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25 March 2019

Public Transport Authority
Public Transport Centre
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PERTH WA 6000

Attention: Laura Zimmermann

Dear Laura

RE: FLORA AND FAUNA ADVICE - CLAREMONT STATION

Please find following a summary of the findings from the flora, vegetation and fauna assessments for the Claremont Station (the 'site' – see Figure 1 of Attachment 1) upgrade project. Also included within this letter is advice relating to the management of impacts to biological factors in the project area, as well as advice pertaining to possible environmental approvals associated with the clearing of native vegetation.

OVERVIEW

Aurora Environmental has been commissioned by the PTA to:

- Assess the biological values of the proposed 'site' to inform the environmental impact assessment process and support broader environmental approvals applications;
- Identify biological values of conservation significance for the proposed project to minimise and/or manage potential environmental impacts;
- Provide recommendations where appropriate to reduce impacts on biological values within the project area; and
- Identify relevant environmental approvals that may be required to facilitate the implementation of the project.

SITE DESCRIPTION

The site is located in the suburb of Claremont within the Town of Claremont, approximately 9km west south-west of the Perth CBD. It is situated in an established residential and commercial area on the western fringe of the central Swan Coastal Plain.

The site encompasses 8.5 hectares (ha), the vast majority of which has been cleared of native vegetation. Remaining vegetation is now largely confined to road verges and residential gardens. The disturbance footprint for the project covers the entire site (Attachment 3).

Historical aerial photography from 1953 shows the site was largely cleared (Landgate, 2018). It is now mainly comprised of roads, rail lines, carparks, retail, residential and other associated infrastructure.

The site is undulating and varies from approximately 15m to 24m Australian Height Datum (AHD). The site is mapped on the Spearwood System which is the second oldest dune system (Bolland, 1998) and contains sand dunes and plains consisting of aeolian sand and limestone over sedimentary rocks (DPIRD, 2018).

The site is mapped as 'No Known Risk' of ASS occurring within 3m of natural soil surface (DWER, 2018).

Groundwater under the site is brackish (salinity 1,000-1,500mg/L) and the water table is estimated at 1m AHD (approximately 14m to 23m below ground level) and generally flows to the south-west towards the Swan River (DWER, 2018). There are no wetlands or surface water features within the site (Australian Government, 2018).

FLORA AND VEGETATION ASSESSMENT SUMMARY

A detailed flora and vegetation survey was undertaken on 11 October 2018 by PGV Environmental for Aurora Environmental. Excluding the fenced rail reserve, the site was walked to record all species observed. No quadrats or relevès were sampled as the site did not contain any intact native vegetation.

PGV Environmental recorded a few *Xanthorrhoea preissii* plants, one Jarrah (*Eucalyptus marginata*) and one Tuart (*Eucalyptus gomphocephala*) within the rail reserve which may be remnant native plants. However, most native species recorded in the road reserve were considered to have been planted and therefore is unlikely to be regarded as native vegetation as defined in the *Environmental Protection Act 1986*.

The *Xanthorrhoea preissii* shrubs mixed with the Norfolk Island Pines among lawn next to Gugeri Street (Location 9, Figure 3 of Attachment 1) are old specimens (PGV Environmental, 2019). These plants are listed on the Town of Claremont's Heritage Inventory as they are remnants of natural bush and are estimated to be more than 100 years old (Town of Claremont, 2014).

PGV Environmental mapped a total area of 0.3 ha of 'non-native mixed with native plants' and 1.5 ha of 'non-native plants' as shown in Figure 4 of Attachment 1.

No Threatened (Declared Rare) species or Priority species were recorded.

Vegetation Description & Condition

No intact native vegetation was recorded on the site. Table A provides a broad description of the vegetation on the site. The locations are shown on Figure 3 of Attachment 1. A total of 26 plant species were recorded – 11 native species and 15 introduced (Table 4, Attachment 1).

The condition of vegetation across the whole site was rated as Completely Degraded using the Bush Forever condition rating scale (Figure 5, Attachment 1).

TABLE A: VEGETATION DESCRIPTIONS

LOCATION NUMBER	DESCRIPTION				
4	WA Peppermint (Agonis flexuosa) in road reserve.				
1	Two Grass Trees (Xanthorrhoea preissii) in rail reserve.				
2	Hill's Weeping Fig (Ficus microphylla var. hillii) and WA Peppermint (Agonis flexuosa) in road reserve.				
3	Grass Tree (Xanthorrhoea preissii), Lemon-scented Gum (Corymbia citriodora), one Jarrah (Eucalyptus marginata) and one Tuart (Eucalyptus gomphocephala) in rail reserve, south side.				
4	WA Peppermint (Agonis flexuosa) in road reserve.				
5	Bottlebrush (Callistemon viminalis) in road reserve.				
6	Camphor Laurel (Cinnamomum camphora) at rail station.				
7	WA Peppermint (Agonis flexuosa) and Liquidambar (Liquidambar styraciflua) over garden beds.				
8	Silver Princess (Eucalyptus caesia) and Illyarrie (E. erythrocorys) over garden beds.				
9	Norfolk Island Pines (<i>Araucaria heterophylla</i>) and scattered Grass Trees (<i>Xanthorrhoea preissii</i>) on lawn.				
10	Sugar Gum (<i>Corymbia cladocalyx</i>), Lemon-scented Gum (<i>Corymbia citriodora</i>), Kurrajong (<i>Brachychiton populneus</i>).				
11	Cape Lilac (<i>Melia azedarach</i>), Broad Leaved Paperbark (<i>Melaleuca quinquenervia</i>), Kurrajong (<i>Brachychiton populneus</i>) in old drainage sump.				
12	Coral Trees (Erythrina indica) next to rail station.				
13	Camphor Laurel (Cinnamomum camphora), Native Frangipani (Hymenosporum flavum), Lemon-scented Gum (Corymbia citriodora).				
14	Jacarandas (Jacaranda mimosifolia).				
15	Exotic <i>Eucalyptus</i> , Bottlebrush (<i>Callistemon viminalis</i>), Red-eyed Wattle (<i>Acacia cyclops</i>), Harsh Hakea (<i>Hakea prostrata</i>) (planted).				
16	Silver Princess (Eucalyptus caesia), Illyarrie (E. erythrocorys), Round Leaved Moort (E. platypus), Bushy Yate (E. lehmannii), Hill's Weeping Fig (Ficus microphylla var. hillii), WA Peppermint (Agonis flexuosa).				
17	Tuart (Eucalyptus gomphocephala) (planted), some Grass Trees (Xanthorrhoea preissii), Red-eyed Wattle (Acacia cyclops).				
18	Norfolk Island Pine and Jacarandas (Jacaranda mimosifolia).				

Conservation Significance

No Threatened or Priority flora species were recorded on the site during the survey. As there was no intact native vegetation, no Threatened or Priority Ecological Communities occur on the site (PGV Environmental, 2019).

The Grass Trees on Gugeri Street have been assigned a heritage Management Category C 'Site' by the Town of Claremont. This means the Grass Trees are of some significance to the council and their conservation is encouraged (Town of Claremont, 2014).

FAUNA ASSESSMENT SUMMARY

A fauna assessment of the site was completed for Aurora Environmental by Greg Harewood, an experienced zoologist. A copy of the report by Harewood (2019) is provided in Attachment 2.

Overall fauna values of the site are rated extremely low given the highly degraded nature of the habitat in the survey area. Fauna biodiversity within the survey area is depauperate, however given the presence of some vegetation, the area still has limited value for some fauna species that are able to persist in degraded habitats of this type.

Most of the fauna species likely to be present would be common, widespread species (mainly birds), with a few exceptions (e.g. occasional presence of black cockatoos). The vast majority of the conservation significant species identified as having been previously recorded in the wider area would not persist in the site primarily due to a complete lack of suitable habitat (i.e. quality and/or extent).

Evidence of seven fauna species (all birds) was observed during the field survey (see Appendix C of Attachment 2). The limited number of species observed can be attributed to the small size of the site, the limited extent of vegetation and its highly degraded state.

The Black Cockatoo habitat tree assessment identified six trees with a Diameter at Breast Height (DBH) of \geq 50cms within the survey area (Figure 2 of Attachment 2). Of these trees, one appeared to contain apparent hollows which were assessed at the time as being unlikely to be suitable for Black Cockatoos to use for nesting purposes due to the small size of the hollows, unsuitable orientation and height above ground level. One of the hollows was also occupied by feral bees and therefore deemed unsuitable for Black Cockatoo use at present.

No evidence of any breeding activity or Black Cockatoos roosting within trees located inside the site was observed during the survey. Additional details on each habitat tree observed can be found in Appendix D of Attachment 2.

Evidence of foraging was observed during the field survey in the form of a small number of chewed Jarrah fruits at a single location. This evidence was attributed to the Forest Red-tailed Black Cockatoo or Carnaby's Black Cockatoo.

It is difficult to estimate the extent of foraging habitat given most trees and shrubs are represented by scattered/isolated specimens located amongst non-favoured species. However, based on vegetation mapping by PGV Environmental (2019) it is estimated that the proposed clearing will involve the removal of less than 1 ha of Black Cockatoo habitat.

Conservation Significance

Two species of conservation significance were identified as utilising the site during the field survey (Forest Red-tailed Black Cockatoo and Carnaby's Black Cockatoo). The site is within the modelled distribution (non-breeding range) but not within the breeding range for Carnaby's Black Cockatoo and within the modelled distribution (likely to occur) for the Forest Red-tailed Black Cockatoo (DSEWPaC, 2012).

Based on the habitats present, Harewood (2019) determined that two additional species of conservation significance, Baudin's Black Cockatoo and the Peregrine Falcon, may possibly occur at times. However, the site is located outside of the distribution for Baudin's Black Cockatoo (DSEWPaC, 2012). The western-most distribution for the species is generally described as the eastern strip of the Swan Coastal Plain including West Midland, Armadale, Byford, Mundijong, Serpentine, North Dandalup and further west to the coast at Lake Clifton, Australind, Bunbury, Busselton and Dunsborough (Johnstone and Kirky, 2008).

The Peregrine Falcon is generally uncommon and only likely to occur very infrequently for brief periods. Their current status on site and/or in the general area is difficult to determine because they were not identified during the survey and no evidence of their use of the site was observed. The Peregrine Falcon generally feeds on small and medium-sized birds as well as rabbits and other species. Given the degraded nature of habitat in the site, it is unlikely that the site provides significant food resources for the Peregrine Falcon.

The potential impact on the significant species listed as potentially being present will vary depending on their current degree of utilisation/population densities and preferred habitat requirements (e.g. quantity and quality of potential foraging habitat that will be affected when clearing of the site is undertaken).

ENVIRONMENTAL IMPACTS

The main environmental impact related to the Claremont Station upgrade project will be the removal of potential Black Cockatoo habitat trees and foraging habitat. Harewood (2019) identified six trees as potentially suitable for Black Cockatoo use (Figure 3 of Attachment 2). One of these trees located at the Station building will be retained.

The extent of quality foraging habitat within the site has been estimated to be less than 1 ha based on the vegetation mapping by PGV Environmental (2019). As it has been assumed that the entire site will be cleared for the project, this vegetation will be removed.

ENVIRONMENTAL APPROVALS

Project environmental approvals can be split into State and Federal approvals.

State Approvals

Two possible approval pathways exist under the *Environmental Protection Act 1986 (EP Act)* to undertake native vegetation clearing. The first involves a referral to the Environmental Protection Authority (EPA) under Section 38 of the EP Act where a proposal has the potential to have a significant environmental impact. Referral under Section 38 of the EP Act can be made by:

- The proponent;
- A decision making authority (DMA); or

A third party.

Referral to the EPA is generally undertaken where a project or proposal is deemed to have a high risk of causing a significant environmental impact. Based on the results of the biological surveys for the Claremont Station project, it is Aurora Environmental's view that the proposed clearing is unlikely to have a significant environmental impact to warrant referral to the EPA and would be considered a very low risk of being assessed by the EPA if it were referred.

The second approval pathway under the EP Act is the native vegetation clearing application process. Under Section 51C of the EP Act, clearing of native vegetation requires a permit from the Department of Water and Environmental Regulation (DWER) unless there is an applicable exemption under Schedule 6 of the EP Act or prescribed under Regulation 5 of the *Environmental Protection* (Clearing of Native Vegetation) Regulations 2004.

Where a clearing permit is required, the DWER will undertake an assessment of the proposed clearing against its '10 clearing principles'. Aurora Environmental has conducted an assessment of the proposed clearing for the project against the DWER's 10 Clearing Principles (Table B).

In summary, after desktop and field assessments of the environmental values of the site, the proposal to clear vegetation in the project area is considered unlikely to be at variance with any of the ten Clearing Principles.

As it is unlikely an exemption would apply to the site, a clearing permit may be needed given the uncertainty about whether some of the native species recorded in the project area are naturally occurring or have been planted. Aurora Environmental recommends consulting with the DWER regarding the requirement for a clearing permit for this site. The ambiguity for this project is based on the EP Act's definition of 'native vegetation'. S51A of the EP Act says native vegetation does not include vegetation that is intentionally sown, planted or propagated unless the vegetation was sown, planted or propagated as required under the EP Act or another written law, or if it is declared to be native vegetation under the regulations.

PGV Environmental (2019) recorded *Xanthorrhoea preissii* plants, one Jarrah and one Tuart within the rail reserve that may be remnant plants. The majority of native species recorded in the road reserve were all considered to have been planted and therefore would not require a clearing permit to be obtained as they are not representative of native vegetation as defined in the EP Act. However, the *'Xanthorrhoea preissii* shrubs mixed with the Norfolk Island Pines among lawn next to Gugeri Street' are old specimens and probably remnant plants (PGV Environmental, 2019). These specimens are registered on the Town of Claremont's Municipal Heritage Inventory as they are regarded as examples of the native vegetation in the area. Given their age, it is unlikely that these Grass trees were planted and therefore are likely classified as native vegetation under the EP Act.

TABLE B: ASSESSMENT AGAINST THE TEN CLEARING PRINCIPLES

IS PROJECT AT VARIANCE WITH THE PRINCIPLE?		COMMENT	
Principle (a) – Native vegetation should not be cleared if it comprises a high level of	The project is unlikely to be at variance with	The majority of the vegetation remaining on site is in a Completely Degraded condition. PGV recorded 26 plant species on the site – 11 native and 15 introduced. This	

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PRINCIPLE	IS PROJECT AT VARIANCE WITH THE PRINCIPLE?	COMMENT				
biological diversity.	this Principle.	level of diversity is considered low.				
Principle (b) – Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna indigenous to Western Australia.	The project is unlikely to be at variance with this Principle.	The fauna habitat present at the site is described as low value due to its degraded condition and lack of diversity. However, evidence of use by two conservation significant bird species (Black Cockatoos) was observed in the project area and an additional conservation significant bird species (Peregrine Falcon) may occasionally visit the site, but would not rely upon the habitat present for its survival. The Black Cockatoo Assessment (Attachment 4) identified six habitat trees with a DBH ≥50cms within the site, five of which will be cleared as part of the redevelopment.				
Principle (c) – Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.	The project is unlikely to be at variance with this Principle.	No declared rare or priority flora species occur or are likely to occur within the site.				
Principle (d) – Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a threatened ecological community.	The project is unlikely to be at variance with this Principle.	No TECs were recorded within the site.				
Principle (e) – Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.	The project is unlikely to be at variance with this Principle.	The project area is located within an urbanised environment and the vegetation to be cleared is primarily remnant native trees or planted vegetation and therefore, is not regarded as significant. The vegetation to be cleared was assessed as being completely degraded and no longer representing an intact vegetation community.				
Principle (f) – Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.	The project is unlikely to be at variance with this Principle.	There are no wetlands or watercourses on the site. The nearest wetland is Lake Claremont, a Conservation Category wetland (CCW) located approximately 400m north of the site. The Swan River (also a CCW) is located approximately 850m south of the site.				
Principle (g) – Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.	The project is unlikely to be at variance with this Principle.	The majority of the site has already been cleared of native vegetation and the additional clearing proposed will not cause appreciable land degradation.				
Principle (h) – Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation	The project is unlikely to be at variance with this Principle.	There are no Environmentally Sensitive Areas (ESAs) within the site. The closest ESA (ID 2394) is approximately 350m north of the site and is associated with Lake Claremont.				

TABLE B: ASSESSMENT AGAINST THE TEN CLEARING PRINCIPLES

PRINCIPLE	IS PROJECT AT VARIANCE WITH THE PRINCIPLE?	COMMENT
area.		
Principle (i) – Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.	The project is unlikely to be at variance with this Principle.	Groundwater is generally between 14m and 23m below the surface of the site, with the salinity being between 1000 and 1500 mg/L (brackish). No dewatering or interference with the groundwater is expected during the redevelopment of the Claremont station. The proposed clearing for the station upgrade is unlikely to result in the deterioration of groundwater quality.
Principle (j) – Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence of flooding.	The project is unlikely to be at variance with this Principle.	The majority of the site has already been cleared of native vegetation. Given the small scale of the proposed clearing, it is considered unlikely to cause or exacerbate the intensity of flooding at the site.

Commonwealth Legislation

The Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) provides the Department of the Environment and Energy (DoEE) the authority to assess an action that may have the potential to significantly impact on a matter of national environmental significance (MNES). A significant impact is defined as an impact which is important, notable, or of consequence, having regard to its context or intensity (DoE, 2013).

The *EPBC Act* applies to 'actions' which:

- have a 'significant impact' on 'matters of national environmental significance';
- are undertaken by Commonwealth government agencies and have a significant impact on the environment anywhere in the world; or
- are undertaken by any person and have a significant impact on Commonwealth land (even if the activity is not actually carried out on the Commonwealth land).

If a project fits one of these descriptions, it will be required to be referred to the DoEE. If the project is not consistent with any of the above descriptions, the environmental impact assessment provisions of the *EPBC Act* will not apply and there is no need to obtain the approval of the Commonwealth Minister for the Environment (EDO, 2012).

The MNES relevant to this project relate to the use or potential use of the site by two listed Black Cockatoo species. As the site contains vegetation that constitutes habitat for two Black Cockatoo species and there is direct evidence of use of this habitat by these species, it is important to consider if the proposed clearing could constitute a significant impact. Table 3 of the *Referral Guidelines* (DSEWPaC, 2012) summarises high risk situations where referral is required due to an action likely to cause a significant impact upon a MNES; actions where there is sufficient uncertainty but referral is recommended; and low risk actions where referral may not be needed.

Clearing of more than 1 ha of quality foraging habitat is deemed at high risk of causing a significant impact, as is the clearing or degradation of any part of a vegetation community known to contain

breeding habitat (DSEWPaC, 2012). Quality is assessed as it pertains specifically to Black Cockatoo use of the habitat. Although the site does not contain intact native vegetation (PGV Environmental, 2019) the proposed disturbance footprint contains 1.8 ha of vegetation (0.3 ha of 'non-native mixed with native plants' and 1.5 ha of 'non-native plants'), less than 1 ha of which is regarded as potential foraging habitat for Black Cockatoos (Attachment 2). The proposed disturbance footprint contains six potential habitat trees, one of these trees will be retained at the Station building.

The DoEE released an updated version of the referral guidelines in 2017 in draft format — *Revised Draft Referral Guideline for Three Threatened Black Cockatoo Species* (DoEE, 2017). At the time of preparing this letter, the draft Guidelines had not been finalised.

According to the Draft Referral Guidelines (DoEE, 2017) "a significant impact is an impact which is important, notable or of consequence, having regard to its context or intensity." The Swan Coastal Plain is regarded as providing 'critical foraging resources for Carnaby's Cockatoo during the non-breeding season' (DoEE, 2017). The Swan Coastal Plain is used by Black Cockatoos primarily for foraging resources with some small patches of breeding habitat (DoEE, 2017).

The draft Referral Guidelines indicate that an action that may lead to one or more of the following may constitute a significant action:

- Clearing of known nesting trees or breeding habitat.
- Complete clearance of roost sites that are close to high quality foraging habitat and water resources in non-breeding areas.
- Very high to high quality foraging habitat.

It is important to note that high quality foraging habitat is defined as habitat with a score of 7 or greater using the habitat scoring tool in DoEE (2017).

The starting point for foraging habitat in the proposed disturbance area has been selected as 1 (Low Quality) as the habitat is comprised of individual foraging plants or small stands of foraging plants within a highly urbanised setting, adjacent to a passenger rail corridor. The applicable 'context adjustors' and total habitat quality scores for each of the three Black Cockatoo species is described in Table C below. Using this method, the habitat present is deemed 'quality' habitat for Carnaby's Cockatoo and 'low quality' habitat for Baudin's and the Forest Red-tailed Black Cockatoo.

TABLE C: FORAGING HABITAT SCORING

Score	Carnaby's Black Cockatoo	Baudin's Black Cockatoo	Forest Red-tailed Black Cockatoo
Starting	1	1	1
+ 3	Is within the Swan Coastal Plain	-	-
+ 2	Contains potential breeding trees	Contains potential breeding trees	Contains potential breeding trees
-1	-	No clear evidence of feeding debris	-

TABLE C: FORAGING HABITAT SCORING

Score	Carnaby's Black Cockatoo	Baudin's Black Cockatoo	Forest Red-tailed Black Cockatoo
-1	Is >12km from a known breeding location	Is >12km from a known breeding location	Is >12km from a known breeding location
Total Score	5	1	2

As the draft Guidelines have not been finalised, the DoEE recommends that the original referral guidelines and the Significant Impact Guidelines 1.1 – Matters of National Environmental Significance (DoE, 2013) are used to assess if a proposed action may constitute a significant impact. The possible impacts on foraging and potential breeding habitat for Black Cockatoos have been considered using the criteria outlined in the Significant Impact Guidelines 1.1 – Matters of National Environmental Significance (DoE, 2013) and are summarised in Table D.

TABLE D: SIGNIFICANT IMPACT ASSESSMENT OF PROPOSED CLEARING

	SIGNIFICA	ANT IMPACT	LIKELY	
IMPACT CRITERIA	Carnaby's	Baudin's	Forest Red- Tailed	JUSTIFICATION
Will the action lead to a long-term decrease in the size of a population?	No	No	No	Other areas of suitable foraging habitat exist nearby. Approximately 1,400 ha of remnant native vegetation is within 10km of the site. Much of this is likely to contain 'potential' breeding habitat. The vegetation at the site is not currently suitable for black cockatoo breeding as there are no suitable hollows and it is located in a highly urbanised area.
Will the action reduce the area of occupancy of the species?	No	No	No	The proposed action will reduce the amount of low quality foraging habitat by less than 1 ha. All three Black Cockatoo species are highly mobile and can forage over a large area and are unlikely to rely on the habitat at the site.
Will the action fragment an existing population into two or more populations?	No	No	No	All three Black Cockatoo species are highly mobile and the proposed clearing will not create a barrier to movement across the region.

TABLE D: SIGNIFICANT IMPACT ASSESSMENT OF PROPOSED CLEARING

	SIGNIFICANT IMPACT LIKELY						
IMPACT CRITERIA	Carnaby's	Baudin's	Forest Red- Tailed	JUSTIFICATION			
Will the action adversely affect habitat critical to the survival of the species?	No	No	No	Foraging habitat is considered important for Black Cockatoos on the Swan Coastal Plain however much larger areas of suitable foraging habitat exist nearby. Approximately 1,400 ha of remnant native vegetation is within 10km of the site. The site does not contain any currently used hollows or roosting habitat. Trees that represent potential breeding habitat (DBH≥50cms) are present on site, however given the site context (highly urbanised, close to passenger train line) it is very unlikely these trees would be used by Black Cockatoos for nesting in the future. Based on this, the habitat is not regarded as being critical to the survival of the species.			
Will the action disrupt the breeding cycle of a population?	No	No	No	The site does not contain any currently used hollows/breeding or roosting habitat, no evidence of nesting was observed. Trees that represent potential breeding habitat (DBH > 50cms) are present on site, however given the site context (highly urbanised, close to passenger train line) it is very unlikely these trees would be used by Black Cockatoos for nesting in the future. Therefore, breeding cycles of the population will not be disrupted.			
Will the action result in invasive species that are harmful to a critically endangered or endangered species becoming established in the endangered or critically endangered species' habitat?	No	No	No	Clearing is not expected to introduce an invasive species that is harmful to Black Cockatoos.			
Will the action introduce disease that may cause the species to decline?	No	No	No	Clearing will not introduce any disease that would cause the three Black Cockatoo species to decline.			

TABLE D: SIGNIFICANT IMPACT ASSESSMENT OF PROPOSED CLEARING

	SIGNIFICA	ANT IMPACT	LIKELY	
IMPACT CRITERIA	Carnaby's	Baudin's	Forest Red- Tailed	JUSTIFICATION
Will the action modify, destroy, isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline?	destroy, isolate or decrease the availability or quality of habitat to the extent that the species is likely to		Previous clearing and development at and around the site has modified Black Cockatoo foraging habitat. The proposed clearing may slightly reduce the availability of habitat. It is highly unlikely the reduction in availability will lead to species decline; given alternative food sources are available nearby.	
Will the action interfere with the recovery of the species?	No	No	No	The population that would use the foraging habitat is very small in comparison to the geographic distribution of the species. Therefore, any clearing of habitat would not interfere with the recovery of the species.

Given the site is already extensively cleared and developed, the proposed action and consequent slight reduction in foraging habitat is highly unlikely to affect the survival or cause decline of the three Black Cockatoo species.

Based on the available information, there is no evidence that the site contains habitat that currently supports Black Cockatoo breeding or roosting. The site does contain potential breeding habitat (trees of species known to support breeding with a DBH of \geq 50cm) and approximately 1 ha of low quality foraging habitat.

The site is within a highly urbanised area, the majority of which is already cleared of native vegetation and used for residential and commercial purposes. It is located adjacent to busy roads (Shenton Road, Gugeri Street), a passenger railway and station. Taking these contextual factors into consideration, the site is not considered to be favourable for Black Cockatoo breeding now or in the future.

RECOMMENDATIONS

Aurora Environmental recommends that the requirement for a Clearing Permit for the site be discussed in greater detail with DWER. It is likely that a Clearing Permit will be required.

The majority of the native plants that will be removed as part of the station redevelopment are Grass Trees (*Xanthorrhoea preissii*). The Grass Trees located in the western verge of Gugeri Street (between Shenton Road underpass and the Park and Ride carpark, Location 9 on Figure 3 of Attachment 1) covering a distance of nearly 500m are listed on the Town of Claremont's Municipal Heritage Inventory. These plants are recommended to be transplanted to alternative locations within the Station precinct or on Town managed land. It is recommended that PTA liaise with the Town of Claremont to determine the appropriate location for the translocation of the Grass Trees.

The Botanic Parks and Gardens Authority (2018) recommends April to June as the best time of year for transplanting Grass Trees. Further information about the best method of transplanting is available on the Botanic Parks and Gardens Authority website.

Up to five Black Cockatoo habitat trees and 1 ha of low quality foraging habitat will be removed as part of the project. Aurora Environmental does not believe this will have a significant impact on any of the Black Cockatoo species, therefore referral to the Commonwealth DoEE is not recommended.

For and on behalf of Aurora Environmental,



Attachments:

- 1. PGV Environmental (2019) Metronet Claremont Station Upgrade Flora and Vegetation Assessment, Version 2, 24 January 2019.
- 2. Harewood, G. (2019) Fauna Habitat Assessment Claremont Train Station Development Works Claremont, Final, 27 January 2019.
- 3. Claremont Station Potential Clearing Area.

REFERENCES

Australian Government (2018) National Map available at http://nationalmap.gov.au/ [accessed September 2018].

Botanic Gardens and Park Authority (2018) 'Transplanting trees' available at https://www.bgpa.wa.gov.au/about-us/horticulture/gardening-resources/385-transplanting-trees [accessed December 2018].

Bolland, M. (1998) *Soils of the Swan Coastal Plain.* Department of Agriculture. Bunbury, Western Australia.

Department of the Environment (DoE) (2013) Matters of National Environmental Significance – Significant impact guidelines 1.1 *Environment Protection and Biodiversity Conservation Act 1999.*

Department of the Environment and Energy (DoEE) (2017) Revised draft referral guideline for three threatened black cockatoo species: Carnaby's Cockatoo (Endangered) *Calyptorhynchus latirostris*, Baudin's Cockatoo (Vulnerable) *Calyptorhynchus baudinii*, Forest Red-tailed Black Cockatoo (Vulnerable) *Calyptorhynchus banksii naso*.

Department of Primary Industries and Regional Development (DPIRD) (2018) National Resource Information available at http://maps.agric.wa.gov.au/nrm-info/ Government of Western Australia, Perth [accessed July 2018].

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Attachment 1

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METRONET CLAREMONT TRAIN STATION

FLORA AND VEGETATION SURVEY

Prepared for: Public Transport Authority

Report Date: 24 January 2019

Version: 2

Report No. 2018-411



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1 INTRODUCTION

1.1 Background

The Public Transport Authority (PTA) is currently seeking to implement parts of METRONET which is the State Government's long-term plan for public transport. As part of the plan Claremont Station will provide a second location on the Fremantle Line for trains to turn back to enable a greater frequency of trains. The proposal also includes a broader upgrade of the station's facilities, including bringing the station up to current Disability Discrimination Act (DDA) standards.

1.2 Site Location

The Claremont Station (hereafter referred to as 'the site') is located in Claremont in the Town of Claremont, approximately 7.5km south-west of the Perth Central Business District (Figure 1). The site is 8.52ha in size and contains the existing railway reserve and parts of surrounding road reserve from Saladin Street to the Shenton Road Underpass and is generally bounded by Claremont Crescent and Barnfield Road and Gugeri Street (Figure 2).

1.3 Objectives

The objectives of the flora and fauna surveys commissioned by PTA are:

- Assess the biological values of each of the proposed projects to inform the environmental impact assessment process and support broader environmental approvals applications.
- Identify biological values of conservation significance for each of the proposed projects to minimise and/or manage potential environmental impacts.

This report provides the flora and vegetation components of the biological values assessment.

1.4 Scope of Works

A Detailed Flora and Vegetation Survey was undertaken in accordance with EPA Technical Guidance Flora and Vegetation Surveys for Environmental Impact Assessment (EPA, 2016). The survey included the following:

- Desktop search and review of Parks and Wildlife Service's (PaWS) (as part of the Department of Biodiversity, Conservation and Attractions (DBCA)) Naturemap database, the Department of the Environment and Energy's (DoEE) Protected Matters Search Tool and previous survey reports;
- Examination of recent aerial photography and contour maps to provisionally identify vegetation types and condition;
- Field survey using quadrats and/or releves in areas of native vegetation to record native and introduced species as well as a thorough site walkover of any areas of native vegetation;
- Field survey to search for Threatened and Priority species;
- Recording of any significant plant species using a hand-held GPS;
- Description and mapping of vegetation types and vegetation condition;

• Record any weed species listed as Declared Pests under S22 of the BAM Act or as Weeds of National Significance were recorded on the site; and

• Compilation of a flora list.

2 EXISTING ENVIRONMENT

2.1 Land Use

Examination of historical aerial photography shows that the site was largely cleared in 1953 (Plate 1).



Plate 1: Historical Aerial Photography from 1953 (Landgate, 2018)

There are no areas that contain intact native vegetation. The site contains some scattered trees.

2.2 Topography

The site is undulating and varies from approximately 15.3m to 23.8m Australian Height Datum (AHD) (DWER, 2018).

2.3 Geology and Soils

The site is mapped on the Spearwood System which is the second oldest dune system (Bolland, 1998) and contains sand dunes and plains and consists of aeolian sand and limestone over sedimentary rocks (DPIRD, 2018).

The soil phases mapped on the site are:

- EnvGeol LS1 Phase (211Sp_LS1) which is described as limestone: light, yellowish brown, fine
 to coarse-grained, sub-angular to well rounded, quartz, trace of feldspar, shell debris, variably
 lithified, surface kankar, of eolian origin with minor heavy minerals and is on most of the site;
 and
- Spearwood S7 Phase (211Sp__S7) which is described as sand with pale and olive yellow, medium to coarse-grained, sub-angular to sub-rounded quartz and trace of feldspar. The soil is moderately sorted of residual origin and is mapped on the eastern part of the site (DPIRD, 2018).

2.4 Hydrology

Groundwater under the site is at approximately 1mAHD (DWER, 2018), which is between 14.3m and 24.8m below ground level. Groundwater generally flows to the south-west (DWER, 2018). There are no surface water features or wetlands mapped on the site (National Map, 2018).

3 METHODOLOGY

3.1 Database Searches

Database searches using Naturemap (PaWS, 2018) and the Protected Matters Search Tool (DoEE, 2018) were undertaken for a 5km buffer around the site prior to the site survey. Other public information was also researched for the site to determine if there were any additional studies that had been completed on or near the site.

3.2 Site Survey

A flora and vegetation survey of the site was conducted by Dr Paul van der Moezel on 11 October 2018. The whole site was walked to record the vegetation types and native species on the site. Access was not needed within the fenced rail reserve as it did not contain any intact native vegetation.

No quadrats or releves were sampled as the whole site did not contain any intact native vegetation.

3.3 Survey Conditions

The conditions that the survey was undertaken in are presented in Table 1 in order to assess the adequacy of the survey. In summary, there were no constraints to the survey.

Table 1: 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 October was optimal to record most of the native species.
Sources of information (historic/recent or new data)	No	The flora in the Perth Metropolitan Region 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. 2018 was a good year for ephemeral species, including orchids.
Disturbances (Fire)	No	The fire age of the vegetation was greater than 5 years.
Intensity of survey (e.g. In retrospect was the intensity adequate)	No	The small site and ease of access made for a full coverage. Access was
Completeness (e.g. was relevant area fully surveyed)	No	not required within the rail reserve.
Resources (e.g. degree of expertise available for plant identification)	No	Experienced botanist undertook plant identifications on site.

Issue	Constraints (Y/N)*	Comment
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	Perth's Bush Forever

^{*}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.

4 RESULTS

4.1 Flora Database Searches

The conservation significant flora identified in the searches of Naturemap database (Appendix 1) and the Protected Matters Search Tool (Appendix 2) as occurring within 5km of the site are listed in Table 2. Table 3 lists preferred habitat of these species.

Table 2: Conservation Significant Flora likely to occur within 5km of the Site

Scientific Name	Common Name	Conservation Status (WA)	Status under EPBC Act
Caladenia huegelii	King Spider-orchid, Grand Spider-orchid, Rusty Spider- orchid	Schedule 1	Endangered
Drakaea elastica	Glossy-leafed Hammer Orchid	Schedule 1	Endangered
Grevillea thelemanniana subsp. thelemanniana	Spider Net Grevillea	Schedule 1	Critically Endangered
Diuris micrantha	Dwarf Bee-orchid	Schedule 2	Vulnerable
Diuris purdiei	Purdie's Donkey-orchid	Schedule 2	Endangered
Diuris drummondii	Tall Donkey Orchid	Schedule 3	Vulnerable
Drakaea micrantha	Dwarf Hammer-orchid	Schedule 3	Vulnerable
Eucalyptus x mundijongensis		Priority 1	
Typhonium peltandroides		Priority 1	
Acacia benthamii		Priority 2	
Adiantum capillus- veneris	Maidenhair	Priority 2	
Calothamnus		Priority 2	
macrocarpus			
Fabronia hampeana		Priority 2	
Melaleuca viminalis		Priority 2	
Poranthera moorokatta		Priority 2	
Acacia horridula		Priority 3	
Amanita fibrillopes		Priority 3	
Amanita wadjukiorum		Priority 3	
Austrostipa mundula		Priority 3	
Beyeria cinerea subsp. cinerea		Priority 3	
Hibbertia spicata subsp.		Priority 3	
leptotheca			
Lasiopetalum glutinosum subsp. glutinosum		Priority 3	
			1
Lasiopetalum membranaceum		Priority 3	
Schoenus capillifolius		Priority 3	
schoenus capillijolius		PHOHILY 3	

Scientific Name	Common Name	Conservation Status (WA)	Status under EPBC Act
Stylidium maritimum		Priority 3	
Calothamnus graniticus		Priority 4	
subsp. leptophyllus		Friority 4	
Dodonaea hackettiana	Hackett's Hopbush	Priority 4	
Hypolaena robusta		Priority 4	
Jacksonia sericea	Waldjumi	Priority 4	

Conservation Codes are shown in Appendix 3

Table 3: Preferred habitat of Identified Conservation Significant Flora

Scientific Name	Common Name	Habitat
Caladenia huegelii	King Spider-orchid,	
	Grand Spider-	The Grand Spider-orchid prefers sand or clay loam. This
	orchid, Rusty	speices generally does not survive in disturbed areas.
	Spider-orchid	
Drakaea elastica	Glossy-leafed Hammer Orchid	The Glossy-leafed Hammer Orchid prefers low-lying
		situations adjoining winter-wet swamps. This species
		oes not survive in disturbed areas
Grevillea		Spider Net Grevillea is recorded from the edge of a
thelemanniana	Spider Net Grevillea	seasonal clay based open depression, on slightly deeper
subsp.	Spider Net Grevined	sandier soils. Moist grey-brown sandy loam over clay
thelemanniana		(Western Australian Herbarium, 2012)
		The Dwarf Bee-orchid is usually found on cleared
Diuris micrantha	Dwarf Bee-orchid	firebreaks or open sandy patches that have been
Diano imeranena	Dwarr bee orema	disturbed with in Jarrah Banksia woodland or thickets of
		Spearwood (Kunzea ericifolia) (Williams et al., 2001)
Diuris purdiei	Purdie's Donkey-	Purdie's Donkey Orchid occurs in grey-black sand in
Diano pararei	orchid	moist winter-wet swamps
Diuris drummondii	Tall Donkey Orchid	The Tall Donkey Orchid grows in low-lying depressions,
Diane araninenan	ran Bonney Gronna	swamps.
	Dwarf Hammer- orchid	Dwarf Hammer-orchid occurs in grey sands over dark,
Drakaea micrantha		grey to blackish, sandy clay-loam substrates in winter
		wet depressions or swamps
Eucalyptus x		Eucalyptus x mundijongensis is found in loam in
mundijongensis		paddocks.
Typhonium		Typhonium peltandroides grows in shallow sand
peltandroides		amongst rough sandstone, red clay on sides of gorges,
pertunatoraes		vine thickets, rocky sites or along watercourses.
Acacia benthamii		Acacia benthamii grows on sand, typically on limestone
		breakaways
Adiantum capillus-	Maidenhair	Adiantum capillus-veneris grows in moist, sheltered sites
veneris	ivialuciiiali	in gorges and on cliff walls.
Calothamnus		Calothamnus macrocarpus occurs in rocky quartzite
macrocarpus		soils, sand on slopes.

Scientific Name	Common Name	Habitat	
		Fabronia hampeana occurs on sheltered wet trunk of	
Fabronia hampeana		Macrozamia dyeri in shrub layer (Western Australian	
		Herbarium, 2005)	
		Melaleuca viminalis is recorded from stony riverbed in	
		rapids with sandstone rocks overlying volcanics, in the	
Melaleuca viminalis		creekline of sandstone gorges in sand among rocks, and	
		around a pool below a waterfall (Craven, Lepschi and	
		Cowley, 2010)	
Poranthera		Poranthara magrakatta grows in white silica sand	
moorokatta		Poranthera moorokatta grows in white silica sand	
Acacia horridula		Acacia horridula grows in gravelly soils over granite,	
Acacia nornadia		sand on rocky hillsides.	
Amanita fibrillanas		Amanita fibrillopes is recorded on grey sand on tracks	
Amanita fibrillopes		(Davison et al., 2013)	
Amanita		Amanita wadjukiorum is solitary to gregarious, in sandy	
wadjukiorum		soil in degraded native vegetation (Davidson et al, 2013)	
Austrostipa		Austrostipa mundula occurs on plains in grey sand	
mundula		(Western Australian Herbarium, 2001)	
Beyeria cinerea		Beyeria cinerea subsp. cinerea grows in sand over	
subsp. cinerea		limestone on road verges, gullies	
Hibbertia spicata		Hibbertia spicata subsp. leptotheca grows near-coastal	
subsp. leptotheca		limestone ridges, outcrops and cliffs	
Lasiopetalum			
glutinosum subsp.		Lasiopetalum glutinosum subsp. glutinosum occurs in	
glutinosum		lateritic and granitic soils.	
Lasiopetalum		Lasiopetalum membranaceum grows in sand over	
membranaceum		limestone.	
Schoenus		Cabacana agaillifalius agasus in brasun agud an claumans	
capillifolius		Schoenus capillifolius grows in brown mud on claypans.	
Ctulidium		Stylidium maritimum occurs in sand over limestone on	
Stylidium		dune slopes and flats in coastal heath and shrubland,	
maritimum		open Banksia woodland.	
Calothamnus		Calathamnus aranitisus subsa lantanhullus assura in	
graniticus subsp.		Calothamnus graniticus subsp. leptophyllus occurs in	
leptophyllus		clay over granite, lateritic soils on hillsides.	
Dodonaea	Haakatt'a Haraburd	Hackett's Hopbush occurs in sand with outcroping	
hackettiana	Hackett's Hopbush	limestone.	
Hypolaena robusta		Hypolaena robusta grows in white sand on sandplains.	
Jacksonia sericea	Waldjumi	Waldjumi grows in calcareous and sandy soils.	
*		page searches and SDPAT (DOFF 2018) unless otherwise	

^{*} sourced from Florabase, PaWS database searches and SPRAT (DoEE, 2018) unless otherwise denoted

4.2 Flora

The site did not contain any intact native vegetation. *Xanthorrhoea preissii* plants, one Jarrah and one Tuart were recorded within the rail reserve and may be remnant plants. Most native species recorded in the road reserve were all considered to have been planted. The *Xanthorrhoea preissii* shrubs mixed with the Norfolk Island Pines among lawn next to Gugeri Street are old specimens and probably remnant plants.

No weed species listed as Declared Pests under S22 of the BAM Act or as Weeds of National Significance were recorded on the site.

A list of all the trees and shrubs recorded on the site is provided in Table 4.

Table 4: Trees and Shrubs Recorded on the Site

Scientific Name	Common Name	Native to Site
Acacia cyclops	Red-eyed Wattle	-
Acacia saligna	Orange Wattle	-
Agonis flexuosa	WA Peppermint	-
Araucaria heterophylla	Norfolk Island Pine	-
Brachychiton populneus	Kurrajong	-
Callistemon viminalis	Bottlebrush	-
Cinnamomum camphora	Camphor Laurel	-
Corymbia citriodora	Lemon-scented Gum	-
Corymbia cladocalyx	Sugar Gum	-
Erythrina indica	Coral Tree	-
Eucalyptus caesia	Silver Princess	-
Eucalyptus erythrocorys	Illyarrie	-
Eucalyptus lehmannii	Bushy Yate	-
Eucalyptus gomphocephala	Tuart	Potentially
Eucalyptus marginata	Jarrah	Potentially
Eucalyptus platypus	Round Leaved Moort	-
Ficus microphylla var. hillii	Hill's Weeping Fig	-
Grevillea olivacea	Olive Grevillea	-
Hakea prostrata	Harsh Hakea	-
Hymenosporum flavum	Native Frangipani	-
Liquidambar styraciflua	Liquidambar	-
Melaleuca quinquenervia	Broad Leaved Paperbark	-
Melia azedarach	Cape Lilac	-
Jacaranda mimosifolia	Jacaranda	-
Phoenix dactylifera	Date Palm	-
Xanthorrhoea preissi	Balga	Potentially

4.3 Vegetation

4.3.1 Vegetation Types

No intact native vegetation was recorded on the site.

A broad description of the vegetation recorded on the site follows. Photographs of areas described are provided in Appendix 1 and the locations shown on Figure 3.

Location 1 – WA Peppermint in road reserve. Two Xanthorrhoea preissii in rail reserve.

Location 2 – Hill's Weeping Fig and WA Peppermint in road reserve.

Location 3 – *Xanthorrhoea preissii*, Lemon-scented Gum, one Jarrah and one Tuart in rail reserve, south side.

Location 4 – WA Peppermint in road reserve

Location 5 – Bottlebrush in road reserve.

Location 6 – Camphor Laurel at rail station

Location 7 – WA Peppermint and Liquidambar over garden beds

Location 8 – Eucalyptus caesia, E. erythrocorys over garden beds

Location 9 – Norfolk Island Pines and scattered Xanthorrhoea preissii on lawn

Location 10 – Sugar Gum, Lemon-scented Gum, Kurrajong

Location 11 - Cape Lilac, Melaleuca quinquenervia, Kurrajong in old drainage sump

Location 12 - Coral Trees next to rail station

Location 13 – Camphor Laurel, Native Frangipani, Lemon-scented Gum

Location 14 – Jacarandas

Location 15 – Exotic Eucalyptus, Bottlebrush, Acacia cyclops, Hakea prostrata (planted)

Location 16 – Eucalyptus caesia, E. erythrocorys, E. platypus, E. lehmannii, Hill's Weeping Fig, WA Peppermint

Location 17 – Tuart (planted) some Xanthorrhoea preissii, Acacia cyclops

Location 18 - Norfolk Island Pine and Jacarandas

4.3.2 Vegetation Condition

The condition of the site was assessed according to the system of Keighery as described in Bush Forever (Government of Western Australia, 2000) (Table 5).

Table 5: 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 to 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.

The whole site was rated as Completely Degraded (Figure 5).

4.4 Conservation Significance of Flora and Vegetation

4.4.1 Flora

No Threatened or Priority flora species were recorded on the site.

4.4.2 Vegetation

No intact native vegetation was recorded on the site. Therefore, no Threatened or Priority Ecological Communities occur on the site.

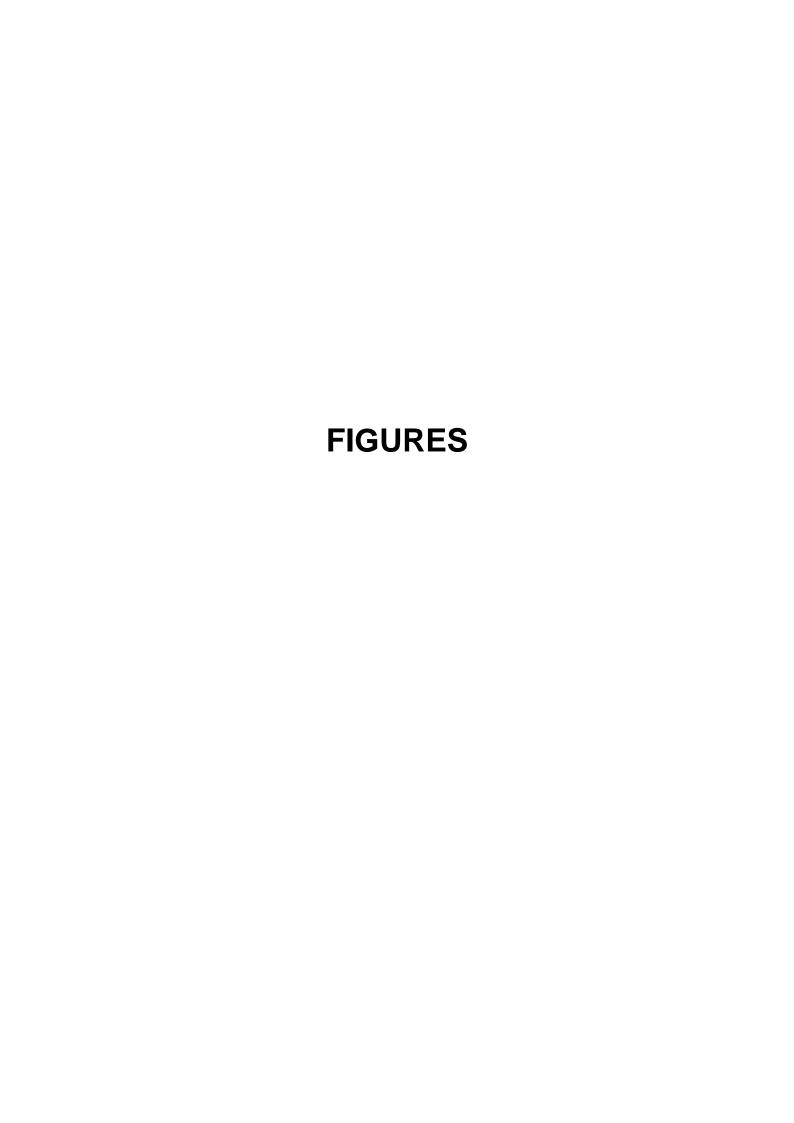
5 SUMMARY AND CONCLUSIONS

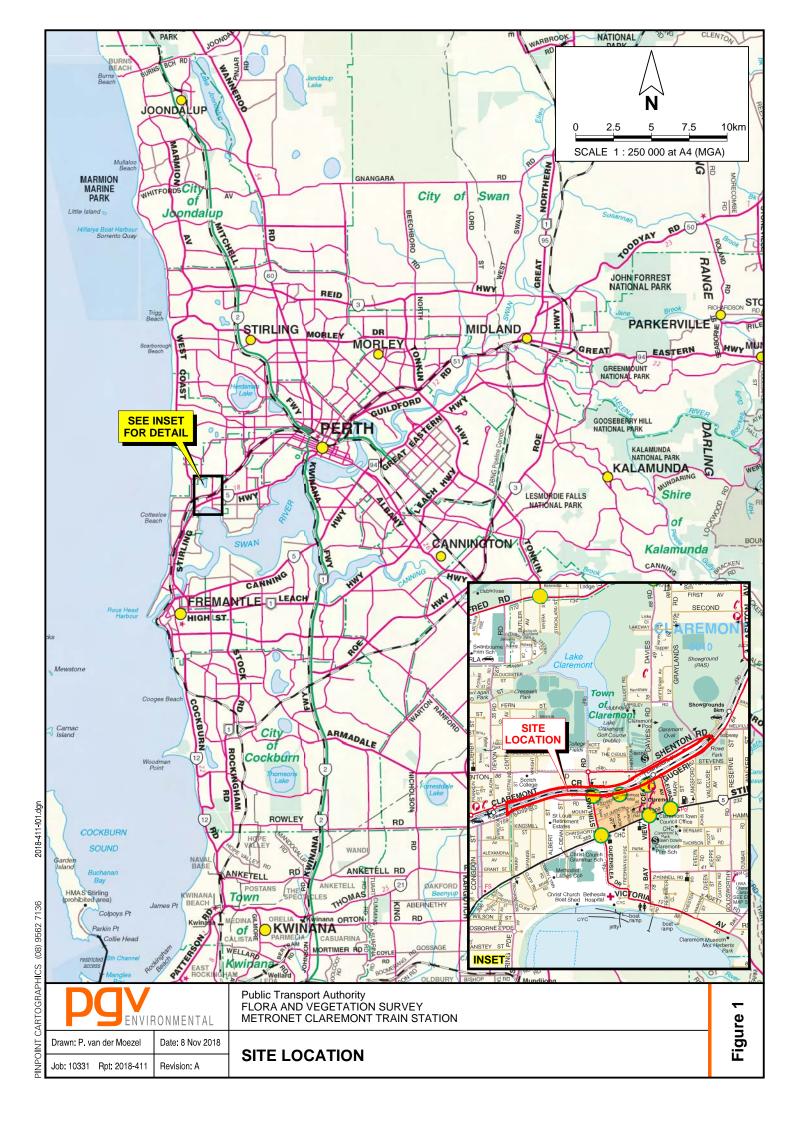
The Flora and Vegetation survey resulted in the following findings:

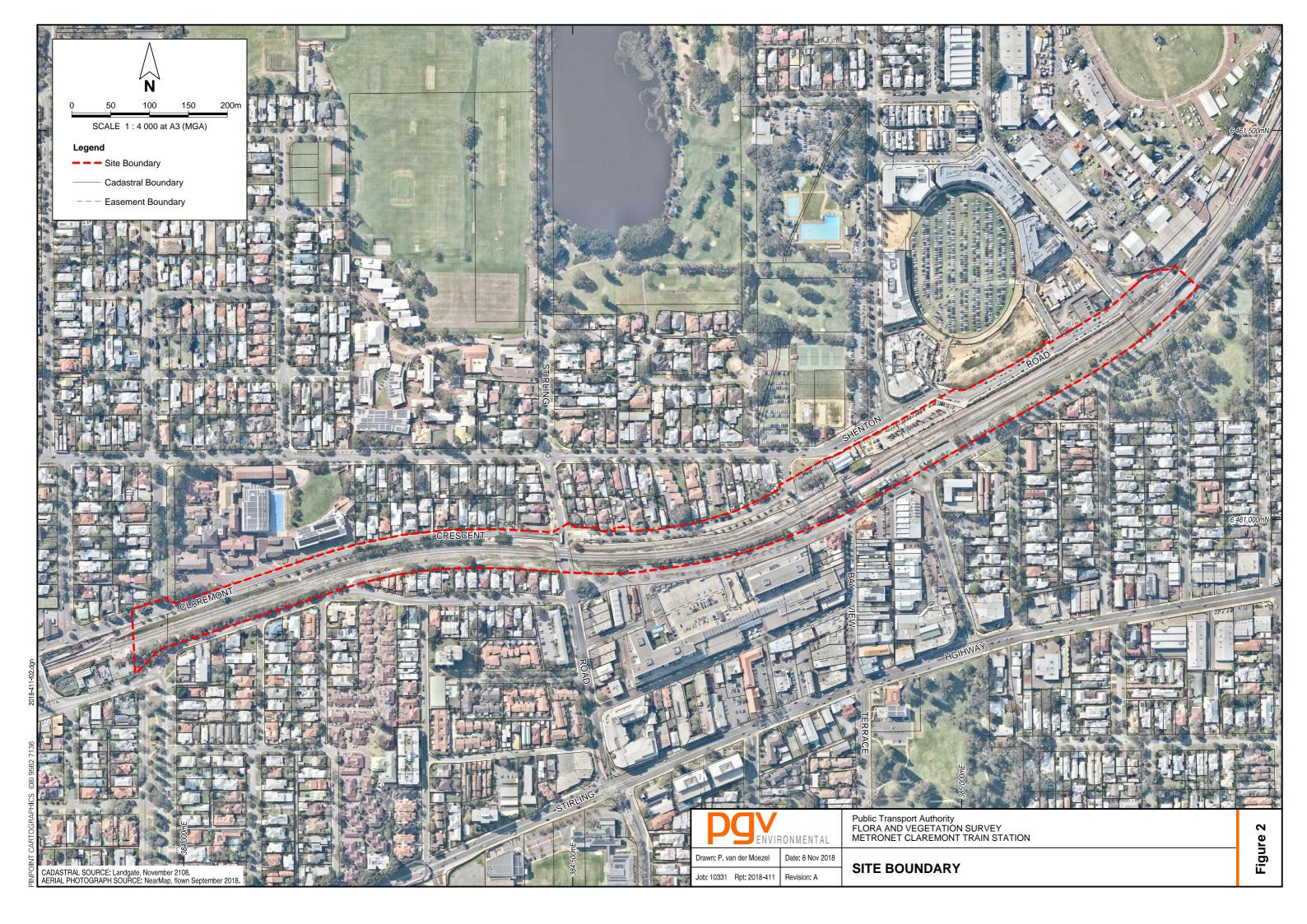
- No intact areas of native vegetation were recorded on the site;
- Xanthorrhoea preissii plants, one Jarrah and one Tuart were recorded within the rail reserve and may be remnant plants. Some native species were recorded in the road reserve and were all considered to have been planted;
- The vegetation in the road reserves and carparks is all planted native and exotic trees and shrubs:
- The condition of all vegetation recorded was rated as Completely Degraded;
- No Threatened (Declared Rare) or Priority flora species were recorded on the site;
- No Threatened or Priority Ecological Communities were recorded on the site; and
- No weed species listed as Declared Pests under S22 of the BAM Act or as Weeds of National Significance were recorded on the site.

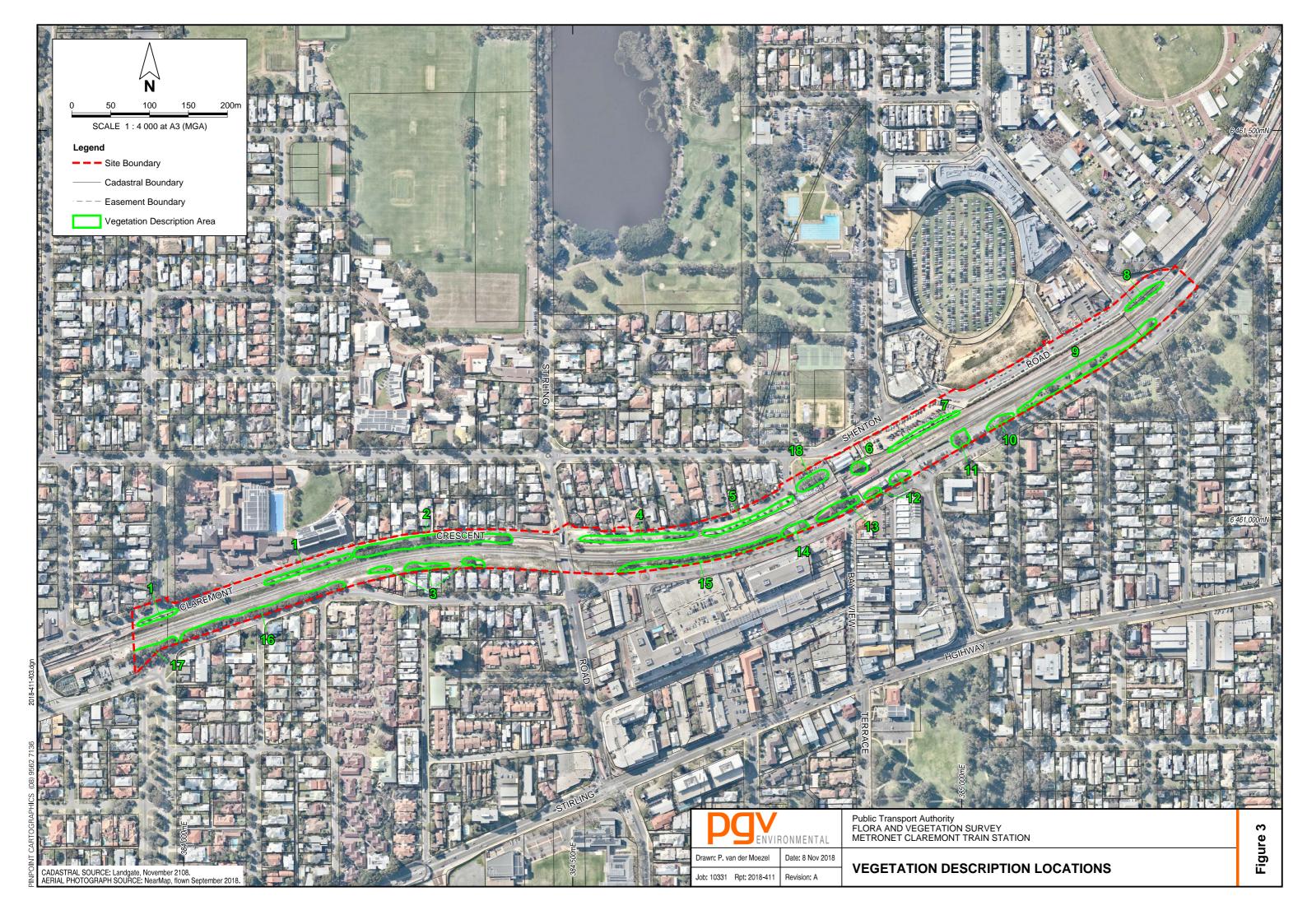
6 REFERENCES

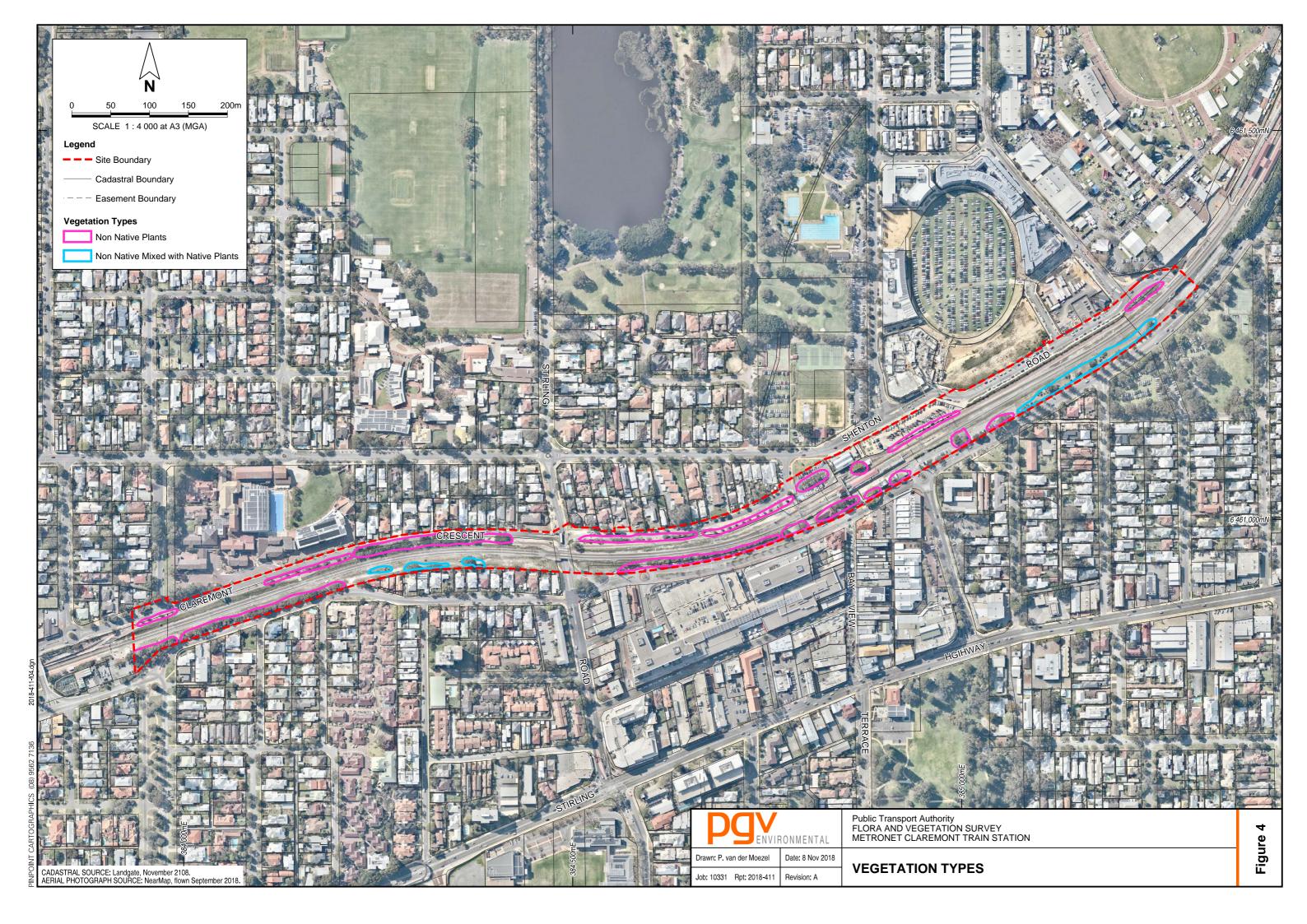
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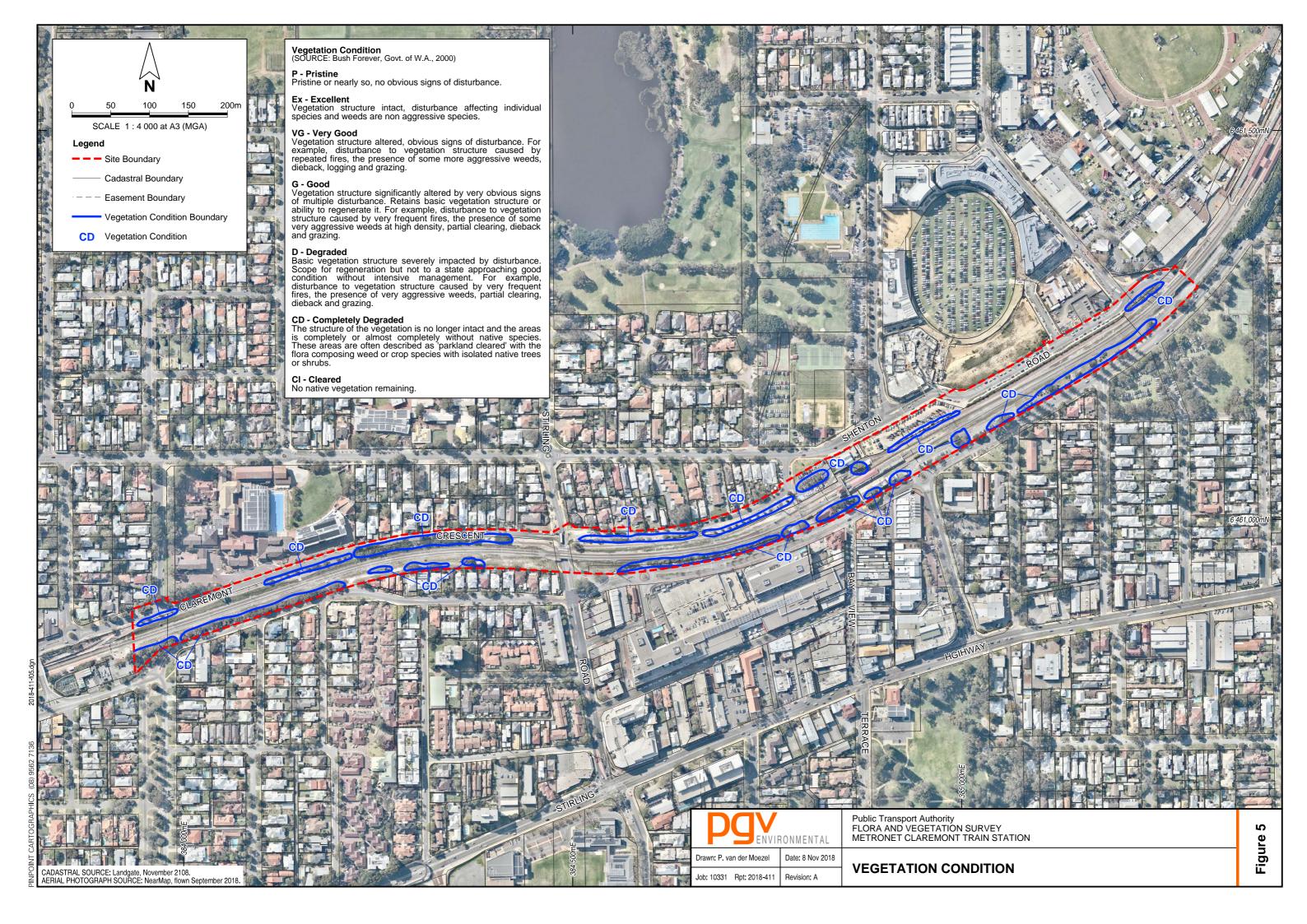












APPENDIX 1 Naturemap Report



NatureMap Species Report

Created By Guest user on 01/11/2018

Current Names Only Yes
Core Datasets Only Yes
Method 'By Line'

Vertices 31° 58' 58" S,115° 46' 13" E 31° 58' 43" S,115° 47' 07" E

Group By Conservation Status

Conservation Status	Species	Records
Non-conservation taxon	1737	21141
Other specially protected fauna	1	1
Presumed extinct	1	1
Priority 1	2	4
Priority 2	7	15
Priority 3	15	50
Priority 4	11	98
Protected under international agreement	26	1111
Rare or likely to become extinct	32	2828
TOTAL	1832	25249

	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Que Area
are or like	ely to bed	come extinct			
1.	24506	Anous tenuirostris subsp. melanops (Australian Lesser Noddy)		Т	
2.	24209	Arctocephalus tropicalis (Subantarctic fur-seal)		Т	
3.	41326	Ardenna carneipes (Flesh-footed Shearwater, Fleshy-footed Shearwater)		Т	
4.	24050	Balaenoptera physalus (Fin Whale)		Т	
5.	24345	Botaurus poiciloptilus (Australasian Bittern)		Т	
6.	1596	Caladenia huegelii (Grand Spider Orchid)		Т	
7.	24784	Calidris ferruginea (Curlew Sandpiper)		Т	
8.	24790	Calidris tenuirostris (Great Knot)		Т	
9.	24731	Calyptorhynchus banksii subsp. naso (Forest Red-tailed Black Cockatoo)		Т	
10.	24733	Calyptorhynchus baudinii (Baudin's Cockatoo, White-tailed Long-billed Black Cockatoo)		Т	
11.	24734	Calyptorhynchus latirostris (Carnaby's Cockatoo, White-tailed Short-billed Black Cockatoo)		Т	
12.	48400	Calyptorhynchus sp. (white-tailed black cockatoo)		Т	
13.	34034	Carcharias taurus (Grey Nurse Shark)		Т	
14.	34031	Carcharodon carcharias (Great White Shark)		Т	
15.	25335	Caretta caretta (Loggerhead Turtle)		Т	
16.	25576	Charadrius mongolus (Lesser Sand Plover)		Т	
17.	24092	Dasyurus geoffroii (Chuditch, Western Quoll)		Т	
18.	25346	Dermochelys coriacea (Leatherback Turtle)		Т	
19.	10796	Diuris drummondii (Tall Donkey Orchid)		Т	
20.	25342	Eretmochelys imbricata subsp. bissa (Hawksbill Turtle)		Т	
21.	24043	Eubalaena australis (Southern Right Whale)		Т	
22.	2107	Grevillea thelemanniana (Spider Net Grevillea)		Т	
23.		Leipoa ocellata (Malleefowl)		Т	
24.	24168	Macrotis lagotis (Bilby, Dalgyte, Ninu)		Т	
25.		Neophoca cinerea (Australian Sea-lion)		Т	
26.		Puffinus huttoni (Hutton's Shearwater)		Т	
27.	24145	Setonix brachyurus (Quokka)		Т	
28.		Sternula nereis subsp. nereis (Fairy Tern)		T	
29.		Thalassarche carteri (Indian Yellow-nosed Albatross)		T	
30.		Thalassarche chrysostoma (Grey-headed Albatross)		Т	
31.		Thalassarche melanophris (Black-browed Albatross)		Т	
32.		Westralunio carteri (Carter's Freshwater Mussel)		T	
esumed	extinct				
33.	14180	Picris compacta		X	Υ
otected (under inte	ernational agreement			
34.		Actitis hypoleucos (Common Sandpiper)		IA	
35.	25554	Apus pacificus (Fork-tailed Swift, Pacific Swift)		IA	

NatureMap is a collaborative project of the Department of Parks and Wildlife and the Western Australian Museum.







	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Quei Area
36.	24779	Calidris acuminata (Sharp-tailed Sandpiper)		IA	
37.	24780	Calidris alba (Sanderling)		IA	
38.	25738	Calidris canutus (Red Knot, knot)		IA	
39.		Calidris melanotos (Pectoral Sandpiper)		IA	
40.	24788	Calidris ruficollis (Red-necked Stint)		IA	
41.	24789	Calidris subminuta (Long-toed Stint)		IA	
42.		Charadrius leschenaultii (Greater Sand Plover)		IA	
43.	48587	Hydroprogne caspia (Caspian Tern)		IA	
44.		Limosa lapponica (Bar-tailed Godwit)		IA	
45.		Limosa limosa (Black-tailed Godwit)		IA	
46.	24690	Macronectes giganteus (Southern Giant Petrel)		IA	
47.		Numenius phaeopus (Whimbrel)		IA	
48.		Oceanites oceanicus (Wilson's Storm-petrel)		IA	
49.		Pandion cristatus (Osprey, Eastern Osprey)		IA	
50.		Plegadis falcinellus (Glossy Ibis)		IA	
51.		Pluvialis fulva (Pacific Golden Plover)		IA	
52.	24383	Pluvialis squatarola (Grey Plover)		IA	
53.	24714	Puffinus griseus (Sooty Shearwater)		IA	
54.	24716	Puffinus pacificus (Wedge-tailed Shearwater)		IA	
55.	25640	Sterna dougallii (Roseate Tern)		IA	
56.	48597	Thalasseus bergii (Crested Tern)		IA	
57.	24806	Tringa glareola (Wood Sandpiper)		IA	
58.	24808	Tringa nebularia (Common Greenshank, greenshank)		IA	
59.	41351	Xenus cinereus (Terek Sandpiper)		IA	
Other speci	ally prot	ected fauna			
60.		Falco peregrinus (Peregrine Falcon)		S	
		, , ,			
Priority 1					
61.	16915	Eucalyptus x mundijongensis		P1	
62.	19209	Typhonium peltandroides		P1	
Priority 2					
63.	3237	Acacia benthamii		P2	
64.		Adiantum capillus-veneris (Maidenhair)		P2	
65.		Calothamnus macrocarpus		P2	
66.		Fabronia hampeana		P2	
67.		Melaleuca viminalis		P2	
68.		Phycodurus eques (Leafy Sea Dragon)		P2	
69.		Poranthera moorokatta		P2	
Priority 3					
70.	3373	Acacia horridula		P3	
71.	43543	Amanita fibrillopes		P3	
72.	48332	Amanita preissii (Cinnamon-ring Lepidella)		P3	
73.	43542	Amanita wadjukiorum		P3	
74.	7831	Angianthus micropodioides		P3	
75.	35317	Austrostipa mundula		P3	
76.	34236	Beyeria cinerea subsp. cinerea		P3	
77.	48579	Euoplos inornatus (inornate trapdoor spider (northern Jarrah Forest))		P3	
78.	11461	Hibbertia spicata subsp. leptotheca		P3	
79.	45081	Lasiopetalum glutinosum subsp. glutinosum		P3	
80.	5038	Lasiopetalum membranaceum		P3	
81.	25249	Neelaps calonotos (Black-striped Snake, black-striped burrowing snake)		P3	
82.		Schoenus capillifolius		P3	
83.		Stylidium maritimum		P3	
84.		Tyto novaehollandiae subsp. novaehollandiae (Masked Owl (southwest))		P3	
Driority 4					
Priority 4	11222	Calathamnus graniticus subsp. Iontonhullus		D4	
85. 86		Calothamnus graniticus subsp. leptophyllus		P4	
86.		Dodonaea hackettiana (Hackett's Hopbush)		P4	
87.		Hydromys chrysogaster (Water-rat, Rakali)		P4	
88.		Hypolaena robusta		P4	
89.		Isoodon fusciventer (Quenda, southwestern brown bandicoot)		P4	
90.		Ixobrychus dubius (Australian Little Bittern)		P4	
	4027	Jacksonia sericea (Waldjumi)		P4	
91.	0 100-	Oxyura australis (Blue-billed Duck)		P4	
91. 92.					
91. 92. 93.	33992	Synemon gratiosa (Graceful Sunmoth)		P4	
91. 92.	33992 48135				

96. ??

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	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
97.	38750	Abortiporus biennis			
98.	3200	Acacia acuminata (Jam, Mangard)			
99.		Acacia applanata			
100.		Acada barbinervis subsp. barbinervis			
101.		Acacia cochlearis (Rigid Wattle)			
102. 103.		Acacia cyclops (Coastal Wattle) Acacia ericifolia			
104.		Acacia incurva			
105.		Acacia iteaphylla	Υ		
106.		Acacia lasiocarpa (Panjang)	·		
107.	11611	Acacia lasiocarpa var. lasiocarpa			
108.	3424	Acacia littorea			
109.	18597	Acacia longifolia subsp. sophorae	Υ		
110.	3442	Acacia microbotrya (Manna Wattle, Kalyang)			
111.	17860	Acacia podalyriifolia	Υ		
112.		Acacia pulchella (Prickly Moses)			
113.		Acacia pulchella var. glaberrima			
114.		Acacia pulchella var. pulchella			
115. 116.		Acacia restiacea Acacia rostellifera (Summer-scented Wattle)			
117.		Acacia saligna (Orange Wattle, Kudjong)			
118.		Acacia saligna subsp. saligna			
119.		Acacia sessilis			
120.	3557	Acacia stenoptera (Narrow Winged Wattle)			
121.	3564	Acacia subcaerulea			
122.	3584	Acacia truncata			
123.	3602	Acacia willdenowiana (Grass Wattle)			
124.	3604	Acacia xanthina (White-stemmed Wattle)			
125.		Acanthistius serratus			
126.		Acanthiza apicalis (Broad-tailed Thornbill, Inland Thornbill)			
127.		Acanthiza chrysorrhoa (Yellow-rumped Thornbill)			
128. 129.		Acanthiza inornata (Western Thornbill)			
130.		Acanthocarpus preissii Acanthorhynchus superciliosus (Western Spinebill)			
131.		Accipiter cirrocephalus (Collared Sparrowhawk)			
132.		Accipiter cirrocephalus subsp. cirrocephalus (Collared Sparrowhawk)			
133.		Accipiter fasciatus (Brown Goshawk)			
134.		Accipiter fasciatus subsp. fasciatus (Brown Goshawk)			
135.		Acentrogobius bifrenatus			
136.		Acentrogobius pflaumi			Υ
137.	40761	Acer negundo	Υ		
138.	48409	Acetabularia caliculus			
139.		Achaearanea convexa			Υ
140.		Achillea millefolium (Yarrow, Milfoil)	Y		
141.		Acrocephalus australia (Australian Reed Warbler)			
142. 143.		Acrocephalus australis subsp. gouldi (Australian Reed Warbler) Acrothamnion preissii			
144.		Acrotriche cordata (Coast Ground Berry)			
145.		Aeonium arboreum	Υ		
146.		Aetapcus maculatus			
147.	38752	Agaricus campestris			
148.		Agaricus sp.			
149.	38753	Agaricus subrufescens			
150.	1505	Agave americana (Century Plant)	Υ		
151.		Agonis flexuosa (Peppermint, Wonil)			
152.		Agonis flexuosa var. flexuosa			
153.		Ailanthus altissima (Tree of Heaven)	Y		
154.		Aira caryophyllea (Silvery Hairgrass)	Y		
155. 156.		Aira praecox (Early Hairgrass) Aizoon pubescens	Y		
150.	40013	Akamptogonus novarae	Υ		
157.	43820	Albuca flaccida	Υ		
159.	-13020	Aldrichetta forsteri	·		
160.	1056	Alexgeorgea nitens			
161.		Allenichthys glauerti			
162.	1375	Allium neapolitanum (Naples Onion)	Υ		
163.	1378	Allium triquetrum (Three-cornered Garlic)	Υ		
164.	1728	Allocasuarina fraseriana (Sheoak, Kondil)			
165.		Allocasuarina humilis (Dwarf Sheoak)			
166.	13908	Allocasuarina lehmanniana subsp. lehmanniana			
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	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
167.		Allomycterus pilatus			
168.		Allothereua maculata			
169.	6565	Alyxia buxifolia (Dysentery Bush)			
170.	00750	Amanita basiorubra			
171.		Amanita umbrinella			
172. 173.	38757	Amazina xanthocephala Amazona auropalliata			Υ
173.		Amblyomma triguttatum			ř
175.	7821	Ambrosia psilostachya (Perennial Ragweed)	Υ		
176.		Ammophila arenaria subsp. arenaria	Y		
177.		Ammotretis elongatus	·		
178.		Amniataba caudavittata			
179.	126	Amphibolis antarctica (Sea Nymph)			
180.	127	Amphibolis griffithii			
181.	200	Amphipogon turbinatus			
182.	26458	Amphiroa anceps			
183.		Amphiroa gracilis			
184.	2380	Amyema miquelii (Stalked Mistletoe)			
185.	0.404.0	Aname mainae			
186.		Anas castanea (Chestnut Teal)			
187. 188.		Anas gracilis (Grey Teal) Anas platyrhynchos (Mallard)			
189.	24313	Anas platyrhynchos subsp. domesticus			
190.	24315	Anas rhynchotis (Australasian Shoveler)			
191.		Anas superciliosa (Pacific Black Duck)			
192.		Andersonia lehmanniana			
193.	7827	Angianthus cunninghamii (Coast Angianthus)			
194.		Anguilla australis			
195.	47414	Anhinga novaehollandiae (Australasian Darter)			
196.		Anidiops villosus			
197.		Anigozanthos humilis subsp. humilis			
198.		Anigozanthos manglesii (Mangles Kangaroo Paw, Kurulbrang)			
199.	29	Anagramma leptophylla (Annual Fern)			
200. 201.		Anoplocapros lenticularis Anser anser			
201.	11725	Anthocercis ilicifolia subsp. ilicifolia			
202.		Anthocercis littorea (Yellow Tailflower)			
204.		Anthochaera carunculata (Red Wattlebird)			
205.		Anthochaera lunulata (Western Little Wattlebird)			
206.		Anthus australis subsp. australis (Australian Pipit)			
207.	26471	Antithamnion armatum			
208.	26477	Antithamnion verticale			Υ
209.	3688	Aotus gracillima			
210.	3186	Aphanes arvensis (Parsley Piert)	Υ		
211.		Apium annuum			
212.	26482	Apoglossum spathulatum			Y
213.		Apogon rueppellii			
214.	24991	Aprasia repens (Sand-plain Worm-lizard)			
215. 216.	24285	Aptychotrema vincentiana Aquila auday (Modra tailed Eagle)			
210.	24200	Aquila audax (Wedge-tailed Eagle) Aracana aurita			
218.		Aracana aurita?			Υ
219.	38759	Arachnopeziza aurata			·
220.		Arachnura higginsi			
221.		Araneus cyphoxis			
222.		Araneus eburneiventris			
223.		Araneus eburnus			
224.		Araneus senicaudatus			
225.		Arctotheca calendula (Cape Weed, African Marigold)	Υ		
226.		Arctotis stoechadifolia (White Arctotis, Silver Arctotis)	Υ		
227.		Arcyria pomiformis			
228.		Ardea medicate (great agret white egret)			
229.		Ardea novembellandica (White faced Horan)			
230. 231.		Ardea novaehollandiae (White-faced Heron) Ardea pacifica (White-packed Heron)			
231.		Ardea pacifica (White-necked Heron) Ardeotis australis (Australian Bustard)			
233.		Areschougia ligulata			
234.		Argemone ochroleuca subsp. ochroleuca	Υ		
235.		Argiope protensa			
236.		Argiope trifasciata			

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	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
237.	7841	Argyranthemum frutescens (Marguerite)	Υ		7.1.04
238.		Argyranthemum frutescens subsp. foeniculaceum	Υ		
239.		Argyrosomus japonicus			
240.		Arothron hispidus			
241.		Arripis georgiana			
242.	25566	Artamus cinereus (Black-faced Woodswallow)			
243.		Artoria linnaei			
244.		Artoria taeniifera			
245.		Artoriopsis expolita			
246.		Artoriopsis joergi			
247.		Arundo donax (Giant Reed)	Υ		
248.		Asparagopsis taxiformis			
249.		Asparagus asparagoides (Bridal Creeper)	Y		
250.		Asparagus plumosus	Y		
251. 252.		Asphodelus fistulosus (Onion Weed)	Ť		
252.	7001	Asteridea pulverulenta (Common Bristle Daisy) Asterostroma persimile			
254.	6323	Astroloma ciliatum (Candle Cranberry)			
255.		Astroloma microcalyx (Native Cranberry)			
256.		Astroloma pallidum (Kick Bush)			
257.		Astroloma xerophyllum			
258.		Atherinomorus lacunosus			
259.		Atherinomorus vaigiensis			
260.	2462	Atriplex hypoleuca			
261.	2463	Atriplex isatidea (Coast Saltbush)			
262.	2471	Atriplex prostrata (Hastate Orache)	Υ		
263.	2475	Atriplex semibaccata (Berry Saltbush)			
264.	26491	Audouinella daviesii			
265.		Aulohalaelurus labiosus			
266.		Austracantha minax			
267.		Australomimetus aurioculatus			
268.	17234	Austrostipa compressa			
269.		Austrostipa elegantissima			
270.		Austrostipa flavescens			
271.		Austrostipa nitida			
272.		Austrostipa variabilis			
273.		Avena barbata (Bearded Oat)	Y		
274. 275.		Avena fatua (Wild Oat) Axonopus fissifolius	Y		
275. 276.		Aythya australis (Hardhead)	Ť		
277.		Babiana nana	Υ		
278.	10200	Backobourkia heroine			
279.	16346	Bacopa monnieri	Υ		
280.		Badhamia foliicola			
281.	38978	Badhamia panicea			
282.		Badumna insignis			
283.		Ballarra longipalpus			
284.	1800	Banksia attenuata (Slender Banksia, Piara)			
285.	32580	Banksia dallanneyi var. dallanneyi			
286.	32523	Banksia fraseri var. fraseri			
287.		Banksia menziesii (Firewood Banksia)			
288.		Banksia prionotes (Acorn Banksia)			
289.		Banksia sessilis (Parrot Bush, Pudjak)			
290.		Banksia sessilis var. cygnorum			
291.		Banksia undata var. undata			
292.	32315	Barbula calycina			
293.	45007	Barnardius zonarius	V		
294. 295.		Bartsia trixago Baumea articulata (Jointed Rush)	Υ		
295. 296.		Baumea juncea (Bare Twigrush)			
290.		Baumea vaginalis (Sheath Twigrush)			
298.		Betaphycus speciosus			
299.		Beyeria viscosa (Pinkwood)			
300.		Billima attrita			Υ
301.	38766	Bisporella citrina			Y
302.		Biziura lobata (Musk Duck)			
303.		Blancoa canescens (Winter Bell)			
304.	38848	Bolbitius titubans			
305.	749	Bolboschoenus caldwellii (Marsh Club-rush)			
306.		Boletus sp.			
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	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
307.	26511	Bornetia binderiana			7.1.04
308.	4403	Boronia alata (Winged Boronia)			
309.	16639	Boronia scabra subsp. scabra			
310.	1272	Borya scirpoidea			
311.	3710	Bossiaea eriocarpa (Common Brown Pea)			
312.		Brachaluteres jacksonianus			
313.	42380	Brachyurophis fasciolatus subsp. fasciolatus (Narrow-banded Shovel-nosed Snake)			
314.	42381	Brachyurophis semifasciatus (Southern Shovel-nosed Snake)			
315.	3000	Brassica tournefortii (Mediterranean Turnip)	Υ		
316.		Briza maxima (Blowfly Grass)	Υ		
317.		Briza minor (Shivery Grass)	Υ		
318.		Bromus arenarius (Sand Brome)			
319.		Bromus diandrus (Great Brome)	Y		
320.		Bromus hordeaceus (Soft Brome)	Y		
321.	44532	Bryoerythrophyllum dubium			
322.	20525	Bryopsis gemellipara			
323. 324.	20020	Bryopsis plumosa Proposis vocatita			
325.	32330	Bryopsis vestita Prum accoptoum			
326.		Bryum argenteum Bryum lanatum			
327.	02001	Bryum sp.			
328.	6675	Buglossoides arvensis (Corn Gromwell)	Υ		
329.		Burchardia congesta	•		
330.		Cacatua pastinator (Western Long-billed Corella)			
331.		Cacatua roseicapilla (Galah)			
332.		Cacatua sanguinea (Little Corella)			
333.	24729	Cacatua tenuirostris (Eastern Long-billed Corella)	Υ		
334.	25598	Cacomantis flabelliformis (Fan-tailed Cuckoo)			
335.	42307	Cacomantis pallidus (Pallid Cuckoo)			
336.	1276	Caesia micrantha (Pale Grass Lily)			
337.	3002	Cakile maritima (Sea Rocket)	Υ		
338.	15330	Caladenia arenicola			
339.	1592	Caladenia flava (Cowslip Orchid)			
340.	15348	Caladenia flava subsp. flava			
341.		Caladenia georgei			
342.		Caladenia latifolia (Pink Fairy Orchid)			
343.		Caladenia longicauda (Common White Spider Orchid)			
344.		Caladenia longicauda subsp. calcigena			
345.		Caladenia vulgata			
346.		Calandrinia brevipedata (Short-stalked Purslane)			
347. 348.		Calandrinia corrigioloides (Strap Purslane) Calandrinia liniflora (Parakeelya)			
349.		Calectasia grandiflora (Blue Tinsel Lily)			
350.		Calectasia narragara			
351.		Callithamnion perpusillum			٧
352.		Callitris preissii (Rottnest Island Pine, Maro)			·
353.		Callogobius mucosus			
354.	26534	Callophycus dorsifer			
355.		Callophycus harveyanus			
356.		Callophycus oppositifolius			
357.	5415	Calothamnus lateralis			
358.	5426	Calothamnus quadrifidus (One-sided Bottlebrush, Kwowdjard)			
359.	35756	Calothamnus quadrifidus subsp. angustifolius			
360.	35758	Calothamnus quadrifidus subsp. homalophyllus (Murchison Clawflower)			
361.	35816	Calothamnus quadrifidus subsp. quadrifidus			
362.	5429	Calothamnus sanguineus (Silky-leaved Blood flower, Pindak)			
363.		Calothrix confervicola			Υ
364.		Calothrix crustacea			Υ
365.		Calyptorhynchus banksii (Red-tailed Black-Cockatoo)			
366.		Calytrix angulata (Yellow Starflower)			
367.		Calytrix aurea			
368.		Calytrix flavescens (Summer Starflower)			
369. 370		Calytrix sylvana Campanalla gragaria			
370. 371		Campanella gregaria	V		
371. 372.		Canis lupus (Dog, Dingo) Canis lupus subsp. familiaris (Dog)	Y		
372.		Canis lupus subsp. familiaris (Dog) Cannabis sativa	Y Y		
373. 374.	10104	Cantherhines sp.			
375.		Caprichthys gymnura			
376.	3004	Capsella bursa-pastoris (Shepherd's Purse)	Υ		
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	Name ID	Species Name	Naturalised C	onservation Code	¹ Endemic To Query Area
377.		Caranx sp.			
378.		Carcharhinus brachyurus			
379.		Carcharhinus leucas			
380.		Carcharhinus obscurus			
381.		Carcharhinus sp.			
382.	3005	Cardamine hirsuta (Common Bittercress)	Y		
383.	18555	Cardamine sp. Jandakot (P. Luff s.n. 4/7/1969)	Υ		
384.	24480	Carduelis carduelis subsp. britannica (Goldfinch)	Υ		
385.		Carduus pycnocephalus (Slender Thistle)	Υ		
386.	754	Carex divisa (Divided Sedge)	Y		
387.	43241	Carex thecata			
388.	2795	Carpobrotus edulis (Hottentot Fig)	Y		
389.	26546	Carpopeltis elata			
390.	2951	Cassytha flava (Dodder Laurel)			
391.	2957	Cassytha racemosa (Dodder Laurel)			
392.	19842	Casuarina equisetifolia	Y		
393.		Casuarina glauca	Υ		
394.	1742	Casuarina obesa (Swamp Sheoak, Kuli)			
395.		Catapodium rigidum (Rigid Fescue)	Υ		
396.		Caulerpa cactoides			
397.		Caulerpa cupressoides			
398.		Caulerpa cylindracea			
399.		Caulerpa flexilis var. muelleri			
400.		Caulerpa lagara			
401.		Caulerpa scalpelliformis			
402.		Caulerpa simpliciuscula			
403.		Caulerpa taxifolia var. distichophylla			
404.		Caulerpa trifaria			
405.		Caulocystis uvifera			
406.		Celaenia excavata			
407.	41564	Cenchrus clandestinus (Kikuyu Grass)	Υ		
408.		Cenchrus echinatus (Burrgrass)	Υ		
409.	41563	Cenchrus purpureus (Elephant Grass)	Υ		
410.		Cenchrus setaceus (Fountain Grass)	Υ		
411.		Cenchrus spinifex (Spiny Burrgrass)	Υ		
412.	6539	Centaurium erythraea (Common Centaury)	Y		
413.		Centranthus macrosiphon	Υ		
414.		Centroceras clavulatum			
415.	1125	Centrolepis drummondiana			
416.		Cephaloziella varians			
417.	26599	Ceramium puberulum			
418.	2889	Cerastium glomeratum (Mouse Ear Chickweed)	Y		
419.	38982	Ceratiomyxa fruticulosa			
420.		Cercophonius granulosus			
421.		Cercophonius sulcatus			
422.		Chaetodermis penicilligera			
423.	26607	Chaetomorpha aerea			
424.		Chalinolobus gouldii (Gould's Wattled Bat)			
425.		Chalinolobus morio (Chocolate Wattled Bat)			
426.		Chamelaucium uncinatum (Geraldton Wax)			
427.		Champia affinis			
428.		Champia zostericola			
429.		Charadrius ruficapillus (Red-capped Plover)			
430.		Chasmanthe floribunda (African Cornflag)	Υ		
431.		Cheilodactylus gibbosus			
432.		Cheilodactylus rubrolabiatus			
433.		Cheilopogon olgae?			Υ
434.		Chelidonichthys kumu			
435.		Chelmonops curiosus			
436.	43380	Chelodina colliei (South-western Snake-necked Turtle)			
437.		Chenonetta jubata (Australian Wood Duck, Wood Duck)			
438.		Chenopodium murale (Nettle-leaf Goosefoot)	Υ		
439.					
440.		Cheramoeca leucosterna (White-backed Swallow)			
	47909	Cheramoeca leucosterna (wnite-packed Swallow) Chondracanthus acicularis			Υ
441.	47909 36281				Υ
441. 442.	47909 36281 26631	Chondracanthus acicularis			Y
	47909 36281 26631	Chondracanthus acicularis Chondria capillaris			Y
442.	47909 36281 26631 24980	Chondracanthus acicularis Chondria capillaris Christinus marmoratus (Marbled Gecko)			Y
442. 443.	47909 36281 26631 24980	Chondracanthus acicularis Chondria capillaris Christinus marmoratus (Marbled Gecko) Chroicocephalus novaehollandiae			Y
442. 443. 444.	47909 36281 26631 24980	Chondracanthus acicularis Chondria capillaris Christinus marmoratus (Marbled Gecko) Chroicocephalus novaehollandiae Chrysococcyx lucidus subsp. plagosus (Shining Bronze Cuckoo)			Y







	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
447.	26649	Cladophora albida			
448.		Cladophora feredayi			
449.		Cladophora herpestica			
450.		Cladophora laetevirens			
451.		Cladophora vagabunda			
452. 453.		Cladophora valonioides Cladorhynchus leucocephalus (Banded Stilt)			
455. 454.		Cladostephus spongiosus			
454.		Cladurus elatus			
456.		Claviclonium ovatum			
457.		Clavulina coralloides			Υ
458.	38769	Clavulina vinaceocervina			
459.		Cleidopus gloriamaris			
460.	10804	Clematis linearifolia			
461.		Cnidoglanis macrocephalus			
462.		Codiophyllum flabelliforme			
463.		Codium australasicum			
464.		Codium duthieae			
465. 466.		Codium bangui			
466.		Codium harveyi Codium laminarioides			
468.		Codium mamillosum			
469.		Codium muelleri			
470.		Codium spinescens			
471.	26687	Coeloclonium debile			Υ
472.	26688	Coeloclonium tasmanicum			
473.	26689	Coeloclonium umbellula			
474.	38984	Collaria arcyrionema			
475.	25675	Colluricincla harmonica (Grey Shrike-thrush)			
476.		Colluricincla harmonica subsp. rufiventris (Grey Shrike-thrush)			
477.		Colpomenia peregrina			
478.		Colpomenia sinuosa	.,		
479. 480.		Columba livia (Domestic Pigeon)	Υ		
481.		Comatricha elegans Comatricha ellae			
482.		Comatricha nigra			
483.		Comatricha rigidireta			Υ
484.		Comesperma calymega (Blue-spike Milkwort)			
485.	4552	Comesperma confertum			
486.	4555	Comesperma integerrimum			
487.		Conger wilsoni			
488.		Conocybe apala			
489.		Conospermum triplinervium (Tree Smokebush)			
490.		Conostephium pendulum (Pearl Flower)			
491.		Conostephium preissii			
492. 493.		Conostylis aculeata (Prickly Conostylis) Conostylis aculeata subsp. cygnorum			
493. 494.		Conostylis aurea (Golden Conostylis)			
495.		Conostylis candicans (Grey Cottonhead)			
496.		Conostylis candicans (croy contoninada) Conostylis candicans subsp. calcicola			
497.		Conostylis candicans subsp. candicans			
498.		Conostylis juncea			
499.	1454	Conostylis setigera (Bristly Cottonhead)			
500.	11597	Conostylis setigera subsp. setigera			
501.		Contusus brevicaudus			
502.		Convolvulus sabatius subsp. mauritanicus	Υ		Υ
503.	20074	Conyza sumatrensis	Y		
504.	00770	Coprinellus micaceus			
505. 506.		Coprinellus pyrrhanthes Coracina novaehollandiae (Black-faced Cuckoo-shrike)			
507.	20000	Cormocephalus aurantiipes			
508.		Cormocephalus hartmeyeri			
509.		Cormocephalus novaehollandiae			
510.		Cormocephalus rubriceps			
511.		Cormocephalus strigosus			
512.	48259	Cortaderia selloana subsp. selloana	Υ		
513.	38774	Cortinarius archeri			
514.		Cortinarius rotundisporus			
515.		Corvus bennetti (Little Crow)			
516.	25592	Corvus coronoides (Australian Raven)			
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	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
517.	24417	Corvus coronoides subsp. perplexus (Australian Raven)			
518.	24419	Corvus splendens (House Crow)			
519.		Corynotheca micrantha (Sand Lily)			
520.		Corynotheca micrantha var. elongata			
521.		Corynotheca micrantha var. micrantha			
522.		Cosmos bipinnatus (Cosmos)	Y		Y
523.		Cotoneaster pannosus	Υ		
524. 525.		Cotula australis (Common Cotula)	Υ		
526.		Cotula turbinata (Funnel Weed) Cracticus nigrogularis (Pied Butcherbird)	r		
527.		Cracticus tibicen (Australian Magpie)			
528.		Cracticus tibicen subsp. dorsalis (White-backed Magpie)			
529.		Cracticus torquartus			
530.	25596	Cracticus torquatus (Grey Butcherbird)			
531.	26701	Craspedocarpus blepharicarpus			
532.	3136	Crassula alata	Υ		
533.		Crassula colorata (Dense Stonecrop)			
534.		Crassula glomerata	Υ		
535.		Crassula thunbergiana	Y		
536.		Crassula thunbergiana subsp. thunbergiana	Υ		
537. 538.		Craterium leucocephalum Crepidotus eucalyptorum			
539.	30700	Crepidotus eucalyptotum Crepidotus nephrodes			
540.		Crepidotus variabilis			
541.	39002	Cribraria microcarpa			
542.	39003	Cribraria minutissima			
543.	25400	Crinia insignifera (Squelching Froglet)			
544.		Cristiceps aurantiacus			
545.		Cristiceps australis			
546.		Cristiceps sp.			
547.		Cristonia biloba subsp. biloba			
548.		Cryptandra arbutiflora var. arbutiflora			
549.		Cryptandra arbutiflora var. tubulosa			
550. 551.		Cryptandra mutila			
552.		Cryptandra scoparia Cryptoblepharus buchananii			
553.		Cryptoblepharus plagiocephalus			
554.	20020	Cryptoerithus quobba			
555.	30899	Ctenophorus adelaidensis (Southern Heath Dragon, Western Heath Dragon)			
556.	25027	Ctenotus australis			
557.	25039	Ctenotus fallens			
558.	25040	Ctenotus gemmula (Jewelled South-west Ctenotus (Swan Coastal Plain subpop P3),			
		skink)			
559.		Ctenotus impar			
560.		Cuscuta epithymum (Lesser Dodder, Greater Dodder)	Υ		
561.		Cyanicula gemmata			
562.	25087	Cyclodomorphus celatus (Western Slender Blue-tongue)			
563. 564.	2/12/2	Cyclosa trilobata Cygnus atratus (Black Swan)			
565.		Cymbalaria muralis subsp. muralis	Υ		
566.		Cynodon dactylon (Couch)	Y		
567.	200	Cynoglossus sp.	·		
568.	776	Cyperus brevifolius (Kyllinga Weed)	Υ		
569.	794	Cyperus gymnocaulos (Spiny Flat-sedge)			
570.	801	Cyperus laevigatus	Υ		
571.	806	Cyperus polystachyos (Bunchy Sedge)			
572.		Cyperus tenuiflorus (Scaly Sedge)	Υ		
573.	818	Cyperus vaginatus (Stiffleaf Sedge)			
574.		Cyprinus carpio			
575.	40040	Cypselurus sp.			
576.		Cyrtostylis huegelii			
577. 578.	10904	Cyrtostylis robusta Cystangium balpineum			
579.	26720	Cystophora grevillei			
580.		Cystophora monilifera			
581.		Cystophora pectinata			
582.		Cystophora retroflexa			
583.	30901	Dacelo novaeguineae (Laughing Kookaburra)	Υ		
584.	30902	Dacelo novaeguineae subsp. novaeguineae (Laughing Kookaburra)	Υ		
585.		Dactylopus dactylopus			







	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
586.	7454	Dampiera linearis (Common Dampiera)			
587.	25673	Daphoenositta chrysoptera (Varied Sittella)			
588.	24606	Daphoenositta chrysoptera subsp. pileata (Varied Sittella, Black-capped Sitella)			
589.		Daption capense (Cape Petrel)			
590.		Darwinia citriodora (Lemon-scented Darwinia)			
591.		Dasya cliftonii			
592.		Dasya elongata			.,
593.		Dasya scopulifera			Υ
594. 595.		Dasyclonium flaccidum Dasyclonium incisum			
596.		Dasypogon bromeliifolius (Pineapple Bush)			
597.		Daucus glochidiatus (Australian Carrot)			
598.		Daviesia angulata			
599.		Daviesia decurrens (Prickly Bitter-pea)			
600.	19747	Daviesia decurrens subsp. decurrens			
601.	18560	Daviesia divaricata subsp. divaricata			
602.	3815	Daviesia horrida (Prickly Bitter-pea)			
603.	16585	Daviesia nudiflora subsp. nudiflora			
604.	3832	Daviesia physodes			
605.	3845	Daviesia triflora			
606.		Delena cancerides			
607.	25766	Delma fraseri (Fraser's Legless Lizard)			
608.	25296	Demansia psammophis subsp. reticulata (Yellow-faced Whipsnake)			
609.		Dermatopsis sp.			
610.		Dermocybe clelandii			
611.		Desmocladus asper			
612.		Desmocladus flexuosus			
613.		Diachea leucopodia			
614.		Dianella revoluta (Blueberry Lily)			
615.		Dianella revoluta var. divaricata			
616. 617.		Dicaeum hirundinaceum (Mistletoebird) Dichelachne crinita (Longhair Plumegrass)			
618.		Dichopogon preissii			
619.		Dictyomenia sonderi			
620.		Dictyomenia tridens			
621.		Dictyopteris australis			
622.	26766	Dictyopteris muelleri			
623.	26767	Dictyopteris plagiogramma			
624.	26776	Dictyota dichotoma			
625.		Dictyota diemensis			
626.	29537	Dictyota fastigiata			
627.		Dictyota furcellata			
628.		Didymodon australasiae			
629.		Didymodon torquatus			
630.		Digitaria ciliaris (Summer Grass)	Y		
631.	320	Digitaria sanguinalis (Crab Grass)	Υ		
632. 633.		Dingosa murata Dingosa serrata			
634.		Diodon nicthemerus			
635.	24939	Diplodactylus polyophthalmus			
636.		Diplopeltis huegelii			
637.		Diplopeltis huegelii subsp. huegelii			
638.	3011	Diplotaxis muralis (Wall Rocket)	Υ		
639.	3012	Diplotaxis tenuifolia (Sand Rocket)	Υ		
640.		Dipulus caecus			
641.	19649	Disa bracteata	Υ		
642.		Dischisma arenarium	Υ		
643.		Dischisma capitatum (Woolly-headed Dischisma)	Υ		
644.		Dittrichia graveolens (Stinkwort)	Υ		
645.		Diuris corymbosa Parkanan arkan (Ocarl Han bark)			
646.		Dodonaea aptera (Coast Hop-bush)			
647.		Dromaius novaehollandiae (Emu)			
648.		Drosera erythrorhiza (Red Ink Sundew)			
649. 650.		Drosera erythrorhiza subsp. erythrorhiza Drosera menziesii subsp. menziesii			
651.		Drosera menziesii suusp. menziesii Drosera pallida (Pale Rainbow)			
652.		Drosera parinda (r die r diribow)			
653.		Drosera stolonifera (Leafy Sundew)			
654.		Dysphania multifida (Scented Goosefoot)	Υ		
655.		Echeneis naucrates			
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	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
656.		Echinochloa colona (Awnless Barnyard Grass)	Υ		
657.		Echinostelium elachiston			Υ
658. 659.		Echinostelium minutum Echinothampion hystrix			
660.		Echinothamnion hystrix Echiopsis curta (Bardick)			
661.		Ecklonia radiata			
662.	20000	Edelia vittata			
663.	25096	Egernia kingii (King's Skink)			
664.	25100	Egernia napoleonis			
665.		Egretta garzetta			
666.		Egretta novaehollandiae			
667.		Ehrharta brevifolia (Annual Veldt Grass)	Υ		
668.		Ehrharta brevifolia var. cuspidata	Y		
669.		Ehrharta calycina (Perennial Veldt Grass)	Y		
670. 671.	349	Ehrharta longiflora (Annual Veldt Grass) Elanus axillaris	Υ		
672.	24290	Elanus caeruleus subsp. axillaris (Australian Black-shouldered Kite)			
673.	2.200	Elops hawaiensis			
674.	47937	Elseyornis melanops (Black-fronted Dotterel)			
675.		Elythranthera brunonis (Purple Enamel Orchid)			
676.	26810	Encyothalia cliftonii			
677.	39030	Enerthenema papillatum			
678.		Engraulis australis			
679.		Enoplosus armatus			
680.	38786	Entoloma viridomarginatum			
681.	0.4054	Eolophus roseicapillus			
682.		Eopsaltria australis subsp. griseogularis (Western Yellow Robin)			
683. 684.		Eopsaltria georgiana (White-breasted Robin) Epilobium billardiereanum subsp. cinereum (Variable Willow Herb)			
685.		Epilobium billardiereanum subsp. intermedium			
686.		Epthianura albifrons (White-fronted Chat)			
687.		Epthianura tricolor (Crimson Chat)			
688.		Eragrostis curvula (African Lovegrass)	Υ		
689.	5541	Eremaea pauciflora			
690.	14104	Eremaea pauciflora var. pauciflora			
691.	7215	Eremophila glabra (Tar Bush)			
692.		Eremophila glabra subsp. albicans			
693.		Eriachne ovata			
694.		Erigeron karvinskianus	Υ		
695. 696.	15412	Eriochilus dilatatus subsp. multiflorus Eriophora biapicata			
697.		Ero aphana			
698.	4332	Erodium botrys (Long Storksbill)	Υ		
699.		Erodium cicutarium (Common Storksbill)	Y		
700.	4336	Erodium moschatum (Musky Crowfoot)	Υ		
701.	6219	Eryngium pinnatifidum (Blue Devils)			
702.		Erythracarus decoris			
703.	26821	Erythroclonium muelleri			
704.		Erythroclonium sedoides			
705.		Erythroclonium sonderi			
706.	24379	Erythrogonys cinctus (Red-kneed Dotterel)			
707. 708.	35345	Eubalichthys mosaicus Eucalyptus camaldulensis subsp. obtusa (Blunt-budded River Red Gum)			
708.		Eucalyptus cladocalyx subsp. petila	Υ		Υ
710.		Eucalyptus foecunda (Narrow-leaved Red Mallee)			·
711.		Eucalyptus gomphocephala (Tuart, Duart)			
712.	5708	Eucalyptus marginata (Jarrah, Djara)			
713.	13547	Eucalyptus marginata subsp. marginata (Jarrah)			
714.		Eucalyptus rudis (Flooded Gum, Kulurda)			
715.		Eucalyptus utilis			
716.		Eudyptula minor subsp. novaehollandiae (Little Penguin)			
717.		Euphorbia dendroides	Y		
718.		Euphorbia helioscopia (Sun Spurge)	Y		
719. 720.		Euphorbia maculata Euphorbia peplus (Petty Spurge)	Y		
720. 721.		Euphorbia terracina (Geraldton Carnation Weed)	Υ Υ		
722.	.570	Eupograpta kottae	•		
723.	26829	Euptilocladia spongiosa			
724.		Euptilota articulata			
725.	3880	Eutaxia virgata			







	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
726.		Exocarpos sparteus (Broom Ballart, Djuk)			
727.		Falco berigora (Brown Falcon)			
728.		Falco berigora subsp. berigora (Brown Falcon)			
729. 730.		Falco cenchroides (Australian Kestrel, Nankeen Kestrel) Falco longipennis (Australian Hobby)			
731.		Falco longipennis subsp. longipennis (Australian Hobby)			
732.	2	Favonigobius lateralis			
733.	48244	Feldmannia mitchelliae			
734.	24041	Felis catus (Cat)	Υ		
735.	1515	Ferraria crispa (Black Flag)	Υ		
736.	11445	Ferraria crispa subsp. crispa	Υ		
737.		Festuca rubra (Red Fescue)	Υ		
738.	20216	Ficinia nodosa (Knotted Club Rush)			
739. 740.	904	Filicampus tigris			
740. 741.	094	Fimbristylis velata Fistularia petimba			
742.		Fistularia sp.			
743.		Fistulina hepatica			
744.	27746	Flavoparmelia marchantii			
745.	6221	Foeniculum vulgare (Fennel)	Y		
746.		Foetorepus calauropomus			
747.		Fomitopsis lilacinogilva			
748.		Frankenia pauciflora (Seaheath)			
749.		Freesia alba x leichtlinii	Y		
750.		Fulica atra (Eurasian Coot)			
751. 752.		Fulica atra subsp. australis (Eurasian Coot) Fuligo septica			
752. 753.		Fulmarus glacialoides (Southern Fulmar)			
754.		Fumaria bastardii	Y		
755.		Fumaria capreolata (Whiteflower Fumitory)	Y		
756.	32370	Funaria hygrometrica			
757.	907	Gahnia trifida (Coast Saw-sedge)			
758.		Galeocerdo cuvier			
759.		Gallinula tenebrosa (Dusky Moorhen)			
760.		Gallinula tenebrosa subsp. tenebrosa (Dusky Moorhen)			
761.	25730	Gallirallus philippensis (Buff-banded Rail)			
762. 763.		Gallus gallus Gambusia sp.			
764.	20346	Gamochaeta coarctata	Y		
765.		Ganoderma australe			
766.	20475	Gastrolobium capitatum			
767.	20473	Gastrolobium ebracteolatum			
768.	20483	Gastrolobium linearifolium			
769.		Gastrolobium nervosum			
770.		Gastrolobium spinosum (Prickly Poison)			
771.		Gavicalis virescens (Singing Honeyeater)	.,		
772. 773.	16311	Gazania linearis Geastrum sp.	Υ		
773. 774.	24959	Gehyra variegata			
774.		Gelidium pusillum			
776.		Gelinaria ulvoidea			
777.	32376	Gemmabryum dichotomum			
778.	32380	Gemmabryum pachythecum			
779.	32381	Gemmabryum preissianum			
780.		Geogarypus taylori			
781.		Geranium molle (Dove's Foot Cranesbill)	Y		
782. 783.		Gerygone fusca (Western Gerygone)			
784.	20004	Gigartina disticha Girella zebra			
784. 785.	1518	Gladiolus angustus (Long Tubed Painted Lady)	Y		
786.		Gladiolus caryophyllaceus (Wild Gladiolus)	Y		
787.		Gladiolus undulatus (Wild Gladiolus)	Y		
788.		Glaucosoma hebraicum			
789.	46135	Glebionis coronaria (Summer Chrysanthemum)	Υ		
790.		Gleditsia triacanthos (Honey Locust)	Υ		
791.		Glischrocaryon angustifolium			
792.		Glischrocaryon aureum (Common Popflower)			
793. 794.		Globicephala macrorhynchus (Short-finned Pilot Whale) Gloiocladia halymenioides			
794. 795.		Gloiosaccion brownii			
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796.	47962	Glyciphila melanops (Tawny-crowned Honeyeater)			
797.		Gnathanacanthus goetzeei			
798. 799.		Gnephosis angianthoides Gompholobium aristatum			
800.		Gompholobium confertum			
801.		Gompholobium polymorphum			
802.		Gompholobium shuttleworthii			
803.	3957	Gompholobium tomentosum (Hairy Yellow Pea)			
804.	6161	Gonocarpus pithyoides			
805.		Gonorynchus greyi			
806.		Gracilaria cliftonii			
807.		Gracilaria flagelliformis			
808. 809.		Gracilaria preissiana Gracilaria verrucosa			
810.		Grallina cyanoleuca (Magpie-lark)			
811.		Grateloupia filicina			
812.		Grateloupia imbricata	Y		
813.		Grateloupia subpectinata			
814.	1982	Grevillea crithmifolia			
815.	13450	Grevillea manglesii subsp. manglesii			
816.	8836	Grevillea obtusifolia (Obtuse Leaved Grevillea)			
817.		Grevillea preissii subsp. preissii			
818.		Grevillea synapheae subsp. synapheae			
819.		Grevillea vestita			
820. 821.		Grevillea vestita subsp. vestita Griffithsia corallinoides			Υ
822.		Griffithsia crassiuscula			Y
823.		Griffithsia monilis			
824.		Griffithsia teges			
825.		Guichenotia sarotes			
826.		Gymnapistes marmoratus			
827.	48605	Gymnogaster boletoides			Υ
828.		Gymnopilus allantopus			
829.		Gymnopilus crociphyllus			
830.	38789	Gymnopilus junonius			
831. 832.	32300	Gymnopilus purpuratus Gymnostomum calcareum			
833.	32390	Gymnothorax woodwardi			
834.	38790	Gyrodontium sacchari			
835.		Gyrostemon ramulosus (Corkybark)			
836.	24487	Haematopus longirostris (Pied Oystercatcher)			
837.	1475	Haemodorum spicatum (Mardja)			
838.	2146	Hakea costata (Ribbed Hakea)			
839.		Hakea incrassata (Marble Hakea)			
840.		Hakea prostrata (Harsh Hakea)			
841. 842.		Hakea ruscifolia (Candle Hakea)			
843.		Hakea trifurcata (Two-leaf Hakea) Hakea varia (Variable-leaved Hakea)			
844.		Haliaeetus leucogaster (White-bellied Sea-Eagle)			
845.		Haliastur sphenurus (Whistling Kite)			
846.	47213	Halimeda versatilis			
847.	24689	Halobaena caerulea (Blue Petrel)			
848.	48568	Halopeltis australis			
849.		Haloplegma preissii			
850.		Halydictyon arachnoideum			
851.	3961	Hardenbergia comptoniana (Native Wisteria)			
852. 853.	39701	Hasarius adansoni Hebeloma crustuliniforme			
854.		Heleioporus eyrei (Moaning Frog)			
855.		Heleioporus psammophilus (Sand Frog)			
856.		Heliophila pusilla	Υ		
857.		Heliotropium curassavicum (Smooth Heliotrope)			
858.	26912	Helminthocladia australis			
859.		Helminthora australis			
860.		Hemiandra pungens (Snakebush)			
861.		Hemiergis quadrilineata			
862. 863		Hemigenia incana (Silky Hemigenia)			
863. 864.		Hemigenia sericea (Silky Hemigenia) Hennedya crispa			
865.		Herposiphonia rostrata			







	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
866.	1526	Hesperantha falcata	Y		
867. 868.		Heteroclinus heptaeolus Heteroclinus roseus			
869.		Heterodontus portusjacksoni			
870.	26927	Heterodoxia denticulata			
871.	26929	Heterosiphonia callithamnium			
872.	26930	Heterosiphonia crassipes			
873.		Heterosiphonia lawrenciana			
874.		Heterosiphonia muelleri			
875. 876.	20938	Heterosiphonia wrangelioides Hexagonia vesparia			
877.	5117	Hibbertia cuneiformis (Cutleaf Hibbertia)			
878.		Hibbertia diamesogenos			
879.	5134	Hibbertia huegelii			
880.		Hibbertia hypericoides (Yellow Buttercups)			
881.		Hibbertia hypericoides subsp. hypericoides			
882. 883.		Hibbertia racemosa (Stalked Guinea Flower) Hibbertia stellaris (Orange Stars)			
884.		Hibbertia striata			
885.		Hibiscus tridactylites	Υ		
886.	47965	Hieraaetus morphnoides (Little Eagle)			
887.	25734	Himantopus himantopus (Black-winged Stilt)			
888.		Hippocampus elongatus			
889.		Hippocampus sp.			
890. 891.	24491	Hippocampus tuberculatus Hirundo neoxena (Welcome Swallow)			
892.	24431	Histiophryne sp.			
893.		Histrio histrio			
894.		Hoggicosa forresti			
895.		Hogna crispipes			
896.		Hogna immansueta			
897.	38793	Hohenbuehelia bingarra			
898. 899.		Holconia westralia Holoplatys dejongi			
900.	6222	Homalosciadium homalocarpum			
901.		Hordeum leporinum (Barley Grass)	Υ		
902.	451	Hordeum vulgare (Barley)	Υ		
903.	26946	Hormophysa cuneiformis			
904.		Hovea pungens (Devil's Pins, Puyenak)			
905. 906.		Hovea trisperma (Common Hovea) Hovea trisperma var. trisperma			
907.		Hybanthus calycinus (Wild Violet)			
908.	02.0	Hydnangium carneum			
909.		Hydnoplicata convoluta			
910.	26949	Hydroclathrus clathratus			
911.		Hydrocotyle diantha			
912.		Hydrocotyle hispidula			
913. 914.		Hydrocotyle pilifera var. glabrata Hydrocotyle tetragonocarpa			
915.		Hydrophis elegans (Elegant Seasnake, Bar-bellied Seasnake)			
916.		Hydrophis ornatus (Ornate Reef Seasnake, Sea Snake)			
917.	43384	Hydrophis platurus (Yellow-bellied Seasnake)			
918.		Hydrurga leptonyx (Leopard Seal)			
919.		Hygrocybe conica			
920. 921.		Hylacola cauta subsp. whitlocki (Shy Groundwren) Hymenocladia chondricola			
921.		Hyparrhenia hirta (Tambookie Grass)	Υ		
923.		Hypnea charoides	•		
924.	35898	Hypnea musciformis			
925.	26971	Hypnea ramentacea			
926.		Hypnea valentiae			
927.		Hypocalymma angustifolium (White Myrtle, Kudjid)			
928. 929.		Hypocalymma angustifolium subsp. Swan Coastal Plain (G.J. Keighery 16777) Hypocalymma robustum (Swan River Myrtle)			
929.		Hypochaeris glabra (Smooth Catsear)	Υ		
931.		Hypochaeris radicata (Flat Weed, Cats-ear)	Y		
932.		Hypocrea gelatinosa			
933.		Hypolaena exsulca			
934.	1071	Hypolaena fastigiata			
935.		Ichthyscopus barbatus			
				December 1	******







	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
936.	44000	Idiommata blackwalli			
937.		lleodictyon gracile			
938. 939.		Inocybe clypeata Inocybe fissurata			
940.		Inocybe froudistii			
941.		Inocybe isabellina			
942.	48532	Inocybe leucotaenia			Υ
943.	40870	Inocybe rufuloides	Υ		
944.		Inocybe sabulosa			
945.		Inocybe spadicea			
946. 947.		Inocybe violaceocaulis Ipomoea cairica (Coast Morning Glory)	Υ		
948.		Isolepis marginata (Coarse Club-rush)	ľ		
949.		Isopeda leishmanni			
950.		Isopedella cana			
951.	2229	Isopogon dubius (Pincushion Coneflower)			
952.		Isopogon sphaerocephalus (Drumstick Isopogon)			
953.		Isotropis cuneifolia (Granny Bonnets)			
954.		Isotropis cuneifolia subsp. cuneifolia	.,		
955. 956.		Ixia maculata (Yellow Ixia) Jacksonia furcellata (Grey Stinkwood)	Υ		
957.		Jacksonia sternbergiana (Stinkwood, Kapur)			
958.		Jania affinis			
959.		Jania micrarthrodia			
960.	48292	Jania rosea			
961.		Jania verrucosa			
962.		Juncus kraussii subsp. australiensis			
963. 964.	1188	Juncus pallidus (Pale Rush) Kangaresa proportinos			
965.	4044	Kangarosa properipes Kennedia prostrata (Scarlet Runner)			
966.	70-1-1	Kennedia rubicunda			
967.	4045	Kennedia stirlingii (Bushy Kennedia)			
968.	26995	Kuetzingia canaliculata			
969.		Kyphosus cornelii			
970.	10001	Kyphosus sydneyanus	.,		
971. 972.		Lachenalia bulbifera Lachenalia mutabilis	Y Y		
973.		Lachenalia reflexa	Y		
974.		Lachnum virgineum			
975.		Lactoria concatenatus			
976.		Lactoria cornuta			
977.	29046	Lactuca serriola forma serriola	Υ		
978.	4.40.40	Lagocephalus sceleratus	.,		
979. 980.		Lagunaria patersonia Lagurus ovatus (Hare's Tail Grass)	Y Y		
981.		Lalage tricolor (White-winged Triller)	'		
982.		Lambertia multiflora var. darlingensis			
983.		Lampona brevipes			
984.		Lampona cylindrata			
985.		Lamponella kimba			
986.	6700	Lamprochernes savignyi	V		
987. 988.		Lantana camara (Common Lantana) Larus dominicanus (Kelp Gull)	Υ		
989.		Larus novaehollandiae (Silver Gull)			
990.		Larus novaehollandiae subsp. novaehollandiae (Silver Gull)			
991.	25638	Larus pacificus (Pacific Gull)			
992.	4047	Lathyrus tingitanus (Tangier Pea)	Υ		
993.		Latrodectus hasseltii			
994.		Laurencia brongniartii			
995. 996.		Laurencia clavata Laurencia elata			
996.		Laurencia filiformis			
998.		Laurencia forsteri			
999.		Laurencia obtusa			
1000.	38324	Lavandula dentata var. candicans	Υ		
1001.		Lawrencia spicata			
1002.		Laxmannia squarrosa			
1003. 1004.		Lechenaultia biloba (Blue Leschenaultia)			
1004.		Lechenaultia floribunda (Free-flowering Leschenaultia) Lechenaultia linarioides (Yellow Leschenaultia)			
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	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
1006.		Leiomenia cribrosa			
1007.		Lenormandia latifolia			
1008.		Lenormandia spectabilis			
1009. 1010.		Lentinellus pulvinulus	Υ		
1010.		Leonotis leonurus (Lion's Ear) Leontodon rhagadioloides	Y		
1012.		Lepidium rotundum (Veined Peppercress)			
1013.		Lepidoblennius marmoratus			
1014.	925	Lepidosperma angustatum			
1015.		Lepidosperma calcicola			
1016.	933	Lepidosperma gladiatum (Coast Sword-sedge, Kerbin)			
1017.	936	Lepidosperma leptostachyum			
1018.	940	Lepidosperma pubisquameum			
1019.	941	Lepidosperma resinosum			
1020.	944	Lepidosperma scabrum			
1021.		Lepidosperma sp.			
1022.		Lepidosperma squamatum			
1023.		Lepiota exocarpi			
1024. 1025.		Leptocarpus coangustatus			
1025.		Leptocarpus decipiens			
1027.		Leptoceras menziesii			
1028.		Leptomeria pauciflora (Sparse-flowered Currant Bush)			
1029.		Leptomeria preissiana			
1030.		Leptospermum erubescens (Roadside Teatree)			
1031.	5850	Leptospermum laevigatum (Coast Teatree)	Υ		
1032.	5857	Leptospermum spinescens			
1033.	25133	Lerista elegans			
1034.	25148	Lerista lineopunctulata			
1035.		Lerista praepedita			
1036.		Leucoagaricus leucothites			
1037.		Leucophyta brownii			
1038.		Leucopogon australis (Spiked Beard-heath)			
1039. 1040.		Leucopogon oliganthus Leucopogon parviflorus (Coast Beard-heath)			
1041.		Leucopogon propinquus			
1042.		Leucopogon pulchellus (Beard-heath)			
1043.		Leucopogon racemulosus			
1044.		Leveillea jungermannioides			
1045.		Leviprora inops			
1046.	25005	Lialis burtonis			
1047.	39041	Licea kleistobolus			
1048.		Lichenostomus leucotis (White-eared Honeyeater)			
1049.		Lichmera indistincta (Brown Honeyeater)			
1050.		Lichmera indistincta subsp. indistincta (Brown Honeyeater)			
1051.		Limacella pitereka			
1052.		Limnodynastes dorsalis (Western Banjo Frog)	V		
1053. 1054.	41780	Limonium hyblaeum Linyphia cupidinea	Υ		Y
1054.		Lissocampus runa			Ť
1056.	25378	Litoria adelaidensis (Slender Tree Frog)			
1057.		Litoria moorei (Motorbike Frog)			
1058.		Lobelia anceps (Angled Lobelia)			
1059.		Lobelia rhytidosperma (Wrinkled-seeded Lobelia)			
1060.		Lobelia tenuior (Slender Lobelia)			
1061.	27043	Lobophora variegata			
1062.	27044	Lobospira bicuspidata			
1063.	3048	Lobularia maritima (Sweet Alyssum)	Υ		
1064.		Logania vaginalis (White Spray)			
1065.		Lolium perenne (Perennial Ryegrass)	Y		
1066.		Lolium rigidum (Wimmera Ryegrass)	Y		
1067.		Lorendro coconitoso (Tufted Met Ruch)	Υ		
1068. 1069.		Lomandra caespitosa (Tufted Mat Rush)			
1069.		Lomandra hermaphrodita Lomandra maritima			
1070.		Lomandra micrantha subsp. micrantha			
1072.		Lomandra nigricans			
1073.		Lomandra odora (Tiered Matrush)			
1074.	1239	Lomandra preissii			
1075.	1240	Lomandra purpurea (Purple Mat Rush)			







	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
1076.	1244	Lomandra sonderi			
1077.	1245	Lomandra spartea			
1078.	1246	Lomandra suaveolens			
1079.	4050	Longepi woodman			
1080. 1081.		Lotus angustissimus (Narrowleaf Trefoil)	Y		
1081.		Lucasium alboguttatum Lupinus angustifolius (Narrowleaf Lupin)	Υ		
1083.		Lupinus cosentinii	Y		
1084.		Lupinus luteus (Yellow Lupin)	Y		
1085.		Lycium ferocissimum (African Boxthorn)	Υ		
1086.		Lycosa australicola			
1087.		Lycosa godeffroyi			
1088.	1097	Lyginia barbata			
1089.		Lyginia imberbis			
1090.		Lysimachia arvensis (Pimpernel)	Υ		
1091.		Lysinema pentapetalum	V		
1092. 1093.		Lythrum hyssopifolia (Lesser Loosestrife) Macarthuria australis	Υ		
1093.	2039	Macrohyporia dictyopora			
1095.	24132	Macropus fuliginosus (Western Grey Kangaroo)			
1096.		Macrozamia fraseri			
1097.	85	Macrozamia riedlei (Zamia, Djiridji)			
1098.	24326	Malacorhynchus membranaceus (Pink-eared Duck)			
1099.	25650	Malurus elegans (Red-winged Fairy-wren)			
1100.	25651	Malurus lamberti (Variegated Fairy-wren)			
1101.		Malurus lamberti subsp. assimilis (Variegated Fairy-wren)			
1102.		Malurus leucopterus (White-winged Fairy-wren)			
1103.		Malurus pulcherrimus (Blue-breasted Fairy-wren)			
1104. 1105.		Malurus splendens (Splendid Fairy-wren) Malva arborea (Tree Mallow)	Υ		
1106.		Malva parviflora (Marshmallow)	Y		
1107.		Malva pseudolavatera	Y		
1108.		Manorina flavigula (Yellow-throated Miner)	·		
1109.	38809	Marasmius crinisequi			
1110.		Maratus pavonis			
1111.		Masasteron tuart			
1112.	31237	Mauranthemum paludosum	Y		
1113.		Maxillicosta scabriceps			
1114.	4075	Mediagra littoralia (Strand Madia)	V		Υ
1115. 1116.		Medicago littoralis (Strand Medic) Medicago polymorpha (Burr Medic)	Y		
1117.		Megalurus gramineus (Little Grassbird)	ı		
1118.		Megalurus gramineus subsp. gramineus (Little Grassbird)			
1119.		Meionectes brownii (Swamp Raspwort)			
1120.	36296	Melaleuca armillaris subsp. armillaris	Y		
1121.	5887	Melaleuca cardiophylla (Tangling Melaleuca)			
1122.	5920	Melaleuca huegelii (Chenille Honeymyrtle)			
1123.		Melaleuca huegelii subsp. huegelii			
1124.		Melaleuca lateritia (Robin Redbreast Bush)			
1125. 1126.		Melaleuca parviceps Melaleuca preissigna (Moonah)			
1126.	J95Z	Melaleuca preissiana (Moonah) Melaleuca quinquenervia			
1127.	5959	Melaleuca rhaphiophylla (Swamp Paperbark)			
1129.		Melaleuca ryeae			
1130.		Melaleuca seriata			
1131.	18598	Melaleuca systena			
1132.	5980	Melaleuca thymoides			
1133.	13280	Melaleuca viminea subsp. viminea			
1134.		Melanoleuca fusca			
1135.		Melilotus indicus	Y		
1136. 1137.		Melinis repens Melithreptus brevirostris (Brown-headed Honeyeater)	Υ		
1137.		Melopsittacus undulatus (Budgerigar)			
1139.		Menetia greyii			
1140.		Merops ornatus (Rainbow Bee-eater)			
1141.		Mesomelaena pseudostygia			
1142.	27068	Metagoniolithon radiatum			
1143.		Metavelifer multiradiatus			
1144.		Meuschenia freycineti			
1145.		Meuschenia hippocrepis			
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	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
1146.		Microcarthus strigatus			
1147. 1148.	195	Microcarbo melanoleucos Microlaena stipoides (Weeping Grass)			
1149.		Millotia myosotidifolia			
1150.		Minuartia mediterranea	Υ		
1151.		Mirabilis jalapa	Υ		
1152.		Mirbelia floribunda (Purple Mirbelia)			
1153.	486	Miscanthus sinensis (Eulalia)	Υ		
1154.	7085	Misopates orontium (Lesser Snapdragon)	Υ		
1155.		Missulena granulosa			
1156.		Missulena occatoria			
1157.		Mituliodon tarantulinus			
1158.		Mitzoruga insularis			
1159.	2894	Moenchia erecta (Erect Chickweed)	Υ		
1160.		Molycria quadricauda			
1161. 1162.		Molycria vokes Monacanthus chinensis			
1163.	29418	Monoculus monstrosus	Υ		
1164.		Monotaxis grandiflora (Diamond of the Desert)	· ·		
1165.		Monotaxis grandiflora var. grandiflora			
1166.		Moraea flaccida (One-leaf Cape Tulip)	Υ		
1167.		Moraea setifolia	Y		
1168.	25240	Morelia spilota subsp. imbricata (Carpet Python)			
1169.	25191	Morethia lineoocellata			
1170.	25192	Morethia obscura			
1171.	17503	Morus alba	Υ		
1172.	48008	Morus serrator (Australasian Gannet)			
1173.		Mugil cephalus			
1174.	0.4000	Muraenichthys tasmaniensis			
1175.		Mus musculus (House Mouse)	Y		
1176. 1177.	13/1	Muscari comosum (Tufted Grape Hyacinth) Mustelus antarcticus	Υ		
1177.		Myandra bicincta			
1179.		Myandra cambridgei			
1180.		Mycena carmeliana			
1181.	38812	Mycena kuurkacea			
1182.		Mycena nargan			
1183.	38813	Mycena subgalericulata			
1184.	38814	Mycena tenerrima			
1185.	27077	Mychodea aciculare			
1186.		Mychodea carnosa			
1187.		Mycocalicium subtile			Y
1188.	25610	Myiagra inquieta (Restless Flycatcher)			
1189.	25420	Myliobatis australis			
1190. 1191.		Myopatrachus gouldii (Turtle Frog) Myoporum caprarioides (Slender Myoporum)			
1192.		Myoporum insulare (Blueberry Tree, boobialla)			
1193.		Myriodesma quercifolium			
1194.		Myriophyllum tillaeoides			
1195.		Needhamiella pumilio			
1196.		Neelaps bimaculatus (Black-naped Snake)			
1197.		Nelusetta ayraudi			
1198.		Nematalosa come			
1199.		Nematalosa erebi			
1200.		Nematalosa vlaminghi			
1201.		Neobatrachus pelobatoides (Humming Frog)			
1202.	24738	Neophema elegans (Elegant Parrot)			
1203.		Neosebastes pandus			
1204. 1205	10050	Nephila edulis			
1205. 1206.		Nerium oleander Neurymenia fraxinifolia	Υ		
1206.		Nicotiana glauca (Tree Tobacco)	Υ		
1207.		Nizymenia conferta	ſ		
1209.	2. 100	Nomeus gronovii			
1210.	25252	Notechis scutatus (Tiger Snake)			
1211.		Notiasemus glauerti			
1212.		Notolabrus parilus			
1213.		Novakiella trituberculosa			
1214.		Nunciella aspera			
1215.	2401	Nuytsia floribunda (Christmas Tree, Mudja)			







	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
1216.	25564	Nycticorax caledonicus (Rufous Night Heron)			
1217. 1218.		Nymphopsis acinacispinatus subsp. bathursti Ocrisiona parmeliae			
1219.	24407	Ocyphaps lophotes (Crested Pigeon)			
1220.		Odax cyanomelas			
1221.		Oecobius navus			
1222.		Oenothera drummondii subsp. drummondii	Υ		
1223.		Oenothera laciniata	Y		
1224. 1225.		Oenothera speciosa (White Evening Primrose) Oenothera stricta subsp. stricta	Y		
1226.		Olax benthamiana	Ť		
1227.		Olea europaea (Olive)	Υ		
1228.	11937	Olea europaea subsp. europaea	Υ		
1229.	8127	Olearia axillaris (Coastal Daisybush)			
1230.		Olearia rudis (Rough Daisybush)			
1231. 1232.	42024	Olearia sp. Kennedy Range (G. Byrne 66) Omegophora armilla			
1233.		Ommatoiulus moreleti			
1234.		Ommatoiulus moreletii			
1235.	18255	Opercularia vaginata (Dog Weed)			
1236.		Ophichthus melanochir			
1237.		Ophichthus sp.			
1238.		Ophisurus serpens			
1239. 1240.	1372	Orectolobus sp. Ornithogalum arabicum (Lesser Cape Lily)	Υ		
1240.		Ornithopus compressus (Yellow Serradella)	Y		
1242.		Orobanche minor (Lesser Broomrape)	Υ		
1243.	1537	Orthrosanthus laxus (Morning Iris)			
1244.		Orthrosanthus laxus var. laxus (Morning Iris)			
1245.		Oryctolagus cuniculus (Rabbit)	Υ		
1246. 1247.		Osmundaria prolifera Ovis aries (Sheep)			
1248.		Oxalis caprina	Υ		
1249.		Oxalis corniculata (Yellow Wood Sorrel)	Y		
1250.	4352	Oxalis glabra	Υ		
1251.	4355	Oxalis perennans			
1252.		Oxalis pes-caprae (Soursob)	Υ		
1253. 1254.	4358	Oxalis purpurea (Largeflower Wood Sorrel)	Υ		
1254.		Oxidus gracilis Oxyopes rubicundus			
1256.	25680	Pachycephala rufiventris (Rufous Whistler)			
1257.	24624	Pachycephala rufiventris subsp. rufiventris (Rufous Whistler)			
1258.	24692	Pachyptila belcheri (Slender-billed Prion)			
1259.		Pachyptila desolata (Antarctic Prion)			
1260.		Pachyptila salvini (Salvin's Prion)			
1261. 1262.		Pachyptila turtur (Fairy Prion) Pachyptila vittata (Broad-billed Prion)			
1263.		Padina boryana			
1264.		Padina elegans			
1265.		Padina fraseri			
1266.		Padina gymnospora			
1267.	27118	Padina sanctae-crucis			
1268. 1269.	39917	Pagrus auratus Panaeolus papilionaceus			
1269.		Panicum repens	Υ		
1271.	22.01	Panus fasciatus			
1272.	27119	Papenfussiella extensa			
1273.		Parablennius postoculomaculatus			
1274.		Parablennius tasmanianus			
1275. 1276	20050	Paradiacheopsis cribrata			Υ
1276. 1277.	39056	Paradiacheopsis fimbriata Paraplotosus albilabris			
1277.		Parapriacanthus elongatus			
1279.		Parascyllium variolatum			
1280.	25253	Parasuta gouldii			
1281.		Pardalotus punctatus (Spotted Pardalote)			
1282.		Pardalotus punctatus subsp. xanthopyge (Yellow-rumped Pardalote)			
1283. 1284.		Pardalotus striatus (Striated Pardalote) Pardalotus striatus subsp. westraliensis (Striated Pardalote)			
1285.	000	Parequula melbournensis			







	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
1286.	1762	Parietaria debilis (Pellitory)			
1287.		Parma mccullochi			
1288. 1289.	27022	Parma occidentalis Parmotrema chinense			
1209.	21922	Parvicrepis sp. 2			
1291.	518	Paspalidium clementii (Clements Paspalidium)			
1292.		Paspalum dilatatum	Υ		
1293.	533	Paspalum vaginatum (Salt Water Couch)			
1294.	5225	Passiflora filamentosa	Y		
1295.		Pediana occidentalis			
1296.	40.40	Pegasus volitans	V		
1297. 1298.		Pelargonium capitatum (Rose Pelargonium) Pelargonium x domesticum	Y		
1299.	11100	Pelates sexlineatus	,		
1300.	24648	Pelecanus conspicillatus (Australian Pelican)			
1301.		Pelsartia humeralis			
1302.		Pempheris sp.			
1303.		Pentameris pallida	Υ		
1304.		Pericalymma ellipticum var. floridum			
1305. 1306.		Persicaria lapathifolia	Y		
1300.		Persoonia saccata (Snottygobble) Petalonia binghamiae	Υ		
1308.		Petalonia fascia	•		
1309.	48061	Petrochelidon nigricans (Tree Martin)			
1310.	48066	Petroica boodang (Scarlet Robin)			
1311.	24659	Petroica goodenovii (Red-capped Robin)			
1312.		Petrophile axillaris			
1313.		Petrophile brevifolia			
1314. 1315.		Petrophile linearis (Pixie Mops) Petrophile macrostachya			
1316.		Petrophile seminuda			
1317.		Petrophile squamata subsp. northern (J. Monks 40)			
1318.	2312	Petrophile striata			
1319.	19825	Petrorhagia dubia	Υ		
1320.		Peziza repanda			
1321. 1322.	27125	Peziza sp. Phacelocarpus sessilis			
1323.	27133	Phaeotrametes decipiens			
1324.	25697	Phalacrocorax carbo (Great Cormorant)			
1325.	24665	Phalacrocorax fuscescens (Black-faced Cormorant)			
1326.	25698	Phalacrocorax melanoleucos (Little Pied Cormorant)			
1327.		Phalacrocorax melanoleucos subsp. melanoleucos (Little Pied Cormorant)			
1328.		Phalacrocorax sulcirostris (Little Black Cormorant)			
1329. 1330.		Phalacrocorax varius (Pied Cormorant) Phalacrocorax varius subsp. hypoleucos (Pied Cormorant)			
1331.		Phalaris aquatica (Phalaris)	Y		
1332.		Phalaris minor (Lesser Canary Grass)	Y		
1333.	24409	Phaps chalcoptera (Common Bronzewing)			
1334.	20460	Pheladenia deformis			
1335.	18529	Philotheca spicata (Pepper and Salt)			
1336.		Phlebia subceracea			
1337. 1338.		Pholicus phalangioides Pholiota highlandensis			
1339.	48071	Phylidonyris niger (White-cheeked Honeyeater)			
1340.		Phylidonyris novaehollandiae (New Holland Honeyeater)			
1341.		Phyllachora amplexicaulis			
1342.	4675	Phyllanthus calycinus (False Boronia)			
1343.		Phyllanthus tenellus	Υ		
1344.	38822	Phylloporus clelandii			
1345. 1346.	30063	Phyllopteryx taeniolatus Physarum cineraum			
1346.		Physarum cinereum Physarum leucophaeum			
1348.		Physarum polycephalum			
1349.		Physarum pusillum			
1350.	39079	Physarum viride			
1351.		Physocyclus globosus			
1352.		Picris squarrosa			
1353. 1354.		Pimelea rosea subsp. rosea			
1354.	3208	Pimelea sulphurea (Yellow Banjine) Pinkfloydia harveii			
		,		(Fig. 1)	***********







	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
1356.	557	Piptatherum miliaceum (Rice Millet)	Υ		
1357. 1358.		Pisodonophis cancrivorus Pisolithus microcarpus			
1359.	42281	Pithocarpa cordata			
1360.		Pittosporum ligustrifolium			
1361.	24841	Platalea flavipes (Yellow-billed Spoonbill)			
1362.	24842	Platalea regia (Royal Spoonbill)			
1363.		Platycephalus endrachtensis			
1364. 1365.	25720	Platycephalus longispinis Platycercus icterotis (Western Rosella)			
1366.		Platycercus spurius (Red-capped Parrot)			
1367.		Platycercus zonarius (Australian Ringneck, Ring-necked Parrot)			
1368.	27151	Platythalia angustifolia			
1369.	27152	Platythalia quercifolia			
1370.		Pletholax gracilis subsp. gracilis (Keeled Legless Lizard)			
1371.		Pleuroflammula praestans			
1372. 1373.		Pleurotus australis Plocamium cartilagineum			
1374.		Plocamium mertensii			
1375.		Plocamium preissianum			
1376.	38825	Pluteus pauperculus			
1377.		Pluteus romellii			
1378.		Poa annua (Winter Grass)	Υ		
1379.		Poa drummondiana (Knotted Poa)			
1380. 1381.		Poa poiformis (Coastal Poa) Poa porphyroclados			
1382.		Poa pratensis (Kentucky Bluegrass)	Υ		
1383.		Podargus strigoides (Tawny Frogmouth)	·		
1384.	24679	Podargus strigoides subsp. brachypterus (Tawny Frogmouth)			
1385.	25704	Podiceps cristatus (Great Crested Grebe)			
1386.		Podolepis gracilis (Slender Podolepis)			
1387.		Podolepis nutans (Nodding Podolepis)			
1388. 1389.		Podotheca angustifolia (Sticky Longheads) Podotheca chrysantha (Yellow Podotheca)			
1390.	0103	Podykipus collinus			
1391.	25510	Pogona minor (Dwarf Bearded Dragon)			
1392.	24907	Pogona minor subsp. minor (Dwarf Bearded Dragon)			
1393.	24681	Poliocephalus poliocephalus (Hoary-headed Grebe)			
1394.		Pollexfenia lobata			
1395. 1396.		Pollexfenia pedicellata Polycarpon tetraphyllum (Fourleaf Allseed)	V		
1397.	2903	Polygonarea imparata	Y		Υ
1398.	27173	Polysiphonia decipiens			
1399.	27180	Polysiphonia subtilissima			
1400.		Pomacentrus sp.			
1401.		Pomatomus saltatrix			
1402.		Poranthera drummondii			
1403. 1404.		Poranthera microphylla (Small Poranthera) Porostereum crassum			
1404.		Porphyra lucasii			
1406.		Porphyrio porphyrio (Purple Swamphen)			
1407.		Porphyrio porphyrio subsp. bellus (Purple Swamphen)			
1408.		Porzana fluminea (Australian Spotted Crake)			
1409.		Porzana pusilla (Baillon's Crake)			
1410.		Porzana tabuensis (Spotless Crake)			
1411. 1412.		Posidonia australis (Fibreball Weed) Posidonia ostenfeldii			
1413.		Prasophyllum giganteum (Bronze Leek Orchid)			
1414.		Prionosternum nitidiceps			
1415.		Prionosternum scutatum			
1416.		Proboscidea louisianica (Purple Flower Devil's Claw)	Υ		
1417.		Psathyrella bipellis			
1418.		Pseudechis australis (Mulga Snake)	Υ		
1419. 1420.	30139	Pseudocodium devriesii Pseudogobius olorum	Y		
1420.		Pseudolampona woodman			
1422.	25511	Pseudonaja affinis (Dugite)			
1423.	25259	Pseudonaja affinis subsp. affinis (Dugite)			
1424.		Pseudonaja mengdeni (Western Brown Snake)			
1425.	25433	Pseudophryne guentheri (Crawling Toadlet)			







	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
1426.		Pseudorhombus jenynsii			
1427.		Pseudorhombus sp.			
1428.	48085	Psittacula krameri (Indian Ringnecked Parrot, Rose-ringed Parakeet)	Υ		
1429.	27195	Pterocladia lucida			
1430.	27198	Pterocladiella capillacea			
1431.	24702	Pterodroma brevirostris (Kerguelen Petrel)			
1432.	24703	Pterodroma lessonii (White-headed Petrel)			
1433.	25710	Pterodroma macroptera (Great-winged Petrel)			
1434.		Pterodroma macroptera subsp. macoptera			
1435.	25711	Pterodroma mollis (Soft-plumaged Petrel)			
1436.	15426	Pterostylis aspera			
1437.		Pterostylis brevisepala			
1438.		Pterostylis sanguinea			
1439.	1698	Pterostylis vittata (Banded Greenhood)			
1440.	07000	Pterygotrigla polyommata			
1441.		Ptilophora prolifera			
1442.		Ptilotus drummondii var. drummondii (Pussytail)			
1443.		Ptilotus polystachyus (Prince of Wales Feather)			
1444. 1445.		Ptilotus sericostachyus subsp. sericostachyus			
1445.		Ptilotus stirlingii subsp. stirlingii Puccinia myrsiphylli			Y
1447.		Puffinus assimilis (Little Shearwater)			T
1448.		Puffinus assimilis subsp. assimilis (Little Shearwater)			
1449.		Pultenaea ericifolia			
1450.		Pultenaea reticulata			
1451.	4101	Punctularia strigosozonata			
1452.		Purpureicephalus spurius			
1453.		Pycnothea flynni			
1454.	25008	Pygopus lepidopodus (Common Scaly Foot)			
1455.		Pyronema omphalodes			
1456.		Pyrorchis nigricans (Red beaks, Elephants ears)			
1457.		Rachycentron canadum			
1458.	32480	Racopilum cuspidigerum var. convolutaceum			
1459.	2932	Ranunculus colonorum (Common Buttercup)			
1460.	2933	Ranunculus muricatus (Sharp Buttercup)	Υ		
1461.	11927	Ranunculus sessiliflorus var. sessiliflorus			
1462.	3061	Raphanus raphanistrum (Wild Radish)	Υ		
1463.	24243	Rattus fuscipes (Western Bush Rat)			
1464.	24244	Rattus norvegicus (Brown Rat)	Υ		
1465.	24245	Rattus rattus (Black Rat)	Υ		
1466.		Raveniella arenacea			
1467.		Raveniella cirrata			
1468.		Raveniella peckorum			
1469.		Raveniella subcirrata			
1470.	24776	Recurvirostra novaehollandiae (Red-necked Avocet)			
1471.	22222	Regalecus glesne			
1472.		Resupinatus cinerascens			
1473.		Resupinatus subapplicatus	V		
1474. 1475		Retama raetam Paticularia lucopardon	Υ		
1475. 1476.		Reticularia lycoperdon Rhagodia baccata subsp. baccata			
1476.		Rhagodia baccata subsp. dioica (Sea Berry Saltbush)			
1477.		Rhamnus alaternus (Buckthorn)	Υ		
1479.		Rhipidura albiscapa (Grey Fantail)	'		
1480.		Rhipidura leucophrys (Willie Wagtail)			
1481.		Rhizoclonium riparium			
1482.		Rhodanthe citrina			
1483.		Rhodanthe corymbosa			
1484.		Rhodopeltis australis			
1485.		Rhodophyllis volans			
1486.		Rhycherus gloveri			
1487.		Rhycherus sp.			Υ
1488.	19942	Ricinocarpos undulatus			
1489.		Ricinus communis (Castor Oil Plant)	Υ		
1490.		Rickenella fibula			
1491.	14485	Romulea flava var. minor	Υ		
1492.	1556	Romulea rosea (Guildford Grass)	Υ		
1493.	11544	Romulea rosea var. australis (Guildford Grass)	Υ		
1494.	14924	Romulea rosea var. communis	Υ		
1495.	27226	Rosenvingea orientalis			







	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query
1496.	10970	Rostraria cristata	Υ		Alou
1497.	44608	Rosulabryum billarderii			
1498.	32429	Rosulabryum torquescens			
1499.	38835	Royoporus badius			
1500.		Rumex crispus (Curled Dock)	Y		
1501.		Rumex hypogaeus	Y		
1502.		Rumex sagittatus (Rambling Dock)	Y		
1503. 1504.	30030	Russula erumpens Russula marangania			
1505.	40426	Rytidosperma occidentale			
1506.		Sagina apetala (Annual Pearlwort)	Υ		
1507.	2907	Sagina procumbens (Spreading Pearlwort)	Υ		
1508.	30434	Salsola australis			
1509.	6484	Samolus repens (Creeping Brookweed)			
1510.		Samolus repens var. paucifolius			
1511.		Santalum acuminatum (Quandong, Warnga)			
1512.	27230	Sarconema filiforme			
1513. 1514.		Sardinella gibbosa Sardinella lemuru?			
1515.	27238	Sargassum distichum			
1516.		Sargassum fallax			
1517.		Sargassum lacerifolium			
1518.	27248	Sargassum ligulatum			
1519.	27249	Sargassum linearifolium			
1520.	27253	Sargassum peronii			
1521.		Sargassum podacanthum			
1522.	27260	Sargassum tristichum			
1523. 1524.		Saurida grandisquamis			
1524.		Saurida tumbil Saurida undosquamis			
1526.	27264	Scaberia agardhii			
1527.		Scabiosa atropurpurea (Purple Pincushion)	Υ		
1528.		Scaevola anchusifolia			
1529.	7603	Scaevola canescens (Grey Scaevola)			
1530.	7606	Scaevola crassifolia (Thick-leaved Fan-flower)			
1531.		Scaevola nitida (Shining Fanflower)			
1532.		Scaevola phlebopetala (Velvet Fanflower)			
1533.		Scaevola repens var. repens			
1534. 1535.		Scaevola thesioides Scaevola thesioides subsp. thesioides			
1536.		Schenkia australis			
1537.		Schinus terebinthifolius	Υ		
1538.	38839	Schizopora paradoxa			
1539.	968	Schoenoplectus pungens (Sharpleaf Rush)			
1540.	982	Schoenus clandestinus			
1541.		Schoenus curvifolius			
1542.		Schoenus grandiflorus (Large Flowered Bogrush)			
1543.	997	Schoenus lanatus (Woolly Bog-rush)			
1544. 1545.		Schuettea woodwardi Scobinichthys granulatus			
1546.		Scolopendra laeta			
1547.		Scomberoides lysan			
1548.		Scorpis georgianus			
1549.	35911	Scytosiphon lomentaria			
1550.	27273	Scytothalia dorycarpa			
1551.	20665	Senecio angulatus	Υ		
1552.		Senecio condylus			
1553.		Senecio elegans (Purple Groundsel)	Y		
1554. 1555.		Senecio pinnatifolius			
1556.		Senecio pinnatifolius var. latilobus Senecio vulgaris (Common Groundsel)	Y		
1557.		Sericornis frontalis (White-browed Scrubwren)	·		
1558.		Sericornis frontalis subsp. maculatus (White-browed Scrubwren)			
1559.		Seringia integrifolia (Common firebush)			
1560.		Seriola hippos			
1561.		Servaea melaina			
1562.		Servaea spinibarbis			
1563.	608	Setaria italica (Italian Millet)	Υ		
1564. 1565.	2000	Siganus fuscescens Silene gallica (French Catchfly)	Υ		
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	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
1566.	15972	Silene gallica var. gallica	Υ		Aiou
1567.		Silene gallica var. quinquevulnera	Y		
1568.		Silene nocturna (Mediterranean Catchfly)	Υ		
1569.		Sillago bassensis			
1570.		Sillago burrus			
1571.	8225	Siloxerus humifusus (Procumbent Siloxerus)			
1572.	25266	Simoselaps bertholdi (Jan's Banded Snake)			
1573.		Siphonognathus argyrophanes			
1574.		Siphonognathus radiatus			
1575.	42785	Sirophysalis trinodis			
1576.		Sisyrinchium exile	Υ		
1577.	30948	Smicrornis brevirostris (Weebill)			
1578.		Sminthopsis murina			
1579.	7017	Solaenodolichopus pruvoti Solaenodolichopus pruvoti Solaenodolichopus pruvoti	V		
1580. 1581.		Solanum laciniatum (Kangaroo Apple) Solanum linnaeanum (Apple of Sodom)	Y		
1581.		Solanum lycopersicum (Tomato)	Y		
1583.		Solanum nigrum (Black Berry Nightshade)	Y		
1584.		Solanum symonii	•		
1585.		Solieria robusta			
1586.	9367	Sonchus hydrophilus (Native Sowthistle)			
1587.	8231	Sonchus oleraceus (Common Sowthistle)	Υ		
1588.	617	Sorghum halepense (Johnson Grass)	Υ		
1589.	1312	Sowerbaea laxiflora (Purple Tassels)			
1590.	2912	Spergula arvensis (Corn Spurry)	Υ		
1591.	33636	Spergularia brevifolia			
1592.	8900	Spergularia marina			
1593.		Sphacelaria tribuloides			
1594.		Sphaerolobium linophyllum			
1595.	4207	Sphaerolobium medium			
1596. 1597.		Sphyrna lewini			
1597.	625	Sphyrna zygaena Spinifex longifolius (Beach Spinifex)			
1599.		Spinifex x alterniflorus			
1600.		Sporobolus virginicus (Marine Couch)			
1601.		Sporochnus comosus			
1602.	27305	Sporochnus radiciformis			
1603.	27306	Sporochnus scoparius			
1604.		Spratelloides robustus			
1605.	27309	Spyridia dasyoides			
1606.		Spyridia filamentosa			
1607.		Spyridium globulosum (Basket Bush)			
1608.	6930	Stachys arvensis (Staggerweed)	Υ		
1609.		Steatoda capensis			
1610. 1611.	2010	Steatoda grossa Stellaria media (Chickweed)	Υ		
1612.		Stellaria pallida	Y		
1613.		Stemonitopsis amoena	'		
1614.		Stenanthemum notiale subsp. chamelum			
1615.		Stenopetalum gracile			
1616.	636	Stenotaphrum secundatum (Buffalo Grass)	Υ		
1617.		Stereum illudens			
1618.	24522	Sterna bergii (Crested Tern)			
1619.		Sterna fuscata subsp. nubilosa (Sooty Tern)			
1620.		Sternula nereis (Fairy Tern)			
1621.	24329	Stictonetta naevosa (Freckled Duck)			
1622.		Stigmatopora argus			
1623.		Stirlingia latifolia (Blueboy)			
1624.		Stirlingia simplex Strongra versicolor (Grov Currawana)			
1625. 1626.		Strepera versicolor (Grey Currawong) Streptopelia chinensis (Spotted Turtle-Dove)	Υ		
1626.		Streptopelia chinensis (Spotted Turtle-Dove) Streptopelia chinensis subsp. tigrina (Spotted Turtle-Dove)	Y		
1628.		Streptopelia senegalensis (Laughing Turtle-Dove)	Y		
1629.		Streptopelia senegalensis subsp. senegalensis (Laughing Turtle-Dove)	Y		
1630.		Strongylura leiura			
1631.	25518	Strophurus spinigerus			
1632.	24942	Strophurus spinigerus subsp. spinigerus			
1633.		Struvea plumosa			
1634.		Stuckenia pectinata			
1635.	30278	Stylidium androsaceum		_	
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	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
1636.		Stylidium brunonianum (Pink Fountain Triggerplant)			
1637. 1638.		Stylidium hispidum (White Butterfly Triggerplant)			
1639.		Stylidium hispidum (White Butterfly Triggerplant) Stylidium inundatum (Hundreds and Thousands)			
1640.		Stylidium neurophyllum (Coastal Plain Triggerplant)			
1641.	7774	Stylidium piliferum (Common Butterfly Triggerplant)			
1642.	7785	Stylidium repens (Matted Triggerplant)			
1643.		Stylidium rigidulum			
1644. 1645.		Stylidium roseoalatum (Pink-wing Triggerplant)			
1646.		Stylidium schoenoides (Cow Kicks) Suaeda australis (Seablite)			
1647.		Succowia balearica	Υ		
1648.	38841	Suillus collinitus	Υ		Υ
1649.		Supunna funerea			
1650.		Supunna picta			
1651. 1652.	25002	Sutorectus tentaculatus Symphyotrichym squamatum (Rushy Stanyort)	V		
1653.		Symphyotrichum squamatum (Bushy Starwort) Synaphea spinulosa	Υ		
1654.		Synaphea spinulosa subsp. spinulosa			
1655.		Synchiropus papilio			
1656.		Synothele michaelseni			
1657.		Synothele rastelloides			
1658.	00400	Synsphyronus magnus			
1659. 1660.		Syntrichia pagorum Tachybaptus novaehollandiae (Australasian Grebe, Black-throated Grebe)			
1661.		Tachybaptus novaehollandiae subsp. novaehollandiae (Australasian Grebe, Black- throated Grebe)			
1662.	24207	Tachyglossus aculeatus (Short-beaked Echidna)			
1663.	25552	Tadorna radjah (Radjah Shelduck)			
1664.		Tadorna tadornoides (Australian Shelduck, Mountain Duck)			
1665. 1666.	30871	Taeniopygia guttata subsp. castanotis (Zebra Finch) Tamopsis perthensis			
1667.		Tandanus bostocki			
1668.	38843	Tapinella panuoides			
1669.	45613	Taraxacum khatoonae	Υ		
1670.	24167	Tarsipes rostratus (Honey Possum, Noolbenger)			
1671.	00000	Tasmanicosa leuckartii			
1672. 1673.		Tecticornia pergranulata Templetonia retusa (Cockies Tongues)			
1674.	4230	Terapon sp.			
1675.	2791	Tersonia cyathiflora (Button Creeper)			
1676.		Testudo sp.			Υ
1677.		Tetragnatha demissa			
1678.	2820	Tetragonia decumbens (Sea Spinach)	Υ		
1679. 1680.		Tetralycosa oraria Tetraodon sp.			Υ
1681.		Tetrapturus angustirostris			'
1682.	1036	Tetraria octandra			
1683.	48342	Tetratheca hirsuta subsp. hirsuta			
1684.		Tetratheca hirsuta subsp. viminea			
1685.		Tetratheca nuda			
1686. 1687.		Thalassodendron pachyrhizum Thamnoclonium lemannianum			Υ
1688.		Thelymitra antennifera (Vanilla Orchid)			
1689.		Thelymitra campanulata (Shirt Orchid)			
1690.	5077	Thomasia cognata			
1691.		Thomasia paniculata			
1692.		Thomasia triphylla			
1693. 1694.	2644	Threlkeldia diffusa (Coast Bonefruit) Threpterius maculosus			
1695.	24845	Threskiornis spinicollis (Straw-necked Ibis)			
1696.		Thryptomene saxicola (Rock Thryptomene)			
1697.		Thyrsites atun			
1698.		Thysanotus arenarius			
1699.		Thysanotus manglesianus (Fringed Lily)			
1700. 1701.		Thysanotus patersonii Thysanotus sparteus			
1701.		Tikvahiella candida			Υ
1703.		Tiliqua occipitalis (Western Bluetongue)			
1704.	25519	Tiliqua rugosa			
				Departmen	of







	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
1705.	25204	Tiliqua rugosa subsp. aspera			
1706.		Tiliqua rugosa subsp. rugosa			
1707.		Todiramphus sanctus (Sacred Kingfisher) Todiramphus sanctus subsp. sanctus (Sacred Kingfisher)			
1708. 1709.	24309	Tomentella pilosa			
1710.		Torquigener pleurogramma			
1711.		Torquigener tuberculiferus			
1712.	32445	Tortula muralis			
1713.		Trachinocephalus myops			
1714.		Trachurus novaezelandiae			
1715.		Trachyandra divaricata	Υ		
1716.		Trachymene coerulea subsp. coerulea			
1717. 1718.	6260	Trachymene pilosa (Native Parsnip) Tragulichthys jaculiferus			
1719.	1483	Tribonanthes longipetala			
1720.		Tribonyx ventralis (Black-tailed Native-hen)			
1721.	4383	Tribulus terrestris (Caltrop)	Υ		
1722.	39094	Trichia affinis			
1723.	39102	Trichia verrucosa			
1724.		Trichodesmium erythraeum			
1725.		Trichoglossus haematodus (Rainbow Lorikeet)			
1726. 1727.		Trichoglossus haematodus subsp. moluccanus (Rainbow Lorikeet) Trichoglossus haematodus subsp. rubritorquis (Red-collared Lorikeet)	Υ		
1727.	24104	Tricholomopsis rutilans			
1729.	32450	Trichostomum eckelianum			
1730.		Trichosurus vulpecula (Common Brushtail Possum)			
1731.	24158	Trichosurus vulpecula subsp. vulpecula (Common Brushtail Possum)			
1732.	1361	Tricoryne elatior (Yellow Autumn Lily)			
1733.		Tridentiger trigonocephalus			
1734.		Trifolium angustifolium var. angustifolium	Υ		
1735.		Trifolium arvense var. arvense	Y		
1736. 1737.		Trifolium campestre (Hop Clover) Trifolium campestre var. campestre (Hop Clover)	Y		
1737.		Trifolium cernuum (Drooping Flower Clover)	Y		
1739.		Trifolium dubium (Suckling Clover)	Y		
1740.		Trifolium fragiferum var. fragiferum	Υ		
1741.	4297	Trifolium glomeratum (Cluster Clover)	Υ		
1742.	4298	Trifolium hirtum (Rose Clover)	Υ		
1743.		Trifolium incarnatum var. incarnatum	Υ		
1744.		Trifolium ornithopodioides (Birdsfoot Fenugreek)	Υ		
1745. 1746.		Trifolium pratense var. sativum Trifolium scabrum (Rough Clover)	Y		
1740.		Trifolium subterraneum (Subterranean Clover)	Y		
1748.		Trifolium tomentosum var. tomentosum	Y		
1749.		Triglochin isingiana	•		
1750.	151	Triglochin striata			
1751.	152	Triglochin trichophora			
1752.	4737	Tripterococcus brunonis (Winged Stackhousia)			
1753.		Triticum aestivum (Wheat)	Υ		
1754.	4360	Tropaeolum majus (Garden Nasturtium)	Υ		
1755.		Trygonoptera mucosa			
1756. 1757.		Trygonoptera personata Trygonoptera personata?			
1758.		Trygonorrhina fasciata			
1759.	11665	Trymalium ledifolium var. ledifolium			
1760.		Trymalium odoratissimum subsp. odoratissimum			
1761.	38846	Tubaria serrulata			
1762.	39103	Tubifera ferruginosa			
1763.		Tubulicrinis calothrix			
1764.		Turbinaria gracilis Turbinaria (Pointed Button queil)			
1765.		Turnix varius (Painted Button-quail)			
1766.		Tursiops aduncus (Indo-Pacific Bottlenose Dolphin) Tursiops truncatus (Bottlenose Dolphin)			
1/6/.		Tyto alba subsp. delicatula (Barn Owl)			
1767. 1768.	24852				
		Ulmus parvifolia	Υ		Υ
1768.	43504		Y		Y Y
1768. 1769.	43504 27350	Ulmus parvifolia	Y		
1768. 1769. 1770. 1771. 1772.	43504 27350 35261 35260	Ulmus parvifolia Ulothrix subflaccida Ulva clathrata Ulva compressa	Y		
1768. 1769. 1770. 1771.	43504 27350 35261 35260 27351	Ulmus parvifolia Ulothrix subflaccida Ulva clathrata	Y		







	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
1775.	35262	Ulva intestinalis			
1776.	27352	Ulva lactuca			
1777.	35126	Ulva linza			
1778.	35861	Ulva prolifera			
1779.	24983	Underwoodisaurus milii (Barking Gecko)			
1780.		Upeneus tragula			
1781.		Urodacus novaehollandiae			
1782.		Urodacus planimanus			
1783.		Urolophus lobatus			
1784.		Urolophus paucimaculatus			
1785.		Urolophus sp.			
1786.		Uromycladium tepperianum			
1787.	8254	Urospermum picroides (False Hawkbit)	Υ		
1788.		Ursinia anthemoides (Ursinia)	Υ		
1789.		Ursinia anthemoides subsp. anthemoides	Υ		
1790.		Urtica urens (Small Nettle)	Υ		
1791.		Usnea dasaea			
1792.		Ustilago hordei			
1793.		Vanacampus phillipi			
1794.		Vanacampus poecilolaemus			
1795.	25577	Vanellus miles (Masked Lapwing)			
1796.		Varanus gouldii (Bungarra or Sand Monitor)			
1797.		Varanus tristis (Racehorse Monitor)			
1798.	20020	Vauclusella calvq (invalid)			Υ
1799.		Venator immansueta			,
1800.		Venatrix pullastra			
1801.	7110	Veronica distans			
1802.		Verticordia densiflora (Compacted Featherflower)			
1803.		Verticordia densiflora var. densiflora			
1804.		Verticordia drummondii (Drummond's Featherflower)			
1805.		Verticordia diaminionali (Stammond's Feathernower) Verticordia huegelii var. huegelii			
1806.		Verticordia nitens (Morrison Featherflower, Kodjeningara)			
1807.		Vespadelus regulus (Southern Forest Bat)			
1808.		Vicia sativa (Common Vetch)	Υ		
1809.		Vicia sativa (common vocar)	Y		
1810.		Vicia sativa subsp. rigra	Y		
1811.		Vidalia spiralis	ī		
1812.		Viminaria juncea (Swishbush, Koweda)			
	4323	Volvopluteus gloiocephalus			
1813.	24040	, , ,	V		
1814. 1815.		Vulnia myuros forma myuros	Y		
1816.		Vulpia myuros forma myuros Wahlenbergia capensis (Cape Bluebell)	Y Y		
1817.		- , , , , , , , , , , , , , , , , , , ,	ī		
1817.		Waitzia suaveolens (Fragrant Waitzia) Waitzia suaveolens var. suaveolens			
1819.		Watsonia meriana var. bulbillifera	Υ		
	10108		Ť		
1820. 1821.	27264	Westrarchaea sinuosa Wollastoniella myriophylloides			
1822.					
		Wrangelia velutina			
1823.		Wurmbea monantha Vanthium accidentale (Necessar Burr)	V		
1824.		Xanthium occidentale (Noogoora Burr)	Υ		
1825.		Xanthorrhoea brunonis Vanthorrhoea praincii (Cross tras Polga)			
1826.		Xanthorrhoea preissii (Grass tree, Palga)			
1827.		Xanthosia ciliata			
1828.		Xanthosia huegelii			
1829.		Xerula mundroola Zanta dooghia gothianiaa (Arura Lih.)	.,		
1830.		Zantedeschia aethiopica (Arum Lily)	Y		
1831.		Zosterops lateralis (Grey-breasted White-eye, Silvereye)			
1832.	4390	Zygophyllum fruticulosum (Shrubby Twinleaf)			

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 2
4 - Priority 4
5 - Priority 5

¹ For NatureMap's purposes, species flagged as endemic are those whose records are wholely 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 2 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 <u>Environment Assessments</u> and the EPBC Act including significance guidelines, forms and application process details.

Report created: 01/11/18 18:31:15

Summary

Details

Matters of NES
Other Matters Protected by the EPBC Act

Caveat

Acknowledgements

Extra Information



This map may contain data which are ©Commonwealth of Australia (Geoscience Australia), ©PSMA 2010

Coordinates
Buffer: 2.5Km



Summary

Matters of National Environmental Significance

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

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance:	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	1
Listed Threatened Species:	43
Listed Migratory Species:	57

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 <u>permit</u> 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:	4
Commonwealth Heritage Places:	2
Listed Marine Species:	90
Whales and Other Cetaceans:	12
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:	1
Regional Forest Agreements:	None
Invasive Species:	40
Nationally Important Wetlands:	1
Key Ecological Features (Marine)	None

Details

Matters of National Environmental Significance

Listed Threatened Ecological Communities

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					
Anous tenuirostris melanops Australian Lesser Noddy [26000]	Vulnerable	Species or species habitat may occur within area			
Botaurus poiciloptilus Australasian Bittern [1001]	Endangered	Species or species habitat known to occur within area			
Calidris canutus					
Red Knot, Knot [855]	Endangered	Species or species habitat known to occur within area			
Calidris ferruginea					
Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area			
Calidris tenuirostris					
Great Knot [862]	Critically Endangered	Species or species habitat known to occur within area			
Calyptorhynchus banksii naso					
Forest Red-tailed Black-Cockatoo, Karrak [67034]	Vulnerable	Species or species habitat known to occur within area			
Calyptorhynchus latirostris Carnaby's Cockatoo, Short-billed Black-Cockatoo [59523]	Endangered	Species or species habitat known to occur within area			
<u>Charadrius leschenaultii</u> Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat known to occur within area			
<u>Charadrius mongolus</u> Lesser Sand Plover, Mongolian Plover [879]	Endangered	Species or species habitat known to occur within area			
Diomedea amsterdamensis Amsterdam Albatross [64405]	Endangered	Species or species habitat may occur within area			
<u>Diomedea epomophora</u> Southern Royal Albatross [89221]	Vulnerable	Foraging, feeding or related			

[Resource Information]

behaviour likely

Name	Status	Type of Presence
		to occur within area
<u>Diomedea exulans</u> Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related
		behaviour likely to occur within area
Diomedea sanfordi		within area
Northern Royal Albatross [64456]	Endangered	Foraging, feeding or related behaviour likely to occur
		within area
Leipoa ocellata Malleefowl [934]	Vulnerable	Species or species habitat
Wallectow [504]	Vullerable	likely to occur within area
Limosa lapponica baueri		
Bar-tailed Godwit (baueri), Western Alaskan Bar-tailed	Vulnerable	Species or species habitat
Godwit [86380]		known to occur within area
Limosa lapponica menzbieri	Critically Endonmored	Canadan ay anadan habitat
Northern Siberian Bar-tailed Godwit, Bar-tailed Godwit (menzbieri) [86432]	Critically Endangered	Species or species habitat may occur within area
Macronectes giganteus		
Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat
		may occur within area
Macronectes halli		
Northern Giant Petrel [1061]	Vulnerable	Species or species habitat may occur within area
Numanius madagassariansis		,
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat
		known to occur within area
Pachyptila turtur subantarctica		
Fairy Prion (southern) [64445]	Vulnerable	Species or species habitat known to occur within area
Destructure exertises		Milowit to occur within area
Rostratula australis Australian Painted-snipe, Australian Painted Snipe	Endangered	Species or species habitat
[77037]	· ·	likely to occur within area
Sternula nereis nereis		
Australian Fairy Tern [82950]	Vulnerable	Foraging, feeding or related behaviour known to occur
The beautiful and the second		within area
Thalassarche cauta cauta Shy Albatross, Tasmanian Shy Albatross [82345]	Vulnerable	Foraging, feeding or related
		behaviour likely to occur
Thalassarche cauta steadi		within area
White-capped Albatross [82344]	Vulnerable	Foraging, feeding or related behaviour likely to occur
		within area
<u>Thalassarche impavida</u> Campbell Albatross, Campbell Black-browed Albatross	Vulnerable	Species or species habitat
[64459]	·	may occur within area
Thalassarche melanophris		
Black-browed Albatross [66472]	Vulnerable	Species or species habitat may occur within area
		may occur within area
Mammals Balaenoptera musculus		
Blue Whale [36]	Endangered	Species or species habitat
		likely to occur within area
Dasyurus geoffroii Chudiah Wastern Quall [220]	\/\n n = \- \- \-	Onesies an annulus I. I. I.
Chuditch, Western Quoll [330]	Vulnerable	Species or species habitat may occur within area
Eubalaena australis		-
Southern Right Whale [40]	Endangered	Breeding known to occur
		within area

Name	Status	Type of Presence
Megaptera novaeangliae Humpback Whale [38]	Vulnerable	Species or species habitat known to occur within area
Neophoca cinerea Australian Sea-lion, Australian Sea Lion [22]	Vulnerable	Species or species habitat known to occur within area
<u>Pseudocheirus occidentalis</u> Western Ringtail Possum, Ngwayir, Womp, Woder, Ngoor, Ngoolangit [25911]	Critically Endangered	Species or species habitat likely to occur within area
Plants		
Diuris micrantha Dwarf Bee-orchid [55082]	Vulnerable	Species or species habitat likely to occur within area
<u>Diuris purdiei</u> Purdie's Donkey-orchid [12950]	Endangered	Species or species habitat may occur within area
<u>Drakaea elastica</u> Glossy-leafed Hammer Orchid, Glossy-leaved Hammer Orchid, Warty Hammer Orchid [16753]	Endangered	Species or species habitat likely to occur within area
Drakaea micrantha Dwarf Hammer-orchid [56755]	Vulnerable	Species or species habitat may occur within area
Reptiles		
Caretta caretta Loggerhead Turtle [1763]	Endangered	Foraging, feeding or related behaviour known to occur within area
Chelonia mydas Green Turtle [1765]	Vulnerable	Foraging, feeding or related behaviour known to occur within area
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Foraging, feeding or related behaviour known to occur within area
Natator depressus Flatback Turtle [59257]	Vulnerable	Foraging, feeding or related behaviour known to occur within area
Sharks		
Carcharias taurus (west coast population) Grey Nurse Shark (west coast population) [68752]	Vulnerable	Species or species habitat known to occur within area
Carcharodon carcharias White Shark, Great White Shark [64470]	Vulnerable	Species or species habitat known to occur within area
Rhincodon typus Whale Shark [66680]	Vulnerable	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 - Threatene	
Name	Threatened	Type of Presence
Migratory Marine Birds		
Anous stolidus Common Noddy [825]		Species or species habitat likely to occur within area
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area

Name	Threatened	Type of Presence
Ardenna carneipes Flesh-footed Shearwater, Fleshy-footed Shearwater [82404]		Foraging, feeding or related behaviour likely to occur within area
Diomedea amsterdamensis Amsterdam Albatross [64405]	Endangered	Species or species habitat may occur within area
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea exulans Wandering Albatross [89223] Diomedea sanfordi	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Northern Royal Albatross [64456]	Endangered	Foraging, feeding or related behaviour likely to occur within area
Hydroprogne caspia Caspian Tern [808]		Foraging, feeding or related behaviour known to occur within area
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Species or species habitat may occur within area
Onychoprion anaethetus Bridled Tern [82845]		Foraging, feeding or related behaviour likely to occur within area
Sterna dougallii Roseate Tern [817]		Foraging, feeding or related behaviour likely to occur within area
Thalassarche cauta Tasmanian Shy Albatross [89224]	Vulnerable*	Foraging, feeding or related behaviour likely to occur within area
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Species or species habitat may occur within area
Thalassarche steadi White-capped Albatross [64462]	Vulnerable*	Foraging, feeding or related behaviour likely to occur within area
Migratory Marine Species		
Balaena glacialis australis Southern Right Whale [75529]	Endangered*	Breeding known to occur within area
Balaenoptera edeni Bryde's Whale [35]		Species or species habitat may occur within area
Balaenoptera musculus Blue Whale [36]	Endangered	Species or species habitat likely to occur within area
Caperea marginata Pygmy Right Whale [39]		Species or species habitat may occur within area

Name	Threatened	Type of Presence
Carcharodon carcharias White Shark, Great White Shark [64470]	Vulnerable	Species or species habitat known to occur within area
Caretta caretta Loggerhead Turtle [1763]	Endangered	Foraging, feeding or related behaviour known to occur within area
Chelonia mydas Green Turtle [1765]	Vulnerable	Foraging, feeding or related behaviour known to occur within area
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Foraging, feeding or related behaviour known to occur within area
Lamna nasus Porbeagle, Mackerel Shark [83288]		Species or species habitat may occur within area
Manta alfredi Reef Manta Ray, Coastal Manta Ray, Inshore Manta Ray, Prince Alfred's Ray, Resident Manta Ray [84994]		Species or species habitat may occur within area
Manta birostris Giant Manta Ray, Chevron Manta Ray, Pacific Manta Ray, Pelagic Manta Ray, Oceanic Manta Ray [84995]		Species or species habitat may occur within area
Megaptera novaeangliae Humpback Whale [38]	Vulnerable	Species or species habitat known to occur within area
Natator depressus Flatback Turtle [59257]	Vulnerable	Foraging, feeding or related behaviour known to occur within area
Orcinus orca Killer Whale, Orca [46]		Species or species habitat may occur within area
Rhincodon typus Whale Shark [66680]	Vulnerable	Species or species habitat may 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 known to occur within area
Arenaria interpres Ruddy Turnstone [872]		Species or species habitat known to occur within area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat known to occur within area
Calidris alba Sanderling [875]		Species or species habitat known to occur within area
Calidris canutus Red Knot, Knot [855]	Endangered	Species or species habitat known to occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur

Name	Threatened	Type of Presence
Calidris melanotos		within area
Pectoral Sandpiper [858]		Species or species habitat known to occur within area
Calidris ruficollis Red-necked Stint [860]		Species or species habitat known to occur within area
Calidris tenuirostris Great Knot [862]	Critically Endangered	Species or species habitat known to occur within area
Charadrius bicinctus Double-banded Plover [895]		Species or species habitat known to occur within area
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat known to occur within area
<u>Charadrius mongolus</u> Lesser Sand Plover, Mongolian Plover [879]	Endangered	Species or species habitat known to occur within area
Limosa lapponica Bar-tailed Godwit [844]		Species or species habitat known to occur within area
Limosa limosa Black-tailed Godwit [845]		Species or species habitat known to occur within area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat known to occur within area
Numenius phaeopus Whimbrel [849]		Species or species habitat known to occur within area
Pandion haliaetus Osprey [952]		Breeding known to occur within area
Phalaropus lobatus Red-necked Phalarope [838]		Species or species habitat known to occur within area
Pluvialis fulva Pacific Golden Plover [25545]		Species or species habitat known to occur within area
Pluvialis squatarola Grey Plover [865]		Species or species habitat known to occur within area
Tringa brevipes Grey-tailed Tattler [851]		Species or species habitat known to occur within area
Tringa nebularia Common Greenshank, Greenshank [832]		Species or species habitat known to occur within area
Tringa stagnatilis Marsh Sandpiper, Little Greenshank [833]		Species or species habitat known to occur within area
Tringa totanus Common Redshank, Redshank [835]		Species or species habitat known to occur within area

Name	Threatened	Type of Presence
Xenus cinereus Terek Sandpiper [59300]		Species or species habitat
		known to occur within area

Other Matters Protected by the EPBC Act

Commonwealth Land [Resource Information]

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

Name

Commonwealth Land -

Arenaria interpres
Ruddy Turnstone [872]

Defence - CAMPBELL BARRACKS - SWANBOURNE

Defence - IRWIN BARRACKS - KARRAKATTA

Defence - SWANBOURNE RIFLE RANGE		
Commonwealth Heritage Places		[Resource Information]
Name	State	Status
Historic		
Army Magazine Buildings Irwin Barracks	WA	Listed place
Claremont Post Office	WA	Listed place
Listed Marine Species		[Resource Information]
* Species is listed under a different scientific name or	the EPBC Act - Threa	atened Species list.
Name	Threatened	Type of Presence
Birds		
Actitis hypoleucos		
Common Sandpiper [59309]		Species or species habitat
		known to occur within area
Anous stolidus		
Common Noddy [825]		Species or species habitat
		likely to occur within area
Anous tenuirostris melanops		
Australian Lesser Noddy [26000]	Vulnerable	Species or species habitat
Additional Education (Education	Valiforable	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
Andre State		within area
Ardea ibis		Charles or angeles babitet
Cattle Egret [59542]		Species or species habitat may occur within area
		may occur within area

Species or species habitat known to occur within area

Name	Threatened	Type of Presence
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat known to occur within area
Calidris alba Sanderling [875]		Species or species habitat known to occur within area
Calidris canutus Red Knot, Knot [855]	Endangered	Species or species habitat known to occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat known to occur within area
Calidris ruficollis Red-necked Stint [860]		Species or species habitat known to occur within area
Calidris tenuirostris Great Knot [862]	Critically Endangered	Species or species habitat known to occur within area
Charadrius bicinctus Double-banded Plover [895]		Species or species habitat known to occur within area
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat known to occur within area
Charadrius mongolus Lesser Sand Plover, Mongolian Plover [879]	Endangered	Species or species habitat known to occur within area
Charadrius ruficapillus Red-capped Plover [881]		Species or species habitat known to occur within area
Diomedea amsterdamensis Amsterdam Albatross [64405]	Endangered	Species or species habitat may occur within area
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea sanfordi Northern Royal Albatross [64456]	Endangered	Foraging, feeding or related behaviour likely to occur within area
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species habitat likely to occur within area
Heteroscelus brevipes Grey-tailed Tattler [59311]		Species or species habitat known to occur within area
Himantopus himantopus Pied Stilt, Black-winged Stilt [870]		Species or species habitat known to occur within area

Name	Threatened	Type of Presence
Larus pacificus		
Pacific Gull [811]		Foraging, feeding or related behaviour may occur within area
<u>Limosa Iapponica</u> Bar-tailed Godwit [844]		Species or species habitat known to occur within area
<u>Limosa limosa</u> Black-tailed Godwit [845]		Species or species habitat known to occur within area
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	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 habitat known to occur within area
Numenius phaeopus Whimbrel [849]		Species or species habitat known to occur within area
Pachyptila turtur Fairy Prion [1066]		Species or species habitat known to occur within area
Pandion haliaetus Osprey [952]		Breeding known to occur within area
Phalaropus lobatus Red-necked Phalarope [838]		Species or species habitat known to occur within area
Pluvialis fulva Pacific Golden Plover [25545]		Species or species habitat known to occur within area
Pluvialis squatarola Grey Plover [865]		Species or species habitat known to occur within area
Puffinus assimilis Little Shearwater [59363]		Foraging, feeding or related behaviour known to occur within area
Puffinus carneipes Flesh-footed Shearwater, Fleshy-footed Shearwater [1043]		Foraging, feeding or related behaviour likely to occur within area
Red-necked Avocet [871]		Species or species habitat known to occur within area
Rostratula benghalensis (sensu lato) Painted Snipe [889]	Endangered*	Species or species habitat likely to occur within area
Sterna anaethetus Bridled Tern [814]		Foraging, feeding or

Name	Threatened	Type of Presence
ivanic	Tilleatened	related behaviour likely to
-		occur within area
Sterna caspia		Farasian faadina ar salatad
Caspian Tern [59467]		Foraging, feeding or related behaviour known to occur within area
Sterna dougallii		
Roseate Tern [817] Thalassarche cauta		Foraging, feeding or related behaviour likely to occur within area
Tasmanian Shy Albatross [89224]	Vulnerable*	Foraging, feeding or related
	Valiforable	behaviour likely to occur within area
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross	Vulnerable	Species or species habitat
[64459]	Vallistable	may occur within area
Thalassarche melanophris	M. Is smalle	0
Black-browed Albatross [66472]	Vulnerable	Species or species habitat may occur within area
Thalassarche steadi		
White-capped Albatross [64462]	Vulnerable*	Foraging, feeding or related behaviour likely to occur within area
Thinornis rubricollis Hooded Plover [59510]		Species or species habitat
Tiooded Flover [55576]		known to occur within area
Tringa nebularia		0 1 177
Common Greenshank, Greenshank [832]		Species or species habitat known to occur within area
Tringa stagnatilis		
Marsh Sandpiper, Little Greenshank [833]		Species or species habitat known to occur within area
Tringa totanus		
Common Redshank, Redshank [835]		Species or species habitat known to occur within area
Xenus cinereus		
Terek Sandpiper [59300]		Species or species habitat known to occur within area
Fish		
Acentronura australe		
Southern Pygmy Pipehorse [66185]		Species or species habitat may occur within area
Campichthys galei		
Gale's Pipefish [66191]		Species or species habitat may occur within area
Choeroichthys suillus		
Pig-snouted Pipefish [66198]		Species or species habitat may occur within area
Halicampus brocki		
Brock's Pipefish [66219]		Species or species habitat may occur within area
Heraldia nocturna		
Upside-down Pipefish, Eastern Upside-down Pipefish, Eastern Upside-down Pipefish [66227]		Species or species habitat may occur within area
Hippocampus angustus		
Western Spiny Seahorse, Narrow-bellied Seahorse [66234]		Species or species habitat may occur within area
Hippocampus breviceps		
Short-head Seahorse, Short-snouted Seahorse		Species or species

Name Threatened Type of Presence [66235] habitat may occur within Hippocampus subelongatus West Australian Seahorse [66722] Species or species habitat may occur within area Histiogamphelus cristatus Rhino Pipefish, Macleay's Crested Pipefish, Ring-back Species or species habitat Pipefish [66243] may occur within area Lissocampus caudalis Australian Smooth Pipefish, Smooth Pipefish [66249] Species or species habitat may occur within area Lissocampus fatiloquus Prophet's Pipefish [66250] Species or species habitat may occur within area Lissocampus runa Javelin Pipefish [66251] Species or species habitat may occur within area Maroubra perserrata Sawtooth Pipefish [66252] Species or species habitat may occur within area Mitotichthys meraculus Western Crested Pipefish [66259] Species or species habitat may occur within area Nannocampus subosseus Bonyhead Pipefish, Bony-headed Pipefish [66264] Species or species habitat may occur within area Phycodurus eques Leafy Seadragon [66267] Species or species habitat may occur within area Phyllopteryx taeniolatus Common Seadragon, Weedy Seadragon [66268] Species or species habitat may occur within area Pugnaso curtirostris Pugnose Pipefish, Pug-nosed Pipefish [66269] Species or species habitat may occur within area Solegnathus lettiensis Gunther's Pipehorse, Indonesian Pipefish [66273] Species or species habitat may occur within area Stigmatopora argus Spotted Pipefish, Gulf Pipefish, Peacock Pipefish Species or species habitat [66276] may occur within area Stigmatopora nigra Widebody Pipefish, Wide-bodied Pipefish, Black Species or species habitat Pipefish [66277] may occur within area Syngnathoides biaculeatus Double-end Pipehorse, Double-ended Pipehorse, Species or species habitat Alligator Pipefish [66279] may occur within area Urocampus carinirostris Hairy Pipefish [66282] Species or species habitat may occur within area

Vanacampus margaritifer

Mother-of-pearl Pipefish [66283]

Species or species habitat may occur within area

Vanacampus phillipi

Port Phillip Pipefish [66284] Species or species habitat may occur within

Name	Threatened	Type of Presence
Venezamus necellala mus		area
Vanacampus poecilolaemus Longsnout Pipefish, Australian Long-snout Pipefish, Long-snouted Pipefish [66285]		Species or species habitat may occur within area
Mammals		
Arctocephalus forsteri Long-nosed Fur-seal, New Zealand Fur-seal [20]		Species or species habitat may occur within area
Neophoca cinerea Australian Sea-lion, Australian Sea Lion [22]	Vulnerable	Species or species habitat known to occur within area
Reptiles		
Aipysurus pooleorum Shark Bay Seasnake [66061]		Species or species habitat may occur within area
Caretta caretta Loggerhead Turtle [1763]	Endangered	Foraging, feeding or related behaviour known to occur within area
Chelonia mydas Green Turtle [1765]	Vulnerable	Foraging, feeding or related behaviour known to occur within area
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Foraging, feeding or related behaviour known to occur within area
Disteira kingii Spectacled Seasnake [1123]		Species or species habitat may occur within area
Natator depressus Flatback Turtle [59257]	Vulnerable	Foraging, feeding or related behaviour known to occur within area
Pelamis platurus Yellow-bellied Seasnake [1091]		Species or species habitat may occur within area
Whales and other Cetaceans		[Resource Information
Name	Status	Type of Presence
Mammals		
Balaenoptera acutorostrata Minke Whale [33]		Species or species habitat may occur within area
Balaenoptera edeni Bryde's Whale [35]		Species or species habitat may occur within area
Balaenoptera musculus Blue Whale [36]	Endangered	Species or species habitat likely to occur within area
Caperea marginata Pygmy Right Whale [39]		Species or species habitat may occur within area
Delphinus delphis Common Dophin, Short-beaked Common Dolphin [60]		Species or species habitat may occur within area
Eubalaena australis Southern Right Whale [40]	Endangered	Breeding known to occur within area
Grampus griseus Risso's Dolphin, Grampus [64]		Species or species

Name	Status	Type of Presence
Megaptera novaeangliae		habitat may occur within area
Humpback Whale [38]	Vulnerable	Species or species habitat
Trampadok Maio [66]	v umorable	known to occur within area
Orcinus orca		
Killer Whale, Orca [46]		Species or species habitat
		may occur within area
Stenella attenuata		
Spotted Dolphin, Pantropical Spotted Dolphin [51]		Species or species habitat may occur within area
Tursiops aduncus		
Indian Ocean Bottlenose Dolphin, Spotted Bottlenose		Species or species habitat
Dolphin [68418]		likely to occur within area
		•
Tursiops truncatus s. str.		
Bottlenose Dolphin [68417]		Species or species habitat
		may occur within area

Extra Information

State and Territory Reserves	[Resource Information]
Name	State
Keanes Point Reserve	WA

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 Resouces Audit, 2001.

Name	Status	Type of Presence
Birds		
Acridotheres tristis		
Common Myna, Indian Myna [387]		Species or species habitat likely to occur within area
Anas platyrhynchos		
Mallard [974]		Species or species habitat likely to occur within area
Carduelis carduelis		
European Goldfinch [403]		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
Passer domesticus		
House Sparrow [405]		Species or species habitat likely to occur within area
Passer montanus		
Eurasian Tree Sparrow [406]		Species or species habitat likely to occur within area
Streptopelia chinensis		
Spotted Turtle-Dove [780]		Species or species

habitat likely to occur within area steep shabitat likely to occur w	Name	Status	Type of Presence
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 Turdus merula Common Blackbird, Eurasian Blackbird [596] Species or species habitat likely to occur within area Mammals Bos taurus Bos taurus Domestic Cattle [16] Species or species habitat likely to occur within area Canis lupus familiaris Domestic Dog [82654] Species or species habitat likely to occur within area Canis lupus familiaris Domestic Dog [82654] Species or species habitat likely to occur within area Felia catus Cat. House Cat, Domestic Cat [19] Species or species habitat likely to occur within area Funambulus pennanii Northern Palm Squirrel, Five-striped Palm Squirrel [129] Species or species habitat likely to occur within area Rutus musculus House Mouse [120] Species or species habitat likely to occur within area Rattus ratus Species or species habitat likely to occur within area Rattus norvegicus Brown Rat, Norway Rat [83] Species or species habitat likely to occur within area Rattus ratus Black Rat, Ship Rat [84] Species or species habitat likely to occur within area Plants Arredera corditolia Arredera Curl Madeiravine, Heartleaf Madeiravine, Species or species habitat likely to occur within area Plants Arredera corditolia Madeira Vine, Jalap, Lamb's-tail, Mignonette Vine, Arredera corditolia Madeira Vine, Jalap, Lamb's-tail, Mignonette Vine, Arredera Curl Madeiravine, Heartleaf Madeiravine, Species or species habitat likely to occur within area Plants Arredera corditolia Agaragus Fern, Ground Asparagus, Basket Fern, Species or species habitat likely to occur within area Ratus Asparagus Fern, Ground Asparagus, Emerald Asparagus Bridal Viel, Bradal Vell Creeper, Smilax, Florist's Species or species habitat likely to occur within area Asparagus declinatus Species or species habitat likely to occur within area			habitat likely to occur within
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			Species or species habitat
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Name	Status	Type of Presence
Brachiaria mutica Para Grass [5879]		Species or species habitat may occur within area
Cenchrus ciliaris Buffel-grass, Black Buffel-grass [20213]		Species or species habitat may occur within area
Chrysanthemoides monilifera Bitou Bush, Boneseed [18983]		Species or species habitat may occur within area
Chrysanthemoides monilifera subsp. monilifera Boneseed [16905]		Species or species habitat likely to occur within area
Genista sp. X Genista monspessulana Broom [67538]		Species or species habitat may occur within area
Lantana camara Lantana, Common Lantana, Kamara Lantana, Large- leaf Lantana, Pink Flowered Lantana, Red Flowered Lantana, Red-Flowered Sage, White Sage, Wild Sage [10892]		Species or species habitat likely to occur within area
Lycium ferocissimum African Boxthorn, Boxthorn [19235]		Species or species habitat likely to occur within area
Olea europaea Olive, Common Olive [9160]		Species or species habitat may occur within area
Opuntia spp. Prickly Pears [82753]		Species or species habitat likely to 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
Sagittaria platyphylla Delta Arrowhead, Arrowhead, Slender Arrowhead [68483]		Species or species habitat likely to occur within area
Salix spp. except S.babylonica, S.x calodendron & S.x Willows except Weeping Willow, Pussy Willow and Sterile Pussy Willow [68497]	reichardtii	Species or species habitat likely to occur within area
Salvinia molesta Salvinia, Giant Salvinia, Aquarium Watermoss, Kariba Weed [13665]		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] Reptiles		Species or species habitat likely to occur within area
Hemidactylus frenatus Asian House Gecko [1708]		Species or species habitat likely to occur within area
Nationally Important Wetlands		[Resource Information]
Name		State
Swan-Canning Estuary		WA

Caveat

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

This report is designed to assist in identifying the locations of places which may be relevant in determining obligations under the Environment Protection and Biodiversity Conservation Act 1999. It holds mapped locations of World 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

 $-31.982649\ 115.770217, -31.981466\ 115.775475, -31.981575\ 115.778886, -31.981066\ 115.780517, -31.978572\ 115.78586, -31.978445\ 115.785881$

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.

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APPENDIX 3Conservation 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.

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

^{*}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).

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;
- 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 4 Location Data

Location 1 WA Peppermint in road reserve. Two Xanthorrhoea preissii in rail reserve



Location 2 Hill's Weeping Fig and WA Peppermint in road reserve.



Location 3 Xanthorrhoea preissii in rail reserve



Location 4 WA Peppermint in road reserve



Location 5 Bottlebrush in road reserve.



Location 6 Camphor Laurel at rail station



Location 7 WA Peppermint and Liquidambar over garden beds



Location 8 Eucalyptus caesia, E. erythrocorys over garden beds



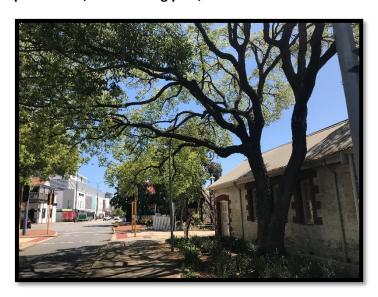
Location 9 Norfolk Island Pines and scattered Xanthorrhoea preissii on lawn



Location 10 Sugar Gum, Lemon-scented Gum, Kurrajong



Location 13 Camphor Laurel, Native Frangipani, Lemon-scented Gum



Location 15 Exotic Eucalyptus, Bottlebrush, Acacia cyclops, Hakea prostrata (planted)



Location 16 Eucalyptus caesia, E. erythrocorys, E. platypus, E. lehmannii, Hill's Weeping Fig, WA
Peppermint



Location 17 Tuart (planted) some Xanthorrhoea preissii, Acacia cyclops



Attachment 2

Harewood, G. (2019) Fauna Habitat Assessment – Claremont Train Station Development Works Claremont, Final, 27 January 2019.

Fauna Habitat Assessment



Claremont Train Station Development Works

Claremont

27 January 2019 FINAL

On behalf of:

Public Transport Authority C/- Aurora Environmental Dilhorn House, 2 Bulwer Street PERTH WA 6000

Prepared by:

Greg Harewood Zoologist PO Box 755 BUNBURY WA 6231 M: 0402 141 197 E: gharewood@iinet.net.au

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FIGURE 1: Aerial Photograph

FIGURE 2: Habitat Trees (DBH ≥50cm)

FIGURE 3: Habitat Tree Species

TABLES

TABLE 1: Conservation significant fauna previously recorded or potentially occurring

within the general vicinity of the subject site

TABLE 2: Example images of the fauna habitats within the subject site

TABLE 3: Summary of habitat trees (DBH ≥50cm) within the subject site

TABLE 4: Foraging evidence examples

TABLE 5: Likelihood of occurrence – fauna species of conservation significance

APPENDICES

APPENDIX A: Conservation Categories

APPENDIX B: DBCA & EPBC Database Search Results

APPENDIX C: Observed Fauna Listing

APPENDIX D: Habitat Tree Details

SUMMARY

This report details the results of a fauna habitat assessment of an 8.5 hectare (ha) area of land associated with the Public Transport Authority's (PTA) proposed Claremont Train Station Development Works (subject site). The assessment was primarily undertaken for the purposes of identifying the presence of conservation significant fauna species and/or their habitat and includes a literature review and field reconnaissance survey.

A list of potential conservation significant fauna species considered likely to occur in the general vicinity of the subject site has been compiled from information obtained during the literature review. Their likelihood of occurrence was assessed based on the results of the field reconnaissance survey and habitat assessment.

The subject site is situated in an established residential and commercial area near the western boundary of the central Swan Coastal Plain. Most of the area has been cleared of native vegetation and is now mainly comprised of roads, rail lines, carparks, retail, residential and other associated infrastructure.

Vegetation within the subject site is largely confined to road verges and residential gardens. Vegetation along road verges is comprised of grassland or planted exotic, non-endemic and native endemic trees and shrubs of variable composition and density.

Overall fauna values of the subject site are rated as extremely low given the highly degraded nature of most of the area. Fauna biodiversity within the subject site would be depauperate, however given the presence of some vegetation the area still has value for some fauna species able to persist in degraded habitats of this type.

Most of the fauna species likely to be present would be common, widespread species (mainly birds), with a few exceptions (e.g. occasional presence of Black Cockatoos). Almost all of conservation significant species identified as having been previously recorded in the wider area could not persist in the subject site primarily due to a complete lack of suitable habitat (i.e. quality and/or extent) and/or known local extinction.

Evidence of seven fauna species, all birds, was observed during the field survey. The limited number of fauna species observed can be attributed to the small size of the subject site, the limited extent of vegetation and its generally highly degraded state.

With the exception of foraging debris attributed to the forest red-tailed Black Cockatoos or Carnaby's Black Cockatoo, which was observed at only one location, no evidence of any of the conservation significant fauna species was seen, though this does not eliminate the potential for some species to still be occur, if only infrequently.

Based on habitats present (and a limited amount of foraging evidence left by one species of Black Cockatoo) it has been determined that four species of conservation significance may possibly occur at times (Forest Red-tailed Black Cockatoo, Carnaby's Black Cockatoo, Baudin's Black Cockatoo and Peregrine Falcon) though their current status on-site and/or in the general area is difficult to determine because they were not sighted during the survey period and/or no evidence of use of the subject site was found. Given the limited extent of

suitable habitat present it can however be expected that these species only occur occasionally and then only for brief periods.

The Black Cockatoo habitat tree assessment identified six trees with a Diametre Diameter at Breast Height (DBH) of >50cms within the subject site. Five trees appeared to not contain hollows of any size. One tree contained apparent hollows, all of which were assessed as being unlikely to be suitable for Black Cockatoos to use for nesting purposes (due to each hollows apparent small size, unsuitable orientation and/or height above ground level). One of the hollows was in use by feral bees and therefore would could not currently be used by Black Cockatoos.

Evidence of Black Cockatoos foraging was observed during the field survey in the form of small number of chewed Jarrah fruits at a single location. This evidence was attributed to the Forest Red-tailed Black Cockatoo or Carnaby's Black Cockatoo.

It is difficult to provide an accurate estimate of the extent of Black Cockatoo foraging habitat within the subject site given most trees and shrubs are represented by scattered/isolated specimens some of which are located amongst non-favoured species but an examination of air photos suggests its total extent would be less than 1 ha in size.

No evidence of Black Cockatoos roosting within trees located inside the subject site was observed during the survey period.

The impact on the significant species listed as potentially being present will vary depending on their current degree of utilisation/population densities and preferred habitat requirements (e.g. quantity and quality of potential foraging habitat that will be affected when clearing of the site is undertaken).

While fauna species of conservation significance are unlikely to be significantly affected by the proposed development the potential impacts on these species and/or their habitat should be taken into consideration during ongoing planning.

1. INTRODUCTION

This report details the results of a fauna habitat assessment of an 8.5 ha area of land associated with the Public Transport Authority's (PTA) proposed Claremont Train Station Development Works (subject site). The fauna assessment was primarily undertaken for the purposes of identifying the presence of conservation significant fauna species and/or their habitat.

It is understood that the information contained within the report will be incorporated into an overall environmental report being prepared by Aurora Environmental for use during ongoing planning and during the development approval process.

2. SCOPE OF WORKS

Desktop Assessment:

The scope of works (with respect to fauna) defined by the PTA was to conduct a desktop review of publicly available information and reports to assess the potential presence of conservation significant fauna and their habitat within the subject site.

Reconnaissance Fauna Survey:

The scope of works (with respect to fauna) defined by the PTA was to conduct a reconnaissance fauna survey, in accordance with *Technical Guidance - Terrestrial Fauna Surveys* (EPA 2016a) and *Technical Guidance - Sampling Methods for Terrestrial Vertebrate Fauna* (EPA 2016b) to identify:

- The presence or potential presence of conservation significant fauna species (e.g. Threatened or Priority Fauna) within the environmental survey boundary (including mapping).
- Assess habitats suitable for conservation significant fauna species.
- Fauna habitat types within the environmental survey boundary (including mapping).

The scope of works defined by the PTA was to conduct a targeted Black Cockatoo¹ habitat survey to:

 Identify Black Cockatoo habitat (foraging, breeding, roosting habitat) within the environmental survey boundary, including GPS locations of breeding habitat trees.

¹ Note: For the purposes of this report the term Black Cockatoo is in reference to all three species i.e. Baudin's Black Cockatoo (*Calyptorhynchus baudinii*,) Carnaby's Black Cockatoo (*Calyptorhynchus latirostris*) and the Forest Red-tailed Black Cockatoo (*Calyptorhynchus banksii naso*), unless stated otherwise.

3. METHOD

3.1 LITERATURE REVIEW

A list of fauna recorded or likely to occur within the subject site has been compiled by a review of available databases and literature including, but not limited to the following data sources:

- Department of Biodiversity, Conservation and Attractions (DBCA) Threatened
 Fauna Database (NatureMap) (DBCA 2018). A 10-kilometre (km) buffer around
 a central point was applied to capture previous fauna records within the
 immediate vicinity;
- EPBC Act Protected Matters database for fauna of national environmental significance (DotEE 2018). The minimum buffer (1 km) was applied to this search as the databases contains distribution data (areas) and not actual fauna records; and
- Literature search and review of other fauna surveys in the vicinity.

The conservation status of each species has been based on current lists produced under Federal and State Acts (*EPBC Act* and the *Wildlife Conservation Act 1950 (WC Act*)), those species recognised under international treaties (CAMBA, JAMBA and the Bonn Convention) and Priority Fauna (as listed by DBCA).

3.2 FIELD SURVEYS

The field component of the fauna assessment was carried out on the 26 September 2018 by Greg Harewood (Zoologist) and consisted of a reconnaissance survey, described in the sections below.

3.2.1 FAUNA HABITAT ASSESSMENT

The objective of the habitat assessment was to assess if it was likely that species of conservation significance would utilise the habitats identified within the subject site.

During the field survey, fauna habitats within the survey area were assessed and specific elements identified, which informed the likelihood of listed conservation significant species utilising the area and fauna habitat of significance.

Vegetation units, landforms and soils observed during the site reconnaissance survey have been used to define broad fauna habitat types across the subject site.

3.2.2 FAUNA OBSERVATIONS

The aim of this part of the assessment was to obtain enough information to assess the likely significance of the subject site to fauna species of conservation significance.

Based on the results of the literature review, evidence of the presence or likely presence of fauna species of conservation significance known to or likely to frequent the general area was searched for and recorded during the field survey.

This included but was not limited to:

- Undertaking a series of transects across the subject site.
- Searching for evidence (i.e. individuals, tracks, scats, calls) of potential conservation significant species under logs, rocks and leaf litter.
- Observing bird species with binoculars.

3.2.3 BLACK COCKATOO HABITAT ASSESSMENT

The following methods were employed to comply with the defined scope of works and are based on guidelines published by the Department of the Environment and Energy (DotEE) (Formerly Department of Sustainability, Environment, Water, Population and Communities (DSEWPaC) 2012) which states that surveys for Carnaby's, Baudin's and Forest Redtailed Black Cockatoo habitat should:

- be done by a suitably qualified person with experience in vegetation or cockatoo surveys, depending on the type of survey being undertaken;
- maximise the chance of detecting the species' habitat and/or signs of use;
- determine the context of the site within the broader landscape—for example, the amount and quality of habitat nearby and in the local region (for example, within 10 km);
- account for uncertainty and error (false presence and absences); and
- include collation of existing data on known locations of breeding and feeding birds and night roost locations.

DSEWPaC (2012) places habitats used by Black Cockatoos into the following three categories:

- Breeding Habitat;
- Foraging Habitat; and
- Night Roosting Habitat.

3.2.3.1 Breeding Habitat Assessment

The Black Cockatoo breeding habitat assessment identified all suitable breeding tree species within the subject site that have a Diameter at Breast Height (DBH) equal to or greater than 50cm. The DBH of each tree was estimated using a pre-made 50 cm "caliper".

Target tree species included Marri, Jarrah, Tuart and Flooded Gum and any other *Corymbia/Eucalyptus* species of a suitable size that was present. Peppermints, *Banksia*, Sheoak and Melaleuca tree species (for example) were not assessed as they typically do not develop hollows used by Black Cockatoos.

The location of each tree identified over the threshold DBH was recorded with a GPS and details of tree species, number and size of hollows (if any) noted. Trees observed to contain hollows (of any size/type) were marked with "H" using spray paint.

Potential hollows were placed into one of four categories, based on the size of the apparent hollow entrance, these being:

- Small = ~<5cm diameter (i.e. entrance too small for a Black Cockatoo);
- Medium = ~5cm-10cm diameter (i.e. entrance too small for a Black Cockatoo);
- Large = ~>10cm diameter (entrance large enough for a Black Cockatoo but hollow appears unsuitable for nesting i.e. wrong orientation, appears too small, too low or too shallow); or
- Large (cockatoo) = ~>10cm diameter (entrance appears big enough for a Black Cockatoo to use for nesting).

Based on this assessment, trees present within the subject site were placed into one of four categories:

- Tree <50cm DBH or an unsuitable species (these were not assessed/recorded);
- Tree ≥50cm DBH, no hollows seen;
- Tree **>**50cm DBH, one or more hollows seen, none of which were considered suitable for Black Cockatoos to use for nesting; or
- Tree <u>></u>50cm DBH, one or more hollows seen, with at least one considered suitable for Black Cockatoos to use for nesting.

For the purposes of this assessment, a tree containing a potential Black Cockatoo nest hollow was defined as:

Generally, any tree which is alive or dead that contains one or more possible hollows (cavities within the trunk or branches) suitable for occupation by Black Cockatoo for the purpose of nesting/breeding. Apparent hollows that had an entrance greater than about 10cm in diameter and would allow the entry of a Black Cockatoo into a suitably orientated and sized branch/trunk, was recorded as a "potential nest hollow".

Identified hollows were examined using binoculars for evidence of actual use by Black Cockatoos (e.g. chewing around hollow entrance, scarring and scratch marks on trunks and branches).

A review of available literature was also carried out to determine the location/extent of any known/likely Black Cockatoo breeding habitat in the vicinity.

3.2.3.2 Foraging Habitat Assessment

The location and nature of Black Cockatoo foraging evidence (e.g. chewed fruits around base of trees) observed during the field survey was recorded. The nature and extent of potential foraging habitat present was also documented irrespective of the presence of any actual foraging evidence. Foraging habitat is represented by plant species that are known to provide a food source for Black Cockatoos. This can be in the form of seeds, flowers and also boring grubs that are extracted from some plant species.

A review of available literature was carried out to determine the location/extent of any known/likely Black Cockatoo foraging habitat areas in the vicinity.

3.2.3.3 Night Roosting Habitat Assessment

Direct and indirect evidence of Black Cockatoos roosting within trees on site was noted where observed (e.g. branch clippings, droppings or moulted feathers).

A review of available literature was carried out to determine the location/extent of any known/likely Black Cockatoo roosting habitat areas in the vicinity.

4. SURVEY LIMITATIONS

No seasonal sampling was carried out as part of this fauna assessment. The conclusions presented are based upon field data and the environmental monitoring and/or testing carried out over a limited period of time and are therefore merely indicative of the environmental condition of the site at the time of the field assessments. It should be recognised that site conditions can change with time.

Lack of observational data on some species should also not necessarily be taken as an indication that a species is absent from the site or does not utilise it for some purpose at times.

During the survey, habitat trees with hollows were searched for. It should be noted that identifying hollows suitable for fauna species from ground level has limitations. Generally, the full characteristics of any hollow seen are not fully evident (e.g. internal dimensions). It is also difficult to locate all hollows within all trees as some are not observable from ground level.

The location of observations was recorded using a handheld GPS. The accuracy of the GPS cannot be guaranteed above a level of about 5 to 10 metres, though it should be noted that in some circumstance the accuracy can increase or decrease beyond this range.

5. RESULTS

5.1 LITERATURE REVIEW

The literature review identified a number of fauna species of conservation significance as potentially occurring in the general area. Table 1 lists the species in question. The NatureMap (DBCA 2018) and Protected Matter Search Tool (DotEE 2018) results, used as a primary source for compiling this listing, are held within Appendix B.

Table 1: Conservation significant fauna previously recorded or potentially occurring within the general vicinity of the subject site.²

	Conservat	ion Status
Species	WC Act/ DBCA Priority	EPBC Act
Carter's Freshwater Mussel Westralunio carteri	S3	VU
Graceful Sunmoth Synemon gratiosa	P4	-
Inornate Trapdoor Spider Euoplos inornatus	P3	-
Woolybush Bee Hylaeus globuliferus	P3	-
Perth Slider Lerista lineata	P3	-
Black-striped Snake Neelaps calonotos	Р3	-
Malleefowl Leipoa ocellata	S3	VU
Australasian Bittern Botaurus poiciloptilus	S2	EN
Australian Little Bittern Ixobrychus dubius	P4	-
Black Bittern Ixobrychus dubius	P2	-
Migratory Shorebirds/Wetland/Marine Species	Various	Various
Hooded Plover Thinornis rubricollis	P4	-
Blue-billed Duck Oxyura australis	P4	-
Glossy Ibis Plegadis falcinellus	S5	Mig, Ma
Eastern Osprey Pandion haliaetus	S5	Mig, Ma
Peregrine Falcon Falco peregrinus	S7	-
Grey Falcon Falco hypoleucos	S3	-
Barking Owl Ninox connivens connivens	P3	-

-

² See Appendix A for conservation status codes

	Conservation Status			
Species	WC Act/ DBCA Priority	EPBC Act		
Masked Owl Tyto novaehollandiae novaehollandiae	P3	-		
Carnaby`s Black Cockatoo Calyptorhynchus latirostris	S2	EN		
Baudin`s Black Cockatoo Calyptorhynchus baudinii	S2	EN		
Forest Red-tailed Black Cockatoo Calyptorhynchus banksii naso	S3	VU		
Muir's Corella Cacatua pastinator pastinator	S6	-		
Western Bristlebird Dasyornis longirostris	S3	EN		
Fork-tailed Swift Apus pacificus	S5	Mig		
Grey Wagtail Motacilla cinerea	S5	Mig		
Chuditch Dasyurus geoffroii	S3	VU		
South-western Brush-tailed Phascogale Phascogale tapoatafa wambenger	S6	-		
Numbat Myrmecobius fasciatus	S3	VU		
Quenda Isoodon fusciventer	P4	1		
Bilby Macrotis lagotis	S3	VU		
Western Ringtail Possum Pseudocheirus occidentalis	S1	CR		
Quokka Setonix brachyurus	S3	VU		
Water Rat Hydromys chrysogaster	P4	-		

5.2 FIELD SURVEYS

5.2.1 FAUNA HABITAT ASSESSMENT

The subject site is situated in an established residential and commercial area near the western fringe of the central Swan Coastal Plain. Most of the area has been cleared of native vegetation and is now mainly comprised of roads, rail lines, carparks, retail, residential and other associated infrastructure.

Vegetation within the subject site is largely confined to road verges and residential gardens. Vegetation along road verges is comprised of grassland or planted exotic, non-endemic and native endemic trees and shrubs of variable composition and density.

The individual remnant native trees and groves of trees, while limited in extent support the primary fauna habitat value although these areas vary in quality, with most areas being totally degraded and lacking significant native groundcover/shrubs and microhabitats such as hollow logs.

Overall fauna values of the subject site are rated as extremely low given the highly degraded nature of most of the area. Fauna biodiversity within the subject site would be depauperate, however given the presence of some vegetation the area still has value for some fauna species able to persist in degraded habitats of this type.

Table 2: Example images of the fauna habitats within the Subject site

Totally cleared (some with occasional scattered trees and shrubs) – roads, railway reserve, parking areas, footpaths, vacant blocks, road verges with bare ground or grassland.

Fauna Habitat Description	Example Image
Planted non-endemic/exotic trees and shrubs along road verges and in	
and shrubs along road verges and in gardens of various composition and density.	
Scattered remnant, regrowth or planted native vegetation along road verges and in railway reserve – Tuart	
Jarrah, Peppermint or Grass Trees over bare ground or open grassland.	

Most of the fauna species likely to be present would however be common, widespread species (mainly birds), with a few exceptions (e.g. occasional presence of Black Cockatoos). Almost all of the conservation significant species identified as having been previously recorded in the wider area (see Table 1) could not persist in the subject site primarily due to a complete lack of suitable habitat (i.e. quality and/or extent) and/or known local extinction.

5.2.2 FAUNA OBSERVATIONS

Seven fauna species, all birds, were observed during the field survey (see Appendix C). The limited number of fauna species observed can be attributed to the small size of the subject site, the limited extent of vegetation and its generally highly degraded state.

With the exception of foraging debris attributed to the Forest Red-tailed Black Cockatoo or Carnaby's Black Cockatoo, (see section 5.2.3.2) which was observed at only one location, no evidence of any of the conservation significant fauna species was seen. However, this does not eliminate the potential for some species to still occur, if only infrequently.

5.2.3 BLACK COCKATOO HABITAT ASSESSMENT

5.2.3.1 Breeding Habitat Assessment

Trees considered potentially suitable for Black Cockatoos to use as nesting habitat (subject to a suitable hollow being present and other factors) found within the subject site comprised the following species:

- Tuart Eucalyptus gomphocephala; and
- Planted non-endemic eucalypts (various unidentified species).

A summary of the habitat trees observed is provided in Table 3 below. The location of habitat trees is shown in Figure 2.

Table 3: Summary of Habitat Trees (DBH ≥50cm) within the subject site

	Number of		Number of Habitat Trees	Tree Species		
Total Number of Habitat Trees (DBH <u>></u> 50cm)	Number of Habitat Trees with <u>No</u> <u>Hollows</u> <u>Observed</u>	Habitat Trees with Possible Hollows considered Unsuitable for Black Cockatoos	with Possible Hollows considered Possibly Suitable for Black Cockatoos	Tuart	Non-Endemic Eucalyptus	
6	5	1	0	2	4	

The assessment identified six trees within the subject site with a DBH of ≥50cm. All but one tree appeared to not contain hollows of any size. One tree contained apparent

hollows, all of which were assessed as being unlikely to currently be suitable for Black Cockatoos to use for nesting purposes (due to each hollows apparent small size, unsuitable orientation and/or height above ground level). One of the hollows was also occupied by feral bees. No evidence of breeding activity was noted.

The distribution of the various habitat tree species is shown in Figure 3. Additional details on each habitat tree observed can be found in Appendix D.

Based on available mapping there is about 1,400 ha of remnant native vegetation within 10 kilometres of the subject site. Much of this is likely to also contain "potential" breeding habitat as defined by DotEE (i.e. suitable tree species with a DBH ≥50cm).

5.2.3.2 Foraging Habitat Assessment

The following flora species known to be or are potentially used as a direct food source (e.g. seeds, flowers, nectar, bark or grubs) by one or more species of Black Cockatoo were recorded within the subject site:

- Tuart Eucalyptus gomphocephala;
- Jarrah Eucalyptus marginata;
- Grass tree Xanthorrhoea preissii;
- Peppermint Agonis flexuosa;
- Bottlebrush Callistemon spp.; and
- Pine Pinus spp.

It should be noted that some of the above-mentioned species (e.g. Tuart, Peppermint, Grass Trees) while foraged upon on occasions are only likely to make up a very small proportion of any one birds diet relative to more favoured plant species such as Marri (absent from the subject site). Some tree species are also only represented by a small number of specimens (e.g. Jarrah) and therefore do not contribute to the overall foraging resource to a significant degree.

Evidence of Black Cockatoos foraging was observed during the field survey in the form of small number of chewed Jarrah fruits at a single location. This evidence was attributed to the Forest red-tailed Black Cockatoo or Carnaby's Black Cockatoo. An example picture of the foraging evidence found is provided in Table 4.

It is difficult to provide an accurate estimate of the extent of Black Cockatoo foraging habitat within the subject site given most trees and shrubs are represented by scattered/isolated specimens some of which are located amongst non-favoured species but an examination of air photos suggests its total extent would be less than 1 ha in size.

Table 4: Foraging evidence examples

Foraging Evidence Description	Example Image
Jarrah Fruits – foraging activity attributed to the forest red-tailed or Carnaby's black-cockatoo.	

Based on available mapping there is about 1,400 ha of remnant native vegetation within 10 kilometres of the subject site. Much of this is likely to also represent Black Cockatoo foraging habitat of some type.

5.2.3.3 Night Roosting Habitat Assessment

No evidence of Black Cockatoos roosting within trees located within the subject site was observed during the survey period. It is difficult to determine if trees or groves of trees within the subject site represent potential roosting habitat as a range of factors, not all of which can be observed, determine suitability. Some of the larger trees (included non-endemics/exotics) may be suitable but as indicated no actual evidence of use was seen.

A review of the 2018 Great Cocky Count database shows no documented roost sites within the subject site, however one registered site (CLASWAR001) is located in private property adjacent to the Shenton Road opposite the northern boundary of the railway reserve. No roosting activity has been recorded here since 2014 when three white-tailed Black Cockatoos were recorded (Peck *et al.* 2018).

The closest active roost (2017) is located ~2.8 km north of the subject site. This site was in use by 261 red-tailed Black Cockatoos during the 2017 Great Cocky Count. Another 59 documented roost sites (but not necessarily in current use) occur within 10 km of the subject site (Peck *et al.* 2018).

6. CONSERVATION SIGNIFICANT FAUNA SPECIES

Based on the information gathered during the site reconnaissance survey and the documented distribution and habitat preferences of the species of conservation significance identified as potentially being present in the general area, their likelihood of occurrence has been assessed. A summary of this assessment is presented in Table 5.

Table 5: Likelihood of Occurrence – Fauna Species of Conservation Significance (continues on following pages).³

0	Conservation Status		Habitat		
Species	WC Act/ DBCA Priori	EPBC Act	Present	Likelihood of Occurrence	
Carter's Freshwater Mussel Westralunio carteri	S3	VU	No	Would Not Occur	
Graceful Sunmoth Synemon gratiosa	P4	-	No	Would Not Occur	
Inornate Trapdoor Spider Euoplos inornatus	P3	-	No	Would Not Occur	
Woolybush Bee Hylaeus globuliferus	P3	-	No	Would Not Occur	
Perth Slider Lerista lineata	P3	-	No/Very Marginal	Would Not Occur	
Black-striped Snake Neelaps calonotos	P3	-	No	Would Not Occur	
Malleefowl Leipoa ocellata	S3	VU	No	Would Not Occur/Regionally Extinct	
Australasian Bittern Botaurus poiciloptilus	S2	EN	No	Would Not Occur	
Australian Little Bittern Ixobrychus dubius	P4	-	No	Would Not Occur	
Black Bittern Ixobrychus dubius	P2	-	No	Would Not Occur	
Migratory Shorebirds/Wetland/Marine Species	Various	Various	No	Would Not Occur	
Hooded Plover Thinornis rubricollis	P4	-	No	Would Not Occur	
Blue-billed Duck Oxyura australis	P4	-	No	Would Not Occur	
Glossy Ibis Plegadis falcinellus	S5	Mig, Ma	No	Would Not Occur	
Eastern Osprey Pandion haliaetus	S5	Mig, Ma	No	Would Not Occur	
Peregrine Falcon Falco peregrinus	S7	-	Yes	Possibly Occurs (on rare occasions)	
Grey Falcon Falco hypoleucos	S3	-	No	Would Not Occur	
Barking Owl Ninox connivens connivens	P3	-	No	Would Not Occur	
Masked Owl Tyto novaehollandiae novaehollandiae	P3	-	No	Would Not Occur	
Carnaby`s Black Cockatoo Calyptorhynchus latirostris	S2	EN	Yes/Marginal	Possibly Occurs	

 $^{^{3}}$ See Appendix A for conservation status codes

Species	Conservation Status		Habitat	Likelihood of Occurrence	
Species	WC Act/ DBCA Priori	EPBC Act	Present	Likelinood of Occurrence	
Baudin`s Black Cockatoo Calyptorhynchus baudinii	S2	EN	Yes/Marginal	Possibly Occurs	
Forest Red-tailed Black Cockatoo Calyptorhynchus banksii naso	S3	VU	Yes/Marginal	Possibly Occurs	
Muir's Corella Cacatua pastinator pastinator	S6	1	No	Would Not Occur	
Western Bristlebird Dasyornis longirostris	S3	EN	No	Would Not Occur/Regionally Extinct	
Fork-tailed Swift Apus pacificus	S5	Mig	Yes	Unlikely to Occur except very rarely	
Grey Wagtail Motacilla cinerea	S5	Mig	No	Would Not Occur	
Chuditch Dasyurus geoffroii	S3	VU	No	Would Not Occur/Regionally Extinct	
South-western Brush-tailed Phascogale <i>Phascogale tapoatafa wambenger</i>	S6	-	No	Would Not Occur	
Numbat <i>Myrmecobius fasciatus</i>	S3	VU	No	Would Not Occur/Regionally Extinct	
Quenda Isoodon fusciventer	P4	-	No	Would Not Occur	
Bilby Macrotis lagotis	S3	VU	No	Would Not Occur/Regionally Extinct	
Western Ringtail Possum Pseudocheirus occidentalis	S1	CR	No	Would Not Occur/Regionally Extinct	
Quokka Setonix brachyurus	S3	VU	No	Would Not Occur	
Water Rat Hydromys chrysogaster	P4	-	No	Would Not Occur	

Four vertebrate fauna species of conservation significance (listed as State or Federal threatened/migratory species or as DBCA priority species) are considered as likely to utilise the subject area for some purpose, these being:

- Calyptorhynchus banksii naso Forest Red-tailed Black Cockatoo S3 (WC Act), Vulnerable (EPBC Act)
 Foraging evidence possibly left by this species was observed. Areas of vegetation within the subject site represent foraging habitat for this species. Larger trees
- (<u>></u>50cm DBH) can be considered potential breeding habitat, though no actual breeding activity was evident. No evidence of roosting observed.

 Calvatorbynchus latirostris Carnaby's Black Cockaton S2 (WC Act) Endangered
- Calyptorhynchus latirostris Carnaby`s Black Cockatoo S2 (WC Act), Endangered (EPBC Act)
 Foraging evidence possibly left by this species observed. Areas of vegetation within the subject site represent foraging habitat for this species. Larger trees (>50cm DBH) can be considered potential breeding habitat, though no actual breeding activity was evident. No evidence of roosting observed.
- Calyptorhynchus baudinii Baudin's Black Cockatoo S2 (WC Act), Endangered (EPBC Act)

No evidence of this species observed. Areas of vegetation within the subject site represent foraging habitat for this species. Larger trees (>50cm DBH) can be considered potential breeding habitat, though no actual breeding activity was evident. No evidence of roosting observed.

Falco peregrinus Peregrine Falcon – S7 (WC Act)
 Uncommon so unlikely to be resident in the area but subject site may form part of larger home range. Only likely to occur very infrequently when foraging in air space over the subject site and then only for brief periods. Unlikely to breed in the area.

A number of other species of conservation significance (as listed in Table 5), while possibly present in the wider area (e.g. Bold Park) are not listed as potentially occurring within the subject site primarily due to a complete lack of suitable habitat (quality and extent) and/or known local/regional extinction.

7. CONCLUSION

The fauna assessment of the proposed Claremont Train Station Development Works Project area was primarily undertaken for the purposes of identifying the presence of conservation significant fauna species and/or their habitat.

Based on habitats present (and a limited amount of foraging evidence left by one species of Black Cockatoo) it has been determined that four species of conservation significance may possibly occur at times (Forest Red-tailed Black Cockatoo, Carnaby's Black Cockatoo, Baudin's Black Cockatoo and Peregrine Falcon) though their current status onsite and/or in the general area is difficult to determine because they were not sighted during the survey period and/or no evidence of use of the subject site was found. Given the limited extent of suitable habitat present it can however be expected that these species only occur occasionally and then only for brief periods.

The potential impact to conservation significant species from the proposed development will vary depending on their current degree of utilisation/population densities and preferred habitat requirements (e.g. quantity and quality of potential foraging habitat that will be affected when clearing of the site is undertaken).

The potential impacts on these species and/or their habitat should be taken into consideration during ongoing planning.

8. REFERENCES

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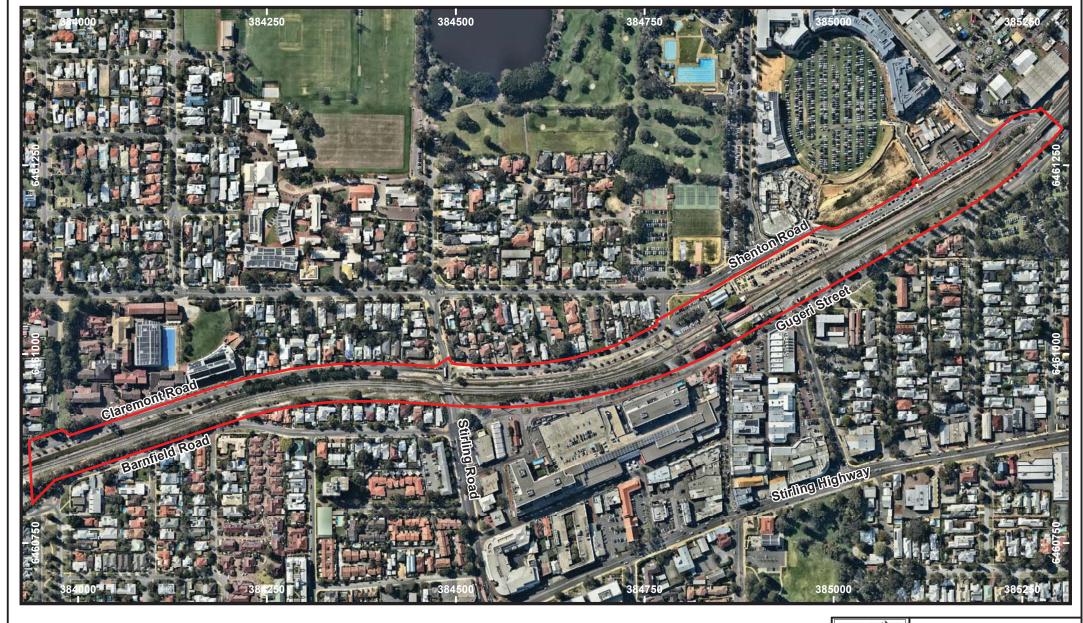
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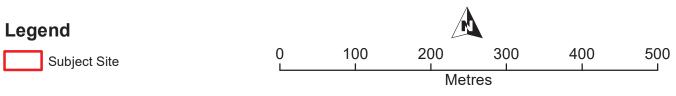
Environmental Protection Authority (EPA) (2016b). *Technical Guidance – Sampling Methods for Terrestrial Vertebrate Fauna.*

Peck, A., Barrett, G. & Williams, M. (2018). The 2018 Great Cocky Count: a community-based survey for Carnaby's Black-Cockatoo (Calyptorhynchus latirostris), Baudin's Black-Cockatoo (Calyptorhynchus baudinii) and Forest Red-tailed Black-Cockatoo (Calyptorhynchus banksii naso). BirdLife Australia, Floreat, Western Australia.

.

FIGURES







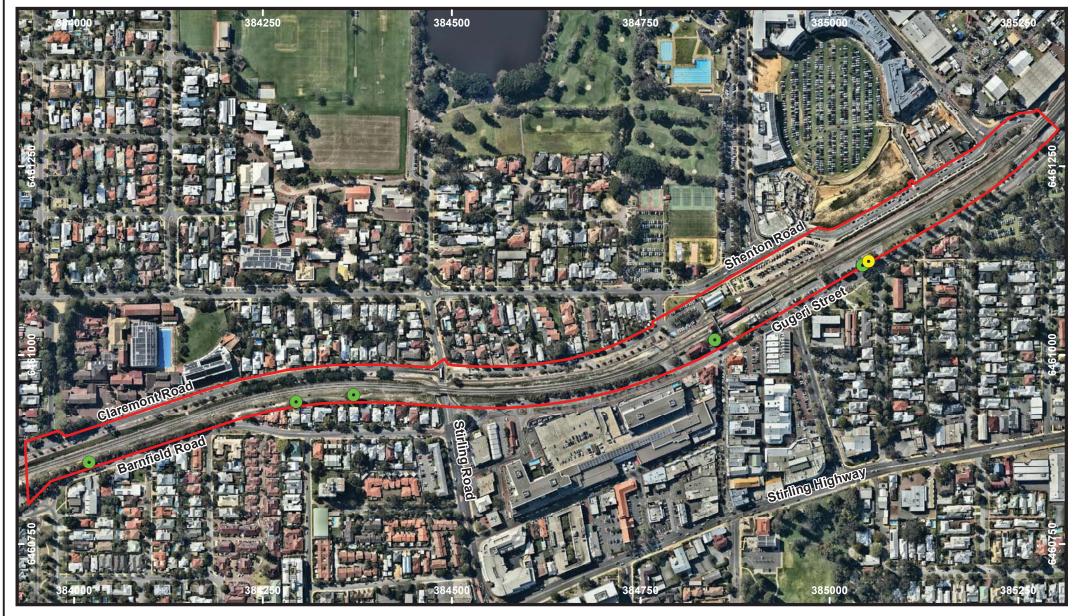
Claremont Train Station Development Works Public Transport Authority

Aerial Photograph

Scale: 1: 50,000

Projection/Coordinate System: UTM/MGA Zone 50

Figure: 1

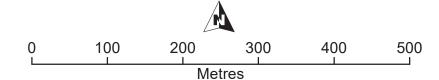


Legend

Subject Site

Habitat Tree - One or more possible small/medium hollows

Habitat Tree - No hollows seen



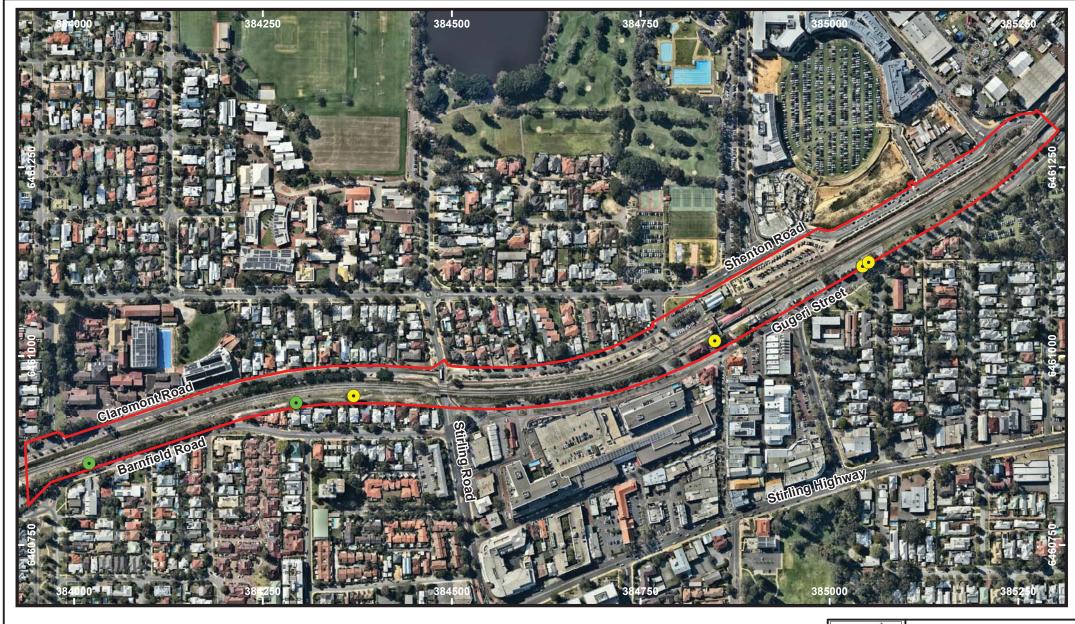


Claremont Train Station Development Works Public Transport Authority

Habitat Trees (DBH >50cm)

Projection/Coordinate System: UTM/MGA Zone 50

Figure: 2

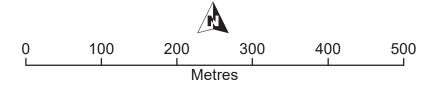






Tuart

Unknown Non-Endemic Eucalypt





Claremont Train Station Development Works Public Transport Authority

Habitat Tree Species

Projection/Coordinate System: UTM/MGA Zone 50

Figure: 3

APPENDIX A

CONSERVATION CATEGORIES

EPBC Act (1999) Threatened Fauna Categories

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

Category	Code	Description
Extinct	E	There is no reasonable doubt that the last member of the species has died.
*Extinct in the wild	EW	A species (a) is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; or (b) 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	CE	A species is facing an extremely high risk of extinction in the wild in the immediate future.
*Endangered	EN	A species: (a) is not critically endangered; and (b) is facing a very high risk of extinction in the wild in the near future.
*Vulnerable	VU	A species (a) is not critically endangered or endangered; and (b) is facing a high risk of extinction in the wild in the medium-term future.
Conservation Dependent	CD	A species is the focus of a specific conservation program the cessation of which would result in the species becoming vulnerable, endangered or critically endangered
*Migratory	Migratory	(a) all migratory species that are: (i) native species; and (ii) from time to time included in the appendices to the Bonn Convention; and (b) all migratory species from time to time included in annexes established under JAMBA, CAMBA and ROKAMBA; and (c) all native species from time to time identified in a list established under, or an instrument made under, an international agreement approved by the Minister.
Marine	Ма	Species in the list established under s248 of the EPBC Act

Note: Only species in those categories marked with an asterix are matters of national environmental significance (NES) under the *EPBC Act*.

Wildlife Conservation (Specially Protected Fauna) Notice 2017 Categories

Published as Specially Protected under the *Wildlife Conservation Act 1950*, and listed under Schedules 1 to 7 of the Wildlife Conservation (Specially Protected Fauna) Notice.

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.

Category	Code	Description
Schedule 1 (S1) Critically Endangered species	CR	Threatened species considered to be facing an extremely high risk of extinction in the wild.
Schedule 2 (S2) Endangered species	EN	Threatened species considered to be facing a very high risk of extinction in the wild.
Schedule 3 (S3) Vulnerable species	VU	Threatened species considered to be facing a high risk of extinction in the wild.
Schedule 4 (S4) Presumed extinct species	EX	Species which have been adequately searched for and there is no reasonable doubt that the last individual has died.
Schedule 5 (S5) Migratory birds protected under an international agreement	IA	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.
Schedule 6 (S6) Fauna that is of special conservation need as conservation dependent fauna	CD	Fauna of special conservation need being species dependent on ongoing conservation intervention to prevent it becoming eligible for listing as threatened.
Schedule 7 (S7) Other specially protected fauna.	os	Fauna otherwise in need of special protection to ensure their conservation.

Western Australian DBCA Priority Fauna Categories

Possibly threatened species that do not meet survey criteria, or are otherwise data deficient, are added to the Priority Fauna 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.

Category	Code	Description
Priority 1 (P1) Poorly Known Species.	P1	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.
Priority 2 (P2) Poorly Known Species.	P2	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.
Priority 3 (P3) Poorly Known Species.	P3	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.
Priority 4 (P4) Rare, Near Threatened and other species in need of	P4	 (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.
monitoring.		(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).

IUCN Red List Threatened Species Categories

The *IUCN Red List of Threatened Species* $^{\text{TM}}$ is a checklist of taxa that have undergone an extinction risk assessment using the *IUCN Red List Categories and Criteria*.

Categories are summarized below.

Category	Code	Description
Extinct	EX	Taxa for which there is no reasonable doubt that the last individual has died.
Extinct in the Wild	EW	Taxa which is known only to survive in cultivation, in captivity or and as a naturalised population well outside its past range and it has not been recorded in known or expected habitat despite exhaustive survey over a time frame appropriate to its life cycle and form.
Critically Endangered	CR	Taxa facing an extremely high risk of extinction in the wild.
Endangered	EN	Taxa facing a very high risk of extinction in the wild.
Vulnerable	VU	Taxa facing a high risk of extinction in the wild.
Near Threatened	NT	Taxa which has been evaluated but does not qualify for CR, EN or VU now but is close to qualifying or likely to qualify in the near future.
Least Concern	LC	Taxa which has been evaluated but does not qualify for CR, EN, VU, or NT but is likely to qualify for NT in the near future.
Data Deficient	DD	Taxa for which there is inadequate information to make a direct or indirect assessment of its risk of extinction based on its distribution and/or population status.
Not Evaluated	NE	Taxa which has not been evaluated.

A full list of categories and their meanings are available at:

http://www.iucnredlist.org/technical-documents/categories-and-criteria/2001-categories-criteria

APPENDIX B

DBCA & EPBC DATABASE SEARCH RESULTS



Amphibian

NatureMap - Claremont Station

Created By Greg Harewood on 29/09/2018

Kingdom Animalia

Current Names Only Yes

Core Datasets Only Yes

Method 'By Circle'

Centre 115° 46' 48" E,31° 58' 52" S

Buffer 10km

Group By Species Group

Species Group	Species	Records
Amphibian Bird Fish Invertebrate Mammal Reptile	13 373 301 162 47 72	643 81410 1279 2030 889 2570
TOTAL	968	88821

Name ID Species Name

Naturalised Conservation Code ¹Endemic To Query Area

Ampinbian			
1.	25398 Crinia georgiana (Quacking Frog)		
2.	25399 Crinia glauerti (Clicking Frog)		
3.	25400 Crinia insignifera (Squelching Froglet)		
4.	25401 Crinia pseudinsignifera (Bleating Froglet)		
5.	25410 Heleioporus eyrei (Moaning Frog)		
6.	25412 Heleioporus psammophilus (Sand Frog)		
7.	25415 Limnodynastes dorsalis (Western Banjo Frog)		
8.	25378 Litoria adelaidensis (Slender Tree Frog)		
9.	25388 Litoria moorei (Motorbike Frog)		
10.	25420 Myobatrachus gouldii (Turtle Frog)		
11.	25426 Neobatrachus pelobatoides (Humming Frog)		
12.	25433 Pseudophryne guentheri (Crawling Toadlet)		
13.	25434 Pseudophryne occidentalis (Western Toadlet)		
Bird			
14.	24559 Acanthagenys rufogularis (Spiny-cheeked Honeyeater)		
15.	24260 Acanthiza apicalis (Broad-tailed Thornbill, Inland Thornbill)		
16.	24261 Acanthiza chrysorrhoa (Yellow-rumped Thornbill)		
17.	24262 Acanthiza inornata (Western Thornbill)		
18.	24265 Acanthiza uropygialis (Chestnut-rumped Thornbill)		
19.	24560 Acanthorhynchus superciliosus (Western Spinebill)		
20.	25535 Accipiter cirrocephalus (Collared Sparrowhawk)		
21.	24281 Accipiter cirrocephalus subsp. cirrocephalus (Collared Sparrowhawk)		
22.	25536 Accipiter fasciatus (Brown Goshawk)		
23.	24283 Accipiter fasciatus subsp. didimus (Brown Goshawk)		
24.	24282 Accipiter fasciatus subsp. fasciatus (Brown Goshawk)		
25.	Acridotheres fuscus		Υ
26.	Acridotheres tristis subsp. tristis		
27.	25755 Acrocephalus australis (Australian Reed Warbler)		
28.	24831 Acrocephalus australis subsp. gouldi (Australian Reed Warbler)		
29.	Acrocephalus scripaceus		Υ
30.	41323 Actitis hypoleucos (Common Sandpiper)	IA	
31.	24301 Aegotheles cristatus subsp. cristatus (Australian Owlet-nightjar)		
32.	Amazona auropalliata		Υ
33.	24310 Anas castanea (Chestnut Teal)		
34.	24312 Anas gracilis (Grey Teal)		
35.	24313 Anas platyrhynchos (Mallard)		
36.	Anas platyrhynchos subsp. domesticus		
37.	24315 Anas rhynchotis (Australasian Shoveler)		
38.	24316 Anas superciliosa (Pacific Black Duck)		
39.	Anas superciliosa subsp. x platyrhynchos		
		A STATE OF THE PARTY OF THE PAR	ANSTAA

NatureMap is a collaborative project of the Department of Parks and Wildlife and the Western Australian Museum.







	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
					Υ
40.		Anhinga novaehollandiae (Australasian Darter)			
41. 42.		Anous stolidus (Common Noddy) Anous stolidus subsp. pileatus (Common Noddy)		IA	
43.		Anous tenuirostris subsp. melanops (Australian Lesser Noddy)		IA T	
44.	24000	Anser anser			
45.	24561	Anthochaera carunculata (Red Wattlebird)			
46.		Anthochaera lunulata (Western Little Wattlebird)			
47.	24599	Anthus australis subsp. australis (Australian Pipit)			
48.	25554	Apus pacificus (Fork-tailed Swift, Pacific Swift)		IA	
49.	24334	Apus pacificus subsp. pacificus (Fork-tailed Swift, Pacific Swift)		IA	
50.	24285	Aquila audax (Wedge-tailed Eagle)			
51.		Ara ararauna			Υ
52.		Ardea garzetta subsp. nigripes (Little Egret)			
53.		Andrea mediante (construente entre la construente e			
54.		Ardea nodesta (great egret, white egret)			
55. 56.		Ardea position (White packed Haran)			
50. 57.		Ardea pacifica (White-necked Heron) Ardenna carneipes (Flesh-footed Shearwater, Fleshy-footed Shearwater)		Т	
58.		Ardenna pacifica (Wedge-tailed Shearwater)		IA	
59.		Ardeotis australis (Australian Bustard)		<i>D</i> (
60.		Arenaria interpres (Ruddy Turnstone)		IA	
61.		Artamus cinereus (Black-faced Woodswallow)			
62.		Artamus cinereus subsp. melanops (Black-faced Woodswallow)			
63.		Artamus personatus (Masked Woodswallow)			
64.	24318	Aythya australis (Hardhead)			
65.		Barnardius zonarius			
66.	24319	Biziura lobata (Musk Duck)			
67.	24345	Botaurus poiciloptilus (Australasian Bittern)		T	
68.	24359	Burhinus grallarius (Bush Stone-curlew)			
69.	25713	Cacatua galerita (Sulphur-crested Cockatoo)			
70.		Cacatua galerita subsp. galerita (Sulphur-crested Cockatoo)	Υ		
71.		Cacatua pastinator (Western Long-billed Corella)			
72.	24724	Cacatua pastinator subsp. pastinator (Muir's Corella, Muir's Corella (Western Corella SW WA))		S	
73.		Cacatua roseicapilla (Galah)			
74.		Cacatua sanguinea (Little Corella)			
75.		Cacatua sanguinea subsp. westralensis (Little Corella)			
76.		Cacatua tenuirostris (Eastern Long-billed Corella)	Υ		
77.		Cacomantis flabelliformis (Fan-tailed Cuckoo)			
78. 79.		Cacomantis flabelliformis subsp. flabelliformis (Fan-tailed Cuckoo)			
79. 80.		Cacomantis pallidus (Pallid Cuckoo) Calidris acuminata (Sharp-tailed Sandpiper)		IA	
81.		Calidris alba (Sanderling)		IA	
82.		Calidris canutus (Red Knot, knot)		IA	
83.		Calidris canutus subsp. rogersi (Red Knot (north-eastern Siberia))		Т	
84.		Calidris ferruginea (Curlew Sandpiper)		Т	
85.		Calidris melanotos (Pectoral Sandpiper)		IA	
86.		Calidris ruficollis (Red-necked Stint)		IA	
87.		Calidris sp.			
88.	24789	Calidris subminuta (Long-toed Stint)		IA	
89.	24790	Calidris tenuirostris (Great Knot)		Т	
90.		Calonectris leucomelas (Streaked Shearwater)		IA	
91.		Calyptorhynchus banksii (Red-tailed Black-Cockatoo)			
92.		Calyptorhynchus banksii subsp. naso (Forest Red-tailed Black Cockatoo)		Т	
93.	24733	Calyptorhynchus baudinii (Baudin's Cockatoo, White-tailed Long-billed Black Cockatoo)		Т	
94.	24734	Calyptorhynchus latirostris (Carnaby's Cockatoo, White-tailed Short-billed Black Cockatoo)		Т	
95.	48400	Calyptorhynchus sp. (white-tailed black cockatoo)		T	
96.	25625	Carduelis carduelis (Goldfinch, European Goldfinch)	Υ		
97.	24480	Carduelis carduelis subsp. britannica (Goldfinch)	Υ		
98.		Carduelis chloris			Υ
99.	25575	Charadrius leschenaultii (Greater Sand Plover)		IA	
100.		Charadrius mongolus (Lesser Sand Plover)		T	
101.		Charadrius ruficapillus (Red-capped Plover)			
102.		Chenonetta jubata (Australian Wood Duck, Wood Duck)			
103.	47909	Cheramoeca leucosterna (White-backed Swallow)			
104.	0.1.100	Chroicocephalus novaehollandiae			
105.	24432	Chrysococcyx lucidus subsp. plagosus (Shining Bronze Cuckoo)			
				Departmen	of







	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
106.		Circus Approximans			Y
107.	24288	Circus approximans (Swamp Harrier)			
108.	24289	Circus assimilis (Spotted Harrier)			
109.	24774	Cladorhynchus leucocephalus (Banded Stilt)			
110.		Collocalia esculenta			
111.	25675	Colluricincla harmonica (Grey Shrike-thrush)			
112.		Colluricincla harmonica subsp. rufiventris (Grey Shrike-thrush)			
113.		Columba livia (Domestic Pigeon)	Υ		
114.		Coracina maxima (Ground Cuckoo-shrike)			
115.		Coracina novaehollandiae (Black-faced Cuckoo-shrike)			
116.		Coracina novaehollandiae subsp. novaehollandiae (Black-faced Cuckoo-shrike)			
117. 118.		Corvus bennetti (Little Crow) Corvus coronoides (Australian Raven)			
119.		Corvus coronoides (Australian Naveri) Corvus coronoides subsp. perplexus (Australian Raven)			
120.		Corvus splendens (House Crow)			
121.		Corvus splendens subsp. protegatus			
122.	24671	Coturnix pectoralis (Stubble Quail)			
123.	25701	Coturnix ypsilophora (Brown Quail)			
124.	24420	Cracticus nigrogularis (Pied Butcherbird)			
125.	25595	Cracticus tibicen (Australian Magpie)			
126.	24422	Cracticus tibicen subsp. dorsalis (White-backed Magpie)			
127.		Cracticus torquartus			
128.	25596	Cracticus torquatus (Grey Butcherbird)			
129.		Cygnus atratus (Black Swan)			
130.		Cygnus olor (Mute Swan)	Y		
131.		Dacelo novaeguineae (Laughing Kookaburra)	Y		
132. 133.		Dacelo novaeguineae subsp. novaeguineae (Laughing Kookaburra) Daphoenositta chrysoptera (Varied Sittella)	Υ		
134.		Daphoenositta chrysoptera subsp. pileata (Varied Sittella, Black-capped Sitella)			
135.		Daption capense (Cape Petrel)			
136.		Dasyornis longirostris (Western Bristlebird)		Т	
137.	25607	Dicaeum hirundinaceum (Mistletoebird)			
138.	24442	Dicrurus bracteatus subsp. bracteatus (Spangled Drongo)			
139.	25618	Diomedea exulans (Wandering Albatross)		T	
140.	30836	Diomedea exulans subsp. exulans (Snowy Albatross)		T	
141.	24470	Dromaius novaehollandiae (Emu)			
142.		Egretta garzetta			
143. 144.		Egretta novaehollandiae Elanus axillaris			
145.	24290	Elanus caeruleus subsp. axillaris (Australian Black-shouldered Kite)			
146.		Elseyornis melanops (Black-fronted Dotterel)			
147.		Eolophus roseicapillus			
148.	24651	Eopsaltria australis subsp. griseogularis (Western Yellow Robin)			
149.	24652	Eopsaltria georgiana (White-breasted Robin)			
150.	24567	Epthianura albifrons (White-fronted Chat)			
151.		Epthianura tricolor (Crimson Chat)			
152.		Erythrogonys cinctus (Red-kneed Dotterel)			
153.		Eudyptes chrysolophus (Macaroni Penguin)			Υ
154.		Eudyptula minor subsp. novaehollandiae (Little Penguin)			
155. 156.		Eurostopodus argus (Spotted Nightjar) Eurystomus orientalis (Dollarbird)			
157.		Falco berigora (Brown Falcon)			
157.		Falco berigora (brown Falcon) Falco berigora subsp. berigora (Brown Falcon)			
159.		Falco cenchroides (Australian Kestrel, Nankeen Kestrel)			
160.		Falco cenchroides subsp. cenchroides (Australian Kestrel, Nankeen Kestrel)			
161.	24473	Falco hypoleucos (Grey Falcon)		Т	
162.	25623	Falco longipennis (Australian Hobby)			
163.	24474	Falco longipennis subsp. longipennis (Australian Hobby)			
164.	25624	Falco peregrinus (Peregrine Falcon)		S	
165.	24475	Falco peregrinus subsp. macropus (Australian Peregrine Falcon)		S	
166.		Fringilla coelebs			Υ
167.		Fulica atra (Eurasian Coot)			
168.		Fulica atra subsp. australis (Eurasian Coot)			
169. 170.	24688	Fulmarus glacialoides (Southern Fulmar) Gallicolumba inhiensis			V
170. 171.	24702	Gallicolumba jobiensis Gallinago stenura (Pin-tailed Snipe)		IA	Y
171.		Gallinula tenebrosa (Dusky Moorhen)		I/A	
173.		Gallinula tenebrosa subsp. tenebrosa (Dusky Moorhen)			
174.		Gallirallus philippensis (Buff-banded Rail)			
175.	24765	Gallirallus philippensis subsp. mellori (Buff-banded Rail)			
		NaturaMan is a callaborative project of the Department of Parks and Wildlife and the Western	Acceptantian Manager	Department Parks and V	ot museum







	Name ID	Species Name Naturalised	Conservation Code	Endemic To Query Area
176.	10011	Gallus gallus		
177.		Gavicalis virescens (Singing Honeyeater)	10	
178. 179.		Gelochelidon nilotica (Gull-billed Tern) Gerygone fusca (Western Gerygone)	IA	
180.		Gerygone fusca (Western Gerygone) Gerygone fusca subsp. fusca (Western Gerygone)		
181.		Glyciphila melanops (Tawny-crowned Honeyeater)		
182.		Gracula religiosa		
183.	24443	Grallina cyanoleuca (Magpie-lark)		
184.		Haematopus fuliginosus (Sooty Oystercatcher)		
185.	24487	Haematopus longirostris (Pied Oystercatcher)		
186.	24293	Haliaeetus leucogaster (White-bellied Sea-Eagle)		
187.	24295	Haliastur sphenurus (Whistling Kite)		
188.		Halobaena caerulea (Blue Petrel)		
189.		Hieraaetus morphnoides (Little Eagle)		
190.		Himantopus himantopus (Black-winged Stilt)		
191.		Himantopus himantopus subsp. leucocephalus (Black-winged Stilt)		
192.	24491	, ,	10	
193. 194.		Hydroprogne caspia (Caspian Tern)	IA	
194.		Hylacola cauta subsp. whitlocki (Shy Groundwren) Ixobrychus dubius (Australian Little Bittern)	P4	
196.		Ixobrychus flavicollis subsp. australia Black Bittern (southwest subpop.), Australian	F#	
100.	24041	Black Bittern)	P2	
197.	24367	Lalage tricolor (White-winged Triller)		
198.		Lanius tigrinus (Tiger Shrike)		Υ
199.		Larus dominicanus (Kelp Gull)		
200.		Larus novaehollandiae (Silver Gull)		
201.	24511	Larus novaehollandiae subsp. novaehollandiae (Silver Gull)		
202.	25638	Larus pacificus (Pacific Gull)		
203.	24557	Leipoa ocellata (Malleefowl)	T	
204.		Leucosarcia melanoleuca		
205.	25659	Lichenostomus leucotis (White-eared Honeyeater)		
206.	25661	Lichmera indistincta (Brown Honeyeater)		
207.	24582	Lichmera indistincta subsp. indistincta (Brown Honeyeater)		
208.		Limosa lapponica (Bar-tailed Godwit)	IA	
209.		Limosa limosa (Black-tailed Godwit)	IA	
210.		Limosa limosa subsp. melanuroides (Black-tailed Godwit)	IA	
211.	25683	Lonchura castaneothorax (Chestnut-breasted Mannikin)		
212.	0.4000	Lophoictinia isura		
213.		Macronectes giganteus (Southern Giant Petrel)	IA	
214. 215.		Macronectes halli (Northern Giant Petrel) Malacorhynchus membranaceus (Pink-eared Duck)	IA	
216.		Malurus elegans (Red-winged Fairy-wren)		
217.		Malurus lamberti (Variegated Fairy-wren)		
218.		Malurus lamberti subsp. assimilis (Variegated Fairy-wren)		
219.		Malurus leucopterus (White-winged Fairy-wren)		
220.		Malurus leucopterus subsp. leuconotus (White-winged Fairy-wren)		
221.	24551			
222.	25654	Malurus splendens (Splendid Fairy-wren)		
223.	24583	Manorina flavigula (Yellow-throated Miner)		
224.	25758	Megalurus gramineus (Little Grassbird)		
225.	24838	Megalurus gramineus subsp. gramineus (Little Grassbird)		
226.	25663	Melithreptus brevirostris (Brown-headed Honeyeater)		
227.	24586	Melithreptus brevirostris subsp. leucogenys (Brown-headed Honeyeater)		
228.		Melithreptus chloropsis (Western White-naped Honeyeater)		
229.		Melopsittacus undulatus (Budgerigar)		
230.	24598	Merops ornatus (Rainbow Bee-eater)		
231.	05-1-	Microcarbo melanoleucos		
232.		Milvus migrans (Black Kite)		
233. 234.		Morus serrator (Australasian Gannet)		
		Myiagra inquieta (Restless Flycatcher)		
235. 236.		Neophema elegans (Elegant Parrot) Ninox connivens subsp. connivens (Barking owl (southwest subpop.))	P3	
237.	24019	Ninox novaeseelandiae subsp. rufigaster	P3	V
237.	24798	Numenius madagascariensis (Eastern Curlew)	Т	
239.	Z+130	Numenius madagascariensis subsp. cyanopus	'	
240.	25742	Numenius phaeopus (Whimbrel)	IA	
241.		Nycticorax caledonicus (Rufous Night Heron)		
		Nymphicus hollandicus (Cockatiel)		
242.	24142			
242. 243.		Oceanites oceanicus (Wilson's Storm-petrel)	IA	
	24497	Oceanites oceanicus (Wilson's Storm-petrel) Ocyphaps lophotes (Crested Pigeon)	IA	





	Name ID	Species Name Naturalis	ed Conservation Code	¹ Endemic To Query Area
245.	41347	Onychoprion anaethetus (Bridled Tern)	IA	
246.	48040	Otus sunia (Oriental Scops Owl)		Υ
247.		Oxyura australis (Blue-billed Duck)	P4	
248.		Pachycephala rufiventris (Rufous Whistler)		
249.		Pachycephala rufiventris subsp. rufiventris (Rufous Whistler)		
250. 251		Pachyptila belcheri (Slender-billed Prion)		
251. 252.		Pachyptila desolata (Antarctic Prion)		
252.		Pachyptila salvini (Salvin's Prion) Pachyptila turtur (Fairy Prion)		
253.		Pachyptila vittata (Broad-billed Prion)		
255.	24007	Padda oryzivora		
256.	48591	Pandion cristatus (Osprev, Eastern Osprey)	IA	
257.		Pardalotus punctatus (Spotted Pardalote)	IA.	
258.		Pardalotus punctatus subsp. punctatus (Spotted Pardalote)		
259.		Pardalotus punctatus subsp. xanthopyge (Yellow-rumped Pardalote)		
260.		Pardalotus striatus (Striated Pardalote)		
261.		Pardalotus striatus subsp. westraliensis (Striated Pardalote)		
262.		Paroaria coronata		Υ
263.	25687	Passer domesticus (House Sparrow) Y		
264.	24642	Passer montanus (Eurasian Tree Sparrow) Y		
265.		Pelecanoides urinatrix subsp. exsul (Common Diving Petrel)		
266.	24648	Pelecanus conspicillatus (Australian Pelican)		
267.	48060	Petrochelidon ariel (Fairy Martin)		
268.	48061	Petrochelidon nigricans (Tree Martin)		
269.	48066	Petroica boodang (Scarlet Robin)		
270.	24659	Petroica goodenovii (Red-capped Robin)		
271.	24663	Phaethon rubricauda (Red-tailed Tropicbird)	P4	
272.	25697	Phalacrocorax carbo (Great Cormorant)		
273.	24664	Phalacrocorax carbo subsp. novaehollandiae (Great Cormorant)		
274.	24665	Phalacrocorax fuscescens (Black-faced Cormorant)		
275.	25698	Phalacrocorax melanoleucos (Little Pied Cormorant)		
276.	24666	Phalacrocorax melanoleucos subsp. melanoleucos (Little Pied Cormorant)		
277.		Phalacrocorax sp.		
278.		Phalacrocorax sulcirostris (Little Black Cormorant)		
279.		Phalacrocorax varius (Pied Cormorant)		
280.		Phalacrocorax varius subsp. hypoleucos (Pied Cormorant)		
281.		Phaps chalcoptera (Common Bronzewing)	_	
282.		Phoebetria fusca (Sooty Albatross)	Т	
283. 284.		Phylidonyris niger (White-cheeked Honeyeater)		
285.		Phylidonyris novaehollandiae (New Holland Honeyeater) Platalea flavipes (Yellow-billed Spoonbill)		
286.		Platalea regia (Royal Spoonbill)		
287.		Platycercus icterotis (Western Rosella)		
288.		Platycercus icterotis subsp. icterotis (Western Rosella)		
289.		Platycercus spurius (Red-capped Parrot)		
290.		Platycercus zonarius (Australian Ringneck, Ring-necked Parrot)		
291.		Platycercus zonarius subsp. semitorquatus (Twenty-eight Parrot)		
292.		Platycercus zonarius subsp. zonarius (Port Lincoln Parrot)		
293.		Plegadis falcinellus (Glossy Ibis)	IA	
294.		Pluvialis fulva (Pacific Golden Plover)	IA	
295.		Pluvialis squatarola (Grey Plover)	IA	
296.		Podargus strigoides (Tawny Frogmouth)		
297.		Podargus strigoides subsp. brachypterus (Tawny Frogmouth)		
298.	25704	Podiceps cristatus (Great Crested Grebe)		
299.		Podiceps cristatus subsp. australis (Great Crested Grebe)		
300.		Poephila bichenovii		Υ
301.		Poephila cincta		
302.	24681	Poliocephalus poliocephalus (Hoary-headed Grebe)		
303.	25722	Polytelis anthopeplus (Regent Parrot)		
304.	30854	Polytelis anthopeplus subsp. westralis (Regent Parrot)		
305.	25731	Porphyrio porphyrio (Purple Swamphen)		
306.	24767	Porphyrio porphyrio subsp. bellus (Purple Swamphen)		
307.	24769	Porzana fluminea (Australian Spotted Crake)		
308.	25732	Porzana pusilla (Baillon's Crake)		
309.	24770	Porzana pusilla subsp. palustris (Baillon's Crake)		
310.	24771	Porzana tabuensis (Spotless Crake)		
311.		Psephotus dissimilis		Υ
312.		Psittacula eupatria		Υ
	48085	Psittacula krameri (Indian Ringnecked Parrot, Rose-ringed Parakeet) Y		
313. 314.	+0003	Psittacus erithacus		Υ



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315.	24702	Pterodroma brevirostris (Kerguelen Petrel)			
316.		Pterodroma lessonii (White-headed Petrel)			
317.	25710	Pterodroma macroptera (Great-winged Petrel)			
318.	05744	Pterodroma macroptera subsp. macoptera			
319. 320.		Pterodroma mollis (Soft-plumaged Petrel) Putfinus cosimilio (Little Shoppyeter)			
320.		Puffinus assimilis (Little Shearwater) Puffinus assimilis subsp. assimilis (Little Shearwater)			
322.		Puffinus griseus (Sooty Shearwater)		IA	
323.		Puffinus huttoni (Hutton's Shearwater)		T	
324.		Puffinus pacificus (Wedge-tailed Shearwater)		IA	
325.		Purnella albifrons (White-fronted Honeyeater)			
326.		Purpureicephalus spurius			
327.	24776	Recurvirostra novaehollandiae (Red-necked Avocet)			
328.	48096	Rhipidura albiscapa (Grey Fantail)			
329.	25614	Rhipidura leucophrys (Willie Wagtail)			
330.	24454	Rhipidura leucophrys subsp. leucophrys (Willie Wagtail)			
331.		Rostratula australis (Australian Painted Snipe)		Т	
332.		Sericornis frontalis (White-browed Scrubwren)			
333.	24279	Sericornis frontalis subsp. maculatus (White-browed Scrubwren)			
334.		Serinus canarius			
335.		Smicrornis brevirostris (Weebill)			
336.		Stercorarius antarcticus (Brown Skua)		P4	
337. 338.		Stercorarius parasiticus (Arctic jaeger, Arctic Skua) Stercorarius pomarinus (Pomarine Jaeger, Pomarine Skua)		IA IA	
339.		Sterna bergii (Crested Tern)		IA	
340.		Sterna dougallii (Roseate Tern)		IA	
341.		Sterna dougallii (Noscate Tern) Sterna dougallii subsp. gracilis (Roseate Tern)		IA	
342.		Sterna fuscata subsp. nubilosa (Sooty Tern)			
343.		Sterna hirundo (Common Tern)		IA	
344.		Sterna hybrida subsp. javanica (Whiskered Tern)			
345.	24533	Sterna paradisaea (Arctic Tern)			
346.	48594	Sternula nereis (Fairy Tern)			
347.	48595	Sternula nereis subsp. nereis (Fairy Tern)		T	
348.	24329	Stictonetta naevosa (Freckled Duck)			
349.	25597	Strepera versicolor (Grey Currawong)			
350.		Streptopelia chinensis (Spotted Turtle-Dove)	Υ		
351.		Streptopelia chinensis subsp. tigrina (Spotted Turtle-Dove)	Υ		
352.		Streptopelia senegalensis (Laughing Turtle-Dove)	Y		
353.		Streptopelia senegalensis subsp. senegalensis (Laughing Turtle-Dove)	Y		
354.		Sturnus vulgaris (Common Starling)	Y		
355.		Tachybaptus novaehollandiae (Australasian Grebe, Black-throated Grebe)			
356.	24682	Tachybaptus novaehollandiae subsp. novaehollandiae (Australasian Grebe, Black-			
357.		throated Grebe) Tachybaptus sp.			
358.	25552	Tadorna radjah (Radjah Shelduck)			
359.		Tadorna tadornoides (Australian Shelduck, Mountain Duck)			
360.		Taeniopygia guttata subsp. castanotis (Zebra Finch)			
361.		Thalassarche carteri (Indian Yellow-nosed Albatross)		Т	
362.		Thalassarche chrysostoma (Grey-headed Albatross)		T	
363.	44607	Thalassarche melanophris (Black-browed Albatross)		Т	
364.	48597	Thalasseus bergii (Crested Tern)		IA	
365.	48135	Thinornis rubricollis (Hooded Plover, Hooded Dotterel)		P4	
366.		Threskiornis spinicollis (Straw-necked Ibis)			
367.		Todiramphus sanctus (Sacred Kingfisher)			
368.		Todiramphus sanctus subsp. sanctus (Sacred Kingfisher)			
369.		Tribonyx ventralis (Black-tailed Native-hen)			
370.		Trichoglossus haematodus (Rainbow Lorikeet)	.,		
371.		Trichoglossus haematodus subsp. moluccanus (Rainbow Lorikeet)	Υ		
372. 373		Trichoglossus haematodus subsp. rubritorquis (Red-collared Lorikeet)		P4	
373. 374.		Tringa brevipes (Grey-tailed Tattler) Tringa glareola (Wood Sandpiper)		IA	
374. 375.		Tringa giareoia (wood Sanapiper) Tringa guttifer (Nordmann's Greenshank)		IA	
376.		Tringa gatalis (Nordanianis Greenshank) Tringa nebularia (Common Greenshank, greenshank)		IA	
377.		Tringa stagnatilis (Marsh Sandpiper, little greenshank)		IA IA	
378.		Turnix varius (Painted Button-quail)		1/1	
379.		Turnix velox (Little Button-quail)			
380.		Tyto alba subsp. delicatula (Barn Owl)			
381.		Tyto novaehollandiae subsp. novaehollandiae (Masked Owl (southwest))		P3	
382.	25577	Vanellus miles (Masked Lapwing)			
383.	24384	Vanellus miles subsp. miles (Masked Lapwing)			
				Departmen	







	Name ID	Species Name Na	aturalised	Conservation Code	Endemic To Query Area
384.		Vanellus tricolor (Banded Lapwing)			
385. 386.		Xenus cinereus (Terek Sandpiper) Zosterops lateralis (Grey-breasted White-eye, Silvereye)		IA	
	20700	Zootoropo latoralio (Oroy broadioa Willio Oyo, Olivoroyo)			
Fish		0.0			
387. 388.		? ? Acanthaluteres brownii			
389.		Acanthaluteres brownii Acanthaluteres vittiger			
390.		Acanthistius pardalotus			
391.		Acanthistius serratus			
392.		Acanthopagrus butcheri			
393.		Acentrogobius bifrenatus			
394.		Acentrogobius pflaumi			Υ
395.		Achoerodus gouldii			
396.		Aetapcus maculatus			
397.		Aldrichetta forsteri			
398.		Alexis ciliaris			
399. 400.		Allenichthys glauerti Allomycterus pilatus			
401.		Amblygobius albimaculatus			
402.		Ammotretis elongatus			
403.		Amniataba caudavittata			
404.		Anguilla australis			
405.		Anoplocapros amygdaloides?			
406.		Anoplocapros lenticularis			
407.		Anoplocapros robustus			
408.		Antennarius sp.			
409.		Aploactisoma milesii			
410. 411.		Applodactylus westralis			
411.		Apogon rueppellii Apogon victoriae			
413.		Aptychotrema vincentiana			
414.		Aracana aurita			
415.		Aracana aurita?			Υ
416.		Argyrosomus japonicus			
417.		Arius thalassinus			
418.		Arothron hispidus			
419.		Arripis georgiana			
420.		Arripis truttacea			
421.		Assurger anzac			Υ
422. 423.		Atherina sp. Atherinomorus lacunosus			
423. 424.		Atherinomorus vaigiensis			
425.		Atherinosoma elongata			
426.		Atherinosoma presbyteroides			
427.		Aulohalaelurus labiosus			
428.		Auxis thazard			
429.		Batrachomoeus rubricephalus			
430.		Bodianus vulpinus			
431.		Brachaluteres jacksonianus			
432.		Caesioscorpis theagenes			
433.		Callogobius mucosus Cantharbines sp.			
434. 435.		Cantherhines sp. Caprichthys gymnura			
436.		Caranx sp.			
437.		Carassius auratus			
438.		Carcharhinus brachyurus			
439.		Carcharhinus leucas			
440.		Carcharhinus obscurus			
441.		Carcharhinus sp.			
442.		Carcharias taurus (Grey Nurse Shark)		Т	
443.	34031	Carcharodon carcharias (Great White Shark)		Т	
444.		Chaetodermis penicilligera			
445.		Chailedactylus gibbosus			
446. 447.		Cheilodactylus gibbosus Cheilodactylus rubrolabiatus			
447.		Cheilopogon olgae?			Υ
449.		Cheilopogon sp.			•
450.		Chelidonichthys kumu			
451.		Chelmonops curiosus			
452.		Cirrhimuraena calamus			
		NatureMap is a collaborative project of the Department of Parks and Wildlife and the Western A	Australian Museur	n. Department	of Wildlife muse





!	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
453.		Cleidopus gloriamaris			
454.		Cnidoglanis macrocephalus			
455.		Conger wilsoni			
456.		Contusus brevicaudus			
457. 458.		Constalus acceptius			
456. 459.		Crapatalus arenarius Craterocephalus mugiloides			
460.		Cristiceps aurantiacus			
461.		Cristiceps australis			
462.		Cristiceps sp.			
463.		Cybiosarda elegans			
464.		Cynoglossus maculipinnis			
465.		Cynoglossus sp.			
466.		Cyprinus carpio			
467.		Cypselurus sp.			
468.		Dactylopus dactylopus			
469.		Dermatopsis sp.			
470.		Diodon nicthemerus			
471.		Dipulus caecus Echaneia payarataa			
472. 473.		Echeneis naucrates Edelia vittata			
473. 474.		Elops hawaiensis			
475.		Engraulis australis			
476.		Enoplosus armatus			
477.		Etrumeus teres			
478.		Eubalichthys mosaicus			
479.		Euleptorhamphus viridis			
480.		Eurypegasus draconis			
481.		Exocoetus sp.			Υ
482.		Favonigobius lateralis			
483.		Filicampus tigris			
484.		Fistularia petimba			
485. 486.		Fistularia sp. Foetorepus calauropomus			
487.		Galaxias maculatus			
488.	34028	Galaxias occidentalis (Western Minnow)			
489.	0.020	Galeocerdo cuvier			
490.		Galeorhinus galeus			
491.		Gambusia affinis			
492.		Gambusia sp.			
493.		Gerres sp.			
494.		Gerres subfasciatus			
495.		Girella zebra			
496.		Glaucosoma hebraicum			
497.		Gnathanacanthus goetzeei			
498.		Gnathanodon speciosus			
499. 500.		Gnathophis sp. Gonorynchus greyi			
500.		Graviceps (invalid) alexanderi (invalid)			Υ
502.		Gymnapistes marmoratus			
503.		Gymnothorax richardsoni			
504.		Gymnothorax woodwardi			
505.		Haletta semifasciata			
506.		Halichoeres brownfieldi			
507.		Heteroclinus heptaeolus			
		Heteroclinus roseus			
508.		Heterodontus portusjacksoni			
509.					
509. 510.		Hippocampus elongatus			
509. 510. 511.		Hippocampus sp.			
509. 510. 511. 512.		Hippocampus sp. Hippocampus tuberculatus			
509. 510. 511. 512. 513.		Hippocampus sp. Hippocampus tuberculatus Histiophryne sp.			
509. 510. 511. 512. 513. 514.		Hippocampus sp. Hippocampus tuberculatus Histiophryne sp. Histrio histrio			
509. 510. 511. 512. 513. 514.		Hippocampus sp. Hippocampus tuberculatus Histiophryne sp. Histrio histrio Hyperlophus vittatus			
509. 510. 511. 512. 513. 514.		Hippocampus sp. Hippocampus tuberculatus Histiophryne sp. Histrio histrio Hyperlophus vittatus Hypnos monopterygium			
509. 510. 511. 512. 513. 514. 515.		Hippocampus sp. Hippocampus tuberculatus Histiophryne sp. Histrio histrio Hyperlophus vittatus			
509. 510. 511. 512. 513. 514. 515. 516. 517.		Hippocampus sp. Hippocampus tuberculatus Histiophryne sp. Histrio histrio Hyperlophus vittatus Hypnos monopterygium Hypoplectrodes nigroruber			
509. 510. 511. 512. 513. 514. 515. 516. 517. 518.		Hippocampus sp. Hippocampus tuberculatus Histiophryne sp. Histrio histrio Hyperlophus vittatus Hypnos monopterygium Hypoplectrodes nigroruber Hyporhamphus melanochir			
509. 510. 511. 512. 513. 514. 515. 516. 517. 518. 519.		Hippocampus sp. Hippocampus tuberculatus Histiophryne sp. Histrio histrio Hyperlophus vittatus Hypnos monopterygium Hypoplectrodes nigroruber Hyporhamphus melanochir Hyporhamphus regularis			







	Name ID	Species Name Nat	turalised	Conservation Code	¹ Endemic To Query
523.		Istiblennius meleagris			Alou
524.		Kyphosus cornelii			
525.		Kyphosus sydneyanus			
526.		Lactoria concatenatus			
527.		Lactoria cornuta			
528.		Lagocephalus sceleratus			
529. 530.		Lepidoblennius marmoratus			
530.		Leviprora inops			
532.		Lissocampus fatiloquus			
533.		Lissocampus runa			
534.		Lotella rhacinus			
535.		Maxillicosta scabriceps			
536.		Metavelifer multiradiatus			
537.		Meuschenia freycineti			
538.		Meuschenia galii			
539.		Meuschenia hippocrepis			
540.		Microcanthus strigatus			
541.		Mitotichthys meraculus			
542.		Monacanthus chinensis			
543.		Mugil cephalus			
544.		Muraenichthys sp.			
545.		Muraenichthys tasmaniensis			
546. 547.		Mustelus antarcticus Myliobatis australis			
		•			
548. 549.		Nelusetta ayraudi Nematalosa come			
550.		Nematalosa erebi			
551.		Nematalosa sp.			
552.		Nematalosa vlaminghi			
553.		Neopataecus waterhousii			
554.		Neosebastes pandus			
555.		Nomeus gronovii			Υ
556.		Notolabrus parilus			
557.		Odax acroptilus			
558.		Odax cyanomelas			
559.		Omegophora armilla			
560.		Omobranchus rotundiceps			
561.		Omobranchus sp.			
562.		Ophichthus melanochir			
563.		Ophichthus sp.			
564.		Ophisurus serpens			
565.		Oplegnathus woodwardi			
566.		Orectolobus ornatus			
567.		Orectolobus sp.			
568.		Pagrus auratus			
569.		Papillogobius punctatus			
570. 571.		Parablennius postoculomaculatus Parablennius tasmanianus			
571. 572.		Paraplagusia acuminata			Υ
572. 573.		Paraplotosus albilabris			Ť
573. 574.		Parapriacanthus elongatus			
575.		Parascyllium variolatum			
576.		Parequula melbournensis			
577.		Paristiopterus gallipavo			
578.		Parma mccullochi			
579.		Parma occidentalis			
580.		Parvicrepis sp. 2			
581.		Pegasus volitans			
582.		Pelates sexlineatus			
583.		Pelsartia humeralis			
584.		Pempheris klunzingeri			
585.		Pempheris multiradiata			
586.		Pempheris sp.			
587.		Phalloceros caudimaculatus			
	34039	Phycodurus eques (Leafy Sea Dragon)		P2	
588.		Phyllophryne scortea			
588. 589.					
588. 589. 590.		Phyllopteryx taeniolatus			
588. 589.					







	Name ID Species Name	Naturalised Conservation Code ¹ Er	demic To Query Area
593.	Platycephalus endrachtensis		
594.	Platycephalus laevigata		
595.	Platycephalus longispinis		
596. 597.	Platycephalus orbitalis		
598.	Platycephalus sp. Platycephalus speculator		
599.	Polyspina piosae		
600.	Pomacentrus sp.		
601.	Pomatomus saltatrix		
602.	Priolepis nuchifasciata		
603.	Pseudocalliurichthys goodladi		
604.	Pseudocaranx dentex		
605.	Pseudocaranx wrighti		
606.	Pseudogobius olorum		
607.	Pseudorhombus arsius		
608.	Pseudorhombus jenynsii		
609.	Pseudorhombus sp.		
610. 611.	Pterygotrigla polyommata Rachycentron canadum		
612.	Regalecus glesne		
613.	Rhycherus gloveri		
614.	Rhycherus sp.		Υ
615.	Rhynchobatus djiddensis		
616.	Sardinella gibbosa		
617.	Sardinella lemuru		
618.	Sardinella lemuru?		
619.	Sardinops neopilchardus		
620.	Saurida grandisquamis		
621.	Saurida tumbil		
622.	Saurida undosquamis		
623.	Scaevius milii		
624.	Schuettea woodwardi		
625. 626.	Scobinichthys granulatus Scomber australasicus		
627.	Scomberoides lysan		
628.	Scorpaena sumptuosa		
629.	Scorpis aequipinnis		
630.	Scorpis georgianus		
631.	Seriola dumerili		
632.	Seriola hippos		
633.	Shark? sp.		
634.	Siganus fuscescens		
635.	Sillago bassensis		
636.	Sillago burrus		
637.	Sillago maculata		
638.	Sillago robusta		
639. 640.	Sillago schomburgkii Sillago vittata		
641.	Sinago viitata Siphonognathus argyrophanes		
642.	Siphonognathus argyrophanes Siphonognathus radiatus		
643.	Sparidentex hasta		Υ
644.	Sphyraena novaehollandiae		
645.	Sphyraena obtusata		
646.	Sphyrna lewini		
647.	Sphyrna zygaena		
648.	Spratelloides robustus		
649.	Squatina australis		
650.	Stigmatopora argus		
GE4	Stolephorus sp.		
651.	Strongylura leiura		
652.	Sutaractus tantaculatus		
652. 653.	Sutorectus tentaculatus Synchiropus papilio		
652. 653. 654.	Synchiropus papilio		
652. 653. 654. 655.	Synchiropus papilio Synodus sageneus		
652. 653. 654. 655. 656.	Synchiropus papilio Synodus sageneus Tandanus bostocki		
652. 653. 654. 655.	Synchiropus papilio Synodus sageneus		Y
652. 653. 654. 655. 656.	Synchiropus papilio Synodus sageneus Tandanus bostocki Terapon sp.		Y
652. 653. 654. 655. 656. 657.	Synchiropus papilio Synodus sageneus Tandanus bostocki Terapon sp. Tetraodon sp.		Y
652. 653. 654. 655. 656. 657. 658. 659.	Synchiropus papilio Synodus sageneus Tandanus bostocki Terapon sp. Tetraodon sp. Tetrapturus angustirostris		Υ

Department of Parks and Wildlife





Nam	ne ID Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
663.	Torquigener pleurogramma			7.1.04
664.	Torquigener tuberculiferus			
665.	Trachinocephalus myops			
666.	Trachinops noarlungae			
667.	Trachinotus baillonii			
668.	Trachinotus coppingeri			
669.	Trachurus novaezelandiae			
670.	Tragulichthys jaculiferus			
671.	Tridentiger trigonocephalus			
672.	Trygonoptera mucosa			
673.	Trygonoptera personata			
674. 675.	Trygonoptera personata? Trygonorrhina fasciata			
676.	Upeneichthys lineatus			
677.	Upeneus tragula			
678.	Urocampus carinirostris			
679.	Urolophus lobatus			
680.	Urolophus paucimaculatus			
681.	Urolophus sp.			
682.	Vanacampus cf. margaritifer			Υ
683.	Vanacampus cf. margaritifier			Υ
684.	Vanacampus phillipi			
685.	Vanacampus poecilolaemus			
686.	Vauclusella calvq (invalid)			Υ
687.	Zeus faber			
Invertebrate				
688.	Achaearanea convexa			Υ
689.	Aganippe rhaphiduca			
690.	Akamptogonus novarae			
691.	Allothereua maculata			
692.	Amblyomma albolimbatum			
693.	Amblyomma triguttatum			
694. 695.	Aname mainae			
696.	Aname tepperi Anidiops villosus			
697.	Arachnura higginsi			
698.	Araneus cyphoxis			
699.	Araneus eburneiventris			
700.	Araneus eburnus			
701.	Araneus senicaudatus			
702.	Argiope protensa			
703.	Argiope trifasciata			
704.	Argoctenus bidentatus			
705.	Artoria linnaei			
706.	Artoria taeniifera			
707.	Artoriopsis eccentrica			
708.	Artoriopsis expolita			
709.	Autocopyrite luquibrie			
710. 711.	Aurecocrypta lugubris Austracantha minax			
711.	Australomimetus aurioculatus			
713.	Austrammo harveyi			
714.	Backobourkia brounii			
715.	Backobourkia heroine			
716.	Badumna insignis			
717.	Ballarra longipalpus			
718.	Billima attrita			Υ
719.	Callevophthalmus lividus			Υ
720.	Celaenia excavata			
721.	Cercophonius granulosus			
722. 723	Cercophonius sulcatus Cheiracanthium nanyosum			V
723. 724.	Cheiracanthium nervosum Cherax destructor			Y
724. 725.	Cormocephalus aurantiipes			
726.	Cormocephalus hartmeyeri			
727.	Cormocephalus novaehollandiae			
728.	Cormocephalus rubriceps			
729.	Cormocephalus strigosus			
730.	Crustulina bicruciata			
731.	Cryptoerithus quobba			
	NatureMap is a collaborative project of the Department of Parks and Wildlife and the Wes	stern Australian Muse	eum. Department	of wildlife museu



	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
732.		Cyclosa trilobata			
733.		Deinopis unicolor			Υ
734. 735.		Delena cancerides Dingosa murata			
736.		Dingosa serrata			
737.		Dinocambala ingens			
738.		Enoplognatha bidens			Υ
739.		Eriophora biapicata			
740.		Eriophora pustulosa			
741.		Ero aphana			
742.		Erythracarus decoris			
743.		Ethmostigmus rubripes			
744.	48579	Euoplos inornatus (inornate trapdoor spider (northern Jarrah Forest))		P3	
745. 746.		Eupograpta kottae			
740.		Geogarypus taylori Hasarius adansoni			
748.		Hemicloea insidiosa			Υ
749.		Heurodes turritus			·
750.		Hoggicosa forresti			
751.		Hogna crispipes			
752.		Hogna immansueta			
753.		Holconia westralia			
754.		Holoplatys dejongi			
755.	33977	Hylaeus globuliferus (woolybush bee)		P3	
756.		Idiommata blackwalli			
757.		Idiosoma hirsutum			
758. 759.		Isometroides vescus			
759. 760.		Isopeda leishmanni Isopedella cana			
761.		Isopedella tindalei			
762.		Ixodes tasmani			Υ
763.		Kangarosa properipes			·
764.		Lampona brevipes			
765.		Lampona cylindrata			
766.		Lampona punctigera			
767.		Lamponella kimba			
768.		Lamprochernes savignyi			
769.		Latrodectus hasseltii			
770.		Linyphia cupidinea			Υ
771.		Longepi woodman			
772. 773.		Lycosa australicola Lycosa gilberta			
774.		Lycosa goldeffroyi			
775.		Maratus pavonis			
776.		Maratus speciosus			
777.		Masasteron tuart			
778.		Mecistocephalus tahitiensis			Υ
779.		Missulena granulosa			
780.		Missulena occatoria			
781.		Mituliodon tarantulinus			
782.		Mitzoruga insularis			
783. 784.		Molycria quadricauda Molycria volcos			
784. 785.		Molycria vokes Myandra bicincta			
786.		Myandra cambridgei			
787.		Nephila edulis			
788.		Nicodamus mainae			
789.		Notiasemus glauerti			
790.		Novakiella trituberculosa			
791.		Nunciella aspera			
792.		Nymphopsis acinacispinatus subsp. bathursti			
793.		Ocrisiona leucocomis			
794.		Ocrisiona parmeliae			
795.		Oecobius navus			
796. 797.		Ommatoiulus moreleti			
797. 798.		Ommatoiulus moreletii Oratemnus curtus			
796. 799.		Ornithonyssus bursa			Υ
800.		Ostearius melanopygius			,
801.		Oxidus gracilis			
				Department	of museu







	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
802.		Oxyopes rubicundus			
803.		Pediana occidentalis			
804.		Pholcus phalangioides			
805.		Phryganoporus candidus			
806.		Physocyclus globosus			
807. 808.		Pinkfloydia harveii			
809.		Podykipus collinus Polygonarea imparata			Υ
810.		Prionosternum nitidiceps			·
811.		Prionosternum scutatum			
812.		Pseudolampona woodman			
813.		Pycnothea flynni			
814.		Raveniella arenacea			
815.		Raveniella cirrata			
816.		Raveniella peckorum			
817.		Raveniella subcirrata			
818.		Scolopendra laeta			
819. 820.		Scolopendra morsitans Soutodes thereoice			
821.		Scytodes thoracica Servaea melaina			
822.		Servaea spinibarbis			
823.		Simaetha tenuior			
824.		Siphonotus flavomarginatus			
825.		Smeringopus natalensis			
826.		Solaenodolichopus pruvoti			
827.		Steatoda capensis			
828.		Steatoda grossa			
829.		Storena formosa			
830.		Supunna funerea			
831.	22002	Supunna picta		B.4	
832. 833.	33992	Synemon gratiosa (Graceful Sunmoth) Synothele durokoppin		P4	
834.		Synothele michaelseni			
835.		Synothele rastelloides			
836.		Synsphyronus magnus			
837.		Tamopsis perthensis			
838.		Tasmanicosa leuckartii			
839.		Tetragnatha demissa			
840.		Tetralycosa oraria			
841.		Thereuopoda lesueurii			
842.		Urodacus novaehollandiae			
843.		Urodacus planimanus			
844. 845.		Venator immansueta Venatrix pullastra			
846.	3/113	Westralunio carteri (Carter's Freshwater Mussel)		Т	
847.	04110	Westrarchaea sinuosa		'	
848.		Xysticus periscelis			Υ
849.		Zebraplatys fractivittata			
Managar		· ·			
Mammal	24200	Austroamhalus faustari (Alaus Zacland Fur Coal Janes manad fur coal)		0	
850. 851.		Arctocephalus forsteri (New Zealand Fur Seal, long-nosed fur-seal) Arctocephalus tropicalis (Subantarctic fur-seal)		S T	
852.		Balaenoptera physalus (Fin Whale)		T	
853.		Canis lupus (Dog, Dingo)	Υ	•	
854.		Canis lupus subsp. familiaris (Dog)	Υ		
855.		Caperea marginata (Pygmy Right Whale)			
856.	24086	Cercartetus concinnus (Western Pygmy-possum, Mundarda)			
857.	24186	Chalinolobus gouldii (Gould's Wattled Bat)			
858.	24187	Chalinolobus morio (Chocolate Wattled Bat)			
859.		Dasyurus geoffroii (Chuditch, Western Quoll)		T	
860.		Equus caballus (Horse)	Υ	_	
861.		Eubalaena australis (Southern Right Whale)		Т	
862.		Felis catus (Cat)	Y		
863. 864		Funambulus pennanti (Indian Palm Squirrel) Clobicophala macrothyrothus (Short-finned Bilot Whale)	Υ		
864. 865.		Globicephala macrorhynchus (Short-finned Pilot Whale) Hydromys chrysogaster (Water-rat, Rakali)		P4	
866.		Hydrurga leptonyx (Leopard Seal)		Γ4	
867.		Isoodon fusciventer (Quenda, southwestern brown bandicoot)		P4	
868.		Macropus fuliginosus (Western Grey Kangaroo)			
869.		Macrotis lagotis (Bilby, Dalgyte, Ninu)		Т	
870.		Megaptera novaeangliae (Humpback Whale)			
		NatureMap is a collaborative project of the Department of Parks and Wildlife and the Weste	rn Australian Muse	um. Department	of museum



	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query
				S	Area
871.	24223	Mus musculus (House Mouse)	Υ	Ţ.	
872.		Mustela putorius (European Polecat, Ferret)	Υ		
873.		Myrmecobius fasciatus (Numbat, Walpurti)		Т	
874.	24210	Neophoca cinerea (Australian Sea-lion)		T	
875.	24194	Nyctophilus geoffroyi (Lesser Long-eared Bat)			
876.	24195	Nyctophilus gouldi (Gould's Long-eared Bat)			
877.	24085	Oryctolagus cuniculus (Rabbit)	Υ		
878.	34016	Ovis aries (Sheep)			
879.	48070	Phascogale tapoatafa subsp. wambenger (South-western Brush-tailed Phascogale,		S	
		Wambenger)		Ü	
880.		Pseudorca crassidens (False Killer Whale)			
881.		Rattus fuscipes (Western Bush Rat)			
882.		Rattus norvegicus (Brown Rat)	Y		
883.		Rattus rattus (Black Rat)	Υ	-	
884.	24145	Setonix brachyurus (Quokka)		Т	
885.	40442	Sminthopsis murina Standilla populacida (Stripped Donkin)			
886. 887.		Stenella coeruleoalba (Striped Dophin) Sus scrofa (Pig)	Υ		
888.		Tachyglossus aculeatus (Short-beaked Echidna)	Ť		
889.		Tarsipes rostratus (Honey Possum, Noolbenger)			
890.		Trichosurus vulpecula (Common Brushtail Possum)			
891.		Trichosurus vulpecula subsp. vulpecula (Common Brushtail Possum)			
892.		Tursiops aduncus (Indo-Pacific Bottlenose Dolphin)			
893.		Tursiops truncatus (Bottlenose Dolphin)			
894.		Vespadelus regulus (Southern Forest Bat)			
895.		Vulpes vulpes (Red Fox)	Υ		
896.		Ziphius cavirostris (Cuvier's Beaked Whale)			
5 (1)					
Reptile	40000	A 14 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
897.		Acritoscincus trilineatus (Western Three-lined Skink)			
898.		Antaresia stimsoni subsp. stimsoni (Stimson's Python)			
899.		Aprasia repens (Sand-plain Worm-lizard)			
900.		Brachyurophis fasciolatus subsp. fasciolatus (Narrow-banded Shovel-nosed Snake)			
901. 902.	42301	Brachyurophis semifasciatus (Southern Shovel-nosed Snake) Calotes versicolor subsp. versicolor			Υ
903.	25335	Caretta caretta (Loggerhead Turtle)		Т	Y
903.		Chelodina colliei (South-western Snake-necked Turtle)		ı	
905.		Chelonia mydas (Green Turtle)		Т	
906.		Christinus marmoratus (Marbled Gecko)		ı	
907.		Cryptoblepharus buchananii			
908.		Cryptoblepharus plagiocephalus			
909.		Ctenophorus adelaidensis (Southern Heath Dragon, Western Heath Dragon)			
910.		Ctenotus australis			
911.		Ctenotus fallens			
912.	25040	Ctenotus gemmula (Jewelled South-west Ctenotus (Swan Coastal Plain subpop P3),			
		skink)			
913.	25047	Ctenotus impar			
914.	25087	Cyclodomorphus celatus (Western Slender Blue-tongue)			
915.	25766	Delma fraseri (Fraser's Legless Lizard)			
916.	25296	Demansia psammophis subsp. reticulata (Yellow-faced Whipsnake)			
917.	25346	Dermochelys coriacea (Leatherback Turtle)		Т	
918.	24929	Diplodactylus granariensis subsp. granariensis			
919.	24939	Diplodactylus polyophthalmus			
920.	25251	Echiopsis curta (Bardick)			
921.	25096	Egernia kingii (King's Skink)			
922.	25100	Egernia napoleonis			
923.	25250	Elapognathus coronatus (Crowned Snake)			
924.	25342	Eretmochelys imbricata subsp. bissa (Hawksbill Turtle)		Т	
925.		Gehyra variegata			
926.		Hemidactylus frenatus (Asian House Gecko)	Υ		
927.	25119	Hemiergis quadrilineata			
928.		Heteronotia binoei (Bynoe's Gecko)			
929.		Hydrophis elegans (Elegant Seasnake, Bar-bellied Seasnake)			
930.		Hydrophis ornatus (Ornate Reef Seasnake, Sea Snake)			
931.		Hydrophis platurus (Yellow-bellied Seasnake)			
932.		Lerista elegans			
933.		Lerista gerrardii		D-2	
934.		Lerista lineata (Perth Slider, Lined Skink)		P3	
935. 936.		Lerista Iineopunctulata			
ა აი.	20100	Lerista praepedita			····yea
		NatureMap is a collaborative project of the Department of Parks and Wildlife and the Western	n Australian Muser	um. Department Parks and V	wildlife museu





	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
937.	25005	Lialis burtonis			
938.	42413	Lissolepis luctuosa (Western Swamp Skink)			
939.	42414	Lucasium alboguttatum			
940.	25184	Menetia greyii			
941.	25240	Morelia spilota subsp. imbricata (Carpet Python)			
942.	25191	Morethia lineoocellata			
943.	25192	Morethia obscura			
944.	25248	Neelaps bimaculatus (Black-naped Snake)			
945.	25249	Neelaps calonotos (Black-striped Snake, black-striped burrowing snake)		P3	
946.	25252	Notechis scutatus (Tiger Snake)			
947.	25253	Parasuta gouldii			
948.	25007	Pletholax gracilis subsp. gracilis (Keeled Legless Lizard)			
949.	25510	Pogona minor (Dwarf Bearded Dragon)			
950.	24907	Pogona minor subsp. minor (Dwarf Bearded Dragon)			
951.	25261	Pseudechis australis (Mulga Snake)			
952.	25511	Pseudonaja affinis (Dugite)			
953.	25259	Pseudonaja affinis subsp. affinis (Dugite)			
954.	42416	Pseudonaja mengdeni (Western Brown Snake)			
955.	25263	Pseudonaja modesta (Ringed Brown Snake)			
956.	25008	Pygopus lepidopodus (Common Scaly Foot)			
957.	25266	Simoselaps bertholdi (Jan's Banded Snake)			
958.	25518	Strophurus spinigerus			
959.	24942	Strophurus spinigerus subsp. spinigerus			
960.		Testudo sp.			Υ
961.	25203	Tiliqua occipitalis (Western Bluetongue)			
962.	25519	Tiliqua rugosa			
963.	25204	Tiliqua rugosa subsp. aspera			
964.	25207	Tiliqua rugosa subsp. rugosa			
965.	24983	Underwoodisaurus milii (Barking Gecko)			
966.	25218	Varanus gouldii (Bungarra or Sand Monitor)			
967.	25225	Varanus rosenbergi (Heath Monitor)			
968.	25526	Varanus tristis (Racehorse Monitor)			

- Conservation Codes

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





¹ For NatureMap's purposes, species flagged as endemic are those whose records are wholely 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.



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 <u>Environment Assessments</u> and the EPBC Act including significance guidelines, forms and application process details.

Report created: 29/09/18 15:45:28

Summary

Details

Matters of NES
Other Matters Protected by the EPBC Act
Extra Information

Caveat

Acknowledgements

No Image Available

This map may contain data which are ©Commonwealth of Australia (Geoscience Australia), ©PSMA 2010

Coordinates
Buffer: 1.0Km

No Image Available

Summary

Matters of National Environmental Significance

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

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:	32
Listed Migratory Species:	45

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 <u>permit</u> 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:	1
Commonwealth Heritage Places:	1
Listed Marine Species:	54
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:	None
Invasive Species:	37
Nationally Important Wetlands:	1
Key Ecological Features (Marine)	None

Details

Matters of National Environmental Significance

Listed Threatened Ecological Communities

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			
Anous tenuirostris melanops Australian Lesser Noddy [26000]	Vulnerable	Species or species habitat may occur within area	
Calidris canutus Red Knot, Knot [855]	Endangered	Species or species habitat known to occur within area	
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat likely to occur within area	
Calidris tenuirostris Great Knot [862]	Critically Endangered	Species or species habitat known to occur within area	
Calyptorhynchus banksii naso Forest Red-tailed Black-Cockatoo, Karrak [67034]	Vulnerable	Species or species habitat known to occur within area	
Calyptorhynchus latirostris Carnaby's Cockatoo, Short-billed Black-Cockatoo [59523]	Endangered	Species or species habitat known to occur within area	
<u>Charadrius leschenaultii</u> Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat known to occur within area	
<u>Charadrius mongolus</u> Lesser Sand Plover, Mongolian Plover [879]	Endangered	Species or species habitat known to occur within area	
<u>Diomedea amsterdamensis</u> Amsterdam Albatross [64405]	Endangered	Species or species habitat may occur within area	
<u>Diomedea epomophora</u> Southern Royal Albatross [89221]	Vulnerable	Species or species habitat likely to occur within area	
<u>Diomedea exulans</u> Wandering Albatross [89223]	Vulnerable	Species or species habitat	

[Resource Information]

likely to occur

Name	Status	Type of Presence
		within area
Diomedea sanfordi Northern Royal Albatross [64456]	Endangered	Species or species habitat likely to occur within area
Leipoa ocellata Malleefowl [934]	Vulnerable	Species or species habitat may occur within area
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	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
Pachyptila turtur subantarctica Fairy Prion (southern) [64445]	Vulnerable	Species or species habitat known to occur within area
Rostratula australis Australian Painted-snipe, Australian Painted Snipe [77037]	Endangered	Species or species habitat likely to occur within area
<u>Thalassarche cauta cauta</u> Shy Albatross, Tasmanian Shy Albatross [82345]	Vulnerable	Species or species habitat may occur within area
Thalassarche cauta steadi White-capped Albatross [82344]	Vulnerable	Species or species habitat likely to occur within area
<u>Thalassarche impavida</u> Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area
<u>Thalassarche melanophris</u> Black-browed Albatross [66472]	Vulnerable	Species or species habitat may occur within area
Mammals		
Dasyurus geoffroii Chuditch, Western Quoll [330]	Vulnerable	Species or species habitat may occur within area
Neophoca cinerea Australian Sea-lion, Australian Sea Lion [22]	Vulnerable	Species or species habitat known to occur within area
<u>Pseudocheirus occidentalis</u> Western Ringtail Possum, Ngwayir, Womp, Woder, Ngoor, Ngoolangit [25911]	Critically Endangered	Species or species habitat likely to occur within area
Plants		
Diuris micrantha Dwarf Bee-orchid [55082]	Vulnerable	Species or species habitat likely to occur within area
<u>Drakaea elastica</u> Glossy-leafed Hammer Orchid, Glossy-leaved Hammer Orchid, Warty Hammer Orchid [16753]	Endangered	Species or species habitat likely to occur within area
<u>Drakaea micrantha</u> Dwarf Hammer-orchid [56755]	Vulnerable	Species or species habitat may occur within area
Reptiles		

Name	Status	Type of Presence
Caretta caretta		•
Loggerhead Turtle [1763]	Endangered	Species or species habitat known to occur within area
Chalania mudaa		
Chelonia mydas	Vulnerable	Charles or appoint habitat
Green Turtle [1765]	vuirierable	Species or species habitat known to occur within area
Dermochelys coriacea		
Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat known to occur within area
Natator depressus		
Flatback Turtle [59257]	Vulnerable	Species or species habitat
		known to occur within area
Listed Migratory Species		[Resource Information]
* Species is listed under a different scientific name on t	he EPBC Act - Threatened	-
Name	Threatened	Type of Presence
Migratory Marine Birds		
Anous stolidus		0
Common Noddy [825]		Species or species habitat likely to occur within area
Apus pacificus		
Fork-tailed Swift [678]		Species or species habitat likely to occur within area
Diomedea amsterdamensis		
Amsterdam Albatross [64405]	Endangered	Species or species habitat may occur within area
Diomedea epomophora		
Southern Royal Albatross [89221]	Vulnerable	Species or species habitat
, 1 1		likely to occur within area
Discount of the second of the		
Diomedea exulans Wandering Albertone [90222]	Vulnerable	Species or species habitat
Wandering Albatross [89223]	vuinerable	Species or species habitat likely to occur within area
<u>Diomedea sanfordi</u>		
Northern Royal Albatross [64456]	Endangered	Species or species habitat
		likely to occur within area
Macronectes giganteus		
Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat
		may occur within area
Macronectes halli		
Northern Giant Petrel [1061]	Vulnerable	Species or species habitat
		may occur within area
01		
Sterna dougallii		Caracina fooding as soluted
Roseate Tern [817]		Foraging, feeding or related behaviour likely to occur
		within area
Thalassarche cauta		
Tasmanian Shy Albatross [89224]	Vulnerable*	Species or species habitat
		may occur within area
Thalassarche impavida		
Campbell Albatross, Campbell Black-browed Albatross	Vulnerable	Species or species habitat
[64459]		may occur within area
The leasure has read as a state		
Thalassarche melanophris	Vulnarahla	Charles or anasias habits
Black-browed Albatross [66472]	Vulnerable	Species or species habitat may occur within area
		may occur within area
Thalassarche steadi		
White-capped Albatross [64462]	Vulnerable*	Species or species habitat
		likely to occur within area

Name	Threatened	Type of Presence
Migratory Marine Species		
Caretta caretta Loggerhead Turtle [1763]	Endangered	Species or species habitat known to occur within area
<u>Chelonia mydas</u> Green Turtle [1765]	Vulnerable	Species or species habitat known to occur within area
<u>Dermochelys coriacea</u> Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat known to occur within area
<u>Lamna nasus</u> Porbeagle, Mackerel Shark [83288]		Species or species habitat may occur within area
Manta alfredi Reef Manta Ray, Coastal Manta Ray, Inshore Manta Ray, Prince Alfred's Ray, Resident Manta Ray [84994]		Species or species habitat may occur within area
Manta birostris Giant Manta Ray, Chevron Manta Ray, Pacific Manta Ray, Pelagic Manta Ray, Oceanic Manta Ray [84995]		Species or species habitat may occur within area
Natator depressus Flatback Turtle [59257]	Vulnerable	Species or species habitat known 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 known to occur within area
Arenaria interpres Ruddy Turnstone [872]		Species or species habitat known to occur within area
<u>Calidris acuminata</u> Sharp-tailed Sandpiper [874]		Species or species habitat known to occur within area
Calidris alba Sanderling [875]		Species or species habitat known to occur within area
Calidris canutus Red Knot, Knot [855]	Endangered	Species or species habitat known to occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat likely to occur within area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat known to occur within area
Calidris ruficollis Red-necked Stint [860]		Species or species habitat known to occur within area
Calidris tenuirostris Great Knot [862]	Critically Endangered	Species or species habitat known to occur within area
<u>Charadrius bicinctus</u> Double-banded Plover [895]		Species or species

Name	Threatened	Type of Presence
		habitat known to occur
Charadrius leschenaultii		within area
Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat known to occur within area
Charadrius mongolus		
Lesser Sand Plover, Mongolian Plover [879]	Endangered	Species or species habitat known to occur within area
Limosa limosa		On a sing on an arian babitat
Black-tailed Godwit [845]		Species or species habitat known to occur within area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat
	Chically Endangered	may occur within area
Numenius phaeopus Whimbrel [849]		Species or species habitat
		known to occur within area
Pandion haliaetus Osprey [952]		Breeding known to occur
		within area
Phalaropus lobatus Red-necked Phalarope [838]		Species or species habitat
		known to occur within area
Pluvialis fulva		
Pacific Golden Plover [25545]		Species or species habitat known to occur within area
Pluvialis squatarola		
Grey Plover [865]		Species or species habitat known to occur within area
Tringa brevipes		
Grey-tailed Tattler [851]		Species or species habitat known to occur within area
<u>Tringa nebularia</u>		
Common Greenshank, Greenshank [832]		Species or species habitat
		known to occur within area
Tringa stagnatilis		
Marsh Sandpiper, Little Greenshank [833]		Species or species habitat known to occur within area
Tringa totanus		Charles on averter helitet
Common Redshank, Redshank [835]		Species or species habitat known to occur within area
Xenus cinereus		On a day of the state of the st
Terek Sandpiper [59300]		Species or species habitat known to occur within area

Other Matters Protected by the EPBC Act

Commonwealth Land [Resource Information]

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

N	а	m	ρ

Commonwealth Land -

Commonwealth Heritage Places		[Resource Information]
Name	State	Status
Historic		
Claremont Post Office	WA	Listed place

Listed Marine Species		[Resource Information]
* Species is listed under a different scientific name o	n the EPBC Act - Thre	eatened Species list.
Name	Threatened	Type of Presence
Birds		

Actitis hypoleucos

Common Sandpiper [59309] Species or species habitat known to occur within area

Anous stolidus

Common Noddy [825] Species or species habitat

likely to occur within area

Anous tenuirostris melanops

Australian Lesser Noddy [26000] Vulnerable 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

Arenaria interpres

Ruddy Turnstone [872] Species or species habitat

known to occur within area

Calidris acuminata

Sharp-tailed Sandpiper [874] Species or species habitat

known to occur within area

Calidris alba

Sanderling [875] Species or species habitat

known to occur within area

Calidris canutus

Red Knot, Knot [855] Endangered Species or species habitat

known to occur within area

Calidris ferruginea

Curlew Sandpiper [856] Critically Endangered Species or species habitat

likely to occur within area

Calidris melanotos

Pectoral Sandpiper [858] Species or species habitat

known to occur within area

Calidris ruficollis

Red-necked Stint [860] Species or species habitat

known to occur within area

Calidris tenuirostris

Great Knot [862] Critically Endangered Species or species

		- (-
Name	Threatened	Type of Presence habitat known to occur within area
<u>Charadrius bicinctus</u> Double-banded Plover [895]		Species or species habitat known to occur within area
<u>Charadrius leschenaultii</u> Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat known to occur within area
<u>Charadrius mongolus</u> Lesser Sand Plover, Mongolian Plover [879]	Endangered	Species or species habitat known to occur within area
<u>Charadrius ruficapillus</u> Red-capped Plover [881]		Species or species habitat known to occur within area
<u>Diomedea amsterdamensis</u> Amsterdam Albatross [64405]	Endangered	Species or species habitat may occur within area
<u>Diomedea epomophora</u> Southern Royal Albatross [89221]	Vulnerable	Species or species habitat likely to occur within area
<u>Diomedea exulans</u> Wandering Albatross [89223]	Vulnerable	Species or species habitat likely to occur within area
<u>Diomedea sanfordi</u> Northern Royal Albatross [64456]	Endangered	Species or species habitat likely to occur within area
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species habitat likely to occur within area
Heteroscelus brevipes Grey-tailed Tattler [59311]		Species or species habitat known to occur within area
Himantopus himantopus Pied Stilt, Black-winged Stilt [870]		Species or species habitat known to occur within area
Limosa limosa Black-tailed Godwit [845]		Species or species habitat known to occur within area
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	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 habitat may occur within area
Numenius phaeopus Whimbrel [849]		Species or species habitat

known to occur

Name	Threatened	Type of Presence
		within area
Pachyptila turtur Fairy Prion [1066]		Species or species habitat
		known to occur within area
Pandion haliaetus		
Osprey [952]		Breeding known to occur within area
Phalaropus lobatus		within area
Red-necked Phalarope [838]		Species or species habitat known to occur within area
		Known to occur within area
Pluvialis fulva Pacific Golden Plover [25545]		Species or species habitat
Facilic Golden Flover [20040]		known to occur within area
Pluvialis squatarola		
Grey Plover [865]		Species or species habitat
		known to occur within area
Recurvirostra novaehollandiae		
Red-necked Avocet [871]		Species or species habitat known to occur within area
		Known to oodal Within area
Rostratula benghalensis (sensu lato) Painted Snipe [889]	Endangered*	Species or species habitat
r amod ompo [cool	Lindangorod	likely to occur within area
Sterna dougallii		
Roseate Tern [817]		Foraging, feeding or related
		behaviour likely to occur within area
Thalassarche cauta		
Tasmanian Shy Albatross [89224]	Vulnerable*	Species or species habitat may occur within area
		may cood main area
<u>Thalassarche impavida</u> Campbell Albatross, Campbell Black-browed Albatross	Vulnerable	Species or species habitat
[64459]		may occur within area
Thalassarche melanophris		
Black-browed Albatross [66472]	Vulnerable	Species or species habitat
		may occur within area
Thalassarche steadi	Mala	On a decrease and the ball that
White-capped Albatross [64462]	Vulnerable*	Species or species habitat likely to occur within area
Thinornis rubricollis		•
Hooded Plover [59510]		Species or species habitat
		known to occur within area
Tringa nebularia		
Common Greenshank, Greenshank [832]		Species or species habitat known to occur within area
		Known to occur within area
Tringa stagnatilis March Sandnings Little Creenshank (922)		Charles or angeles habitat
Marsh Sandpiper, Little Greenshank [833]		Species or species habitat known to occur within area
<u>Tringa totanus</u>		
Common Redshank, Redshank [835]		Species or species habitat
		known to occur within area
Xenus cinereus		
Terek Sandpiper [59300]		Species or species habitat known to occur within area
		om. to ooda within area
Mammals Neophoca cinerea		
Australian Sea-lion, Australian Sea Lion [22]	Vulnerable	Species or species habitat

Species or species habitat known to occur within area

Name Reptiles	Threatened	Type of Presence
Caretta caretta Loggerhead Turtle [1763]	Endangered	Species or species habitat known to occur within area
<u>Chelonia mydas</u> Green Turtle [1765]	Vulnerable	Species or species habitat known to occur within area
<u>Dermochelys coriacea</u> Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat known to occur within area
Natator depressus Flatback Turtle [59257]	Vulnerable	Species or species habitat known to occur within area

Extra Information

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 Resouces Audit, 2001.

Name	Status	Type of Presence
Birds		• .
Acridotheres tristis		
Common Myna, Indian Myna [387]		Species or species habitat likely to occur within area
Anas platyrhynchos		
Mallard [974]		Species or species habitat likely to occur within area
Carduelis carduelis		
European Goldfinch [403]		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
Passer domesticus		
House Sparrow [405]		Species or species habitat likely to occur within area
Passer montanus		
Eurasian Tree Sparrow [406]		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

Sturnus vulgaris Common Starling [389] Species or species habitat likely to occur within area likely to occur with	Name	Status	Type of Presence
Marmals Bos taurus Domestic Cattle [16] Species or species habitat likely to occur within area likely to occur wit			within area
Bos tarurs Domestic Cattle [16] Species or species habitat likely to occur within area can be compared to the			
Domestic Cattle [16] Canis lupus familiaris Domestic Dog [82654] Species or species habitat likely to occur within area likely	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 Funambulus pennantii Northern Palm Squirrel, Five-striped Palm Squirrel [129] Species or species habitat likely to occur within area Mus musculus House Mouse [120] Species or species habitat likely to occur within area Oryctolagus cuniculus Rabbit, European Rabbit [128] Species or species habitat likely to occur within area Rattus norvegicus Brown Rat, Norway Rat [83] Species or species habitat likely to occur within area Rattus rattus Black Rat, Ship Rat [84] Vulpes vulpes Red Fox, Fox [18] Species or species habitat likely to occur within area Plants Anredera cordifolla Madeira Vine, Jalap, Lamb's-tail, Mignonette Vine, Anredera cordifolla Madeira Vine, Jalap, Lamb's-tail, Mignonette Vine, Anredera cordifolla Madeira Vine, Jalap, Lamb's-tail, Mignonette Vine, Asparagus Fern, Ground Asparagus, Basket Fern, Species or species habitat likely to occur within area Potato Vine [2643] Asparagus Asparagus, Emerald Asparagus [62425] Species or species habitat likely to occur within area Red Species or species habitat likely to occur within area Red Species or species habitat likely to occur within area Brandrar Vine, Jalap, Lamb's-tail, Mignonette Vine, Asparagus Fern, Ground Asparagus, Basket Fern, Species or species habitat likely to occur within area Red Species or species habitat likely to occur within area Red Species or species habitat likely to occur within area Red Species or species habitat likely to occur within area Red Species or species habitat likely to occur within area Red Species or species habitat likely to occur within area Red Species or species habitat likely to occur within area Red Species or species habitat likely to occur within area Red Species or species habitat likely to occur within area Red Species or species habitat likely to occur within area Red Spe	Bos taurus		
Domestic Dog [82654] Species or species habitat likely to occur within area season of the process of species habitat likely to occur within area season occur wit			
Felis catus Cat, House Cat, Domestic Cat [19] Species or species habitat likely to occur within area Funambulus pennantii Northern Palm Squirrel, Five-striped Palm Squirrel [129] Mus musculus House Mouse [120] Species or species habitat likely to occur within area Mus musculus House Mouse [120] Species or species habitat likely to occur within area Oryctolagus cuniculus Rabbit, European Rabbit [128] Species or species habitat likely to occur within area Rattus norvegicus Brown Rat, Norway Rat [83] Species or species habitat likely to occur within area Rattus rattus Black Rat, Ship Rat [84] Species or species habitat likely to occur within area Rattus rattus Black Rat, Ship Rat [84] Species or species habitat likely to occur within area Rattus rattus Plants Anredera cordifolia Madelira Vine, Jaliap, Lamb's-tail, Mignonette Vine, Anredera, Gulf Madeiravine, Heartleaf Madeiravine, Potato Vine [2643] Asparagus Bern, Ground Asparagus, Basket Fern, Species or species habitat likely to occur within area Rattus rattus Spreng's Fern, Bushy Asparagus, Emerald Asparagus [62425] Asparagus aparagoides Bridal Creeper, Bridal Veil Creeper, Smilax, Florist's Smilax, Smilax Asparagus [22473] Species or species habitat Rasparagus Pern, Bushy Asparagus, Emerald Asparagus Rasparagus Pern, Bushy Asparagus, Emerald Asparagus Rasparagus plumosus Climbing Asparagus-fern [48993] Species or species habitat Responders Ratter Rasparagus Pern, Ground Asparagus, Florist's Species or species habitat Responders Ratter Rasparagus Pern, Ground Asparagus Rasparagus Pern, Bushy Asparagus, Responders Ratter Rasparagus Pern, Responders Ratter Rasparagus Pe	•		Charies are analise hebitat
Cat, House Cat, Domestic Cat [19] Species or species habitat likely to occur within area	Domestic Dog [82054]		
Funambulus pennantii Northern Palm Squirrel, Five-striped Palm Squirrel [129] Species or species habitat [129] Species or species habitat [129] Species or species habitat Ilkely to occur within area Mus musculus House Mouse [120] Species or species habitat Ilkely to occur within area Oryctolagus cuniculus Rabbit, European Rabbit [128] Species or species habitat Ilkely to occur within area Rattus norvegicus Brown Rat, Norway Rat [83] Species or species habitat Ilkely to occur within area Rattus rattus Black Rat, Ship Rat [84] Species or species habitat Ilkely to occur within area Vulpes vulpes Red Fox, Fox [18] Species or species habitat Ilkely to occur within area Plants Anredera Cordifolia Madeira Vine, Jalap, Lamb's-tail, Mignonette Vine, Anredera Cordifolia Madeira Vine, Jalap, Lamb's-tail, Mignonette Vine, Anredera Cordifolia Madeira Vine, Jalap, Lamb's-tail, Mignonette Vine, Anredera Cordifolia Potato Vine [2643] Asparagus eathopicus Asparagus eathopicus Asparagus eathopicus Asparagus Fern, Ground Asparagus, Basket Fern, Species or species habitat Ilkely to occur within area [62425] Asparagus asparagoides Asparagus saparagoides Asparagus saparagoides Asparagus saparagoides Asparagus plumosus Climbing Asparagus-fern [48993] Species or species habitat Ilkely to occur within area Brachiaria mutica Para Grass [5879] Species or species habitat may occur within area Cenchrus ciliaris Buffel-grass, Black Buffel-grass [20213] Species or species habitat may occur within area Chrysanthemoides monilifera subsp. monilifera Bitou Bush, Boneseed [18983] Species or species habitat may occur within area			Species or species habitat
Northern Palm Squirrel, Five-striped Palm Squirrel [129] Mus musculus House Mouse [120] Species or species habitat likely to occur within area Palm Squirrel [129] Species or species habitat likely to occur within area Pabbit, European Rabbit [128] Species or species habitat likely to occur within area Pabbit, European Rabbit [128] Species or species habitat likely to occur within area Pabbit, European Rabbit [128] Species or species habitat likely to occur within area Pabbit, European Rabbit [128] Species or species habitat likely to occur within area Pabbit Ratius rattus Black Rat, Ship Rat [84] Species or species habitat likely to occur within area Pabbitat Pabbi			
Mus musculus House Mouse [120] Species or species habitat likely to occur within area Oryctolagus cuniculus Rabbit, European Rabbit [128] Species or species habitat likely to occur within area Rattus norvegicus Brown Rat, Norway Rat [83] Species or species habitat likely to occur within area Rattus rattus Black Rat, Ship Rat [84] Species or species habitat likely to occur within area Vulpes vulpes Red Fox, Fox [18] Species or species habitat likely to occur within area Plants Anredera cordifolia Madeira Vine, Jalap, Lamb's-tail, Mignonette Vine, Anredera, Gulf Madeiravine, Heartleaf Madeiravine, Potato Vine [2643] Asparagus aethiopicus Asparagus Berm, Ground Asparagus, Basket Fern, Species or species habitat Sprengis Fern, Bushy Asparagus, Emerald Asparagus Ilikely to occur within area (50245) Species or species habitat Sprengis Fern, Bushy Asparagus, Emerald Asparagus Ilikely to occur within area Rasparagus asparagoides Bridal Creeper, Bridal Veil Creeper, Smilax, Florist's Species or species habitat Ilikely to occur within area Species or species habitat Ilikely to occur within area Climbing Asparagus-fern [48993] Species or species habitat Ilikely to occur within area Cenchrus cillaris Buffel-grass, Black Buffel-grass [20213] Species or species habitat may occur within area Chrysanthemoides monilifera Bitou Bush, Boneseed [18983] Species or species habitat may occur within area	·		Species or species habitat
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·	Bitou Bush, Boneseed [18983]		
·	Chrysanthemoides monilifera subsp. monilifera		
			Species or species

Name	Status	Type of Presence
		habitat likely to occur within
Genista sp. X Genista monspessulana		area
Broom [67538]		Species or species habitat may occur within area
Lantana camara Lantana, Common Lantana, Kamara Lantana, leaf Lantana, Pink Flowered Lantana, Red Flow Lantana, Red-Flowered Sage, White Sage, Wi [10892]	wered	Species or species habitat likely to occur within area
Lycium ferocissimum African Boxthorn, Boxthorn [19235]		Species or species habitat likely to occur within area
Olea europaea		
Olive, Common Olive [9160]		Species or species habitat may occur within area
Pinus radiata		
Radiata Pine Monterey Pine, Insignis Pine, Wil Pine [20780]	lding	Species or species habitat may occur within area
Rubus fruticosus aggregate		
Blackberry, European Blackberry [68406]		Species or species habitat likely to occur within area
Sagittaria platyphylla		
Delta Arrowhead, Arrowhead, Slender Arrowhe [68483]	ead	Species or species habitat likely to occur within area
Salix spp. except S.babylonica, S.x calodendro	on & S.x reichardtii	
Willows except Weeping Willow, Pussy Willow Sterile Pussy Willow [68497]	and	Species or species habitat likely to occur within area
Salvinia molesta Salvinia, Giant Salvinia, Aquarium Watermoss, Weed [13665]	, Kariba	Species or species habitat likely to occur within area
Tamarix aphylla Athel Pine, Athel Tree, Tamarisk, Athel Tamari Athel Tamarix, Desert Tamarisk, Flowering Cyl Salt Cedar [16018]		Species or species habitat likely to occur within area
Reptiles Hemidactylus frenatus		
Asian House Gecko [1708]		Species or species habitat likely to occur within area
Nationally Important Wetlands		[Resource Information]
Name		State
Swan-Canning Estuary		WA

Caveat

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

This report is designed to assist in identifying the locations of places which may be relevant in determining obligations under the Environment Protection and Biodiversity Conservation Act 1999. It holds mapped locations of World 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

-31.98125 115.77998

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 C OBSERVED FAUNA LISTING

Fauna Observed During Survey Period

Claremont Compiled by Greg Harewood - Oct 2018

Class Family Species	Common Name	Conservation Status
Aves		
Psittacidae Parrots		
Calyptorhynchus banksii naso	Forest Red-tailed Black-Cockatoo	S3 VU Bp LC
Trichoglossus haematodus	Rainbow Lorikeet	Introduced
Pardalotidae Pardalotes		
Pardalotus striatus	Striated Pardalote	LC
Meliphagidae Honeyeaters, Chats		
Anthochaera carunculata	Red Wattlebird	LC
Lichmera indistincta	Brown Honeyeater	LC
Dicruridae Monarchs, Magpie Lark, Flycatchers, Fantails, Drong	0	
Rhipidura leucophrys	Willie Wagtail	LC
Cracticidae Currawongs, Magpies & Butcherbirds		
Cracticus tibicen	Australian Magpie	LC

APPENDIX D HABITAT TREE DETAILS

Habitat Trees DBH >50cm Datum - GDA94

Entrance Size Ranges - Small = >5cm, Medium = 5 to 10cm, Large = >10cm

Waypoint Number	Zone	mE	mN	Tree Species	Tree Height (m)	DBH (cm)	Number of Hollows	Estimated Hollow Entrnace Size Range	Occupancy	Potential Cockatoo Nest Hollow	Comments
wpt001	50J	384020	6460858	Tuart	10-15	>50	0		No Signs	No	
wpt002	50J	384848	6461020	Unknown Euc	20+	>50	0		No Signs	No	
wpt003	50J	385044	6461119	Unknown Euc	20+	>50	0		No Signs	No	
wpt004	50J	385052	6461124	Unknown Euc	20+	>50	2+	Small & Medium	Bees	No	Bees occupying a hollow
wpt005	50J	384370	6460947	Unknown Euc	20+	>50	0		No Signs	No	
wpt006	50J	384294	6460938	Tuart	10-15	>50	0		No Signs	No	-

DISCLAIMER

This fauna assessment report ("the report") has been prepared in accordance with the scope of services set out in the contract, or as otherwise agreed, between the Client and Greg Harewood ("the Author"). In some circumstances the scope of services may have been limited by a range of factors such as time, budget, access and/or site disturbance constraints. In accordance with the scope of services, the Author has relied upon the data and has conducted environmental field monitoring and/or testing in the preparation of the report. The nature and extent of monitoring and/or testing conducted is described in the report.

The conclusions are based upon field data and the environmental monitoring and/or testing carried out over a limited period of time and are therefore merely indicative of the environmental condition of the site at the time of preparing the report. Also it should be recognised that site conditions, can change with time.

Within the limitations imposed by the scope of services, the field assessment and preparation of this report have been undertaken and performed in a professional manner, in accordance with generally accepted practices and using a degree of skill and care ordinarily exercised by reputable environmental consultants under similar circumstances. No other warranty, expressed or implied, is made.

In preparing the report, the Author has relied upon data, surveys, analyses, designs, plans and other information provided by the Client and other individuals and organisations, most of which are referred to in the report ("the data"). Except as otherwise stated in the report, the Author has not verified the accuracy of completeness of the data. To the extent that the statements, opinions, facts, information, conclusions and/or recommendations in the report ("conclusions") are based in whole or part on the data, those conclusions are contingent upon the accuracy and completeness of the data. The Author will not be liable in relation to incorrect conclusions should any data, information or condition be incorrect or have been concealed, withheld, misrepresented or otherwise not fully disclosed to the Author.

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Attachment 3

Claremont Station – Potential Clearing Area

