

Native Vegetation Clearing Permit

Camboon Road Malaga

Public Transport Authority

6 August 2024

→ The Power of Commitment

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1. Introduction

1.1 Project background

The Public Transport Authority (PTA) is planning to undertake works at the Malaga Bus Depot (51 Truganina Road, Malaga) and requires an upgrade to the bus depot power connection to facilitate electric bus charging. Western Power has provided the PTA with a construction design drawing for power connection along Camboon Road, crossing under Reid Highway and connecting to the depot via Victoria Road. Western Power has identified potential clearing is required in three areas, for the portion of the proposed connection between Camboon Road and under Reid Highway. This document assesses the environmental impact of a 0.038 hectare (ha) clearing footprint.

1.2 Purpose of this report

The purpose of this document is to support a Native Vegetation Clearing Permit (NVCP) submitted to the Department of Water and Environmental Regulation (DWER). This document provides background and current existing environment information and an assessment against the ten clearing principles as required under Schedule 5 of the *Environmental Protection Act 1986* (EP Act).

1.3 Scope and limitations

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

GHD otherwise disclaims responsibility to any person other than PTA 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 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.

2. Description of clearing activities

The clearing footprint is located in the vicinity of Camboon Road, Malaga and Noranda within the City of Bayswater and the City of Swan. The proposed clearing comprises three areas, crossing Reid Highway, with up to 0.038 ha of vegetation required to be cleared (Figure 1).

Due to the difference in elevation between Camboon Road and Reid Highway, clearing is required for trenching within the batters of Reid Highway. Additional clearing is required to set up machinery for horizontal drilling under Reid Highway. Post installation of the power connection, the trench will be backfilled and PTA will restore the area to a similar standard as pre-works, to the satisfaction of Main Roads WA (Main Roads).

2.1 Alternatives to Native Vegetation Clearing Considered

Other alignments were considered to achieve the required electrical connection; however, are constrained or require additional vegetation clearing. In addition, the PTA has worked with Western Power to reduce the clearing footprint required for trenching from a 6 m wide corridor to a 3 m wide corridor.

Methods to avoid and minimise clearing during the design phase included:

- 1. Placement of laydown areas, turnarounds etc. in previously cleared land
- 2. Restriction of works to existing road maintenance zone where possible
- 3. Utilisation of pruning instead of clearing where possible
- 4. Utilisation of previously cleared areas where possible
- 5. Undergrounding of cables and drilling instead of trenching, where viable
- 6. Selection of joint and entry/exit hole locations to avoid clearing of vegetation
- 7. Early and continual engagement with Western Power environment team to highlight proposed risks and avoid where possible
- 8. Implementing lower impact clearing methodologies.



3. Existing environment

An assessment of the clearing footprint was undertaken by reviewing databases, such as *Dandjoo* (DBCA) and DataWA, and field observations by ecology consultants on 3 July 2024. The desktop assessment included a search of the Protected Matters Search Tool (PMST), provided in Appendix A.

3.1 Flora and vegetation

The clearing footprint has been previously cleared of its original native vegetation to facilitate the construction of Reid Highway in approximately 1995 as shown in Plate 1. It has been re-landscaped, with the landscaping ranging from approximately 8 to 30 years old (per. comms. Main Roads). Landscaping vegetation ranges in condition from Completely Degraded to Good condition. None of the clearing footprint was revegetated as a statutory requirement.





Plate 1 Aerial photographs showing location of Camboon Road and Reid Highway interchange in 1977 and 1995 (Landgate 2024)

The clearing footprint lies within the Swan Coastal Plain IBRA Bioregion and the Perth IBRA Subregion. The Perth Subregion comprises colluvial and aeolian sands, alluvial river flats, and coastal limestone. (McKenzie, Keighery & Gibson 2000).

Broad-scale (1:250,000) pre-European vegetation mapping of the area was completed by Beard (1975) at an association level. Mapping indicates the clearing footprint is within vegetation association 1001: Medium very sparse woodland; jarrah, with low woodland; banksia & casuarina. This association is moderately represented in the region, with 22.05% of the pre-European vegetation extent remaining across State, IBRA Region and IBRA Subregion extents, 2.65% remaining within the City of Bayswater and 26.18% within the City of Swan (Table 1). The clearing will be less than 0.001% of the remaining extent of association 1001.

Table 1 Extent of pre-European vegetation association 1001 within the clearing footprint (Beard 1975)

Scale	Pre-European extent (ha)	Current extent (ha)	Remaining (%)	% current extent in DBCA managed land
State: Western Australia	57,410.23	12,660.76	22.05	14.19
IBRA Bioregion: Swan Coastal Plain	57,410.23	12,660.76	22.05	14.19
IBRA Subregion: Perth	57,410.23	12,660.76	22.05	14.19
LGA: City of Bayswater	2,848.37	75.18	2.64	-
LGA: City of Swan	8,868.19	2,321.48	26.18	3.98

Broad-scale (1:250,000) mapping of pre-1750 vegetation complexes was undertaken by Heddle (1980) and indicates the clearing footprint is within the Bassendean Complex-Central and South. This complex is moderately

represented within the region with 24.49% of the pre-1750 vegetation extent remaining (Table 2). The clearing will be less than 0.001% of the remaining extent within the Bassendean Complex-Central and South.

Table 2 Extent of pre-1750 Bassendean Complex-Central and South within the clearing footprint (Heddle 1980)

Scale	Pre-European extent (ha)	Current extent (ha)	Remaining (%)	% current extent in DBCA managed land
State: Western Australia	87476.26	21425.48	24.49	28.35
IBRA Bioregion: Swan Coastal Plain	87476.26	21425.48	24.49	28.35
IBRA Subregion: Perth	87476.26	21425.48	24.49	28.35
LGA: City of Bayswater	2889.55	58.32	2.02	-
LGA: City of Swan	4678.80	1434.16	30.65	2.36

DataWA (DPIRD-005) contains vegetation extent polygons from mapping of remnant vegetation in Western Australia, with the most recent update being 2020. This dataset indicates the vegetation associated with the clearing footprint is not mapped as native vegetation, as presented in Figure 2. Additionally, as the area has been previously cleared, landscaped and re-planted, it is no longer representative of the broad scale vegetation association and complexes.

3.1.1 Threatened Ecological Communities

The clearing footprint is located within the buffers of the Banksia Woodlands of the Swan Coastal Plain Threatened Ecological Community (Endangered, Priority 3), as presented in Figure 2. The vegetation within the clearing footprint was identified as landscaping and hence does not represent vegetation of this threatened ecological community.

3.1.2 Flora

The *Dandjoo* (DBCA) database identified 259 flora taxa previously recorded within a 10 km radius of the clearing footprint. This comprised 128 dicots, 98 algae, 29 monocots, three mosses, and one fern.

The *Dandjoo* (DBCA) database did not identify any significant flora taxa previously recorded within 10 km of the clearing footprint. The PMST search identified 11 significant flora taxa as likely or possible to occur in the clearing footprint:

- Synaphea sp. Fairbridge Farm (D.Papenfus 696) Critically Endangered
- Andersonia gracilis Endangered
- Banksia mimica Endangered
- Caladenia huegelii Endangered
- Diuris purdiei Endangered
- Drakaea elastica Endangered
- Macarthuria keigheryi Endangered
- Thelymitra stellata Endangered
- Anigozanthos viridis subsp. terraspectans Vulnerable
- Diuris micrantha Vulnerable
- Drakaea micrantha Vulnerable

The site visit did not identify any Threatened or Priority flora, Declared Pests, or Weeds of National Significance as present within the clearing footprint.

The site visit identified the verge of Camboon Rd in Malaga (north of Reid Highway) to be completely degraded with dominant herbaceous weed cover of approximately 70% and some isolated trees and shrubs as shown in

Plate 2. The trees and shrubs in this area were all native taxa and included *Banksia menziesii*, *Banksia attenuata*, *Hakea sp.*, *Allocasuarina sp.*, *Eucalyptus sp.*, *Acacia pulchella.*, *Macrozamia riedlei* and *Daviesia divaricata*. This area is prone to fly-tipping, with a large pile of rubbish observed in the area.



Plate 2 Camboon Road, Malaga verge

The area within the road reserve immediately north of Reid Highway, within the road reserve was largely landscaped approximately 30 years ago, with the vegetation closer to the highway having been planted as recently as 8 years ago. It is well established and contains a mixture of native and non-native species with a complex canopy, mid-storey and understorey plants. The vegetation was a *Pinus sp. (pine) and Banksia spp. woodland, over mixed myrtaceous and proteaceous closed shrubland, over Pterostylis sanguinea (Orchidaceae), Acacia pulchella and scattered weeds including *Gladiolus caryophyllaceus (gladiola).

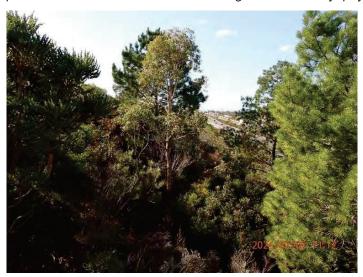


Plate 3 Canopy and mid-storey vegetation north of Reid Highway

The herbaceous and grassy weeds *Allium spp., *Ehrharta calycina, *Eragrostis curvula, and *Oxalis sp. were most common in cleared areas at the base of the slope closer to Reid Highway. *Gladiolus caryophyllaceus was present throughout the understorey. The herbaceous and grassy weeds accounted for <5% total vegetation cover.

Established shrubs of *Chamelaucium uncinatum* (Geraldton wax), not native to the Perth region, were also densely planted along the roadside (Plate 4).



Plate 4 Geraldton wax planted along the roadside, north of Reid Highway

The median strip was completely degraded and remains dominated by bare ground and weed cover as shown in Plate 5. Vegetation present included *Calothamnus sp.* and *Scaevola crassifolia* over scattered native ground covers *Grevillea crithmifolia* and *Eremophila glabra* over bare ground and sparse weed cover of herbs **Erodium sp.*, **Lupinus cosentinii* and **Oxalis sp.*, and grasses **Ehrharta calycina*, **Ehrharta longiflora* and **Eragrostis curvula*.



Plate 5 Reid Highway median strip

Seven families of native species were present and comprised the shrub layer in the area south of Reid Highway, more recently landscaped in approximately 2017 after the installation additional principal shared path (PSP) (Plate 6). These taxa included Asteraceae (*Olearia axillaris*), Chenopodiaceae (*Atriplex cinerea*), Fabaceae (*Acacia cochlearis* and *Acacia* sp.), Goodeniaceae (*Scaevola crassifolia*), Lamiaceae (*Hemiandra pungens*), Myrtaceae (*Calothamnus* sp., *Chamelaucium uncinatum* (not native to Perth), *Eucalyptus* sp., and *Myrtaceae* sp.), and Proteaceae (*Adenanthos* sp., *Banksia menziesii*, *Banksia sessilis*, *Grevillea crithmifolia*, and *Hakea* sp.).



Plate 6 Area south of Reid Highway

3.2 Fauna

The *Dandjoo* (DBCA) database identified 50 fauna taxa previously recorded within a 10 km radius of the clearing footprint. This comprised 30 birds, 11 invertebrates, and nine reptiles.

The *Dandjoo* (DBCA) database did not identify any significant fauna taxa previously recorded within 10 km of the clearing footprint. The PMST search identified 13 significant fauna taxa as known, likely or possible to occur within the clearing footprint:

- Curlew Sandpiper (Calidris ferruginiea) Critically Endangered and Migratory
- Douglas' Broad-headed Bee (Hesperocolletes douglasi) Critically Endangered
- Eastern Curlew (Numenius madagascariensis) Critically Endangered and Migratory
- Western Ringtail Possum (Pseudocheirus occidentalis) Critically Endangered
- Woylie (Bettongia penicillata ogilbyi) Endangered
- Australasian Bittern (Botaurus poiciloptilus) Endangered
- Australian Painted Snipe (Rostratula australis) Endangered
- Common Greenshank (Tringa nebularia) Endangered and Migratory
- Carnaby's Black Cockatoo (Zando latirostris) Endangered
- Sharp-tailed Sandpiper (Calidris acuminata) Vulnerable and Migratory
- Forest Red-tailed Black Cockatoo (Calyptorhynchus banksii naso) Vulnerable
- Chuditch (Dasyurus geoffroii) Vulnerable
- Malleefowl (Leipoa ocellata) Vulnerable

The species identified as known to occur are the Curlew Sandpiper, Woylie, Australasian Bittern, Australian Painted Snipe, Common Greenshank, Carnaby's Black Cockatoo, Sharp-tailed Sandpiper, Forest Red-tailed Black Cockatoo, and Chuditch. These species are highly mobile with large home ranges and are not restricted to the proposed clearing area.

Carnaby's Cockatoos were observed during the site visit flying over the clearing footprint. There was evidence of Black Cockatoo foraging on cones of *Pinus* species adjacent to the clearing area. Banksias in the area were fruiting and are another known food source for Black Cockatoos. No potential Black Cockatoo nesting trees were present and there was no secondary evidence of roosting. There was no other evidence of faunal use for other species (e.g. scats, diggings).

3.3 Environmental constraints

3.3.1 Soils and geology

The clearing footprint lies within the Bassendean System, comprising sand dunes and sandplains with pale deep sand, semi-wet and wet soil. The underlying soil type of the clearing footprint is primarily fine to medium-grained sand. (GoWA 2024)

There are no acid sulphate soils or contaminated sites within the clearing footprint (CSIRO 2020, GoWA 2024).

3.3.2 Hydrology

The clearing footprint is situated in the Perth Groundwater Area, which is Proclaimed under the *Rights in Water* and *Irrigation Act 1914* (RiWI Act) (GoWA 2024).

The clearing footprint does not intersect any surface waters or geomorphic wetlands (GoWA 2024).

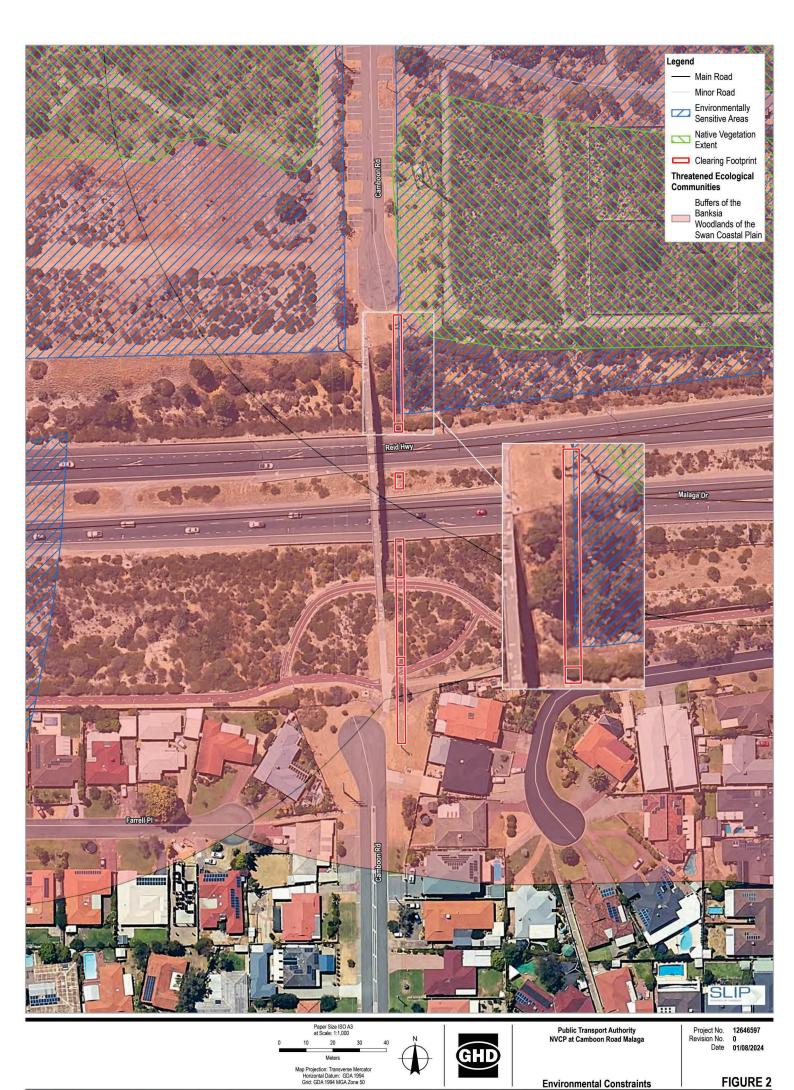
3.3.3 Conservation areas

The clearing footprint does not intersect any legislated lands or waters (GoWA 2024).

The clearing footprint slightly intersects an environmentally sensitive area (19391), which is also a Bush Forever site 385 – Mirrabooka Bushland (GoWA 2024). This portion of the Bush Forever site is located within local road reserve and Reid Highway Road Reserve. The clearing will impact <0.01 ha of the environmentally sensitive area, through an intrusion of approximately one metre (Figure 2).

3.4 Aboriginal heritage

The clearing footprint slightly intersects a Lodged Aboriginal heritage site, Kee Uch Jarnny (28427) which is not registered under the *Aboriginal Heritage Act 1972*. This site is listed as ceremonial, historical, modified tree, mythological, meeting place, named place, or natural feature (GoWA 2024). The clearing will impact <0.01 ha of the site, through an intrusion of approximately one metre (Figure 3).



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4. Suitability for referral process

The DWER Guideline: Native vegetation clearing referrals (GoWA 2021) outlines nine suitability aspects for clearing activities to be deemed appropriate for a clearing referral. Table 3 assesses the proposed clearing activity against the DWER Guideline suitability aspects (GoWA 2021).

Table 3 Clearing referral suitability

Aspect	Assessment	Suitability
Land that is subject to reserve or conservation covenant under the Soil and Land Conservation Act 1945 (SLC Act)	The clearing footprint land is not subject to reserve or conservation covenant under the SLC Act.	Suitable for clearing referral
Land that is subject to an environmental protection covenant under Part VB of the EP Act	The clearing footprint land is not subject to an environmental protection covenant.	Suitable for clearing referral
Clearing timeframe	The clearing will be completed within two years.	Suitable for clearing referral
Will contravene the requirements of a soil conservation notice issued under Part V of the SLC Act	Clearing will not contravene the requirements of a soil conservation notice.	Suitable for clearing referral
Will or is likely to have a significant impact on matters of national environmental significance (MNES)	The clearing works will not have a significant impact on MNES.	Suitable for clearing referral
Includes marine native vegetation clearing activities	The clearing sites are terrestrial and no marine vegetation will be cleared.	Suitable for clearing referral
May impact on protected or otherwise significant flora or fauna	No significant flora or fauna were found in the clearing footprint.	Suitable for clearing referral
Will be within a highly cleared landscape or an area containing limited or restricted native vegetation types	The clearing will be less than 0.001% of the remaining extent of association 1001. The clearing will be less than 0.001% of the remaining extent of The clearing will be less than 0.01% of remaining native vegetation within 5 km. The clearing footprint has been previously cleared and not mapped as remaining native vegetation by DataWA (DPIRD-005).	Suitable for clearing referral
Is on land previously reserved as an environmental offset under the conditions of another approval under the EP Act	The clearing footprint is not on land previously reserved as an environmental offset.	Suitable for clearing referral

5. Assessment against the DWER Criteria

A Project that meets the four DWER criteria is exempt from requiring a permit (DWER 2021). The proposal clearing does not satisfy Criterion 1 of the four DWER criterion; however the clearing footprint is not mapped as remaining native vegetation and therefore the applicability of this measure in this instance should be considered further.

5.1 Criterion 1: The area proposed to be cleared is small relative to the total remaining vegetation

Under consideration of Criterion 1, DWER assesses the size of the proposed clearing relative to the remaining vegetation in the region and the remaining vegetation of the ecological community to be cleared.

Table 4 DWER Criterion 1 Thresholds

Thresholds for a permit to be required	Proposed clearing
More than 1 ha is proposed to be cleared (Extensive Land Use Zone)	Disturbance to 0.038 ha.
Less than 10% of that native vegetation association or complex is remaining within the relevant	Vegetation association 1001 is adequately represented in the region, with 22.05% of the pre-European vegetation extent remaining in the IBRA Region. The clearing in association 1001 will be less than 0.001% of the remaining extent.
IBRA bioregion	Bassendean Complex-Central and South is adequately represented in the region with 24.49% of the pre-1750 vegetation remaining in the IBRA Region. The clearing in the complex will be less than 0.001% of the remaining extent.
	The vegetation is not considered representative of vegetation association 1001 or the Bassendean Complex-Central and South as it was previously cleared and has since been landscaped.
Less than 10% native vegetation is remaining within a 5 km buffer of the proposed clearing	There is 8% native vegetation remaining within a 5 km buffer of the proposed clearing (645/8019 ha). The proposed clearing represents a loss of 0.01% of this remaining native vegetation. However the clearing footprint is not mapped as remaining native vegetation by DataWA (DPIRD-005) and therefore will not impact this criterion.

The proposal does not satisfy this criterion as there is 8% native vegetation remaining within a 5 km buffer of the proposed clearing, however the clearing area does not intersect with the DataWA (DPIRD-005) mapped remaining native vegetation (Figure 2) and therefore the proposed clearing will not impact this criterion. Additionally, Cullacabardee and Whiteman Park are both areas of native vegetation located mostly outside the 5 km buffer to the north of the clearing area.

5.2 Criterion 2: There are no known or likely significant environmental values within the area

Under consideration of Criterion 2, DWER considers the potential impacts on various environmental values within the proposed clearing. There are no known or likely significant environmental values within the clearing area, as described in Table 5.

Table 5 DWER Criterion 2 Considerations

Environmental Value	Impacts of proposed clearing
Vegetation condition	The vegetation within the clearing footprint was identified as landscaping, ranging from 8 to 30 years old (per. comms. Main Roads). Landscaping vegetation ranges in condition from Completely Degraded to Good condition.
Significant fauna	No Threatened or Priority fauna were identified in the clearing footprint.

Environmental Value	Impacts of proposed clearing
Fauna habitat	There is 0.038 ha of potential fauna habitat within the clearing footprint.
Significant ecological linkage	The proposed clearing is not part of a significant ecological linkage, nor will it disrupt the movement of fauna through the region.
Mapped ecological community	The clearing footprint is located within the buffers of the Banksia Woodlands of the Swan Coastal Plain Threatened Ecological Community (Endangered, Priority 3).
	The vegetation within the clearing footprint was identified as landscaping and hence does not represent vegetation of this threatened ecological community.
Significant flora	No significant or priority flora was identified in the clearing footprint.
Mapped wetland	The clearing footprint does not intersect any mapped wetlands.
Mapped watercourse	The clearing footprint does not intersect any mapped watercourses.
Water resources	It is considered unlikely that clearing will significantly disturb or interrupt natural drainage and surface run-off patterns, as it is associated with previously modified batters and median for Reid Highway. No Public Drinking Water Source Areas are present within the clearing footprint.
Conservation reserve	The clearing footprint does not intersect any conservation reserves.
Land and soil quality	Acid sulphate soils are not present in the clearing footprint. The clearing is unlikely to cause deterioration in surface water or groundwater quality.
Heritage and native title	One Lodged Aboriginal heritage site is slightly intersected by the clearing area. No Registered Aboriginal heritage or native title sites have been identified within the clearing footprint.

The proposal satisfies this criterion.

5.3 Criterion 3: The state of scientific knowledge of native vegetation within the region is adequate

Under consideration of Criterion 3, DWER reviews the current state of scientific knowledge within the clearing area and the wider region. Details of native vegetation in the region are contained in DBCA databases. Further understanding of vegetation within the region has been obtained through field observations.

The state of scientific knowledge of native vegetation within the region is adequate for the minor nature of the proposed clearing and acknowledgement the vegetation represents native species landscaping ranging from approximately 8 to 30 years of establishment. The proposal satisfies this criterion.

5.4 Criterion 4: Conditions will not be required to manage environmental impacts

Under consideration of Criterion 4, DWER assesses if the applicant has implicated the mitigation hierarchy when planning the clearing activity.

The hierarchy of avoid, minimise, reduce, and rehabilitate has been used while selecting the clearing footprint to mitigate the environmental impacts. The trench will be back-filled, and the cleared area will be restored to a similar standard as pre-works, to the satisfaction of Main Roads WA.

The clearing will not require offsets or any other conditions to manage effects on the environment.

The proposal satisfies this criterion.

6. Assessment against the 10 clearing principles

The clearing of vegetation in Western Australia is regulated by DWER and requires a permit under Part V of the EP Act, except when a project is assessed under Schedule 6 of the EP Act or is prescribed by regulation in the *Environmental Protection (Clearing Native Vegetation) Regulations 2004*.

In deciding about a clearing permit application under section 510 of the EP Act, the CEO of DWER must consider the clearing principles contained in Schedule 5 of the EP Act so far as they are relevant to the matter under consideration. The ten clearing principles aim to ensure that potential impacts resulting from the removal of native vegetation can be assessed holistically.

An assessment of the proposed clearing against the ten clearing principles, outlined in Schedule 5 of the EP Act, has been undertaken and presented in Table 6. The assessment was undertaken with reference to DWER guideline A guide to the assessment of applications to clear native vegetation under Part V Division 2 of the Environmental Protection Act 1986 (DWER 2014).

This assessment concluded the proposed clearing is not at or unlikely to be at variance to the clearing principles.

Clearing principle	Assessment of impacts	Outcome
(a) Native vegetation should not be cleared if it comprises a high level of biological diversity	The clearing footprint is located within the buffers of the Banksia Woodlands of the Swan Coastal Plain Threatened Ecological Community (Endangered), as presented in Figure 2. The vegetation within the clearing footprint was identified as landscaping and hence does not represent vegetation of this threatened ecological community.	The proposed clearing is unlikely to be at variance to this principle
	The <i>Dandjoo</i> (DBCA) database identified 259 flora taxa previously recorded within a 10 km radius of the clearing footprint. This comprised 128 dicots, 98 algae, 29 monocots, three mosses, and one fern.	
	The Dandjoo (DBCA) database did not identify any significant flora taxa previously recorded within 10 km of the clearing footprint. The PMST search identified 11 significant flora taxa as likely or possible to occur in the clearing footprint:	
	- Synaphea sp. Fairbridge Farm (D.Papenfus 696) - Critically Endangered	
	- Andersonia gracilis - Endangered	
	 Banksia mimica – Endangered 	
	 Caladenia huegelii – Endangered 	
	 Diuris purdiei – Endangered 	
	- Drakaea elastica - Endangered	
	 Macarthuria keigheryi – Endangered 	
	- Thelymitra stellata - Endangered	
	 Anigozanthos viridis subsp. terraspectans – Vulnerable 	
	 Diuris micrantha – Vulnerable 	
	- Drakaea micrantha - Vulnerable	
	The site visit did not identify any significant flora within the clearing footprint.	
	The Dandjoo (DBCA) database identified 50 fauna taxa previously recorded within a 10 km radius of the clearing footprint. This comprised 30 birds, 11 invertebrates, and nine reptiles.	
	The Dandjoo (DBCA) database did not identify any significant fauna taxa previously recorded within 10 km of the clearing footprint. The PMST search identified 13 significant fauna taxa as known, likely or possible to occur within the clearing footprint:	
	 Curlew Sandpiper (Calidris ferruginiea) – Critically Endangered and Migratory 	
	 Douglas' Broad-headed Bee (Hesperocolletes douglasi) – Critically Endangered 	
	 Eastern Curlew (Numenius madagascariensis) – Critically Endangered and Migratory 	
	 Western Ringtail Possum (Pseudocheirus occidentalis) – Critically Endangered 	
	 Woylie (Bettongia penicillata ogilbyi) – Endangered 	
	 Australasian Bittern (Botaurus poiciloptilus) – Endangered 	
	 Australian Painted Snipe (Rostratula australis) – Endangered 	
	 Common Greenshank (Tringa nebularia) – Endangered and Migratory 	
	 Carnaby's Black Cockatoo (Zando latirostris) – Endangered 	

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Clearing principle	Assessment of impacts Outcome
	ndpiper (Calidris acuminata) – Vulnerable and Migratory
	 Forest Red-tailed Black Cockatoo (Calyptorhynchus banksii naso) – Vulnerable
	Chuditch (Dasyurus geoffroii) – Vulnerable
	Malleefowl (<i>Leipoa ocellata</i>) – Vulnerable
	The species identified as known to occur are the Curlew Sandpiper, Woylie, Australasian Bittern, Australian Painted Snipe, Common Greenshank, Carnaby's Black Cockatoo, Sharp-tailed Sandpiper, Forest Red-tailed Black Cockatoo, and Chuditch. All of these taxa are highly mobile with large home ranges and are not restricted to the proposed clearing area.
	Carnaby's Cockatoos were observed during the site visit flying over the clearing footprint. There was evidence of Black Cockatoo foraging on cones of Pinus species. Banksias in the area were fruiting and are another known food source for Black Cockatoos. No potential Black Cockatoo nesting trees were present and there was no secondary evidence of roosting. There was no other evidence of faunal use for other species (e.g. scats, diggings).
(b) Native vegetation should not be cleared if it comprises	database did not identify any significant fauna taxa previously recorded within 10 km of the PMST search identified 13 significant fauna taxa as known, likely or possible to occur within
the whole of a part of, or is	
necessary for the maintenance of a significant	 Curlew Sandpiper (Calidris ferruginiea) – Critically Endangered and Migratory
habitat for fauna indigenous	 Douglas' Broad-headed Bee (Hesperocolletes douglasi) – Critically Endangered
to Western Australia.	 Eastern Curlew (Numenius madagascariensis) – Critically Endangered and Migratory
	 Western Ringtail Possum (Pseudocheirus occidentalis) – Critically Endangered
	 Woylie (Bettongia penicillata ogilbyi) – Endangered
	 Australasian Bittern (Botaurus poiciloptilus) – Endangered
	 Australian Painted Snipe (Rostratula australis) – Endangered
	 Common Greenshank (Tringa nebularia) – Endangered and Migratory
	 Carnaby's Black Cockatoo (Zando latirostris) – Endangered
	 Sharp-tailed Sandpiper (Calidris acuminata) – Vulnerable and Migratory
	 Forest Red-tailed Black Cockatoo (Calyptorhynchus banksii naso) – Vulnerable
	Chuditch (Dasyurus geoffroii) – Vulnerable
	Malleefowl (<i>Leipoa ocellata</i>) – Vulnerable
	The species identified as known to occur are the Curlew Sandpiper, Woylie, Australasian Bittern, Australian Painted Snipe, Common Greenshank, Carnaby's Black Cockatoo, Sharp-tailed Sandpiper, Forest Red-tailed Black Cockatoo, and Chuditch. All of these taxa are highly mobile with large home ranges and are not restricted to the
	Carnaby's Cockatoos were observed during the site visit flying over the clearing tootprint. There was evidence of Black Cockatoo foraging on cones of Pinus species. Banksias in the area were fruiting and are another known food source for Black Cockatoos. No potential Black Cockatoo nesting trees were present and there was no secondary evidence of roosting. There was no other evidence of faunal use for other species (e.g. scats,
	diggings).

Clearing principle	Assessment of impacts	Outcome
(c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of rare	The Dandjoo (DBCA) database did not identify any significant flora taxa previously recorded within 10 km of the clearing footprint. The PMST search identified 11 significant (rare) flora taxa as likely or possible to occur in the clearing footprint:	The proposed clearing is unlikely to be at variance to this principle.
flora	 Synaphea sp. Fairbridge Farm (D.Papentus 696) – Critically Endangered Andersonia gracilis – Endangered 	
	 Banksia mimica – Endangered 	
	Caladenia huegelii – Endangered	
	Diuris purdiei – Endangered Drakapa alastira – Endangered	
	Macarthuria keigheryi – Endangered	
	 Thelymitra stellata – Endangered 	
	 Anigozanthos viridis subsp. terraspectans – Vulnerable 	
	 Diuris micrantha – Vulnerable 	
	 Drakaea micrantha – Vulnerable 	
	The site visit did not identify any significant flora within the clearing footprint, nor are any expected given the clearing footprint is associated with roadside landscaping vegetation.	
(d) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of a threatened ecological community	The clearing footprint is located within the buffers of the Banksia Woodlands of the Swan Coastal Plain Threatened Ecological Community (Endangered). The vegetation within the clearing footprint was identified as landscaping and hence does not represent vegetation of this threatened ecological community.	The proposed clearing is not at variance to this principle
(e) Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared	Broad-scale (1:250,000) pre-European vegetation mapping (Beard 1975) identifies vegetation association 1001 (Medium very sparse woodland; jarrah, with low woodland; banksia & casuarina) as present across the entire clearing footprint. This association is moderately represented in the region, with 22.05% of the pre-European vegetation extent remaining across State, IBRA Region and IBRA Subregion extents, 2.65% remaining within the City of Swan. The clearing in association 1001 will be less than 0.001% of the remaining extent.	The proposed clearing is unlikely to be at variance to this principle
	Broad-scale (1:250,000) mapping of pre-1750 vegetation complexes was undertaken by Heddle (1980) and indicates the clearing footprint is within the Bassendean Complex-Central and South. This complex is moderately represented within the region with 24.49% of the pre-1750 vegetation extent remaining across State, IBRA Region and IBRA Subregion extents. The clearing will be less than 0.001% of the remaining extent within the Bassendean Complex-Central and South. DataWA (DPIRD-005) indicates the vegetation associated with the clearing footprint is not mapped as native	
	Vegetation.	
(f) Native vegetation should not be cleared if it is growing in, or in association with, an	The clearing footprint avoids watercourses or associated vegetation. There will be no clearing of any vegetation associated with watercourses.	The proposed clearing is not at variance to this principle
	GHD Public Transport Authority 12610324 Native Vegetation Clearing Permit 18	

Clearing principle	Assessment of impacts	Outcome
environment associated with a watercourse or wetland		
(g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation	The underlying soil type is primarily fine to medium-grained sand (GoWA 2024). There are no acid sulphate soils in the clearing footprint (CSIRO 2020). The small scale of linear clearing is unlikely to result in appreciable land degradation or be at variance with this principle.	The proposed clearing is unlikely to be at variance to this principle
(h) Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area	The clearing footprint does not intersect any conservation areas, and none occur within three kilometres (GoWA 2024). The proposed clearing is not at variance to this principle.	Not at variance to this principle.
(i) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water	No Internationally (Ramsar) or Nationally Important Wetlands intersect the clearing footprint. The clearing footprint does not intersect any surface waters or rivers proclaimed under the RiWI Act (GoWA 2024). The clearing will not disturb or interrupt natural drainage and surface runoff patterns. Similarly the scale and nature of the clearing is unlikely to impact on groundwater levels or quality. The proposed clearing is not at variance to this principle.	Not at variance to this principle.
(j) Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding	The underlying soil type is primarily fine to medium-grained sand (GoWA 2024). The small scale of linear clearing, primarily within the batters for Reid Highway,is not likely to cause, or exacerbate, the incidence or intensity of flooding and is not at variance with this principle.	Not at variance to this principle.

7. References

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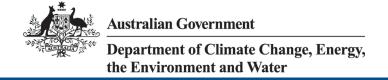
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Appendix A

Protected Matters Search Tool Results



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. Please see the caveat for interpretation of information provided here.

Report created: 10-Jul-2024

Summary

Details

Matters of NES

Other Matters Protected by the EPBC Act

Extra Information

Caveat

Acknowledgements

Summary

Matters of National Environment Significance

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

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance (Ramsar	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	6
Listed Threatened Species:	63
Listed Migratory Species:	35

Other Matters Protected by the EPBC Act

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

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

A <u>permit</u> may be required for activities in or on a Commonwealth area that may affect a member of a listed threatened species or ecological community, a member of a listed migratory species, whales and other cetaceans, or a member of a listed marine species.

Commonwealth Lands:	153
Commonwealth Heritage Places:	2
Listed Marine Species:	40
Whales and Other Cetaceans:	None
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks:	None
Habitat Critical to the Survival of Marine Turtles:	None

Extra Information

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

State and Territory Reserves:	13
Regional Forest Agreements:	None
Nationally Important Wetlands:	5
EPBC Act Referrals:	52
Key Ecological Features (Marine):	None
Biologically Important Areas:	1
Bioregional Assessments:	None
Geological and Bioregional Assessments:	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.

Status of Vulnerable, Disallowed and Ineligible are not MNES under the EPBC Act.

(Community Name	Threatened Category	Presence Text	Buffer Status
	Banksia Woodlands of the Swan Coastal Plain ecological community	Endangered	Community likely to occur within area	In feature area
_	Clay Pans of the Swan Coastal Plain	Critically Endangered	Community likely to occur within area	In buffer area only
	Empodisma peatlands of southwestern Australia	Endangered	Community may occu within area	rIn buffer area only
1	Honeymyrtle shrubland on limestone ridges of the Swan Coastal Plain Bioregion	Critically Endangered	Community may occu within area	rIn buffer area only
	Subtropical and Temperate Coastal Saltmarsh	Vulnerable	Community likely to occur within area	In buffer area only
1	Tuart (Eucalyptus gomphocephala) Woodlands and Forests of the Swan Coastal Plain ecological community	Critically Endangered	Community likely to occur within area	In feature area

Listed Threatened Species

[Resource Information]

Status of Conservation Dependent and Extinct are not MNES under the EPBC Act. Number is the current name ID.

Scientific Name	Threatened Category	Presence Text	Buffer Status
BIRD			
Botaurus poiciloptilus			
Australasian Bittern [1001]	Endangered	Species or species habitat known to occur within area	In feature area
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Calidris canutus	Threatened Category	T TESETICE TEXT	Duller Status
Red Knot, Knot [855]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Calidris tenuirostris Great Knot [862]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
Calyptorhynchus banksii naso Forest Red-tailed Black-Cockatoo, Karrak [67034]	Vulnerab l e	Species or species habitat known to occur within area	In feature area
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerab l e	Species or species habitat likely to occur within area	In buffer area only
<u>Diomedea amsterdamensis</u> Amsterdam Albatross [64405]	Endangered	Species or species habitat may occur within area	In buffer area only
<u>Diomedea epomophora</u> Southern Royal Albatross [89221]	Vulnerab l e	Species or species habitat may occur within area	In buffer area only
<u>Diomedea exulans</u> Wandering Albatross [89223]	Vulnerab l e	Species or species habitat likely to occur within area	In buffer area only
Leipoa ocellata Malleefowl [934]	Vulnerab l e	Species or species habitat likely to occur within area	In feature area
Limosa lapponica menzbieri Northern Siberian Bar-tailed Godwit, Russkoye Bar-tailed Godwit [86432]	Endangered	Species or species habitat known to occur within area	In buffer area only
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat likely to occur within area	In feature area
Pachyptila turtur subantarctica Fairy Prion (southern) [64445]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Phaethon rubricauda westralis Red-tailed Tropicbird (Indian Ocean), Indian Ocean Red-tailed Tropicbird [91824]	Endangered	Species or species habitat may occur within area	In buffer area only
Rostratula australis Australian Painted Snipe [77037]	Endangered	Species or species habitat known to occur within area	In feature area
Sternula nereis nereis Australian Fairy Tern [82950]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
Thalassarche cauta Shy Albatross [89224]	Endangered	Species or species habitat may occur within area	In buffer area only
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Thalassarche steadi White-capped Albatross [64462]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Tringa nebularia Common Greenshank, Greenshank [832]	Endangered	Species or species habitat known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Zanda baudinii listed as Calyptorhynchus		T TOSCHOO TOXE	Duller Otatus
Baudin's Cockatoo, Baudin's Black-Cockatoo, Long-billed Black-cockatoo [87736]	Endangered	Species or species habitat likely to occur within area	In buffer area only
Zanda latirostris listed as Calyptorhynchu Carnaby's Black Cockatoo, Short-billed Black-cockatoo [87737]	<u>is latirostris</u> Endangered	Breeding known to occur within area	In feature area
INSECT			
Hesperocolletes douglasi Douglas' Broad-headed Bee, Rottnest Bee [66734]	Critically Endangered	Species or species habitat may occur within area	In feature area
MAMMAL			
Bettongia penicillata ogilbyi Woylie [66844]	Endangered	Species or species habitat known to occur within area	In feature area
Dasyurus geoffroii Chuditch, Western Quoll [330]	Vulnerable	Species or species habitat known to occur within area	In feature area
Macroderma gigas Ghost Bat [174]	Vulnerab l e	Species or species habitat may occur within area	In buffer area only
Pseudocheirus occidentalis Western Ringtail Possum, Ngwayir, Womp, Woder, Ngoor, Ngoolangit [25911]	Critically Endangered	Species or species habitat likely to occur within area	In feature area
OTHER			
Westralunio carteri			
Carter's Freshwater Mussel, Freshwater Mussel [86266]	Vulnerable	Species or species habitat may occur within area	In buffer area only
PLANT			
Andersonia gracilis			
Slender Andersonia [14470]	Endangered	Species or species habitat likely to occur within area	In feature area
Anigozanthos viridis subsp. terraspectans Dwarf Green Kangaroo Paw [3435]	S Vulnerable	Species or species habitat may occur within area	In feature area
Banksia mimica Summer Honeypot [82765]	Endangered	Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Caladenia huegelii King Spider-orchid, Grand Spider-orchid, Rusty Spider-orchid [7309]	Endangered	Species or species habitat likely to occur within area	In feature area
Calytrix breviseta subsp. breviseta Swamp Starflower [23879]	Endangered	Species or species habitat may occur within area	In buffer area only
Chamelaucium Iullfitzii listed as Chamela Gingin Wax [92777]	ucium sp. Gingin (N.G.Ma Endangered (listed as Chamelaucium sp. Gingin	Species or species habitat may occur within area	In buffer area only
Conospermum undulatum Wavy-leaved Smokebush [24435]	Vulnerab l e	Species or species habitat likely to occur within area	In buffer area only
Diplolaena andrewsii [6601]	Endangered	Species or species habitat may occur within area	In buffer area only
Diuris drummondii Tall Donkey Orchid [4365]	Vulnerab l e	Species or species habitat likely to occur within area	In buffer area only
Diuris micrantha Dwarf Bee-orchid [55082]	Vulnerab l e	Species or species habitat likely to occur within area	In feature area
<u>Diuris purdiei</u> Purdie's Donkey-orchid [12950]	Endangered	Species or species habitat likely to occur within area	In feature area
Drakaea elastica Glossy-leafed Hammer Orchid, Glossy- leaved Hammer Orchid, Warty Hammer Orchid [16753]	Endangered	Species or species habitat likely to occur within area	In feature area
<u>Drakaea micrantha</u> Dwarf Hammer-orchid [56755]	Vulnerab l e	Species or species habitat likely to occur within area	In feature area
Eleocharis keigheryi Keighery's Eleocharis [64893]	Vulnerab l e	Species or species habitat likely to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Eremophila glabra subsp. chlorella [84927]	Endangered	Species or species habitat may occur within area	In buffer area only
Eucalyptus argutifolia Yanchep Mallee, Wabling Hill Mallee [24263]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Eucalyptus x balanites Cadda Road Mallee, Cadda Mallee [87816]	Endangered	Species or species habitat may occur within area	In buffer area only
Grevillea curviloba subsp. curviloba Curved-leaf Grevillea [64908]	Endangered	Species or species habitat may occur within area	In buffer area only
Grevillea curviloba subsp. incurva Narrow curved-leaf Grevillea [64909]	Endangered	Species or species habitat may occur within area	In buffer area only
Macarthuria keigheryi Keighery's Macarthuria [64930]	Endangered	Species or species habitat may occur within area	In feature area
Morelotia australiensis listed as Tetraria Southern Tetraria [92784]	<u>australiensis</u> Vulnerable	Species or species habitat may occur within area	In buffer area only
Synaphea sp. Fairbridge Farm (D.Paper	nfus 696)		
Selena's Synaphea [82881]	Critically Endangered	Species or species habitat likely to occur within area	In feature area
Thelymitra dedmaniarum Cinnamon Sun Orchid [65105]	Endangered	Species or species habitat may occur within area	In buffer area only
Thelymitra stellata Star Sun-orchid [7060]	Endangered	Species or species habitat likely to occur within area	In feature area
Trithuria occidentalis Swan Hydatella [42224]	Endangered	Species or species habitat likely to occur within area	In buffer area only
REPTILE			

Scientific Name	Threatened Category	Presence Text	Buffer Status
Caretta caretta Loggerhead Turtle [1763]	Endangered	Species or species habitat known to occur within area	In buffer area only
<u>Chelonia mydas</u> Green Turtle [1765]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
<u>Dermochelys coriacea</u> Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat known to occur within area	In buffer area only
Natator depressus Flatback Turtle [59257]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
SHARK			
Pristis pristis Freshwater Sawfish, Largetooth Sawfish, River Sawfish, Leichhardt's Sawfish, Northern Sawfish [60756]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Sphyrna lewini Scalloped Hammerhead [85267]	Conservation Dependent	Species or species habitat likely to occur within area	In buffer area only
Listed Migratory Species		[Res	source Information]
Scientific Name	Threatened Category	Presence Text	Buffer Status
Migratory Marine Birds			
Anous stolidus Common Noddy [825]		Species or species habitat likely to occur within area	In buffer area only
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area	In feature area
<u>Diomedea amsterdamensis</u> Amsterdam Albatross [64405]	Endangered	Species or species habitat may occur within area	In buffer area only
<u>Diomedea epomophora</u> Southern Royal Albatross [89221]	Vulnerable	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
<u>Diomedea exulans</u> Wandering Albatross [89223]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In buffer area only
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Sterna dougallii Roseate Tern [817]		Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Thalassarche cauta Shy Albatross [89224]	Endangered	Species or species habitat may occur within area	In buffer area only
Thalassarche impavida Campbell Albatross, Campbell Black- browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Thalassarche steadi White-capped Albatross [64462]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Migratory Marine Species			
Caretta caretta Loggerhead Turtle [1763]	Endangered	Species or species habitat known to occur within area	In buffer area only
Chelonia mydas Green Turtle [1765]	Vulnerable	Species or species habitat known to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Dermochelys coriacea			
Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat known to occur within area	In buffer area only
Lamna nasus Porbeagle, Mackerel Shark [83288]		Species or species habitat may occur within area	In buffer area only
Mobula alfredi as Manta alfredi Reef Manta Ray, Coastal Manta Ray [90033]		Species or species habitat may occur within area	In buffer area only
Mobula birostris as Manta birostris Giant Manta Ray [90034]		Species or species habitat may occur within area	In buffer area only
Natator depressus Flatback Turtle [59257]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
Pristis pristis Freshwater Sawfish, Largetooth Sawfish, River Sawfish, Leichhardt's Sawfish, Northern Sawfish [60756]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Migratory Terrestrial Species			
Motacilla cinerea Grey Wagtail [642]		Species or species habitat may occur within area	In feature area
Migratory Wetlands Species			
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat known to occur within area	In feature area
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat known to occur within area	In feature area
Calidris canutus Red Knot, Knot [855]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat known to occur within area	In feature area
Calidris ruficollis Red-necked Stint [860]		Species or species habitat known to occur within area	In buffer area only
Calidris tenuirostris Great Knot [862]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
<u>Charadrius leschenaultii</u> Greater Sand Plover, Large Sand Plover [877]	Vulnerab l e	Species or species habitat likely to occur within area	In buffer area only
<u>Limosa lapponica</u> Bar-tailed Godwit [844]		Species or species habitat known to occur within area	In buffer area only
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat likely to occur within area	In feature area
Pandion haliaetus Osprey [952]		Breeding known to occur within area	In buffer area only
Tringa glareola Wood Sandpiper [829]		Species or species habitat known to occur within area	In buffer area only
Tringa nebularia Common Greenshank, Greenshank [832]	Endangered	Species or species habitat known to occur within area	In feature area
<u>Tringa stagnatilis</u> Marsh Sandpiper, Little Greenshank [833]		Species or species habitat known to occur within area	In buffer area only

Other Matters Protected by the EPBC Act

Commonwealth Lands [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.

Commonwealth Land Name Defence	State	Buffer Status
Defence - HOLDFAST BARRACKS [50212]	WA	In buffer area only
Defence - HOLDFAST BARRACKS [50213]	WA	In buffer area only
Defence - HOLDFAST BARRACKS [50211]	WA	In buffer area only
Defence - HOLDFAST BARRACKS [50226]	WA	In buffer area only
Defence - HOLDFAST BARRACKS [50227]	WA	In buffer area only
Defence - HOLDFAST BARRACKS [50228]	WA	In buffer area only
Defence - HOLDFAST BARRACKS [50225]	WA	In buffer area only
Defence - PALMER BARRACKS - SOUTH GUILDFORD [50177]	WA	In buffer area only
Defence - RAAF CAVERSHAM [50003]	WA	In buffer area only
Defence - SWAN BARRACKS [50171]	WA	In buffer area only
Unknown		
Commonwealth Land - [51127]	WA	In buffer area only
Commonwealth Land - [51331]	WA	In buffer area only
Commonwealth Land - [51188]	WA	In buffer area only
Commonwealth Land - [51189]	WA	In buffer area only
Commonwealth Land - [50699]	WA	In buffer area only
Commonwealth Land - [50698]	WA	In buffer area only
Commonwealth Land - [51185]	WA	In buffer area only
Commonwealth Land - [51184]	WA	In buffer area only
Commonwealth Land - [51424]	WA	In buffer area only
Commonwealth Land - [50695]	WA	In buffer area only
Commonwealth Land - [51162]	WA	In buffer area only
Commonwealth Land - [50829]	WA	In buffer area only

Commonwealth Land Name	State	Buffer Status
Commonwealth Land - [50828]	WA	In buffer area only
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Commonwealth Land - [50827]	WA	In buffer area only
Commonwealth Land - [50739]	WA	In buffer area only
Commonwealth Land - [50738]	WA	In buffer area only
Commonwealth Land - [50757]	WA	In buffer area only
Commonwealth Land - [50826]	WA	In buffer area only
Commonwealth Land - [50758]	WA	In buffer area only
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Commonwealth Land - [50823]	WA	In buffer area only
Commonwealth Land - [50759]	WA	In buffer area only
Commonwealth Land - [50822]	WA	In buffer area only
Commonwealth Land - [30022]	VVA	in buller area only
Commonwealth Land - [50752]	WA	In buffer area only
Commonwealth Land - [50312]	WA	In buffer area only
Commonwedian Eand [600 12]	***	in bandrarda driiy
Commonwealth Land - [51439]	WA	In buffer area only
Commonwealth Land - [51903]	WA	In buffer area only
Commence of the Lord (F4000)	10/0	la huffan ana a anh
Commonwealth Land - [51902]	WA	In buffer area only
Commonwealth Land - [51906]	WA	In buffer area only
Commonwealth Land - [51904]	WA	In buffer area only
Commonwealth Land - [51129]	WA	In buffer area only
Commonwealth Land - [50702]	WA	In buffer area only
Commonwealth Land - [50703]	WA	In buffer area only
Commonwealth Land - [50717]	WA	In buffer area only
Commonwealth Land - [50706]	WA	In buffer area only
Commonwealth Land - [50704]	WA	In buffer area only
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Commonwealth Land - [50700]	WA	In buffer area only
Commonwealth Land - [50701]	WA	In buffer area only
Commonwealth Land - [50812]	WA	In buffer area only
SSISINISAINI EANA [00012]		Janor area orny
Commonwealth Land - [50846]	WA	In buffer area only

Commonwealth Land Name	State	Buffer Status
Commonwealth Land - [50847]	WA	In buffer area only
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Commonwealth Land - [50692]	WA	In buffer area only
Commonwealth Land [50945]	WA	In huffer area only
Commonwealth Land - [50845]	VVA	In buffer area only
Commonwealth Land - [50842]	WA	In buffer area only
Commonwealth Land - [50853]	WA	In buffer area only
Commonwealth Land - [51154]	WA	In buffer area only
Oommonwealth Land - [01104]	VVA	in build area only
Commonwealth Land - [50841]	WA	In buffer area only
Commonwealth Land - [50840]	WA	In buffer area only
Commonwealth Land - [51203]	WA	In buffer area only
Commonwealth Land - [51157]	WA	In buffer area only
0	14/4	1 1 66
Commonwealth Land - [50765]	WA	In buffer area only
Commonwealth Land - [50767]	WA	In buffer area only
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Commonwealth Land - [50768]	WA	In buffer area only
Commonwealth Land - [50769]	WA	In buffer erec only
Commonwealth Land - [50709]	VVA	In buffer area only
Commonwealth Land - [50753]	WA	In buffer area only
Commonwealth Land - [50719]	WA	In buffer area only
Commonwealth Land - [50715]	WA	In buffer area only
Commonwealth Earld [007 10]	V V / V	in build area only
Commonwealth Land - [50714]	WA	In buffer area only
Commonwealth Land - [50839]	WA	In buffer area only
Commonwealth Land - [51178]	WA	In buffer area only
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Commonwealth Land - [51145]	WA	In buffer area only
Commonwoolth Land [51141]	WA	In buffer area only
Commonwealth Land - [51141]	VVA	in buller area only
Commonwealth Land - [51238]	WA	In buffer area only
Commonwealth Land - [50728]	WA	In buffer area only
Commonwealth Land - [50724]	WA	In buffer area only
Commonwealth Earlie [COTZ 1]	**/ 1	Sanor area orny
Commonwealth Land - [50726]	WA	In buffer area only
O	14/4	1. 1. 66
Commonwealth Land - [50727]	WA	In buffer area only

Commonwealth Land Name	State	Buffer Status
Commonwealth Land - [50720]	WA	In buffer area only
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Commonwealth Land - [50723]	WA	In buffer area only
Commonwealth Land - [50748]	WA	In buffer area only
Commonwealth Land - [50808]	WA	In buffer area only
Commonwealth Land - [30000]	VVA	in buller area only
Commonwealth Land - [50696]	WA	In buffer area only
Commonwealth Land - [50697]	WA	In buffer area only
Commonwealth Land - [50746]	WA	In buffer area only
Commonwealth Land - [50747]	WA	In buffer area only
Commonwealth Land - [51161]	WA	In buffer area only
Commonwealth Land - [51186]	WA	In buffer area only
Commonwealth Land - [51187]	WA	In buffer area only
Commonwealth Land - [51515]	WA	In buffer area only
Commonwealth Land - [50773]	WA	In buffer area only
Commonwealth Land - [50716]	WA	In buffer area only
Commonwealth Land - [50760]	WA	In buffer area only
Commonwealth Land - [51138]	WA	In buffer area only
Commonwealth Land - [51139]	WA	In buffer area only
Commonwealth Land - [51190]	WA	In buffer area only
Commonwealth Land - [51191]	WA	In buffer area only
Commonwealth Land - [51194]	WA	In buffer area only
Commonwealth Land - [51195]	WA	In buffer area only
Commonwealth Land - [51136]	WA	In buffer area only
Commonwealth Land - [51510]	WA	In buffer area only
Commonwealth Land - [51133]	WA	In buffer area only
Commonwealth Land - [50863]	WA	In buffer area only
Commonwealth Land - [51135]	WA	In buffer area only
Commonwealth Land - [51132]	WA	In buffer area only

Commonwealth Land Name	State	Buffer Status
Commonwealth Land - [51507]	WA	In buffer area only
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Commonwealth Land - [51506]	WA	In buffer area only
Commonwealth Land [51500]	WA	In huffer area only
Commonwealth Land - [51509]	VVA	In buffer area only
Commonwealth Land - [51508]	WA	In buffer area only
Commonwealth Land - [51134]	WA	In buffer area only
Commonwealth Land - [51137]	WA	In buffer area only
Oommonwealth Land - [01107]	VVA	in build area only
Commonwealth Land - [51502]	WA	In buffer area only
Commonwealth Land - [51420]	WA	In buffer area only
Commonwealth Land - [50691]	WA	In buffer area only
Commonwealth Land - [51181]	WA	In buffer area only
Commence of the Lond (FOCO)	10/0	la buffer and and
Commonwealth Land - [50693]	WA	In buffer area only
Commonwealth Land - [51505]	WA	In buffer area only
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Commonwealth Land - [51503]	WA	In buffer area only
Commonwealth Land - [51504]	WA	In buffer area only
Commonwealth Land - [31304]	VVA	in buller area offig
Commonwealth Land - [51166]	WA	In buffer area only
Commonwealth Land - [51167]	WA	In buffer area only
Commonwealth Land - [51164]	WA	In buffer area only
Commonwealth Earle [61161]	***	in bandrarea emy
Commonwealth Land - [51168]	WA	In buffer area only
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Commonwealth Land - [51169]	WA	In buffer area only
Commonwealth Land - [51423]	WA	In buffer area only
		•
Commonwealth Land - [51422]	WA	In buffer area only
Commonwealth Land - [50801]	WA	In buffer area only
Commonwealth Land - [30001]	VVA	in buller area only
Commonwealth Land - [51182]	WA	In buffer area only
Commonwealth Land - [50803]	WA	In buffer area only
Commonwealth Land - [51183]	WA	In buffer area only
		Janor area orny
Commonwealth Land - [50770]	WA	In buffer area only
Commonwealth Land (50774)	10/0	la buffer ou l
Commonwealth Land - [50771]	WA	In buffer area only

Commonwealth Land Name	State	Buffer Status
Commonwealth Land - [50778]	WA	In buffer area only
Commonwealth Land - [50772]	WA	In buffer area only
Commonwealth Land - [50775]	WA	In buffer area only
Commonwealth Land - [50776]	WA	In buffer area only
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Commonwealth Land - [50777]	WA	In buffer area only
Commonwealth Land - [50806]	WA	In buffer area only
Commonwealth Land - [50804]	WA	In buffer area only
Commonwealth Land - [50807]	WA	In buffer area only
Commonwealth Land - [51418]	WA	In buffer area only
Commonwealth Land - [51419]	WA	In buffer area only
Commonwealth Land - [50834]	WA	In buffer area only
Commonwealth Land - [51140]	WA	In buffer area only
Commonwealth Land - [50805]	WA	In buffer area only
Commonwealth Land - [50783]	WA	In buffer area only
Commonwealth Land - [50694]	WA	In buffer area only
Commonwealth Land - [51175]	WA	In buffer area only
Commonwealth Land - [51172]	WA	In buffer area only
Commonwealth Land - [51170]	WA	In buffer area only
Commonwealth Land - [51173]	WA	In buffer area only
Commonwealth Land - [51176]	WA	In buffer area only
Commonwealth Land - [51171]	WA	In buffer area only
Commonwealth Land - [51174]	WA	In buffer area only
Commonwealth Land - [51177]	WA	In buffer area only
Commonwealth Heritage Places	_ [D	esource Information 1

Commonwealth Heritage Places			[Resource Information]
Name	State	Status	Buffer Status
Historic			
Inglewood Post Office	WA	Listed place	In buffer area only
Perth General Post Office	WA	Listed place	In buffer area only

Listed Marine Species			source Information]
Scientific Name	Threatened Category	Presence Text	Buffer Status
Bird			
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat known to occur within area	In feature area
Anous stolidus Common Noddy [825]		Species or species habitat likely to occur within area	In buffer area only
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area overfly marine area	In feature area
Bubulcus ibis as Ardea ibis Cattle Egret [66521]		Species or species habitat may occur within area overfly marine area	In feature area
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat known to occur within area	In feature area
Calidris canutus Red Knot, Knot [855]	Vulnerable	Species or species habitat known to occur within area overfly marine area	In buffer area only
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area overfly marine area	In feature area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat known to occur within area overfly marine area	In feature area
Calidris ruficollis Red-necked Stint [860]		Species or species habitat known to occur within area overfly marine area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
<u>Calidris tenuirostris</u> Great Knot [862]	Vulnerable	Species or species habitat known to occur within area overfly marine area	In buffer area only
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Charadrius ruficapillus Red-capped Plover [881]		Species or species habitat known to occur within area overfly marine area	In buffer area only
<u>Diomedea amsterdamensis</u> Amsterdam Albatross [64405]	Endangered	Species or species habitat may occur within area	In buffer area only
<u>Diomedea epomophora</u> Southern Royal Albatross [89221]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<u>Diomedea exulans</u> Wandering Albatross [89223]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species habitat known to occur within area	In feature area
Himantopus himantopus Pied Stilt, Black-winged Stilt [870]		Species or species habitat known to occur within area overfly marine area	In buffer area only
Limosa Iapponica Bar-tailed Godwit [844]		Species or species habitat known to occur within area	In buffer area only
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Macronectes halli	,		
Northern Giant Petrel [1061]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Merops ornatus			
Rainbow Bee-eater [670]		Species or species habitat may occur within area overfly marine area	In feature area
Motacilla cinerea			
Grey Wagtail [642]		Species or species habitat may occur within area overfly marine area	In feature area
Numenius madagascariensis			
Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat likely to occur within area	In feature area
Pachyptila turtur			
Fairy Prion [1066]		Species or species habitat likely to occur within area	In buffer area only
Pandion haliaetus			
Osprey [952]		Breeding known to occur within area	In buffer area only
Recurvirostra novaehollandiae			
Red-necked Avocet [871]		Species or species habitat known to occur within area overfly marine area	In buffer area only
Rostratula australis as Rostratula bengh	alensis (sensu lato)		
Australian Painted Snipe [77037]	Endangered	Species or species habitat known to occur within area overfly marine area	In feature area
Sterna dougallii			
Roseate Tern [817]		Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Thalassarche cauta			
Shy Albatross [89224]	Endangered	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Thalassarche impavida			
Campbell Albatross, Campbell Black- browed Albatross [64459]	Vulnerab l e	Species or species habitat may occur within area	In buffer area only
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Thalassarche steadi White-capped Albatross [64462]	Vulnerab l e	Species or species habitat may occur within area	In buffer area only
Thinornis cucullatus as Thinornis rubricol Hooded Plover, Hooded Dotterel [87735]		Species or species habitat likely to occur within area overfly marine area	In buffer area only
Tringa glareola			
Wood Sandpiper [829]		Species or species habitat known to occur within area overfly marine area	In buffer area only
Tringa nebularia Common Greenshank, Greenshank [832]	Endangered	Species or species habitat known to occur within area overfly marine area	In feature area
Tringa stagnatilis Marsh Sandpiper, Little Greenshank [833]		Species or species habitat known to occur within area overfly marine area	In buffer area only
Reptile			
Caretta caretta			
Loggerhead Turtle [1763]	Endangered	Species or species habitat known to occur within area	In buffer area only
Chelonia mydas Green Turtle [1765]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
<u>Dermochelys coriacea</u> Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat known to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Natator depressus Flatback Turtle [59257]	Vulnerable	Species or species habitat known to occur within area	In buffer area only

Extra Information

State and Territory Reserves			[Resource Information]
Protected Area Name	Reserve Type	State	Buffer Status
Errina Road	Nature Reserve	WA	In buffer area only
Helena River	Management Area	WA	In buffer area only
Kings Park	Botanic Gardens	WA	In buffer area only
Swan River	Management Area	WA	In buffer area only
Unnamed WA31906	Nature Reserve	WA	In buffer area only
Unnamed WA36440	Management Area	WA	In buffer area only
Unnamed WA44853	Nature Reserve	WA	In buffer area only
Unnamed WA45772	5(1)(h) Reserve	WA	In buffer area only
Unnamed WA45773	5(1)(h) Reserve	WA	In buffer area only
Unnamed WA46756	Conservation Park	WA	In buffer area only
Unnamed WA50067	5(1)(h) Reserve	WA	In buffer area only
Unnamed WA50514	5(1)(h) Reserve	WA	In buffer area only
Unnamed WA52237	5(1)(h) Reserve	WA	In buffer area only

Nationally Important Wetlands		[Resource Information]
Wetland Name	State	Buffer Status
Herdsman Lake	WA	In buffer area only
Palmer Barracks, Guildford	WA	In buffer area only
Perth Airport Woodland Swamps	WA	In buffer area only
RAAF Caversham	WA	In buffer area only
Swan-Canning Estuary	WA	In buffer area only

EPBC Act Referrals			[Resou	rce Information]
Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Northern Terminal to Neerabup Terminal 330kV Transmission Line	2024/09799		Assessment	In buffer area only
Residential Subdivision development	2011/6040		Post-Approval	In buffer area only
Controlled action				
Airport & Freight Access Gateway	2010/5384	Controlled Action	Post-Approval	In buffer area only
East Landsdale Residential Development	2008/4676	Controlled Action	Post-Approval	In buffer area only
East Wanneroo Cell 9 residential subdivision - Lots 50,51,52,154 & 404	2010/5772	Controlled Action	Completed	In buffer area only
Erindale Road Development, Hamersley, WA	2018/8324	Controlled Action	Further Information Request	In buffer area only
Morley-Ellenbrook Rail Line Part 2, WA	2019/8546	Controlled Action	Post-Approval	In buffer area only
Natural Gas Pipeline Expansion	2006/2813	Controlled Action	Post-Approval	In buffer area only
Nava-1 Cable System	2001/510	Controlled Action	Completed	In buffer area only
Perth-Darwin National Highway alignment (Swan Valley Section), WA	2013/7042	Controlled Action	Post-Approval	In buffer area only
Primary school, residential development and open space, Lots 9000 Bottlebrush Drive, Kiara, WA	2013/7050	Controlled Action	Post-Approval	In buffer area only
Residential Development 822 Youle- Dean Road, Brabham, WA	2015/7458	Controlled Action	Post-Approval	In buffer area only
Sand Mining 70/915 Banksia Road, Wellard, WA	2015/7438	Controlled Action	Post-Approval	In buffer area only
Shenton Park Subdivision	2004/1479	Controlled Action	Completed	In buffer area only
To grade separate three intersections on Tonkin Highway, WA	2014/7385	Controlled Action	Post-Approval	In buffer area only
Not controlled action				
Brabham North residential development, Brabham, WA	2018/8380	Not Controlled Action	Completed	In buffer area only

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Not controlled action				
Cell 2 of Caversham Local Structure Plan	2012/6259	Not Controlled Action	Completed	In buffer area only
Construction of the Perth Stadium and associated infrastructure	2013/6740	Not Controlled Action	Completed	In buffer area only
Development Application 20 Kenhelm St Balcatta WA	2021/9037	Not Controlled Action	Completed	In buffer area only
Development of 39 (Lot 3000) Hardcastle Avenue, Landsdale, WA	2017/8100	Not Controlled Action	Completed	In buffer area only
Development of Crown Towers Five Star Quality Hotel	2012/6695	Not Controlled Action	Completed	In buffer area only
Ellenbrook Bus Rapid Transit Project, WA	2016/7732	Not Controlled Action	Completed	In buffer area only
Eradication of the European House Borer, Perth metropolitan area, WA	2009/5027	Not Controlled Action	Completed	In buffer area only
Forrestfield Airport Link, WA	2015/7399	Not Controlled Action	Completed	In buffer area only
Gnangara Road upgrade project, city of Swan, WA	2013/6966	Not Controlled Action	Completed	In buffer area only
GPO Building, 3 Forrest Place, Perth WA 6000	2017/8014	Not Controlled Action	Completed	In buffer area only
Improving rabbit biocontrol: releasing another strain of RHDV, sthrn two thirds of Australia	2015/7522	Not Controlled Action	Completed	In feature area
INDIGO Central Submarine Telecommunications Cable	2017/8127	Not Controlled Action	Completed	In buffer area only
Landsdale Primary School Development, WA	2015/7597	Not Controlled Action	Completed	In buffer area only
Landsdale Residential Subdivision Development	2011/6027	Not Controlled Action	Completed	In buffer area only
Lot 158 Landsdale Rd, Landsdale, WA	2012/6403	Not Controlled Action	Completed	In buffer area only
Lots 71 & 72 Queensway Rd, East Landsdale	2012/6541	Not Controlled Action	Completed	In buffer area only
Reid Highway/Malaga Drive interchange upgrade, City of Swan, WA	2013/6892	Not Controlled Action	Completed	In feature area
Reid Highway duplication project(Erindale Rd - Duffy Rd)WA	2013/7073	Not Controlled Action	Completed	In buffer area only

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Not controlled action Residential and commercial	2013/6982	Not Controlled	Completed	In buffer area
development, Lot 1981 Alexander Drive & Lot 152 Gnangara Road, Landsdale,	2013/0962	Action	Completed	only
Residential Development, 50 Lot 2 Driver Road, Darch, Western Australia	2020/8677	Not Controlled Action	Completed	In buffer area only
Residential development, Landsdale, WA	2013/6964	Not Controlled Action	Completed	In buffer area only
Residential development, Lot 14143 (16) Harford Way, Girrawheen, WA	2016/7819	Not Controlled Action	Completed	In buffer area only
Residential Development, Lot 500 Park Street, Brabham, WA	2019/8472	Not Controlled Action	Completed	In buffer area only
Residential development, Lot 55 Alexander Drive, Landsdale, WA	2013/6971	Not Controlled Action	Completed	In buffer area only
Residential Subdivision	2012/6410	Not Controlled Action	Completed	In buffer area only
Residential subdivision - lot 169 Kingsway Road, Landsdale WA	2012/6412	Not Controlled Action	Completed	In buffer area only
Residential subdivision - Lots 156 and 157 Landsdale Road Landsdale WA	2012/6407	Not Controlled Action	Completed	In buffer area only
Telstra PITC O3B Clearing Application	2011/6147	Not Controlled Action	Completed	In buffer area only
Tonkin Highway Upgrade, Guildford Road to Great Eastern Highway, WA	2019/8545	Not Controlled Action	Completed	In buffer area only
Urban Development Project, Lot 55 and 56 Cottonwood Crescent, Dianella, WA	2017/8031	Not Controlled Action	Completed	In buffer area only
Wangara Industrial Extension Area, WA	2012/6501	Not Controlled Action	Completed	In buffer area only
Not controlled action (particular manne	er)			
Ocean Reef Road Extension Works in Wangara	2010/5388	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only
Perth GPO alteration and refurbishment	2007/3318	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status		
Not controlled action (particular manner)						
Sale of ABC Sound Broadcasting and Television Studios	2008/3951	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only		
South West Metropolitan Railway Project	2003/1175	Not Controlled Action (Particular Manner)	Post-Approval	In feature area		
Referral decision						
GPO Building, 3 Forrest Place, Perth WA 6000	2017/7988	Referral Decision	Completed	In buffer area only		

Biologically Important Areas		[Re	source Information]
Scientific Name	Behaviour	Presence	Buffer Status
Seabirds			
Sterna dougallii			
Roseate Tern [817]	Foraging	Known to occur	r In buffer area only

Caveat

1 PURPOSE

This report is designed to assist in identifying the location of matters of national environmental significance (MNES) and other matters protected by the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act) which may be relevant in determining obligations and requirements under the EPBC Act.

The report contains the mapped locations of:

- · World and National Heritage properties;
- · Wetlands of International and National Importance;
- · Commonwealth and State/Territory reserves;
- distribution of listed threatened, migratory and marine species;
- · listed threatened ecological communities; and
- other information that may be useful as an indicator of potential habitat value.

2 DISCLAIMER

This report is not intended to be exhaustive and should only be relied upon as a general guide as mapped data is not available for all species or ecological communities listed under the EPBC Act (see below). Persons seeking to use the information contained in this report to inform the referral of a proposed action under the EPBC Act should consider the limitations noted below and whether additional information is required to determine the existence and location of MNES and other protected matters.

Where data are available to inform the mapping of protected species, the presence type (e.g. known, likely or may occur) that can be determined from the data is indicated in general terms. It is the responsibility of any person using or relying on the information in this report to ensure that it is suitable for the circumstances of any proposed use. The Commonwealth cannot accept responsibility for the consequences of any use of the report or any part thereof. To the maximum extent allowed under governing law, the Commonwealth will not be liable for any loss or damage that may be occasioned directly or indirectly through the use of, or reliance

3 DATA SOURCES

Threatened ecological communities

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

Threatened, migratory and marine species

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

Where little information is available for a species or large number of maps are required in a short time-frame, maps are derived either from 0.04 or 0.02 decimal degree cells; by an automated process using polygon capture techniques (static two kilometre grid cells, alpha-hull and convex hull); or captured manually or by using topographic features (national park boundaries, islands, etc.).

In the early stages of the distribution mapping process (1999-early 2000s) distributions were defined by degree blocks, 100K or 250K map sheets to rapidly create distribution maps. More detailed distribution mapping methods are used to update these distributions

4 LIMITATIONS

The following species and ecological communities have not been mapped and do not appear in this report:

- threatened species listed as extinct or considered vagrants;
- · some recently listed species and ecological communities;
- some listed migratory and listed marine species, which are not listed as threatened species; and
- migratory species that are very widespread, vagrant, or only occur in Australia in small numbers.

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

- listed migratory and/or listed marine seabirds, which are not listed as threatened, have only been mapped for recorded
- seals which have only been mapped for breeding sites near the Australian continent

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

Refer to the metadata for the feature group (using the Resource Information link) for the currency of the information.

Acknowledgements

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

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Please feel free to provide feedback via the Contact us page.

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