



Main Roads Western Australia
BGC Quarry Access Realignment
Preliminary Clearing Impact Assessment

June 2014

Summary

Project Title: BGC Quarry Access realignment

Project Location: The project is located between Hidden Valley Retreat and Wanneroo Road in the City of Wanneroo. The project area is accessed via Hester Avenue in Neerabup, and is adjacent to and/or partly includes the existing BGC Quarry Access Road.

Area proposed to be cleared: The project area is 1.58 hectares (ha) in size and includes approximately 0.73 ha of the existing Quarry Access Road. The total clearing area is 0.85 ha in size (0.74 ha of native vegetation and 0.11 ha of revegetation).

Project purpose/ components: The purpose of the project is realign the Quarry Access Road. The BGC Quarry Access Road occurs adjacent to and/or partly within the project area for Stage 1 of the Mitchell Freeway Extension Project. In order to progress the proposed Mitchell Freeway interchange with Hester Avenue and Hester Avenue duplication (components of Stage 1 of the Mitchell Freeway Extension Project), the Quarry Access Road needs to be realigned.

The Quarry Access Road will be realigned largely adjacent to the existing Access Road and will utilise the existing Access Road where possible. During the realignment process the Quarry Access Road will be widened (average width of 20 meters (m)) and sealed.

Temporary clearing required: No

A Preliminary Clearing Impact Assessment (PCIA) of the project was undertaken. The PCIA outlines the key activities associated with the Quarry Access Road realignment project, the existing environment and an assessment of native vegetation clearing. This assessment provides an evaluation of the vegetation clearing impacts associated with the project using the Ten Clearing Principles and strategies used to manage vegetation clearing. This report is subject to, and must be read in conjunction with, the limitations set out in Section 1.4; and the assumptions and qualifications contained throughout the Report.

Key impact assessment points are listed below.

Key Clearing Impact Assessment Points

A desktop assessment against the Ten Clearing Principles determined that the project is at variance with Principle (a) and Principle (h). The project is not likely to be at variance to any of the other Principles.

The main native vegetation clearing impacts associated with this project are:

- The project will require clearing of remnant vegetation which is located within Neerabup National Park (Class A Reserve, R 27575) and the Bush Forever site No. 383 'Neerabup National Park, Lake Nowergup Nature Reserve and adjacent bushland, Neerabup'. Clearing for the project will result in the direct loss of 0.74 ha of vegetation within Neerabup National Park and Bush Forever site No. 383.
- The project will require clearing of 0.51 ha vegetation that is in *Very Good to Good* condition (Keighery 1994).
- There is 0.74 ha of *Banksia* woodland vegetation considered likely to be Priority 3 Priority Ecological Community (PEC) '*Banksia* dominated woodlands on the Swan Coastal Plain IBRA region' located within the project area.

- Individuals of two DPaW Priority-listed flora taxa will be required to be cleared within project area, including *Acacia benthamii* (Priority 2) and five individuals of *Jacksonia sericea* (Priority 4).
- The project will require clearing of vegetation located within an Environmentally Sensitive Area (ESA). This ESA is most likely associated with Neerabup National Park and Bush Forever site No. 383.

Consultation

Consultation with the Department of Environment Regulation (DER) is recommended to confirm if the Project will be at variance with Principle (a) and Principle (h), and therefore unable to be completed under Main Roads Statewide vegetation clearing permit (Purpose Permit CPS 818).

Consultation with the Department of Parks and Wildlife (DPaW) is recommended to confirm the occurrence of the 'Banksia dominated woodlands on the Swan Coastal Plain IBRA region' Priority 3 PEC within the project area.

Consultation with Department of Agriculture and Food WA (DAFWA) is also recommended to discuss the Declared Pest, **Gomphocarpus fruticosus* (Narrow leaf cotton bush), which was identified within the project area during the site visit.

Referrals and approvals

The project is unlikely to require referral to the Federal Department of Environment (DotE) under the *Environment Protection Biodiversity Conservation Act 1999* (EPBC Act).

The project will likely require referral the Environmental Protection Authority (EPA) under the *Environmental Protection Act 1986*, due to the likely impact on conservation estate (Neerabup National Park). Furthermore, under Section 38 of the *Planning and Development Act 2005* all region planning schemes and amendments require referral to the EPA.

The project is likely to require referral to the Western Australian Planning Commission and City of Wanneroo. The project is located on land currently reserved as Parks and Recreation and designated as a Bush Forever site under the Metropolitan Region Scheme (MRS), and zoned as Regional Parks and Recreation under the City of Wanneroo Town Planning Scheme 2. An amendment to the MRS will most likely be required and should be submitted to WAPC for their consideration and approval. Under Section 38 of the Planning and Development Act 2005, all region scheme amendments require referral to the EPA.

Further studies

Consultation with the appropriate regulatory authorities is recommended prior to undertaking any further studies.

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1. Introduction

1.1 Background

The Mitchell Freeway provides the primary road access route from the City of Perth to the north-west corridor; however, the freeway currently terminates at Burns Beach Road. The freeway has been constructed in several stages since the 1960s, with further extensions and widening works planned. Further development of the freeway is now required to provide a more direct route for traffic in the far northern suburbs, take pressure off smaller local roads and facilitate residential and business development in the area.

The proposed Mitchell Freeway Extension Project will be constructed in three stages with Stage 1 planned for 2015-2017. The Stage 1 scope of works will include:

- Mitchell Freeway extension from Burns Beach Road to Hester Avenue.
- Grade separated interchanges (including road bridges) at Burns Beach Road, Neerabup Road and Hester Avenue.
- Principal Shared Path (PSP) on western side of the Mitchell Freeway extension from Burns Beach Road to Hester Avenue including a PSP bridge over Burns Beach Road.
- Underpasses at Currambine Station, Neerabup Road and Hester Avenue.
- Hester Avenue duplication from Hidden Valley Retreat to Wanneroo Road.
- Neerabup Road upgrade from Connolly Drive to Wanneroo Road connection to freeway.
- Wanneroo duplication from just south of relocated Flynn Drive to Hall Road.

As part of the Mitchell Freeway Extension Project related upgrade/development activities are also being investigated.

1.2 Assessment scope

This preliminary clearing impact assessment (PCIA) involved a desktop analysis of environmental aspects and impacts and an assessment of native vegetation clearing impacts for the realignment of the Quarry Access Road into Quinns Quarry, located on Hester Avenue in the City of Wanneroo. The study area is confined to a local area of a 10 km radius.

This PCIA also includes information from the Preliminary Environmental Impact Assessment (PEIA) for the project which involved a desktop assessment and site investigation (GHD 2014).

This PCIA report will be used by Main Roads determined whether further Clearing Impact Assessment (CIA) is necessary, the need to seek submissions and develop and obtain approvals from the Department of Environment Regulation (DER) for revegetation plans, vegetation management plans dieback management plans or offset proposals.

1.3 Project description

The Quinns Quarry (managed by BGC), located on Hester Avenue is an inert landfill facility that provides a number of services including: solid waste depot, disposal of special waste (asbestos), storage and treatment of top soil, treatment of green waste and screening of material. The Quarry is accessed from Hester Avenue via a single-carriage, sealed road that carries both light and heavy vehicles. The Quarry Access Road occurs adjacent to and/or partly within the project area for Stage 1 of the Mitchell Freeway Extension Project. In order to progress the proposed Mitchell Freeway interchange with Hester Avenue and Hester Avenue

duplication (components of Stage 1 of the Mitchell Freeway Extension Project), the Quarry Access Road needs to be realigned.

The Quarry Access Road will be realigned largely adjacent to the existing Access Road and will utilise the existing Access Road where possible. During the realignment process the Quarry Access Road will be widened (average width of 20 meters (m)) and sealed.

1.3.1 Project location

The project is located between Hidden Valley Retreat and Wanneroo Road in the City of Wanneroo. The project area is accessed via Hester Avenue in Neerabup, and is adjacent to and/or partly includes the existing BGC Quarry Access Road. The project area is 1.58 hectares (ha) in size and includes approximately 0.73 ha of the existing Quarry Access Road. The project area is shown in Figure 1 (Appendix A).

1.4 Limitations and assumptions

This report has been prepared by GHD for Main Roads Western Australia and may only be used and relied on by Main Roads Western Australia for the purpose agreed between GHD and the Main Roads Western Australia as set out in section 1.2 of this report.

GHD otherwise disclaims responsibility to any person other than Main Roads Western Australia arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

The site investigation was a preliminary assessment aimed at identifying the major ecological constraints within the project area; it was not a full flora and fauna assessment.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

The opinions, conclusions and any recommendations in this report are based on assumptions made by GHD described in this report. GHD disclaims liability arising from any of the assumptions being incorrect.

GHD has prepared this report on the basis of information provided by Main Roads and others who provided information to GHD (including Government authorities), which GHD has not independently verified or checked beyond the agreed scope of work. It is assumed that the information provided by Main Roads WA and online database sources is both current and correct. GHD does not accept liability in connection with such unverified information, including errors and omissions in the report which were caused by errors or omissions in that information.

2. Methodology

2.1 Preliminary desktop study

A preliminary assessment of the project area and an assessment of native vegetation clearing was undertaken by reviewing a number of government agency managed databases, viewing GIS shapefiles and consulting with relevant stakeholders where necessary.

The results of this assessment are presented in the PEIA for the project (GHD 2014) and provided in Appendix B.

2.1.1 Information sources for desktop assessment

The information sources utilised in the desktop assessment are detailed in Table 1.

Table 1 Desktop assessment information sources

Aspect	Information Source
Matters of National Environmental Significance	Environment Protection Biodiversity Conservation Act 1999 (EPBC Act) Protected Matters Search Tool for Matters of National Environmental Significance (DotE 2014a)
Reserves and conservation areas	Department of Parks and Wildlife (DPaW managed lands and waters (DPaW spatial dataset)
Environmentally Sensitive Areas (ESAs)	Native Vegetation Map Viewer (DER 2014)
Vegetation	Beard (1979) vegetation association mapping Heddle <i>et al.</i> (1980) vegetation complex mapping
Conservation significant ecological communities	EPBC Act Protected Matters Search Tool (DotE 2014a) NatureMap (DPaW 2007–) DPaW Threatened Ecological Community (TEC) and Priority Ecological Community (PEC) databases
Conservation significant flora and fauna	EPBC Act Protected Matters Search Tool (DotE 2014a) NatureMap (DPaW 2007–) DPaW Threatened and Priority Flora (TPFL) and the Western Australian Herbarium (WAHERB) databases
Wetlands	EPBC Act Protected Matters Search Tool (DotE 2014a) DoW Perth Groundwater Atlas (DoW 2014b) WetlandBase (DAFWA 2014)
Acid Sulphate Soils	Australian Soil Resource Information System (ASRIS 2014) Natural Resource Management SLIP (GoWA 2014)
Groundwater and surface waters	Natural Resource Management SLIP (GoWA 2014) Hydrological features (GoWA 2014) Department of Water (DoW) Geographic Data Atlas (DoW 2014a)

3. Clearing of native vegetation

Native vegetation describes all indigenous aquatic and terrestrial vegetation (living or dead). The term does not include vegetation that was intentionally sown, planted or propagated unless it was required under a statutory condition.

Apart from activities that are exempt under the clearing regulation (Section 5 – Prescribed Clearing), all native vegetation clearing completed by Main Roads WA will be undertaken using a permit.

3.1 Measures to avoid and minimise clearing

The project area is accessed via Hester Avenue in Neerabup, and is adjacent to and/or partly includes the existing quarry access road. The quarry access road will be realigned largely adjacent to the existing access road and will utilise the existing access road where possible to minimise vegetation clearing.

3.2 Existing Vegetation Details

3.2.1 Project area vegetation description

Broad vegetation association

Beard (1979) mapping indicates that one vegetation association is present within the project area:

- Low woodland; banksia (association 949).

The Hedde *et al.* (1980) mapping identified the following vegetation complex on Aeolian Deposits of the Swan Coastal Plain within the project area (GoWA 2000):

Spearwood Dunes

- Cottesloe complex – central and south: Mosaic of woodland of *Eucalyptus gomphocephala* and open forest of *E. gomphocephala* – *E. marginata* – *E. calophylla* [now *Corymbia calophylla*]; closed heath on the Limestone outcrops.

Site vegetation types and condition

The type and condition of the vegetation within the project area was described during the site visit as part of the PEIA.

Banksia Woodland was the most dominant vegetation type within the project area occurring on the southern and western sides of the existing Access Road. This vegetation type was dominated by *Banksia attenuata* and *B. menziesii*, with scattered *Eucalyptus marginata* and *Allocasuarina fraseriana* trees over shrubland of *Xanthorrhoea preissii*, *Hibbertia hypericoides* and *Acacia pulchella* over an understory of *Mesomelaena pseudostygia*, *Desmocladius flexuosus* and *Scaevola canescens*. Areas within Neerabup National Park were rated as *Very Good* (3) to *Good* (4), and showed intact vegetation structure and evidence of minimal disturbance. Areas adjacent to the Access Road were rated as *Degraded* (5), and showed evidence of ongoing disturbance associated with the Access Road, including weed invasion, rubbish and dust.

The *Banksia* Woodland vegetation type aligned with Beard (1979) vegetation association 949: Low woodland; banksia, and potentially aligned with Gibson *et al.* (1994) Floristic Community Type (FCT) 28: Spearwood *Banksia attenuata* or *Banksia attenuata/Eucalyptus* woodlands.

The remainder of the project area included the existing Quinns Quarry Access Road, which was rated as *Completely Degraded* (6) and an area which had been previously cleared and subsequently revegetated with native species. This revegetated area occurred in the northern part of the project area, adjacent to the Access Road and was rated as *Degraded* (5).

3.2.2 Vegetation complexes and representation

The local and regional impacts on the loss of vegetation associations have been assessed using the mapped extent of the Beard (1979) vegetation associations within the project area.

The extent of Beard's (1979) vegetation associations have been determined by the state-wide vegetation remaining extent calculations maintained by the DPaW (latest update 2013 – GoWA 2013). As indicated in Table 2, the current extent of Beard (1979) vegetation association 949 is greater than 30 percent of the pre-European extent (considered to be the threshold level – Commonwealth of Australia 2001; EPA 2000) at the State, Interim Biogeographic Regionalisation for Australia (IBRA) bioregion, IBRA sub-region and local government authority (LGA) levels.

Table 2 Extent of Beard (1979) vegetation association within the project area (GoWA 2013)

Vegetation association	Scale	Pre-European extent (ha)	Current extent (ha)	Remaining (%)	Current extent in all DPaW managed lands (%)
Swan Coastal Plain IBRA Bioregion		1,501,221.92	586,975.23	39.10	36.48
949	State: Western Australia	218,193.94	124,080.33	56.87	54.73
	IBRA Bioregion: Swan Coastal Plain	209,983.25	121,216.29	57.73	55.33
	IBRA Subregion: Perth	184,475.82	105,076.59	56.96	58.53
	LGA: City of Wanneroo	37,138.47	17,641.75	47.50	68.10

The Local biodiversity Program (2010, 2013) provides information on the extent of vegetation complexes mapped by Heddle *et al.* (1980) in the south west portion of Western Australia. As shown in Table 3, the current extent of Heddle *et al.* (1980) Cottesloe complex – central and south vegetation complex is greater than 30 percent of the pre-European extent on the Swan Coastal Plain and within the City of Wanneroo.

Table 3 Extent of Heddle *et al.* (1980) vegetation complex within the project area (Local Biodiversity Project 2010, 2013)

Vegetation complex	Scale	Pre-European extent (ha)	2013 extent (ha)	% of pre-European extent	% of pre-European extent with formal protection + BF
Cottesloe complex – central and south	Swan Coastal Plain	44,899.92	15,815.73	35.22	12.75
	City of Wanneroo	13,310	6,122.77	46.00	6.36

3.2.3 Conservation significant ecological communities

A search of the EPBC Act Protected Matters Search Tool (DotE 2014a) and DPaW Threatened Ecological Community (TEC) and Priority Ecological Community (PEC) databases identified the potential presence of three TECs and five PECs within 10 km of the project area. In addition a new PEC has been listed by DPaW, 'Banksia dominated woodlands on the Swan Coastal Plain IBRA region' (Priority 3), which may occur in the vicinity of the project area.

The likelihood of occurrence assessment conducted as part of the PEIA (GHD 2014) identified that the 'Banksia dominated woodlands on the Swan Coastal Plain IBRA region' Priority 3 PEC was likely to occur within the project area. This assessment took into account previous records and locations, habitats present within the project area and community requirements.

3.2.4 Flora diversity

A search of the *NatureMap* database (DPaW 2007–) identified 491 plant taxa, representing 93 families and 272 genera that have been previously recorded within 10 km of the project area.

A total of 47 flora taxa were recorded in the project area during the site visit. This total comprised 36 native taxa and 11 introduced taxa (GHD 2014). This total does not represent a comprehensive list of all taxa occurring within the project area.

3.2.5 Conservation significant flora

Desktop searches of the EPBC Act Protected Matters database (DotE 2014a), DPaW NatureMap records (DPaW 2007–), DPaW Threatened and Priority Flora (TPFL) and the Western Australian Herbarium (WAHERB) databases identified the presence/potential presence of 29 conservation significant flora taxa within 10 km of the project area.

During the site visit two DPaW Priority-listed taxa were recorded within the project area:

- *Acacia benthamii* (Priority 2)
- *Jacksonia sericea* (Priority 4)

The likelihood of occurrence assessment (based on the range, habitat requirements and previous records of the species) conducted as part of the PEIA (GHD 2014) concluded that two conservation significant flora taxa have been recorded, three taxa are likely to occur, ten taxa could possibly occur, 13 taxa are unlikely to occur and one taxon is highly unlikely to occur in the project area.

3.3 Assessment against the 10 Clearing Principles

In assessing whether the project is likely to have a significant impact on the environment, the project was assessed against the Ten Clearing Principles (EP Act, Schedule 5).

This assessment has identified that the project is at variance with Principle (a) and Principle (h).

(a) Native vegetation should not be cleared if it comprises a high level of biological diversity

Comments	Proposal is at variance to this Principle
Assessment	<p>The project area is located within the Swan Coastal Plain IBRA bioregion, and Perth IBRA subregions (DotE 2014b). Broad scale vegetation mapping of the area undertaken by Beard (1979) identified the following vegetation association within the project area:</p> <ul style="list-style-type: none">• Low woodland; banksia (association 949).

Comments

Proposal is at variance to this Principle

The Heddle *et al.* (1980) mapping identified the following vegetation complex on Aeolian Deposits of the Swan Coastal Plain within the project area (GoWA 2000):

Spearwood Dunes

- Cottesloe complex – central and south: Mosaic of woodland of *Eucalyptus gomphocephala* and open forest of *E. gomphocephala* – *E. marginata* – *E. calophylla* [now *Corymbia calophylla*]; closed heath on the Limestone outcrops.

The extents of Beard (1979) association 949 and Heddle *et al.* (1980) vegetation complex Cottesloe complex – central and south are greater than 30 % of the pre-European extent at the State, IBRA region, IBRA sub-region and LGA scale (City of Wanneroo). Therefore they are above the 30% threshold level (Commonwealth of Australia 2001; EPA 2000).

The Project Area includes both remnant vegetation (0.74 ha) and cleared areas (0.84 ha). The results of the site visit indicates that the remnant vegetation within the project area consists of *Banksia* Woodland (0.74 ha) in *Very Good* (3) to *Good* (4) condition (Keighery 1994) and showed intact vegetation structure and evidence of minimal disturbance (GHD 2014). Areas adjacent to the Access Road were rated as *Degraded* (5), and showed evidence of ongoing disturbance associated with the Access Road, including weed invasion, rubbish and dust.

The remainder of the project area consists of the existing Quinns Quarry Access Road (rated as *Completely Degraded* (6)) and an area which had been previously cleared and subsequently revegetated with native species (rated as *Degraded* (5)). The *Banksia* Woodland vegetation type aligned with Beard (1979) vegetation association 949: Low woodland; banksia.

Overall the vegetation ranges in condition from *Completely Degraded* (6) to *Very Good* (3):

- *Very Good* (3) to *Good* (4) – 0.51 ha
- *Degraded* (5) – 0.28 ha
- *Completely Degraded* (6) – 0.79 ha

A search of the EPBC Act Protected Matters Search Tool (DotE 2014a) and DPaW TEC and PEC databases identified the potential presence of three TECs and five PECs within 10 km of the project area. In addition a new PEC has been listed by DPaW, '*Banksia* dominated woodlands on the Swan Coastal Plain IBRA region' (Priority 3), which may occur in the vicinity of the project area. The likelihood of occurrence assessment conducted as part of the PEIA (GHD 2014) identified that the '*Banksia* dominated woodlands on the Swan Coastal Plain IBRA region' Priority 3 PEC was likely to occur within the project area. There is 0.74 ha of *Banksia* woodland vegetation considered likely to be this PEC located within the project area.

A search of the *NatureMap* database (DPaW 2007–) identified 491 plant taxa, representing 93 families and 272 genera that have been previously recorded within 10 km of the project area. A total of 47 flora taxa were recorded in the project area during the site visit, including 36 native taxa and 11 introduced

Comments	Proposal is at variance to this Principle
	<p>taxa (GHD 2014). This total does not represent a comprehensive list of all taxa occurring within the project area.</p> <p>Desktop searches of the EPBC Act Protected Matters database (DotE 2014a), DPaW NatureMap records (DPaW 2007–), DPaW Threatened and Priority Flora (TPFL) and the Western Australian Herbarium (WAHERB) databases identified the presence/potential presence of 29 conservation significant flora taxa within 10 km of the project area. During the site visit two DPaW Priority-listed taxa were recorded within the project area:</p> <ul style="list-style-type: none"> • <i>Acacia benthamii</i> (Priority 2) • <i>Jacksonia sericea</i> (Priority 4) <p>The likelihood of occurrence assessment (based on the range, habitat requirements and previous records of the species) conducted as part of the PEIA (GHD 2014) concluded that two conservation significant flora taxa have been recorded, three taxa are likely to occur, ten taxa could possibly occur, 13 taxa are unlikely to occur and one taxon is highly unlikely to occur in the project area. The three species considered likely to occur include:</p> <ul style="list-style-type: none"> • <i>Leucopogon</i> sp. Yanchep (M. Hislop 1986) (Priority 3) • <i>Baeckea</i> sp. Limestone (N. Gibson & M.N. Lyons 1425) (Priority 1) • <i>Pimelea calcicola</i> (Priority 3) <p>The project area is located within Neerabup National Park (Class A Reserve, R 27575) and within Bush Forever site No. 383 'Neerabup National Park, Lake Nowergup Nature Reserve and adjacent bushland, Neerabup'. Clearing for the project will result in the direct loss of 0.74 ha of vegetation within Neerabup National Park and Bush Forever site No. 383.</p> <p>The project area is also located within an Environmentally Sensitive Area (ESA), which is most likely associated with Neerabup National Park and Bush Forever site No. 383.</p> <p>Two broad fauna habitats associated with remnant vegetation were recorded within the project area, <i>Banksia</i> woodland and revegetation. The <i>Banksia</i> woodland is well represented in the immediate vicinity of the project area within Neerabup National Park and in the broader City of Wanneroo region.</p> <p>Desktop searches (DotE 2014a, DPaW 2007–) identified 318 fauna species as previously recorded within 10 km of the project area, including 305 native and 13 introduced species. A total of 20 fauna species were recorded in the project area during the site visit. This total consisted of 18 birds and two mammals, of which 17 are native species and three are introduced species. All of these species have been previously recorded from the locality. No fauna species of conservation significance were recorded within the project area during the fauna field survey.</p> <p>The project area contains <i>Banksia</i> spp. <i>Hakea</i> spp. and other proteaceous species that provide suitable foraging habitat for the conservation significant Black Cockatoo species. There is 0.74 ha of <i>Banksia</i> woodland foraging habitat within the project area. There is however no potential breeding habitat or suitable roosting habitat for Black Cockatoos within the project area.</p>

Comments	Proposal is at variance to this Principle
	<p>The likelihood of occurrence assessment (based on the range, habitat requirements and previous records of the species) conducted as part of the PEIA (GHD 2014) concluded that eight conservation significant fauna species are considered likely to occur, five species are unlikely to occur and six species are highly unlikely to occur in with project area. The species likely to occur include:</p> <ul style="list-style-type: none"> • Carnaby's Black Cockatoo (<i>Calyptorhynchus latirostris</i>) • Baudin's Black Cockatoo (<i>Calyptorhynchus baudinii</i>) • Rainbow Bee-eater (<i>Merops ornatus</i>) • Western Brush Wallaby (<i>Macropus irma</i>) • Carpet Python (<i>Morelia spilota</i> subsp. <i>imbricata</i>) • Black-striped Snake (<i>Neelaps calonotos</i>) • A native bee (<i>Hylaeus globuliferus</i>) • Graceful Sun Moth (<i>Synemon gratiosa</i>) <p>The project area is not likely to comprise a greater diversity than similar areas either locally or at a bioregional scale.</p> <p>Based on desktop assessment, the project area is considered to be of high biodiversity due to the likely presence of the Priority 3 PEC (<i>Banksia</i> dominated woodlands on the Swan Coastal Plain IBRA region), the presence of two DPaW Priority-listed flora taxa and that the project area is located within Neerabup National Park and Bush Forever site No. 383. In addition, three DPaW Priority-listed flora taxa and eight conservation significant fauna species are considered likely to occur to occur within the project area. Therefore clearing of the vegetation within the project area is considered to be at variance to this principle.</p>
Methodology	<p>GHD (2014)</p> <p>DPaW databases (DPaW managed lands and waters)</p> <p>NatureMap database (DPaW 2007–) – accessed April 2014</p> <p>EPBC Act Protected Matters Search Tool (DotE 2014a)</p> <p>IBRA (DotE 2014b)</p> <p>Mapped pre-European vegetation (Beard 1979, Heddle <i>et al.</i> 1980 Shepherd <i>et al.</i> 2002, GoWA 2013)</p> <p>TEC/PEC lists (DPaW 2013a; 2013b)</p> <p>Bush Forever (GoWA 2000)</p>

(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

Comments	Proposal is not likely to be at variance to this Principle
Assessment	Desktop searches (DotE 2014a, DPaW 2007–) identified 318 fauna species as

	<p>previously recorded within 10 km of the project area, including 305 native and 13 introduced species. A total of 20 fauna species were recorded in the project area during the site visit. This total consisted of 18 birds and two mammals, of which 17 are native species and three are introduced species. All of these species have been previously recorded from the locality. No fauna species of conservation significance were recorded within the project area during the fauna field survey.</p> <p>Two broad fauna habitats associated with remnant vegetation were recorded within the project area, <i>Banksia</i> woodland and revegetation. The <i>Banksia</i> woodland is well represented in the immediate vicinity of the project area within Neerabup National Park and in the broader City of Wanneroo region.</p> <p>The project area contains <i>Banksia</i> spp. <i>Hakea</i> spp. and other proteaceous species that provide suitable foraging habitat for the conservation significant Black Cockatoo species. There is 0.74 ha of <i>Banksia</i> woodland foraging habitat within the project area. There is however no potential breeding habitat or suitable roosting habitat for Black Cockatoos within the project area.</p> <p>Desktop searches (DotE 2014a, DPaW 2007–) identified the presence/potential presence of 19 conservation significant fauna within 10 km of the project area. The likelihood of occurrence assessment (based on the range, habitat requirements and previous records of the species) conducted as part of the PEIA (GHD 2014) concluded that eight conservation significant fauna species are considered likely to occur, five species are unlikely to occur and six species are highly unlikely to occur in with project area. The species likely to occur include:</p> <ul style="list-style-type: none"> • Carnaby's Black Cockatoo (<i>Calyptorhynchus latirostris</i>) • Baudin's Black Cockatoo (<i>Calyptorhynchus baudinii</i>) • Rainbow Bee-eater (<i>Merops ornatus</i>) • Western Brush Wallaby (<i>Macropus irma</i>) • Carpet Python (<i>Morelia spilota</i> subsp. <i>imbricata</i>) • Black-striped Snake (<i>Neelaps calonotos</i>) • A native bee (<i>Hylaeus globuliferus</i>) • Graceful Sun Moth (<i>Synemon gratiosa</i>) <p>The <i>Banksia</i> woodland habitat within the project area is represented locally (within Neerabup National Park) and regionally and therefore the above listed fauna species are unlikely to rely solely upon the habitats that occur with the project area. Clearing of the 0.74 ha of Black Cockatoo foraging habitat is unlikely to have a large impact on the three species of Black Cockatoos.</p> <p>Overall, clearing of vegetation within the project area is not expected to adversely impact upon available fauna species habitat locally or regionally.</p>
Methodology	<p>GHD (2014)</p> <p>EPBC Act Protected Matters Search (2014a)</p> <p><i>NatureMap</i> database (DPaW 2007–) – accessed April 2014</p>

(c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora

Comments	Proposal is not likely to be at variance to this Principle
Assessment	<p>Desktop searches identified the presence/potential presence of 13 WC Act and or EPBC Act listed flora taxa within 10 km of the project area (DotE 2014a, DPaW 2007–).</p> <p>A likelihood of occurrence assessment, which takes into account the habitats present, known taxa distribution and previous records, was completed for the 13 threatened flora taxa identified in the desktop assessment. This assessment concluded that all taxa were unlikely to occur within the project area (GHD 2014).</p>
Methodology	<p>EPBC Act Protected Matters Search (DotE 2014a)</p> <p><i>NatureMap</i> (DPaW 2007–)</p>

(d) Native vegetation should not be cleared if it comprises the whole or part of, or if necessary for the maintenance of a threatened ecological community

Comments	Proposal is not likely to be at variance to this Principle
Assessment	<p>Desktop searches (DotE 2014a) identified the potential presence of three TECs within 10 km of the project area.</p> <p>The likelihood of occurrence assessment conducted as part of the PEIA (GHD 2014) did not identify any of these TECs as being likely to occur within the project area.</p>
Methodology	<p>EPBC Act Protected Matters Search (DotE 2014a)</p> <p>TEC/PEC lists (DPaW 2013a; 2013b)</p>

(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

Comments	Proposal is not likely to be at variance to this Principle
Assessment	<p>The project area is located within the Swan Coastal Plain IBRA bioregion, and Perth IBRA subregions (DotE 2014b). Broad scale vegetation mapping of the area undertaken by Beard (1979) identified the following vegetation association within the project area:</p> <ul style="list-style-type: none"> • Low woodland; banksia (association 949). <p>The Heddle <i>et al.</i> (1980) mapping identified the following vegetation complex on Aeolian Deposits of the Swan Coastal Plain within the project area (GoWA 2000):</p> <p>Spearwood Dunes</p> <ul style="list-style-type: none"> • Cottesloe complex – central and south: Mosaic of woodland of <i>Eucalyptus gomphocephala</i> and open forest of <i>E. gomphocephala</i> – <i>E. marginata</i> – <i>E. calophylla</i> [now <i>Corymbia calophylla</i>]; closed heath on the Limestone outcrops. <p>The extents of Beard (1979) association 949 and Heddle <i>et al.</i> (1980) vegetation complex Cottesloe complex – central and south are greater than 30 percent of the pre-European extent at the State, IBRA region, IBRA sub-region and LGA scale (City of Wanneroo). Therefore they are above the 30 percent</p>

	<p>threshold level (Commonwealth of Australia 2001; EPA 2000). Any clearing of vegetation association 949 or the Cottesloe complex – central and south within the project area will not reduce their pre-European extents to below 30 percent.</p> <p>The project area occurs within the highly modified Perth metropolitan area and the vegetation associated with the project area occurs adjacent to the existing Quarry Access Road. Any clearing of the project area is not considered likely to further fragment adjacent vegetation.</p>
Methodology	<p>IBRA (DotE 2014b)</p> <p>GHD (2014)</p> <p>Mapped pre-European vegetation (Beard 1979, Heddle <i>et al.</i> 1980 Shepherd <i>et al.</i> 2002, GoWA 2013)</p>

(f) Native vegetation should not be cleared if it is growing in, or in association with, an environment with a watercourse or wetland

Comments	Proposal is not likely to be at variance to this Principle
Assessment	<p>A search of the EPBC Act Protected Matters database indicates that no Ramsar or Internationally wetlands are present within 10 km of the project area. One Nationally Important Wetland, Joondalup Lake is located within 10 km of the project area. A search of the DoW Perth Groundwater Atlas and DAFWA WetlandBase indicates that there are no wetlands in the project area (DAFWA 2014). It is unlikely that the proposed works will impact any wetlands in the vicinity of the project area.</p> <p>No rivers or surface water bodies listed under the <i>Rights in Water and Irrigation Act 1914</i> (RIWI Act) were identified within the project area (DoW 2014a). There are no drainage lines or lakes in the project area (DoW 2014a). It is unlikely that the proposed works will disturb or interrupt any natural drainage and surface run-off patterns.</p> <p>No vegetation associated with watercourses or wetlands was recorded in the project area during the site visit.</p> <p>The project is not likely to be at variance to this principle as there is no vegetation growing in, or in association with, an environment with a watercourse or wetland within the project area.</p>
Methodology	<p>Department of Water Geographic data atlas (DoW 2014a)</p> <p>EPBC Act Protected Matters Search (DotE 2014a)</p> <p>GHD (2014)</p> <p>WetlandBase (DAFWA 2014)</p> <p>Department of Water Perth Groundwater Atlas (DoW 2014b)</p>

(g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation

Comments	Proposal is not likely to be at variance to this Principle
Assessment	The groundwater salinity in project area is relatively fresh, ranging from typically 200 to 1000 mg/L TDS. The Natural Resource Management Shared

	<p>Land Information Platform (SLIP) has mapped the salinity risk as '0-2% high to extreme hazard of salinity risk' (GoWA 2014). Native vegetation clearing in the project area is unlikely to increase salinity in the project area and surrounding areas.</p> <p>The project area is located within the Gnangara Mound which is an important source of fresh groundwater in the Perth region, derived from the unconfined superficial aquifer. The Natural Resource Management SLIP has mapped the waterlogging risk as '0-2% moderate to very high hazard' and flooding risk as '0-2% Moderate to high hazard' (GoWA 2014). It is unlikely that clearing of native vegetation in the project area will increase waterlogging and flooding within and surrounding the project area. The risk of water erosion was mapped as '3-9% high to extreme hazard' for the majority of project area.</p> <p>The project area consists of Spearwood Dunes and the Natural Resource Management SLIP has mapped the soils within the project area as:</p> <ul style="list-style-type: none"> • Karrakatta shallow soils Phase – Rocky low hills and ridges on limestone in the Swan Coastal Plain with bare rock, yellow/brown shallow sands and stony soils. • Karrakatta Sand Yellow Phase – Undulating dunes on aeolian sand over limestone in the Swan Coastal Plain with yellow deep sands. <p>The sands within the project area are therefore relatively porous and well drained and therefore there is little overland surface water flow, which minimises the risk of water erosion.</p> <p>The Natural Resource Management SLIP has mapped wind erosion risk as '30-49% high to extreme hazard' for the majority of the project area (shallow sands) and 70-100% high to extreme hazard' for the remaining areas (deeper sands) (GoWA 2014). The high sand content of the soils and ease with which these materials can be transported by the wind means there is a high risk of wind erosion in this area.</p> <p>The ASS Swan Coastal Plain dataset did not identify any known ASS within the project area and the ASRIS database indicates that the area is classified as 'Extremely Low Probability of Occurrence' with a high degree of confidence (ASRIS 2014).</p> <p>Given the small size of vegetation clearing (0.85 ha) required for the project, the project is unlikely to cause significant land degradation.</p>
Methodology	Australia Soil Resource Information System (ASRIS 2014) Natural Resource Management SLIP (GoWA 2014)

(h) Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environment values of any adjacent or nearby conservation area

Comments	Proposal is at variance to this Principle
Assessment	The project area is located within Neerabup National Park (Class A Reserve, R 27575) and within Bush Forever site No. 383 'Neerabup National Park, Lake Nowergup Nature Reserve and adjacent bushland, Neerabup'. Clearing for the project will result in the direct loss of 0.74 ha of native vegetation within

Neerabup National Park and Bush Forever site No. 383.

Four other DPaW managed reserves are located within the vicinity of the project area:

- Neerabup Lake and adjacent bushland (approximately 500 m north-east of the project area).
- Neerabup Nature Reserve (approximately 3.5 km east of the project area).
- Gngangara–Moore River State Forest (approximately 5 km east of the project area).
- Lake Joondalup Nature Reserve (approximately 7.5 m south of the project area).

Locally, the habitat within the project area is connected to the east to the surrounding remnant vegetation within Neerabup National Park. This provides a linkage to the much larger linear vegetated corridor associated with Neerabup National Park and a number of Bush Forever sites. To the north, west and south, the project area is immediately bound by Hester Avenue, the railway and the Quarry. Any clearing of the project area is not considered to significantly impact or further fragment adjacent vegetation in Neerabup National Park and Bush Forever site No. 383. However, any clearing will result in the direct loss of native vegetation within these conservation areas.

At a larger scale, the areas of remnant *Banksia* woodland vegetation in and immediately surrounding the project area are part of a regionally significant contiguous bushland/wetland linkage (GoWA 2000). A large proportion of this vegetation is currently included as national park and a series of Bush Forever sites (GoWA 2000). There are several surrounding linkages and the habitat within Neerabup National Park (Bush Forever site 383) is linked to bushland to the north in Yanchep National Park, to the south to Bush Forever site 299 (across Wanneroo road) and to the east and west to Bush Forever Site 323 and through bushland to Bush Forever Site 397. The vegetation within project area also connected to Greenways 35, 2, 5 (Tingay, Alan and Associates 1998) and overall the Neerabup National Park provides a narrow corridor to allow movement of fauna along the coastal plain and associated wetlands. Although the project area contributes to local and regional ecological linkages, any clearing of the project area is not considered to result in a loss of connectivity function between these ecological linkages.

Weed incursion into Neerabup National Park and Bush Forever No. 383 was observed within the project area as a result of the existing Quarry Access Road. Any clearing of the project area is unlikely to increase the existing weed incursion into these conservation areas, but will most likely result in weed incursion occurring further east.

The project area is also located within an Environmentally Sensitive Area (ESA), which is associated with Bush Forever site No. 383.

The project area contains 0.74 ha of native vegetation that occurs within Neerabup National Park and Bush Forever site No. 383. Any clearing of the project area is not considered to significantly impact or further fragment these conservation areas or result in a loss of connectivity function between local and regional ecological linkages. However, clearing of the project area will result in the direct loss of native vegetation within these conservation areas.

Methodology	DPaW database (DPaW managed lands and waters) Natural Resource Management SLIP (GoWA 2014) Bush Forever (GoWA 2000)
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(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.

Comments	Project is not likely to be at variance to this Principle
Assessment	<p>The project area is located in the Perth <i>Rights in Water and Irrigation Act 1914</i> (RIWI Act) Groundwater Area and the Perth Coastal and Gwelup Underground Water Pollution Control Area Public Drinking Water Source Area (PDWSA), which is a Priority 3 Protection Zone. Priority 3 areas are declared over land where water supply sources need to coexist with other land uses such as residential, commercial and light industrial developments. Groundwater in the region is inferred as flowing in a westerly direction beneath the project area. No dewatering is expected for the project and it is unlikely that the proposed works will impact upon groundwater.</p> <p>No rivers or surface water bodies listed under the RIWI Act were identified within the project area (DoW 2014a). There are no drainage lines or lakes in the project area (DoW 2014a). It is unlikely that the proposed works will disturb or interrupt any natural drainage and surface run-off patterns due to the deep sandy soils present in the area.</p> <p>A search of the DoW Perth Groundwater Atlas and DAFWA WetlandBase indicates that there are no wetlands in the project area (DAFWA 2014). The nearest wetland is located approximately 2 km east of the project area (Neerabup Lake). It is unlikely that the proposed works will impact any wetlands in the vicinity of the project area.</p> <p>There are no Environmental Protection Policy (EPP) lakes protected under the <i>Environmental Protection (Swan Coastal Plain Lakes) Policy 1992</i> within the project area. There are however several EPP Lakes located within proximity to the project area. The nearest EPP lake is located approximately 2 km east of the project area (Neerabup Lake) and therefore no direct impacts are expected to occur to any EPP lakes as a result of the proposed project.</p> <p>The ASS Swan Coastal Plain dataset did not identify any known ASS within the project area and the ASRIS database indicates that the area is classified as 'Extremely Low Probability of Occurrence' with a high degree of confidence (ASRIS 2014). Native vegetation clearing in the project area is unlikely to result in ASS. There are also no known contaminated sites are present within or immediately adjacent to the project area</p> <p>The Natural Resource Management Shared Land Information Platform (SLIP) has mapped the salinity risk as '0-2% high to extreme hazard of salinity risk' (GoWA 2014). Native vegetation clearing in the project area is unlikely to increase salinity in the project area and surrounding areas.</p> <p>The Natural Resource Management SLIP mapped the phosphorus export risk as '3-9% high to extreme hazard' for project area. The quality of surface and underground water in areas surrounding the project area are unlikely to be impacted as a result of native vegetation clearing in the project area.</p>

	<p>Clearing is not likely to significantly increase surface water runoff due to the porosity of the soils in the area. There are no watercourses or wetlands within the project area; with the closest wetland, Neerabup Lake, located approximately 2 km east. It is unlikely that clearing of the vegetation within the project area will result in any indirect impacts to this wetland, such as changes to hydrology and changes to surface water flows to this wetland.</p> <p>The project is not likely to be at variance to this principle as clearing of the 0.85 ha of vegetation is unlikely to cause deterioration in the quality of surface or underground water.</p>
Methodology	<p>Natural Resource Management SLIP (GoWA 2014)</p> <p>Australia Soil Resource Information System (ASRIS 2014)</p> <p>Department of Water Geographic Data Atlas (DoW 2014a)</p> <p>Department of Water Perth Groundwater Atlas (DoW 2014b)</p>

(j) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding

Comments	Project is not likely to be at variance to this Principle
Assessment	<p>The soils of the project area are sandy and porous and the area is generally well-drained. No wetlands, watercourses or areas subject to inundation are located within the project area. In addition the clearing area is relatively small (0.85 ha) compared to the size of the catchment zone.</p> <p>It is unlikely that the removal of vegetation proposed for this project would cause or exacerbate the incidence or intensity of flooding in the local area.</p> <p>The project area is unlikely to be susceptible to waterlogging due to the highly porous nature of the soils in the area and clearing is unlikely to cause or exacerbate waterlogging within the project area.</p>
Methodology	<p>Natural Resource Management SLIP (GoWA 2014)</p> <p>Department of Water Geographic Data Atlas (DoW 2014a)</p>

4. Additional actions required

The following table (Table 4) summarises what further clearing impact assessment and vegetation management is required in accordance with Main Roads State-wide vegetation Clearing Permit (CPS 818).

Table 4 Summary of Additional Management Actions Required by Permit CPS818

Impact of Clearing	Yes/No or NA	Further Action Required
1. The PCIA indicates that the clearing is 'Seriously at Variance', At Variance' or 'May be at Variance' with one or more of the clearing principles.	Yes	<ol style="list-style-type: none"> 1. Submissions are required to be sought from relevant parties. 2. A CIA is required to be undertaken (see condition 6(n)). 3. A Vegetation Management Plan (VMP) is required to be approved by DER. The VMP must be approved prior to undertaking clearing of the area to which the VMP is related 4. An offset proposal is required to be approved by DER. The offset proposal must be approved prior to undertaking clearing of the area to which the offset is related.
2. The PCIA indicates that the clearing is at variance or may be at variance with clearing principle (g) land degradation, (i) surface or underground water quality or (j) the incidence of flooding.	No	No further action required.
3. The project involves clearing for temporary works (as defined by the permit in under Condition 11 of CPS 818).	No	No further action required.
4a. The project is in part of a region that has annual rainfall greater than 400 mm and is south of the 26th parallel of latitude.	Yes	If yes, go to number 4b.
4b. The project will require movement of soil in conditions other than dry conditions.	No	No further action required.

5. Stakeholder consultation

It's understood Main Roads has consulted with DPaW and the Conservation Commission about the relocation of the Access Road with the Neerabup National Park. Further stakeholder consultation will be required prior to native vegetation clearing and the implementation of the project. Recommended stakeholder consultation includes:

- DPaW – to confirm the occurrence of the '*Banksia* dominated woodlands on the Swan Coastal Plain IBRA region' Priority 3 PEC within the project area that considered likely to occur based on the desktop study and site visit.
- DAFWA – to discuss Declared Pest, **Gomphocarpus fruticosus* (Narrow leaf cotton bush), which was identified within the project area during the site visit.
- BGC (Quinns Quarry) – to discuss project timeframes and alternate traffic flow options during construction of the project.

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Appendices

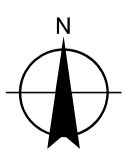
Appendix A – Project location

Figure 1 Locality



LEGEND
 Project area

1: 50,000 (at A3)
 0 0.25 0.5 1 1.5 2 2.5
 Kilometres
 Map Projection: Transverse Mercator
 Horizontal Datum: Geocentric Datum of Australia
 Grid: Map Grid of Australia 1994, Zone 50



Main Roads Western Australia
 Mitchell Freeway BGC Quarry Access Realignment

Job Number 61-2943513
 Revision 0
 Date 06 Jun 2014

Locality

Figure 1

Appendix B – Desktop searches

EPBC Act Protected Matters Search report

NatureMap Flora report (10 km radius)

NatureMap Fauna report (10 km radius)



EPBC Act Protected Matters Report

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

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

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

Report created: 31/03/14 19:53:33

[Summary](#)

[Details](#)

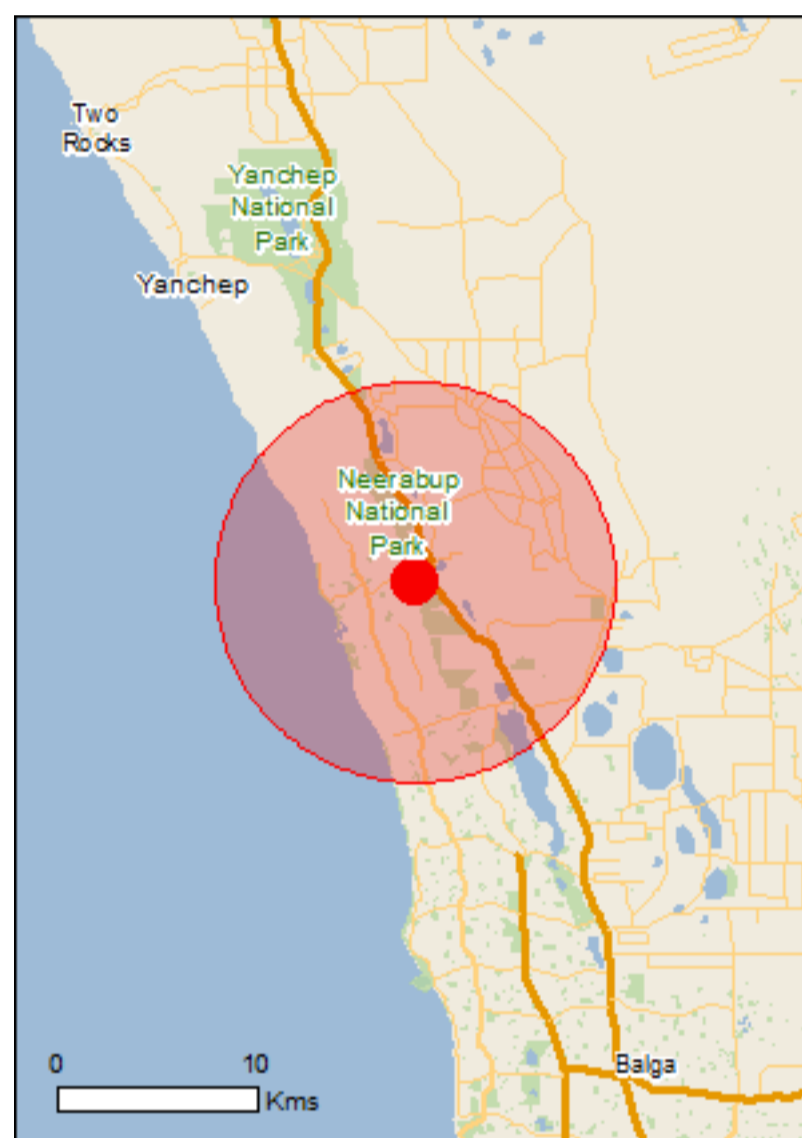
[Matters of NES](#)

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

[Extra Information](#)

[Caveat](#)

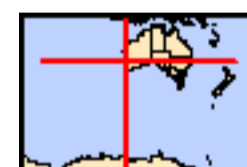
[Acknowledgements](#)



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

[Coordinates](#)

[Buffer: 10.0Km](#)



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 Areas:	None
Listed Threatened Ecological Communities:	1
Listed Threatened Species:	43
Listed Migratory Species:	39

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 and the heritage values of a place on the Register of the National Estate.

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.

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

Commonwealth Land:	1
Commonwealth Heritage Places:	None
Listed Marine Species:	62
Whales and Other Cetaceans:	13
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Commonwealth Reserves Marine	None

Extra Information

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

Place on the RNE:	8
State and Territory Reserves:	5
Regional Forest Agreements:	None
Invasive Species:	36
Nationally Important Wetlands:	1
Key Ecological Features (Marine)	None

Details

Matters of National Environmental Significance

Listed Threatened Ecological Communities

[\[Resource Information \]](#)

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

Name	Status	Type of Presence
Sedgelands in Holocene dune swales of the southern Swan Coastal Plain	Endangered	Community known 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
Calyptorhynchus latirostris Carnaby's Black-Cockatoo, Short-billed Black-Cockatoo [59523]	Endangered	Breeding likely to occur within area
Diomedea epomophora epomophora Southern Royal Albatross [25996]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea epomophora sanfordi Northern Royal Albatross [82331]	Endangered	Foraging, feeding or related behaviour likely to occur within area
Diomedea exulans amsterdamensis Amsterdam Albatross [82330]	Endangered	Species or species habitat may occur within area
Diomedea exulans exulans Tristan Albatross [82337]	Endangered	Species or species habitat may occur within area
Diomedea exulans (sensu lato) Wandering Albatross [1073]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Halobaena caerulea Blue Petrel [1059]	Vulnerable	Species or species habitat may occur within

Name	Status	Type of Presence area
Leipoa ocellata Malleefowl [934]	Vulnerable	Species or species habitat likely to occur within area
Macronectes giganteus 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
Pterodroma mollis Soft-plumaged Petrel [1036]	Vulnerable	Species or species habitat may occur within area
Rostratula australis Australian Painted Snipe [77037]	Endangered	Species or species habitat may occur within area
Sternula nereis nereis Australian Fairy Tern [82950]	Vulnerable	Species or species habitat may occur within area
Thalassarche carteri Indian Yellow-nosed Albatross [64464]	Vulnerable	Foraging, feeding or related behaviour may occur within area
Thalassarche cauta cauta Shy Albatross, Tasmanian Shy Albatross [82345]	Vulnerable	Species or species habitat may occur within area
Thalassarche cauta steadi White-capped Albatross [82344]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Species or species habitat may occur within area
Thalassarche melanophris impavida Campbell Albatross [82449]	Vulnerable	Species or species habitat may occur within area
Mammals		
Balaenoptera musculus Blue Whale [36]	Endangered	Species or species habitat may occur within area
Dasyurus geoffroii Chuditch, Western Quoll [330]	Vulnerable	Species or species habitat likely to occur within area
Eubalaena australis Southern Right Whale [40]	Endangered	Breeding known to occur within area
Megaptera novaeangliae Humpback Whale [38]	Vulnerable	Species or species habitat known to occur within area
Neophoca cinerea Australian Sea-lion [22]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Plants		
Andersonia gracilis Slender Andersonia [14470]	Endangered	Species or species habitat may occur within area
Anigozanthos viridis subsp. terraspectans Dwarf Green Kangaroo Paw [3435]	Vulnerable	Species or species habitat likely to occur

Name	Status	Type of Presence within area
Caladenia huegelii King Spider-orchid, Grand Spider-orchid, Rusty Spider-orchid [7309]	Endangered	Species or species habitat likely to occur within area
Centrolepis caespitosa [6393]	Endangered	Species or species habitat likely to occur within area
Darwinia foetida Muceha Bell [83190]	Critically Endangered	Species or species habitat likely to occur within area
Diuris micrantha Dwarf Bee-orchid [55082]	Vulnerable	Species or species habitat likely to occur within area
Diuris purdiei Purdie's Donkey-orchid [12950]	Endangered	Species or species habitat may occur within area
Drakaea elastica Glossy-leafed Hammer-orchid, Praying Virgin [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
Epiblema grandiflorum var. cyaneum Baby Blue Orchid, Blue Babe-in-the-cradle Orchid, Blue Babe-in-a-cradle [67182]	Endangered	Species or species habitat may occur within area
Eucalyptus argutifolia Yanchep Mallee, Wabbling Hill Mallee [24263]	Vulnerable	Species or species habitat likely to occur within area
Lepidosperma rostratum Beaked Lepidosperma [14152]	Endangered	Species or species habitat likely to 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 may occur within area
Carcharodon carcharias Great White Shark [64470]	Vulnerable	Species or species habitat may 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 - Threatened Species list.

Name	Threatened	Type of Presence
Migratory Marine Birds		
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area
Diomedea amsterdamensis Amsterdam Albatross [64405]	Endangered*	Species or species habitat may occur within area
Diomedea dabbenena Tristan Albatross [66471]	Endangered*	Species or species habitat may occur within area
Diomedea epomophora (sensu stricto) Southern Royal Albatross [1072]	Vulnerable*	Foraging, feeding or related behaviour likely to occur within area
Diomedea exulans (sensu lato) Wandering Albatross [1073]	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
Macronectes giganteus 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
Puffinus carneipes Flesh-footed Shearwater, Fleshy-footed Shearwater [1043]		Species or species habitat likely to occur within area
Sterna anaethetus Bridled Tern [814]		Foraging, feeding or related behaviour likely to occur within area
Sterna caspia Caspian Tern [59467]		Foraging, feeding or related behaviour known to occur within area
Sterna dougallii Roseate Tern [817]		Foraging, feeding or related behaviour likely to occur within area
Thalassarche carteri Indian Yellow-nosed Albatross [64464]	Vulnerable	Foraging, feeding or related behaviour may occur within area
Thalassarche cauta (sensu stricto) Shy Albatross, Tasmanian Shy Albatross [64697]	Vulnerable*	Species or species habitat may occur within area
Thalassarche impavida Campbell 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

Name	Threatened	Type of Presence
Balaenoptera edeni Bryde's Whale [35]		Species or species habitat may occur within area
Balaenoptera musculus Blue Whale [36]	Endangered	Species or species habitat may occur within area
Caperea marginata Pygmy Right Whale [39]		Species or species habitat may occur within area
Carcharodon carcharias Great White Shark [64470]	Vulnerable	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
Eubalaena australis Southern Right Whale [40]	Endangered	Breeding known to occur within area
Lagenorhynchus obscurus Dusky Dolphin [43]		Species or species habitat may occur within area
Lamna nasus Porbeagle, Mackerel Shark [83288]		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		
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species habitat known to occur within area
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area
Migratory Wetlands Species		
Ardea alba Great Egret, White Egret [59541]		Species or species habitat known to occur within area

Name	Threatened	Type of Presence
Ardea ibis Cattle Egret [59542]		Species or species habitat likely to occur within area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat known to occur within area
Calidris ruficollis Red-necked Stint [860]		Species or species habitat known to occur within area
Rostratula benghalensis (sensu lato) Painted Snipe [889]	Endangered*	Species or species habitat may 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 -

Listed Marine Species [\[Resource Information \]](#)

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

Name	Threatened	Type of Presence
Birds		
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]		Species or species habitat known to occur within area
Ardea ibis Cattle Egret [59542]		Species or species habitat likely to occur within area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat known to occur within area
Calidris ruficollis Red-necked Stint [860]		Species or species habitat known to occur within area
Catharacta skua Great Skua [59472]		Species or species habitat may occur within area
Diomedea amsterdamensis Amsterdam Albatross [64405]	Endangered*	Species or species habitat may occur within area
Diomedea dabbenena Tristan Albatross [66471]	Endangered*	Species or species habitat may occur within

Name	Threatened	Type of Presence area
Diomedea epomophora (sensu stricto) Southern Royal Albatross [1072]	Vulnerable*	Foraging, feeding or related behaviour likely to occur within area
Diomedea exulans (sensu lato) Wandering Albatross [1073]	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 known to occur within area
Halobaena caerulea Blue Petrel [1059]	Vulnerable	Species or species habitat may occur within area
Himantopus himantopus Black-winged Stilt [870]		Species or species habitat known to occur within area
Larus pacificus Pacific Gull [811]		Foraging, feeding or related behaviour may occur within area
Macronectes giganteus 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
Pandion haliaetus Osprey [952]		Species or species habitat known to occur within area
Pterodroma mollis Soft-plumaged Petrel [1036]	Vulnerable	Species or species habitat may 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]		Species or species habitat likely to occur within area
Recurvirostra novaehollandiae 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 may occur within area
Sterna anaethetus Bridled Tern [814]		Foraging, feeding or related behaviour likely to occur within area
Sterna caspia Caspian Tern [59467]		Foraging, feeding or related behaviour known to occur within area

Name	Threatened	Type of Presence
Sterna dougallii Roseate Tern [817]		Foraging, feeding or related behaviour likely to occur within area
Thalassarche carteri Indian Yellow-nosed Albatross [64464]	Vulnerable	Foraging, feeding or related behaviour may occur within area
Thalassarche cauta (sensu stricto) Shy Albatross, Tasmanian Shy Albatross [64697]	Vulnerable*	Species or species habitat may occur within area
Thalassarche impavida Campbell 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
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
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 [66235]		Species or species habitat may occur within area
Hippocampus subelongatus West Australian Seahorse [66722]		Species or species habitat may occur within area
Lissocampus fatiloquus Prophet's Pipefish [66250]		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

Name	Threatened	Type of Presence
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 [66276]		Species or species habitat may occur within area
Stigmatopora nigra Widebody Pipefish, Wide-bodied Pipefish, Black Pipefish [66277]		Species or species habitat may occur within area
Syngnathoides biaculeatus Double-end Pipehorse, Double-ended Pipehorse, Alligator Pipefish [66279]		Species or species habitat 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
Mammals		
Arctocephalus forsteri New Zealand Fur-seal [20]		Species or species habitat may occur within area
Neophoca cinerea Australian Sea-lion [22]	Vulnerable	Foraging, feeding or related behaviour likely 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

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 may occur within area
Caperea marginata Pygmy Right Whale [39]		Species or species habitat may occur within area
Delphinus delphis Common Dolphin, 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 habitat may occur within area
Lagenorhynchus obscurus Dusky Dolphin [43]		Species or species habitat may occur within area
Megaptera novaeangliae Humpback Whale [38]	Vulnerable	Species or species habitat 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 Dolphin [68418]		Species or species habitat likely to occur within area
Tursiops truncatus s. str. Bottlenose Dolphin [68417]		Species or species habitat may occur within area

Extra Information

Places on the RNE [[Resource Information](#)]

Note that not all Indigenous sites may be listed.

Name	State	Status
Natural		
Marmion Marine Park	WA	Indicative Place
Wanneroo Wetlands Eastern Chain	WA	Indicative Place
Lake Joondalup Reserves	WA	Registered
Neerabup National Park	WA	Registered
Nowergup Lake Fauna Reserve	WA	Registered
Indigenous		

Name	State	Status
Doogarch Site	WA	Indicative Place
Orchestra Shell Cave	WA	Registered
Historic		
Eglinton Shipwreck	WA	Registered

State and Territory Reserves [\[Resource Information \]](#)

Name	State
Lake Joondalup	WA
Neerabup	WA
Neerabup	WA
Unnamed WA21176	WA
Unnamed WA43290	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 Resources 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 within area
Sturnus vulgaris Common Starling [389]		Species or species habitat likely to occur within area
Mammals		
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
Felis catus Cat, House Cat, Domestic Cat [19]		Species or species habitat likely to occur within area

Name	Status	Type of Presence
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]		Species or species habitat likely to occur within area
Vulpes vulpes Red Fox, Fox [18]		Species or species habitat likely to occur within area
Plants		
Asparagus aethiopicus Asparagus Fern, Ground Asparagus, Basket Fern, Sprengi's Fern, Bushy Asparagus, Emerald Asparagus [62425]		Species or species habitat likely to occur within area
Asparagus asparagoides Bridal Creeper, Bridal Veil Creeper, Smilax, Florist's Smilax, Smilax Asparagus [22473]		Species or species habitat likely 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 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 linifolia Flax-leaved Broom, Mediterranean Broom, Flax Broom [2800]		Species or species habitat likely to occur within area
Genista sp. X Genista monspessulana Broom [67538]		Species or species habitat may occur within area
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
Pinus radiata Radiata Pine Monterey Pine, Insignis Pine, Wilding		Species or species

Name	Status	Type of Presence
Pine [20780]		habitat may occur within area
Rubus fruticosus aggregate		
Blackberry, European Blackberry [68406]		Species or species habitat likely to occur within area
Salix spp. except S.babylonica, S.x calodendron & S.x reichardtii		
Willows except Weeping Willow, Pussy Willow and Sterile Pussy Willow [68497]		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]		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
Ramphotyphlops braminus		
Flowerpot Blind Snake, Brahminy Blind Snake, Cacing Besi [1258]		Species or species habitat likely to occur within area
Nationally Important Wetlands		[Resource Information]
Name		State
Joondalup Lake		WA

Coordinates

-31.67124 115.73384

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 Heritage and Register of National Estate properties, Wetlands of International 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.

For species where the distributions are well known, maps are digitised from sources such as recovery plans and detailed habitat studies. Where appropriate, core breeding, foraging and roosting areas are indicated under 'type of presence'. For species whose distributions are less well known, point locations are collated from government wildlife authorities, museums, and non-government organisations; bioclimatic distribution models are generated and these validated by experts. In some cases, the distribution maps are based solely on expert knowledge.

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.

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:

- [-Department of Environment, Climate Change and Water, New South Wales](#)
- [-Department of Sustainability and Environment, Victoria](#)
- [-Department of Primary Industries, Parks, Water and Environment, Tasmania](#)
- [-Department of Environment and Natural Resources, South Australia](#)
- [-Parks and Wildlife Service NT, NT Dept of Natural Resources, Environment and the Arts](#)
- [-Environmental and Resource Management, Queensland](#)
- [-Department of Environment and Conservation, Western Australia](#)
- [-Department of the Environment, Climate Change, Energy and Water](#)
- [-Birds Australia](#)
- [-Australian Bird and Bat Banding Scheme](#)
- [-Australian National Wildlife Collection](#)
- Natural history museums of Australia
- [-Museum Victoria](#)
- [-Australian Museum](#)
- [-SA 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, Atherton and Canberra](#)
- [-University of New England](#)
- [-Ocean Biogeographic Information System](#)
- [-Australian Government, Department of Defence](#)
- [-State Forests of NSW](#)
- [-Geoscience Australia](#)
- [-CSIRO](#)
- 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.

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NatureMap Flora Species Report

Created By Guest user on 31/03/2014

Kingdom Plantae
Current Names Only Yes
Core Datasets Only Yes
Method 'By Circle'
Centre 115°44' 02" E,31°40' 15" S
Buffer 10km
Group By Family

Family	Species	Records
Acrotylaceae	1	2
Aizoaceae	4	8
Amaranthaceae	8	15
Apiaceae	9	44
Apocynaceae	1	1
Araceae	1	2
Araliaceae	5	23
Areaceae	1	2
Areschougiaceae	2	3
Asparagaceae	19	63
Asteraceae	34	108
Bonnemaisoniaceae	1	1
Brassicaceae	4	10
Campanulaceae	2	6
Caryophyllaceae	4	15
Casuarinaceae	3	10
Celastraceae	4	5
Centrolepidaceae	3	12
Ceramiaceae	2	2
Chenopodiaceae	6	8
Codiaceae	1	1
Colchicaceae	1	2
Commelinaceae	1	2
Convolvulaceae	1	1
Coralliaceae	2	2
Crassulaceae	3	11
Cucurbitaceae	1	1
Cyperaceae	25	87
Dasyaceae	1	1
Dasypogonaceae	2	3
Delesseriaceae	1	1
Dilleniaceae	6	31
Droseraceae	7	37
Elaeocarpaceae	1	2
Ericaceae	13	43
Euphorbiaceae	2	3
Fabaceae	47	139
Fabroniaceae	1	7
Frankeniaceae	1	1
Gelidiaceae	1	1
Geraniaceae	5	16
Goodeniaceae	8	14
Gracilariaceae	1	1
Gyrostemonaceae	1	1
Haemodoraceae	14	46
Haloragaceae	5	9
Halymeniaceae	3	4
Hemero-callidaceae	8	29
Hydatellaceae	1	1
Hypnaceae	3	3
Iridaceae	6	32
Juncaginaceae	1	1
Lamiaceae	2	7
Lauraceae	2	5
Loganiaceae	1	1
Loranthaceae	1	1
Malvaceae	2	4
Menyanthaceae	1	1
Myrtaceae	32	98
Nitrariaceae	1	1
Oiacaceae	1	1
Onagraceae	2	2
Orchidaceae	22	57
Orobanchaceae	1	2
Oxalidaceae	1	1
Phyllanthaceae	3	20
Phytolaccaceae	1	2
Pittosporaceae	1	4
Plantaginaceae	1	1
Plocamiaceae	1	1
Poaceae	32	106
Polygalaceae	3	7
Polygonaceae	2	3
Portulacaceae	5	6
Proteaceae	24	80

Restionaceae	4	6
Rhamnaceae	3	9
Rhodomelaceae	9	13
Rubiaceae	2	5
Rutaceae	3	6
Santalaceae	3	4
Sapindaceae	2	2
Schizymeniaceae	2	2
Scrophulariaceae	4	7
Solanaceae	4	5
Stylidiaceae	13	26
Thymelaeaceae	6	10
Ulvaceae	1	1
Urticaceae	1	3
Verbenaceae	1	2
Violaceae	1	8
Xanthorrhoeaceae	1	16
Zamiaceae	1	7
TOTAL	491	1416

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
Acrotylaceae				
1.	26665 <i>Clavicladium ovatum</i>			
Aizoaceae				
2.	2798 <i>Carpobrotus virescens</i> (Coastal Pigface, Kolboko)			
3.	11571 <i>Galenia pubescens</i> var. <i>pubescens</i>	Y		
4.	17543 <i>Sarcozona bicarinata</i>		P3	
5.	2820 <i>Tetragonia decumbens</i> (Sea Spinach)	Y		
Amaranthaceae				
6.	2668 <i>Amaranthus powellii</i> (Powell's Amaranth)	Y		
7.	2671 <i>Amaranthus viridis</i> (Green Amaranth)	Y		
8.	2718 <i>Ptilotus drummondii</i> (Narrowleaf Mulla Mulla)			
9.	11260 <i>Ptilotus drummondii</i> var. <i>drummondii</i> (Pussytail)			
10.	2742 <i>Ptilotus manglesii</i> (Pom Poms, Mulamula)			
11.	2751 <i>Ptilotus polystachyus</i> (Prince of Wales Feather)			
12.	15856 <i>Ptilotus sericostachyus</i> subsp. <i>sericostachyus</i>			
13.	40841 <i>Ptilotus stirlingii</i> subsp. <i>stirlingii</i>			
Apiaceae				
14.	6205 <i>Actinotus leucocephalus</i> (Flannel Flower)			
15.	6210 <i>Apium annuum</i>			
16.	8595 <i>Apium graveolens</i> (Wild Celery)	Y		
17.	6214 <i>Centella asiatica</i>			
18.	6218 <i>Daucus glochidiatus</i> (Australian Carrot)			
19.	6219 <i>Eryngium pinnatifidum</i> (Blue Devils)			
20.	15446 <i>Eryngium pinnatifidum</i> subsp. <i>pinnatifidum</i>			
21.	6222 <i>Homalosciadium homalocarpum</i>			
22.	6289 <i>Xanthosia huegelii</i>			
Apocynaceae				
23.	11051 <i>Gomphocarpus physocarpus</i>	Y		
Araceae				
24.	28342 <i>Landoltia punctata</i> (Thin Duckweed)			
Araliaceae				
25.	6226 <i>Hydrocotyle callicarpa</i> (Small Pennywort)			
26.	6229 <i>Hydrocotyle diantha</i>			
27.	6232 <i>Hydrocotyle hispidula</i>			
28.	20649 <i>Tetrapanax papyrifer</i>	Y		Y
29.	6280 <i>Trachymene pilosa</i> (Native Parsnip)			
Arecaceae				
30.	17910 <i>Washingtonia filifera</i>	Y		
Areschougiaceae				
31.	26535 <i>Callophycus harveyanus</i>			
32.	26536 <i>Callophycus oppositifolius</i>			
Asparagaceae				
33.	1208 <i>Acanthocarpus preissii</i>			
34.	1280 <i>Chamaescilla corymbosa</i> (Blue Squill)			
35.	1287 <i>Dichopogon capillipes</i>			
36.	16091 <i>Lachenalia bulbifera</i>	Y		
37.	1309 <i>Laxmannia squarrosa</i>			
38.	1223 <i>Lomandra caespitosa</i> (Tufted Mat Rush)			
39.	1228 <i>Lomandra hermaphrodita</i>			
40.	1231 <i>Lomandra maritima</i>			
41.	1232 <i>Lomandra micrantha</i> (Small-flower Mat-rush)			
42.	14542 <i>Lomandra micrantha</i> subsp. <i>micrantha</i>			
43.	1234 <i>Lomandra nigricans</i>			
44.	1239 <i>Lomandra preissii</i>			
45.	1243 <i>Lomandra sericea</i> (Silky Mat Rush)			
46.	1246 <i>Lomandra suaveolens</i>			
47.	1312 <i>Sowerbaea laxiflora</i> (Purple Tassels)			
48.	1338 <i>Thysanotus manglesianus</i> (Fringed Lily)			
49.	1339 <i>Thysanotus multiflorus</i> (Many-flowered Fringe Lily)			
50.	1343 <i>Thysanotus patersonii</i>			
51.	1351 <i>Thysanotus sparteus</i>			
Asteraceae				

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
52.	7818 <i>Actites megalocarpus</i> (Dune Thistle)			
53.	7838 <i>Arctotheca calendula</i> (Cape Weed)	Y		
54.	7840 <i>Arctotis stoechadifolia</i> (White Arctotis)	Y		
55.	7851 <i>Asteridea pulverulenta</i> (Common Bristle Daisy)			
56.	7909 <i>Carduus pycnocephalus</i> (Slender Thistle)	Y		
57.	7937 <i>Cirsium vulgare</i> (Spear Thistle)	Y		
58.	20074 <i>Coryza sumatrensis</i>	Y		
59.	42009 <i>Craspedia</i> sp. Yalgorup National Park (G.J. Keighery 14449)			
60.	15137 <i>Euchiton sphaericus</i>			
61.	7976 <i>Galinsoga parviflora</i> (Potato Weed)	Y		
62.	8005 <i>Gnephosis uniflora</i>			
63.	8086 <i>Hypochoeris glabra</i> (Smooth Catsear)	Y		
64.	8096 <i>Lactuca serriola</i> (Prickly Lettuce)	Y		
65.	17852 <i>Leptorhynchos scaber</i> (Lanky Buttons)			
66.	8105 <i>Millotia myosotidifolia</i>			
67.	8106 <i>Millotia tenuifolia</i> (Soft Millotia)			
68.	8127 <i>Olearia axillaris</i> (Coastal Daisybush)			
69.	32716 <i>Olearia lehmanniana</i>			
70.	42281 <i>Pithocarpa cordata</i>			
71.	8175 <i>Podolepis gracilis</i> (Slender Podolepis)			
72.	8177 <i>Podolepis lessonii</i>			
73.	8183 <i>Podotheca chrysantha</i> (Yellow Podotheca)			
74.	8184 <i>Podotheca gnaphalioides</i> (Golden Long-heads)			
75.	8195 <i>Quinetia urvillei</i>			
76.	15035 <i>Rhodanthe corymbosa</i>			
77.	13312 <i>Rhodanthe pyrethrum</i>			
78.	8225 <i>Siloxerus humifusus</i> (Procumbent Siloxerus)			
79.	8230 <i>Sonchus asper</i> (Rough Sowthistle)	Y		
80.	9367 <i>Sonchus hydrophilus</i> (Native Sowthistle)			
81.	8231 <i>Sonchus oleraceus</i> (Common Sowthistle)	Y		
82.	8254 <i>Urospermum picroides</i> (False Hawkbit)	Y		
83.	8255 <i>Ursinia anthemoides</i> (Ursinia)	Y		
84.	38388 <i>Ursinia anthemoides</i> subsp. <i>anthemoides</i>	Y		
85.	8282 <i>Waitzia suaveolens</i> (Fragrant Waitzia)			

Bonnemaisoniaceae

86. 26486 *Asparagopsis taxiformis*

Brassicaceae

87. 11187 *Brassica barrelieri* subsp. *oxyrrhina* (Smooth-stem Turnip)

88. 3000 *Brassica tournefortii* (Mediterranean Turnip)

89. 3016 *Heliophila pusilla*

90. 3080 *Stenopetalum robustum*

Campanulaceae

91. 7408 *Lobelia tenuior* (Slender Lobelia)

92. 7389 *Wahlenbergia preissii*

Caryophyllaceae

93. 2889 *Cerastium glomeratum* (Mouse Ear Chickweed)

94. 16693 *Minuartia mediterranea*

95. 2910 *Silene nocturna* (Mediterranean Catchfly)

96. 2918 *Stellaria media* (Chickweed)

Casuarinaceae

97. 1728 *Allocasuarina fraseriana* (Sheoak, Kondil)

98. 1732 *Allocasuarina humilis* (Dwarf Sheoak)

99. 18314 *Casuarina cunninghamiana* subsp. *cunninghamiana*

Celastraceae

100. 4733 *Stackhousia monogyna*

101. 9070 *Stackhousia pubescens* (Downy Stackhousia)

102. 4737 *Tripterococcus brunonis* (Winged Stackhousia)

103. 16998 *Tripterococcus paniculatus*

P4

Centrolepidaceae

104. 1125 *Centrolepis drummondiana*

105. 1132 *Centrolepis mutica*

106. 1134 *Centrolepis polygyna* (Wiry Centrolepis)

Ceramiaceae

107. 26468 *Anotrichium limphorum*

108. 26830 *Euptilota articulata*

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
Chenopodiaceae				
109.	2452 <i>Atriplex cinerea</i> (Grey Saltbush)			
110.	2483 <i>Chenopodium album</i> (Fat Hen)	Y		
111.	2490 <i>Chenopodium glaucum</i> (Glaucous Goosefoot)	Y		
112.	2491 <i>Chenopodium macrospermum</i>	Y		
113.	11341 <i>Rhagodia baccata</i> subsp. <i>baccata</i>			
114.	11930 <i>Rhagodia baccata</i> subsp. <i>dioica</i> (Sea Berry Saltbush)			
Codiaceae				
115.	26675 <i>Codium laminarioides</i>			
Colchicaceae				
116.	12770 <i>Burchardia congesta</i>			
Commelinaceae				
117.	1162 <i>Cartonema philydroides</i>			
Convolvulaceae				
118.	11021 <i>Cuscuta planiflora</i>	Y		
Corallinaceae				
119.	26988 <i>Jania verrucosa</i>			
120.	27068 <i>Metagoniolithon radiatum</i>			
Crassulaceae				
121.	3137 <i>Crassula colorata</i> (Dense Stonecrop)			
122.	3140 <i>Crassula glomerata</i>	Y		
123.	3146 <i>Crassula thunbergiana</i>	Y		
Cucurbitaceae				
124.	7370 <i>Citrullus lanatus</i> (Pie Melon)	Y		
Cyperaceae				
125.	740 <i>Baumea arthrophylla</i>			
126.	743 <i>Baumea juncea</i> (Bare Twigrush)			
127.	745 <i>Baumea preissii</i>			
128.	43241 <i>Carex thecata</i>			
129.	18318 <i>Cyperus involucratus</i>	Y		
130.	910 <i>Isolepis cernua</i> (Nodding Club-rush)			
131.	917 <i>Isolepis marginata</i> (Coarse Club-rush)	Y		
132.	925 <i>Lepidosperma angustatum</i>			
133.	42742 <i>Lepidosperma calcicola</i>			
134.	937 <i>Lepidosperma longitudinale</i> (Pithy Sword-sedge)			
135.	944 <i>Lepidosperma scabrum</i>			
136.	945 <i>Lepidosperma squamatum</i>			
137.	946 <i>Lepidosperma striatum</i>			
138.	955 <i>Mesomelaena pseudostygia</i>			
139.	969 <i>Schoenoplectus validus</i> (Lake Club-rush)			
140.	973 <i>Schoenus asperocarpus</i> (Poison Sedge)			
141.	982 <i>Schoenus clandestinus</i>			
142.	984 <i>Schoenus curvifolius</i>			
143.	985 <i>Schoenus discifer</i>			
144.	992 <i>Schoenus grandiflorus</i> (Large Flowered Bogrush)			
145.	997 <i>Schoenus lanatus</i> (Woolly Bog-rush)			
146.	1006 <i>Schoenus odontocarpus</i>			
147.	1018 <i>Schoenus subfascicularis</i>			
148.	1023 <i>Schoenus tenellus</i>			
149.	1036 <i>Tetraria octandra</i>			
Dasyaceae				
150.	26735 <i>Dasya cliffonii</i>			
Dasypogonaceae				
151.	1213 <i>Calectasia cyanea</i> (Blue Tinsel Lily)		T	
152.	19309 <i>Calectasia narragara</i>			
Delesseriaceae				
153.	26622 <i>Chauviniella coriifolia</i>			
Dilleniaceae				
154.	5112 <i>Hibbertia aurea</i>			
155.	5134 <i>Hibbertia huegelii</i>			
156.	5135 <i>Hibbertia hypericoides</i> (Yellow Buttercups)			
157.	5162 <i>Hibbertia racemosa</i> (Stalked Guinea Flower)			
158.	43280 <i>Hibbertia sericosepala</i>			
159.	11461 <i>Hibbertia spicata</i> subsp. <i>leptotheca</i>		P3	

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
Droseraceae				
160.	3095 <i>Drosera erythrorhiza</i> (Red Ink Sundew)			
161.	3106 <i>Drosera macrantha</i> (Bridal Rainbow)			
162.	3109 <i>Drosera menziesii</i> (Pink Rainbow)			
163.	13216 <i>Drosera menziesii</i> subsp. <i>penicillaris</i>			
164.	3118 <i>Drosera pallida</i> (Pale Rainbow)			
165.	31233 <i>Drosera patens</i>			
166.	30712 <i>Drosera x sidjamesii</i>		P1	
Elaeocarpaceae				
167.	4524 <i>Platytheca galioides</i>			
Ericaceae				
168.	6295 <i>Acrotriche cordata</i> (Coast Ground Berry)			
169.	6311 <i>Andersonia heterophylla</i>			
170.	6314 <i>Andersonia lehmanniana</i>			
171.	6323 <i>Astroloma ciliatum</i> (Candle Cranberry)			
172.	6331 <i>Astroloma microcalyx</i> (Native Cranberry)			
173.	6334 <i>Astroloma pallidum</i> (Kick Bush)			
174.	6348 <i>Conostephium pendulum</i> (Pearl Flower)			
175.	6427 <i>Leucopogon parviflorus</i> (Coast Beard-heath)			
176.	6434 <i>Leucopogon polymorphus</i>			
177.	6436 <i>Leucopogon propinquus</i>			
178.	19460 <i>Leucopogon</i> sp. <i>Yanchep</i> (M. Hislop 1986)		P3	
179.	6456 <i>Lysinema ciliatum</i> (Curry Flower)			
180.	34736 <i>Lysinema pentapetalum</i>			
Euphorbiaceae				
181.	4648 <i>Euphorbia terracina</i> (Geraldton Carnation Weed)	Y		
182.	4713 <i>Stachystemon axillaris</i> (Leafy Stachystemon)			
Fabaceae				
183.	15470 <i>Acacia barbinervis</i> subsp. <i>borealis</i>			
184.	3237 <i>Acacia benthamii</i>		P2	
185.	3271 <i>Acacia costata</i>			
186.	3282 <i>Acacia cyclops</i> (Coastal Wattle)			
187.	3409 <i>Acacia lasiocarpa</i> (Panjang)			
188.	11611 <i>Acacia lasiocarpa</i> var. <i>lasiocarpa</i>			
189.	17861 <i>Acacia longifolia</i>	Y		
190.	3502 <i>Acacia pulchella</i> (Prickly Moses)			
191.	15481 <i>Acacia pulchella</i> var. <i>glaberrima</i>			
192.	15482 <i>Acacia pulchella</i> var. <i>goadbyi</i>			
193.	3525 <i>Acacia rostellifera</i> (Summer-scented Wattle)			
194.	3527 <i>Acacia saligna</i> (Orange Wattle, Kudjong)			
195.	30032 <i>Acacia saligna</i> subsp. <i>saligna</i>			
196.	3584 <i>Acacia truncata</i>			
197.	3602 <i>Acacia willdenowiana</i> (Grass Wattle)			
198.	3710 <i>Bossiaea eriocarpa</i> (Common Brown Pea)			
199.	3793 <i>Daviesia angulata</i>			
200.	3805 <i>Daviesia decurrens</i> (Prickly Bitter-pea)			
201.	3807 <i>Daviesia divaricata</i> (Marmo)			
202.	18560 <i>Daviesia divaricata</i> subsp. <i>divaricata</i>			
203.	3824 <i>Daviesia nudiflora</i>			
204.	3845 <i>Daviesia triflora</i>			
205.	20483 <i>Gastrolobium linearifolium</i>			
206.	20482 <i>Gastrolobium nervosum</i>			
207.	3957 <i>Gompholobium tomentosum</i> (Hairy Yellow Pea)			
208.	3961 <i>Hardenbergia comptoniana</i> (Native Wisteria)			
209.	3966 <i>Hovea pungens</i> (Devil's Pins, Puyenak)			
210.	12859 <i>Hovea trisperma</i> var. <i>trisperma</i>			
211.	3992 <i>Isotropis cuneifolia</i> (Granny Bonnets)			
212.	14783 <i>Jacksonia calcicola</i>			
213.	4027 <i>Jacksonia sericea</i> (Waldjumi)		P4	
214.	4029 <i>Jacksonia sternbergiana</i> (Stinkwood, Kapur)			
215.	4044 <i>Kennedia prostrata</i> (Scarlet Runner)			
216.	4066 <i>Lupinus cosentinii</i>	Y		
217.	4075 <i>Medicago littoralis</i> (Strand Medic)	Y		
218.	4079 <i>Medicago polymorpha</i> (Burr Medic)	Y		
219.	4085 <i>Melilotus indicus</i>	Y		
220.	4207 <i>Sphaerolobium medium</i>			
221.	4256 <i>Templetonia retusa</i> (Cockies Tongues)			
222.	4292 <i>Trifolium campestre</i> (Hop Clover)			

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
		Y		
223.	17763 <i>Trifolium campestre</i> var. <i>campestre</i> (Hop Clover)	Y		
224.	4295 <i>Trifolium dubium</i> (Suckling Clover)	Y		
225.	4297 <i>Trifolium glomeratum</i> (Cluster Clover)	Y		
226.	4309 <i>Trifolium scabrum</i> (Rough Clover)	Y		
227.	4322 <i>Vicia sativa</i> (Common Vetch)	Y		
228.	11474 <i>Vicia sativa</i> subsp. <i>nigra</i>	Y		
229.	4325 <i>Viminaria juncea</i> (Swishbush, Koweda)			
Fabroniaceae				
230.	20162 <i>Fabronia hampeana</i>		P2	
Frankeniaceae				
231.	5209 <i>Frankenia pauciflora</i> (Seaheath)			
Gelidiaceae				
232.	26848 <i>Gelidium crinale</i>			
Geraniaceae				
233.	4332 <i>Erodium botrys</i> (Long Storksbill)	Y		
234.	4339 <i>Geranium molle</i> (Dove's Foot Cranesbill)	Y		
235.	4341 <i>Geranium solanderi</i> (Native Geranium)			
236.	4343 <i>Pelargonium capitatum</i> (Rose Pelargonium)	Y		
237.	4346 <i>Pelargonium littorale</i>			
Goodeniaceae				
238.	12724 <i>Anthotium junciforme</i>			
239.	19286 <i>Goodenia pulchella</i> subsp. <i>Coastal Plain A (M. Hislop 634)</i>			
240.	7574 <i>Lechenaultia floribunda</i> (Free-flowering Leschenaultia)			
241.	7580 <i>Lechenaultia linarioides</i> (Yellow Leschenaultia)			
242.	7603 <i>Scaevola canescens</i> (Grey Scaevola)			
243.	7606 <i>Scaevola crassifolia</i> (Thick-leaved Fan-flower)			
244.	13182 <i>Scaevola repens</i> var. <i>repens</i>			
245.	13152 <i>Scaevola thesioides</i> subsp. <i>thesioides</i>			
Gracilariaceae				
246.	26871 <i>Gracilaria flagelliformis</i>			
Gyrostemonaceae				
247.	2784 <i>Gyrostemon ramulosus</i> (Corkybark)			
Haemodoraceae				
248.	1409 <i>Anigozanthos humilis</i> (Catspaw)			
249.	11434 <i>Anigozanthos humilis</i> subsp. <i>humilis</i>			
250.	1418 <i>Conostylis aculeata</i> (Prickly Conostylis)			
251.	11826 <i>Conostylis aculeata</i> subsp. <i>aculeata</i>			
252.	11513 <i>Conostylis aculeata</i> subsp. <i>cygnorum</i>			
253.	1425 <i>Conostylis bracteata</i>		P3	
254.	1427 <i>Conostylis candicans</i> (Grey Cottonhead)			
255.	11438 <i>Conostylis candicans</i> subsp. <i>candicans</i>			
256.	1443 <i>Conostylis pauciflora</i> (Dawesville Conostylis)			
257.	1454 <i>Conostylis setigera</i> (Bristly Cottonhead)			
258.	11597 <i>Conostylis setigera</i> subsp. <i>setigera</i>			
259.	11870 <i>Conostylis teretifolia</i> subsp. <i>teretifolia</i>			
260.	1468 <i>Haemodorum laxum</i>			
261.	1478 <i>Phlebocarya ciliata</i>			
Haloragaceae				
262.	33620 <i>Glischrocaryon angustifolium</i>			
263.	6143 <i>Glischrocaryon aureum</i> (Common Popflower)			
264.	6161 <i>Gonocarpus pithyoides</i>			
265.	6192 <i>Myriophyllum drummondii</i>			
266.	6199 <i>Myriophyllum tillaeoides</i>			
Halymeniaceae				
267.	26709 <i>Cryptonemia undulata</i>			
268.	26850 <i>Gelinaria ulvoidea</i>			
269.	37640 <i>Halymenia floresii</i>			
Hemerocallidaceae				
270.	1276 <i>Caesia micrantha</i> (Pale Grass Lily)			
271.	1285 <i>Corynotheca micrantha</i> (Sand Lily)			
272.	11283 <i>Corynotheca micrantha</i> var. <i>micrantha</i>			
273.	1259 <i>Dianella revoluta</i> (Blueberry Lily)			
274.	11636 <i>Dianella revoluta</i> var. <i>divaricata</i>			
275.	1293 <i>Hensmania turbinata</i>			

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
276.	1260 <i>Stypantra glauca</i> (Blind Grass)			
277.	1361 <i>Tricoryne elatior</i> (Yellow Autumn Lily)			
Hydatellaceae				
278.	1141 <i>Triithuria submersa</i>			
Hypneaceae				
279.	35922 <i>Hypnea cornuta</i>			
280.	35898 <i>Hypnea musciformis</i>			
281.	26973 <i>Hypnea valentiae</i>			
Iridaceae				
282.	1520 <i>Gladiolus caryophyllaceus</i> (Wild Gladiolus)	Y		
283.	19179 <i>Moraea flaccida</i> (One-leaf Cape Tulip)	Y		
284.	1537 <i>Orthrosanthus laxus</i> (Morning Iris)			
285.	11749 <i>Orthrosanthus laxus</i> var. <i>laxus</i> (Morning Iris)			
286.	1556 <i>Romulea rosea</i> (Guildford Grass)	Y		
287.	1558 <i>Sparaxis bulbifera</i>	Y		
Juncaginaceae				
288.	152 <i>Triglochin trichophora</i>			
Lamiaceae				
289.	16934 <i>Hemiantra glabra</i> subsp. <i>glabra</i>			
290.	6839 <i>Hemiantra pungens</i> (Snakebush)			
Lauraceae				
291.	2952 <i>Cassytha glabella</i> (Tangled Dodder Laurel)			
292.	2957 <i>Cassytha racemosa</i> (Dodder Laurel)			
Loganiaceae				
293.	16177 <i>Phyllangium paradoxum</i>			
Loranthaceae				
294.	2401 <i>Nuytsia floribunda</i> (Christmas Tree, Mudja)			
Malvaceae				
295.	5011 <i>Guichenotia ledifolia</i>			
296.	5105 <i>Thomasia triphylla</i>			
Menyanthaceae				
297.	36177 <i>Ornduffia albiflora</i>			
Myrtaceae				
298.	20283 <i>Astartea scoparia</i>			
299.	34161 <i>Baeckea</i> sp. <i>Limestone</i> (N. Gibson & M.N. Lyons 1425)		P1	
300.	5382 <i>Beaufortia elegans</i>			
301.	5415 <i>Calothamnus lateralis</i>			
302.	5426 <i>Calothamnus quadrifidus</i> (One-sided Bottlebrush, Kwowdjard)			
303.	5429 <i>Calothamnus sanguineus</i> (Silky-leaved Blood flower, Pindak)			
304.	5458 <i>Calytrix flavescens</i> (Summer Starflower)			
305.	5460 <i>Calytrix fraseri</i> (Pink Summer Calytrix)			
306.	17104 <i>Corymbia calophylla</i> (Marri)			
307.	13091 <i>Eucalyptus argutifolia</i> (Wabbling Hill Mallee)		T	
308.	13536 <i>Eucalyptus decipiens</i> subsp. <i>decipiens</i>			
309.	5649 <i>Eucalyptus foecunda</i> (Narrow-leaved Red Mallee)			
310.	5659 <i>Eucalyptus gomphocephala</i> (Tuart, Duart)			
311.	5708 <i>Eucalyptus marginata</i> (Jarrah, Djara)			
312.	13547 <i>Eucalyptus marginata</i> subsp. <i>marginata</i> (Jarrah)			
313.	20808 <i>Eucalyptus petiolaris</i>	Y		
314.	13541 <i>Eucalyptus petrensis</i>			
315.	5763 <i>Eucalyptus rudis</i> (Flooded Gum, Kulurda)			
316.	13511 <i>Eucalyptus rudis</i> subsp. <i>rudis</i>			
317.	5825 <i>Hypocalymma robustum</i> (Swan River Myrtle)			
318.	5847 <i>Leptospermum erubescens</i> (Roadside Teatree)			
319.	5887 <i>Melaleuca cardiophylla</i> (Tangling Melaleuca)			
320.	5920 <i>Melaleuca huegelii</i> (Chenille Honey myrtle)			
321.	13271 <i>Melaleuca huegelii</i> subsp. <i>huegelii</i>			
322.	5952 <i>Melaleuca preissiana</i> (Moonah)			
323.	5959 <i>Melaleuca rhapsiophylla</i> (Swamp Paperbark)			
324.	33022 <i>Melaleuca</i> sp. <i>Wanneroo</i> (G.J. Keighery 16705)		P1	Y
325.	18598 <i>Melaleuca systema</i>			
326.	5978 <i>Melaleuca teretifolia</i> (Banbar)			
327.	5986 <i>Melaleuca urceolaris</i>			
328.	6012 <i>Regelia ciliata</i>			
329.	15432 <i>Verticordia densiflora</i> var. <i>densiflora</i>			

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
Nitrariaceae				
330.	4366 <i>Nitraria billardierei</i> (Nitre Bush)			
Olacaceae				
331.	2365 <i>Olax benthamiana</i>			
Onagraceae				
332.	6132 <i>Epilobium ciliatum</i>	Y		
333.	6133 <i>Epilobium hirtigerum</i> (Hairy Willow Herb)			
Orchidaceae				
334.	15330 <i>Caladenia arenicola</i>			
335.	11038 <i>Caladenia bicalliata</i>			
336.	1592 <i>Caladenia flava</i> (Cowslip Orchid)			
337.	15348 <i>Caladenia flava</i> subsp. <i>flava</i>			
338.	15352 <i>Caladenia georgei</i>			
339.	1595 <i>Caladenia hirta</i> (Sugar Candy Orchid)			
340.	1599 <i>Caladenia latifolia</i> (Pink Fairy Orchid)			
341.	15361 <i>Caladenia longicauda</i> subsp. <i>calcigena</i>			
342.	10916 <i>Cyrtostylis huegelii</i>			
343.	19649 <i>Disa bracteata</i>	Y		
344.	11049 <i>Diuris corymbosa</i>			
345.	1635 <i>Diuris longifolia</i> (Common Donkey Orchid)			
346.	1643 <i>Elythranthera brunonis</i> (Purple Enamel Orchid)			
347.	1645 <i>Epiblema grandiflorum</i> (Babe-in-a-cradle)			
348.	1646 <i>Eriochilus dilatatus</i> (White Bunny Orchid)			
349.	1653 <i>Leporella fimbriata</i> (Hare Orchid)			
350.	15419 <i>Microtis media</i> subsp. <i>media</i>			
351.	1672 <i>Prasophyllum fimbria</i> (Fringed Leek Orchid)			
352.	17267 <i>Pterostylis brevisepala</i>			
353.	12217 <i>Pterostylis sanguinea</i>			
354.	18658 <i>Pterostylis</i> sp. <i>short sepals</i> (W. Jackson BJ259)			
355.	1698 <i>Pterostylis vittata</i> (Banded Greenhood)			
Orobanchaceae				
356.	7122 <i>Orobanche minor</i> (Lesser Broomrape)	Y		
Oxalidaceae				
357.	4356 <i>Oxalis pes-caprae</i> (Soursob)	Y		
Phyllanthaceae				
358.	4675 <i>Phyllanthus calycinus</i> (False Boronia)			
359.	17794 <i>Phyllanthus tenellus</i>	Y		
360.	4691 <i>Poranthera microphylla</i> (Small Poranthera)			
Phytolaccaceae				
361.	2793 <i>Phytolacca octandra</i> (Red Ink Plant)	Y		
Pittosporaceae				
362.	25819 <i>Marianthus paralius</i>		T	
Plantaginaceae				
363.	16346 <i>Bacopa monnieri</i>	Y		
Plocamiaceae				
364.	27155 <i>Plocamium cartilagineum</i>			
Poaceae				
365.	184 <i>Aira caryophyllea</i> (Silvery Hairgrass)	Y		
366.	17234 <i>Austrostipa compressa</i>			
367.	17240 <i>Austrostipa flavescens</i>			
368.	35317 <i>Austrostipa mundula</i>		P2	
369.	231 <i>Avellinia michelii</i>	Y		
370.	233 <i>Avena barbata</i> (Bearded Oat)	Y		
371.	244 <i>Briza maxima</i> (Blowfly Grass)	Y		
372.	245 <i>Briza minor</i> (Shivery Grass)	Y		
373.	249 <i>Bromus diandrus</i> (Great Brome)	Y		
374.	277 <i>Cortaderia selloana</i> (Pampas Grass)	Y		
375.	283 <i>Cynodon dactylon</i> (Couch)	Y		
376.	306 <i>Dichelachne crinita</i> (Longhair Plumegrass)			
377.	320 <i>Digitaria sanguinalis</i> (Crab Grass)	Y		
378.	347 <i>Ehrharta calycina</i> (Perennial Veldt Grass)	Y		
379.	349 <i>Ehrharta longiflora</i> (Annual Veldt Grass)	Y		
380.	376 <i>Eragrostis curvula</i> (African Lovegrass)	Y		
381.	439 <i>Hemarthria uncinata</i> (Matgrass)			

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
382.	444 <i>Holcus lanatus</i> (Yorkshire Fog)	Y		
383.	445 <i>Holcus setiger</i> (Annual Fog)	Y		
384.	449 <i>Hordeum leporinum</i> (Barley Grass)	Y		
385.	467 <i>Lagurus ovatus</i> (Hare's Tail Grass)	Y		
386.	8682 <i>Lolium loliaceum</i> (Stiff Ryegrass)	Y		
387.	475 <i>Lolium multiflorum</i> (Italian Ryegrass)	Y		
388.	485 <i>Microlaena stipoides</i> (Weeping Grass)			
389.	571 <i>Poa annua</i> (Winter Grass)	Y		
390.	573 <i>Poa drummondiana</i> (Knotted Poa)			
391.	578 <i>Poa porphyroclados</i>			
392.	582 <i>Polypogon monspeliensis</i> (Annual Beardgrass)	Y		
393.	635 <i>Sporobolus virginicus</i> (Marine Couch)			
394.	10874 <i>Thinopyrum distichum</i>	Y		
395.	11137 <i>Vulpia fasciculata</i>	Y		
396.	724 <i>Vulpia myuros</i> (Rat's Tail Fescue)	Y		

Polygalaceae

397.	4550 <i>Comesperma calymega</i> (Blue-spike Milkwort)			
398.	4552 <i>Comesperma confertum</i>			
399.	4554 <i>Comesperma flavum</i>			

Polygonaceae

400.	13911 <i>Persicaria decipiens</i>			
401.	16984 <i>Persicaria lapathifolia</i>	Y		

Portulacaceae

402.	2845 <i>Calandrinia brevipedata</i> (Short-stalked Purslane)			
403.	2848 <i>Calandrinia corrigioloides</i> (Strap Purslane)			
404.	2854 <i>Calandrinia granulifera</i> (Pygmy Purslane)			
405.	2856 <i>Calandrinia liniflora</i> (Parakeelya)			
406.	40827 <i>Calandrinia tholiformis</i>			

Proteaceae

407.	1800 <i>Banksia attenuata</i> (Slender Banksia, Piara)			
408.	11386 <i>Banksia leptophylla</i> var. <i>melletica</i>			
409.	1834 <i>Banksia menziesii</i> (Firewood Banksia)			
410.	32077 <i>Banksia sessilis</i> var. <i>cygnorum</i>			
411.	15511 <i>Conospermum boreale</i>			
412.	1876 <i>Conospermum incurvum</i> (Plume Smokebush)			
413.	15611 <i>Conospermum stoechadis</i> subsp. <i>stoechadis</i> (Common Smokebush)			
414.	1885 <i>Conospermum triplinervium</i> (Tree Smokebush)			
415.	15839 <i>Grevillea preissii</i> subsp. <i>preissii</i>			
416.	33737 <i>Grevillea</i> sp. <i>Ocean Reef</i> (D. Pike Joon 4)		P1	Y
417.	2119 <i>Grevillea vestita</i>			
418.	12824 <i>Grevillea vestita</i> subsp. <i>vestita</i>			
419.	2146 <i>Hakea costata</i> (Ribbed Hakea)			
420.	2175 <i>Hakea lissocarpha</i> (Honey Bush)			
421.	2203 <i>Hakea ruscifolia</i> (Candle Hakea)			
422.	2214 <i>Hakea trifurcata</i> (Two-leaf Hakea)			
423.	2258 <i>Persoonia comata</i>			
424.	2273 <i>Persoonia saccata</i> (Snottygobble)			
425.	20368 <i>Petrophile axillaris</i>			
426.	2299 <i>Petrophile linearis</i> (Pixie Mops)			
427.	2301 <i>Petrophile macrostachya</i>			
428.	2309 <i>Petrophile serruriae</i>			
429.	2316 <i>Stirlingia latifolia</i> (Blueboy)			
430.	15532 <i>Synaphea spinulosa</i> subsp. <i>spinulosa</i>			

Restionaceae

431.	17663 <i>Desmocladius asper</i>			
432.	1070 <i>Hypolaena exsulca</i>			
433.	1090 <i>Lepyrodia muirii</i>			
434.	17694 <i>Meeboldina scariosa</i>			

Rhamnaceae

435.	4802 <i>Cryptandra mutila</i>			
436.	4810 <i>Cryptandra scoparia</i>			
437.	4828 <i>Spyridium globulosum</i> (Basket Bush)			

Rhodomelaceae

438.	26688 <i>Coeloclonium tasmanicum</i>			
439.	26762 <i>Dictyomenia sonderi</i>			
440.	26763 <i>Dictyomenia tridens</i>			
441.	26995 <i>Kuetzingia canaliculata</i>			

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
442.	26998 <i>Laurencia brongniartii</i>			
443.	27001 <i>Laurencia filiformis</i>			
444.	27013 <i>Lenormandia spectabilis</i>			
445.	27107 <i>Osmundaria prolifera</i>			
446.	27162 <i>Pollexfenia pedicellata</i>			
Rubiaceae				
447.	7323 <i>Galium murale</i> (Small Goosegrass)	Y		
448.	18255 <i>Opercularia vaginata</i> (Dog Weed)			
Rutaceae				
449.	17665 <i>Boronia purdieana</i> subsp. <i>purdieana</i>			
450.	4453 <i>Diplolaena angustifolia</i> (Yanchep Rose)			
451.	18529 <i>Philotheca spicata</i> (Pepper and Salt)			
Santalaceae				
452.	10765 <i>Exocarpos sparteus</i> (Broom Ballart, Djuk)			
453.	2344 <i>Leptomeria empetriformis</i>			
454.	2352 <i>Leptomeria preissiana</i>			
Sapindaceae				
455.	4746 <i>Diplopeltis huegelii</i>			
456.	18541 <i>Diplopeltis huegelii</i> subsp. <i>huegelii</i>			
Schizymeniaceae				
457.	27144 <i>Platoma cyclocolpum</i>			
458.	27268 <i>Schizymenia dubyi</i>			
Scrophulariaceae				
459.	7054 <i>Dischisma arenarium</i>	Y		
460.	7215 <i>Eremophila glabra</i> (Tar Bush)			
461.	17175 <i>Eremophila glabra</i> subsp. <i>albicans</i>			
462.	7291 <i>Myoporum insulare</i> (Blueberry Tree, boobialla)			
Solanaceae				
463.	6949 <i>Anthocercis littorea</i> (Yellow Tailflower)			
464.	6988 <i>Solanum americanum</i> (Glossy Nightshade)	Y		
465.	7020 <i>Solanum linnaeanum</i> (Apple of Sodom)	Y		
466.	7022 <i>Solanum nigrum</i> (Black Berry Nightshade)	Y		
Stylidiaceae				
467.	7677 <i>Levenhookia stipitata</i> (Common Stylewort)			
468.	30278 <i>Stylidium androsaceum</i>			
469.	25831 <i>Stylidium araeophyllum</i>			
470.	7693 <i>Stylidium brunonianum</i> (Pink Fountain Triggerplant)			
471.	7696 <i>Stylidium calcaratum</i> (Book Triggerplant)			
472.	7717 <i>Stylidium divaricatum</i> (Daddy-long-legs)			
473.	7745 <i>Stylidium junceum</i> (Reed Triggerplant)			
474.	7756 <i>Stylidium longitubum</i> (Jumping Jacks)		P3	
475.	13127 <i>Stylidium maritimum</i>		P3	
476.	25829 <i>Stylidium neurophyllum</i>			
477.	7774 <i>Stylidium piliferum</i> (Common Butterfly Triggerplant)			
478.	20521 <i>Stylidium rigidulum</i>			
479.	7806 <i>Stylidium utricularioides</i> (Pink Fan Triggerplant)			
Thymelaeaceae				
480.	5232 <i>Pimelea argentea</i> (Silvery Leaved Pimelea)			
481.	5237 <i>Pimelea calcicola</i>		P3	
482.	5243 <i>Pimelea ferruginea</i>			
483.	18117 <i>Pimelea rosea</i> subsp. <i>rosea</i>			
484.	5268 <i>Pimelea sulphurea</i> (Yellow Banjine)			
485.	5272 <i>Pimelea villifera</i>			
Ulvaceae				
486.	35263 <i>Ulva flexuosa</i>			
Urticaceae				
487.	1762 <i>Parietaria debilis</i> (Pellitory)			
Verbenaceae				
488.	6734 <i>Phyla nodiflora</i> var. <i>nodiflora</i>	Y		
Violaceae				
489.	5216 <i>Hybanthus calycinus</i> (Wild Violet)			
Xanthorrhoeaceae				
490.	1256 <i>Xanthorrhoea preissii</i> (Grass tree, Palga)			

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
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Zamiaceae

491.	85 <i>Macrozamia riedlei</i> (<i>Zamia</i> , <i>Djiridji</i>)			
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Conservation Codes

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

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

NatureMap Fauna Species Report

Created By Guest user on 31/03/2014

Kingdom Animalia
Current Names Only Yes
Core Datasets Only Yes
Method 'By Circle'
Centre 115°44' 02" E,31°40' 15" S
Buffer 10km
Group By Family

Family	Species	Records
Acanthizidae	7	552
Accipitridae	9	321
Actinopodidae	1	1
Aegothelidae	1	1
Agamidae	3	36
Anatidae	12	1599
Apodidae	1	3
Araneidae	5	12
Ardeidae	4	181
Artamidae	2	10
Atemnidae	1	1
Balaenidae	1	1
Balaenopteridae	1	1
Barychelidae	1	4
Boidae	2	6
Bothriuridae	2	2
Bovidae	2	2
Camelidae	1	1
Campephagidae	2	74
Canidae	2	5
Caprimulgidae	1	2
Carangidae	1	1
Castniidae	1	390
Casuariidae	1	3
Chaetodontidae	1	1
Charadriidae	3	41
Cheilodactylidae	2	2
Cheloniidae	2	4
Cheluidae	1	1
Colletidae	1	4
Columbidae	5	648
Corvidae	3	358
Cracticidae	6	609
Cuculidae	3	20
Dasyuridae	1	1
Dermochelyidae	1	1
Dicaeidae	1	5
Dicruridae	4	539
Diomedeidae	2	2
Diplodactylidae	4	14
Elapidae	12	70
Engraulidae	1	1
Falconidae	5	78
Felidae	1	4
Gekkonidae	1	9
Halcyonidae	2	255
Hirundinidae	2	196
Hylidae	2	10
Hyriidae	1	1
Idiopidae	2	2
Ixodidae	1	2
Julidae	1	4
Labridae	2	2
Lamponidae	1	2
Laridae	2	4
Leporidae	1	4
Limnodynastidae	2	53
Lycosidae	2	3
Macropodidae	3	15
Maluridae	6	210
Meiphagidae	12	706
Meropidae	1	25
Micropolcommatidae	3	5
Mimetidae	1	1
Molossidae	1	2
Monacanthidae	1	3
Mullidae	2	2
Muraenidae	1	1
Muridae	4	49
Myobatrachidae	3	14
Nemesiidae	1	8
Neosittidae	1	12
Odacidae	1	1
Oecobiidae	1	1
Otariidae	1	9

Pachycephalidae	6	125
Paradoxosomatidae	1	7
Pararchaeidae	1	1
Pardalotidae	2	158
Pataecidae	1	1
Pelecanidae	1	139
Peramelidae	2	47
Peripatopsidae	1	1
Petroicidae	5	10
Phalacrocoracidae	4	150
Phalangeridae	1	4
Phasianidae	1	5
Pholcidae	1	1
Physteridae	1	1
Podargidae	1	6
Podicipedidae	3	303
Pomacentridae	1	1
Potoroidae	2	2
Procellariidae	5	10
Psittacidae	17	687
Pygopodidae	8	46
Rallidae	6	518
Recurvirostridae	3	291
Salticidae	1	1
Scincidae	18	329
Scolopacidae	5	39
Scolopendridae	5	63
Sillaginidae	1	1
Sparassidae	1	1
Spheniscidae	1	1
Strigidae	1	8
Sylviidae	3	94
Tachyglossidae	1	2
Tarsipedidae	1	11
Tettigonidae	1	2
Threskiornithidae	5	497
Typhlopidae	3	9
Tytonidae	1	1
Urodacidae	1	13
Varanidae	2	4
Veliferidae	1	1
Vespertilionidae	2	2
Zodariidae	1	3
Zosteropidae	1	256
TOTAL	318	11075

Name ID	Species Name	Naturalised	Conservation Code	Endemic To Query Area
Acanthizidae				
1.	24260 <i>Acanthiza apicalis</i> (Broad-tailed Thornbill, Inland Thornbill)			
2.	24261 <i>Acanthiza chrysorrhoa</i> (Yellow-rumped Thornbill)			
3.	24262 <i>Acanthiza inornata</i> (Western Thornbill)			
4.	25530 <i>Gerygone fusca</i> (Western Gerygone)			
5.	25534 <i>Sericornis frontalis</i> (White-browed Scrubwren)			
6.	24279 <i>Sericornis frontalis</i> subsp. <i>maculatus</i> (White-browed Scrubwren)			
7.	30948 <i>Smicromis brevirostris</i> (Weebill)			
Accipitridae				
8.	25535 <i>Accipiter cirrocephalus</i> (Collared Sparrowhawk)			
9.	25536 <i>Accipiter fasciatus</i> (Brown Goshawk)			
10.	24282 <i>Accipiter fasciatus</i> subsp. <i>fasciatus</i> (Brown Goshawk)			
11.	24285 <i>Aquila audax</i> (Wedge-tailed Eagle)			
12.	25538 <i>Aquila morphnoides</i> (Little Eagle)			
13.	24286 <i>Aquila morphnoides</i> subsp. <i>morphnoides</i> (Little Eagle)			
14.	24288 <i>Circus approximans</i> (Swamp Harrier)			
15.	24293 <i>Haliaeetus leucogaster</i> (White-bellied Sea-Eagle)		IA	
16.	24295 <i>Haliastur sphenurus</i> (Whistling Kite)			
Actinopodidae				
17.	-11748 <i>Missulena occatoria</i>			
Aegothelidae				
18.	25544 <i>Aegotheles cristatus</i> (Australian Owlet-nightjar)			
Agamidae				
19.	30899 <i>Ctenophorus adelaidensis</i> (Southern Heath Dragon, Western Heath Dragon)			
20.	25510 <i>Pogona minor</i> (Dwarf Bearded Dragon)			
21.	24907 <i>Pogona minor</i> subsp. <i>minor</i> (Dwarf Bearded Dragon)			
Anatidae				
22.	24310 <i>Anas castanea</i> (Chestnut Teal)			
23.	24312 <i>Anas gracilis</i> (Grey Teal)			
24.	24313 <i>Anas platyrhynchos</i> (Mallard)			
25.	24315 <i>Anas rhynchotis</i> (Australasian Shoveler)			
26.	24316 <i>Anas superciliosa</i> (Pacific Black Duck)			
27.	24318 <i>Aythya australis</i> (Hardhead)			
28.	24319 <i>Biziura lobata</i> (Musk Duck)			
29.	24321 <i>Chenonetta jubata</i> (Australian Wood Duck, Wood Duck)			
30.	24322 <i>Cygnus atratus</i> (Black Swan)			
31.	24326 <i>Malacorhynchus membranaceus</i> (Pink-eared Duck)			
32.	24328 <i>Oxyura australis</i> (Blue-billed Duck)			
33.	24331 <i>Tadorna tadornoides</i> (Australian Shelduck, Mountain Duck)			
Apodidae				
34.	25554 <i>Apus pacificus</i> (Fork-tailed Swift)		IA	
Araneidae				
35.	-12293 <i>Araneus cyphoxis</i>			
36.	-11820 <i>Araneus senicaudatus</i>			
37.	-12529 <i>Austracantha minax</i>			
38.	-11734 <i>Eriophora biapicata</i>			
39.	-12321 <i>Paraplectanoides crassipes</i>			
Ardeidae				
40.	41324 <i>Ardea modesta</i> (Eastern Great Egret)		IA	
41.	24340 <i>Ardea novaehollandiae</i> (White-faced Heron)			
42.	24341 <i>Ardea pacifica</i> (White-necked Heron)			
43.	25564 <i>Nycticorax caledonicus</i> (Rufous Night Heron)			
Artamidae				
44.	25566 <i>Artamus cinereus</i> (Black-faced Woodswallow)			
45.	24353 <i>Artamus cyanopterus</i> (Dusky Woodswallow)			
Atemnidae				
46.	-11719 <i>Oratemnus curtus</i>			
Balaenidae				
47.	24043 <i>Eubalaena australis</i> (Southern Right Whale)		T	
Balaenopteridae				
48.	24051 <i>Megaptera novaeangliae</i> (Humpback Whale)		T	

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
Barychelidae				
49.	-12201 <i>Idiommata blackwalli</i>			
Boidae				
50.	25241 <i>Antaresia stimsoni subsp. stimsoni</i> (Stimson's Python)			
51.	25240 <i>Morelia spilota subsp. imbricata</i> (Carpet Python)		S	
Bothriuridae				
52.	-1805 <i>Cercophonius granulosus</i>			
53.	-11741 <i>Cercophonius sulcatus</i>			
Bovidae				
54.	24251 <i>Bos taurus</i> (European Cattle)	Y		
55.	34016 <i>Ovis aries</i> (Sheep)			
Camelidae				
56.	24254 <i>Camelus dromedarius</i> (Dromedary, Camel)	Y		
Campephagidae				
57.	25568 <i>Coracina novaehollandiae</i> (Black-faced Cuckoo-shrike)			
58.	24367 <i>Lalage tricolor</i> (White-winged Triller)			
Canidae				
59.	25454 <i>Canis lupus</i> (Dog, Dingo)	Y		
60.	24040 <i>Vulpes vulpes</i> (Red Fox)	Y		
Caprimulgidae				
61.	24368 <i>Eurostopodus argus</i> (Spotted Nightjar)			
Carangidae				
62.	-15872 <i>Seriola lalandi</i>			
Castniidae				
63.	33992 <i>Synemon gratiosa</i> (Graceful Sunmoth)		P4	
Casuariidae				
64.	24470 <i>Dromaius novaehollandiae</i> (Emu)			
Chaetodontidae				
65.	-17499 <i>Chelmonops curiosus</i>			
Charadriidae				
66.	25575 <i>Charadrius leschenaultii</i> (Greater Sand Plover)		IA	
67.	24377 <i>Charadrius ruficapillus</i> (Red-capped Plover)			
68.	24379 <i>Erythrogonys cinctus</i> (Red-kneed Dotterel)			
Cheilodactylidae				
69.	-18013 <i>Cheilodactylus gibbosus</i>			
70.	-17168 <i>Cheilodactylus rubrolabiatus</i>			
Cheloniidae				
71.	25335 <i>Caretta caretta</i> (Loggerhead Turtle)		T	
72.	25336 <i>Chelonia mydas</i> (Green Turtle)		T	
Cheluidae				
73.	43380 <i>Chelodina collieii</i> (Oblong Turtle)			
Colletidae				
74.	33977 <i>Hylaeus globuliferus</i> (bee)		P3	
Columbidae				
75.	24399 <i>Columba livia</i> (Domestic Pigeon)	Y		
76.	24407 <i>Ocyphaps lophotes</i> (Crested Pigeon)			
77.	24409 <i>Phaps chalcoptera</i> (Common Bronzewing)			
78.	25589 <i>Streptopelia chinensis</i> (Spotted Turtle-Dove)	Y		
79.	25590 <i>Streptopelia senegalensis</i> (Laughing Turtle-Dove)	Y		
Corvidae				
80.	24416 <i>Corvus bennetti</i> (Little Crow)			
81.	25592 <i>Corvus coronoides</i> (Australian Raven)			
82.	24417 <i>Corvus coronoides subsp. perplexus</i> (Australian Raven)			
Cracticidae				
83.	24420 <i>Cracticus nigrogularis</i> (Pied Butcherbird)			
84.	25595 <i>Cracticus tibicen</i> (Australian Magpie)			
85.	24422 <i>Cracticus tibicen subsp. dorsalis</i> (White-backed Magpie)			
86.	25596 <i>Cracticus torquatus</i> (Grey Butcherbird)			
87.	24424 <i>Cracticus torquatus subsp. torquatus</i> (Grey Butcherbird)			
88.	25597 <i>Strepera versicolor</i> (Grey Currawong)			

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Cuculidae				
89.	25598 <i>Cacomantis flabelliformis</i> (Fan-tailed Cuckoo)			
90.	42307 <i>Cacomantis pallidus</i> (Pallid Cuckoo)			
91.	24431 <i>Chrysococcyx basalis</i> (Horsfield's Bronze Cuckoo)			
Dasyuridae				
92.	24092 <i>Dasyurus geoffroi</i> (Chuditch, Western Quoll)		T	
Dermochelyidae				
93.	25346 <i>Dermochelys coriacea</i> (Leatherback Turtle)		T	
Dicaeidae				
94.	25607 <i>Dicaeum hirundinaceum</i> (Mistletoebird)			
Dicruridae				
95.	24443 <i>Grallina cyanoleuca</i> (Magpie-lark)			
96.	25610 <i>Myiagra inquieta</i> (Restless Flycatcher)			
97.	25613 <i>Rhipidura fuliginosa</i> (Grey Fantail)			
98.	25614 <i>Rhipidura leucophrys</i> (Willie Wagtail)			
Diomedeidae				
99.	30908 <i>Diomedea chlororhynchos</i> (Yellow-nosed Albatross)		T	
100.	24468 <i>Diomedea chrysostoma</i> (Grey-headed Albatross)		T	
Diplodactylidae				
101.	24918 <i>Crenadactylus ocellatus</i> subsp. <i>ocellatus</i> (Clawless Gecko)			
102.	24939 <i>Diplodactylus polyophthalmus</i>			
103.	24943 <i>Strophurus spinigerus</i> subsp. <i>inornatus</i>			
104.	24942 <i>Strophurus spinigerus</i> subsp. <i>spinigerus</i>			
Elapidae				
105.	42380 <i>Brachyurophis fasciolatus</i> subsp. <i>fasciolatus</i> (Narrow-banded Shovel-nosed Snake)			
106.	42381 <i>Brachyurophis semifasciatus</i> (Southern Shovel-nosed Snake)			
107.	25296 <i>Demansia psammophis</i> subsp. <i>reticulata</i> (Yellow-faced Whipsnake)			
108.	25251 <i>Echiopsis curta</i> (Bardick)			
109.	43384 <i>Hydrophis platurus</i> (Yellow-bellied Seasnake)			
110.	25248 <i>Neelaps bimaculatus</i> (Black-naped Snake)			
111.	25249 <i>Neelaps calonotos</i> (Black-striped Snake)		P3	
112.	25252 <i>Notechis scutatus</i> (Tiger Snake)			
113.	25253 <i>Parasuta gouldii</i>			
114.	25511 <i>Pseudonaja affinis</i> (Dugite)			
115.	25259 <i>Pseudonaja affinis</i> subsp. <i>affinis</i> (Dugite)			
116.	25266 <i>Simoselaps bertholdi</i> (Jan's Banded Snake)			
Engraulidae				
117.	-15048 <i>Engraulis australis</i>			
Falconidae				
118.	25621 <i>Falco berigora</i> (Brown Falcon)			
119.	25622 <i>Falco cenchroides</i> (Australian Kestrel)			
120.	25623 <i>Falco longipennis</i> (Australian Hobby)			
121.	25624 <i>Falco peregrinus</i> (Peregrine Falcon)		S	
122.	24475 <i>Falco peregrinus</i> subsp. <i>macropus</i> (Australian Peregrine Falcon)		S	
Felidae				
123.	24041 <i>Felis catus</i> (Cat)	Y		
Gekkonidae				
124.	24980 <i>Christinus marmoratus</i> (Marbled Gecko)			
Halcyonidae				
125.	30901 <i>Dacelo novaeguineae</i> (Laughing Kookaburra)	Y		
126.	25549 <i>Todiramphus sanctus</i> (Sacred Kingfisher)			
Hirundinidae				
127.	24491 <i>Hirundo neoxena</i> (Welcome Swallow)			
128.	25629 <i>Hirundo nigricans</i> (Tree Martin)			
Hylidae				
129.	25378 <i>Litoria adelaidensis</i> (Slender Tree Frog)			
130.	25388 <i>Litoria moorei</i> (Motorbike Frog)			
Hyrriidae				
131.	34113 <i>Westralunio carteri</i> (Carter's Freshwater Mussel)		P4	
Idiopidae				
132.	33917 <i>Idiosoma nigrum</i> (Shield-backed Trapdoor Spider)		T	
133.	-12943 <i>Idiosoma sigillatum</i>			

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Ixodidae				
134.	-13367 <i>Amblyomma triguttatum</i>			
Julidae				
135.	-13106 <i>Ommatoiulus moreletii</i>			
Labridae				
136.	-14027 <i>Coris auricularis</i>			
137.	-16927 <i>Notolabrus parilus</i>			
Lamponidae				
138.	-1741 <i>Lampona cylindrata</i>			
Laridae				
139.	25637 <i>Larus novaehollandiae</i> (Silver Gull)			
140.	25638 <i>Larus pacificus</i> (Pacific Gull)			
Leporidae				
141.	24085 <i>Oryctolagus cuniculus</i> (Rabbit)	Y		
Limnodynastidae				
142.	25410 <i>Heleioporus eyrei</i> (Moaning Frog)			
143.	25415 <i>Limnodynastes dorsalis</i> (Western Banjo Frog)			
Lycosidae				
144.	-12219 <i>Tasmanicosa leuckartii</i>			
145.	-12507 <i>Venator immansueta</i>			
Macropodidae				
146.	24132 <i>Macropus fuliginosus</i> (Western Grey Kangaroo)			
147.	24133 <i>Macropus irma</i> (Western Brush Wallaby)		P4	
148.	24142 <i>Petrogale lateralis</i> subsp. <i>lateralis</i> (Black-flanked Rock-wallaby, Black-footed Rock-wallaby)			T
Maluridae				
149.	25651 <i>Malurus lamberti</i> (Variegated Fairy-wren)			
150.	24544 <i>Malurus lamberti</i> subsp. <i>assimilis</i> (Variegated Fairy-wren)			
151.	25652 <i>Malurus leucopterus</i> (White-winged Fairy-wren)			
152.	24547 <i>Malurus leucopterus</i> subsp. <i>edouardi</i> (Barrow Is. White-winged Fairy-wren)			T
153.	25654 <i>Malurus splendens</i> (Splendid Fairy-wren)			
154.	24552 <i>Malurus splendens</i> subsp. <i>splendens</i> (Splendid Fairy-wren)			
Meliphagidae				
155.	24559 <i>Acanthagenys rufogularis</i> (Spiny-cheeked Honeyeater)			
156.	24560 <i>Acanthorhynchus superciliosus</i> (Western Spinebill)			
157.	24561 <i>Anthochaera carunculata</i> (Red Wattlebird)			
158.	24562 <i>Anthochaera lunulata</i> (Western Little Wattlebird)			
159.	24567 <i>Epthianura albifrons</i> (White-fronted Chat)			
160.	25659 <i>Lichenostomus leucotis</i> (White-eared Honeyeater)			
161.	25661 <i>Lichmera indistincta</i> (Brown Honeyeater)			
162.	24583 <i>Manorina flavigula</i> (Yellow-throated Miner)			
163.	25663 <i>Melithreptus brevirostris</i> (Brown-headed Honeyeater)			
164.	25669 <i>Phylidonyris nigra</i> (White-cheeked Honeyeater)			
165.	24595 <i>Phylidonyris nigra</i> subsp. <i>gouldii</i> (White-cheeked Honeyeater)			
166.	24596 <i>Phylidonyris novaehollandiae</i> (New Holland Honeyeater)			
Meropidae				
167.	24598 <i>Merops ornatus</i> (Rainbow Bee-eater)		IA	
Micropholcommatidae				
168.	-13383 <i>Raveniella arenacea</i>			
169.	-12909 <i>Raveniella cirrata</i>			
170.	-12492 <i>Raveniella peckorum</i>			
Mimetidae				
171.	-12747 <i>Australomimetes ovidi</i>			
Molossidae				
172.	24185 <i>Tadarida australis</i> (White-striped Freetail-bat)			
Monacanthidae				
173.	-16940 <i>Meuschenia freycineti</i>			
Mullidae				
174.	-15261 <i>Parupeneus chrysopleuron</i>			
175.	-14957 <i>Upeneichthys stotti</i>			
Muraenidae				

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176.	-16934 <i>Gymnothorax prasinus</i>			
Muridae				
177.	24223 <i>Mus musculus</i> (House Mouse)	Y		
178.	24230 <i>Pseudomys albocinereus</i> (Ash-grey Mouse)			
179.	24243 <i>Rattus fuscipes</i> (Western Bush Rat)			
180.	24245 <i>Rattus rattus</i> (Black Rat)	Y		
Myobatrachidae				
181.	25400 <i>Crinia insignifera</i> (Squelching Froglet)			
182.	25420 <i>Myobatrachus gouldii</i> (Turtle Frog)			
183.	25433 <i>Pseudophryne guentheri</i> (Crawling Toadlet)			
Nemesiidae				
184.	-12895 <i>Aname mainae</i>			
Neosittidae				
185.	25673 <i>Daphoenositta chrysoptera</i> (Varied Sittella)			
Odacidae				
186.	-14239 <i>Odax cyanomelas</i>			
Oecobiidae				
187.	-13468 <i>Oecobius navus</i>			
Otariidae				
188.	24210 <i>Neophoca cinerea</i> (Australian Sea Lion)		S	
Pachycephalidae				
189.	25675 <i>Colluricincla harmonica</i> (Grey Shrike-thrush)			
190.	24613 <i>Colluricincla harmonica</i> subsp. <i>rufiventris</i> (Grey Shrike-thrush)			
191.	25679 <i>Pachycephala pectoralis</i> (Golden Whistler)			
192.	24623 <i>Pachycephala pectoralis</i> subsp. <i>fuliginosa</i> (Golden Whistler)			
193.	25680 <i>Pachycephala rufiventris</i> (Rufous Whistler)			
194.	24624 <i>Pachycephala rufiventris</i> subsp. <i>rufiventris</i> (Rufous Whistler)			
Paradoxosomatidae				
195.	-12498 <i>Antichiropus whistleri</i>			
Pararchaeidae				
196.	-12497 <i>Westrarchaea spinosa</i>			
Pardalotidae				
197.	25681 <i>Pardalotus punctatus</i> (Spotted Pardalote)			
198.	25682 <i>Pardalotus striatus</i> (Striated Pardalote)			
Patacidae				
199.	-14241 <i>Aetapcus maculatus</i>			
Pelecanidae				
200.	24648 <i>Pelecanus conspicillatus</i> (Australian Pelican)			
Peramelidae				
201.	25478 <i>Isoodon obesulus</i> (Southern Brown Bandicoot)		P5	
202.	24153 <i>Isoodon obesulus</i> subsp. <i>fusciventer</i> (Quenda, Southern Brown Bandicoot)		P5	
Peripatopsidae				
203.	-13409 <i>Occiperipatoides gilesii</i>			
Petroicidae				
204.	24651 <i>Eopsaltria australis</i> subsp. <i>griseogularis</i> (Western Yellow Robin)			
205.	24652 <i>Eopsaltria georgiana</i> (White-breasted Robin)			
206.	25693 <i>Microeca fascians</i> (Jacky Winter)			
207.	24659 <i>Petroica goodenovii</i> (Red-capped Robin)			
208.	25695 <i>Petroica multicolor</i> (Scarlet Robin)			
Phalacrocoracidae				
209.	25697 <i>Phalacrocorax carbo</i> (Great Cormorant)			
210.	25698 <i>Phalacrocorax melanoleucos</i> (Little Pied Cormorant)			
211.	24667 <i>Phalacrocorax sulcirostris</i> (Little Black Cormorant)			
212.	25699 <i>Phalacrocorax varius</i> (Pied Cormorant)			
Phalangeridae				
213.	25521 <i>Trichosurus vulpecula</i> (Common Brushtail Possum)			
Phasianidae				
214.	25701 <i>Coturnix ypsilophora</i> (Brown Quail)			
Pholcidae				
215.	-12657 <i>Pholcus phalangioides</i>			

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Physeteridae				
216.	24073 <i>Physeter macrocephalus</i> (Sperm Whale)		P4	
Podargidae				
217.	25703 <i>Podargus strigoides</i> (Tawny Frogmouth)			
Podicipedidae				
218.	25704 <i>Podiceps cristatus</i> (Great Crested Grebe)			
219.	24681 <i>Poliiocephalus poliocephalus</i> (Hoary-headed Grebe)			
220.	25705 <i>Tachybaptus novaehollandiae</i> (Australasian Grebe, Black-throated Grebe)			
Pomacentridae				
221.	-14959 <i>Parma victoriae</i>			
Potoroidae				
222.	24161 <i>Bettongia lesueur</i> subsp. <i>graii</i> (Boodie, Burrowing Bettong)			
223.	24162 <i>Bettongia penicillata</i> subsp. <i>ogilbyi</i> (Woylie, Brush-tailed Bettong)		T	
Procellariidae				
224.	24689 <i>Halobaena caerulea</i> (Blue Petrel)			
225.	24690 <i>Macronectes giganteus</i> (Southern Giant Petrel)		P4	
226.	24693 <i>Pachyptila desolata</i> (Antarctic Prion)			
227.	24712 <i>Puffinus carneipes</i> (Fleshy-footed Shearwater)		IA	
228.	24716 <i>Puffinus pacificus</i> (Wedge-tailed Shearwater)		IA	
Psittacidae				
229.	25713 <i>Cacatua galerita</i> (Sulphur-crested Cockatoo)			
230.	25714 <i>Cacatua pastinator</i> (Western Long-billed Corella)			
231.	25715 <i>Cacatua roseicapilla</i> (Galah)			
232.	25716 <i>Cacatua sanguinea</i> (Little Corella)			
233.	24727 <i>Cacatua sanguinea</i> subsp. <i>westralensis</i> (Little Corella)			
234.	24729 <i>Cacatua tenuirostris</i> (Eastern Long-billed Corella)	Y		
235.	25717 <i>Calyptorhynchus banksii</i> (Red-tailed Black-Cockatoo)			
236.	24733 <i>Calyptorhynchus baudinii</i> (Baudin's Cockatoo (long-billed black-cockatoo), Baudin's Cockatoo)		T	
237.	24734 <i>Calyptorhynchus latirostris</i> (Carnaby's Cockatoo (short-billed black-cockatoo), Carnaby's Cockatoo)		T	
238.	24735 <i>Glossopsitta porphyrocephala</i> (Purple-crowned Lorikeet)			
239.	24738 <i>Neophema elegans</i> (Elegant Parrot)			
240.	25720 <i>Platycercus icterotis</i> (Western Rosella)			
241.	24747 <i>Platycercus spurius</i> (Red-capped Parrot)			
242.	25721 <i>Platycercus zonarius</i> (Australian Ringneck, Ring-necked Parrot)			
243.	24750 <i>Platycercus zonarius</i> subsp. <i>semitorquatus</i> (Twenty-eight Parrot)			
244.	25722 <i>Polytelis anthopeplus</i> (Regent Parrot)			
245.	25723 <i>Trichoglossus haematodus</i> (Rainbow Lorikeet)			
Pygopodidae				
246.	24991 <i>Aprasia repens</i> (Sand-plain Worm-lizard)			
247.	30906 <i>Delma concinna</i> (Javelin Legless Lizard)			
248.	30905 <i>Delma concinna</i> subsp. <i>concinna</i> (Javelin Legless Lizard)			
249.	25766 <i>Delma fraseri</i> (Fraser's Legless Lizard)			
250.	24999 <i>Delma grayii</i>			
251.	25005 <i>Lialis burtonis</i>			
252.	25007 <i>Pletholax gracilis</i> subsp. <i>gracilis</i> (Keeled Legless Lizard)			
253.	25008 <i>Pygopus lepidopodus</i> (Common Scaly Foot)			
Rallidae				
254.	25727 <i>Fulica atra</i> (Eurasian Coot)			
255.	25729 <i>Gallinula tenebrosa</i> (Dusky Moorhen)			
256.	25730 <i>Gallirallus philippensis</i> (Buff-banded Rail)			
257.	25731 <i>Porphyrio porphyrio</i> (Purple Swamphen)			
258.	24769 <i>Porzana fluminea</i> (Australian Spotted Crane)			
259.	24771 <i>Porzana tabuensis</i> (Spotless Crane)			
Recurvirostridae				
260.	24774 <i>Cladorhynchus leucocephalus</i> (Banded Stilt)			
261.	25734 <i>Himantopus himantopus</i> (Black-winged Stilt)			
262.	24776 <i>Recurvirostra novaehollandiae</i> (Red-necked Avocet)			
Salticidae				
263.	-1698 <i>Ocrisiona leucomomis</i>			
Scincidae				
264.	42368 <i>Acritoscincus trilineatus</i> (Western Three-lined Skink)			
265.	30893 <i>Cryptoblepharus buchananii</i>			

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
266.	25027 <i>Ctenotus australis</i>			
267.	25039 <i>Ctenotus fallens</i>			
268.	25087 <i>Cyclodomorphus celatus</i> (Western Slender Blue-tongue)			
269.	25096 <i>Egernia kingii</i> (King's Skink)			
270.	25100 <i>Egernia napoleonis</i>			
271.	25119 <i>Hemiergis quadrilineata</i>			
272.	25131 <i>Lerista distinguenda</i>			
273.	25133 <i>Lerista elegans</i>			
274.	25148 <i>Lerista lineopunctulata</i>			
275.	25165 <i>Lerista praepedita</i>			
276.	25184 <i>Menetia greyii</i>			
277.	25191 <i>Morethia lineocellata</i>			
278.	25192 <i>Morethia obscura</i>			
279.	25203 <i>Tiliqua occipitalis</i> (Western Bluetongue)			
280.	25519 <i>Tiliqua rugosa</i>			
281.	25207 <i>Tiliqua rugosa subsp. rugosa</i>			
Scolopacidae				
282.	41323 <i>Actitis hypoleucos</i> (Common Sandpiper)		IA	
283.	24784 <i>Calidris ferruginea</i> (Curlew Sandpiper)		T	
284.	24788 <i>Calidris ruficollis</i> (Red-necked Stint)		IA	
285.	25741 <i>Limosa limosa</i> (Black-tailed Godwit)		IA	
286.	24808 <i>Tringa nebularia</i> (Common Greenshank)		IA	
Scolopendridae				
287.	-1785 <i>Cormocephalus aurantiipes</i>			
288.	-12659 <i>Cormocephalus novaehollandiae</i>			
289.	-12200 <i>Cormocephalus rubriceps</i>			
290.	-1739 <i>Cormocephalus turneri</i>			
291.	-1667 <i>Ethmostigmus rubripes</i>			
Sillaginidae				
292.	-15064 <i>Sillago schomburgkii</i>			
Sparassidae				
293.	-12890 <i>Isopeda leishmanni</i>			
Spheniscidae				
294.	24818 <i>Eudyptula minor subsp. novaehollandiae</i> (Little Penguin)			
Strigidae				
295.	25748 <i>Ninox novaeseelandiae</i> (Boobook Owl)			
Sylviidae				
296.	25755 <i>Acrocephalus australis</i> (Australian Reed Warbler)			
297.	24834 <i>Cincloramphus mathewsi</i> (Rufous Songlark)			
298.	25758 <i>Megalurus gramineus</i> (Little Grassbird)			
Tachyglossidae				
299.	24207 <i>Tachyglossus aculeatus</i> (Short-beaked Echidna)			
Tarsipedidae				
300.	24167 <i>Tarsipes rostratus</i> (Honey Possum, Noolbenger)			
Tettigoniidae				
301.	33973 <i>Austrosaga spinifer</i> (cricket)		P3	
Threskiornithidae				
302.	24841 <i>Platalea flavipes</i> (Yellow-billed Spoonbill)			
303.	24842 <i>Platalea regia</i> (Royal Spoonbill)			
304.	24843 <i>Plegadis falcinellus</i> (Glossy Ibis)		IA	
305.	24844 <i>Threskiornis molucca</i> (Australian White Ibis)			
306.	24845 <i>Threskiornis spinicollis</i> (Straw-necked Ibis)			
Typhlopidae				
307.	25271 <i>Ramphotyphlops australis</i>			
308.	25285 <i>Ramphotyphlops pinguis</i>			
309.	25288 <i>Ramphotyphlops waitii</i>			
Tytonidae				
310.	25762 <i>Tyto alba</i> (Barn Owl)			
Urodacidae				
311.	-11701 <i>Urodacus novaehollandiae</i>			
Varanidae				
312.	25218 <i>Varanus gouldii</i> (Bungarra or Sand Monitor)			
313.	25526 <i>Varanus tristis</i> (Racehorse Monitor)			

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
Veliferidae				
314.	-15138 <i>Metavelifer multiradiatus</i>			
Vespertilionidae				
315.	24186 <i>Chalinolobus gouldii</i> (Gould's Wattled Bat)			
316.	24194 <i>Nyctophilus geoffroyi</i> (Lesser Long-eared Bat)			
Zodariidae				
317.	-13364 <i>Masasteron sampeyae</i>			
Zosteropidae				
318.	25765 <i>Zosterops lateralis</i> (Grey-breasted White-eye, Silvereye)			

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

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

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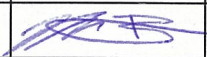
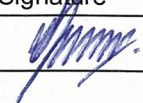
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Document Status

Rev No.	Author	Reviewer		Approved for Issue		
		Name	Signature	Name	Signature	Date
0	L Zimmermann J Reid	J Reid M Dilly		D Farrar		06/06/2014

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