GOVERNMENT OF
WESTERN AUSTRALIA

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 10827/1
Permit Holder:	Amplitel Pty Ltd
Duration of Permit:	From 21 February 2025 to 21 February 2030

The permit holder is authorised to clear *native vegetation* subject to the following conditions of this permit.

PART I – CLEARING AUTHORISED

1. Clearing authorised (purpose)

The permit holder is authorised to clear *native vegetation* for the purpose of installation of a telecommunications tower.

2. Land on which clearing is to be done

Lot 500 on Diagram 426822, Eneabba

3. Clearing authorised

The permit holder must not clear more than 0.06 hectares of *native vegetation* within the area cross-hatched yellow in Figure 1 of Schedule 1.

PART II – MANAGEMENT CONDITIONS

4. Avoid, minimise, and reduce impacts and extent of clearing

In determining the *native vegetation* authorised to be cleared under this permit, the permit holder must apply the following principles, set out in descending order of preference:

(a) avoid the clearing of *native vegetation*;

(b) minimise the amount of *native vegetation* to be cleared; and

(c) reduce the impact of *clearing* on any environmental value.

5. Weed and dieback management

When undertaking any *clearing* authorised under this permit, the permit holder must take the following measures to minimise the risk of introduction and spread of *weeds* and *dieback*:

(a) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be *cleared*;

(b) ensure that no known *dieback* or *weed*-affected soil, *mulch*, *fill*, or other material is brought into the area to be *cleared*; and

(c) restrict the movement of machines and other vehicles to the limits of the areas to be *cleared*.

6. Wind erosion management

The permit holder must commence construction work no later than two (2) months after undertaking the authorised *clearing* activities to reduce potential for wind erosion

PART III - RECORD KEEPING AND REPORTING

7. Records that must be kept

The permit holder must maintain records relating to the listed relevant matters in accordance with the specifications detailed in Table 1.

Table 1: Records that must be kept

No.	Relevant matter	Specifications
1.	In relation to the authorised clearing activities generally	(a) the species composition, structure, and density of the *cleared* area; (b) the location where the clearing occurred, recorded using a Global Positioning System (GPS) unit set to GDA2020, expressing the geographical coordinates in Eastings and Northings; (c) the date that the area was *cleared*; (d) the size of the area *cleared* (in hectares); and (e) actions taken to avoid, minimise, and reduce the impacts and extent of clearing in accordance with condition 4; and (f) actions taken to minimise the risk of the introduction and spread of *weeds* and *dieback* in accordance with condition 5; and (g) actions taken to manage wind erosion in accordance with condition 6.

8. Reporting

The permit holder must provide to the *CEO* the records required under condition 7 of this permit when requested by the *CEO*.

DEFINITIONS

In this permit, the terms in Table 2 have the meanings defined.

Table 2: Definitions

Term	Definition
CEO	Chief Executive Officer of the department responsible for the administration of the clearing provisions under the *Environmental Protection Act 1986*.
clearing	has the meaning given under section 3(1) of the EP Act.
condition	a condition to which this clearing permit is subject under section 51H of the EP Act.
dieback	means the effect of *Phytophthora* species on native vegetation.
department	means the department established under section 35 of the *Public Sector Management Act 1994* (WA) and designated as responsible for the administration of the EP Act, which includes Part V Division 3.
EP Act	*Environmental Protection Act 1986* (WA)
fill	means material used to increase the ground level, or to fill a depression.
mulch	means the use of organic matter, wood chips or rocks to slow the movement of water across the soil surface and to reduce evaporation.
native vegetation	has the meaning given under section 3(1) and section 51A of the EP Act.
weeds	means any plant – (a) that is a declared pest under section 22 of the *Biosecurity and Agriculture Management Act 2007*; or (b) published in a Department of Biodiversity, Conservation and Attractions species-led ecological impact and invasiveness ranking summary, regardless of ranking; or (c) not indigenous to the area concerned.

END OF CONDITIONS

Ryan Mincham
MANAGER
NATIVE VEGETATION REGULATION

Officer delegated under Section 20
of the Environmental Protection Act 1986

29 January 2025

Schedule 1

The boundary of the area authorised to be cleared is shown in the map below (Figure 1).

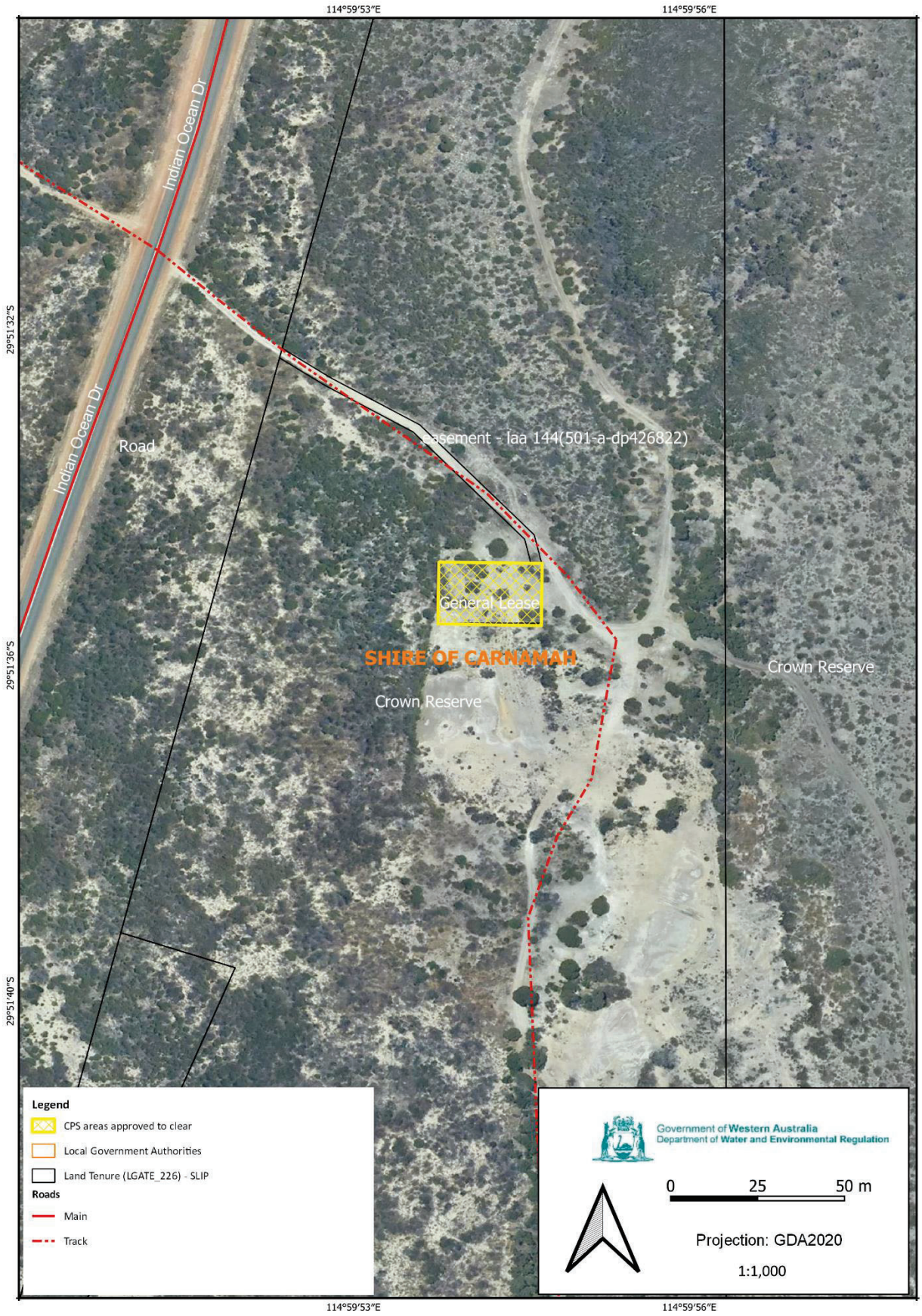

Figure 1: Map of the boundary of the area within which clearing may occur

Government of Western Australia
Department of Water and Environmental Regulation

Clearing Permit Decision Report

1 Application details and outcome

1.1. Permit application details

Permit number:	CPS 10827/1
Permit type:	Purpose permit
Applicant name:	Amplitel Pty Ltd
Application received:	6 November 2024
Application area:	0.06 hectares of native vegetation
Purpose of clearing:	Installation of a telecommunication tower
Method of clearing:	Mechanical
Property:	Lot 500 on Deposited Plan 426822
Location (LGA area/s):	Shire of Carnamah
Localities (suburb/s):	Eneabba

1.2. Description of clearing activities

The vegetation proposed to be cleared comprises 0.06 hectares of native vegetation contained within a single contiguous area near the intersection of Indian Ocean Drive and Coolimba-Eneabba Road (see Figure 1, Section 1.5). The proposed site is located approximately 240 kilometres north of Perth in the Shire of Carnamah. The proposed project is to install a 50-metre telecommunication lattice tower within a 20 metre x 30 metre leased compound area (Amplitel, 2024).

The proposed work has been funded by Telstra and the Federal Government in Round 5A of the Federal Governments Mobile Black Spot Program (MBSP5A). There is currently little to no 4G coverage along Indian Ocean Drive in this area. The proposed work is designed to provide adequate coverage along Indian Ocean Drive and the surrounding areas to address an identified need for improved emergency services infrastructure along this occupied tourist route (Amplitel, 2024).

The proposed work includes installation of a new lattice tower, including new solar system and telecommunication outdoor equipment units and associated equipment. The major components are listed below (Aplitel, 2024);

- installation of new 50 steel lattice tower;
- installation of new headframe on top of lattice tower and associated antennas, feeders and required telecommunications equipment onto the new structure;
- installation of new foundations for new solar panels and associated solar equipment;
- installation of all underground earthing required for all equipment installation and connection of new earth grid to all installation;
- installation of new solar panels, battery outdoor units and batteries required for solar installation;
- installation of new cable tray from new monopole structure to equipment outdoor units;
- installation of new chain mesh fencing around entire compound including access gates.

1.3. Decision on application

Decision:	Granted
Decision date:	29 January 2025
Decision area:	0.06 hectares of native vegetation, as depicted in Section 1.5, below.

1.4. Reasons for decision

This clearing permit application was submitted, accepted, assessed and determined in accordance with sections 51E and 51O of the *Environmental Protection Act 1986* (EP Act). The Department of Water and Environmental Regulation (DWER) advertised the application for 21 days and no submissions were received.

In making this decision, the Delegated Officer had regard for the site characteristics (see Appendix A), relevant datasets (see Appendix E.1), the findings of a flora, vegetation and fauna survey, the clearing principles set out in Schedule 5 of the EP Act (see Appendix B), relevant planning instruments and any other matters considered relevant to the assessment (see Section 3). The Delegated Officer also took into consideration that the proposed clearing is to install a telecommunication lattice tower which is funded by Telstra and the Federal Government to improve emergency services infrastructure.

The assessment identified that the proposed clearing would result in:

- the potential introduction and spread of weeds and dieback into adjacent vegetation, which could impact on the quality of the adjacent vegetation and its habitat values;
- removal of three (3) seedlings of the priority four flora species *Grevillea olivacea*

After consideration of the available information, as well as the applicant's minimisation and mitigation measures (see Section 3.1), the Delegated Officer determined the proposed clearing is unlikely to lead to appreciable land degradation, have long-term adverse impacts on environmental values and can be minimised and managed to unlikely lead to an unacceptable risk to environmental values. The applicant has suitably demonstrated avoidance and minimisation measures and committed to mitigate the environmental impacts through adhering to the Construction Environment Management Plan (CEMP).

The Delegated Officer decided to grant a clearing permit subject to conditions to:

- avoid, minimise to reduce the impacts and extent of clearing;
- take hygiene steps to minimise the risk of the introduction and spread of weeds and dieback;
- commence the construction works no later than two (2) months after undertaking the authorised clearing activities to reduce the potential for wind erosion.

1.5. Site map

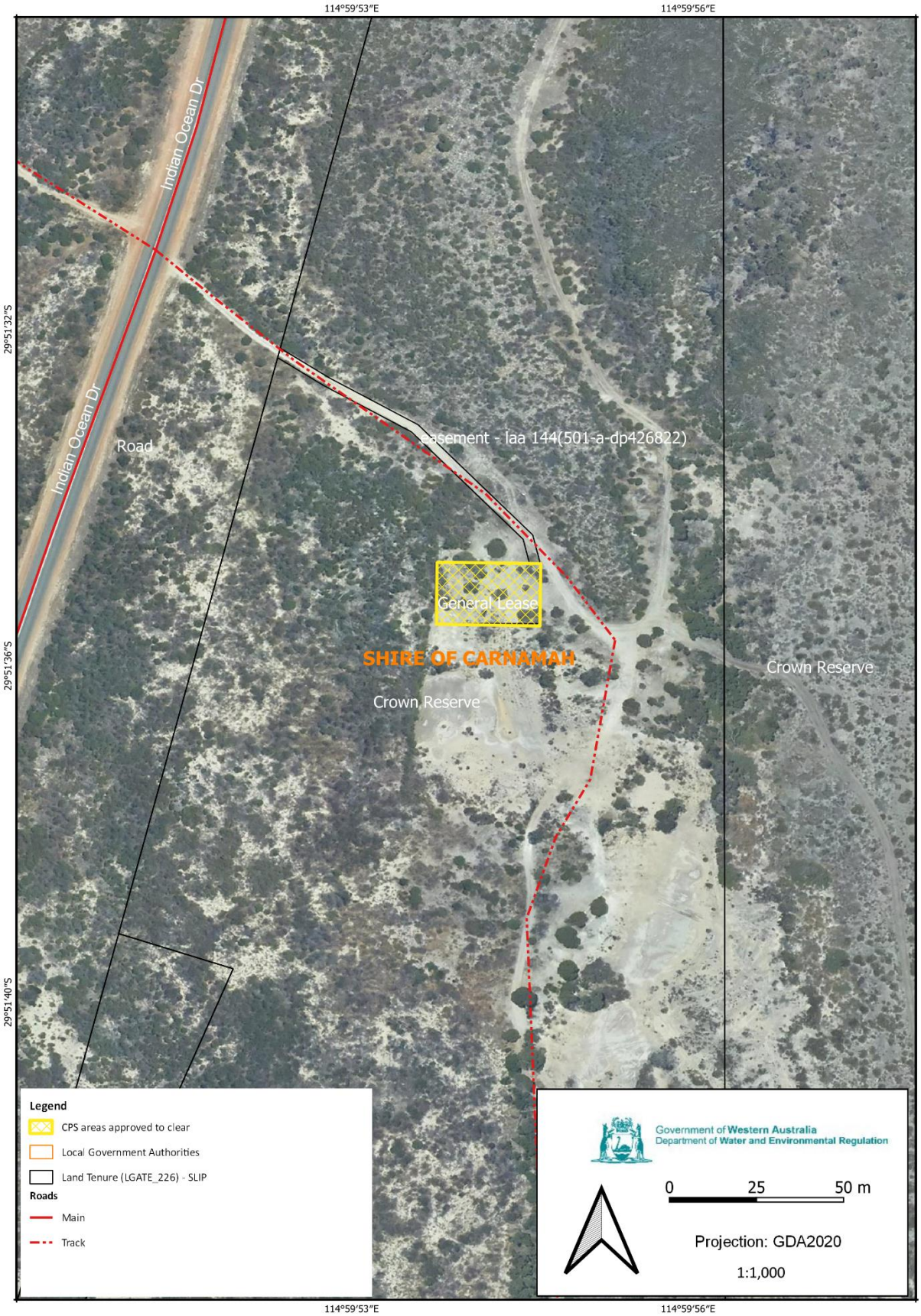

Figure 1 - The areas cross-hatched yellow indicate the area authorised to be cleared under the granted clearing permit.

2 Legislative context

The clearing of native vegetation in Western Australia is regulated under the EP Act and the *Environmental Protection (Clearing of Native Vegetation) Regulations 2004* (Clearing Regulations).

In addition to the matters considered in accordance with section 51O of the EP Act (see Section 1.4), the Delegated Officer has also had regard to the objects and principles under section 4A of the EP Act, particularly:

- the precautionary principle
- the principle of intergenerational equity
- the principle of the conservation of biological diversity and ecological integrity.

Other legislation of relevance for this assessment include:

- *Biodiversity Conservation Act 2016* (WA) (BC Act)
- *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act)

The key guidance documents which inform this assessment are:

- *A guide to the assessment of applications to clear native vegetation* (DER, December 2013)
- *Procedure: Native vegetation clearing permits* (DWER, October 2019)
- Technical guidance – *Flora and Vegetation Surveys for Environmental Impact Assessment* (EPA, 2016)
- Technical guidance – *Terrestrial Fauna Surveys for Environmental Impact Assessment* (EPA, 2016)

3 Detailed assessment of application

3.1. Avoidance and mitigation measures

Evidence was submitted by the applicant, demonstrating that sufficient measures have been applied to avoid and minimise the potential impacts of the proposed clearing on environmental values.

The site selection has been focused on the thin strip of land to the east of Indian Ocean Drive, avoiding more environmentally sensitive areas managed for conservation in the Beekeepers Nature Reserve further to the east.

The selected site is located within a natural clearing that is vegetated with dispersed shrubs. To mitigate and reduce impacts on native vegetation, the compound is in close proximity to an existing access track on the subject land to minimise native vegetation disturbance from the construction of new tracks on the site. In addition, the applicant will seek to prevent disturbance to vegetation in proximity to the compound by erecting appropriate fencing around the works area.

The site will utilise solar power and radio transmission to minimise the need for electrical and fibre cable trenching. The proposed development has been sited to avoid and minimise impacts on native vegetation as much as possible and provides a balance between vegetation removal, placement to mitigate visual impact and provision of essential infrastructure.

The applicant will ensure that vehicles and equipment are clean prior to entering the site to prevent any foreign material, weed species and soil pathogens from contaminating the site as detailed in the CEMP.

The Delegated Officer was satisfied that the applicant has undertaken reasonable measures to avoid and minimise potential impacts of the proposed clearing on environmental values.

3.2. Assessment of impacts on environmental values

In assessing the application, the Delegated Officer has had regard for the site characteristics (see Appendix A) and the extent to which the impacts of the proposed clearing present a risk to biological, conservation, or land and water resource values.

The assessment against the clearing principles (see Appendix D) identified that the impacts of the proposed clearing are limited and able to be managed to be environmentally acceptable with standard management conditions.

3.3. Relevant planning instruments and other matters

The Shire of Carnamah advised DWER that the Shire has issued the planning approval for the telecommunication tower, and the Shire does not have any objections to the proposed clearing.

The application area is located within the boundaries of the registered area of interest of the Yamatji Marlpa Aboriginal Corporation RNTBC, acting on behalf of the Yamatji nation native title claimants. The proposed clearing will be conducted in accordance with a lease agreement between the applicant and the Department of Planning, Lands and Heritage which emphasises that native title notification under the section 24KA of the *Native Title Act 1993 (Cth)* is not required as this has already been considered under the lease agreement.

The Eneabba West Ceremonial/ Camp aboriginal site is mapped with the application area. It is the permit holder's responsibility to comply with the *Aboriginal Heritage Act 1972* (WA) and ensure that no Aboriginal Sites of Significance are damaged through the clearing process.

End

Appendix A. Site characteristics

A.1 Site characteristics

<table>
<tr><th>Characteristic</th><th>Details</th></tr>
<tr><td>Local context</td><td>The area proposed to be cleared is a 0.06-hectare part of an expansive tract of native vegetation in the intensive land use zone of Western Australia. It is adjacent to Beekeepers Nature Reserve.

Spatial data indicates the local area (20-kilometre radius from the centre of the area proposed to be cleared) retains approximately 90.88 per cent of the original native vegetation cover.</td></tr>
<tr><td>Ecological linkage</td><td>The application area is not within a formally mapped ecological linkage.</td></tr>
<tr><td>Conservation areas</td><td>The application area is not mapped within a conservation area, however, is located 50 metres west of the boundary of the Beekeepers Nature Reserve.</td></tr>
<tr><td>Vegetation description</td><td>The flora and vegetation survey conducted by Ecoscape (Australia) Pty Ltd (Ecoscape) indicates the vegetation within the survey area consists of three vegetation types:
Casuarina obesa low open woodland (CoLOW) described as low lying and disturbed
Melaleuca lanceolata and Melaleuca cardiophylla tall shrubland (MIMcTS) described as dune or sand over limestone
Tecticornia spp. and Samolus repens low samphire shrubland/shrubland (TsSrLSSS) described as wetland fringe
The full survey descriptions and maps are available in Appendix D.

This is consistent with the mapped vegetation type Cliff Head 1026, which is described as Mosaic: Shrublands; Acacia rostellifera, A. cyclops (in the south) & Melaleuca cardiophylla (in the north) thicket / Shrublands; Acacia lasiocarpa & Melaleuca acerosa heath (Government of Western Australia, 2019).

The mapped vegetation type retains approximately 93.9 per cent of the original extent (Government of Western Australia, 2019</td></tr>
<tr><td>Vegetation condition</td><td>The flora and vegetation survey conducted by Ecoscape indicates that the vegetation within the survey area ranges from degraded to very good (Keighery, 1994) condition, described as depicted in the below table.

<table>
<tr><th>Vegetation Condition</th><th>Pristine</th><th>Excellent</th><th>Very good</th><th>Good</th><th>Degraded</th><th>Completely degraded</th><th>Not vegetated or cleared</th></tr>
<tr><td>Extent (ha)</td><td>-</td><td>-</td><td>0.03</td><td>0.11</td><td>0.01</td><td>-</td><td>0.09</td></tr>
<tr><td>Proportion %</td><td>-</td><td>-</td><td>12.82</td><td>45.76</td><td>5.59</td><td>-</td><td>35.84</td></tr>
</table>
The full Keighery (1994) condition rating scale is provided in Appendix C.

The full survey descriptions and mapping are available in Appendix D.</td></tr>
<tr><td>Climate and landform</td><td>The closest coastal Bureau of Meteorology (BoM) station with long-term temperature records is Jurien Bay (BOM 2024 station 9131) which is located approximately 70 km south of the survey area. February is the hottest month with a mean maximum temperature of 30.8°C and minimum of 18°C. July is the coldest month with a mean maximum of 19.6°C and minimum of 9.5°C. The mean annual rainfall is 513.2 mm falling predominantly during May–August (Ecoscape, 2024).</td></tr>
</table>

Characteristic	Details
Soil description and land degradation risk	The soil is mapped as Eatha 2 Subsystem (221Ea_2) described as depositional plain surrounding Ea1 (includes small areas of Ea1). The mapped soil type has a low risk of land degradation resulting from water erosion, wind erosion, water repellence, surface acidification and phosphorus export, but has a moderate to high risk of land degradation resulting from water logging and salinity (DPIRD, 2019).
Waterbodies and Hydrogeography	The desktop assessment and aerial imagery indicated that application area is within proximity to the geomorphic wetlands – Cervantes Eneabba categorised as Sumpland. Ecoscape indicated that the survey area is located adjacent to lands that are included in the Geomorphic Wetlands Cervantes Eneabba, specifically a floodplain feature. The desktop assessment and aerial imagery indicated that the application area is not mapped with any perennial or non-perennial waterlines. However, it is close to inland waters categorised as 'non-perennial lake' and inland flats categorised as 'inundation area'. Ecoscape has identified this area as a non-perennial waterbody called Leeman Lagoon (Ecoscape, 2024) The application area is mapped within the Arrowsmith Groundwater Area proclaimed under the *Rights in Water and Irrigation Act 1914* (the RIWI Act). The application area does not transect any other proclaimed surface or groundwater resources.
Flora	The desktop assessment identified that a total of 59 threatened or priority flora species have been recorded within the local area, comprising four Priority 1 (P1) flora, 12 Priority 2 (P2) flora, 23 Priority 3 (P3) flora, 16 Priority 4 (P4) flora and four threatened flora species (Western Australian Herbarium, 1998-). None of these existing records occur within the application area, with the closest record being an occurrence of *Grevillea olivacea* (P4) approximately 540 metres from the application area, separated by the Indian Ocean Drive. The flora and vegetation survey conducted by Ecoscape on 27 November 2023, recorded three seedlings of *Grevillea olivacea* within the application area, whilst noting larger *Grevillea olivacea* shrubs outside of the survey area. The applicant has advised that the three seedlings are within the construction footprint and cannot be avoided. The clearing of these three individuals is not likely to represent a significant impact in a local or regional context and will not impact on the conservation status of this species. Ecoscape has assessed that the following species also have suitable habitat and 'may occur' within the application area as a result of a post-survey likelihood assessment based on the site characteristics and vegetation types identified through the flora and vegetation survey: • *Stylidium maritimum* (P3) • *Haloragis foliosa* (P3) The flora and vegetation survey conducted by Ecoscape, did not record any other priority flora species other than *Grevillea olivacea* within the survey area. It is noted that the abovementioned priority flora species have a wider distribution both locally and regionally. With consideration for the site characteristics set out above, relevant datasets (see Appendix E.1) and the flora and vegetation survey conducted by Ecoscape, the application area may provide suitable habitat for several conservation significant flora species. Considering the results from the flora and vegetation survey conducted by Ecoscape, the local and regional vegetation extent, vegetation condition and distribution of the abovementioned priority flora species, the clearing is unlikely to have a significant impact on conservation significant flora.
Ecological communities	There are no known Threatened or Priority Ecological communities located within, or in close proximity to the application area (GIS Database). The Ecoscape flora and vegetation survey did not record any known Threatened or Priority Ecological Communities.

Characteristic	Details
Fauna	The desktop assessment identified that a total of 21 threatened or priority fauna species have been recorded within the local area, including 4 threatened fauna species, 3 priority fauna species, and 14 fauna species protected under international agreement (DBCA, 2007-). None of these records occur within the application area, with the closest record being a Caspian tern (*Hydroprogne caspia*), approximately 950 metres from the application area. The desktop assessment identified 16 records of Carnaby cockatoos (*Zanda latirostris*), with the closest record being 10.36 kilometres from the application area. The application area is mapped within the Carnaby's distribution range, however, there are no breeding or roosting records within the local area. The basic fauna survey conducted by Ecoscape has identified two fauna habitats within the survey area described as Shrubland and Samphire habitats. Both these habitats occur more commonly in the local areas and regional areas (see Appendix D) (Ecoscape, 2024). The fauna survey conducted by the Ecoscape did not record any conservation significant fauna species (Ecoscape, 2024). Further, the survey area is considered to represent 'negligible to low 'foraging value for Carnaby's cockatoo and there are no trees present that provide suitable breeding or roosting habitat for this species (Ecoscape, 2024). With consideration for the site characteristics set out above, relevant datasets (see Appendix E.1) and the results of the fauna survey, it is unlikely that the proposed clearing will have a significant impact on habitat for conservation significant fauna species.

A.2. Vegetation extent

	Pre-European extent (ha)	Current extent (ha)	Extent remaining (%)	Current extent in all DBCA managed land (ha)	Current proportion (%) of pre-European extent in all DBCA managed land
IBRA bioregion*					
Geraldton Sandplains	3,136,037.83	1,404,424.32	44.78	568,255.10	18.12
Vegetation complex					
Cliff Head 1026 *	11,426.90	10,729.87	93.90	5,562.78	48.68
Local area					
20km radius	70,806.41	64,348.79	90.88	-	-

*Government of Western Australia (2019a)

.3. Flora analysis table

With consideration for the site characteristics set out above, relevant datasets (see Appendix.E.1), and biological survey information, impacts to the following conservation significant flora required further consideration.

Species name	Conservation status	Suitable habitat features ? [Y/N]	Suitable vegetation type? [Y/N]	Suitable soil type? [Y/N]	Distance of closest record to application area (km)	Number of known records (total)	Are surveys adequate to identify? [Y, N, N/A]
Grevillea olivacea	P4	Y	Y	Y	0.54	12	Y
Thryptomene butleri	P3	Y	Y	Y	8.23	8	N/A
Stylidium maritimum	P3	Y	Y	No	2.76	8	Y
Haloragis foliosa	P3	Y	Y	No	12.54	4	Y

Species name	Conservation status	Suitable habitat features ? [Y/N]	Suitable vegetation type? [Y/N]	Suitable soil type? [Y/N]	Distance of closest record to application area (km)	Number of known records (total)	Are surveys adequate to identify? [Y, N, N/A]
Spergularis nesophila	P3	-	-	-	-	-	Y

T: threatened, CR: critically endangered, EN: endangered, VU: vulnerable, P: priority

A.4. Fauna analysis table

Species name	Conservation status	Suitable habitat features? [Y/N]	Suitable vegetation type? [Y/N]	Distance of closest record to application area (km)	Number of known records (total)	Are surveys adequate to identify? [Y, N, N/A]
Zanda latirostris	EN	Y	No	10.36	16	Y

T: threatened, CR: critically endangered, EN: endangered, VU: vulnerable, P: priority

Appendix B. Assessment against the clearing principles

Assessment against the clearing principles	Variance level	Is further consideration required?
Environmental value: biological values		
Principle (a): *"Native vegetation should not be cleared if it comprises a high level of biodiversity."* Assessment: Although the application area may contain suitable habitat for fauna, the application area is not likely to comprise locally or regionally significant flora, vegetation or ecological communities. Given that the proposed clearing area comprises mostly of vegetation in degraded (Keighery, 1994) condition and cleared areas that has been subject to disturbance, the proposed clearing area is not considered likely to comprise a high level of biodiversity.	Not likely to be at variance	No
Principle (b): *"Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna."* Assessment: No conservation significant fauna species were recorded during the survey (Ecoscape, 2024). The two fauna habitats identified through the survey do not represent critical habitat for conservation significant fauna species. Given that the proposed clearing area comprises mostly of vegetation in degraded (Keighery, 1994) condition and cleared areas that have been subject to historical disturbance, the proposed clearing is not considered likely to impact significant habitat for fauna	Not likely to be at variance	No
Principle (c): *"Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora."* Assessment: Noting the site characteristics (see Appendix A), habitat preferences including soil type and vegetation associations, extent of occurrence, existing records and results of the flora and vegetation survey, the proposed clearing area is not likely to contain suitable habitat for threatened flora species.	Not likely to be at variance	No

Assessment against the clearing principles	Variance level	Is further consideration required?
Given the small scale of clearing of vegetation predominantly in degraded (Keighery, 1994) condition, it is unlikely that the proposed clearing will have a significant impact on conservation significant flora species		
Principle (d): *"Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a threatened ecological community."* Assessment: No threatened ecological communities were recorded during the flora and vegetation survey, therefore the proposed clearing area is not considered to comprise vegetation representative of a threatened ecological community.	Not likely to be at variance	No
Environmental value: significant remnant vegetation and conservation areas		
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."* Assessment: The extent of the mapped vegetation type and native vegetation in the local area is consistent with the national objectives and targets for biodiversity conservation in Australia (Commonwealth of Australia, 2001)	Not likely to be at variance	No
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."* Assessment: While the proposed clearing is within close proximity to a conservation area, the extent of clearing is small and is not likely to have an impact on the environmental values of the conservation area.	Not likely to be at variance	No
Environmental value: land and water resources		
Principle (f): *"Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland."* Assessment: The proposed clearing area is not mapped within any mapped watercourses or wetlands. However, it is close proximity to the geomorphic wetland known as Leeman Lagoon (see Appendix A). Ecoscape indicated that ground disturbance works may affect the quality of the nearby wetland if conducted during times of significant rainfalls. Given that the applicant plans to conduct the proposed works within drier periods, the clearing is unlikely to impact either on- or off-site hydrology or water quality.	May be at variance	No
Principle (g): *"Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation."* Assessment: The mapped soil type has moderate to high susceptibility salinity and waterlogging risk. Noting the extent of the proposed clearing and the condition of the vegetation, theclearing is not likely to have an appreciable impact on land degradation. However, Ecoscape noted that ground disturbance (clearing) on the dune may lead to wind erosion as a result of the strong winds experienced in the area and sandy soils. Surface stabilisation during and after construction should be considered as part of the Construction Environment Management Plan. Noting that the applicant has taken necessary steps to reduce the land degradation risks and due to the small scall of clearing, the proposed clearing is not considered likely to have an appreciable impact on land degradation.	Not likely to be at variance	No
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."*	Not likely to be at variance	No

Assessment against the clearing principles	Variance level	Is further consideration required?
Assessment: Although no watercourses or wetlands are recorded within the proposed clearing area, the application area is mapped within a proclaimed groundwater area (see Appendix A). However, noting the extent of the proposed clearing, the condition of the vegetation, vegetation extent in the local area and that adjacent vegetation of similar or higher quality will be retained, the proposed clearing is not considered likely to cause deterioration in the quality of surface or underground water		
Principle (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."* Assessment: Given the small extent of clearing within a historically disturbed area comprising predominantly degraded vegetation, the proposed clearing is not considered likely to contribute to increased incidence or intensity of flooding.	Not likely to be at variance	No

Appendix C. Vegetation condition rating scale

Vegetation condition is a rating given to a defined area of vegetation to categorise and rank disturbance related to human activities. The rating refers to the degree of change in the vegetation structure, density and species present in relation to undisturbed vegetation of the same type. The degree of disturbance impacts upon the vegetation's ability to regenerate. Disturbance at a site can be a cumulative effect from a number of interacting disturbance types.

Considering its location, the scale below was used to measure the condition of the vegetation proposed to be cleared. This scale has been extracted from Keighery, B.J. (1994) *Bushland Plant Survey: A Guide to Plant Community Survey for the Community*. Wildflower Society of WA (Inc). Nedlands, Western Australia.

Measuring vegetation condition for the South West and Interzone Botanical Province (Keighery, 1994)

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

Appendix D. Biological survey information excerpts

Table 8: Vegetation types

Landform	Mapping unit	Vegetation type	Floristic quadrats	Representative photograph	Other species	Area (ha) and extent (%)
Flat	CoLOW	*Casuarina obesa* low open woodland over *Melaleuca lanceolata* and *Melaleuca huegelii* tall open shrubland over **Vulpia myuros* forma myuros, **Ehrharta longiflora* and *Hyalosperma cotula* low open grassland/forbland **NVIS**: U ^*Casuarina obesa*\^tree\6\r;M+ ^*Melaleuca lanceolata*,^*Melaleuca huegelii*\^shrub\4\i;G ^^*Vulpia myuros* forma *myuros*,*Ehrharta longiflora*,*Hyalosperma cotula*\^other grass,forb\1\i	CE2303		*Acacia xanthina* *Acanthocarpus preissii* *Austrostipa* sp. **Avellinia michelii* *Blennospora drummondii* **Bromus rubens* **Carpobrotus edulis* **Cuscuta planiflora* *Grevillea olivacea* (P4) *Lobelia* sp. **Lysimachia arvensis* *Rhodanthe laevis* *Rytidosperma* sp. *Templetonia retusa* **Urospermum picroides*	0.04 ha 17.88%
Dunes, sand over limestone	MlMcTS	*Melaleuca lanceolata* and *Melaleuca cardiophylla* tall shrubland over **Bromus hordeaceus* and *Spergularia marina* low sparse grassland/forbland **NVIS**: M+ ^*Melaleuca lanceolata*,^*Melaleuca cardiophylla*\^shrub\4\c;G ^*Bromus hordeaceus*,^*Spergularia marina*\^other grass,forb\1\r	CE2301		*Acanthocarpus preissii* *Austrostipa* sp. *Crassula* sp. *Melaleuca huegelii* *Rhagodia preissii* subsp. *obovata* *Roepera fruticulosa*	0.08 ha 33.47%

Landform	Mapping unit	Vegetation type	Floristic quadrats	Representative photograph	Other species	Area (ha) and extent (%)
Wetland fringe	TsSrLSSS	*Tecticornia* spp. and *Samolus repens* low samphire shrubland/shrubland **NVIS**: G+ ^^*Tecticornia* sp. 1,*Samolus repens*,*Tecticornia* sp. 3\^samphire shrub,shrub\2\c	CE2302		*Frankenia pauciflora* **Juncus bufonius* **Lagurus ovatus* *Melaleuca lanceolata* *Tecticornia* sp. 2 *Tecticornia* sp. 4	0.03 ha 12.8%
		Not native vegetation (cleared, salt pan)			0.09 ha	35.8%
		TOTAL EXTENT			**0.25 ha**	

Table 1: Vegetation types

Figure 2: Vegetation types, quadrats and conservation listed flora

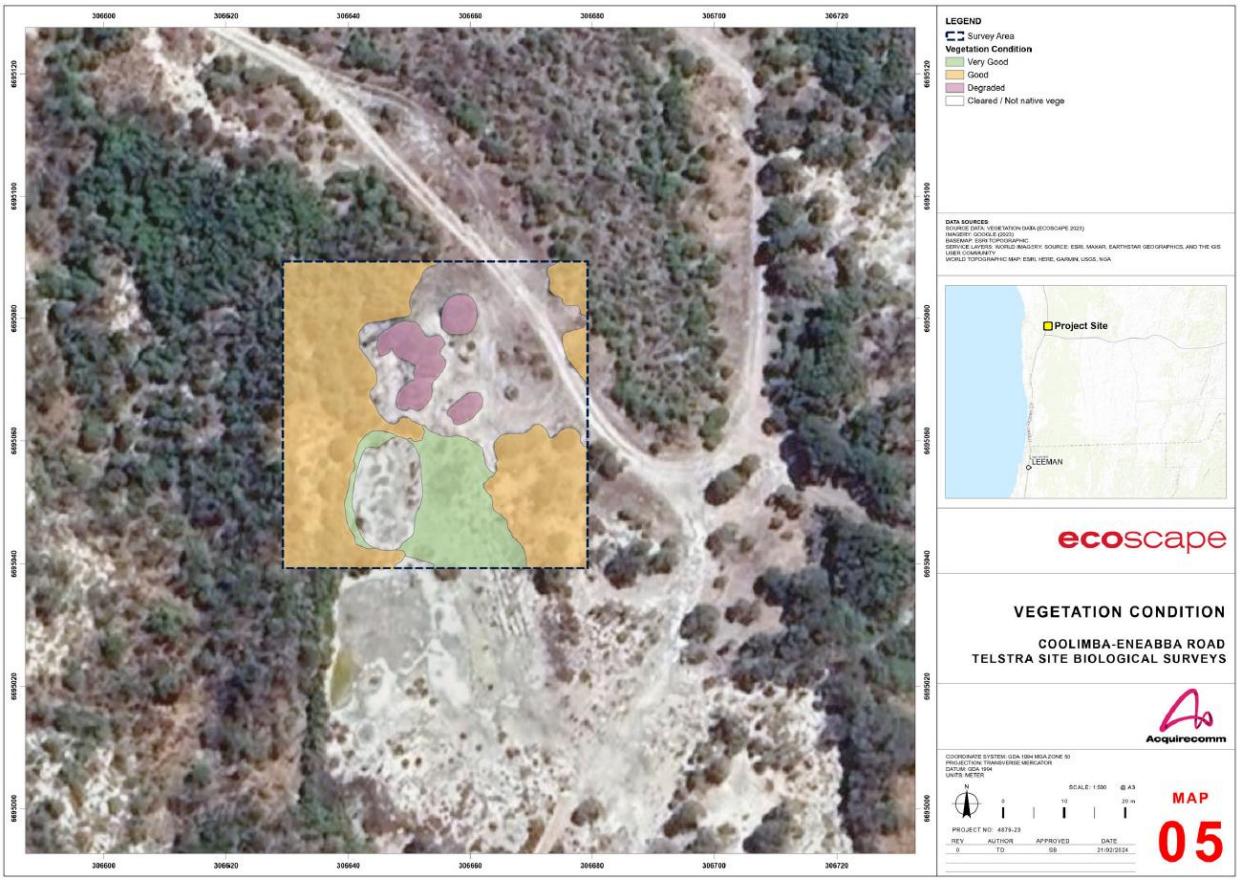

Figure 3: Vegetation condition

Figure 4: Fauna habitat

Habitat type	Description	Photograph
Shrubland	The Shrubland habitat was on the sand dune (upper image) and shallow sand over limestone (lower image) and was characterised by *Melaleuca* (Honeymyrtle) and *Acacia* (Wattle) species. There were occasional emergent *Casuarina* (Sheoak) trees on lower-lying parts. The Shrubland is suited to nesting and foraging of smaller bird species. Reptiles are likely to be present (although none were observed) as the sand is suited to burrowing and there was much fallen timber suited to lizards. Mammals, particularly rodent-sized species, may occur as there is sufficient cover as shelter and the sandy soil is suited to burrowing. Rabbits are likely although not recorded, as are feral predators including cats and foxes. Kangaroos are likely to occur more frequently in the more-open sections of Shrubland on the flatter areas due to the density of the dunal vegetation. **Extent**: 0.13 ha; 51.3%	 

Habitat type	Description	Photograph
Samphire	The Samphire habitat (upper image) occurred on the edge of a small saline wetland formed on the leeward edge of a sand dune and is likely part of the larger floodplain of Leeman Lagoon. A small pool of hypersaline water was present in the adjacent salt pan during the field survey, on the edge of the adjacent dune. The pool size is likely to be larger during wetter years although only seasonal (winter-early summer). The soil is clayey sand with shell fragments (lower image) and was saline. Kangaroo tracks were observed in the soft mud on the edge of the salt pan. No bird tracks were observed suggesting that the hypersaline water was of little interest for aquatic invertebrate foraging. The Samphire habitat is poor quality for virtually all fauna suites due to the lack of shelter due to the paucity of shrubs as shelter and for foraging. However, this open nature is likely to represent a part of the landscape that is easy to traverse (e.g. kangaroos) thus be a preferred pathway during larger traverse. **Extent**: 0.03 ha; 12.8%	 

Table 2: Fauna habitats

Appendix E. Sources of information

E.1. GIS databases

Publicly available GIS Databases used (sourced from www.data.wa.gov.au):

- 10 Metre Contours (DPIRD-073)
- Aboriginal Heritage Places (DPLH-001)
- Aboriginal Heritage Places (DPLH-001)
- Cadastre (LGATE-218)
- Cadastre Address (LGATE-002)
- Contours (DPIRD-073)
- DBCA – Lands of Interest (DBCA-012)
- DBCA Legislated Lands and Waters (DBCA-011)
- Directory of Important Wetlands in Australia – Western Australia (DBCA-045)
- Environmentally Sensitive Areas (DWER-046)
- Flood Risk (DPIRD-007)
- Groundwater Salinity Statewide (DWER-026)
- Hydrography – Inland Waters – Waterlines
- Hydrological Zones of Western Australia (DPIRD-069)
- IBRA Vegetation Statistics
- Imagery
- Local Planning Scheme – Zones and Reserves (DPLH-071)
- Native Title (ILUA) (LGATE-067)

- Offsets Register – Offsets (DWER-078)
- Pre-European Vegetation Statistics
- Public Drinking Water Source Areas (DWER-033)
- Ramsar Sites (DBCA-010)
- Regional Parks (DBCA-026)
- Remnant Vegetation, All Areas
- RIWI Act, Groundwater Areas (DWER-034)
- RIWI Act, Surface Water Areas and Irrigation Districts (DWER-037)
- Soil Landscape Land Quality – Flood Risk (DPIRD-007)
- Soil Landscape Land Quality – Phosphorus Export Risk (DPIRD-010)
- Soil Landscape Land Quality – Subsurface Acidification Risk (DPIRD-011)
- Soil Landscape Land Quality – Water Erosion Risk (DPIRD-013)
- Soil Landscape Land Quality – Water Repellence Risk (DPIRD-014)
- Soil Landscape Land Quality – Waterlogging Risk (DPIRD-015)
- Soil Landscape Land Quality – Wind Erosion Risk (DPIRD-016)
- Soil Landscape Mapping – Best Available
- Soil Landscape Mapping – Systems
- Wheatbelt Wetlands Stage 1 (DBCA-021)

Restricted GIS Databases used:

- ICMS (Incident Complaints Management System) – Points and Polygons
- Threatened Flora (TPFL)
- Threatened Flora (WAHerb)
- Threatened Fauna
- Threatened Ecological Communities and Priority Ecological Communities
- Threatened Ecological Communities and Priority Ecological Communities (Buffers)

E.2. References

Amplitel Pty Ltd (2024) *Clearing permit application CPS 10827/1*, received 6 November 2024 (DWER Ref: DWERVT17077).

Commonwealth of Australia (2001) *National Objectives and Targets for Biodiversity Conservation 2001-2005*, Canberra.

Department of Environment Regulation (DER) (2013). *A guide to the assessment of applications to clear native vegetation*. Perth. Available from: https://www.der.wa.gov.au/images/documents/your-environment/native-vegetation/Guidelines/Guide2_assessment_native_veg.pdf.

Department of Primary Industries and Regional Development (DPIRD) (2019). *NRInfo Digital Mapping. Department of Primary Industries and Regional Development.* Government of Western Australia. URL: https://maps.agric.wa.gov.au/nrm-info/ (accessed 20 January 2025).

Department of Water and Environmental Regulation (DWER) (2019). *Procedure: Native vegetation clearing permits*. Joondalup. Available from: https://dwer.wa.gov.au/sites/default/files/Procedure_Native_vegetation_clearing_permits_v1.PDF.

Ecoscape (Australia) Pty Ltd (2024) *Indian Ocean Drive Biological Surveys- Coolimba-Eneabba Road, Aquirecomm on behalf of Telstra*, November 2023 (DWER Ref: DWERDT1048589).

Environmental Protection Authority (EPA) (2016). *Technical Guidance - Flora and Vegetation Surveys for Environmental Impact Assessment*. Available from: http://www.epa.wa.gov.au/sites/default/files/Policies_and_Guidance/EPA%20Technical%20Guidance%20-%20Flora%20and%20Vegetation%20survey_Dec13.pdf.

Environmental Protection Authority (EPA) (2016). *Technical Guidance – Terrestrial Fauna Surveys.* Available from: https://www.epa.wa.gov.au/sites/default/files/Policies_and_Guidance/Tech%20guidance-%20Terrestrial%20Fauna%20Surveys-Dec-2016.pdf.

Government of Western Australia (2019) *2018 South West Vegetation Complex Statistics. Current as of March 2019*. WA Department of Biodiversity, Conservation and Attractions, Perth, https://catalogue.data.wa.gov.au/dataset/dbca

Government of Western Australia. (2019) *2018 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of March 2019.* WA Department of Biodiversity, Conservation and Attractions. https://catalogue.data.wa.gov.au/dataset/dbca-statewide-vegetation-statistics

Heddle, E. M., Loneragan, O. W., and Havel, J. J. (1980) *Vegetation Complexes of the Darling System, Western Australia*. In Department of Conservation and Environment, Atlas of Natural Resources, Darling System, Western Australia.

Keighery, B.J. (1994) *Bushland Plant Survey: A Guide to Plant Community Survey for the Community*. Wildflower Society of WA (Inc). Nedlands, Western Australia.

Mattiske, E.M. and Havel, J.J. (1998) *Vegetation Complexes of the South-west Forest Region of Western Australia.* Maps and report prepared as part of the Regional Forest Agreement, Western Australia for the Department of Conservation and Land Management and Environment Australia.

Molloy, S., Wood, J., Hall, S., Wallrodt, S. and Whisson, G. (2009) *South West Regional Ecological Linkages Technical Report*, Western Australian Local Government Association and Department of Environment and Conservation, Perth.

Shire of Carnamah (2024) *Advice for clearing permit application CPS 10827/1*, received 24 December 2024 (DWER Ref: DWERDT1056149).

Western Australian Herbarium (1998-). *FloraBase - the Western Australian Flora*. Department of Biodiversity, Conservation and Attractions, Western Australia. https://florabase.dpaw.wa.gov.au/ (Accessed 10 January 2024)