, at top of drive above site BJK 1, Gingin	GPS	1	15/12/2009
39609	4172418	2278	<i>Persoonia sulcata</i>	4						65 mile peg on Geraldton Road [ca 32 km S of Mogumber]	AUTO	3	/09/1948
41476	8124957	4161	<i>Ptychosema pusillum</i>	T	Herb to 10 cm. Yellow flowers; red - striped on back of flower.	On firebreak and slope with dry white sand.	Low woodland B over Low Heath C over Herbs. <i>Banksia attenuata</i> , <i>Eucalyptus todtiana</i> , <i>Adenanthos cygnorum</i> , <i>Stirlingia latifolia</i> , <i>Sholtzia</i> sp., <i>Hibbertia hypericoides</i> , <i>Leucopogon sprengelioides</i> .	500+ mature plants.	Plants located on the eastern firebreak and scattered throughout bare sandy patches in the vegetation.	Breera Nature Reserve, Gingin	GPS	1	9/09/2008
41478	7782152	4161	<i>Ptychosema pusillum</i>	T	Perennial herb to 10 cm high. Flowers red-brown-yellow, striped on the back of flowers.	Slope, dry white sand.	Low Woodland B over Low Heath Cover Herbs. <i>Banksia menzeisii</i> , <i>B. attenuata</i> , <i>B. illicifolia</i> , <i>Eucalyptus todtiana</i> , <i>Leucopogon sprengelioides</i> , <i>Podotheca angustifolia</i> , <i>Stylidium</i> aff. <i>repens</i> , <i>Ursinia anthemoides</i> , <i>Isolepis marginata</i> and <i>Arctotheca calendula</i> .		New population.	Lot 439 Breera Road, Gingin, Plants at NE corner of property on fire breaks and powerline track	GPS	1	18/09/2007
45200	7815336	7756	<i>Stylidium longitubum</i>	4	Slender erect herb. Flowers bright pink, throat white, in flower.	Winter wet flats. Black peaty sand surface. Clay in lower horizons.	<i>Melaleuca raphiophylla</i> low woodland.	rare.		Chandala Nature Reserve	GPS	2	21/11/2005

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FID	Sheet	NameID	Taxon	Cons_C ode	Plant_Desc	Site	Vegetation	Frequency	Notes	Locality	Geo_Met hod	Precision	Date
46072	8203601	48297	Styphelia filifolia	3		Well drained gentle SW facing slope. Yellow-brown sand over yellow-grey sand. Litter 75% to 1 cm depth; bare ground 15-20%.	Banksia attenuata and Eucalyptus todtiana Open Low Woodland over Allocasuarina humilis and Hakea costata Shrubland over Eremaea pauciflora var. pauciflora Open Low Heath, over Mesomelaena pseudostygia Very Open Sedgeland.		Vegetation condition excellent.	Plot IOPP04, Chandala Nature Reserve Northern Block, Shire of Chittering	GPS	0	2/09/2006
47644	7708491	35581	Tetraria sp. Chandala (G.J. Keighery 17055)	2	Slender erect sedge 1.5 m high x 30 cm. Flowers brown.	Mound spring. Peaty sand.	Dense Melaleuca raphiophylla woodland over mound dominated by ferns and Tetraria sedges.		locally common.	Chandala Nature Reserve	GPS	1	28/07/2005
47909	8202931	4540	Tetratheca pilifera	3		Slope, breakaway. Gully, drainage line. Dry - moist brown loam clay over granite, laterite and boulders.	Eucalyptus wandoo fringing shrubland. Associated species: Trymalium floribundum, Hypocalymma angustifolium, Gastrolobium trilobium, Hakea undulata, Melaleuca radula, Hibbertia hypericoides, Xanthorrhoea preissii.		5 plants over 10 m x 10 m.	350 Bindoon Spring Road, ca 750 m E of the farmhouse, Toodyay West	GPS	1	8/10/2009

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FID	Sheet	NameID	Taxon	Cons_C ode	Plant_Desc	Site	Vegetation	Frequency	Notes	Locality	Geo_Met hod	Precision	Date
51384	7908857	12456	Verticordia rutilastra	3		Slope. NW aspect. White sand over laterite/mosiac.	(Muir's): Open Shrubland Allocauarina humilis, Xanthorrhoea preissii and/or Jacksonia floribunda over species rich Low Shrubland to Open Low Heath typically Hibbertia hypericoides and Calothamnus sanguineus, mixed Very Open Sedgeland dominated by Mesome		Condition of population: healthy.	Lot 570. Ioppolo Road, Chittering	GPS	1	1/09/2006
51386	7835302	12456	Verticordia rutilastra	3		Sand, flat, private property.	Low Open Woodland of Eucalyptus todtiana and Banksia attenuata.		Proposed excavation for landfill. Healthy population for landfill.	Lot 26 Ioppolo Road, Dandragan Plateua	GPS	1	12/10/2008
51411	7908865	12460	Verticordia serrata var. linearis	3		Slope. Granite/dolerite. Mosaic limestone and laterite/granite derived deep white and orange sands.	(Muir's): Open Shrubland Allocauarina humilis, Xanthorrhoea preissii and/or Jacksonia floribunda over species rich Low Shrubland to Open Low Heath typically Hibbertia hypericoides and Calothamnus sanguineus, mixed Very Open Sedgeland dominated by Mesome		Condition of population: healthy.	Lot 570. Ioppolo Road, Chittering	GPS	1	1/11/2006

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FID	PopId	NameId	Taxon	ConsSt atus	WARa nk	PopNu mber	SubPo pCode	PopSt atus	Location	District	Vesting	Purpos e1	Purpos e2	CountDate	Method	Matur eCou n	Juveni leCo	Seedli ngCo	LiveT otal	PlantType C	AreaO ccupi	inFlo wer	Populatio n
670	89605	11229	Acacia drummondii subsp. affinis	3		16			Site 7, Great Northern Hwy, S of Bindoon (3.526km SSW of Bindoon - GIS extrapolated), on high ground between highway and lake.	PERTH HILLS	UNKNO WN	UNKNO WN	1/09/2005 0:00		0		0					N	
1612	100727	11336	Adenanthos cygnorum subsp. chamaephyton	3		3	A		South end of Lot 77 Tee Tree Rd. North side of Tee Tree Rd, ca. 0.7 km W of the junction with Great Northern Hwy. Main Roads gravel pit (MRD Stockpile GNH-59).	PERTH HILLS	MRD	GRA	26/10/1996 0:00	ESTMT	350		350					N	
1613	100728	11336	Adenanthos cygnorum subsp. chamaephyton	3		3	B		South end of Lot 76 Tee Tree Rd. North side of Tee Tree Rd, ca. 0.7 km west of the junction with Great Eastern Hwy.	PERTH HILLS	LGA	OTH	26/10/1996 0:00	ESTMT	100		100					N	
1614	100729	11336	Adenanthos cygnorum subsp. chamaephyton	3		3	C		North verge of Tee Tree Rd, from ca. 0.6 to 0.75 km north- west from the junction with Great Eastern Hwy.	PERTH HILLS	LGA	VER	26/10/1996 0:00	ESTMT	50		50					N	
1615	100730	11336	Adenanthos cygnorum subsp. chamaephyton	3		3	D		North verge of Tee Tree Rd, ca. 0.4 km north-west from the junction with Great Northern Hwy.	PERTH HILLS	LGA	VER	26/10/1996 0:00	ESTMT	30		30					N	
1616	89663	11336	Adenanthos cygnorum subsp. chamaephyton	3		4			East verge of Great Northern Hwy, ca. 5.1 km south of the junction with Tee Tree Rd.	PERTH HILLS	MRD	VER	26/10/1996 0:00	ESTMT	20		20					N	
1625	89651	11336	Adenanthos cygnorum subsp. chamaephyton	3		11			Private Property, 6.4 km at 250 degrees from Bindoon. [Ca. 0.2 km north of Tee Tree Rd, ca. 1.85 km south east from the junction with Tee Tree Road North].	PERTH HILLS	PRI		24/11/1990 0:00		0		0					N	
1634	89661	11336	Adenanthos cygnorum subsp. chamaephyton	3		20			Private Property, Lot 8, 6.4km @ 250° from Bindoon.	PERTH HILLS	PRI		24/11/1990 0:00		0		0					N	
5327	105384	35776	Chamelaucium sp. Gingin (N.G. Marchant 6)	T	VU	1	A		Crown Reserve 50678. Ioppolo Rd, ca. 4.1km E of Brand Hwy, proposed A-class NR Loc.No.4, Lot 24, S side of rd, around gate, firebreaks and access track.	PERTH HILLS	CC	NRE	18/03/2015 0:00	ACT_IND	2000		0		PLANTS	15000		HEALTHY	
5328	105385	35776	Chamelaucium sp. Gingin (N.G. Marchant 6)	T	VU	1	B		PP Lot 3, Ioppolo Road, ca.4.1km E of Brand Hwy, N side of rd.	SWAN COASTAL	PRI		5/10/2016 0:00	ACT_IND	100	80	67	0	PLANTS		N	HEALTHY	

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FID	PopId	NameId	Taxon	ConsSt atus	WARa nk	PopNu mber	SubPo pCode	PopSt atus	Location	District	Vesting	Purpos e1	Purpos e2	CountDate	Method	Matur eCou n	Juveni leCo	Seedli ngCo	LiveT otal	PlantType C	AreaO ccupi	inFlo wer	Populatio n
5329	105386	35776	Chamelaucium sp. Gingin (N.G. Marchant 6)	T	VU	1	C		Road Reserve. Ioppolo Road, ca. 3.6-5km E of Brand Hwy, both sides of rd. Adjacent to Location No. 3 & 4. (This subpopulation previously known as 1C,1E,1H and 1J).	PERTH HILLS	LGA	VER		15/09/2015 0:00	ACT_IND	54	27	0	PLANTS			HEALTHY	
5330	105387	35776	Chamelaucium sp. Gingin (N.G. Marchant 6)	T	VU	1	D		PP Lot 25 Loc.No.M2122, Ioppolo Road, ca.4.4-5km E of Brand Hwy, N of rd, also extending N on E side of powerline for 130m.	SWAN COASTAL	PRI			21/10/2000 0:00	ACT_IND	482	177	482			Y		
5331	105388	35776	Chamelaucium sp. Gingin (N.G. Marchant 6)	T	VU	1	E		PP Loc.No.M2091, Ioppolo Road, ca. 4.4km E of Brand Hwy, S of rd, in the north west corner of the property extending from the northern side of the northern firebreak, south approx 245m, along the western firebreak and on the powerline track.	PERTH HILLS	SWA	CFL		11/02/2016 0:00		0	0			N	HEALTHY		
5332	116409	35776	Chamelaucium sp. Gingin (N.G. Marchant 6)	T	VU	1	F		Nature Reserve 50678, just west of eastern boundary firebreak at ac. 270m south of Ioppolo Road, 3.3km east of Brand Highway.	PERTH HILLS	SWA	NRE		18/12/2013 0:00	ACT_IND	1299		0	PLANTS		Y	HEALTHY	
5333	105390	35776	Chamelaucium sp. Gingin (N.G. Marchant 6)	T	VU	2	A		Ioppolo Road, 6.7km E of Brand Hwy, PP Loc.M2122, Lot 26, N of rd adj. to firebreak.	SWAN COASTAL	PRI			27/07/2000 0:00	ACT_IND	8	6	8			N		
5334	105391	35776	Chamelaucium sp. Gingin (N.G. Marchant 6)	T	VU	2	B		Ioppolo Road, 6.5km E of Brand Hwy approx 6.726km, N side of rd adj. to firebreak.	SWAN COASTAL	LGA	VER		21/10/2009 0:00	ACT_IND	4		0	PLANTS	226	Y	HEALTHY	
5335	105393	35776	Chamelaucium sp. Gingin (N.G. Marchant 6)	T	VU	3	A		Road Reserve. Breera Rd, 3.1-4.1km E of Brand Hwy, both sides of rd.	SWAN COASTAL	LGA	VER		6/10/2017 0:00	ACT_IND	0		97	PLANTS		Y	HEALTHY	
5336	105394	35776	Chamelaucium sp. Gingin (N.G. Marchant 6)	T	VU	3	B		PP Lot 1003 (previously 450) N of Breera Rd, 3.1km E of Brand Hwy. Pop'n occurs from the SE corner of the property and extends northwesterly.	SWAN COASTAL	PRI			12/12/2013 0:00	ACT_IND	202	45	0	PLANTS	14908		HEALTHY	

APPENDIX 2

FID	PopId	Nameid	Taxon	ConsSt atus	WARa nk	PopNu mber	SubPo pCode	PopSt atus	Location	District	Vesting	Purpos e1	Purpos e2	CountDate	Method	Matur eCou n	Juveni leCo	Seedli ngCo	LiveT otal	PlantType C	AreaO ccupi	inFlo wer	Populatio n
5337	105396	35776	Chamelaucium sp. Gingin (N.G. Marchant 6)	T	VU	4	A		PP Lot 25, Loc.M2122, Breera Road, 4.4km E of Brand Hwy & 1.1km S on track, pop. extends between powerline and W bdry of Lot 25, adj. the SE cnr of NR 47435 (previously Lot 1).	SWAN COASTAL	PRI			11/10/2017 0:00		0		0				N	
5338	105397	35776	Chamelaucium sp. Gingin (N.G. Marchant 6)	T	VU	4	B		Breera Nature Reserve 47435 (previously Lot 1), Breera Road, adj. boundary firebreak starting at E bdry near SE cnr of property clockwise to N bdry ending at E DRF marker on S verge of Breera Rd ca.4.1km E of Brandt Hwy.	SWAN COASTAL	CC	CFF		14/05/2015 0:00	ACT_IND	5134		0	PLANTS		Y	HEALTHY	
5339	105398	35776	Chamelaucium sp. Gingin (N.G. Marchant 6)	T	VU	4	C		Private property Loc. M1907 (248 Breera Rd, Gingin). Plants occur in N and E firebreaks & throughout veg. 3 distinct groups along the E firebreak.	SWAN COASTAL	PRI			19/12/2013 0:00	ACT_IND	645		0	PLANTS		Y	HEALTHY	
5340	105399	35776	Chamelaucium sp. Gingin (N.G. Marchant 6)	T	VU	4	D		Unmade Road Reserve, immediately S of Breera NR (R 47435). 3 groups: the Western group is near Lot M1907, the Eastern group is near Lot 25, and the Middle group is ca. 1/2 way along Breera NR S road verge.	SWAN COASTAL	LGA	VER		14/05/2015 0:00	ACT_IND	113		0	PLANTS		Y	HEALTHY	
5341	96700	35776	Chamelaucium sp. Gingin (N.G. Marchant 6)	T	VU	5			Private Property Loc.3. Ca. 2.5-2.6km east of Brand Hwy on Ioppolo Rd to PP Loc.3, then 0.6-1.1km north.	SWAN COASTAL	PRI			29/11/2013 0:00	ESTMT	0		17	PLANTS		N		
5342	105401	35776	Chamelaucium sp. Gingin (N.G. Marchant 6)	T	VU	6	A		PP Lot 25, Loc.M2122, adj. W bdry firebreak, extending 0.2-1.4km N of Ioppolo Rd in 6 subpopulations (@ 0.2, 0.62, 0.72, 1.09, 1.25 & 1.38km N of rd).	SWAN COASTAL	PRI			11/10/2017 0:00		0		0				N	

APPENDIX 2

FID	PopId	NameId	Taxon	ConsSt atus	WARa nk	PopNu mber	SubPo pCode	PopSt atus	Location	District	Vesting	Purpos e1	Purpos e2	CountDate	Method	Matur eCou n	Juveni leCo	Seedli ngCo	LiveT otal	PlantType C	AreaO ccupi	inFlo wer	Populatio n
5343	105402	35776	Chamelaucium sp. Gingin (N.G. Marchant 6)	T	VU	6	B		PP Lot 25, Loc.M2122, adj.to powerline 0.27-1.02km N of loppolo Rd, in 5 subpopulations (@ 0.27, 0.39 & 1.02km N of rd, W of powerline; 0.77km N of rd, E of powerline; 0.56km N of rd and 130m W of powerline along old firebreak).	SWAN COASTAL	PRI			11/10/2017 0:00		0		0					N
5344	116449	35776	Chamelaucium sp. Gingin (N.G. Marchant 6)	T	VU	6	C		PP, Lot 25, Breera. Pop is located ~350m NE of 6A and ~1km N of loppolo Rd. Plants are ~60m North of Pole MOR- MUC 81-304 under the line and outside of the western edge of the transmission line alignment.	PERTH HILLS	PRI	UNKNO WN	21/11/2016 0:00	ACT_IND	0			197	PLANTS		Y		
5345	96701	35776	Chamelaucium sp. Gingin (N.G. Marchant 6)	T	VU	7			Private property. Lot 451 (or 439?) Breera Road, Gingin. Plant located on the western boundary track, ca. 36m SSW of house, near power pole.	SWAN COASTAL	PRI		3/09/2007 0:00	ACT_IND	1		1				Y		
11503	94918	19775	Hibbertia glomerata subsp. ginginensis	2		2	A		Northern and Southern road verges on Mooliabeenee Rd, Mooliabeenee. Approx 150- 600m SE of Wells Glover Rd. 14.9 km along Mooliabeenee Rd from Gingin towards Bindoon. Continuous with population 2B (on private property).	PERTH HILLS	LGA	VER	22/04/2014 0:00	ACT_IND	0			18	PLANTS	2000	N	HEALTHY	
11505	94919	19775	Hibbertia glomerata subsp. ginginensis	2		3			15.6km from Gingin toward Bindoon, at Moora- Mogumber turnout.	PERTH HILLS	UNKNO WN	UNKNO WN	28/09/1968 0:00		0		0				N		
11507	94921	19775	Hibbertia glomerata subsp. ginginensis	2		5			15km E of Gingin	PERTH HILLS	UNKNO WN	UNKNO WN	4/09/1995 0:00		0		0				N		
12496	95193	20527	Lechenaultia magnifica	1		4			Mooliabeenee Road (Mooliabeenee-Gingin Road). 2 km E of Peterson Rise Rd. Mondah WA 6503.	SWAN COASTAL	LGA	VER	23/10/2004 0:00		0		0				Y		

APPENDIX 2

FID	PopId	NameId	Taxon	ConsSt atus	WARa nk	PopNu mber	SubPo pCode	PopSt atus	Location	District	Vesting	Purpos e1	Purpos e2	CountDate	Method	Matur eCou n	Juveni leCo	Seedli ngCo	LiveT otal	PlantType C	AreaO ccupi	inFlo wer	Populatio n
14819	86914	4161	Ptychosema pusillum	T	VU	3			PP, Lot 451 (439 Breera Road). Plants in the NE corner of property on firebreaks and scattered throughout vegetation. Plants also occur on powerline track. Gingin.	SWAN COASTAL	PRI			3/09/2007 0:00	ESTMT	1000		1000				Y	
14820	98959	4161	Ptychosema pusillum	T	VU	4	A		Breera Road NR (R 47435). Located on the E firebreak and scattered throughout bare sandy patches in vegetation. Gingin.	SWAN COASTAL	CC	CFF		9/09/2008 0:00	ESTMT	500		500				N	
14821	98960	4161	Ptychosema pusillum	T	VU	4	B		PP Lot 25 467 Ioppolo Road Breera. Not surveyed, seen from fenceline.	SWAN COASTAL	PRI			9/09/2008 0:00		0		0				N	
17143	90128	12460	Verticordia serrata var. linearis	3		9			PRI Lot 2091 (previously 570), Ioppolo Rd. [lot purchased by DPaW Jan 2014]	SWAN COASTAL	SWA	CFL		1/11/2006 0:00		0		0				Y	

APPENDIX 2

Naturemap Report

NatureMap Species Report

Created By Guest user on 23/08/2019

Current Names Only Yes
Core Datasets Only Yes
Method 'By Circle'
Centre 116° 00' 45" E, 31° 24' 24" S
Buffer 10km
Group By Conservation Status

Conservation Status	Species	Records
Non-conservation taxon	808	2923
Priority 1	2	3
Priority 2	7	18
Priority 3	14	32
Priority 4	9	24
Protected under international agreement	2	2
Rare or likely to become extinct	9	122
TOTAL	851	3124

Name ID	Species Name	Naturalised	Conservation Code	Endemic To Query Area
Rare or likely to become extinct				
1.	1213 <i>Calectasia cyanea</i> (Blue Tinsel Lily)		T	
2.	24731 <i>Calyptorhynchus banksii</i> subsp. <i>naso</i> (Forest Red-tailed Black Cockatoo)		T	
3.	24734 <i>Calyptorhynchus latirostris</i> (Carnaby's Cockatoo, White-tailed Short-billed Black Cockatoo)		T	
4.	48400 <i>Calyptorhynchus</i> sp. (white-tailed black cockatoo)		T	
5.	35776 <i>Chamelaucium</i> sp. <i>Gingin</i> (N.G. Marchant 6)		T	
6.	24092 <i>Dasyurus geoffroii</i> (Chuditch, Western Quoll)		T	
7.	14319 <i>Grevillea corrugata</i>		T	
8.	4161 <i>Ptychosema pusillum</i> (Dwarf Pea)		T	
9.	34113 <i>Westralunio carteri</i> (Carter's Freshwater Mussel)		T	
Protected under international agreement				
10.	41323 <i>Actitis hypoleucos</i> (Common Sandpiper)		IA	
11.	24808 <i>Tringa nebularia</i> (Common Greenshank, greenshank)		IA	
Priority 1				
12.	20527 <i>Lechenaultia magnifica</i>		P1	
13.	8205 <i>Senecio gilbertii</i>		P1	
Priority 2				
14.	13827 <i>Cyanicula ixiooides</i> subsp. <i>candida</i>		P2	
15.	20514 <i>Gastrolobium nudum</i>		P2	
16.	19775 <i>Hibbertia glomerata</i> subsp. <i>ginginensis</i>		P2	
17.	48928 <i>Idiosoma maclemeutorum</i> (Julimar shield-backed trapdoor spider)		P2	
18.	40804 <i>Leucopogon squarrosus</i> subsp. <i>trigynus</i>		P2	
19.	14337 <i>Millotia tenuifolia</i> var. <i>laevis</i>		P2	
20.	35581 <i>Tetralix</i> sp. <i>Chandala</i> (G.J. Keighery 17055)		P2	
Priority 3				
21.	3210 <i>Acacia anarthros</i>		P3	
22.	14066 <i>Acacia cummingiana</i>		P3	
23.	11229 <i>Acacia drummondii</i> subsp. <i>affinis</i>		P3	
24.	14129 <i>Acacia oncinophylla</i> subsp. <i>oncinophylla</i>		P3	
25.	14927 <i>Acacia pulchella</i> var. <i>reflexa acuminata bracteole variant</i> (R.J. Cumming 882)		P3	
26.	11336 <i>Adenanthos cygnorum</i> subsp. <i>chamaephyton</i>		P3	
27.	6686 <i>Halgania corymbosa</i>		P3	
28.	16317 <i>Isotropis cuneifolia</i> subsp. <i>glabra</i>		P3	
29.	6354 <i>Leucopogon allittii</i>		P3	
30.	2271 <i>Persoonia rudis</i>		P3	
31.	48297 <i>Styphelia filifolia</i>		P3	
32.	4540 <i>Tetradlea pilifera</i>		P3	
33.	12456 <i>Verticordia rutilastra</i>		P3	
34.	12460 <i>Verticordia serrata</i> var. <i>linearis</i>		P3	

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
			P3	
Priority 4				
35.	13862 <i>Caladenia speciosa</i>		P4	
36.	5421 <i>Calothamnus pachystachyus</i>		P4	
37.	5145 <i>Hibbertia miniata</i> (Orange Hibbertia)		P4	
38.	17622 <i>Hypolaena robusta</i>		P4	
39.	48588 <i>Isoodon fusciventer</i> (Quenda, southwestern brown bandicoot)		P4	
40.	34843 <i>Oxymyrrhine coronata</i>		P4	
41.	24328 <i>Oxyura australis</i> (Blue-billed Duck)		P4	
42.	2278 <i>Persoonia sulcata</i>		P4	
43.	7756 <i>Stylidium longitubum</i> (Jumping Jacks)		P4	
Non-conservation taxon				
44.	3200 <i>Acacia acuminata</i> (Jam, Mangard)			
45.	15466 <i>Acacia applanata</i>			
46.	15469 <i>Acacia barbinervis</i> subsp. <i>barbinervis</i>			
47.	3254 <i>Acacia celastrifolia</i> (Glowing Wattle)			
48.	14061 <i>Acacia clydonophora</i>			
49.	11926 <i>Acacia drewiana</i> subsp. <i>drewiana</i>			
50.	11303 <i>Acacia drummondii</i> subsp. <i>candolleana</i>			
51.	11192 <i>Acacia drummondii</i> subsp. <i>elegans</i>			
52.	3323 <i>Acacia ericifolia</i>			
53.	3331 <i>Acacia extensa</i> (Wiry Wattle)			
54.	3374 <i>Acacia huegelii</i>			
55.	11611 <i>Acacia lasiocarpa</i> var. <i>lasiocarpa</i>			
56.	15721 <i>Acacia lasiocarpa</i> var. <i>sedifolia</i>			
57.	3410 <i>Acacia lateriticola</i>			
58.	3442 <i>Acacia microbotrya</i> (Manna Wattle, Kalyang)			
59.	3454 <i>Acacia nervosa</i> (Rib Wattle)			
60.	17860 <i>Acacia podalyriifolia</i>	Y		
61.	3502 <i>Acacia pulchella</i> (Prickly Moses)			
62.	15482 <i>Acacia pulchella</i> var. <i>goadbyi</i>			
63.	15480 <i>Acacia pulchella</i> var. <i>reflexa</i>			
64.	3527 <i>Acacia saligna</i> (Orange Wattle, Kudjong)			
65.	30033 <i>Acacia saligna</i> subsp. <i>lindleyi</i>			
66.	30032 <i>Acacia saligna</i> subsp. <i>saligna</i>			
67.	3541 <i>Acacia sessilis</i>			
68.	3543 <i>Acacia shuttleworthii</i>			
69.	15484 <i>Acacia sphacelata</i> subsp. <i>sphacelata</i>			
70.	3554 <i>Acacia squamata</i>			
71.	3557 <i>Acacia stenoptera</i> (Narrow Winged Wattle)			
72.	3574 <i>Acacia teretifolia</i>			
73.	3591 <i>Acacia urophylla</i>			
74.	3602 <i>Acacia willdenowiana</i> (Grass Wattle)			
75.	24260 <i>Acanthiza apicalis</i> (Broad-tailed Thornbill, Inland Thornbill)			
76.	24261 <i>Acanthiza chrysorrhoa</i> (Yellow-rumped Thornbill)			
77.	24262 <i>Acanthiza inornata</i> (Western Thornbill)			
78.	24560 <i>Acanthorhynchus superciliosus</i> (Western Spinebill)			
79.	25536 <i>Accipiter fasciatus</i> (Brown Goshawk)			
80.	25755 <i>Acrocephalus australis</i> (Australian Reed Warbler)			
81.	1775 <i>Adenanthos cygnorum</i> (Common Woollybush)			
82.	11837 <i>Adenanthos cygnorum</i> subsp. <i>cygnorum</i> (Common Woollybush)			
83.	184 <i>Aira caryophyllea</i> (Silvery Hairgrass)	Y		
84.	1056 <i>Alexgeorgea nitens</i>			
85.	1721 <i>Allocasuarina campestris</i>			
86.	1731 <i>Allocasuarina huegeliana</i> (Rock Sheoak, Kwool)			
87.	1732 <i>Allocasuarina humilis</i> (Dwarf Sheoak)			
88.	13380 <i>Amphibromus nervosus</i>			
89.	2383 <i>Amyema preissii</i> (Wireleaf Mistletoe)			
90.	24312 <i>Anas gracilis</i> (Grey Teal)			
91.	24315 <i>Anas rhynchotis</i> (Australasian Shoveler)			
92.	24316 <i>Anas superciliosa</i> (Pacific Black Duck)			
93.	6311 <i>Andersonia heterophylla</i>			
94.	6314 <i>Andersonia lehmanniana</i>			
95.	11471 <i>Andersonia lehmanniana</i> subsp. <i>lehmanniana</i>			
96.	7833 <i>Angianthus preissianus</i>			
97.	47414 <i>Anhinga novaehollandiae</i> (Australasian Darter)			
98.	1409 <i>Anigozanthos humilis</i> (Catspaw)			
99.	1411 <i>Anigozanthos manglesii</i> (Mangles Kangaroo Paw, Kurulbrang)			
100.	1416 <i>Anigozanthos viridis</i> (Green Kangaroo Paw, Kurulbardang)			

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
101.	25241 <i>Antaresia stimsoni</i> subsp. <i>stimsoni</i> (Stimson's Python)			
102.	24561 <i>Anthochaera carunculata</i> (Red Wattlebird)			
103.	24562 <i>Anthochaera lunulata</i> (Western Little Wattlebird)			
104.	3688 <i>Aotus gracillima</i>			
105.	1117 <i>Aphelia cyperoides</i>			
106.	1119 <i>Aphelia nutans</i>			
107.	24991 <i>Aprasia repens</i> (Sand-plain Worm-lizard)			
108.	24285 <i>Aquila audax</i> (Wedge-tailed Eagle)			
109.	7838 <i>Arctotheca calendula</i> (Cape Weed, African Marigold)	Y		
110.	41324 <i>Ardea modesta</i> (great egret, white egret)			
111.	24340 <i>Ardea novaehollandiae</i> (White-faced Heron)			
112.	207 <i>Aristida contorta</i> (Bunched Kerosene Grass)			
113.	25566 <i>Artamus cinereus</i> (Black-faced Woodswallow)			
114.	24353 <i>Artamus cyanopterus</i> (Dusky Woodswallow)			
115.	6580 <i>Asclepias curassavica</i> (Redhead Cottonbush)	Y		
116.	20350 <i>Astartea affinis</i> (West-coast Astartea)			
117.	20283 <i>Astartea scoparia</i> (Common Astartea)			
118.	6328 <i>Astroloma glaucescens</i>			
119.	6330 <i>Astroloma macrocalyx</i> (Swan Berry)			
120.	42144 <i>Astroloma oblongifolium</i>			
121.	6334 <i>Astroloma pallidum</i> (Kick Bush)			
122.	6339 <i>Astroloma xerophyllum</i>			
123.	<i>Atherinosoma wallacei</i>			
124.	43942 <i>Austroparmelina pruinata</i>			
125.	17234 <i>Austrostipa compressa</i>			
126.	17244 <i>Austrostipa macalpinei</i>			
127.	17257 <i>Austrostipa variabilis</i>			
128.	233 <i>Avena barbata</i> (Bearded Oat)	Y		
129.	24318 <i>Aythya australis</i> (Hardhead)			
130.	18279 <i>Babiana angustifolia</i>	Y		
131.	36441 <i>Babingtonia camphorosmae</i> (Camphor Myrtle)			
132.	45416 <i>Babingtonia grandiflora</i> (Large-flowered Babingtonia)			
133.	45403 <i>Babingtonia pelloeae</i> (Pelloe's Babingtonia)			
134.	<i>Backbourkia heroine</i>			
135.	1800 <i>Banksia attenuata</i> (Slender Banksia, Piara)			
136.	32580 <i>Banksia dallanneyi</i> subsp. <i>dallanneyi</i> var. <i>dallanneyi</i>			
137.	32560 <i>Banksia drummondii</i> subsp. <i>hiemalis</i>			
138.	32523 <i>Banksia fraseri</i> var. <i>fraseri</i>			
139.	1819 <i>Banksia grandis</i> (Bull Banksia, Pulgarla)			
140.	1834 <i>Banksia menziesii</i> (Firewood Banksia)			
141.	32159 <i>Banksia polycephala</i> (Many-headed Dryandra)			
142.	32080 <i>Banksia sessilis</i> var. <i>sessilis</i>			
143.	33401 <i>Banksia sphaerocarpa</i> var. <i>pumilio</i>			
144.	12111 <i>Banksia sphaerocarpa</i> var. <i>sphaerocarpa</i> (Fox Banksia)			
145.	32044 <i>Banksia squarrosa</i> (Pingle)			
146.	32045 <i>Banksia squarrosa</i> subsp. <i>squarrosa</i>			
147.	32315 <i>Barbula calycina</i>			
148.	<i>Barnardius zonarius</i>			
149.	739 <i>Baumea acuta</i> (Pale Twig-rush)			
150.	747 <i>Baumea rubiginosa</i>			
151.	5382 <i>Beaufortia elegans</i> (Elegant Beaufortia)			
152.	7046 <i>Bellardia trixago</i> (Bellardia)	Y		
153.	25788 <i>Billardiera fraseri</i> (Elegant Pronaya)			
154.	25798 <i>Billardiera fusiformis</i> (Australian Bluebell)			
155.	<i>Bindoona glauerti</i>			Y
156.	24319 <i>Biziura lobata</i> (Musk Duck)			
157.	1417 <i>Blancoa canescens</i> (Winter Bell)			
158.	7856 <i>Blennospora drummondii</i>			
159.	11381 <i>Boronia ramosa</i> subsp. <i>anethifolia</i>			
160.	11564 <i>Boronia ramosa</i> subsp. <i>ramosa</i>			
161.	16639 <i>Boronia scabra</i> subsp. <i>scabra</i>			
162.	4443 <i>Boronia subsessilis</i>			
163.	1272 <i>Borya scirpoidea</i>			
164.	1273 <i>Borya sphaerocephala</i> (Pincushions)			
165.	3710 <i>Bossiaea eriocarpa</i> (Common Brown Pea)			
166.	<i>Bostockia porosa</i>			
167.	10915 <i>Brachychiton populneus</i> (Kurrajong)	Y		
168.	7867 <i>Brachyscome bellidioides</i>			
169.	7878 <i>Brachyscome iberidifolia</i>			
170.	7883 <i>Brachyscome pusilla</i>			

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
171.	42381 <i>Brachyurophis semifasciatus</i> (Southern Shovel-nosed Snake)			
172.	244 <i>Briza maxima</i> (Blowfly Grass)	Y		
173.	245 <i>Briza minor</i> (Shivery Grass)	Y		
174.	1366 <i>Bulbine semibarbata</i> (Leek Lily)			
175.	1383 <i>Burchardia bairdiae</i>			
176.	1385 <i>Burchardia multiflora</i> (Dwarf Burchardia)			
177.	25714 <i>Cacatua pastinator</i> (Western Long-billed Corella)			
178.	24725 <i>Cacatua roseicapilla</i> subsp. <i>assimilis</i> (Galah)			
179.	25716 <i>Cacatua sanguinea</i> (Little Corella)			
180.	42307 <i>Cacomantis pallidus</i> (Pallid Cuckoo)			
181.	1276 <i>Caesia micrantha</i> (Pale Grass Lily)			
182.	44893 <i>Caladenia denticulata</i> subsp. <i>denticulata</i>			
183.	15348 <i>Caladenia flava</i> subsp. <i>flava</i>			
184.	15360 <i>Caladenia longicauda</i> subsp. <i>borealis</i>			
185.	15361 <i>Caladenia longicauda</i> subsp. <i>calcigena</i>			
186.	15503 <i>Caladenia paludosa</i>			
187.	2846 <i>Calandrinia calyptata</i> (Pink Purslane)			
188.	2848 <i>Calandrinia corrigioloides</i> (Strap Purslane)			
189.	2854 <i>Calandrinia granulifera</i> (Pygmy Purslane)			
190.	2856 <i>Calandrinia liniflora</i> (Parakeelya)			
191.	27624 <i>Caloplaca cerina</i>			
192.	41653 <i>Caloplaca kaerrefeltii</i>			
193.	<i>Caloplaca</i> sp.			
194.	5429 <i>Calothamnus sanguineus</i> (Silky-leaved Blood flower, Pindak)			
195.	25717 <i>Calyptorhynchus banksii</i> (Red-tailed Black-Cockatoo)			
196.	5439 <i>Calytrix angulata</i> (Yellow Starflower)			
197.	5458 <i>Calytrix flavescens</i> (Summer Starflower)			
198.	5460 <i>Calytrix fraseri</i> (Pink Summer Calytrix)			
199.	5461 <i>Calytrix glutinosa</i>			
200.	5479 <i>Calytrix strigosa</i>			
201.	5481 <i>Calytrix sylvana</i>			
202.	5485 <i>Calytrix variabilis</i>			
203.	32334 <i>Campylopus australis</i>			
204.	7909 <i>Carduus pycnocephalus</i> (Slender Thistle)	Y		
205.	753 <i>Carex appressa</i> (Tall Sedge)			
206.	7911 <i>Carthamus lanatus</i> (Saffron Thistle)	Y		
207.	1162 <i>Cartonema philydroides</i>			
208.	11206 <i>Cassytha glabella</i> forma <i>bicallosa</i>			
209.	1742 <i>Casuarina obesa</i> (Swamp Sheoak, Kuli)			
210.	760 <i>Caustis dioica</i>			
211.	6539 <i>Centaurium erythraea</i> (Common Centaury)	Y		
212.	1120 <i>Centrolepis alepyroides</i>			
213.	1121 <i>Centrolepis aristata</i> (Pointed Centrolepis)			
214.	1125 <i>Centrolepis drummondiana</i>			
215.	1132 <i>Centrolepis mutica</i>			
216.	1133 <i>Centrolepis pilosa</i>			
217.	1134 <i>Centrolepis polygyna</i> (Wiry Centrolepis)			
218.	<i>Centrolepis</i> sp. <i>Gingin1</i> not mature			Y
219.	32462 <i>Ceratodon purpureus</i> subsp. <i>convolutus</i>			
220.	24086 <i>Cercartetus concinnus</i> (Western Pygmy-possum, Mundarda)			
221.	18156 <i>Chamaecytisus palmensis</i> (Tagasaste)	Y		
222.	5498 <i>Chamaelacium uncinatum</i> (Geraldton Wax)			
223.	24377 <i>Charadrius ruficapillus</i> (Red-capped Plover)			
224.	31 <i>Cheilanthes austrotenuifolia</i>			
225.	43380 <i>Chelodina colliei</i> (South-western Snake-necked Turtle)			
226.	24321 <i>Chenonetta jubata</i> (Australian Wood Duck, Wood Duck)			
227.	272 <i>Chloris virgata</i> (Feathertop Rhodes Grass)	Y		
228.	7925 <i>Chondrilla juncea</i> (Skeleton Weed)	Y		
229.	3753 <i>Chorizema dicksonii</i> (Yellow-eyed Flame Pea)			
230.	6543 <i>Cicendia filiformis</i> (Slender Cicendia)	Y		
231.	24288 <i>Circus approximans</i> (Swamp Harrier)			
232.	7937 <i>Cirsium vulgare</i> (Spear Thistle, Scotch Thistle)	Y		
233.	2929 <i>Clematis pubescens</i> (Common Clematis)			
234.	27707 <i>Collema subconveniens</i>			
235.	<i>Colletotrichum gloeosporioides</i>			
236.	25675 <i>Colluricincla harmonica</i> (Grey Shrike-thrush)			
237.	24613 <i>Colluricincla harmonica</i> subsp. <i>rufiventris</i> (Grey Shrike-thrush)			
238.	4564 <i>Comesperma virgatum</i> (Milkwort)			
239.	1864 <i>Conospermum crassinervium</i> (Summer Smokebush)			
240.	14876 <i>Conospermum densiflorum</i> subsp. <i>densiflorum</i>			

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
241.	1874 <i>Conospermum glumaceum</i> (Hooded Smokebush)			
242.	1880 <i>Conospermum polycephalum</i>			
243.	1882 <i>Conospermum stoechadis</i> (Common Smokebush)			
244.	6347 <i>Conostephium minus</i> (Pink-tipped Pearl flower)			
245.	6348 <i>Conostephium pendulum</i> (Pearl Flower)			
246.	6349 <i>Conostephium preissii</i>			
247.	1418 <i>Conostylis aculeata</i> (Prickly Conostylis)			
248.	1420 <i>Conostylis androstemma</i> (Trumpets)			
249.	1423 <i>Conostylis aurea</i> (Golden Conostylis)			
250.	1436 <i>Conostylis juncea</i>			
251.	1454 <i>Conostylis setigera</i> (Bristly Cottonhead)			
252.	11597 <i>Conostylis setigera</i> subsp. <i>setigera</i>			
253.	1457 <i>Conostylis teretifolia</i>			
254.	11870 <i>Conostylis teretifolia</i> subsp. <i>teretifolia</i>			
255.	6614 <i>Convolvulus remotus</i>			
256.	25568 <i>Coracina novaehollandiae</i> (Black-faced Cuckoo-shrike)			
257.	25592 <i>Corvus coronoides</i> (Australian Raven)			
258.	24417 <i>Corvus coronoides</i> subsp. <i>perplexus</i> (Australian Raven)			
259.	33437 <i>Corynephorus fasciculatus</i>	Y		
260.	1285 <i>Corynotheca micrantha</i> (Sand Lily)			
261.	7945 <i>Cotula coronopifolia</i> (Waterbuttons)	Y		
262.	7946 <i>Cotula cotuloides</i> (Smooth Cotula)			
263.	24420 <i>Cracticus nigrogularis</i> (Pied Butcherbird)			
264.	25595 <i>Cracticus tibicen</i> (Australian Magpie)			
265.	25596 <i>Cracticus torquatus</i> (Grey Butcherbird)			
266.	13354 <i>Craspedia variabilis</i>			
267.	3137 <i>Crassula colorata</i> (Dense Stonecrop)			
268.	11709 <i>Crassula colorata</i> var. <i>acuminata</i>			
269.	25398 <i>Crinia georgiana</i> (Quacking Frog)			
270.	25400 <i>Crinia insignifera</i> (Squelching Froglet)			
271.	25401 <i>Crinia pseudinsignifera</i> (Bleating Froglet)			
272.	17964 <i>Crinum moorei</i>	Y		
273.	13527 <i>Croninia kingiana</i>			
274.	30893 <i>Cryptoblepharus buchananii</i>			
275.	30899 <i>Ctenophorus adelaidensis</i> (Southern Heath Dragon, Western Heath Dragon)			
276.	25027 <i>Ctenotus australis</i>			
277.	25039 <i>Ctenotus fallens</i>			
278.	25047 <i>Ctenotus impar</i>			
279.	25074 <i>Ctenotus schomburgkii</i>			
280.	6663 <i>Cuscuta epithimum</i> (Lesser Dodder, Greater Dodder)	Y		
281.	15404 <i>Cyanicula sericea</i>			
282.	54 <i>Cyclosorus interruptus</i>			
283.	40661 <i>Cycnogeton lineare</i>			
284.	24322 <i>Cygnus atratus</i> (Black Swan)			
285.	794 <i>Cyperus gymnocaulos</i> (Spiny Flat-sedge)			
286.	806 <i>Cyperus polystachyos</i> (Bunchy Sedge)			
287.	810 <i>Cyperus rotundus</i> (Nut Grass)	Y		
288.	30901 <i>Dacelo novaeguineae</i> (Laughing Kookaburra)	Y		
289.	7420 <i>Dampiera alata</i> (Winged-stem Dampiera)			
290.	7428 <i>Dampiera coronata</i> (Wedge-leaved Dampiera)			
291.	25673 <i>Daphoenositta chrysoptera</i> (Varied Sittella)			
292.	5508 <i>Darwinia citriodora</i> (Lemon-scented Darwinia)			
293.	35779 <i>Darwinia</i> sp. <i>Bindoon</i> (S. Patrick 281)			
294.	5531 <i>Darwinia thymoides</i>			
295.	18193 <i>Darwinia thymoides</i> subsp. <i>thymoides</i>			
296.	6218 <i>Daucus glochidiatus</i> (Australian Carrot)			
297.	3793 <i>Daviesia angulata</i>			
298.	19747 <i>Daviesia decurrens</i> subsp. <i>decurrens</i>			
299.	18560 <i>Daviesia divaricata</i> subsp. <i>divaricata</i>			
300.	11879 <i>Daviesia hakeoides</i> subsp. <i>hakeoides</i>			
301.	3815 <i>Daviesia horrida</i> (Prickly Bitter-pea)			
302.	3819 <i>Daviesia longifolia</i>			
303.	16585 <i>Daviesia nudiflora</i> subsp. <i>nudiflora</i>			
304.	3832 <i>Daviesia physodes</i>			
305.	3835 <i>Daviesia preissii</i>			
306.	3845 <i>Daviesia triflora</i>			
307.	24999 <i>Delma grayii</i>			
308.	17663 <i>Desmocladius asper</i>			
309.	16595 <i>Desmocladius flexuosus</i>			
310.	1259 <i>Dianella revoluta</i> (Blueberry Lily)			

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311.	25607 <i>Dicaeum hirundinaceum</i> (Mistletoebird)			
312.	1287 <i>Dichopogon capillipes</i>			
313.	1289 <i>Dichopogon preissii</i>			
314.	17838 <i>Dielsia stenostachya</i>			
315.	20367 <i>Dillwynia laxiflora</i>			
316.	1509 <i>Dioscorea hastifolia</i> (Warrine, Waram)			
317.	24929 <i>Diplodactylus granariensis</i> subsp. <i>granariensis</i>			
318.	24940 <i>Diplodactylus pulcher</i>			
319.	19649 <i>Disa bracteata</i>	Y		
320.	7961 <i>Dittrichia graveolens</i> (Stinkwort)	Y		
321.	1634 <i>Diuris laxiflora</i> (Bee Orchid)			
322.	24470 <i>Dromaius novaehollandiae</i> (Emu)			
323.	13204 <i>Drosera callistos</i>			
324.	48724 <i>Drosera collina</i>			
325.	48751 <i>Drosera drummondii</i>			
326.	3095 <i>Drosera erythrorhiza</i> (Red Ink Sundew)			
327.	3097 <i>Drosera gigantea</i> (Giant Sundew)			
328.	3098 <i>Drosera glanduligera</i> (Pimpernel Sundew)			
329.	3109 <i>Drosera menziesii</i> (Pink Rainbow)			
330.	48709 <i>Drosera minutiflora</i>			
331.	3118 <i>Drosera pallida</i> (Pale Rainbow)			
332.	3128 <i>Drosera ramellosa</i> (Branched Sundew)			
333.	49090 <i>Drosera</i> sp. <i>Branched styles</i> (S.C. Coffey 193)			
334.	13185 <i>Drosera spilos</i>			
335.	3131 <i>Drosera stolonifera</i> (Leafy Sundew)			
336.	3133 <i>Drosera subhirtella</i> (Sunny Rainbow)			
337.	32351 <i>Eccremidium pulchellum</i>			
338.	25251 <i>Echiopsis curta</i> (Bardick)			
339.	<i>Edelia vittata</i>			
340.	25100 <i>Egernia napoleonis</i>			
341.	<i>Egretta novaehollandiae</i>			
342.	346 <i>Ehrharta brevifolia</i> (Annual Veldt Grass)	Y		
343.	347 <i>Ehrharta calycina</i> (Perennial Veldt Grass)	Y		
344.	349 <i>Ehrharta longiflora</i> (Annual Veldt Grass)	Y		
345.	<i>Elanus axillaris</i>			
346.	47937 <i>Elseymornis melanops</i> (Black-fronted Dotterel)			
347.	<i>Eolophus roseicapillus</i>			
348.	6131 <i>Epilobium billardioreanum</i> (Glabrous Willow Herb)			
349.	24567 <i>Epthianura albifrons</i> (White-fronted Chat)			
350.	379 <i>Eragrostis elongata</i> (Clustered Lovegrass)			
351.	5541 <i>Eremaea pauciflora</i>			
352.	5542 <i>Eremaea purpurea</i>			
353.	25109 <i>Eremiascincus richardsonii</i> (Broad-banded Sand Swimmer)			
354.	<i>Eriophora biapicata</i>			
355.	4332 <i>Erodium botrys</i> (Long Storksbill)	Y		
356.	4335 <i>Erodium cygnorum</i> (Blue Heronsbill)			
357.	24379 <i>Erythronyctes cinctus</i> (Red-kneed Dotterel)			
358.	13548 <i>Eucalyptus marginata</i> subsp. <i>thalassica</i> (Blue-leaved Jarrah)			
359.	5763 <i>Eucalyptus rudis</i> (Flooded Gum, Kulurda)			
360.	5790 <i>Eucalyptus todtiana</i> (Coastal Blackbutt)			
361.	12906 <i>Eucalyptus wandoo</i> subsp. <i>wandoo</i>			
362.	25622 <i>Falco cenchroides</i> (Australian Kestrel, Nankeen Kestrel)			
363.	1747 <i>Ficus carica</i> (Common Fig)	Y		
364.	27748 <i>Flavoparmelia rutidota</i>			
365.	18392 <i>Freesia alba</i> x <i>leichtlinii</i>	Y		
366.	25727 <i>Fulica atra</i> (Eurasian Coot)			
367.	24761 <i>Fulica atra</i> subsp. <i>australis</i> (Eurasian Coot)			
368.	7321 <i>Galium divaricatum</i>	Y		
369.	3887 <i>Gastrolobium acutum</i>			
370.	20515 <i>Gastrolobium axillare</i>			
371.	3895 <i>Gastrolobium calycinum</i> (York Road Poison)			
372.	20475 <i>Gastrolobium capitatum</i>			
373.	20473 <i>Gastrolobium ebracteolatum</i>			
374.	3906 <i>Gastrolobium ilicifolium</i>			
375.	3909 <i>Gastrolobium microcarpum</i> (Sandplain Poison)			
376.	20512 <i>Gastrolobium praemorsum</i>			
377.	3924 <i>Gastrolobium spinosum</i> (Prickly Poison)			
378.	3933 <i>Gastrolobium villosum</i> (Crinkle-leaved Poison)			
379.	24959 <i>Gehyra variegata</i>			
380.	32381 <i>Gemmabryum preissianum</i>			

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381.	3936 <i>Genista linifolia</i> (Flaxleaf Broom)	Y		
382.	4340 <i>Geranium retrorsum</i>			
383.	25530 <i>Gerygone fusca</i> (Western Gerygone)			
384.	1520 <i>Gladiolus caryophyllaceus</i> (Wild Gladiolus)	Y		
385.	6143 <i>Glischrocaryon aureum</i> (Common Popflower)			
386.	17043 <i>Glyceria declinata</i>	Y		
387.	47962 <i>Glyciphila melanops</i> (Tawny-crowned Honeyeater)			
388.	7991 <i>Gnephosis drummondii</i>			
389.	<i>Gnephosis tenuissima</i> - <i>drummondii</i> complex			
390.	3950 <i>Gompholobium knightianum</i>			
391.	3955 <i>Gompholobium preissii</i>			
392.	3956 <i>Gompholobium shuttleworthii</i>			
393.	3957 <i>Gompholobium tomentosum</i> (Hairy Yellow Pea)			
394.	6149 <i>Gonocarpus cordiger</i>			
395.	6161 <i>Gonocarpus pthyoides</i>			
396.	29362 <i>Goodenia coerulea</i>			
397.	12551 <i>Goodenia micrantha</i>			
398.	7538 <i>Goodenia pulchella</i>			
399.	24443 <i>Grallina cyanoleuca</i> (Magpie-lark)			
400.	19628 <i>Grevillea bipinnatifida</i> subsp. <i>bipinnatifida</i>			
401.	1965 <i>Grevillea biternata</i>			
402.	1997 <i>Grevillea endlicheriana</i> (Spindly Grevillea)			
403.	2066 <i>Grevillea pilulifera</i> (Woolly-flowered Grevillea)			
404.	17745 <i>Grevillea shuttleworthiana</i> subsp. <i>canarina</i>			
405.	2101 <i>Grevillea synapheae</i> (Catkin Grevillea)			
406.	14421 <i>Grevillea synapheae</i> subsp. <i>synapheae</i>			
407.	32473 <i>Grimmia pulvinata</i> var. <i>africana</i>			
408.	5012 <i>Guichenotia macrantha</i> (Large-flowered Guichenotia)			
409.	2784 <i>Gyrostemon ramulosus</i> (Corkybark)			
410.	1468 <i>Haemodorum laxum</i>			
411.	1472 <i>Haemodorum simplex</i>			
412.	1473 <i>Haemodorum simulans</i>			
413.	1474 <i>Haemodorum sparsiflorum</i>			
414.	1476 <i>Haemodorum venosum</i>			
415.	2128 <i>Hakea amplexicaulis</i> (Prickly Hakea)			
416.	2136 <i>Hakea candolleana</i>			
417.	2146 <i>Hakea costata</i> (Ribbed Hakea)			
418.	2149 <i>Hakea cristata</i> (Snail Hakea)			
419.	2152 <i>Hakea cyclocarpa</i> (Ramshorn)			
420.	2158 <i>Hakea erinacea</i> (Hedge-hog Hakea)			
421.	2175 <i>Hakea lissocarpha</i> (Honey Bush)			
422.	2203 <i>Hakea ruscifolia</i> (Candle Hakea)			
423.	2206 <i>Hakea stenocarpa</i> (Narrow-fruited Hakea)			
424.	2214 <i>Hakea trifurcata</i> (Two-leaf Hakea)			
425.	2215 <i>Hakea undulata</i> (Wavy-leaved Hakea)			
426.	24295 <i>Haliastur sphenurus</i> (Whistling Kite)			
427.	3961 <i>Hardenbergia comptoniana</i> (Native Wisteria)			
428.	25410 <i>Heleioporus eyrei</i> (Moaning Frog)			
429.	25412 <i>Heleioporus psammophilus</i> (Sand Frog)			
430.	6707 <i>Heliotropium curassavicum</i> (Smooth Heliotrope)			
431.	6836 <i>Hemiantra incana</i>			
432.	6838 <i>Hemiantra linearis</i> (Speckled Snakebush)			
433.	6855 <i>Hemigenia humilis</i>			
434.	6875 <i>Hemigenia westringioides</i> (Open Hemigenia)			
435.	1293 <i>Hensmania turbinata</i>			
436.	5108 <i>Hibbertia acerosa</i> (Needle Leaved Guinea Flower)			
437.	5109 <i>Hibbertia amplexicaulis</i>			
438.	5114 <i>Hibbertia commutata</i>			
439.	20046 <i>Hibbertia hibbertioides</i> var. <i>hibbertioides</i>			
440.	5134 <i>Hibbertia huegelii</i>			
441.	5135 <i>Hibbertia hypericoides</i> (Yellow Buttercups)			
442.	45534 <i>Hibbertia hypericoides</i> subsp. <i>hypericoides</i>			
443.	5139 <i>Hibbertia lasiopus</i> (Large Hibbertia)			
444.	5157 <i>Hibbertia polystachya</i>			
445.	5162 <i>Hibbertia racemosa</i> (Stalked Guinea Flower)			
446.	43280 <i>Hibbertia sericosepala</i>			
447.	48381 <i>Hibbertia striata</i>			
448.	5173 <i>Hibbertia subvaginata</i>			
449.	47965 <i>Hieraaetus morphnoides</i> (Little Eagle)			
450.	25734 <i>Himantopus himantopus</i> (Black-winged Stilt)			

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451.	24491 <i>Hirundo neoxena</i> (Welcome Swallow)			
452.	13758 <i>Histiogaster incisa</i>			
453.	6222 <i>Homaloscladium homalocarum</i>			
454.	3966 <i>Hovea pungens</i> (Devil's Pins, Puyenak)			
455.	3967 <i>Hovea stricta</i>			
456.	3968 <i>Hovea trisperma</i> (Common Hovea)			
457.	12741 <i>Hyalosperma cotula</i>			
458.	5216 <i>Hybanthus calycinus</i> (Wild Violet)			
459.	6223 <i>Hydrocotyle alata</i>			
460.	6226 <i>Hydrocotyle callicarpa</i> (Small Pennywort)			
461.	6229 <i>Hydrocotyle diantha</i>			
462.	5817 <i>Hypocalymma angustifolium</i> (White Myrtle, Kudjid)			
463.	35074 <i>Hypocalymma angustifolium</i> subsp. <i>Dandaragan plateau</i> (S. Patrick 702A)			
464.	5829 <i>Hypocalymma xanthopetalum</i>			
465.	8086 <i>Hypochaeris glabra</i> (Smooth Catsear)	Y		
466.	1070 <i>Hypolaena exsulca</i>			
467.	17695 <i>Hypolepis dicksonioides</i>	Y		
468.	<i>Idiomma blackwallii</i>			
469.	910 <i>Isolepis cernua</i> (Nodding Club-rush)			
470.	20200 <i>Isolepis cernua</i> var. <i>setiformis</i>			
471.	912 <i>Isolepis cyperoides</i>			
472.	917 <i>Isolepis marginata</i> (Coarse Club-rush)			
473.	10831 <i>Isolepis prolifera</i> (Budding Club-rush)	Y		
474.	2227 <i>Isopogon divergens</i> (Spreading Coneflower)			
475.	2232 <i>Isopogon linearis</i>			
476.	7396 <i>Isotoma hypocrateriformis</i> (Woodbridge Poison)			
477.	7399 <i>Isotoma scapigera</i> (Long-scaped Isotome)			
478.	3992 <i>Isotropis cuneifolia</i> (Granny Bonnets)			
479.	4012 <i>Jacksonia furcellata</i> (Grey Stinkwood)			
480.	4029 <i>Jacksonia sternbergiana</i> (Stinkwood, Kapur)			
481.	1298 <i>Johnsonia pubescens</i> (Pipe Lily)			
482.	19632 <i>Johnsonia pubescens</i> subsp. <i>pubescens</i>			
483.	1177 <i>Juncus articulatus</i> (Jointed Rush)	Y		
484.	1178 <i>Juncus bufonius</i> (Toad Rush)	Y		
485.	1180 <i>Juncus capitatus</i> (Capitate Rush)	Y		
486.	14630 <i>Juncus imbricatus</i>	Y		
487.	1186 <i>Juncus microcephalus</i>	Y		
488.	1188 <i>Juncus pallidus</i> (Pale Rush)			
489.	1190 <i>Juncus planifolius</i> (Broadleaf Rush)			
490.	4044 <i>Kennedia prostrata</i> (Scarlet Runner)			
491.	4045 <i>Kennedia stirlingii</i> (Bushy Kennedia)			
492.	15498 <i>Kunzea glabrescens</i> (Spearwood)			
493.	5835 <i>Kunzea micrantha</i>			
494.	17461 <i>Kunzea micrantha</i> subsp. <i>micrantha</i>			
495.	17785 <i>Kunzea micrantha</i> subsp. <i>petiolata</i>			
496.	5841 <i>Kunzea recurva</i>			
497.	11289 <i>Labichea lanceolata</i> subsp. <i>lanceolata</i>			
498.	20019 <i>Lachnagrostis filiformis</i>			
499.	18585 <i>Lagenophora huegelii</i>			
500.	45082 <i>Lasiopetalum glutinosum</i> subsp. <i>latifolium</i>			
501.	38323 <i>Lavandula stoechas</i> subsp. <i>stoechas</i>	Y		
502.	1307 <i>Laxmannia ramosa</i> (Branching Lily)			
503.	11911 <i>Laxmannia ramosa</i> subsp. <i>ramosa</i>			
504.	11464 <i>Laxmannia sessiliflora</i> subsp. <i>australis</i>			
505.	1309 <i>Laxmannia squarrosa</i>			
506.	7568 <i>Lechenaultia biloba</i> (Blue Leschenaultia)			
507.	7574 <i>Lechenaultia floribunda</i> (Free-flowering Leschenaultia)			
508.	7586 <i>Lechenaultia stenosepala</i> (Narrow-sepaled Leschenaultia)			
509.	44490 <i>Leontodon rhagadioloides</i>	Y		
510.	1075 <i>Lepidobolus preissianus</i>			
511.	936 <i>Lepidosperma leptostachyum</i>			
512.	937 <i>Lepidosperma longitudinale</i> (Pithy Sword-sedge)			
513.	944 <i>Lepidosperma scabrum</i>			
514.	<i>Lepidosperma</i> sp.			
515.	1653 <i>Leporella fimbriata</i> (Hare Orchid)			
516.	1077 <i>Leptocarpus canus</i> (Hoary Twine-rush)			
517.	27839 <i>Leptogium corniculatum</i>			
518.	2344 <i>Leptomeria empetriformis</i>			
519.	5847 <i>Leptospermum erubescens</i> (Roadside Teatree)			
520.	25128 <i>Lerista christinae</i>			

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521.	25133 <i>Lerista elegans</i>			
522.	25148 <i>Lerista lineopunctulata</i>			
523.	25165 <i>Lerista praepedita</i>			
524.	6374 <i>Leucopogon conostephioides</i>			
525.	6425 <i>Leucopogon oxycedrus</i>			
526.	6436 <i>Leucopogon propinquus</i>			
527.	6439 <i>Leucopogon pulchellus</i> (Beard-heath)			
528.	20086 <i>Leucopogon</i> sp. Northern Scarp (M. Hislop 2233)			
529.	6444 <i>Leucopogon sprengelioides</i>			
530.	6445 <i>Leucopogon squarrosus</i>			
531.	40803 <i>Leucopogon squarrosus</i> subsp. <i>squarrosus</i>			
532.	7677 <i>Levenhookia stipitata</i> (Common Stylewort)			
533.	25005 <i>Lialis burtonis</i>			
534.	25661 <i>Lichmera indistincta</i> (Brown Honeyeater)			
535.	25415 <i>Limnodynastes dorsalis</i> (Western Banjo Frog)			
536.	7075 <i>Linaria maroccana</i>	Y		
537.	36160 <i>Liparophyllum capitatum</i>			
538.	36179 <i>Liparophyllum violifolium</i>			
539.	9289 <i>Lobelia anceps</i> (Angled Lobelia)			
540.	7406 <i>Lobelia rhombifolia</i> (Tufted Lobelia)			
541.	7407 <i>Lobelia rhytidosperra</i> (Wrinkled-seeded Lobelia)			
542.	7408 <i>Lobelia tenuior</i> (Slender Lobelia)			
543.	478 <i>Lolium rigidum</i> (Wimmera Ryegrass)	Y		
544.	1223 <i>Lomandra caespitosa</i> (Tufted Mat Rush)			
545.	1228 <i>Lomandra hermaphrodita</i>			
546.	1232 <i>Lomandra micrantha</i> (Small-flower Mat-rush)			
547.	14542 <i>Lomandra micrantha</i> subsp. <i>micrantha</i>			
548.	1246 <i>Lomandra suaveolens</i>			
549.	4059 <i>Lotus angustissimus</i> (Narrowleaf Trefoil)	Y		
550.	<i>Lotus</i> sp. <i>Gingin2</i>			Y
551.	8564 <i>Lotus subbiflorus</i>	Y		
552.	4065 <i>Lupinus angustifolius</i> (Narrowleaf Lupin)	Y		
553.	4066 <i>Lupinus cosentinii</i>	Y		
554.	1198 <i>Luzula meridionalis</i> (Field Woodrush)			
555.	1097 <i>Lyginia barbata</i>			
556.	18049 <i>Lyginia imberbis</i>			
557.	2396 <i>Lysiana casuarinae</i>			
558.	36375 <i>Lysimachia arvensis</i> (Pimpernel)	Y		
559.	36373 <i>Lysimachia minima</i>	Y		
560.	34736 <i>Lysinema pentapetalum</i>			
561.	5281 <i>Lythrum hyssopifolia</i> (Lesser Loosestrife)	Y		
562.	2839 <i>Macarthuria australis</i>			
563.	1477 <i>Macropidia fuliginosa</i> (Black Kangaroo Paw)			
564.	24132 <i>Macropus fuliginosus</i> (Western Grey Kangaroo)			
565.	24326 <i>Malacorhynchus membranaceus</i> (Pink-eared Duck)			
566.	25650 <i>Malurus elegans</i> (Red-winged Fairy-wren)			
567.	25651 <i>Malurus lamberti</i> (Variegated Fairy-wren)			
568.	25652 <i>Malurus leucopterus</i> (White-winged Fairy-wren)			
569.	25654 <i>Malurus splendens</i> (Splendid Fairy-wren)			
570.	25758 <i>Megalurus gramineus</i> (Little Grassbird)			
571.	34676 <i>Meionectes brownii</i> (Swamp Raspwort)			
572.	5893 <i>Melaleuca concreta</i>			
573.	5926 <i>Melaleuca lateritia</i> (Robin Redbreast Bush)			
574.	41120 <i>Melaleuca marginata</i>			
575.	5952 <i>Melaleuca preissiana</i> (Moonah)			
576.	5959 <i>Melaleuca raphiophylla</i> (Swamp Paperbark)			
577.	<i>Melaleuca</i> sp. <i>Gingin3</i> (M. <i>raphiophylla</i> nearby)			Y
578.	5983 <i>Melaleuca trichophylla</i>			
579.	5987 <i>Melaleuca viminea</i> (Mohan)			
580.	27852 <i>Menegazzia caesiopruinosa</i>			
581.	25184 <i>Menetia greyii</i>			
582.	24598 <i>Merops ornatus</i> (Rainbow Bee-eater)			
583.	953 <i>Mesomelaena graciliceps</i>			
584.	955 <i>Mesomelaena pseudostygia</i>			
585.	<i>Microcarbo melanoleucos</i>			
586.	6897 <i>Microcorys longifolia</i>			
587.	1657 <i>Microtis alba</i> (White Mignonette Orchid)			
588.	15419 <i>Microtis media</i> subsp. <i>media</i>			
589.	8105 <i>Millotia myosotidifolia</i>			
590.	8106 <i>Millotia tenuifolia</i> (Soft Millotia)			

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591.	<i>Missulena granulosa</i>			
592.	29418 <i>Monoculus monstrosus</i>	Y		
593.	7410 <i>Monopsis debilis</i>	Y		
594.	25191 <i>Morethia lineocellata</i>			
595.	2415 <i>Muehlenbeckia polybotrya</i>			
596.	24223 <i>Mus musculus</i> (House Mouse)	Y		
597.	24446 <i>Myiagra cyanoleuca</i> (Satin Flycatcher)			
598.	25420 <i>Myobatrachus gouldii</i> (Turtle Frog)			
599.	8117 <i>Myriocephalus helichrysoides</i>			
600.	27880 <i>Normandina pulchella</i>			
601.	25252 <i>Notechis scutatus</i> (Tiger Snake)			
602.	<i>Notiasemus glauerti</i>			
603.	25564 <i>Nycticorax caledonicus</i> (Rufous Night Heron)			
604.	18255 <i>Opercularia vaginata</i> (Dog Weed)			
605.	17 <i>Ophioglossum lusitanicum</i> (Adders Tongue)			
606.	11749 <i>Orthrosanthus laxus</i> var. <i>laxus</i> (Morning Iris)			
607.	24085 <i>Oryctolagus cuniculus</i> (Rabbit)	Y		
608.	17756 <i>Osteospermum ecklonis</i>	Y		
609.	30375 <i>Oxalis exilis</i>			
610.	4352 <i>Oxalis glabra</i>	Y		
611.	25680 <i>Pachycephala rufiventris</i> (Rufous Whistler)			
612.	25253 <i>Parasuta gouldii</i>			
613.	25682 <i>Pardalotus striatus</i> (Striated Pardalote)			
614.	1550 <i>Patersonia occidentalis</i> (Purple Flag, Koma)			
615.	30471 <i>Patersonia occidentalis</i> var. <i>angustifolia</i>			
616.	14433 <i>Patersonia rudis</i> subsp. <i>rudis</i>			
617.	4346 <i>Pelargonium littorale</i>			
618.	24648 <i>Pelecanus conspicillatus</i> (Australian Pelican)			
619.	11052 <i>Persicaria prostrata</i>			
620.	2273 <i>Persoonia saccata</i> (Snottygobble)			
621.	48061 <i>Petrochelidon nigricans</i> (Tree Martin)			
622.	48066 <i>Petroica boodang</i> (Scarlet Robin)			
623.	24659 <i>Petroica goodenovii</i> (Red-capped Robin)			
624.	2292 <i>Petrophile divaricata</i>			
625.	2308 <i>Petrophile seminuda</i>			
626.	2309 <i>Petrophile serruriae</i>			
627.	2312 <i>Petrophile striata</i>			
628.	19825 <i>Petrorhagia dubia</i>	Y		
629.	25697 <i>Phalacrocorax carbo</i> (Great Cormorant)			
630.	25698 <i>Phalacrocorax melanoleucos</i> (Little Pied Cormorant)			
631.	24667 <i>Phalacrocorax sulcirostris</i> (Little Black Cormorant)			
632.	548 <i>Phalaris aquatica</i> (Phalaris)	Y		
633.	24409 <i>Phaps chalcoptera</i> (Common Bronzewing)			
634.	32408 <i>Phascopsis rubicunda</i>			
635.	18534 <i>Philothea nodiflora</i> subsp. <i>nodiflora</i>			
636.	18529 <i>Philothea spicata</i> (Pepper and Salt)			
637.	1172 <i>Philydrella drummondii</i>			
638.	1173 <i>Philydrella pygmaea</i> (Butterfly Flowers)			
639.	1478 <i>Phlebocarya ciliata</i>			
640.	1479 <i>Phlebocarya filifolia</i>			
641.	48071 <i>Phylidonyris niger</i> (White-cheeked Honeyeater)			
642.	24596 <i>Phylidonyris novaehollandiae</i> (New Holland Honeyeater)			
643.	4675 <i>Phyllanthus calycinus</i> (False Boronia)			
644.	27973 <i>Physcia nubila</i>			
645.	<i>Phytophthora cinnamomi</i>			
646.	5232 <i>Pimelea argentea</i> (Silvery Leaved Pimelea)			
647.	11928 <i>Pimelea ciliata</i> subsp. <i>ciliata</i>			
648.	5244 <i>Pimelea floribunda</i>			
649.	12041 <i>Pimelea suaveolens</i> subsp. <i>suaveolens</i>			
650.	24841 <i>Platalea flavipes</i> (Yellow-billed Spoonbill)			
651.	24747 <i>Platycercus spurius</i> (Red-capped Parrot)			
652.	6255 <i>Platysace juncea</i>			
653.	25007 <i>Pletholax gracilis</i> subsp. <i>gracilis</i> (Keeled Legless Lizard)			
654.	32478 <i>Pleurodium nervosum</i> var. <i>nervosum</i>			
655.	66 <i>Pleurotorus subglandulosus</i>			
656.	571 <i>Poa annua</i> (Winter Grass)	Y		
657.	578 <i>Poa porphyroclados</i>			
658.	25704 <i>Podiceps cristatus</i> (Great Crested Grebe)			
659.	8175 <i>Podolepis gracilis</i> (Slender Podolepis)			
660.	8177 <i>Podolepis lessonii</i>			

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661.	8182 <i>Podotheca angustifolia</i> (Sticky Longheads)			
662.	24907 <i>Pogona minor</i> subsp. <i>minor</i> (Dwarf Bearded Dragon)			
663.	8188 <i>Pogonolepis stricta</i>			
664.	24681 <i>Poliiocephalus poliocephalus</i> (Hoary-headed Grebe)			
665.	582 <i>Polypogon monspeliensis</i> (Annual Beardgrass)	Y		
666.	4691 <i>Poranthera microphylla</i> (Small Poranthera)			
667.	25731 <i>Porphyrio porphyrio</i> (Purple Swamphen)			
668.	24767 <i>Porphyrio porphyrio</i> subsp. <i>bellus</i> (Purple Swamphen)			
669.	17211 <i>Prunus cerasifera</i>	Y		
670.	46202 <i>Prunus persica</i> var. <i>persica</i>	Y		
671.	25261 <i>Pseudechis australis</i> (Mulga Snake)			
672.	<i>Pseudogobius olorum</i>			
673.	24230 <i>Pseudomys albocinereus</i> (Ash-grey Mouse)			
674.	25259 <i>Pseudonaja affinis</i> subsp. <i>affinis</i> (Dugite)			
675.	25433 <i>Pseudophryne guentheri</i> (Crawling Toadlet)			
676.	57 <i>Pteridium esculentum</i> (Bracken)			
677.	45 <i>Pteris vittata</i> (Chinese Brake)			
678.	48674 <i>Pterostylis orbiculata</i>			
679.	<i>Pterostylis</i> sp.			
680.	1698 <i>Pterostylis vittata</i> (Banded Greenhood)			
681.	2716 <i>Ptilotus declinatus</i> (Curved Mulla Mulla)			
682.	2718 <i>Ptilotus drummondii</i> (Narrowleaf Mulla Mulla)			
683.	11260 <i>Ptilotus drummondii</i> var. <i>drummondii</i> (Pussytail)			
684.	2733 <i>Ptilotus humilis</i>			
685.	15856 <i>Ptilotus sericostachyus</i> subsp. <i>sericostachyus</i>			
686.	591 <i>Puccinellia ciliata</i> (Puccinellia)	Y		
687.	<i>Purpureicephalus spurius</i>			
688.	25008 <i>Pygopus lepidopodus</i> (Common Scaly Foot)			
689.	8195 <i>Quinetia urvillei</i>			
690.	28224 <i>Ramalina inflata</i> subsp. <i>australis</i>			
691.	2938 <i>Ranunculus trilobus</i> (Buttercup)	Y		
692.	3061 <i>Raphanus raphanistrum</i> (Wild Radish)	Y		
693.	24245 <i>Rattus rattus</i> (Black Rat)	Y		
694.	6014 <i>Regelia inops</i>			
695.	48096 <i>Rhipidura albiscapa</i> (Grey Fantail)			
696.	25614 <i>Rhipidura leucophrys</i> (Willie Wagtail)			
697.	13234 <i>Rhodanthe manglesii</i>			
698.	<i>Riccia bifurca</i>			
699.	1555 <i>Romulea obscura</i>	Y		
700.	1556 <i>Romulea rosea</i> (Guildford Grass)	Y		
701.	11544 <i>Romulea rosea</i> var. <i>australis</i> (Guildford Grass)	Y		
702.	10931 <i>Rosa chinensis</i> x <i>moschata</i>	Y		
703.	40425 <i>Rytidosperma caespitosum</i>			
704.	6483 <i>Samolus juncea</i>			
705.	7603 <i>Scaevola canescens</i> (Grey Scaevola)			
706.	7613 <i>Scaevola glandulifera</i> (Viscid Hand-flower)			
707.	12585 <i>Scaevola repens</i>			
708.	6263 <i>Schoenolaena juncea</i>			
709.	984 <i>Schoenus curvifolius</i>			
710.	987 <i>Schoenus elegans</i>			
711.	994 <i>Schoenus humilis</i>			
712.	1006 <i>Schoenus odontocarpus</i>			
713.	17614 <i>Schoenus plumosus</i>			
714.	1011 <i>Schoenus rigens</i>			
715.	1018 <i>Schoenus subfascicularis</i>			
716.	1019 <i>Schoenus subflavus</i> (Yellow Bog-rush)			
717.	16252 <i>Schoenus subflavus</i> subsp. <i>subflavus</i>			
718.	1026 <i>Schoenus unispiculatus</i>			
719.	17409 <i>Schoenus variicellae</i>			
720.	6033 <i>Scholtzia involucrata</i> (Spiked Scholtzia)			
721.	<i>Scleroderma cepa</i>			
722.	6 <i>Selaginella gracillima</i> (Tiny Clubmoss)			
723.	8203 <i>Senecio diaschides</i>			
724.	25534 <i>Sericornis frontalis</i> (White-browed Scrubwren)			
725.	611 <i>Setaria sphacelata</i> (South African Pigeon Grass)	Y		
726.	8225 <i>Siloxerus humifusus</i> (Procumbent Siloxerus)			
727.	14583 <i>Siloxerus multiflorus</i>			
728.	25266 <i>Simoselaps bertholdi</i> (Jan's Banded Snake)			
729.	30948 <i>Smicromis brevirostris</i> (Weebill)			
730.	24109 <i>Sminthopsis dolichura</i> (Little long-tailed Dunnart)			

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731.	24111 <i>Sminthopsis gilberti</i> (Gilbert's Dunnart)			
732.	25515 <i>Sminthopsis griseoventer</i> (Grey-bellied Dunnart)			
733.	7013 <i>Solanum hoplopetalum</i> (Thorny Solanum)			
734.	7018 <i>Solanum lasiophyllum</i> (Flannel Bush, Mindjulu)			
735.	7022 <i>Solanum nigrum</i> (Black Berry Nightshade)	Y		
736.	8231 <i>Sonchus oleraceus</i> (Common Sowthistle)	Y		
737.	1558 <i>Sparaxis bulbifera</i>	Y		
738.	33636 <i>Spergularia brevifolia</i>			
739.	4207 <i>Sphaerolobium medium</i>			
740.	635 <i>Sporobolus virginicus</i> (Marine Couch)			
741.	9069 <i>Stackhousia huegelii</i>			
742.	9070 <i>Stackhousia pubescens</i> (Downy Stackhousia)			
743.	3076 <i>Stenopetalum filifolium</i>			
744.	19403 <i>Stenopetalum gracile</i>			
745.	2316 <i>Stirlingia latifolia</i> (Blueboy)			
746.	<i>Storena formosa</i>			
747.	25597 <i>Strepera versicolor</i> (Grey Currawong)			
748.	24943 <i>Strophurus spinigerus</i> subsp. <i>inornatus</i>			
749.	7679 <i>Stylidium adpressum</i> (Trigger-on-stilts)			
750.	7681 <i>Stylidium affine</i> (Queen Triggerplant)			
751.	12846 <i>Stylidium albolilacinum</i>			
752.	7684 <i>Stylidium amoenum</i> (Lovely Triggerplant)			
753.	25831 <i>Stylidium araeophyllum</i> (Stilt Walker)			
754.	48457 <i>Stylidium bindoon</i>			
755.	7693 <i>Stylidium brunonianum</i> (Pink Fountain Triggerplant)			
756.	7696 <i>Stylidium calcaratum</i> (Book Triggerplant)			
757.	12845 <i>Stylidium carlquistii</i>			
758.	7709 <i>Stylidium crossocephalum</i> (Posy Triggerplant)			
759.	7716 <i>Stylidium diuroides</i> (Donkey Triggerplant)			
760.	7719 <i>Stylidium ecome</i> (Foot Triggerplant)			
761.	7762 <i>Stylidium miniatum</i> (Pink Butterfly Triggerplant)			
762.	25829 <i>Stylidium neurophyllum</i> (Coastal Plain Triggerplant)			
763.	7768 <i>Stylidium obtusatum</i> (Pinafore Triggerplant)			
764.	7773 <i>Stylidium petiolare</i> (Horn Triggerplant)			
765.	7774 <i>Stylidium piliferum</i> (Common Butterfly Triggerplant)			
766.	7785 <i>Stylidium repens</i> (Matted Triggerplant)			
767.	25806 <i>Stylidium scariosum</i>			
768.	<i>Stylidium</i> sp.			
769.	3181 <i>Stylobasium australe</i>			
770.	1260 <i>Stypandra glauca</i> (Blind Grass)			
771.	6476 <i>Styphelia tenuiflora</i> (Common Pinheath)			
772.	<i>Supunna picta</i>			
773.	12914 <i>Synaphea decorticans</i>			
774.	29186 <i>Synaphea</i> sp. <i>Udumung</i> (A.S. George 17058)			
775.	2329 <i>Synaphea spinulosa</i>			
776.	15532 <i>Synaphea spinulosa</i> subsp. <i>spinulosa</i>			
777.	25705 <i>Tachybaptus novaehollandiae</i> (Australasian Grebe, Black-throated Grebe)			
778.	24682 <i>Tachybaptus novaehollandiae</i> subsp. <i>novaehollandiae</i> (Australasian Grebe, Black-throated Grebe)			
779.	24207 <i>Tachyglossus aculeatus</i> (Short-beaked Echidna)			
780.	24331 <i>Tadorna tadornoides</i> (Australian Shelduck, Mountain Duck)			
781.	24167 <i>Tarsipes rostratus</i> (Honey Possum, Noolbenger)			
782.	20135 <i>Taxandria linearifolia</i>			
783.	1036 <i>Tetraria octandra</i>			
784.	4528 <i>Tetradthea confertifolia</i>			
785.	4535 <i>Tetradthea hirsuta</i> (Black Eyed Susan)			
786.	48342 <i>Tetradthea hirsuta</i> subsp. <i>hirsuta</i>			
787.	4537 <i>Tetradthea nuda</i>			
788.	1701 <i>Thelymitra antennifera</i> (Vanilla Orchid)			
789.	<i>Thereuopoda lesueurii</i>			
790.	5080 <i>Thomasia foliosa</i>			
791.	24845 <i>Threskiornis spinicollis</i> (Straw-necked Ibis)			
792.	1318 <i>Thysanotus arbuscula</i>			
793.	1319 <i>Thysanotus arenarius</i>			
794.	1328 <i>Thysanotus dichotomus</i> (Branching Fringe Lily)			
795.	1338 <i>Thysanotus manglesianus</i> (Fringed Lily)			
796.	<i>Thysanotus manglesianus/patersonii</i> complex			
797.	1343 <i>Thysanotus patersonii</i>			
798.	1351 <i>Thysanotus sparteus</i>			
799.	1354 <i>Thysanotus tenellus</i>			

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
800.	25519 <i>Tiliqua rugosa</i>			
801.	25207 <i>Tiliqua rugosa subsp. rugosa</i>			
802.	25549 <i>Todiramphus sanctus</i> (Sacred Kingfisher)			
803.	6280 <i>Trachymene pilosa</i> (Native Parsnip)			
804.	1481 <i>Tribonanthes australis</i> (Southern Tiurndin)			
805.	1483 <i>Tribonanthes longipetala</i> (Branching Tiurndin)			
806.	1485 <i>Tribonanthes violacea</i> (Violet Tiurndin)			
807.	48141 <i>Tribonyx ventralis</i> (Black-tailed Native-hen)			
808.	25521 <i>Trichosurus vulpecula</i> (Common Brushtail Possum)			
809.	17542 <i>Trifolium arvense</i> var. <i>arvense</i>	Y		
810.	4293 <i>Trifolium cernuum</i> (Drooping Flower Clover)	Y		
811.	4295 <i>Trifolium dubium</i> (Suckling Clover)	Y		
812.	4313 <i>Trifolium subterraneum</i> (Subterranean Clover)	Y		
813.	33676 <i>Triglochin calcitrapa</i>			
814.	33677 <i>Triglochin centrocarpa</i>			
815.	147 <i>Triglochin mucronata</i>			
816.	4839 <i>Trymalium angustifolium</i>			
817.	33418 <i>Trymalium odoratissimum subsp. odoratissimum</i>			
818.	98 <i>Typha domingensis</i> (Bulrush, Djandjind)			
819.	24983 <i>Underwoodisaurus milii</i> (Barking Gecko)			
820.	<i>Unixenus mjoebergi</i>			
821.	<i>Urodacus armatus</i>			
822.	<i>Urodacus novaehollandiae</i>			
823.	8255 <i>Ursinia anthemoides</i> (Ursinia)	Y		
824.	38388 <i>Ursinia anthemoides subsp. anthemoides</i>	Y		
825.	28086 <i>Usnea dasaea</i>			
826.	7145 <i>Utricularia menziesii</i> (Redcoats)			
827.	24386 <i>Vanellus tricolor</i> (Banded Lapwing)			
828.	25211 <i>Varanus caudolineatus</i>			
829.	7665 <i>Velleia trinervis</i>			
830.	7666 <i>Verreauxia reinwardtii</i> (Common Verreauxia)			
831.	12388 <i>Verticordia acerosa</i> var. <i>preissii</i>			
832.	12395 <i>Verticordia bifimbriata</i>			
833.	6076 <i>Verticordia densiflora</i> (Compacted Featherflower)			
834.	12411 <i>Verticordia densiflora</i> var. <i>cespitosa</i>			
835.	15432 <i>Verticordia densiflora</i> var. <i>densiflora</i>			
836.	15433 <i>Verticordia huegelii</i> var. <i>huegelii</i>			
837.	12458 <i>Verticordia serrata</i> var. <i>ciliata</i>			
838.	722 <i>Vulpia bromoides</i> (Squirrel Tail Fescue)	Y		
839.	33101 <i>Vulpia myuros</i> forma <i>myuros</i>	Y		
840.	7384 <i>Wahlenbergia capensis</i> (Cape Bluebell)	Y		
841.	7389 <i>Wahlenbergia preissii</i>			
842.	13333 <i>Waitzia suaveolens</i> var. <i>suaveolens</i>			
843.	1394 <i>Wurmbea dioica</i> (Early Nancy)			
844.	12072 <i>Wurmbea dioica subsp. alba</i>			
845.	1403 <i>Wurmbea tenella</i> (Eight Nancy)			
846.	28192 <i>Xanthoparmelia yowaensis</i>			
847.	1256 <i>Xanthorrhoea preissii</i> (Grass tree, Palga)			
848.	6285 <i>Xanthosia ciliata</i>			
849.	6289 <i>Xanthosia huegelii</i>			
850.	7113 <i>Zaluzianskya divaricata</i> (Spreading Night Phlox)	Y		
851.	25765 <i>Zosterops lateralis</i> (Grey-breasted White-eye, Silvereye)			

Conservation Codes

T - Rare or likely to become extinct
X - Presumed extinct
IA - Protected under international agreement
S - Other specially protected fauna
1 - Priority 1
2 - Priority 2
3 - Priority 3
4 - Priority 4
5 - Priority 5

¹ For NatureMap's purposes, species flagged as endemic are those whose records are wholly contained within the search area. Note that only those records complying with the search criterion are included in the calculation. For example, if you limit records to those from a specific datasource, only records from that datasource are used to determine if a species is restricted to the query area.

APPENDIX 3

Protected Matters Search Tool Report



EPBC Act Protected Matters Report

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

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

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

Report created: 23/08/19 13:18:32

[Summary](#)

[Details](#)

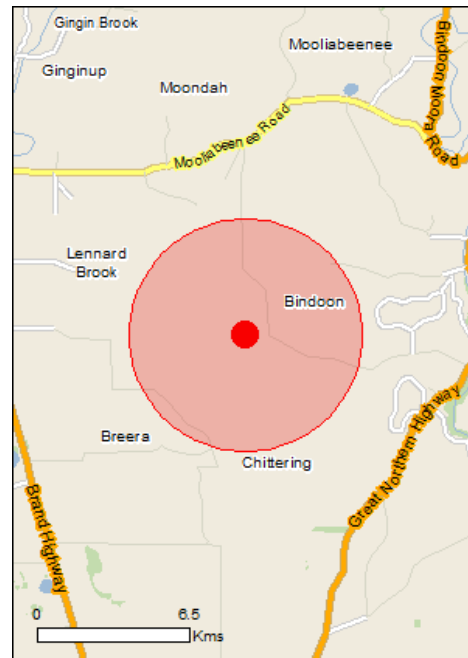
[Matters of NES](#)

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

[Extra Information](#)

[Caveat](#)

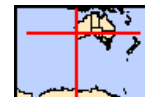
[Acknowledgements](#)



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

Buffer: 5.0Km



Matters of National Environmental Significance

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

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance:	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	1
Listed Threatened Species:	21
Listed Migratory Species:	8

Other Matters Protected by the EPBC Act

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

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As heritage values of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place. Information on the new heritage laws can be found at <http://www.environment.gov.au/heritage>

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

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

Extra Information

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

State and Territory Reserves:	None
Regional Forest Agreements:	1
Invasive Species:	19
Nationally Important Wetlands:	None
Key Ecological Features (Marine)	None

Matters of National Environmental Significance

Listed Threatened Ecological Communities [[Resource Information](#)]

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

Name	Status	Type of Presence
Banksia Woodlands of the Swan Coastal Plain ecological community	Endangered	Community likely to occur within area

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

Name	Status	Type of Presence
------	--------	------------------

Birds

Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
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Calyptorhynchus banksii naso Forest Red-tailed Black-Cockatoo, Karrak [67034]	Vulnerable	Species or species habitat likely to occur within area
--	------------	--

Calyptorhynchus latirostris Carnaby's Cockatoo, Short-billed Black-Cockatoo [59523]	Endangered	Breeding likely to occur within area
--	------------	--------------------------------------

Leipoa ocellata Malleefowl [934]	Vulnerable	Species or species habitat likely to occur within area
---	------------	--

Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area
---	-----------------------	--

Rostratula australis Australian Painted-snipe, Australian Painted Snipe [77037]	Endangered	Species or species habitat likely to occur within area
--	------------	--

Fish

Galaxiella nigrostriata Blackstriped Dwarf Galaxias, Black-stripe Minnow [88677]	Endangered	Species or species habitat may occur within area
---	------------	--

Mammals

Dasyurus geoffroi Chuditch, Western Quoll [330]	Vulnerable	Species or species habitat likely to occur within area
--	------------	--

Other

Westralunio carteri Carter's Freshwater Mussel, Freshwater Mussel [86266]	Vulnerable	Species or species habitat may occur within area
--	------------	--

Plants

Chamelaucium sp. Gingin (N.G.Marchant 6) Gingin Wax [88881]	Endangered	Species or species habitat likely to occur
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Name	Status	Type of Presence
Conospermum densiflorum subsp. unicephalum One-headed Smokebush [64871]	Endangered	within area Species or species habitat may occur within area
Diplolaena andrewsii [6601]	Endangered	Species or species habitat may occur within area
Drakaea elastica Glossy-leafed Hammer Orchid, Glossy-leafed Hammer Orchid, Warty Hammer Orchid [16753]	Endangered	Species or species habitat may occur within area
Eleocharis keigheryi Keighery's Eleocharis [64893]	Vulnerable	Species or species habitat likely to occur within area
Eucalyptus leprophloia Scaly Butt Mallee, Scaly-butt Mallee [56712]	Endangered	Species or species habitat may occur within area
Eucalyptus x balanites Cadda Road Mallee, Cadda Mallee [87816]	Endangered	Species or species habitat may occur within area
Grevillea corrugata a shrub [65445]	Endangered	Species or species habitat likely to occur within area
Grevillea curviloba subsp. incurva Narrow curved-leaf Grevillea [64909]	Endangered	Species or species habitat may occur within area
Ptychosema pusillum Dwarf Pea [11268]	Vulnerable	Species or species habitat likely to occur within area
Thelymitra dedmaniarum Cinnamon Sun Orchid [65105]	Endangered	Species or species habitat may occur within area
Thelymitra stellata Star Sun-orchid [7060]	Endangered	Species or species habitat may occur within area

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

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

Name	Threatened	Type of Presence
Migratory Marine Birds		
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area
Migratory Terrestrial Species		
Motacilla cinerea Grey Wagtail [642]		Species or species habitat may occur within area
Migratory Wetlands Species		
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat may occur within area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat may occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area

Name	Threatened	Type of Presence
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area
Pandion haliaetus Osprey [952]		Species or species habitat may occur within area

Other Matters Protected by the EPBC Act

Listed Marine Species		[Resource Information]
* Species is listed under a different scientific name on the EPBC Act - Threatened Species list.		
Name	Threatened	Type of Presence
Birds		
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat may occur within area
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area
Ardea alba Great Egret, White Egret [59541]		Breeding known to occur within area
Ardea ibis Cattle Egret [59542]		Species or species habitat may occur within area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat may occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species habitat may occur within area
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area
Motacilla cinerea Grey Wagtail [642]		Species or species habitat may occur within area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species

Name	Threatened	Type of Presence
Pandion haliaetus Osprey [952]		habitat may occur within area
Rostratula benghalensis (sensu lato) Painted Snipe [889]	Endangered*	Species or species habitat likely to occur within area

APPENDIX 2

Extra Information

Regional Forest Agreements [\[Resource Information \]](#)

Note that all areas with completed RFAs have been included.

Name	State
South West WA RFA	Western Australia

Invasive Species [\[Resource Information \]](#)

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

Name	Status	Type of Presence
Birds		
Anas platyrhynchos Mallard [974]		Species or species habitat likely to occur within area
Columba livia Rock Pigeon, Rock Dove, Domestic Pigeon [803]		Species or species habitat likely to occur within area
Streptopelia chinensis Spotted Turtle-Dove [780]		Species or species habitat likely to occur within area
Streptopelia senegalensis Laughing Turtle-dove, Laughing Dove [781]		Species or species habitat likely to occur within area
Sturnus vulgaris Common Starling [389]		Species or species habitat likely to occur within area
Mammals		
Canis lupus familiaris Domestic Dog [82654]		Species or species habitat likely to occur within area
Felis catus Cat, House Cat, Domestic Cat [19]		Species or species habitat likely to occur within area
Mus musculus House Mouse [120]		Species or species habitat likely to occur within area
Oryctolagus cuniculus Rabbit, European Rabbit [128]		Species or species habitat likely to occur within area

APPENDIX 2

Name	Status	Type of Presence
Rattus rattus Black Rat, Ship Rat [84]		Species or species habitat likely to occur within area
Sus scrofa Pig [6]		Species or species habitat likely to occur within area
Vulpes vulpes Red Fox, Fox [18]		Species or species habitat likely to occur within area
Plants		
Asparagus asparagoides Bridal Creeper, Bridal Veil Creeper, Smilax, Florist's Smilax, Smilax Asparagus [22473]		Species or species habitat likely to occur within area
Chrysanthemoides monilifera Bitou Bush, Boneseed [18983]		Species or species habitat may occur within area
Genista linifolia Flax-leaved Broom, Mediterranean Broom, Flax Broom [2800]		Species or species habitat likely to occur within area
Genista sp. X Genista monspessulana Broom [67538]		Species or species habitat may occur within area
Pinus radiata Radiata Pine Monterey Pine, Insignis Pine, Wilding Pine [20780]		Species or species habitat may occur within area
Rubus fruticosus aggregate Blackberry, European Blackberry [68406]		Species or species habitat likely to occur within area
Tamarix aphylla Athel Pine, Athel Tree, Tamarisk, Athel Tamarisk, Athel Tamarix, Desert Tamarisk, Flowering Cypress, Salt Cedar [16018]		Species or species habitat likely to occur within area

Caveat

APPENDIX 2

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

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

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

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

Threatened, migratory and marine species distributions have been derived through a variety of methods. Where distributions are well known and if time permits, maps are derived using either thematic spatial data (i.e. vegetation, soils, geology, elevation, aspect, terrain, etc) together with point locations and described habitat; or environmental modelling (MAXENT or BIOCLIM habitat modelling) using point locations and environmental data layers.

Where very little information is available for species or large number of maps are required in a short time-frame, maps are derived either from 0.04 or 0.02 decimal degree cells; by an automated process using polygon capture techniques (static two kilometre grid cells, alpha-hull and convex hull); or captured manually or by using topographic features (national park boundaries, islands, etc). In the early stages of the distribution mapping process (1999-early 2000s) distributions were defined by degree blocks, 100K or 250K map sheets to rapidly create distribution maps. More reliable distribution mapping methods are used to update these distributions as time permits.

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

- migratory and
- marine

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

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

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

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

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

Coordinates

-31.4046 116.00882

Acknowledgements

This database has been compiled from a range of data sources. The department acknowledges the following custodians who have contributed valuable data and advice:

- [Office of Environment and Heritage, New South Wales](#)
- [Department of Environment and Primary Industries, Victoria](#)
- [Department of Primary Industries, Parks, Water and Environment, Tasmania](#)
- [Department of Environment, Water and Natural Resources, South Australia](#)
- [Department of Land and Resource Management, Northern Territory](#)
- [Department of Environmental and Heritage Protection, Queensland](#)
- [Department of Parks and Wildlife, Western Australia](#)
- [Environment and Planning Directorate, ACT](#)
- [Birdlife Australia](#)
- [Australian Bird and Bat Banding Scheme](#)
- [Australian National Wildlife Collection](#)
- Natural history museums of Australia
- [Museum Victoria](#)
- [Australian Museum](#)
- [South Australian Museum](#)
- [Queensland Museum](#)
- [Online Zoological Collections of Australian Museums](#)
- [Queensland Herbarium](#)
- [National Herbarium of NSW](#)
- [Royal Botanic Gardens and National Herbarium of Victoria](#)
- [Tasmanian Herbarium](#)
- [State Herbarium of South Australia](#)
- [Northern Territory Herbarium](#)
- [Western Australian Herbarium](#)
- [Australian National Herbarium, Canberra](#)
- [University of New England](#)
- [Ocean Biogeographic Information System](#)
- [Australian Government, Department of Defence Forestry Corporation, NSW](#)
- [Geoscience Australia](#)
- [CSIRO](#)
- [Australian Tropical Herbarium, Cairns](#)
- [eBird Australia](#)
- [Australian Government – Australian Antarctic Data Centre](#)
- [Museum and Art Gallery of the Northern Territory](#)
- [Australian Government National Environmental Science Program](#)
- [Australian Institute of Marine Science](#)
- [Reef Life Survey Australia](#)
- [American Museum of Natural History](#)
- [Queen Victoria Museum and Art Gallery, Inveresk, Tasmania](#)
- [Tasmanian Museum and Art Gallery, Hobart, Tasmania](#)
- Other groups and individuals

The Department is extremely grateful to the many organisations and individuals who provided expert advice and information on numerous draft distributions.

Please feel free to provide feedback via the [Contact Us](#) page.

APPENDIX 4

Conservation Codes

Conservation Codes for Western Australian Flora and Fauna

Specially protected fauna or flora are species* which have been adequately searched for and are deemed to be, in the wild, either rare, at risk of extinction, or otherwise in need of special protection, and have been gazetted as such.

Categories of specially protected fauna and flora are:

T Threatened species – Schedules 1-4

Published as Specially Protected under the *Wildlife Conservation Act 1950*, and listed under Schedules 1 to 4 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora (which may also be referred to as Declared Rare Flora).

- **Threatened fauna** is that subset of ‘Specially Protected Fauna’ declared to be ‘likely to become extinct’ pursuant to section 14(4) of the Wildlife Conservation Act.
- **Threatened flora** is flora that has been declared to be ‘likely to become extinct or is rare, or otherwise in need of special protection’, pursuant to section 23F(2) of the Wildlife Conservation Act.

The assessment of the conservation status of these species is based on their national extent and ranked according to their level of threat using IUCN Red List categories and criteria as detailed below.

CR Critically endangered species – Schedule 1

Threatened species considered to be facing an extremely high risk of extinction in the wild. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 1 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.

EN Endangered species – Schedule 2

Threatened species considered to be facing a very high risk of extinction in the wild. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 2 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.

VU Vulnerable species - Schedule 3

Threatened species considered to be facing a high risk of extinction in the wild. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 3 of the Wildlife Conservation (Specially Protected Fauna) Notice for Threatened Fauna and Wildlife Conservation (Rare Flora) Notice for Threatened Flora.

EX Presumed extinct species - Schedule 4

Species which have been adequately searched for and there is no reasonable doubt that the last individual has died. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 4 of the Wildlife Conservation (Specially Protected Fauna) Notice for Presumed Extinct Fauna and Wildlife Conservation (Rare Flora) Notice for Presumed Extinct Flora.

IA Migratory birds protected under an international agreement - Schedule 5

Birds that are subject to an agreement between the government of Australia and the governments of Japan (JAMBA), China (CAMBA) and The Republic of Korea (ROKAMBA), and the Bonn Convention, relating to the protection of migratory birds. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 5 of the Wildlife Conservation (Specially Protected Fauna) Notice.

CD Conservation dependent fauna - Schedule 6

Fauna of special conservation need being species dependent on ongoing conservation intervention to prevent it becoming eligible for listing as threatened. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 6 of the Wildlife Conservation (Specially Protected Fauna) Notice.

OS Other specially protected fauna - Schedule 7

Fauna otherwise in need of special protection to ensure their conservation. Published as Specially Protected under the *Wildlife Conservation Act 1950*, in Schedule 7 of the Wildlife Conservation (Specially Protected Fauna) Notice.

P Priority species

Possibly threatened species that do not meet survey criteria, or are otherwise data deficient, are added to the Priority Fauna or Priority Flora Lists under Priorities 1, 2 or 3. These three categories are ranked in order of priority for survey and evaluation of conservation status so that consideration can be given to their declaration as threatened flora or fauna.

Species that are adequately known, are rare but not threatened, or meet criteria for near threatened, or that have been recently removed from the threatened species or other specially protected fauna lists for other than taxonomic reasons, are placed in Priority 4. These species require regular monitoring.

Assessment of Priority codes is based on the Western Australian distribution of the species, unless the distribution in WA is part of a contiguous population extending into adjacent States, as defined by the known spread of locations.

1 Priority 1: Poorly-known species

Species that are known from one or a few locations (generally five or less) which are potentially at risk. All occurrences are either: very small; or on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, road and rail reserves, gravel reserves and active mineral leases; or otherwise under threat of habitat destruction or degradation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under immediate threat from known threatening processes. Such species are in urgent need of further survey.

2 Priority 2: Poorly-known species

Species that are known from one or a few locations (generally five or less), some of which are on lands managed primarily for nature conservation, e.g. national parks, conservation parks, nature reserves and other lands with secure tenure being managed for conservation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under threat from known threatening processes. Such species are in urgent need of further survey.

3 Priority 3: Poorly-known species

Species that are known from several locations, and the species does not appear to be under imminent threat, or from few but widespread locations with either large population size or significant remaining areas of apparently suitable habitat, much of it not under imminent threat. Species may be included if they are comparatively well known from several locations but do not meet adequacy of survey requirements and known threatening processes exist that could affect them. Such species are in need of further survey.

4 Priority 4: Rare, Near Threatened and other species in need of monitoring

(a) Rare: Species that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection, but could be if present circumstances change. These species are usually represented on conservation lands.

(b) Near Threatened: Species that are considered to have been adequately surveyed and that are close to qualifying for Vulnerable, but are not listed as Conservation Dependent.

(c) Species that have been removed from the list of threatened species during the past five years for reasons other than taxonomy.

*Species includes all taxa (plural of taxon - a classificatory group of any taxonomic rank, e.g. a family, genus, species or any infraspecific category i.e. subspecies or variety, or a distinct population).

A list of the current rankings can be downloaded from the Parks and Wildlife Threatened Species and Communities webpage at <http://www.dpaw.wa.gov.au/plants-and-animals/threatened-species-and-communities>

Commonwealth of Australia Conservation Codes

Threatened fauna and flora may be listed under Section 178 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) in any one of the following six categories:

Extinct

A native species is eligible to be included in the extinct category at a particular time if, at that time, there is no reasonable doubt that the last member of the species has died.

Extinct in the wild

A native species is eligible to be included in the extinct in the wild category at a particular time if, at that time:

- a) it is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; or
- b) it has not been recorded in its known and/or expected habitat, at appropriate seasons, anywhere in its past range, despite exhaustive surveys over a time frame appropriate to its life cycle and form.

Critically endangered

A taxon is Critically Endangered when the best available evidence indicates that it meets any of the five criteria for the category identified in Part 7.01 of the EPBC Regulations, and it is therefore considered to be facing an extremely high risk of extinction in the wild.

Endangered

A taxon is Endangered when the best available evidence indicates that it meets any of the five criteria for the category identified in Part 7.01 of the EPBC Regulations, and it is therefore considered to be facing a very high risk of extinction in the wild.

Vulnerable

A taxon is Vulnerable when the best available evidence indicates that it meets any of the five criteria for the category identified in Part 7.01 of the EPBC Regulations, and it is therefore considered to be facing a high risk of extinction in the wild.

Conservation dependent

A native species is eligible to be included in the conservation dependent category at a particular time if, at that time:

- a) the species is the focus of a specific conservation program the cessation of which would result in the species becoming vulnerable, endangered or critically endangered; or
- b) the following subparagraphs are satisfied:
 - i. the species is a species of fish;

- ii. the species is the focus of a plan of management that provides for management actions necessary to stop the decline of, and support the recovery of, the species so that its chances of long term survival in nature are maximised;
- iii. the plan of management is in force under a law of the Commonwealth or of a State or Territory;
- iv. cessation of the plan of management would adversely affect the conservation status of the species.

The EPBC Act does not provide for listing in a data deficient category. Where sufficient data (evidence) is unavailable to allow assessment by the Threatened Species Scientific Committee against the criteria for listing, the species are found to be ineligible. A recommendation is made to the Minister to not include the species in any category under the EPBC Act. For reasons of transparency and to inform future research, the Threatened Species Scientific Committee publishes the names of those species found to be data deficient. As data deficient is not a listing category under the EPBC Act, this has no statutory implications and the species is not considered to be listed under the EPBC Act.

APPENDIX 5

TEC/PEC Database Search

APPENDIX 2

OCC_UNIQUE	COM_ID	COM_NAME	STATE_CATG	COMM_CATG	S_ID_COUNT	FIRST_S_ID	LAST_S_ID	BUFFER	OCC_CONFID	BDY_ID	ORIG_FID
2534	Banksia yellow-orange sands	Banksia woodland of the Gingin area restricted to soils dominated by yellow to orange sands	Priority 2		1	BYOS06		500	No	1141	922
2533	Banksia yellow-orange sands	Banksia woodland of the Gingin area restricted to soils dominated by yellow to orange sands	Priority 2		1	BYOS05		500	No	1142	923
2532	Banksia yellow-orange sands	Banksia woodland of the Gingin area restricted to soils dominated by yellow to orange sands	Priority 2		1	BYOS04		500	No	1143	924
118513	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld12795		200	No	115512	27787
118514	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld12796		200	No	115513	27788
118515	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld12797		200	No	115514	27789
118516	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld12798		200	No	115515	27790
118517	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld12799		200	No	115516	27791
118518	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld12800		200	No	115517	27792
118519	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld12801		200	No	115518	27793
118520	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld12802		200	No	115519	27794
118524	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld12806		200	No	115523	27798
118525	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld12807		200	No	115524	27799
118528	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld12810		200	No	115527	27802
118570	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld12852		200	No	115569	27844
118588	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld12870		200	No	115587	27862
118593	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld12875		200	No	115592	27867
118594	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld12876		200	No	115593	27868
118597	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld12879		200	No	115596	27871

APPENDIX 2

OCC_UNIQUE	COM_ID	COM_NAME	STATE_CATG	COMM_CATG	S_ID_COUNT	FIRST_S_ID	LAST_S_ID	BUFFER	OCC_CONFID	BDY_ID	ORIG_FID
118598	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld12880		200	No	115597	27872
118599	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld12881		200	No	115598	27873
118616	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld12898		200	No	115615	27890
118620	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld12902		200	No	115619	27894
118624	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld12906		200	No	115623	27898
118625	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld12907		200	No	115624	27899
118626	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld12908		200	No	115625	27900
118627	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld12909		200	No	115626	27901
118628	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld12910		200	No	115627	27902
118631	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld12913		200	No	115630	27905
118632	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld12914		200	No	115631	27906
118776	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld13058		200	No	115775	28050
118784	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld13066		200	No	115783	28058
118789	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld13071		200	No	115788	28063
118793	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld13075		200	No	115792	28067
118794	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld13076		200	No	115793	28068
118795	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld13077		200	No	115794	28069
118796	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld13078		200	No	115795	28070
118797	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld13079		200	No	115796	28071
118798	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld13080		200	No	115797	28072

APPENDIX 2

OCC_UNIQUE	COM_ID	COM_NAME	STATE_CATG	COMM_CATG	S_ID_COUNT	FIRST_S_ID	LAST_S_ID	BUFFER	OCC_CONFID	BDY_ID	ORIG_FID
118799	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld13081		200	No	115798	28073
118800	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld13082		200	No	115799	28074
118801	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld13083		200	No	115800	28075
118802	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld13084		200	No	115801	28076
118804	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld13086		200	No	115803	28078
118805	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld13087		200	No	115804	28079
118806	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld13088		200	No	115805	28080
118807	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld13089		200	No	115806	28081
118808	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld13090		200	No	115807	28082
118809	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld13091		200	No	115808	28083
118810	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld13092		200	No	115809	28084
118811	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld13093		200	No	115810	28085
118812	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld13094		200	No	115811	28086
118813	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld13095		200	No	115812	28087
118814	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld13096		200	No	115813	28088
118815	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld13097		200	No	115814	28089
118816	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld13098		200	No	115815	28090
118817	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld13099		200	No	115816	28091
118818	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld13100		200	No	115817	28092
118819	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld13101		200	No	115818	28093

APPENDIX 2

OCC_UNIQUE	COM_ID	COM_NAME	STATE_CATG	COMM_CATG	S_ID_COUNT	FIRST_S_ID	LAST_S_ID	BUFFER	OCC_CONFID	BDY_ID	ORIG_FID
118820	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld13102		200	No	115819	28094
118821	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld13103		200	No	115820	28095
118822	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld13104		200	No	115821	28096
118823	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld13105		200	No	115822	28097
118824	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld13106		200	No	115823	28098
118827	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld13109		200	No	115826	28101
118828	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld13110		200	No	115827	28102
118829	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld13111		200	No	115828	28103
118830	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld13112		200	No	115829	28104
118831	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld13113		200	No	115830	28105
118832	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld13114		200	No	115831	28106
118833	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld13115		200	No	115832	28107
118838	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld13120		200	No	115837	28112
118839	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld13121		200	No	115838	28113
118842	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld13124		200	No	115841	28116
118844	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld13126		200	No	115843	28118
118845	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld13127		200	No	115844	28119
118846	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld13128		200	No	115845	28120
118847	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld13129		200	No	115846	28121
118848	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld13130		200	No	115847	28122

APPENDIX 2

OCC_UNIQUE	COM_ID	COM_NAME	STATE_CATG	COMM_CATG	S_ID_COUNT	FIRST_S_ID	LAST_S_ID	BUFFER	OCC_CONFID	BDY_ID	ORIG_FID
118849	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld13131		200	No	115848	28123
118850	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld13132		200	No	115849	28124
118851	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld13133		200	No	115850	28125
118852	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld13134		200	No	115851	28126
118853	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld13135		200	No	115852	28127
118854	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld13136		200	No	115853	28128
118855	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld13137		200	No	115854	28129
118856	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld13138		200	No	115855	28130
118857	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld13139		200	No	115856	28131
122493	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld16775		200	No	119492	31765
122494	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld16776		200	No	119493	31766
122495	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld16777		200	No	119494	31767
122496	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld16778		200	No	119495	31768
122497	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld16779		200	No	119496	31769
122498	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld16780		200	No	119497	31770
122499	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld16781		200	No	119498	31771
122500	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld16782		200	No	119499	31772
2540	Banksia yellow-orange sands	Banksia woodland of the Gingin area restricted to soils dominated by yellow to orange sands	Priority 2		1	BYOS11		500	No	1154	935
118526	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld12808		200	No	115525	27800
118527	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld12809		200	No	115526	27801

APPENDIX 2

OCC_UNIQUE	COM_ID	COM_NAME	STATE_CATG	COMM_CATG	S_ID_COUNT	FIRST_S_ID	LAST_S_ID	BUFFER	OCC_CONFID	BDY_ID	ORIG_FID
118604	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld12886		200	No	115603	27878
118605	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld12887		200	No	115604	27879
118610	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld12892		200	No	115609	27884
118777	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld13059		200	No	115776	28051
118787	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld13069		200	No	115786	28061
118790	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld13072		200	No	115789	28064
118803	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	1	BanksiaWld13085		200	No	115802	28077

APPENDIX 6

Species List

SPECIES LIST – Lot 777 Tea Tree Road, Chittering

GYMNOSPERMS

CYCADACEAE

Macrozamia riedlei

MONOCOTYLEDONS

ANARTHRIACEAE

Lyginia barbata

ASPARAGACEAE

*Lomandra hermaphrodita**Lomandra caespitosa**Lomandra sericea**Sowerbaea laxiflora*

COLCHICACEAE

Burchardia congesta

CYPERACEAE

*Caustis dioica**Lepidosperma leptostachyum**Lepidosperma pubisquameum**Lepidosperma squamatum**Mesomelaena pseudostygia**Mesomelaena tetragona**Schoenus sp.**Tetraria octandra*

HAEMODORACEAE

*Anigozanthos humilis**Conostylis setigera* subsp. *setigera**Haemodorum spicatum*

HEMEROCALLIDACEAE

Dianella revoluta var. *divaricata**Johnsonia pubescens* subsp. *pubescens*

IRIDACEAE

Gladiolus caryophyllaceusPatersonia occidentalis*

ORCHIDACEAE

*Caladenia flava**Leporella fimbriata**Microtis media**Pterostylis vittata**Pyrorchis nigricans**Thelymitra crinita*

RESTIONACEAE

*Alexgeorgea nitens**Desmocladus fasciculatus**Hypolaena exsulca**Lepidobolus preissianus*

XANTHORRHOEACEAE

*Xanthorrhoea preissii**Xanthorrhoea brunonis*

DICOTYLEDONS

APIACEAE

*Trachymene pilosa**Xanthosia huegelii*

ASTERACEAE

Arctotheca calendula*Hypochaeris glabra**Lagenophora huegelii**Millotia myosotidifolia**Podotheca angustifolia***Ursinia anthemoides**Waitzia suaveolens* var. *suaveolens*

CASUARINACEAE

Allocasuarina humilis

CRASSULACEAE

Crassula colorata

DILLENIACEAE

*Hibbertia acerosa**Hibbertia crassifolia**Hibbertia huegelii**Hibbertia hypericoides**Hibbertia subvaginata*

DROSERACEAE

Drosera erythrorhiza
Drosera macrantha

ELAEOCARPACEAE

Tetratheca pilifera P3

ERICACEAE

Andersonia heterophylla
Astroloma macrocalyx
Astroloma pallidum
Astroloma xerophyllum
Conostephium pendulum
Leucopogon conostephioides
Leucopogon oxycedrus
Leucopogon polymorphus
Lysinema ciliatum

FABACEAE

Acacia applanata
Acacia barbinervis subsp. *barbinervis*
Acacia drummondii
Acacia extensa
Acacia pulchella var. *glaberrima*
Bossiaea eriocarpa
Daviesia angulata
Daviesia nudiflora
Daviesia physodes
Daviesia triflora
Daviesia angulata
Gastrolobium capitatum
Gompholobium tomentosum
Hovea trisperma
Isotropis cuneifolia subsp. *cuneifolia*
Jacksonia floribunda

GOODENIACEAE

Lechenaultia biloba

LAURACEAE

Cassytha racemosa

LORANTHACEAE

Nuytsia floribunda

MALVACEAE

Guichenotia macrantha

MYRTACEAE

Beaufortia elegans
Calothamnus sanguineus
Calytrix flavescens
Calytrix fraseri
Calytrix leschenaultii
Calytrix variabilis
Corymbia calophylla
Eremaea pauciflora
Eucalyptus marginata
Eucalyptus todtiana
Hypocalymma xanthopetalum
Kunzea glabrescens
Melaleuca trichophylla
Scholtzia involucrata
Verticordia nitens

PITTOSPORACEAE

Billardiera fraseri

PROTEACEAE

Adenanthos cygnorum subsp. *cygnorum*
Banksia attenuata
Banksia dallaneyi
Banksia grandis
Banksia menziesii
Banksia sessilis var. *sessilis*
Conospermum stoechadis
Conospermum triplinervium
Grevillea synapheae
Hakea costata
Hakea ruscifolia
Hakea trifurcata
Isopogon sphaerocephalus
Persoonia saccata
Petrophile linearis
Petrophile striata
Petrophile macrostachya
Stirlingia latifolia
Synaphea spinulosa

RUBIACEAE

Opercularia vaginata

RUTACEAE

Philotheca spicata

STYLIDIACEAE

Stylidium brunonianum

Stylidium piliferum

Stylidium repens

Stylidium sp.

THYMELEACEAE

Pimelea sulphurea

APPENDIX 7

Quadrat Data

QUADRAT TT1

50 405837 E 6525429 N

Vegetation: *Eucalyptus todtiana* Low Open Woodland over *Hibbertia hypericoides*/*Eremaea pauciflora*/*Astroloma xerophyllum* Closed Low Heath

Condition: Pristine

Soil Type: Orange-brown sand with a white sand veneer

Landform: Gentle slope down to the west



QUADRAT (10 x 10m)

SPECIES	HEIGHT (m)	COVER (%)
<i>Eucalyptus todtiana</i>	3.5	10
<i>Banksia attenuata</i>	1.3	1
<i>Conospermum stoechadis</i>	1.2	1
<i>Adenanthos cygnorum</i>	1.1	<1
<i>Jacksonia floribunda</i>	1.1	<1
<i>Stirlingia latifolia</i>	0.8	1
<i>Philothea spicata</i>	0.8	<1
<i>Acacia pulchella</i>	0.6	<1
<i>Daviesia triflora</i>	0.6	<1
<i>Hibbertia hypericoides</i>	0.5	10
<i>Calothamnus sanguineus</i>	0.5	<1
<i>Eremaea pauciflora</i>	0.4	5
<i>Astroloma xerophyllum</i>	0.4	2
<i>Petrophile linearis</i>	0.4	<1
<i>Lyginia barbata</i>	0.4	<1
<i>Conostephium pendulum</i>	0.4	<1
<i>Gompholobium tomentosum</i>	0.4	<1
<i>Synaphea spinulosa</i>	0.4	<1
<i>Hibbertia crassifolia</i>	0.4	<1

APPENDIX 2

SPECIES	HEIGHT (m)	COVER (%)
<i>Lepidobolus preissianus</i>	0.4	<1
<i>Burchardia congesta</i>	0.4	<1
<i>Calytrix fraseri</i>	0.3	<1
<i>Leucopogon polymorphus</i>	0.3	<1
<i>Hibbertia huegelii</i>	0.3	<1
<i>Leucopogon oxycedrus</i>	0.3	<1
<i>Anigozanthos humilis</i>	0.2	<1
<i>Melaleuca trichophylla</i>	0.2	<1
<i>Scholtzia involucrata</i>	0.2	<1
<i>Hovea stricta</i>	0.2	<1
<i>Bossiaea eriocarpa</i>	0.2	<1
<i>Hibbertia acerosa</i>	0.2	<1
<i>Conostylis setigera</i>	0.1	1
<i>Stylidium repens</i>	0.1	1
<i>Johnsonia pubescens</i>	0.1	<1
<i>Hypocalymma xanthopetalum</i>	0.1	<1
<i>Stylidium sp</i>	0.1	<1
<i>Alexgeorgea nitens</i>	0.1	<1
<i>Drosera menziesii</i>	climber	<1
<i>Cassytha racemosa</i>	climber	<1

* introduced species

QUADRAT TT2

50 405988 E 6525373 N

- Vegetation:** *Eucalyptus marginata*/*Corymbia calophylla* Low Woodland over *Daviesia angulata* Shrubland over *Hibbertia hypericoides*/*Leucopogon polymorphus*/*Xanthorrhoea preissii*/*Synaphea spinulosa*/*Acacia pulchella* Open Low Heath
- Condition:** Excellent
- Soil Type:** Lateritic stones and boulders at the surface, 40% cover, Orange-brown loamy sand between rocks
- Landform:** Near top of low rise, gentle slope down to the west



QUADRAT (10 x 10m)

SPECIES	HEIGHT (m)	COVER (%)
<i>Corymbia calophylla</i>	4	10
<i>Eucalyptus marginata</i>	4	5
<i>Acacia pulchella</i>	1.1	2
<i>Banksia sessilis</i>	1.1	<1
<i>Daviesia angulata</i>	1	20
<i>Xanthorrhoea preissii</i>	0.9	5
<i>Xanthorrhoea brunonis</i>	0.8	1
<i>Hibbertia hypericoides</i>	0.5	5
<i>Synaphea spinulosa</i>	0.5	4
<i>Leucopogon polymorphus</i>	0.4	2
<i>Conostephium pendulum</i>	0.4	1
<i>Petrophile striata</i>	0.4	1
<i>Calytrix fraseri</i>	0.4	1
<i>Lomandra caespitosa</i>	0.4	<1
<i>Astroloma xerophyllum</i>	0.4	<1
<i>Lechenaultia biloba</i>	0.4	<1

APPENDIX 2

SPECIES	HEIGHT (m)	COVER (%)
<i>Philothea spicata</i>	0.4	<1
<i>Sowerbaea laxiflora</i>	0.4	<1
<i>Burchardia congesta</i>	0.4	<1
<i>Acacia drummondii</i>	0.4	<1
<i>Tetaria octandra</i>	0.3	1
<i>Lepidosperma squamatum</i>	0.3	<1
<i>Hibbertia huegelii</i>	0.3	<1
<i>Haemodorum spicatum</i>	0.3	<1
<i>Bossiaea eriocarpa</i>	0.2	<1
<i>Gomphobium tomentosum</i>	0.2	<1
<i>Pterostylis ?vittata</i>	0.2	<1
<i>Lomandra hermaphrodita</i>	0.2	<1
<i>Stylidium repens</i>	0.1	<1
<i>Banksia dallaneyi</i>	0.1	<1
<i>Isotropis cuneifolia</i>	0.1	<1
<i>Opercularia vaginata</i>	0.1	<1
* <i>Ursinia anthemoides</i>	0.1	<1
<i>Millotia myosotidifolia</i>	<0.1	<1
<i>Trachymene pilosa</i>	<0.1	<1
<i>Pyrorchis nigricans</i>	Flat	<1
* <i>Hypochaeris glabra</i>	Flat	<1
<i>Drosera macrantha</i>	Climber	<1

* introduced species

QUADRAT TT3

50 406342 E 6525165 N

Vegetation: *Eucalyptus todtiana*/*Nuytsia floribunda* Low Open Woodland over
Allocasuarina humilis/*Hibbertia hypericoides*/*Synaphea*
spinulosa/*Astroloma xerophyllum*/*Calytrix fraseri* Closed Heath

Condition: Pristine

Soil Type: Dark grey sand with white sand veneer

Landform: Very gently sloping down to the west



Quadrat (10 x 10m)

SPECIES	HEIGHT (m)	COVER (%)
<i>Nuytsia floribunda</i>	2.5	2
<i>Eucalyptus todtiana</i>	2	5
<i>Jacksonia floribunda</i>	1.4	1
<i>Allocasuarina humilis</i>	1	25
<i>Adenanthos cygnorum</i>	1	1
<i>Lysinema ciliatum</i>	0.7	<1
<i>Hibbertia hypericoides</i>	0.6	20
<i>Daviesia nudiflora</i>	0.5	1
<i>Stirlingia latifolia</i>	0.5	1
<i>Lyginia barbata</i>	0.5	<1
<i>Hakea costata</i>	0.5	<1
<i>Acacia extensa</i>	0.5	<1
<i>Synaphea spinulosa</i>	0.4	2
<i>Conostephium pendulum</i>	0.4	<1
<i>Daviesia physodes</i>	0.4	<1
<i>Leucopogon polymorphus</i>	0.4	<1
<i>Petrophile linearis</i>	0.4	<1
<i>Isopogon sphaerocephalus</i>	0.4	<1

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<i>Hovea stricta</i>	0.4	<1
<i>Patersonia occidentalis</i>	0.4	<1
<i>Hypolaena exsulca</i>	0.4	<1
<i>Astroloma xerophyllum</i>	0.3	1
<i>Calytrix fraseri</i>	0.3	1
<i>Mesomelaena pseudostygia</i>	0.3	<1
<i>Hibbertia subvaginata</i>	0.3	<1
<i>Calothamnus sanguineus</i>	0.3	<1
<i>Hibbertia acerosa</i>	0.3	<1
<i>Schoenus sp</i>	0.3	<1
<i>Hypocalymma xanthopetalum</i>	0.2	1
<i>Gompholobium tomentosum</i>	0.2	<1
<i>Lomandra hermaphrodita</i>	0.2	<1
<i>Banksia dallanneyi</i>	0.2	<1
<i>Lomandra caespitosa</i>	0.2	<1
<i>Caladenia flava</i>	0.2	<1
<i>Johnsonia pubescens</i>	0.1	<1
<i>Calytrix flavescens</i>	0.1	<1
<i>Anigozanthos humilis</i>	0.1	<1
<i>Conostylis setigera</i>	0.1	<1
<i>Hibbertia crassifolia</i>	0.1	<1
<i>Alexgeorgea nitens</i>	0.1	<1
<i>Stylidium sp.</i>	0.1	<1
<i>Drosera erythrorhiza</i>	Flat	<1
<i>Leporella fimbriata</i>	Flat	<1
<i>Drosera macrantha</i>	Climber	<1
<i>Cassytha racemosa</i>	Climber	<1

* introduced species

QUADRAT TT4

50 406726 E 6524785 N

Vegetation: *Eucalyptus marginata*/*Corymbia calophylla* Low Woodland over
Daviesia angulata/*Xanthorrhoea preissii* Open Shrubland over
Leucopogon polymorphus/*Bossiaea eriocarpa*/*Grevillea synapheae*
Open Low Heath

Condition: Excellent

Soil Type: Lateritic stone at the surface, 20%, Dark grey sand between stones

Landform: Very gentle slope down to the south



QUADRAT (10 x 10m)

SPECIES	HEIGHT (m)	COVER (%)
<i>Eucalyptus marginata</i>	4-5	20
<i>Corymbia calophylla</i>	4	5
<i>Daviesia angulata</i>	1.4	5
<i>Xanthorrhoea preissii</i>	1	5
<i>Stirlingia latifolia</i>	0.8	<1
<i>Calytrix flavescens</i>	0.5	<1
<i>Leucopogon polymorphus</i>	0.4	2
<i>Calytrix fraseri</i>	0.4	1
<i>Opercularia vaginata</i>	0.4	<1
<i>Burchardia congesta</i>	0.4	<1
<i>Conostephium pendulum</i>	0.4	<1
<i>Petrophile linearis</i>	0.4	<1
<i>Gompholobium tomentosum</i>	0.4	<1
<i>Acacia appplanata</i>	0.4	<1
<i>Lomandra caespitosa</i>	0.4	<1
<i>Astroloma xerophyllum</i>	0.3	<1
<i>Hibbertia hypericoides</i>	0.3	<1
<i>Bossiaea eriocarpa</i>	0.3	<1

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SPECIES	HEIGHT (m)	COVER (%)
<i>Hypocalymma xanthopetalum</i>	0.3	<1
<i>Banksia dallanneyi</i>	0.2	4
<i>Desmocladus fascicularis</i>	0.2	<1
<i>Hibbertia huegelii</i>	0.2	<1
<i>Tetraria octandra</i>	0.2	<1
<i>Opercularia vaginata</i>	0.2	<1
<i>Grevillea synapheae</i>	0.1	1
<i>Millotia myosotidifolia</i>	0.1	<1
<i>Podotrochea angustifolia</i>	0.1	<1
<i>Pterostylis vittata</i>	0.1	<1
<i>Trachymene pilosa</i>	0.1	<1
<i>Alexgeorgea nitens</i>	0.1	<1
<i>Lagenophora huegelii</i>	Flat	<1
<i>Stylidium piliferum</i>	Flat	<1
<i>Pyrorchis nigricans</i>	Flat	<1
* <i>Hypochaeris glabra</i>	Flat	<1
<i>Drosera macrantha</i>	Climber	<1

* introduced species

QUADRAT TT5

50 406588 E 6524714 N

Vegetation: *Banksia menziesii*/*B. attenuata*/*Eucalyptus todtiana* Low Woodland over *Conospermum stoechadis*/*Jacksonia floribunda*/*Adenanthos cygnorum* Open Shrubland over *Eremaea pauciflora*/*Leucopogon polymorphus*/*Astroloma xerophyllum*/*Calytrix fraseri* Open Low Heath

Condition: Pristine

Soil Type: Orange-brown sand with white sand veneer

Landform: Gently sloping down to the south



QUADRAT (10 x 10m)

SPECIES	HEIGHT (m)	COVER (%)
<i>Banksia menziesii</i>	4	15
<i>Banksia attenuata</i>	3	10
<i>Eucalyptus todtiana</i>	2.5	4
<i>Conospermum stoechadis</i>	1.1	4
<i>Jacksonia floribunda</i>	1.1	1
<i>Stirlingia latifolia</i>	0.8	1
<i>Adenanthos cygnorum</i>	0.8	<1
<i>Hibbertia hypericoides</i>	0.7	1
<i>Synaphea spinulosa</i>	0.7	<1
<i>Astroloma xerophyllum</i>	0.5	4
<i>Calytrix fraseri</i>	0.5	1
<i>Hibbertia subvaginata</i>	0.5	<1
<i>Philothea spicata</i>	0.5	<1
<i>Eremaea pauciflora</i>	0.4	3
<i>Burchardia congesta</i>	0.4	<1
<i>Petrophile linearis</i>	0.4	<1
<i>Patersonia occidentalis</i>	0.4	<1

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SPECIES	HEIGHT (m)	COVER (%)
<i>Conospermum triplinervium</i>	0.4	<1
<i>Conostephium pendulum</i>	0.4	<1
<i>Scholtzia involucrata</i>	0.3	5
<i>Hypocalymma xanthopetalum</i>	0.3	<1
<i>Bossiaea eriocarpa</i>	0.3	<1
<i>Hibbertia huegelii</i>	0.3	<1
<i>Leucopogon conostephioides</i>	0.3	<1
<i>Calytrix flavescens</i>	0.2	2
<i>Pterostylis vittata</i>	0.2	<1
<i>Stylidium repens</i>	0.1	<1
<i>Conostylis setigera</i>	0.1	<1
<i>Anigozanthos humilis</i>	0.1	<1
<i>Drosera erythrorhiza</i>	Flat	<1
<i>Leporella fimbriata</i>	Flat	<1

* introduced species

QUADRAT TT6

50 406251 E 6524931 N

Vegetation: *Eucalyptus marginata*/*Corymbia calophylla* Low Woodland over *Banksia sessilis*/*Daviesia angulata* Open Heath over *Hibbertia hypericoides*/*Leucopogon polymorphus*/*Xanthorrhoea preissii* Open Low Heath

Condition: Excellent

Soil Type: Lateritic rocks at surface, 40%, Orange-brown sand between rocks

Landform: Flat, top of small rise



QUADRAT (10 x 10m)

SPECIES	HEIGHT (m)	COVER (%)
<i>Eucalyptus marginata</i>	4	20
<i>Corymbia calophylla</i>	3	5
<i>Banksia sessilis</i>	1.5-2	15
<i>Daviesia angulata</i>	1	20
<i>Xanthorrhoea preissii</i>	1	5
<i>Hibbertia hypericoides</i>	0.5	2
<i>Synaphea spinulosa</i>	0.5	1
<i>Dianella revoluta</i> var. <i>divaricata</i>	0.5	<1
<i>Tetratheca pilifera</i>	0.4	<1
<i>Haemodorum spicatum</i>	0.4	<1
<i>Lomandra caespitosa</i>	0.4	<1
<i>Burchardia congesta</i>	0.4	<1
<i>Conostephium pendulum</i>	0.4	<1
<i>Sowerbaea laxiflora</i>	0.4	<1
<i>Leucopogon polymorphus</i>	0.3	5
<i>Hibbertia huegelii</i>	0.3	<1
<i>Lepidosperma squamatum</i>	0.3	<1
<i>Bossiaea eriocarpa</i>	0.3	<1

APPENDIX 2

SPECIES	HEIGHT (m)	COVER (%)
<i>Stylidium sp</i>	0.3	<1
<i>Tetraria octandra</i>	0.3	<1
<i>Acacia drummondii</i>	0.2	2
<i>Opercularia vaginata</i>	0.2	<1
<i>Caladenia flava</i>	0.1	<1
<i>Millotia myosotidifolia</i>	<0.1	<1
<i>Trachymene pilosa</i>	<0.1	<1
<i>Microtis media</i>	Flat	<1
* <i>Hypochaeris glabra</i>	Flat	<1
<i>Billardiera fraseri</i>	Climber	<1
<i>Drosera macrantha</i>	Climber	<1

* introduced species

QUADRAT TT7

50 406047 E 6525000 N

Vegetation: *Eucalyptus marginata* Low Open Woodland over *Jacksonia floribunda*/*Xanthorrhoea preissii* Open Shrubland over *Calothamnus sanguineus*/*Hibbertia hypericoides*/*Leucopogon polymorphus*/*Astroloma xerophyllum*/*Calytrix fraseri* Closed Low Heath

Condition: Pristine

Soil Type: Orange-brown sand

Landform: Flat



QUADRAT (10 x 10m)

SPECIES	HEIGHT (m)	COVER (%)
<i>Eucalyptus marginata</i>	6	15
<i>Jacksonia floribunda</i>	1.4	1
<i>Xanthorrhoea preissii</i>	1	2
<i>Xanthorrhoea brunonis</i>	1	1
<i>Stirlingia latifolia</i>	0.8	<1
<i>Calothamnus sanguineus</i>	0.6	10
* <i>Gladiolus caryophyllaceus</i>	0.6	<1
<i>Hibbertia hypericoides</i>	0.5	10
<i>Acacia pulchella</i>	0.5	1
<i>Bossiaea eriocarpa</i>	0.5	1
<i>Philothea spicata</i>	0.5	<1
<i>Lysinema ciliatum</i>	0.5	<1
<i>Hypocalymma xanthopetalum</i>	0.4	2
<i>Astroloma xerophyllum</i>	0.4	1
<i>Petrophile macrostachya</i>	0.4	1
<i>Conostephium pendulum</i>	0.4	<1

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SPECIES	HEIGHT (m)	COVER (%)
<i>Acacia barbinervis</i>	0.4	<1
<i>Burchardia congesta</i>	0.4	<1
<i>Gompholobium tomentosum</i>	0.4	<1
<i>Acacia applanata</i>	0.4	<1
<i>Lomandra caespitosa</i>	0.4	<1
<i>Daviesia nudiflora</i>	0.4	<1
<i>Persoonia saccata</i>	0.4	<1
<i>Leucopogon polymorphus</i>	0.3	4
<i>Mesomelaena pseudostygia</i>	0.3	<1
<i>Synaphea spinulosa</i>	0.3	<1
<i>Hibbertia acerosa</i>	0.3	<1
<i>Beaufortia elegans</i>	0.3	<1
<i>Calytrix fraseri</i>	0.3	<1
<i>Hibbertia subvaginata</i>	0.3	<1
<i>Petrophile linearis</i>	0.3	<1
<i>Banksia dallanneyi</i>	0.3	<1
<i>Lepidosperma squamatum</i>	0.3	<1
<i>Caustis dioica</i>	0.3	<1
<i>Patersonia occidentalis</i>	0.3	<1
<i>Lomandra hermaphrodita</i>	0.2	<1
<i>Caladenia flava</i>	0.2	<1
<i>Anigozanthos humilis</i>	0.1	<1
<i>Stylidium repens</i>	0.1	<1
<i>Alexgeorgea nitens</i>	0.1	<1
<i>Stylidium brunonianum</i>	0.1	<1
<i>Stylidium piliferum</i>	Flat	<1
<i>Drosera erythrorhiza</i>	Flat	<1
<i>Drosera macrantha</i>	Climber	<1
<i>Cassytha racemosa</i>	Climber	<1

* introduced species

APPENDIX 8

DBCA Fauna Database Search

APPENDIX 2

NAME_SCI	NAME_COM	CLASS	CONS_	Date	DAY	MONTH	YEAR	SOURCE_ID	SOURCE	CERTAINTY	METHOD	TYPE	COUNT	LOCALITY	SITE	ACCURACY_M	NAME_ID	FAMILY
Calyptorhynchus latirostris	Carnaby's Cockatoo, White-tailed Short-billed Black Cockatoo	BIRD	EN	15/11/2012	15	11	2012	1273374 794	BIRDATA						Breera Road1010	0	24734	Psittacidae
Calyptorhynchus sp. 'white-tailed black cockatoo'	white-tailed black cockatoo	BIRD	EN	4/10/1977	4	10	1977	16469 266	BIRDATLAS1	Moderately Certain	Observational	Sighting	1	CHITTERING	CHITTERING	18000	0	Cacatuidae
Calyptorhynchus sp. 'white-tailed black cockatoo'	white-tailed black cockatoo	BIRD	EN	31/01/1978	31	1	1978	22421 266	BIRDATLAS1	Moderately Certain	Observational	Sighting	1	CHITTERING	CHITTERING	18000	0	Cacatuidae
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	EN	1/09/1999	1	9	1999	32781 794	BIRDATLAS2	Moderately Certain	Observational	Sighting	1	CHITTERING	Chittering Lakes	100	24734	Cacatuidae
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	EN	19/09/1999	19	9	1999	33836 794	BIRDATLAS2	Moderately Certain	Observational	Sighting	1	CHITTERING	Lake Chandala Nature Reserve	100	24734	Cacatuidae
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	EN	11/11/2001	11	11	2001	186640 794	BIRDATLAS2	Moderately Certain	Observational	Sighting	1	CHITTERING	Holy Trinity Church, Chittering	100	24734	Cacatuidae
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	EN	6/08/2005	6	8	2005	5015011 794	BIRDATLAS2	Moderately Certain	Observational	Sighting	1	BINDOON	Chittering Lakes - Bindoon	100	24734	Cacatuidae
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	EN	15/11/2012	15	11	2012	5115831 794	BIRDATLAS2	Moderately Certain	Observational	Sighting	1	BREERA	Breera Road1010	100	24734	Cacatuidae
Calyptorhynchus sp. 'white-tailed black cockatoo'	white-tailed black cockatoo	BIRD	EN	5/11/1999	5	11	1999	202073 841	BIRDATLAS2					Lake Nangar	500	48400	Psittacidae	
Oxyura australis	blue-billed duck	BIRD	P4	1/03/1999	1	3	1999	9257 216	BIRDATLAS2	Moderately Certain	Observational	Sighting	1	CHITTERING	Chittering Lake	500	24328	Anatidae
Oxyura australis	blue-billed duck	BIRD	P4	5/11/1999	5	11	1999	202072 216	BIRDATLAS2	Moderately Certain	Observational	Sighting	1	BINDOON	Lake Needoonga	500	24328	Anatidae
Oxyura australis	blue-billed duck	BIRD	P4	25/01/2001	25	1	2001	129060 216	BIRDATLAS2	Moderately Certain	Observational	Sighting	1	CHITTERING	Chittering Lake	100	24328	Anatidae
Oxyura australis	blue-billed duck	BIRD	P4	11/11/2001	11	11	2001	186641 216	BIRDATLAS2	Moderately Certain	Observational	Sighting	1	CHITTERING	Chittering Lake	100	24328	Anatidae
Oxyura australis	blue-billed duck	BIRD	P4	10/02/2002	10	2	2002	267315 216	BIRDATLAS2	Moderately Certain	Observational	Sighting	1	BINDOON	Lake Chittering	500	24328	Anatidae
Oxyura australis	blue-billed duck	BIRD	P4	11/11/2006	11	11	2006	471035 216	BIRDATLAS2	Moderately Certain	Observational	Sighting	1	CHITTERING	Chittering Lake	100	24328	Anatidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	6/08/2007	6	8	2007	819GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	6/08/2007	6	8	2007	820GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	6/08/2007	6	8	2007	821GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	6/08/2007	6	8	2007	822GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	6/08/2007	6	8	2007	823GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	6/08/2007	6	8	2007	824GAA	FAUNAFILE							30	25478	Peramelidae

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Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	6/08/2007	6	8	2007	825GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	6/08/2007	6	8	2007	826GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	6/08/2007	6	8	2007	827GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	6/08/2007	6	8	2007	828GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	6/08/2007	6	8	2007	829GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	7/08/2007	7	8	2007	830GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	7/08/2007	7	8	2007	831GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	7/08/2007	7	8	2007	832GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	7/08/2007	7	8	2007	833GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	7/08/2007	7	8	2007	834GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	7/08/2007	7	8	2007	835GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	7/08/2007	7	8	2007	836GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	7/08/2007	7	8	2007	837GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	7/08/2007	7	8	2007	838GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	7/08/2007	7	8	2007	839GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	7/08/2007	7	8	2007	840GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	7/08/2007	7	8	2007	841GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	8/08/2007	8	8	2007	842GAA	FAUNAFILE							30	25478	Peramelidae

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Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	8/08/2007	8	8	2007	843GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	9/08/2007	9	8	2007	844GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	9/08/2007	9	8	2007	845GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	4/08/2008	4	8	2008	846GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	4/08/2008	4	8	2008	847GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	4/08/2008	4	8	2008	848GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	4/08/2008	4	8	2008	849GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	4/08/2008	4	8	2008	850GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	4/08/2008	4	8	2008	851GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	4/08/2008	4	8	2008	852GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	4/08/2008	4	8	2008	853GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	4/08/2008	4	8	2008	854GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	4/08/2008	4	8	2008	855GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	4/08/2008	4	8	2008	856GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	4/08/2008	4	8	2008	857GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	4/08/2008	4	8	2008	858GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	4/08/2008	4	8	2008	859GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	4/08/2008	4	8	2008	860GAA	FAUNAFILE							30	25478	Peramelidae

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Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	4/08/2008	4	8	2008	861GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	4/08/2008	4	8	2008	862GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	4/08/2008	4	8	2008	863GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	4/08/2008	4	8	2008	865GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	5/08/2008	5	8	2008	867GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	5/08/2008	5	8	2008	868GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	5/08/2008	5	8	2008	869GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	5/08/2008	5	8	2008	870GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	5/08/2008	5	8	2008	871GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	5/08/2008	5	8	2008	872GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	5/08/2008	5	8	2008	873GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	5/08/2008	5	8	2008	874GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	5/08/2008	5	8	2008	875GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	5/08/2008	5	8	2008	876GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	5/08/2008	5	8	2008	877GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	5/08/2008	5	8	2008	878GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	6/08/2008	6	8	2008	882GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	6/08/2008	6	8	2008	883GAA	FAUNAFILE							30	25478	Peramelidae

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Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	6/08/2008	6	8	2008	886GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	6/08/2008	6	8	2008	890GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	6/08/2008	6	8	2008	891GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	7/08/2008	7	8	2008	895GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	7/08/2008	7	8	2008	896GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	7/08/2008	7	8	2008	898GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	7/08/2008	7	8	2008	900GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	7/08/2008	7	8	2008	902GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	7/08/2008	7	8	2008	903GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	7/08/2008	7	8	2008	904GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	7/08/2008	7	8	2008	905GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	7/08/2008	7	8	2008	906GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	8/08/2008	8	8	2008	911GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	8/08/2008	8	8	2008	912GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	8/08/2008	8	8	2008	913GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	11/08/2008	11	8	2008	1123GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	11/08/2008	11	8	2008	1124GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	11/08/2008	11	8	2008	1125GAA	FAUNAFILE							30	25478	Peramelidae

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Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	11/08/2008	11	8	2008	1126GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	11/08/2008	11	8	2008	1127GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	11/08/2008	11	8	2008	1128GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	11/08/2008	11	8	2008	1129GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	11/08/2008	11	8	2008	1130GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	11/08/2008	11	8	2008	1131GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	11/08/2008	11	8	2008	1132GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	11/08/2008	11	8	2008	1133GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	11/08/2008	11	8	2008	1134GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	11/08/2008	11	8	2008	1135GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	11/08/2008	11	8	2008	1136GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	11/08/2008	11	8	2008	1137GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	11/08/2008	11	8	2008	1140GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	11/08/2008	11	8	2008	1142GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	12/08/2008	12	8	2008	1143GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	12/08/2008	12	8	2008	1145GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	12/08/2008	12	8	2008	1148GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	12/08/2008	12	8	2008	1149GAA	FAUNAFILE							30	25478	Peramelidae

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Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	12/08/2008	12	8	2008	1150GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	12/08/2008	12	8	2008	1151GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	12/08/2008	12	8	2008	1152GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	12/08/2008	12	8	2008	1153GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	12/08/2008	12	8	2008	1154GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	12/08/2008	12	8	2008	1155GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	12/08/2008	12	8	2008	1157GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	12/08/2008	12	8	2008	1159GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	12/08/2008	12	8	2008	1160GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	12/08/2008	12	8	2008	1161GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	12/08/2008	12	8	2008	1162GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	12/08/2008	12	8	2008	1163GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	12/08/2008	12	8	2008	1166GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	12/08/2008	12	8	2008	1167GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	13/08/2008	13	8	2008	1169GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	13/08/2008	13	8	2008	1170GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	13/08/2008	13	8	2008	1173GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	13/08/2008	13	8	2008	1174GAA	FAUNAFILE							30	25478	Peramelidae

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Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	13/08/2008	13	8	2008	1175GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	13/08/2008	13	8	2008	1176GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	13/08/2008	13	8	2008	1177GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	13/08/2008	13	8	2008	1178GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	13/08/2008	13	8	2008	1180GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	13/08/2008	13	8	2008	1181GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	13/08/2008	13	8	2008	1182GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	13/08/2008	13	8	2008	1184GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	13/08/2008	13	8	2008	1185GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	13/08/2008	13	8	2008	1186GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	13/08/2008	13	8	2008	1188GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	13/08/2008	13	8	2008	1189GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	13/08/2008	13	8	2008	1192GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	13/08/2008	13	8	2008	1193GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	14/08/2008	14	8	2008	1194GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	14/08/2008	14	8	2008	1197GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	14/08/2008	14	8	2008	1198GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	14/08/2008	14	8	2008	1199GAA	FAUNAFILE							30	25478	Peramelidae

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NAME_SCI	NAME_COM	CLASS	CONS_	Date	DAY	MONTH	YEAR	SOURCE_ID	SOURCE	CERTAINTY	METHOD	TYPE	COUNT	LOCALITY	SITE	ACCURACY_M	NAME_ID	FAMILY
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	14/08/2008	14	8	2008	1200GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	14/08/2008	14	8	2008	1201GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	14/08/2008	14	8	2008	1203GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	14/08/2008	14	8	2008	1204GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	14/08/2008	14	8	2008	1206GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	14/08/2008	14	8	2008	1207GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	14/08/2008	14	8	2008	1208GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	14/08/2008	14	8	2008	1209GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	14/08/2008	14	8	2008	1210GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	14/08/2008	14	8	2008	1211GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	14/08/2008	14	8	2008	1212GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	14/08/2008	14	8	2008	1213GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	14/08/2008	14	8	2008	1214GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	14/08/2008	14	8	2008	1216GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	14/08/2008	14	8	2008	1217GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	15/08/2008	15	8	2008	1218GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	15/08/2008	15	8	2008	1225GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	15/08/2008	15	8	2008	1228GAA	FAUNAFILE							30	25478	Peramelidae

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NAME_SCI	NAME_COM	CLASS	CONS_	Date	DAY	MONTH	YEAR	SOURCE_ID	SOURCE	CERTAINTY	METHOD	TYPE	COUNT	LOCALITY	SITE	ACCURACY_M	NAME_ID	FAMILY
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	15/08/2008	15	8	2008	1231GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	15/08/2008	15	8	2008	1232GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	15/08/2008	15	8	2008	1233GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	15/08/2008	15	8	2008	1234GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	15/08/2008	15	8	2008	1235GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	15/08/2008	15	8	2008	1237GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	15/08/2008	15	8	2008	1238GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	15/08/2008	15	8	2008	1239GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	15/08/2008	15	8	2008	1240GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	15/08/2008	15	8	2008	1241GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	15/08/2008	15	8	2008	1242GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	15/08/2008	15	8	2008	1243GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	15/08/2008	15	8	2008	1245GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	15/08/2008	15	8	2008	1246GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	4/05/2009	4	5	2009	916GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	5/05/2009	5	5	2009	917GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	5/05/2009	5	5	2009	921GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	6/05/2009	6	5	2009	922GAA	FAUNAFILE							30	25478	Peramelidae

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Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	6/05/2009	6	5	2009	925GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	6/05/2009	6	5	2009	926GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	6/05/2009	6	5	2009	927GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	6/05/2009	6	5	2009	928GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	6/05/2009	6	5	2009	929GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	6/05/2009	6	5	2009	930GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	7/05/2009	7	5	2009	931GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	7/05/2009	7	5	2009	932GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	7/05/2009	7	5	2009	933GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	7/05/2009	7	5	2009	935GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	7/05/2009	7	5	2009	937GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	7/05/2009	7	5	2009	938GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	7/05/2009	7	5	2009	939GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	7/05/2009	7	5	2009	940GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	7/05/2009	7	5	2009	941GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	8/05/2009	8	5	2009	942GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	8/05/2009	8	5	2009	943GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	8/05/2009	8	5	2009	944GAA	FAUNAFILE							30	25478	Peramelidae

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NAME_SCI	NAME_COM	CLASS	CONS_	Date	DAY	MONTH	YEAR	SOURCE_ID	SOURCE	CERTAINTY	METHOD	TYPE	COUNT	LOCALITY	SITE	ACCURACY_M	NAME_ID	FAMILY
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	8/05/2009	8	5	2009	946GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	8/05/2009	8	5	2009	947GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	8/05/2009	8	5	2009	948GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	8/05/2009	8	5	2009	949GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	8/05/2009	8	5	2009	950GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	11/05/2009	11	5	2009	951GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	11/05/2009	11	5	2009	952GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	11/05/2009	11	5	2009	953GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	11/05/2009	11	5	2009	954GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	11/05/2009	11	5	2009	955GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	11/05/2009	11	5	2009	956GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	11/05/2009	11	5	2009	957GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	11/05/2009	11	5	2009	958GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	11/05/2009	11	5	2009	960GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	11/05/2009	11	5	2009	961GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	11/05/2009	11	5	2009	962GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	12/05/2009	12	5	2009	964GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	12/05/2009	12	5	2009	965GAA	FAUNAFILE							30	25478	Peramelidae

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NAME_SCI	NAME_COM	CLASS	CONS_	Date	DAY	MONTH	YEAR	SOURCE_ID	SOURCE	CERTAINTY	METHOD	TYPE	COUNT	LOCALITY	SITE	ACCURACY_M	NAME_ID	FAMILY
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	12/05/2009	12	5	2009	966GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	12/05/2009	12	5	2009	967GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	12/05/2009	12	5	2009	968GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	12/05/2009	12	5	2009	969GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	13/05/2009	13	5	2009	970GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	13/05/2009	13	5	2009	971GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	13/05/2009	13	5	2009	972GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	13/05/2009	13	5	2009	973GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	14/05/2009	14	5	2009	975GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	14/05/2009	14	5	2009	976GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	14/05/2009	14	5	2009	977GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	15/05/2009	15	5	2009	982GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	15/05/2009	15	5	2009	983GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	15/05/2009	15	5	2009	988GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	15/05/2009	15	5	2009	989GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	18/05/2009	18	5	2009	1247GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	18/05/2009	18	5	2009	1248GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	18/05/2009	18	5	2009	1249GAA	FAUNAFILE							30	25478	Peramelidae

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NAME_SCI	NAME_COM	CLASS	CONS_	Date	DAY	MONTH	YEAR	SOURCE_ID	SOURCE	CERTAINTY	METHOD	TYPE	COUNT	LOCALITY	SITE	ACCURACY_M	NAME_ID	FAMILY
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	18/05/2009	18	5	2009	1250GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	18/05/2009	18	5	2009	1251GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	18/05/2009	18	5	2009	1252GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	18/05/2009	18	5	2009	1253GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	18/05/2009	18	5	2009	1254GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	18/05/2009	18	5	2009	1255GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	18/05/2009	18	5	2009	1256GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	18/05/2009	18	5	2009	1257GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	18/05/2009	18	5	2009	1258GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	18/05/2009	18	5	2009	1259GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	18/05/2009	18	5	2009	1260GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	18/05/2009	18	5	2009	1261GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	19/05/2009	19	5	2009	1262GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	19/05/2009	19	5	2009	1263GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	19/05/2009	19	5	2009	1264GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	19/05/2009	19	5	2009	1265GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	19/05/2009	19	5	2009	1266GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	20/05/2009	20	5	2009	1267GAA	FAUNAFILE							30	25478	Peramelidae

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NAME_SCI	NAME_COM	CLASS	CONS_	Date	DAY	MONTH	YEAR	SOURCE_ID	SOURCE	CERTAINTY	METHOD	TYPE	COUNT	LOCALITY	SITE	ACCURACY_M	NAME_ID	FAMILY
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	20/05/2009	20	5	2009	1268GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	20/05/2009	20	5	2009	1269GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	20/05/2009	20	5	2009	1270GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	20/05/2009	20	5	2009	1271GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	20/05/2009	20	5	2009	1272GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	20/05/2009	20	5	2009	1273GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	20/05/2009	20	5	2009	1274GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	21/05/2009	21	5	2009	1275GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	21/05/2009	21	5	2009	1276GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	21/05/2009	21	5	2009	1277GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	21/05/2009	21	5	2009	1278GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	22/05/2009	22	5	2009	1279GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	22/05/2009	22	5	2009	1280GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	22/05/2009	22	5	2009	1281GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	22/05/2009	22	5	2009	1282GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	25/05/2009	25	5	2009	1283GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	25/05/2009	25	5	2009	1284GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	25/05/2009	25	5	2009	1285GAA	FAUNAFILE							30	25478	Peramelidae

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NAME_SCI	NAME_COM	CLASS	CONS_	Date	DAY	MONTH	YEAR	SOURCE_ID	SOURCE	CERTAINTY	METHOD	TYPE	COUNT	LOCALITY	SITE	ACCURACY_M	NAME_ID	FAMILY
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	25/05/2009	25	5	2009	1286GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	25/05/2009	25	5	2009	1287GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	25/05/2009	25	5	2009	1288GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	25/05/2009	25	5	2009	1289GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	25/05/2009	25	5	2009	1290GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	25/05/2009	25	5	2009	1291GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	25/05/2009	25	5	2009	1292GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	26/05/2009	26	5	2009	1293GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	26/05/2009	26	5	2009	1294GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	26/05/2009	26	5	2009	1295GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	26/05/2009	26	5	2009	1296GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	26/05/2009	26	5	2009	1297GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	27/05/2009	27	5	2009	1298GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	27/05/2009	27	5	2009	1299GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	27/05/2009	27	5	2009	1300GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	27/05/2009	27	5	2009	1301GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	28/05/2009	28	5	2009	1302GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	28/05/2009	28	5	2009	1303GAA	FAUNAFILE							30	25478	Peramelidae

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NAME_SCI	NAME_COM	CLASS	CONS_	Date	DAY	MONTH	YEAR	SOURCE_ID	SOURCE	CERTAINTY	METHOD	TYPE	COUNT	LOCALITY	SITE	ACCURACY_M	NAME_ID	FAMILY
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	29/05/2009	29	5	2009	1304GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	17/08/2009	17	8	2009	997GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	17/08/2009	17	8	2009	999GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	24/08/2009	24	8	2009	1316GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	24/08/2009	24	8	2009	1319GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	24/08/2009	24	8	2009	1320GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	24/08/2009	24	8	2009	1321GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	25/08/2009	25	8	2009	1345GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	25/08/2009	25	8	2009	1349GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	25/08/2009	25	8	2009	1352GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	25/08/2009	25	8	2009	1357GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	26/08/2009	26	8	2009	1363GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	28/08/2009	28	8	2009	1412GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	4/05/2010	4	5	2010	1044GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	4/05/2010	4	5	2010	1047GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	4/05/2010	4	5	2010	1048GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	5/05/2010	5	5	2010	1049GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	5/05/2010	5	5	2010	1052GAA	FAUNAFILE							30	25478	Peramelidae

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Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	5/05/2010	5	5	2010	1053GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	6/05/2010	6	5	2010	1056GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	7/05/2010	7	5	2010	1059GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	7/05/2010	7	5	2010	1060GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	11/05/2010	11	5	2010	1068GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	11/05/2010	11	5	2010	1069GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	11/05/2010	11	5	2010	1070GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	11/05/2010	11	5	2010	1072GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	12/05/2010	12	5	2010	1075GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	14/05/2010	14	5	2010	1084GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	18/05/2010	18	5	2010	1418GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	18/05/2010	18	5	2010	1419GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	18/05/2010	18	5	2010	1420GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	18/05/2010	18	5	2010	1421GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	19/05/2010	19	5	2010	1424GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	20/05/2010	20	5	2010	1430GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	21/05/2010	21	5	2010	1443GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	21/05/2010	21	5	2010	1446GAA	FAUNAFILE							30	25478	Peramelidae

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Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	21/05/2010	21	5	2010	1449GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	3/08/2010	3	8	2010	1454GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	3/08/2010	3	8	2010	1455GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	3/08/2010	3	8	2010	1461GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	4/08/2010	4	8	2010	1466GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	4/08/2010	4	8	2010	1469GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	4/08/2010	4	8	2010	1471GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	4/08/2010	4	8	2010	1474GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	5/08/2010	5	8	2010	1476GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	5/08/2010	5	8	2010	1478GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	5/08/2010	5	8	2010	1482GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	6/08/2010	6	8	2010	1496GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	6/08/2010	6	8	2010	1501GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	28/09/2010	28	9	2010	1516GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	28/09/2010	28	9	2010	1517GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	29/09/2010	29	9	2010	1525GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	30/09/2010	30	9	2010	1530GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	30/09/2010	30	9	2010	1533GAA	FAUNAFILE							30	25478	Peramelidae

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NAME_SCI	NAME_COM	CLASS	CONS_	Date	DAY	MONTH	YEAR	SOURCE_ID	SOURCE	CERTAINTY	METHOD	TYPE	COUNT	LOCALITY	SITE	ACCURACY_M	NAME_ID	FAMILY
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	1/10/2010	1	10	2010	1540GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	1/10/2010	1	10	2010	1545GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	1/10/2010	1	10	2010	1547GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	1/10/2010	1	10	2010	1548GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	2/08/2011	2	8	2011	1087GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	2/08/2011	2	8	2011	1088GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	2/08/2011	2	8	2011	1089GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	2/08/2011	2	8	2011	1091GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	2/08/2011	2	8	2011	1092GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	2/08/2011	2	8	2011	1095GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	3/08/2011	3	8	2011	1097GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	3/08/2011	3	8	2011	1101GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	3/08/2011	3	8	2011	1105GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	4/08/2011	4	8	2011	1111GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	5/08/2011	5	8	2011	1118GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	5/08/2011	5	8	2011	1120GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	9/08/2011	9	8	2011	1549GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	9/08/2011	9	8	2011	1550GAA	FAUNAFILE							30	25478	Peramelidae

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NAME_SCI	NAME_COM	CLASS	CONS_	Date	DAY	MONTH	YEAR	SOURCE_ID	SOURCE	CERTAINTY	METHOD	TYPE	COUNT	LOCALITY	SITE	ACCURACY_M	NAME_ID	FAMILY
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	9/08/2011	9	8	2011	1553GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	10/08/2011	10	8	2011	1557GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	10/08/2011	10	8	2011	1559GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	11/08/2011	11	8	2011	1562GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	11/08/2011	11	8	2011	1567GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	11/08/2011	11	8	2011	1569GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	11/08/2011	11	8	2011	1570GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	11/08/2011	11	8	2011	1571GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	11/08/2011	11	8	2011	1574GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	12/08/2011	12	8	2011	1579GAA	FAUNAFILE							30	25478	Peramelidae
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	P4	12/08/2011	12	8	2011	1581GAA	FAUNAFILE							30	25478	Peramelidae
Westralunio carteri	Carter's freshwater mussel	INVERTEBRATE	VU	28/11/2009	28	11	2009	138694	FAUNASURVEY	Certain	Survey	Unknown	6	MOOLIABEENEE	Lower Brockman River, Marbling Brook-Chittering Valley Rd	100	34113	Hyriidae
Calyptorhynchus banksii naso	forest red-tailed black cockatoo	BIRD	VU	10/02/2007	10	2	2007	80790	TFAUNA	Certain	Community survey	Day sighting	1	Chittering		10000	0	
Calyptorhynchus banksii naso	forest red-tailed black cockatoo	BIRD	VU	1/05/2015	1	5	2015	96400	TFAUNA	Certain	Opportunistic sighting		1	Bindoon		10000	0	
Calyptorhynchus banksii naso	forest red-tailed black cockatoo	BIRD	VU	1/05/2015	1	5	2015	96401	TFAUNA	Certain	Opportunistic sighting		1	Chittering		10000	0	
Calyptorhynchus banksii naso	forest red-tailed black cockatoo	BIRD	VU	1/05/2015	1	5	2015	96402	TFAUNA	Certain	Opportunistic sighting		1	Chittering		10000	0	
Calyptorhynchus banksii naso	forest red-tailed black cockatoo	BIRD	VU	9/04/2017	9	4	2017	95837	TFAUNA	Moderately certain	Community survey	Sighting	15	BINDOON		1000	0	
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	EN	1/12/2000	1	12	2000	9750	TFAUNA	Certain	Community survey	Day sighting	6	Mooliabeenee		500	0	
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	EN	11/11/2001	11	11	2001	6470	TFAUNA	Certain	Community survey	Day sighting		Lake Chittering		1000	0	
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	EN	24/05/2003	24	5	2003	32530	TFAUNA	Certain	Survey	Day sighting	130	CHITTERING		1000	0	

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<i>Calyptorhynchus latirostris</i>	Carnaby's cockatoo	BIRD	EN	24/05/2003	24	5	2003	32531	TFAUNA	Certain	Survey	Day sighting	1	CHITTERING		1000	0	
<i>Calyptorhynchus latirostris</i>	Carnaby's cockatoo	BIRD	EN	8/09/2003	8	9	2003	26470	TFAUNA	Certain	Survey	Day sighting	1	BINDOON		500	0	
<i>Calyptorhynchus latirostris</i>	Carnaby's cockatoo	BIRD	EN	9/09/2003	9	9	2003	35430	TFAUNA	Certain	Survey	Day sighting	1	BINDOON		500	0	
<i>Calyptorhynchus latirostris</i>	Carnaby's cockatoo	BIRD	EN	11/10/2003	11	10	2003	26469	TFAUNA	Certain	Survey	Day sighting	1	BINDOON		500	0	
<i>Calyptorhynchus latirostris</i>	Carnaby's cockatoo	BIRD	EN	30/09/2004	30	9	2004	34372	TFAUNA	Certain	Survey	Secondary sign	9	Burroloo Well Nature Reserve		1000	0	
<i>Calyptorhynchus latirostris</i>	Carnaby's cockatoo	BIRD	EN	10/10/2004	10	10	2004	34371	TFAUNA	Certain	Survey	Day sighting	1	Burroloo Well Nature Reserve		1000	0	
<i>Calyptorhynchus latirostris</i>	Carnaby's cockatoo	BIRD	EN	18/10/2004	18	10	2004	32539	TFAUNA	Certain	Survey	Day sighting	4	BINDOON		1000	0	
<i>Calyptorhynchus latirostris</i>	Carnaby's cockatoo	BIRD	EN	21/11/2005	21	11	2005	32529	TFAUNA	Certain	Survey	Day sighting	10	CHITTERING		1000	0	
<i>Calyptorhynchus latirostris</i>	Carnaby's cockatoo	BIRD	EN	16/12/2006	16	12	2006	32538	TFAUNA	Certain	Survey	Day sighting	16	BINDOON		1000	0	
<i>Calyptorhynchus latirostris</i>	Carnaby's cockatoo	BIRD	EN	22/11/2007	22	11	2007	32537	TFAUNA	Certain	Survey	Day sighting	1	BINDOON		1000	0	
<i>Calyptorhynchus latirostris</i>	Carnaby's cockatoo	BIRD	EN	8/03/2008	8	3	2008	30918	TFAUNA	Certain	Survey	Day sighting	1	BINDOON		1000	0	
<i>Calyptorhynchus latirostris</i>	Carnaby's cockatoo	BIRD	EN	21/08/2008	21	8	2008	32536	TFAUNA	Certain	Survey	Day sighting	10	BINDOON		1000	0	
<i>Calyptorhynchus latirostris</i>	Carnaby's cockatoo	BIRD	EN	4/10/2008	4	10	2008	32535	TFAUNA	Certain	Survey	Day sighting	6	BINDOON		1000	0	
<i>Calyptorhynchus latirostris</i>	Carnaby's cockatoo	BIRD	EN	3/09/2009	3	9	2009	32534	TFAUNA	Certain	Survey	Day sighting	25	BINDOON		1000	0	
<i>Calyptorhynchus latirostris</i>	Carnaby's cockatoo	BIRD	EN	5/09/2009	5	9	2009	34373	TFAUNA	Certain	Survey	Day sighting	4	Burroloo Well Nature Reserve		1000	0	
<i>Calyptorhynchus latirostris</i>	Carnaby's cockatoo	BIRD	EN	5/09/2009	5	9	2009	34374	TFAUNA	Certain	Survey	Day sighting	1	Burroloo Well Nature Reserve		1000	0	
<i>Calyptorhynchus latirostris</i>	Carnaby's cockatoo	BIRD	EN	5/09/2009	5	9	2009	34375	TFAUNA	Certain	Survey	Day sighting	2	Burroloo Well Nature Reserve		1000	0	
<i>Calyptorhynchus latirostris</i>	Carnaby's cockatoo	BIRD	EN	7/10/2013	7	10	2013	75910	TFAUNA	Moderately certain	Survey	Day sighting	28	BINDOON		1000	0	
<i>Calyptorhynchus latirostris</i>	Carnaby's cockatoo	BIRD	EN	28/10/2013	28	10	2013	75909	TFAUNA	Not sure	Survey	Day sighting	1	BINDOON		1000	0	
<i>Calyptorhynchus latirostris</i>	Carnaby's cockatoo	BIRD	EN	8/11/2013	8	11	2013	75911	TFAUNA	Moderately certain	Survey	Day sighting	2	BINDOON		1000	0	
<i>Calyptorhynchus latirostris</i>	Carnaby's cockatoo	BIRD	EN	18/11/2013	18	11	2013	75912	TFAUNA	Moderately certain	Survey	Day sighting	2	BINDOON		1000	0	
<i>Calyptorhynchus latirostris</i>	Carnaby's cockatoo	BIRD	EN	18/11/2014	18	11	2014	80786	TFAUNA	Moderately certain	Community survey	Day sighting	4	Chittering		1000	0	
<i>Calyptorhynchus latirostris</i>	Carnaby's cockatoo	BIRD	EN	18/11/2014	18	11	2014	80787	TFAUNA	Moderately certain	Community survey	Secondary sign	0	Chittering		1000	0	
<i>Calyptorhynchus latirostris</i>	Carnaby's cockatoo	BIRD	EN	18/12/2014	18	12	2014	80124	TFAUNA	Certain	Opportunistic sighting	Day sighting	3	Bindoon		1000	0	

APPENDIX 2

NAME_SCI	NAME_COM	CLASS	CONS_	Date	DAY	MONTH	YEAR	SOURCE_ID	SOURCE	CERTAINTY	METHOD	TYPE	COUNT	LOCALITY	SITE	ACCURACY_M	NAME_ID	FAMILY
<i>Calyptorhynchus latirostris</i>	Carnaby's cockatoo	BIRD	EN	10/03/2016	10	3	2016	89509	TFAUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote sensing	1	Breera		1000	0	
<i>Calyptorhynchus latirostris</i>	Carnaby's cockatoo	BIRD	EN	10/03/2016	10	3	2016	89513	TFAUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote sensing	1	Lennard Brook		1000	0	
<i>Calyptorhynchus latirostris</i>	Carnaby's cockatoo	BIRD	EN	10/03/2016	10	3	2016	89514	TFAUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote sensing	1	Lennard Brook		1000	0	
<i>Calyptorhynchus latirostris</i>	Carnaby's cockatoo	BIRD	EN	10/03/2016	10	3	2016	89515	TFAUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote sensing	1	Lennard Brook		1000	0	
<i>Calyptorhynchus latirostris</i>	Carnaby's cockatoo	BIRD	EN	10/03/2016	10	3	2016	89516	TFAUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote sensing	1	Lennard Brook		1000	0	
<i>Calyptorhynchus latirostris</i>	Carnaby's cockatoo	BIRD	EN	10/03/2016	10	3	2016	89517	TFAUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote sensing	1	Lennard Brook		1000	0	
<i>Calyptorhynchus latirostris</i>	Carnaby's cockatoo	BIRD	EN	10/08/2017	10	8	2017	95516	TFAUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote sensing		CHITTERING		1000	0	
<i>Calyptorhynchus latirostris</i>	Carnaby's cockatoo	BIRD	EN	10/08/2017	10	8	2017	95595	TFAUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote sensing		LENNARD BROOK		1000	0	
<i>Dasyurus geoffroii</i>	chuditch, western quoll	MAMMAL	VU	4/05/1993	4	5	1993	1012	TFAUNA	Certain	Opportunistic sighting	Dead	1	BINDOON		1000	0	
<i>Dasyurus geoffroii</i>	chuditch, western quoll	MAMMAL	VU	22/06/2000	22	6	2000	3074	TFAUNA	Certain	Survey	Caught or trapped	1	Bindoon		1000	0	
<i>Dasyurus geoffroii</i>	chuditch, western quoll	MAMMAL	VU	12/01/2015	12	1	2015	80123	TFAUNA	Certain	Opportunistic sighting	Night sighting	1	Bindoon		1000	0	
<i>Galaxiella munda</i>	mud minnow, western dwarf galaxias	FISH	VU	1/12/2009	1	12	2009	96362	TFAUNA	Certain	Survey	Caught or trapped	9	Lennard Brook		1000	0	
<i>Isoodon fusciventer</i>	quenda, southwestern brown bandicoot	MAMMAL	P4	4/08/2013	4	8	2013	24950	TFAUNA	Moderately certain	Community survey	Night sighting	1	Bindoon		1000	0	
<i>Westralunio carteri</i>	Carter's freshwater mussel	INVERTEBRATE	VU	10/03/2017	10	3	2017	89146	TFAUNA	Certain	Opportunistic sighting	Sighting	1	Moondah		1000	0	
<i>Westralunio carteri</i>	Carter's freshwater mussel	INVERTEBRATE	VU	27/06/2018	27	6	2018	96034	TFAUNA	Very Certain (photo, specimen, expert)	Opportunistic sighting	Day sighting	40	Moondah		1000	0	
<i>Calyptorhynchus latirostris</i>	Carnaby's cockatoo	BIRD	EN	24/05/2003	24	5	2003	AVIF:38340	WAM_BIRDS	WAM Vouchered	Collection	Specimen	1	BINDOON	Great Northern Highway Chittering	10000	24734	Cacatuidae
<i>Calyptorhynchus latirostris</i>	Carnaby's cockatoo	BIRD	EN	7/05/2005	7	5	2005	AVIF:38512	WAM_BIRDS	WAM Vouchered	Collection	Specimen	1	BINDOON	Bindoon	10000	24734	Cacatuidae

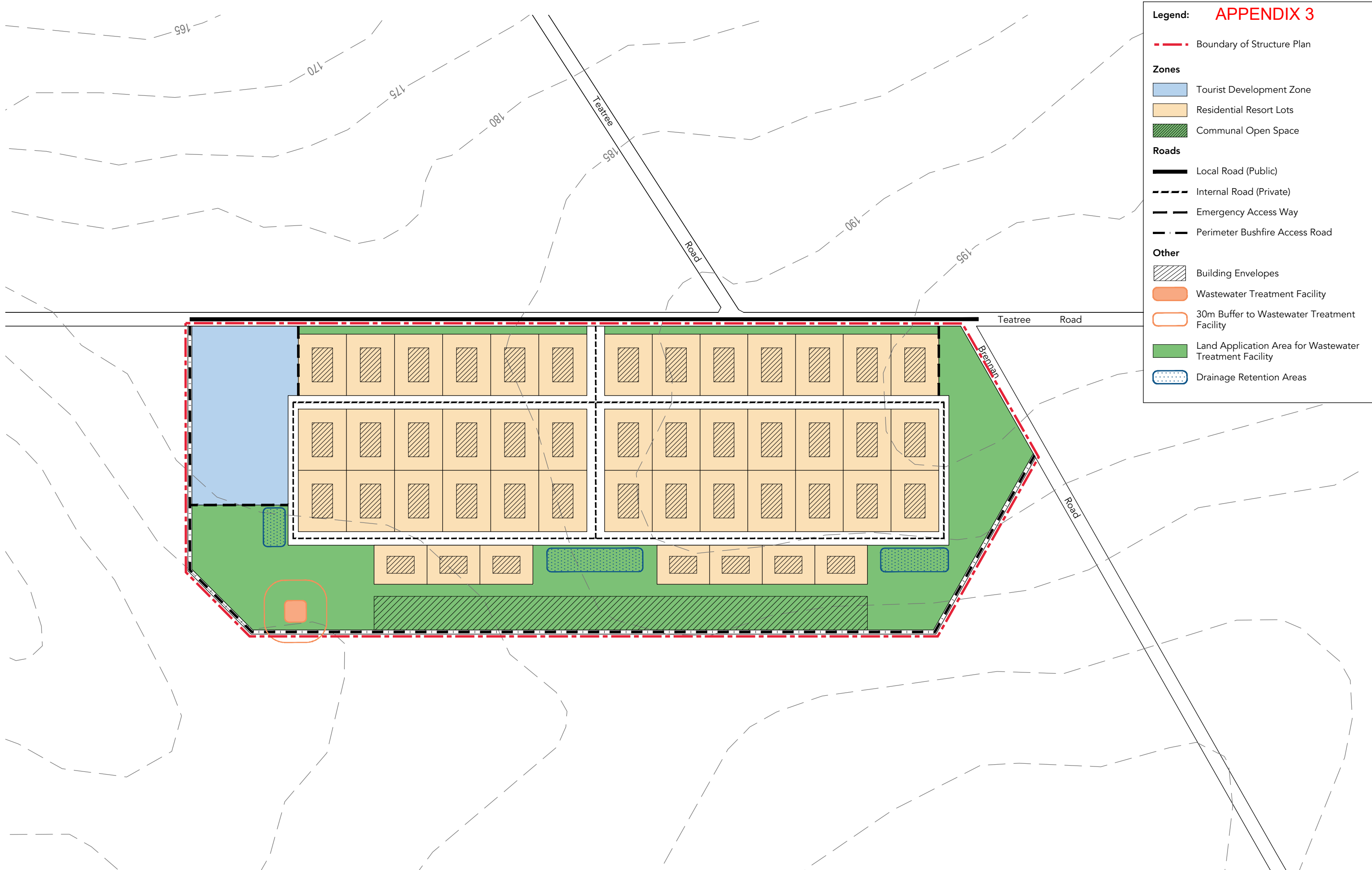
APPENDIX 2

NAME_SCI	NAME_COM	CLASS	CONS_	Date	DAY	MONTH	YEAR	SOURCE_ID	SOURCE	CERTAINTY	METHOD	TYPE	COUNT	LOCALITY	SITE	ACCURACY_M	NAME_ID	FAMILY
<i>Calyptorhynchus latirostris</i>	Carnaby's cockatoo	BIRD	EN	1/12/2005	1	12	2005	AVIF:38302	WAM_BIRDS	WAM Vouchered	Collection	Specimen	1	BINDOON	Bindoon	10000	24734	Cacatuidae
<i>Calyptorhynchus latirostris</i>	Carnaby's cockatoo	BIRD	EN	12/12/2005	12	12	2005	AVIF:38296	WAM_BIRDS	WAM Vouchered	Collection	Specimen	1	BINDOON	Bindoon	10000	24734	Cacatuidae
<i>Calyptorhynchus latirostris</i>	Carnaby's cockatoo	BIRD	EN	12/12/2005	12	12	2005	AVIF:38337	WAM_BIRDS	WAM Vouchered	Collection	Specimen	1	BINDOON	Bindoon	10000	24734	Cacatuidae
<i>Calyptorhynchus latirostris</i>	Carnaby's cockatoo	BIRD	EN	16/02/2008	16	2	2008	AVIF:38305	WAM_BIRDS	WAM Vouchered	Collection	Specimen	1	BINDOON	Bindoon	10000	24734	Cacatuidae
<i>Calyptorhynchus latirostris</i>	Carnaby's cockatoo	BIRD	EN	16/10/2008	16	10	2008	AVIF:37917	WAM_BIRDS	WAM Vouchered	Collection	Specimen	1	BINDOON	Bindoon	10000	24734	Cacatuidae
<i>Dasyurus geoffroii</i>	chuditch, western quoll	MAMMAL	VU	12/07/1967	12	7	1967	MAMM:M13199	WAM_MAMMALS	WAM Vouchered	Collection	Specimen	1	MOONDAH	PERTH-NEW NORCIA RD.	10000	24092	Dasyuridae
<i>Dasyurus geoffroii</i>	Chuditch, Western Quoll	MAMMAL	VU	12/07/1967	12	7	1967	urn:lsid:taxonomy.org.au:MAMM:M13199	WAM_MAMMALS	WAM Vouchered	Collection	Specimen	1	MOONDAH	PERTH-NEW NORCIA RD.	10000	24092	Dasyuridae
<i>Phascogale tapoatafa wambenger</i>	south-western brush-tailed phascogale, wambenger	MAMMAL	CD	15/05/2001	15	5	2001	urn:lsid:taxonomy.org.au:MAMM:M49191	WAM_MAMMALS	WAM Vouchered	Collection	Specimen	1	MOONDAH	HOPELANDS RD	10000	24099	Dasyuridae
<i>Phascogale tapoatafa wambenger</i>	south-western brush-tailed phascogale, wambenger	MAMMAL	CD	15/05/2001	15	5	2001	MAMM:M49191	WAM_MAMMALS	WAM Vouchered	Collection	Specimen	1	MOONDAH	HOPELANDS RD	10000	0	Dasyuridae

APPENDIX 3

Legend: APPENDIX 3

- Boundary of Structure Plan**: Red dashed line
- Zones**
 - Tourist Development Zone: Light blue
 - Residential Resort Lots: Light orange
 - Communal Open Space: Green with diagonal hatching
- Roads**
 - Local Road (Public): Solid black line
 - Internal Road (Private): Dashed black line
 - Emergency Access Way: Dashed black line with a central dash
 - Perimeter Bushfire Access Road: Dashed black line with a central dash and a solid outer line
- Other**
 - Building Envelopes: Hatched rectangles
 - Wastewater Treatment Facility: Orange square
 - 30m Buffer to Wastewater Treatment Facility: Orange outline
 - Land Application Area for Wastewater Treatment Facility: Green area
 - Drainage Retention Areas: Blue dotted rectangles



Local Structure Plan
 Portion of Lot 101 (No.777)
 Tea Tree Road, Bindoon



Drawing Number: 01
 Revision: A
 Projection: MGA50
 Scale: 1:5,000 @ A3

Project: Local Structure Plan
 Job Reference: 0072
 Date: 16 December 2019



APPENDIX 4



Environmental Protection Authority

Chief Executive Officer
Shire of Chittering
PO Box 70
BINDOON WA 6502

Your Ref:
Our Ref: CMS17102
Enquiries: Stephen Pavey, 6145 0800
Email: Stephen.Pavey@epa.wa.gov.au

Dear Sir/Madam

**DECISION UNDER SECTION 48A(1)(a)
*Environmental Protection Act 1986***

SCHEME:	Shire of Chittering - Town Planning Scheme 6 - Amendment 61
LOCATION:	Lot 101 Teatree Road, Bindoon
RESPONSIBLE AUTHORITY:	Shire of Chittering
DECISION:	Referral Examined, Preliminary Investigations and Inquiries Conducted. Scheme Amendment Not to be Assessed Under Part IV of EP Act. Advice Given. (Not Appealable)

Thank you for referring the above scheme to the Environmental Protection Authority (EPA).

After consideration of the information provided by you, the EPA considers that the proposed scheme should not be assessed under Part IV Division 3 of the *Environmental Protection Act 1986* (EP Act) but nevertheless provides the attached advice and recommendations.

Please note the following:

- For the purposes of Part IV of the EP Act, the scheme is defined as an assessed scheme. In relation to the implementation of the scheme, please note the requirements of Part IV Division 4 of the EP Act.

- There is no appeal right in respect of the EPA's decision to not assess the scheme.

Yours sincerely



Patrick Seares
Director
Strategic Policy and Planning Division

Delegate of the Chairman of the Environmental Protection Authority
Under Notice of Delegation No. 33 published 17 December 2013

26 June 2017

Encl. Scheme Advice and Recommendations

**ADVICE UNDER SECTION 48A(1)(a)
ENVIRONMENTAL PROTECTION ACT 1986**

Shire of Chittering Town Planning Scheme 6 Amendment 61

Location: Lot 101 Teatree Road, Bindoon

Determination: Scheme Not Assessed – Advice Given (not appealable)

Determination Published: 26 June 2017

Summary

The Shire of Chittering proposes to amend its local planning scheme to allow for tourist development within the permitted 50 hectare development area of Lot 101 Teatree Road. The scheme amendment also proposes to remove the requirement for a Conservation Covenant over the remainder of the lot.

The Environmental Protection Authority (EPA) has considered the scheme amendment in accordance with the requirements of the *Environmental Protection Act 1986* (EP Act). The EPA considers that the scheme amendment is unlikely to have a significant effect on the environment and does not warrant formal assessment under Part IV of the EP Act, providing the following advice is implemented.

1. Environmental Factors

The EPA has identified the following environmental factors relevant to this scheme amendment:

- a) Flora and Vegetation;
- b) Terrestrial Fauna; and
- c) Hydrological Processes.

2. Advice and Recommendations regarding Environmental Factors

The EPA has based its decision on the scheme amendment documentation provided by the Shire.

Flora and Vegetation and Terrestrial Fauna

Lot 101 is approximately 475 hectares in size and is covered by remnant vegetation in mainly excellent condition. The vegetation consists of Banksia Woodlands and is considered habitat for Carnaby's and Red-Tail Black Cockatoos. These Black Cockatoos are protected under both the *Wildlife Conservation Act 1950* and the *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act).

The current and proposed scheme provisions allow for a 50 hectare development area within Lot 101. The exact location of the 50 hectare development area is yet to be finalised.

Hydrological Processes

The proposed development within the development area is estimated to require approximately 63 megalitres of water per year, not including any allocation for fire services. There is currently no mains water supply to the site. The EPA understands that different supply options are being considered including accessing groundwater.

Recommendations

The EPA recommends:

- the requirement for a Conservation Covenant over the portion of Lot 101 that is outside of the development area should remain in the scheme. This requirement should only be removed if this portion of the lot is transferred to the State for conservation;
- the 50 hectare development area should be located so that it remains as one consolidated area and minimises fragmentation of vegetation; and
- the Department of Planning liaise with the Shire of Chittering to develop appropriate mechanisms or scheme provisions to ensure that any extraction of water for future development does not impact on the environmental assets of the lot.