Denham Biological Surveys

Flora, Vegetation and Fauna

Horizon Power

18 Brodie-Hall Drive, Bentley, WA 6102

Prepared by:

SLR Consulting Australia

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Basis of Report

This report has been prepared by SLR Consulting Australia (SLR) with all reasonable skill, care and diligence, and taking account of the timescale and resources allocated to it by agreement with Horizon Power (the Client). Information reported herein is based on the interpretation of data collected, which has been accepted in good faith as being accurate and valid.

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Executive Summary

Horizon Power commissioned SLR Consulting Australia (SLR) to undertake a detailed flora and vegetation, basic terrestrial vertebrate fauna, and targeted significant fauna survey for the proposed Denham Wind Farm. The Survey Area covers approximately 73.9 hectares (ha) and is located approximately 0.5 kilometres (km) northeast of the town of Denham, in the Carnarvon bioregion of Western Australia (WA).

The objective of the survey was to identify key flora, vegetation, and fauna values within the Survey Area as part of the environmental impact approvals and recommendations process.

Flora and Vegetation

The detailed flora and vegetation survey recorded the floristic composition and vegetation types within the Survey Area from 14 survey quadrats. A total of 58 vascular flora taxa were recorded from 49 genera and 27 families. Eight taxa collected at the time of the survey could not be confirmed to species level. Ten introduced flora taxa were recorded within the Survey Area, including two Weeds of National Significance (WoNs): **Opuntia stricta* (Erect prickly pear), and **Lycium ferocissimum* (African boxthorn). **Opuntica stricta* is also a Declared Pest (DP).

No flora taxa listed as Threatened under the EPBC Act 1999 and BC Act 2016 were recorded within the Survey Area. Two Priority flora taxa were recorded: *Triodia plurinervata* (P3) and *Olearia occidentissima* (P2). 885 individuals of *Triodia plurinervata* (P3) were recorded from nine locations within the Survey Area. These individuals do not represent the full extent of the population of *Triodia plurinervata* (P3) within the Survey Area, as this taxon dominated the lower stratum of vegetation type AlTp. Seventy-three individuals of *Olearia occidentissima* (P2) were recorded from 13 locations within the Survey Area. *Olearia occidentissima* (P2) was recorded across both vegetation types within the Survey Area.

Two vegetation types were recorded across the Survey Area, AlTp and AlAp. None of the vegetation types delineated across the Survey Area were analogous to nearby Threatened Ecological Communities (TECs) or Priority Ecological Communities (PECs). None of the vegetation types recorded were restricted to the Survey Area.

Vegetation condition ranged from Completely Degraded to Good within the Survey Area. The majority of the Survey Area was assessed to be in Good condition. Disturbance within the Survey Area was primarily associated with introduced flora taxa, grazing, vehicle tracks, infrastructure, and litter.

Vertebrate Fauna

The basic terrestrial vertebrate fauna and targeted significant fauna survey used a variety of detection methods including pitfall traps, active searches, and opportunistic observations. Fauna habitat mapping was based on a combination of field observations, vegetation mapping, fauna habitat assessment data, and aerial imagery. Two fauna habitats were mapped within the Survey Area: *Acacia* Shrubland over *Triodia* and *Acacia* Shrubland. Both habitats present within the Survey Area are widespread and abundant at a regional scale.

A total of 25 fauna taxa from 23 families were recorded, comprising 14 birds, seven mammals, and four reptiles. No significant taxa were recorded during the fauna survey under the BC or EPBC Act.

The desktop assessment identified a further 95 significant fauna taxa as potentially occurring within the Survey Area. These taxa were assessed to determine their likelihood of occurrence within the Survey Area; five significant fauna taxa were assessed as having a high likelihood, two significant fauna taxa were assessed as having a medium likelihood, and 88 significant fauna taxa were assessed as having have a low likelihood of occurrence.

Both *Acacia* Shrubland and *Acacia* Shrubland and over *Triodia* habitats within the Survey Area constitute potential core habitat for Malleefowl (*Leipoa ocellata*) (VU – BC and EPBC Act), Shark Bay Western Grasswren (*Amytornis textilis textilis*) (Priority 4 - DBCA), Bilby (*Macrotis lagotis*) (VU – BC and EPBC Act), Western Spiny-tailed Skink (*Egernia stokesii badia*) (VU – BC and EPBC Act), and Shark Bay Keeled Legless Gecko (*Pletholax edelensis*) (Priority 3 - DBCA), Javelin Lizard (*Delma concinna major*) (Priority 1 – DBCA) and the Chuditch (*Dasyurus geoffroii fortis*) (VU – BC and EPBC Act).

Five introduced taxa were recorded during the survey, Goat (**Capra aegagrus hircus*), Dingo/Dog (**Canis familiaris*), Horse (**Equus ferus caballus*), Cat (**Felis catus*), and Rabbit (**Oryctolagus cuniculus*).

The basic fauna survey and targeted significant fauna survey were undertaken in April which falls within the primary survey periods for reptiles, mammals, birds, and amphibians (EPA, 2020).

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Acronyms and Abbreviations

°C	Degree Celsius
ALA	Atlas of Living Australia
BAM Act	*Biosecurity and Agriculture Management Act 2007*
BC Act	*Biodiversity Conservation Act 2016*
BoM	Bureau of Meteorology
CISS	Centre for Invasive Species Solutions
CR	Critically Endangered
DAWE	Department of Agriculture Water and Environment
DBCA	Department of Biodiversity, Conservation and Attractions
DCCEEW	Department of Climate Change, Energy, the Environment and Water
DEE	Department of the Environment and Energy
DEWHA	Department of the Environment, Water, Heritage and the Arts
Desktop Study Area	The area that was studied during the desktop assessment encompassing the Survey Area and surrounds
DMIRS	Department of Mines, Industry Regulation and Safety
DoE	Department of the Environment
DP	Declared Pest
DPIRD	Department of Primary Industries and Regional Development
DPLH	Department of Planning, Lands and Heritage
DSEWPaC	Department of Sustainability, Environment, Water, Population and Communities
DWER	Department of Water and Environmental Regulation
EIA	Environmental Impact Assessment
EN	Endangered
EP Act	*Environmental Protection Act 1986*
EPA	Environmental Protection Authority
EPBC Act	*Environment Protection Biodiversity and Conservation Act 1999*
ESA	Environmentally Sensitive Area
FCT	Floristic Community Type
GIS	Geographic Information System
GPS	Global Positioning System
GDE	Groundwater Dependent Ecosystem
ha	Hectare
IBRA	Interim Biogeographic Regionalisation for Australia
IBSA	Index of Biodiversity Surveys for Assessments
km	Kilometres
Lat	Latitude
Long	Longitude

m	Metres
MA	Marine
MI	Migratory
mm	Millimetres
MNES	Matters of National Environmental Significance
NVCP	Native Vegetation Clearing Permit
NVIS	National Vegetation Information System
OS	Other Specially Protected Fauna
P	Priority
PEC	Priority Ecological Community
PMST	Protected Matters Search Tool
Sp.	Species
Spp.	More than one species
SLR	SLR Consulting Australia
Survey Area	The area that was surveyed
T	Threatened
TEC	Threatened Ecological Community
TPFL	Threatened and Priority Flora Database
TPFRF	Threatened and Priority Flora Report Form
VU	Vulnerable
WA	Western Australia
WAH	Western Australian Herbarium
WAM	Western Australian Museum
WoNS	Weeds of National Significance

1.0 Introduction

1.1 The Project

Horizon Power commissioned SLR Consulting Australia (SLR) to undertake a detailed flora and vegetation, basic terrestrial vertebrate fauna, and targeted significant fauna survey for the proposed Denham Wind Farm (the Project). The survey was undertaken within a defined area (the Survey Area) that covers 73.9 hectares (ha) and is located approximately 0.5 kilometres (km) northeast of the town of Denham, in the Carnarvon bioregion of Western Australia (**Map 1**). All maps are provided in **Appendix A**.

1.2 Objective and Scope

The objective of the survey was to identify key flora, vegetation, and fauna values within the Survey Area as part of the environmental impact assessment process for the Project.

The following scope of work was completed:

- Desktop assessment including relevant database searches and a literature review to compile and summarise existing records of flora, vegetation, and fauna in the vicinity of the Survey Area.
- Detailed flora and vegetation survey using quadrats/relevés to identify and describe the vegetation and flora occurring within the Survey Area.
- Targeted search for significant flora within the Survey Area
- Basic fauna survey and targeted significant terrestrial vertebrate fauna using a variety of detection methods including trap sites, active searches, and opportunistic observations.
- Technical biological report.
- Geospatial data package prepared in accordance with IBSA data standard requirements.

2.0 Background

2.1 Statutory and Regulatory Framework

Western Australian flora, vegetation and fauna are governed by the following legislative measures:

- *Environment Protection and Biodiversity Conservation Act 1999* (Commonwealth) (EPBC Act) (Commonwealth of Australia, 1999).
- *Biodiversity Conservation Act 2016* (WA) (BC Act) (Government of Western Australia, 2016).
- *Environmental Protection Act 1986* (WA) (EP Act) (Government of Western Australia, 1986).
- *Biosecurity and Agriculture Management Act 2007* (WA) (BAM Act) (Government of Western Australia, 2007).

In addition to these legislative measures, the following non-legislative lists are considered on a case-by-case basis:

- WA Department of Biodiversity Conservation and Attractions (DBCA) Priority lists for fauna, flora, and ecological communities.
- Weeds of National Significance (WoNS).
- Recognition of locally significant populations by DBCA.
- The EIA process is supported by guidance documents published by the Environmental Protection Authority (EPA), DBCA and the Department of Climate Change, Energy, the Environment and Water (DCCEEW).

Western Australia

- *Technical Guidance – Flora and vegetation surveys for environmental impact assessment* (EPA, 2016a).
- *Environmental Factor Guideline – Flora and Vegetation* (EPA, 2016b).
- *Technical Guidance – Terrestrial vertebrate fauna surveys for environmental impact assessment* (EPA, 2020).
- *Environmental Factor Guideline – Terrestrial Fauna* (EPA, 2016c).
- *Guidelines for surveys to detect the presence of bilbies and assess the importance of habitat in Western Australia* (DBCA, 2017a).

Commonwealth

- *Matters of National Environmental Significance – Significant Impact Guidelines 1.1* (DoE, 2013).
- *Survey guidelines for Australia's threatened birds* (DEWHA, 2010).
- *Survey guidelines for Australia's threatened mammals* (DSEWPaC, 2011a).
- *Survey guidelines for Australia's threatened reptiles* (DSEWPaC, 2011b).

2.2 Existing Environment

2.2.1 Climate

The closest long-term Bureau of Meteorology (BoM) weather station with a complete dataset is the Shark Bay Airport Weather Station (Station 006105). This station is located approximately 5 km northeast of the Survey Area.

The long-term mean minimum temperature for the Shark Bay Airport Weather Station ranges from 10.6˚C (July) to 22.3˚C (February) and the long-term mean maximum temperature ranges from 22.8˚C (July) to 35˚C (February) (**Figure 1**) (BoM, 2025a).

The Shark Bay Airport Weather Station recorded 178.4 millimetres (mm) of rainfall in the 12 months prior to the survey (April 2024 to March 2025), which is 13.7 mm below the long-term (2000 to 2024) average of 192.1 mm (BoM, 2025a). In the three months prior to the survey (January 2025 to March 2025), 1.2 mm of rainfall was recorded, which is 44 mm below the long-term average of 45.2 mm for the same period (BoM, 2025a). Trends for rainfall and maximum temperatures for the Shark Bay Airport weather station are presented in **Table 1**.

Table 1: Trends for rainfall and maximum temperature for the Shark Bay Airport weather station (006105)

Total Rainfall (mm)				Mean Maximum Temperature (˚C)			
3 months prior	Difference to long-term mean	12 months prior	Difference to long-term mean	3 months prior	Difference to long-term mean	12 months prior	Difference to long-term mean
1.2	-44.0	178.4	-13.7	36.7	+2.2	30.4	+1.2

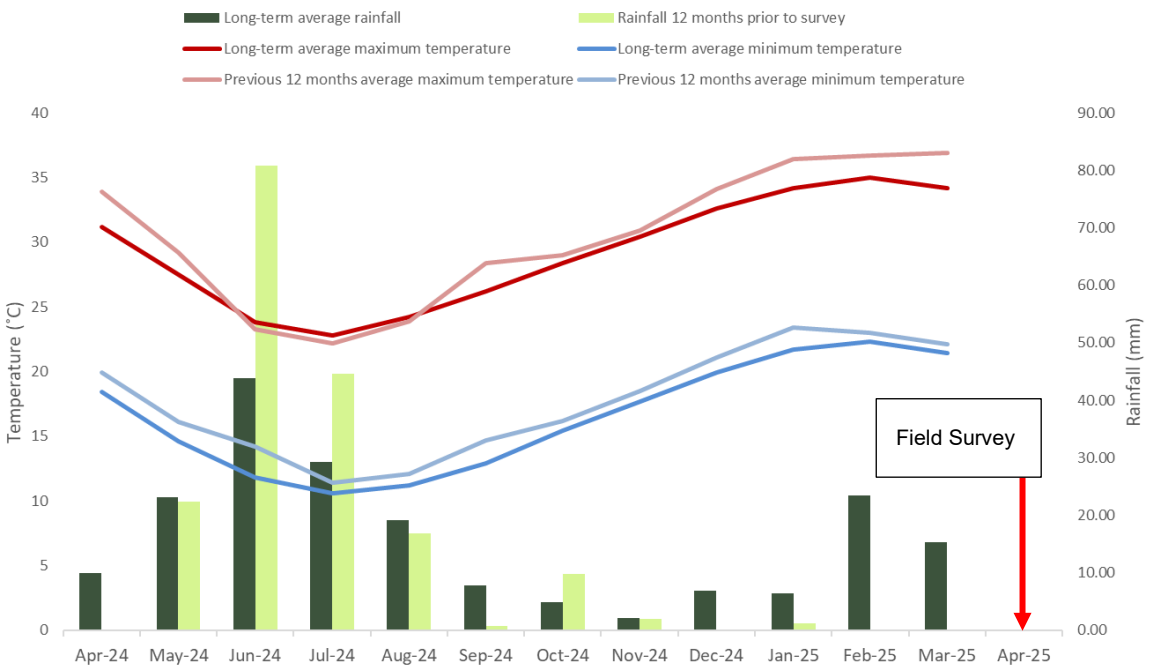

Figure 1: Climate summary of Shark Bay Airport Weather Station (006105)

2.2.2 Interim Biogeographic Regionalisation of Australia

The Interim Biogeographic Regionalisation of Australia (IBRA) divides Australia into 89 bioregions based on major biological, geographical, and geological attributes. These bioregions are subdivided into 419 subregions as part of a refinement of the IBRA framework (DEE, 2016). The Survey Area occurs within the Carnarvon bioregion and the Wooramel (CAR2) subregion. The following is a description of the Wooramel (CAR2) subregion:

> *"The Wooramel Subregion is the southern and central parts of the Carnarvon Basin. Alluvial plains associated with downstream sections and deltas of Gascoyne, Minilya and Wooramel Rivers. Includes Lake MacLeod and Kennedy Range. Tree to shrub steppe over hummock grasslands on and between aeolian red sand dunefields are extensive in the north and east as well as on top of Kennedy Range. Permian sediments are common in northern parts. Southern areas comprise limestone plateaux overlain by red sand plains. Acacia shrublands (Mulga, Bowgada and A. coriacea) over bunch grasses on red sandy ridges and plains. Mangroves confined to small areas around Lake MacLeod and near Carnarvon. Saline alluvial plains with samphire and saltbush low shrublands in near-coastal areas"* (Desmond and Chant, 2001).

2.2.3 Soil Landscape Mapping

Soil landscape mapping of Western Australia consists of a compilation of various surveys at different scales varying between 1:20,000 and 1:3,000,000 (DPIRD, 2022). The mapping comprises a nested hierarchy of levels, with each level a subdivision of the preceding level. Soil landscape mapping provides an indication of potential vegetation types and fauna habitats within the Survey Area and has been described below to the highest level of detail available for the Survey Area.

The Survey Area occurs across two soil landscape systems (**Table 2**; **Map 2**).

Table 2: Soil landscape systems within the Survey Area

System		Description	Area and percentage within Survey Area
Name	Code		
Peron	237Pn	Undulating plains of calcareous sand supporting low *Acacia* spp. shrublands and *Lamarchea hakeifolia* heaths.	42.3 ha (57.2%)
Taillefer	237Ti	Undulating sandy plains of calcareous sand over limestone with minor limestone ridges, low coastal dunes and sea cliffs supporting mainly hard spinifex (*Triodia* spp.) grasslands with numerous shrubs.	31.6 ha (42.8%)

2.2.4 Hydrography

No hydrographic features intersect the Survey Area. The nearest hydrographic feature to the Survey Area is the Little Lagoon, a non-perennial lake, located 500 m northwest of the Survey Area.

The Survey Area intersects an area assessed by the National Groundwater Dependent Atlas as having a moderate potential to support terrestrial Groundwater Dependent Ecosystems (BoM, 2025b) (**Map 3**). The area intersects the northern portion of the Survey Area and covers approximately 31.6 ha.

2.2.5 Pre-European Vegetation

The major source of data for pre-European vegetation mapping in Western Australia is the published and unpublished mapping of J. S. Beard at 1:250,000 scale. These vegetation types were later refined by Shepherd, Beeston, and Hopkins (2002), resulting in 819 Vegetation Association-level units, and a subsequent reclassification resulted in the creation of over 2,175 finer-scale System Associations (Beard et al., 2013). Two System Associations are mapped within the Survey Area (**Table 3**; **Map 4**). Representation of System Associations at a state, regional, and local level is shown in **Table 4** (Government of Western Australia, 2019). Vegetation association mapped across the Survey Area are represented by over 95% of their pre-European value at the State, IBRA, IBRA subregion and local government area levels.

Table 3: Vegetation System Associations within the Survey Area

System Association	Description	Area and percentage within Survey Area
Denham 1011	Thicket of Wattle (*Acacia* spp.), Casuarina (*Allocasuarina* spp.), and Teatree (*Melaleuca* spp.)	35.1 ha (47.5%)
Peron 112	Shrub-steppe of hummock grassland (*Triodia* spp.) with scattered shrubs (*Acacia* spp., *Grevillea* spp.) and Mallees (*Eucalyptus* spp.).	38.8 ha (52.5%)

Table 4: Representation of System Associations within the Survey Area at a state, regional, and local level

System Association	Extent				
	Pre-European (ha)	Current (ha)	Remaining (%)	Managed in DBCA lands (%)*	Within Survey Area (%)*
Representation across Western Australia					
Denham 1011	12,601.25	12,597.77	99.97	78.24	0.28
Peron 112	26,116.34	24,812.18	95.01	4.69	0.16
Representation across the Carnarvon Bioregion					
Denham 1011	11,926.16	11,926.16	100.00	78.03	0.29
Peron 112	20,012.09	19,921.06	99.55	1.76	0.19
Representation across the Wooramel Subregion					
Denham 1011	11,926.16	11,926.16	100.00	78.03	0.29
Peron 112	20,012.09	19,921.06	99.55	1.76	0.19
Representation across the Shire of Shark Bay					
Denham 1011	12,601.25	12,597.77	99.97	78.24	0.28
Peron 112	26,116.34	24,812.18	95.01	4.69	0.16

**As a portion of the current extent.*

2.2.6 Conservation Areas

Conservation areas consist of areas protected for the purpose of conservation, including but not limited to National Parks, Nature Reserves, Conservation Parks, and Regional Parks. The Survey Area does not intersect any conservation areas (DBCA, 2023b, 2023a). Nearby conservation areas are listed below and shown in **Map 5**:

- Shark Bay Marine Park, vested under the Marine Parks and Reserves Authority is located approximately 500 m to the northwest of the Survey Area.
- Nanga National Park, vested under the Conservation Commission of Western Australia, is located approximately one kilometre east of the Survey Area.
- Francois Peron National Park, vested under the Conservation Commission of Western Australia, is located approximately 1.5 km north of the Survey Area.

2.2.7 Environmentally Sensitive Areas

Environmentally Sensitive Areas (ESAs) are declared by the Department of Water and Environmental Regulation (DWER) to prevent the degradation of important environmental values such as Threatened flora, Threatened Ecological Communities (TECs), or significant wetlands. The Survey Area intersects one mapped ESA, an area recognized under the Register of the National Estate for its natural heritage values (DWER, 2021) (**Map 5**).

2.2.8 Land Use

Land within the Survey Area has been previously disturbed for the generation of renewable energy, with several solar panels, wind turbines and access tracks being present. Land use within the broader vicinity of the Survey Area is associated with residential development and tourism. Historically, land within the Survey Areas has been used for pastoral purposes.

3.0 Methods

The surveys documented in this report were undertaken in accordance with relevant EPA and DAWE guidelines (see **Section 2.1**).

3.1 Desktop Assessment

3.1.1 Literature Review

Background information on the Survey Area and surrounds (the Desktop Study Area) was compiled prior to the field survey. The literature review considered a selection of relevant reports detailing assessments undertaken in the region that were either publicly available from sources such as the Index of Biodiversity Surveys for Assessments (IBSA) website, the EPA Consultation Hub, or internet searches, or provided by the client. These reports are listed below in order of distance from the current Survey Area and summarised in **Appendix B**:

- *Synergy Site (North), Denham: Flora and Fauna Report* (360 Environmental Pty Ltd, 2019a), intersects the Survey Area.
- *Shire of Shark Bay Site, Denham: Flora and Fauna Report* (360 Environmental Pty Ltd, 2019b), intersects the Survey Area.
- *Water Corporation Site, Denham: Flora and Fauna Report* (360 Environmental Pty Ltd, 2019c), adjacent to the eastern boundary of the Survey Area.
- *Shark Bay Biological Survey: Flora, Vegetation and Fauna Assessment* (360 Environmental Pty Ltd, 2018), 40 km southeast of the Survey Area.
- *Vertebrate Fauna Survey Coburn Mineral Sand Project* (Ninox Wildlife Consulting, 2005), 99 km southeast of the Survey Area.

3.1.2 Database Searches

Database searches were undertaken to compile a list of flora and fauna known to occur in the Desktop Study Area and identify significant flora, fauna, and ecological communities with potential to occur within the Survey Area (**Table 5**).

Table 5: Database search details

Database name	Date received	Search target	Buffer around the Survey Area
Threatened and Priority Ecological Communities database search (DBCA, 2025a)	25th March 2025	TECs and PECs	100 km
Threatened and Priority Flora (TPFL) database search (DBCA, 2025b)	25th March 2025	Threatened and Priority flora	80 km
Western Australian Herbarium Flora database search (DBCA, 2025c)	25th March 2025	Threatened and Priority flora	80 km
Threatened and Priority Fauna database search (DBCA, 2025d)	25th March 2025	Threatened and Priority fauna	80 km
Protected Matters Search Tool (PMST) (DCCEEW, 2025)	25th March 2025	Threatened flora, fauna, and ecological communities	50 km

Database name	Date received	Search target	Buffer around the Survey Area
NatureMap (DBCA, 2025e)	25th March 2025	Flora and fauna	80 km
Atlas of Living Australia (ALA, 2025)	25th March 2025	Fauna	80 km

3.1.3 Likelihood of Occurrence

Significant flora and fauna taxa identified during the desktop assessment were assessed to determine the likelihood of their occurrence within the Survey Area before and after the field survey. The assessment used the likelihood of occurrence criteria presented in **Table 6**.

Taxa listed as Marine (MA) only under the EPBC Act were not considered to be significant taxa because the Marine listing does not constitute MNES under the EPBC Act. Additionally, erroneous records (i.e. records that occur well outside a taxon's known distribution) were excluded from consideration. Only taxa that have been recorded within the Survey Area or were assessed as having a high or medium likelihood of occurrence are discussed in detail.

Table 6: Likelihood of occurrence criteria

Rank	Criteria
Recorded	The taxon was recorded within the Survey Area during the current survey.
Previously Recorded	The taxon has been previously recorded within the Survey Area according to database search or literature review results.
High (Likely to occur)	Suitable habitat is present within the Survey Area, and: • For flora, the taxon has been recorded within 20 km of the Survey Area. • For fauna, the taxon has been recorded within the Desktop Study Area in the last 15 years.
Medium (May occur)	Suitable habitat is marginal or limited in extent within the Survey Area, or suitable habitat is present within the Survey Area, and: • For flora, the taxon has been recorded between 20 and 50 km of the Survey Area. • For fauna, the taxon has not been recorded within the Desktop Study Area in the last 15 years.
Low (Unlikely to occur)	Suitable habitat is not present within the Survey Area, or the taxon is very infrequently recorded in the locality despite reasonable previous search effort, or the taxon is believed to be extinct or locally extinct. For Flora, the taxon has been recorded over 50 km, or an unknown distance, from the Survey Area.

3.2 Field Survey

3.2.1 Survey Timing

The field surveys were undertaken across a single field trip as shown in **Table 7**.

Table 7: Survey timing

Tasks completed	Dates	Person field days
Detailed Flora and Vegetation, Basic Fauna, and Targeted Fauna	02 – 06 April 2025	10 field days

3.2.2 Field Personnel and Licences

Details of field personnel, including their level of experience, role, and flora collection licence numbers are detailed in **Table 8**.

Fauna fieldwork was completed under Fauna Taking (Biological Assessment) License – Regulation 27 (BA27001281) and an authorisation to take or disturb threatened species under Section 40 of the BC Act (TFA-2425-0224) (**Appendix C**). Animal ethics approval was obtained under scientific use licence number U336 / 2023 - 2025 and permit number WAEC 24-02-12.

Table 8: Field personnel

Personnel	Experience	Licence	Role
Lukas Geidans – Associate Ecologist	7 years	FB62000691	Lead Zoologist
Carter Mooney – Senior Botanist	4 years	FB62000690-2; TFL-2425-0115	Lead Botanist

3.2.3 Weather Conditions

Weather conditions during the fauna survey are presented in **Table 9**. Daily temperature and rainfall data is from the Shark Bay Weather Station (Station 006105) (BoM, 2025a). Weather conditions can impact potential detection of fauna taxa during a survey.

Table 9: Field survey weather conditions

Date	Temperature (°C)		Rainfall (mm)
	Min	Max	
02/04/2025	19.9	36.2	0
03/04/2025	23.4	36.2	0
04/04/2025	23.1	30.2	0
05/04/2025	19.2	30.8	0
06/04/2025	16.8	31.8	0

3.3 Flora and Vegetation

3.3.1 Establishment of Flora Sites

Indicative site selection was undertaken prior to the survey based on aerial photography and available literature. The number and locations of flora sites were then adjusted on site to achieve sites most representative of the vegetation present. Where possible, at least three flora sites were established in each vegetation type within the Survey Area. In instances where vegetation types were not large enough to accommodate three flora sites, one or two sites were established.

Flora sites consisted of quadrats. Quadrats were 30 x 30 m with corners aligned to northwest, northeast, southeast and southwest, and were measured out using measuring tapes. The northwest corner of each quadrat was demarcated with an aluminium fence dropper. A comprehensive list of the flora present at the time of sampling was recorded within quadrats.

Flora site locations were recorded using a GPS-enabled handheld device, with points recorded at each corner of a quadrat. The following information was recorded at each flora site:

- Site code.
- Date and personnel.
- Landform and soil description.
- Relevant site descriptors including, slope, aspect, litter cover, bare ground cover, and fire history.
- Inventory of vascular flora including the approximate average height and percentage foliar cover for each taxon.
- Vegetation description in accordance with the National Vegetation Information System (NVIS) Level 5 ‘association’ whereby the dominant growth form, height, cover, and species (three species) for the three traditional strata (upper, mid, and ground) are described
- Vegetation condition in accordance with the Eremaean and Northern Botanical Provinces vegetation condition scale (EPA, 2016a).
- Evidence of disturbance (for example clearing, rubbish, feral animals, weed incursion, and evidence of feral animals and dieback) where present.
- Photograph of the vegetation occurring within the site.

A total of 14 quadrats were established within the Survey Area. An additional six mapping notes were completed to aid vegetation mapping. Flora site locations are shown on **Map 6**.

3.3.2 Opportunistic Flora

Flora taxa observed outside flora sites were recorded opportunistically. When significant flora, Declared Pests (DPs), or WoNS were encountered opportunistically, a GPS location and count of the individuals present was recorded.

3.3.3 Targeted Searching

Prior to the survey a list of significant flora taxa with the potential to occur within the Survey Area was compiled (see **Section 3.1.3**). Field personnel familiarised themselves with photographs, reference samples, and descriptions of these taxa before conducting the survey.

When Threatened or Priority flora were encountered in the field a GPS location was taken and a count of individuals was recorded, followed by a search in the local vicinity to determine if any other individuals were present nearby and delineate population boundaries where relevant and possible. Specimens of potential significant flora that could not be identified in the field were collected for identification at the Western Australian Herbarium (WAH).

3.3.4 Vegetation Type and Condition Mapping

Vegetation type and condition mapping was initially conducted in the field with boundaries delineated over aerial photography at a scale of 1:5,000. Vegetation types were refined based on taxonomic identification of flora collections and mapping notes taken during the field survey. Further validation of vegetation types was undertaken using multivariate analysis of data collected from the quadrats. Vegetation condition mapping was refined based on site data and mapping notes. Polygons were digitised using GIS software.

3.3.5 Taxonomy and Nomenclature

Where field identification of plant taxa was not possible, specimens were collected for identification using WAH resources. Identification of specimen was completed by a suitably qualified taxonomist.

FloraBase (DBCA, 2025f) was used to determine the conservation status and known distribution of each taxon. The control status of introduced flora was sourced from the WoNS list and declared plants list (CISS, 2024; DPIRD, 2024).

Where relevant, Threatened and Priority Flora Report Forms (TPFRFs) were submitted to DBCA. Threatened and Priority Flora Report Forms are available in **Appendix D**.

3.3.6 Statistical Analyses

3.3.6.1 Vegetation Type Validation

Multivariate analysis to validate vegetation types was undertaken using PRIMER version 7. A comparison of the similarity of floristic composition between flora sites based on species presence or absence was undertaken using the Bray-Curtis similarity index. Vegetation types were defined based on approximately 70-87% similarity and distinguished visually in a dendrogram cluster analysis. The analysis was undertaken on a data matrix comprising 26 vascular flora taxa and 14 flora sites. Quadrats were included in the analysis as comprehensive species presence or absence was recorded at both site types. Singletons (flora taxa recorded at only one site) were excluded from the analysis as they can result in bias due to the Bray-Curtis coefficient and grouping properties. Unidentified or partially identified flora taxa were removed based on their ambiguity; exceptions were made for taxa that could not be identified but were confirmed to be the same across multiple sites. Introduced taxa were also excluded as their presence is typically associated with a disturbance rather than representative of a vegetation type.

3.3.6.2 Species Accumulation Curve

A species accumulation curve was plotted using PRIMER version 7 to determine the adequacy of the survey. The treatments comprised Sobs (Mao Tao), which effectively smooths the curve of observed species by simulating an infinite number of randomisations of the sample order, and richness estimators Chao 1, Chao 2, Jacknife 1, Bootstrap, and Michaelis-Menton to predict the theoretical maximum number of species that could potentially be recorded. The species accumulation curve was calculated using systematic sampling data from flora sites and does not include opportunistic flora records. All identified flora taxa, including annual and perennial, within each flora site was used to generate the species accumulation curve. Unknown flora taxa that could not be identified to a species level was excluded.

3.4 Fauna

3.4.1 Habitat Assessment and Mapping

Habitat assessments were undertaken in representative areas of fauna habitat within the Survey Area to record habitat values. Where possible, at least one habitat assessment was recorded within each habitat type. Habitat assessment locations are shown in **Map 6**.

The following information was collected at each habitat assessment locations using a GPS-enabled handheld device:

- Site photo.
- Landform.
- Soil type and colour.
- Rock types, surface stone cover, and size classes.
- Key habitat and microhabitat features including leaf litter, logs, burrows, rocky outcrops, rock crevices, hollows, and water sources.
- Habitat quality, fire history, and evidence of disturbance.
- General description of vegetation structure.
- Fauna habitat mapping was based on a combination of field observations, habitat assessment data, aerial imagery, and vegetation type mapping. Polygons were digitised using GIS software.

3.4.2 Trap Sites

Two pitfall trap lines were installed within the Survey Area in areas of suitable and representative habitat to target the Shark Bay Keeled Legless Gecko and the Keeled Slider. Each site consisted of a single pitfall trap line with six pitfall (20 litre buckets) connected by approximately 15 m of wire fence. Trap site locations are shown in **Map 6** and the survey effort for trap sites is shown in **Table 10**.

Table 10: Trap site survey effort

Habitat	Site number	Lat/long (WGS84)	Number of nights open	Total pitfall trap nights
Acacia Shrubland	01	-25.90744, 113.55141	3	3
Acacia Shrubland over *Triodia*	02	-25.91031, 113.54905	3	3
Total			**3**	**3**

3.4.3 Camera Traps

Four unbaited motion sensitive camera traps were set up opportunistically during the field survey. Camera traps were deployed at each trap site and in areas of suitable habitat for Bilbies. **Table 11** shows the total camera trap survey effort, and camera trap locations are shown in **Map 6**.

Table 11: Camera trap survey effort

Habitat	Site number	Lat/long (WGS84)	Number of camera traps	Total camera trap nights
Acacia Shrubland over *Triodia*	04	-25.9064639, 113.5482939	1	3
Acacia Shrubland over *Triodia*	05	-25.9100691, 113.5514839	1	3
Acacia Shrubland	07	-25.9165646, 113.5491996	1	3
Acacia Shrubland over *Triodia*	10	-25.9075051, 113.5514283	1	3
Total			**4**	**3**

3.4.4 Opportunistic Observations

Opportunistic observations of fauna were recorded throughout the Survey Area, including primary evidence (direct sightings, calls, remains) and secondary evidence (tracks, scats, diggings).

3.4.5 Active Searches

Active searches were undertaken at each habitat assessment for a duration of 30 minutes. Further untimed active searches were undertaken opportunistically whilst traversing the site. These searches included raking leaf litter, peeling bark, splitting dead wood, and flipping rocks in search of evidence of fauna.

3.4.6 Targeted Significant Fauna Transect

3.4.6.1 Bilby Searches

A targeted Bilby search was undertaken throughout the entirety of the Survey Area and consisted of personnel on foot searching for evidence of Bilby activity, including burrows, diggings, scats, and tracks. Any evidence of Bilbies within the Survey Area was recorded. The transect is shown in **Map 6**.

3.4.6.2 Malleefowl Searches

A targeted Malleefowl search was undertaken in areas of suitable Malleefowl habitat and consisted of personnel traversing the Survey Area and searching for evidence of Malleefowl activity, including opportunistic observations of individuals, potential nesting mound features, scrapings, and feathers, were recorded if observed. The transect is shown in **Map 6**.

3.4.7 Identification and Taxonomy

Terrestrial vertebrate fauna taxa were identified in the field and released on site.

Where there was doubt on a species name (through subsequent name changes or taxonomic reviews), an effort was made to determine the current scientific name for each taxon. Taxonomy and nomenclature in this report follows the Checklist of the Terrestrial Vertebrate Fauna of Western Australia (WAM, 2025) where relevant.

4.0 Results

4.1 Limitations

Limitations and constraints of the flora, vegetation, and fauna survey are detailed below in **Table 12**.

Table 12: Limitations and constraints associated with the survey

Variable	Degree of limitation	Potential constraints on survey outcomes
Availability of data and information	None	Sufficient data and information, including regional and local contextual information, was available to complete the scope of the survey.
Competency and experience of the survey team	None	The survey was undertaken by a team with extensive experience undertaking similar scopes within the bioregion. Associate Zoologist Lukas Geidans – 7 years' experience Senior Botanist Carter Mooney – 4 years' experience
The proportion of flora and fauna identified, recorded, or collected	None	Of the 58 flora taxa recorded, eight specimens (13.8%), could not be identified to species level because they were sterile at the time of the survey. The unidentified flora specimens were not analogous to significant flora taxa. All fauna taxa recorded were identified to species level during the field survey.
Scope of the survey	None	The scope of the survey was limited to vascular plants and terrestrial vertebrate fauna. No further exclusions were made within these groups.
Adequacy of the survey intensity and proportion of survey achieved	None	A minimum of three quadrats were installed within each vegetation type and two fauna trap sites were installed with one site within each habitat type. Additional survey effort may yield additional flora and fauna taxa, however, sufficient time and effort was allocated to the survey given the size and complexity of the Survey Area and the expected level of survey intensity.
Access problems	None	The Survey Area was sufficiently accessed by vehicle and on foot.
Timing, weather, and season	None	The recommended primary survey period for flora and vegetation within the Eremaean Botanical Province occurs 6-8 weeks post wet season (March to June) (EPA, 2016a). The flora and vegetation survey (02 – 06 April) was undertaken within the recommended primary survey period. The recommended primary survey periods for the Eremaean broad climatic regions are: • Amphibians – Immediately after significant rain events • Birds – Immediately after rain events • Mammals – No preferred time • Reptiles – September - April The fauna survey (02 – 06 April) was undertaken within the recommended primary survey period.

Variable	Degree of limitation	Potential constraints on survey outcomes
Disturbance that may have affected the results of survey	None	Areas of disturbance associated with solar infrastructure and vehicle tracks were present within the Survey Area but were not a limitation on the results of the survey.
Problems with data and analysis, including sampling biases	None	Species accumulation curves provide an indication of survey adequacy at each sampling location but do not necessarily reflect survey adequacy across the entire Survey Area, however, this is not considered a limitation on the survey outcomes. Survey effort for significant flora was concentrated in preferred habitats. This may introduce a bias where the use of non-preferred habitat is underrepresented, however, this is not considered a limitation on the survey outcomes.

4.2 Flora and Vegetation

4.2.1 Desktop Assessment

The database searches and literature review identified 67 significant flora taxa occurring within the Desktop Study Area, comprising:

- Two Threatened taxa
- 15 Priority 1 taxa
- 17 Priority 2 taxa
- 27 Priority 3 taxa
- Six Priority 4 taxa

Key findings of the literature review are summarised in **Appendix B,** and database search results are summarised in **Appendix E** and presented in **Map 7**.

No TECs were identified within the database searches. Four state listed PECs were identified in the database searches (**Table 13**). PECs identified by database searches are presented in **Map 7**.

Table 13: Priority Ecological Communities identified within the Desktop Study Area

Significant Ecological Community	BC Act Status	Distance from the Desktop Study Area
Hypersaline microbial community number 2 (Hamelin Pool stromatolites)	Priority 1	32.9 km
Salune Land System	Priority 3	78.3 km
Tamala Land System	Priority 3	78.9 km
Cullawarra Land System	Priority 3	98.1 km

4.2.2 Likelihood of Occurrence Assessment

The pre-survey likelihood of occurrence assessment identified that of the 67 significant flora taxa which occur within the vicinity of the Survey Area:

- Three species have previously been recorded within the Survey Area, including:
  - *Acanthocarpus rupestris* (P2)
  - *Olearia occidentissima* (P2)
  - *Triodia plurinervata* (P3)
- Seventeen species were considered to have a high likelihood of occurrence within the Survey Area.
- Fifteen species were considered to have a medium likelihood of occurrence within the Survey Area.
- Thirty-two species were considered to have a low likelihood of occurrence within the Survey Area.

Following the field survey, the post-survey likelihood of occurrence assessment identified that:

- Two priority flora taxa were recorded within the Survey Area:
  - *Olearia occidentissima* (P2)
  - *Triodia plurinervata* (P3)
- Six taxa were considered to have a medium likelihood of occurrence. This was due to the presence of supporting habitat within the Survey Area and the species not being recorded during the field survey. The six taxa are:
  - *Acanthocarpus rupestris* (P2)
  - *Chthonocephalus muellerianus* (P2)
  - *Acanthocarpus parviflorus* (P3)
  - *Lepidium biplicatum* (P3)
  - *Grevillea rogersoniana* (P3)
  - *Anthocercis intricata* (P3)
- Fifty-nine taxa were considered to have a low likelihood of occurrence.

The complete results of the pre-survey and post-survey significant flora likelihood of occurrence assessment are provided in **Appendix E**.

4.2.3 Floristic Composition

The field survey recorded a total of 58 taxa from 49 genera across 27 families (**Appendix F**). The most abundant genus was *Acacia* (three taxa). The most dominant families were Poaceae (nine taxa), Asteraceae (six taxa), Chenopodiaceae (five taxa) and Fabaceae (five taxa).

4.2.4 Significant Flora

4.2.4.1 Threatened and Priority Flora Recorded Within the Survey Area

No Threatened flora taxa were recoded within the Survey Area. Two Priority flora taxa were recorded during the field survey (**Table 14**; **Map 8**). Threatened and Priority Flora Report Forms have been submitted to DBCA and are provided in **Appendix D**.

Table 14: Priority flora recorded within the Survey Area

Taxon (status)	Number of individuals and locations	Habitat/landform
Triodia plurinervata (P3)	885 from 9 locations	Vegetation type AlTp on undulating sub-coastal dunes
Olearia occidentissima (P2)	73 from 13 locations	Vegetation types AlTp and AlAp on undulating sub-coastal dunes

4.2.4.2 *Triodia plurinervata* (P3)

Triodia plurinervata (P3) (**Plate 1**) is a perennial grass, growing to between 0.4 and 1.5 m. This species is known from 36 records across the Wooramel IBRA subregion, including, the Peron Peninsula, Dirk Hartog Island, Dorre Island and Bernier Island (DBCA, 2025f).

During the field survey, 885 individuals of *Triodia plurinervata* (P3) were recorded from nine locations. These individuals and locations do not represent the full extent of the *Triodia plurinervata* (P3) within the Survey Area. This taxon was recorded exclusively within the AlTp vegetation type on undulating sub-coastal dunes. A majority of *Triodia plurinervata* (P3) specimens recorded within the Survey Area were sterile at the time of survey. Some specimens contained spent florets which maintained some reproductive structures (awns, lemma, palea) which aided in positive taxonomic identification.

Plate 1: *Triodia plurinervata* (P3) A) Habit and B) Specimen collected within the Survey Area

4.2.4.3 *Olearia occidentissima* (P2)

Olearia occidentissima (P2) (**Plate 2**) is a prostrate, straggling to erect shrub growing to 0.2 m in height. This species is known from 21 records across the Wooramel IBRA subregions, including the Peron Peninsula and Dirk Hartog Island (DBCA, 2025f).

During the field survey, 73 individuals of *Olearia occidentissima* (P2) were recorded from 13 locations. This taxon was recorded across both vegetation types AlTp and AlAp on undulating sub-coastal dunes. All specimens of *Olearia occidentissima* (P2) recorded within the Survey Area were in poor condition and sterile. Some specimens contained residual bracts, which aided in positive taxonomic identification.

Plate 2: *Olearia occidentissima* (P3) specimen collected within the Survey Area

4.2.5 Introduced Flora

A total of 10 introduced taxa were recorded within the Survey Area, representing 17.2% of the total taxa recorded (**Table 15**; **Map 9**). Two are listed as a WoNS (**Lycium ferocissimum* and **Opuntia stricta*), of which one (**Opuntia stricta*) is listed as Declared Pests under the BAM Act.

Table 15: Introduced flora taxa recorded within the Survey Area

Taxon	Common name	Status under BAM Act	WoNS
**Avena barbata*	Slender oat	Permitted – s11	No
**Cenchrus ciliaris*	Buffel grass	Permitted – s11	No
**Centaurea melitensis*	Maltese cockspur	Permitted – s11	No
**Lycium ferocissimum*	African boxthorn	Permitted – s11	Yes
**Mesembryanthemum crystallinum*	Ice plant	Permitted – s11	No

Taxon	Common name	Status under BAM Act	WoNS
**Opuntia stricta*	Erect prickly pear	Declared Pest – s22(2)	Yes
**Pentameris airoides*	-	Permitted – s11	No
**Sisymbrium erysimoides*	Mediterranean rocket	Permitted – s11	No
**Sonchus oleraceus*	Common sowthistle	Permitted – s11	No
**Urospermum picroides*	Prickly goldenfleece	Permitted – s11	No

4.2.5.1 Declared Pests and Weeds of National Significance (WoNS)

******Lycium ferocissimum* **(African boxthorn)**

**Lycium ferocissimum* (African boxthorn), is an intricately branched, spiny shrub growing to between 0.5-4 m in height. Five individuals of **Lycium ferocissimum* were recorded from two locations within the Survey Area. Specimens of **Lycium ferocissimum* were sterile and in poor condition at the time of survey.

****Opuntia stricta*** **(Erect prickly pear), Declared Pest – s22(2)**

Opuntia strict* (Erect prickly pear) (Plate 3**), is a spreading to erect shrub growing to around two metres in height. Two individuals of **Opuntia stricta* were recorded from two locations within the Survey Area.

Plate 3: ****Opuntia stricta* **recorded within the Survey Area

4.2.6 Unconfirmed Flora

Eight specimens (13.8% of the taxa recorded) could not be identified to species level because the taxa were sterile at the time of the survey (**Appendix F**). Of these specimens, one was identified to family level, six were identified to genus level, and one was tentatively identified to species level. No unconfirmed flora taxa were analogous to significant flora taxa identified by the desktop assessment.

4.2.7 Multivariate Analysis

Selected inputs and outputs of the floristic analysis are presented in **Appendix G**. Floristic composition analysis was conducted using presence/absence to produce vegetation type groupings. CLUSTER outputs of floristic analysis with vegetation types defined are presented in **Figure 2**. The following observations were made from the analysis:

- All vegetation types occurred on the same lineage. This is likely a result of all vegetation types occurring on the same landform. Species composition was relatively stable across vegetation types within the Survey Area. Both vegetation types AlTp and AlAp shared approximately 72.2% if flora taxa recorded. The key difference between both vegetation types was the presence/absence of *Triodia plurinervata* (P3). *Triodia plurinervata* (P3) was exclusively present within vegetation type AlTp.

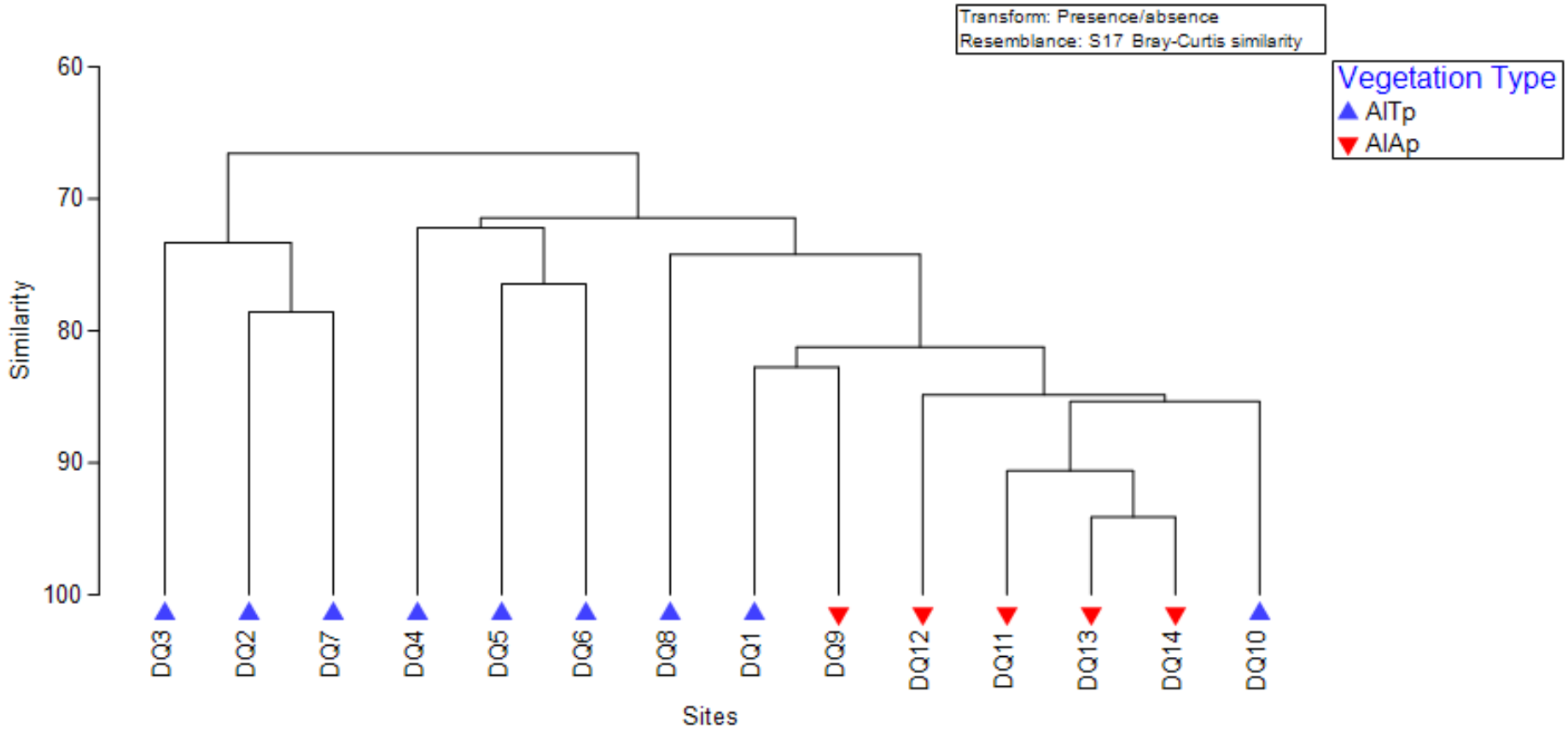

Figure 2 Floristic Community Type Dendrogram Output

4.2.8 Vegetation Types

Two vegetation types were described and mapped across one broad landform (sub-coastal undulating dunes) within the Survey Area (**Table 16**; **Map 8**).

Detailed site sheets for each quadrat are provided in **Appendix H.**

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Table 16: Vegetation types recorded within the Survey Area

Vegetation type and description	Local landform	Total area, percentage of Survey Area	Sites	Vegetation condition	Representative photograph
AlTp: *Acacia ligulata*, *Exocarpos aphyllus* and *Rhagodia latifolia* subsp. *latifolia* mid-open shrubland over *Triodia plurinervata* (P3) low-open hummock grassland.	Sub-coastal undulating dunes on orange sandy-clay soils.	45.2 ha, 61.2%	DQ1, DQ2, DQ3, DQ4, DQ5, DQ6, DQ7, DQ8, DQ10	Poor to Good	
AlAp: *Acacia ligulata*, *Acacia tetragonophylla* and *Exocarpos aphyllus* mid-open shrubland over *Maireana stipitata*, *Atriplex paludosa* subsp. *moquiniana* and *Ptilotus divaricatus* low-sparse shrubland.	Sub-coastal undulating dunes on orange sandy-clay soils.	22.4 ha, 30.3%	DQ9, DQ11, DQ12, DQ13, DQ14	Poor to Good	

Vegetation type and description	Local landform	Total area, percentage of Survey Area	Sites	Vegetation condition	Representative photograph
Cleared Areas	-	6.3 ha, 8.6%	-	Completely Degraded	-
Total Area	-	**73.9 ha, 100%**	-	-	-

4.2.9 Vegetation Condition

Vegetation condition within the Survey Area ranged from Completely Degraded to Good, with the majority (83.9%) being in Good condition (**Table 17**; **Map 9**).

Evidence of disturbance was largely associated with the presence of introduced flora, grazing, litter, vehicle tracks and infrastructure.

Table 17: Summary of vegetation condition within the Survey Area

Vegetation condition	Area	Percentage of Survey Area
Good	62.0 ha	83.9%
Poor	2.5 ha	3.4%
Degraded	3.1 ha	4.2%
Completely Degraded (Cleared Areas)	6.3 ha	8.6%
Total	**73.9 ha**	**100.0%**

4.2.10 Significant Vegetation

4.2.10.1 Threatened and Priority Ecological Communities

No TECs were recorded within the vicinity of the Survey Area.

Further, vegetation types delineated across the Survey Area were not analogous to any PECs identified in the Desktop Assessment.

4.2.10.2 Groundwater Dependent Ecosystems

An area assessed as having a moderate potential to support terrestrial GDE intersects the Survey Area (**Map 3**) (BoM, 2025b). All flora taxa recorded within the Survey Area are xerophytic species and do not rely on the presence of groundwater. The vegetation recorded within the survey area does not represent a terrestrial GDE.

4.2.11 Species Accumulation Curve

Analysis of systematic flora data for the Survey Area produced a Sobs curve that is beginning to approach an asymptotic plateau (**Figure 3**). All richness estimators were greater than the Sobs curve, indicating that the observed species richness was lower than predicted by the analysis. The observed species richness for the Survey Area was 46, whereas estimated species richness ranged from 48.2 (Michaelis-Menton) to 61.1 (Chao 1 and Chao2), which suggests that approximately 75.3 to 95.4% of the theoretical maximum number of flora species was recorded during the field survey (**Table 18**).

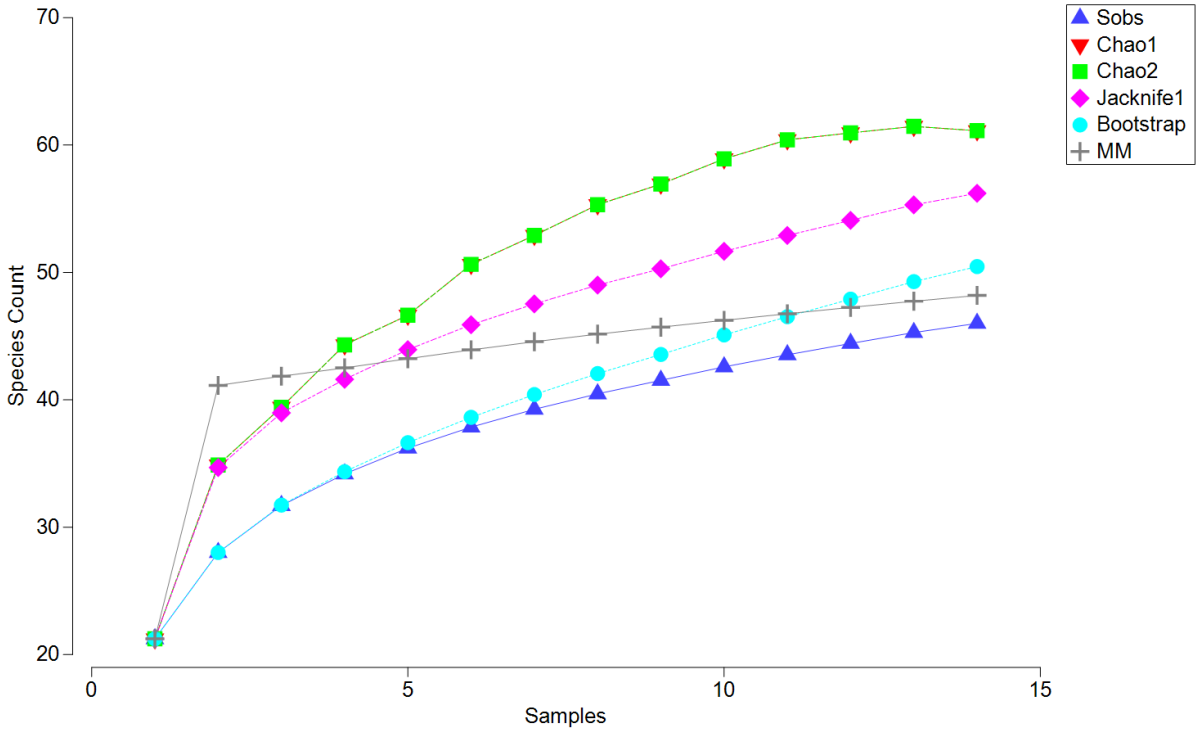

Figure 3: Flora species accumulation curve

Table 18: Flora species richness estimators

Treatment	Estimated species richness	Observed species richness as a proportion of estimated species richness
Chao 1	61.1	75.3%
Chao 2	61.1	75.3%
Jacknife 1	56.2	81.9%
Bootstrap	50.5	91.1%
Michaelis-Menton	48.2	95.4%

5.0 Fauna

5.1 Desktop Assessment

The database searches and literature review identified 421 terrestrial vertebrate fauna taxa occurring within the Desktop Study Area, comprising:

- Three amphibians, of which none are significant.
- 255 birds, of which 77 are significant.
- 56 mammals, of which 23 are significant.
- 110 reptiles, of which 13 are significant.

Key findings of the literature review are summarised in **Appendix B**, a complete list of fauna taxa recorded within the Desktop Study Area is presented in **Appendix I** and database search results are displayed in **Map 10**.

5.1.1 Fauna Habitats

Two fauna habitats (excluding cleared areas), namely the *Acacia* Shrubland and the *Acacia* Shrubland over *Triodia* were identified and mapped within the Survey Area. Fauna habitats are presented in **Map 11**, described below in **Table 19**, and site sheets for each habitat assessment are provided in **Appendix J**. Small discrepancies in fauna habitat extents (i.e., not adding up to the exact area extent of the Survey Area) are due to rounding.

Table 19: Fauna habitats recorded within the Survey Area

Fauna habitat	Total area, percentage of Survey Area	Habitat description	Representative photograph
Acacia Shrubland	22.4 ha, 30.3%	Broad landform of undulating plains with orange sandy soils. Vegetation consists of *Acacia ligulata, Acacia tetragonophylla* and *Exocarpos aphyllus* mid-open shrubland over *Maireana stipitate*, *Atriplex paludosa* subsp. *moquiniana* and *Ptilotus divaricatus* low-sparse shrubland. Microhabitats include hummocks and woody debris. Habitat condition ranged from Poor to Good, with the majority of the habitat in Good condition. Areas of poor condition contained disturbances caused by vehicle tracks and clearing. This habitat may provide foraging, breeding, and dispersal habitat for the Bilby, Malleefowl and Shark Bay Western Grasswren, and shelter for the Shark Bay Keeled Legless Gecko and Western Spiny-tailed Skink due to the presence of preferred vegetation and sandy substrate.	
Acacia Shrubland over *Triodia*	45.2 ha, 61.2%	Broad landform of undulating plains with orange sandy soils. Vegetation consists of *Acacia ligulata, Exocarpos aphyllus* and *Rhagodia latifolia* subsp. *latifolia* mid-open shrubland over low *Triodia plurinervata* low-open hummock grassland. Microhabitats include *Triodia* hummocks and woody debris. Habitat condition ranged from Degraded to Good, with the majority of the habitat in Good condition. Areas of degraded condition were associated with vehicle tracks and clearing surrounding the solar array. This habitat may provide foraging, breeding, and dispersal habitat for the Bilby, Malleefowl, and Shark Bay Western Grasswren, and shelter for the Shark Bay Keeled Legless	

Fauna habitat	Total area, percentage of Survey Area	Habitat description	Representative photograph
		Gecko and Western Spiny-tailed Skink due to the presence of preferred vegetation and sandy substrate.	
Cleared	6.3 ha, 8.6%	Cleared land for existing tracks/roads. Low/negligible fauna habitat value.	
Total	**73.9 ha, 100%**		

5.1.2 Fauna Records

The fauna survey recorded a total of 25 fauna taxa from 23 families, outlined below in **Table 20**.

Table 20: Recorded fauna during the field survey

Family	Scientific Name	Common Name	Conservation Status		Abundance
			State	Common wealth	
Birds					
Acanthizidae	*Sericornis frontalis*	White-browed Scrubwren	-	-	1
Casuariidae	*Dromaius novaehollandiae*	Emu	-	-	3
Columbidae	*Phaps chalcoptera*	Common Bronzewing	-	-	1
Columbidae	*Spilopelia senegalensis*	Laughing Turtle Dove	-	-	6
Corvidae	*Corvus bennetti*	Little Crow	-	-	11
Estrildidae	*Taeniopygia castanotis*	Australian Zebra Finch	-	-	20
Falconidae	*Falco cenchroides*	Nankeen Kestrel	-	MA	1
Hirundinidae	*Hirundo neoxena*	Welcome Swallow	-	MA	2
Maluridae	*Malurus leucopterus*	White-winged Fairywren	-	-	5
Meliphagidae	*Gavicalis virescens*	Singing Honeyeater	-	-	1
Motacillidae	*Anthus australis*	Australian Pipit	-	MA	1
Petroicidae	*Microeca fascinans*	Jacky Winter	-	-	1
Psophodidae	*Psophodes occidentalis*	Chiming Wedgebill	-	-	1
Rhipiduridae	*Rhipidura leucophrys*	Willie Wagtail	-	-	1
Mammals					
Bovidae	**Capra hircus*	Feral Goat	-	-	1
Canidae	**Canis lupus*	Dingo / Dog	-	-	2
Equidae	**Equus ferus caballus*	Horse	-	-	2
Felidae	**Felis catus*	Cat	-	-	1
Leporidae	**Oryctolagus cuniculus*	Rabbit	-	-	2
Macropodidae	*Osphranter robustus*	Common Wallaroo	-	-	4
Tachyglossidae	*Tachyglossus aculeatus acanthion*	Short-beaked Echidna	-	-	4

Family	Scientific Name	Common Name	Conservation Status		Abundance
			State	Common wealth	
Reptiles					
Agamidae	*Ctenophorus maculatus maculatus*	Spotted Sand Dragon	-	-	3
Elapidae	*Simoselaps bertholdi*	Jan's Banded Snake	-	-	1
Scincidae	*Morethia lineoocellata*	West Coast Morethia Skink	-	-	1
Scincidae	*Tiliqua rugosa palarra*	Shark Bay Bobtail	-	-	1

Amphibians

No amphibians were recorded within the Survey Area.

Birds

A total of 14 native bird taxa from 13 families were recorded within the Survey Area. The most abundant bird taxa were the Australian Zebra Finch (*Taeniopygia castanotis*) and Little Crow (*Corvus bennetti*). The most diverse bird family was Columbidae (two taxa).

No significant or introduced birds were recorded.

Mammals

A total of two native mammal taxa from two families were recorded within the Survey Area including, the Common Wallaroo (*Osphranter robustus*) and Short-beaked Echidna (*Tachyglossus aculeatus acanthion*).

No significant mammals were recorded, and five introduced mammals were recorded, including the Feral Goat (**Capra hircus*), Dingo/Dog (**Canis lupus*), Horse (**Equus ferus caballus*), Cat (**Felis catus*), and Rabbit (**Oryctolagus cuniculus*)

Reptiles

A total of four native reptile taxa from three families were recorded within the Survey Area including, the Spotted Sand Dragon (*Ctenophorus maculatus maculatus*), Jan's Banded Snake (*Simoselaps bertholdi*), West Coast Morethia Skink (*Morethia lineoocellata*), and Shark Bay Bobtail (*Tiliqua rugosa palarra*).

No significant or introduced reptiles were recorded.

5.1.3 Significant Fauna

5.1.3.1 Recorded Within the Survey Area

No significant fauna taxa were recorded within the Survey Area during the field survey under the EPBC or BC Act.

5.1.3.2 Potentially Occurring Within the Survey Area

No significant fauna taxa have been recorded within the Survey Area during previous surveys.

Five significant fauna taxa were assessed as having a high likelihood of occurring within the Survey Area:

- Malleefowl (*Leipoa ocellata*), listed as Vulnerable under the BC Act and EPBC Act.
- Bilby (*Macrotis lagotis*), listed as Vulnerable under the BC Act and EPBC Act.
- Western Spiny-tailed Skink (*Egernia stokesii badia*), listed as Vulnerable under the BC Act and Endangered under the EPBC Act.
- Shark Bay Keeled Legless Gecko (*Pletholax edelensis*), listed as Priority 3 by DBCA.
- Shark Bay Western Grasswren (*Amytornis textilis textilis*), listed as Priority 4 by DBCA.

Two significant fauna taxon was assessed as having a medium likelihood of occurring within the Survey Area:

- Chuditch (*Dasyurus geoffroii fortis*) listed as Vulnerable under the BC Act and EPBC Act.
- Javelin Lizard (*Delma concinna major*), listed as Priority 1 by DBCA.

The remaining 88 significant fauna taxa were assessed as having a low likelihood of occurring within the Survey Area.

The complete results of the significant fauna likelihood of occurrence assessment including justification for the assessment outcome for each taxon is provided in **Appendix K**.

6.0 Discussion

6.1 Flora and Vegetation

6.1.1 Floristic Composition

A total of 58 vascular flora taxa were recorded during the survey. Floristic diversity within the Survey Area is consistent with pre-survey database searches undertaken as part of the Desktop Assessment. The number of species was lower than expected, particularly with regard to annual flora taxa present. Ten annual taxa were recorded during the field survey. This low number of annual taxa was due largely to the low rainfall prior to the field survey. Annual taxa require high levels of soil moisture to germinate and develop reproductive features (Aplin, 1979).

6.1.2 Significant Flora

No Threatened flora species were recorded within the Survey Area. Two Priority flora taxa were recorded within the Survey Area: *Triodia plurinervata* (P3) and *Olearia occidentissima* (P2). Both taxa were recorded within the pre-survey likelihood assessment as having been previously recorded within the Survey Area.

One taxon, *Acanthocarpus rupestris* (P2) had been previously recorded within the Survey Area. Despite searches, this taxon was not recorded during the field survey. One sterile *Acanthocarpus* species was recorded, however it did not share affinities to *Acanthocarpus rupestris* (P2). The *Acanthocarpus* specimen collected during the field survey contained between 7-13 nerves per leaf face, versus the 3-5 veins displayed in *Acanthocarpus rupestris* (P2). The presence of between 7 and 13 nerves per leaf face is consistent with *Acanthocarpus preissii*, a common species within the bioregion.

6.1.2.1 *Triodia plurinervata* (P3)

Triodia plurinervata (P3) is a perennial grass, growing to between 0.4 and 1.5 m. This species is known from 36 records across the Wooramel IBRA subregion, including, the Peron Peninsula, Dirk Hartog Island, Dorre Island and Bernier Island (DBCA, 2025f).

During the field survey, 885 individuals of *Triodia plurinervata* (P3) were recorded from nine locations. These individuals and locations do not represent the full extent of the *Triodia plurinervata* (P3) within the Survey Area. This taxon was recorded exclusively within the AlTp vegetation type on undulating sub-coastal dunes. Within vegetation type AlTp, *Triodia plurinervata* (P3) dominated the lower vegetation stratum. A majority of *Triodia plurinervata* (P3) specimens recorded within the Survey Area were sterile at the time of survey. Some specimens contained spent florets which maintained some reproductive structures (awns, lemma, palea) which aided in positive taxonomic identification.

6.1.2.2 *Olearia occidentissima* (P2)

Olearia occidentissima (P2) is a prostrate, straggling to erect shrub growing to 0.2 m in height. This species is known from 21 records across the Wooramel IBRA subregions, including the Peron Peninsula and Dirk Hartog Island (DBCA, 2025f).

During the field survey, 73 individuals of *Olearia occidentissima* (P2) were recorded from 13 locations. This taxon was recorded across both vegetation types AlTp and AlAp on undulating sub-coastal dunes. All specimens of *Olearia occidentissima* (P2) recorded within the Survey Area were in poor condition and sterile. Some specimens contained residual bracts, which aided in positive taxonomic identification.

6.1.3 Introduced Flora

A total of 10 introduced flora taxa were recorded during the survey. Two introduced flora taxa are listed as WoNS; **Opuntia stricta (*Erect Prickly Pear) and **Lycium ferocissimum* (African Boxthorn). One introduced taxon, **Opuntia stricta* is listed as a Declared Pest under the BAM Act.

6.1.3.1 **Lycium ferocissimum* (African boxthorn)

**Lycium ferocissimum* (African boxthorn), is an intricately branched, spiny shrub growing to between 0.5-4 m in height. Five individuals of **Lycium ferocissimum* were recorded from two locations within the Survey Area. Specimens of **Lycium ferocissimum* were sterile and in poor condition at the time of survey.

At the state-level **Lycium ferocissimum* is listed as Permitted – s11 under the BAM Act 2007. **Lycium ferocissimum* is listed as a WoNS. It is considered a WoNS due to its invasiveness, potential to spread, and environmental and economic impacts. Additionally, all parts of **Lycium ferocissimum* (flowers, leaves, roots, stems) are considered to be poisonous to both humans and livestock. Ecologically, **Lycium ferocissimum* reduces biodiversity by forming dense thickets, outcompeting native flora, and providing refuge for feral animals (CISS, 2025).

6.1.3.2 **Opuntia stricta* (Erect prickly pear), Declared Pest – s22(2)

**Opuntia strict* (Erect prickly pear), is a spreading to erect shrub growing to around 2 m in height. Two individuals of **Opuntia stricta* were recorded from two locations within the Survey Area.

**Opuntia stricta* is listed as a Declared Pest – s22(2) under the BAM act. **Opuntia stricta* is subject C3 – Management/Restricted control measures across all of WA. It is considered an organism which should have management strategies applied to alleviate the harmful impacts of the organism, reduce its numbers, or prevent/contain its spread (DPIRD, 2025a).

**Opuntia stricta* is part of the larger Opuntioid cacti group, which are all considered to be WoNS. Opuntioid cacti are considered WoNS due to their invasiveness, potential to spread, and environmental impacts. Ecologically, Opuntioid cacti can reduce biodiversity by outcompeting native flora, especially along flood plains and drainage areas (DPIRD, 2025b).

6.1.4 Vegetation Types and Condition

Two vegetation types were delineated within the Survey Area across a single landform: the undulating sub-coastal dunes on sandy-clay soils. Neither of the vegetation types recorded are restricted to the Survey Area.

Vegetation type AlTp was present across the northern two-thirds (61.2%) of the Survey Area. Vegetation type AlTp lacked an upper stratum. It was composed of an open shrubland middle stratum, containing *Acacia ligulata, Exocarpos aphyllus* and *Rhagodia latifolia* subsp. *latifolia*. The lower stratum of vegetation type AlTp was dominated by *Triodia plurinervata* (P3) grassland.

Vegetation type AlAp contained many of the same flora taxa as vegetation type AlTp. Vegetation type AlAp also lacked an upper stratum. Its middle stratum was comprised of a many of the same species as vegetation type AlTp, including *Acacia ligulata* and *Exocarpos aphyllus*. The key difference between vegetation type AlAp and AlTp, was the distinct lack of *Triodia plurinervata* (P3) from the lower stratum of vegetation type AlAp. Rather than a grassland in the lower stratum, vegetation type AlAp contained a sparse shrubland largely consisting of *Atriplex paludosa* subsp. *moquiniana* low shrubs.

Vegetation condition within the Survey Area ranged from Completely Degraded to Good. The majority of the Survey Area was in Good condition (83.9%). Disturbance within the Survey Area was largely associated with the presence of litter, low-level grazing, infrastructure, vehicle tracks and introduced flora taxa.

6.1.5 Significant Vegetation

No Threatened or Priority Ecological Communities were recorded within the Survey Area.

6.1.6 Survey Adequacy

Fourteen vegetation survey quadrats were established across the Survey Area. A minimum of three survey quadrats were established in each vegetation type encountered during the field survey.

Species accumulation analysis indicated that between 75.3% and 95.4% of flora taxa potentially present within the Survey Area were recorded. The lower range is likely to be a result of the lack of annual taxa present within the Survey Area. As discussed above, low rainfall prior to the field survey is likely to have supressed floristic diversity at the time of survey.

The flora and vegetation survey effort was in accordance with the scope of work, and appropriate for a detailed flora and vegetation survey in the Eremaean botanical province. The data collected is considered adequate to provide a good representation of the flora and vegetation present within the Survey Area.

6.2 Fauna

6.2.1 Fauna Habitats

The two fauna habitats and assemblages identified within the Survey Area are typical of the Carnarvon bioregion and consistent with habitats and assemblages identified by previous studies in the region (**Appendix B**). Both habitats identified within the Survey Area extend outside the Survey Area to form larger ecosystems. A number of ephemeral lakes occur both to the north and east of the Survey Area and may influence seasonal habitat use. However, the Survey Area itself is not important for regional connectivity, as it occurs within an intact landscape that retains large areas of native vegetation and fauna movement can occur outside the Survey Area.

Both the *Acacia* Shrubland over *Triodia* and *Acacia* Shrubland are widespread and abundant at a regional scale. The shrublands contribute to landscape connectivity and may offer sheltering and foraging opportunities for the broader faunal assemblage. Although no significant species were identified during the survey, the presence of scattered dead and decaying trees may provide sheltering opportunities for the significant Western Spiny-tailed Skink whilst the sandy substrate found throughout is preferred for burrowing by the Bilby. Both habitat types contain mid open shrublands of *Acacia* sp. which is preferred for sheltering and foraging by the Shark Bay Keeled Legless Gecko, Javelin Lizard, Shark Bay Western Grasswren, and the Malleefowl. These species may use the habitats within Survey Area, however, due to their widespread distribution in the broader region, they are unlikely to be dependent on it.

6.2.2 Significant Fauna

6.2.2.1 Recorded within the Survey Area

No significant fauna were recorded within the Survey Area during the field survey.

6.2.2.2 High Likelihood of Occurrence within the Survey Area

Malleefowl (*Leipoa ocellata*) – VU (BC Act; EPBC Act)

The Malleefowl is found in semi-arid to arid shrublands and low woodlands, especially those dominated by Mallee and/or *Acacia*. Sandy substrates and an abundance of leaf litter are required for breeding (Department of the Environment and Energy, 2018). Densities of these bird species are generally higher in areas with higher rainfall and more fertile soils, where habitats are denser and food plants are more abundant. Large quantities of ideal habitat for the Malleefowl has already been cleared or has been modified by grazing via introduced fauna such as Sheep, Cattle, Rabbits, and Goats (Benshemesh, 2007). The species nests in large mounds of dirt and leaf litter, up to five metres wide and one metre tall (Menkhorst et al., 2017).

Malleefowl has been recorded recently within the Desktop Study Area and is likely to occur within the Survey Area. Both the *Acacia* Shrubland and *Acacia* Shrubland over *Triodia* within the Survey Area may provide habitat for the Malleefowl because of its value for foraging and dispersal. These habitats are also suitable for Malleefowl breeding, although no Malleefowl mounds were recorded during the field survey.

Bilby (*Macrotis lagotis*) – VU (BC Act; EPBC Act)

The range of the Bilby has declined northwards, with wild subpopulations now restricted predominantly to the Tanami Desert in the Northern Territory and the Gibson, Little Sandy and Great Sandy Deserts as well as parts of the Pilbara region in Western Australia (DBCA, 2017b; Southgate, 1990). The Bilby is described as occupying a wide range of vegetation types, including open tussock grassland on upland hills, Mulga woodland/shrubland growing on ridges and rises and spinifex growing on sandplains and dunes, drainage systems, salt lake systems, and other alluvial areas (DBCA, 2017b; Pavey, 2006).

The Bilby has been recorded recently within the Desktop Study Area and is likely to occur within the Survey Area. Both the *Acacia* Shrubland and *Acacia* Shrubland over *Triodia* habitats within the Survey Area constitute potential core habitat for Bilby because of their value for breeding, burrowing, and foraging.

Western Spiny-tailed Skink (Egernia *stokesii badia*) – VU (BC Act); EN (EPBC Act)

A brown form of the Western Spiny-tailed Skink occurs in the Wheatbelt and Shark Bay area and inhabits tree hollows and fallen logs, capable of providing a combination of basking and shelter sites. This is distinct from the black form of the species which occurs in the Murchison region and inhabits rocky outcrops with crevices and boulders (DAWE, 2020). The species leaves distinctive clusters of faecal droppings outside refuges (How et al., 2003).

Western Spiny-tailed Skink has been recorded within the Desktop Study Area and is likely to occur within the Survey Area. Within the Survey Area, both the *Acacia* Shrubland over *Triodia* and *Acacia* Shrubland habitats constitute potential core habitat providing basking, foraging, and sheltering sites. This habitat may also be used by the species for dispersal into the surrounding landscape.

Shark Bay Keeled Legless Gecko (*Pletholax edelensis*) - Priority 3 (DBCA)

The Shark Bay Keeled Legless Gecko occurs on Edel Land Peninsula, Peron Peninsula and Dirk Hartog Island within the Shark Bay region. Inhabits *Acacia* shrubs, *Triodia*, coastal spinifex, and heath associated with coastal dunes and sandplains (Wilson and Swan, 2021).

Shark Bay Keeled Legless Gecko has been recorded within the Desktop Study Area and is likely to occur within the Survey Area. Within the Survey Area, both the *Acacia* Shrubland over *Triodia* and *Acacia* Shrubland habitats constitute core habitat providing basking,

foraging, and sheltering sites. This habitat may also be used by the species for dispersal into the surrounding landscape.

Shark Bay Western Grasswren (*Amytornis textilis textilis*) – P4 (DBCA)

The range and habitat of the Shark Bay Western Grasswren does not overlap with any other Grasswren. This species prefers *Acacia* Shrublands with dense areas of shrubs and lower recumbent shrubs less than 1 m in height, and forages on the ground around the base of shrubs (Menkhorst et al., 2019). The species typically occurs in pairs and in small family groups (Menkhorst et al., 2019).

Shark Bay Western Grasswrens have been recorded frequently and recently within the Desktop Study Area and is likely to occur within the within the Survey Area. Both the *Acacia* Shrubland over *Triodia* and *Acacia* Shrubland habitats constitute core habitat for the Shark Bay Western Grasswren because of their value for foraging and nesting.

6.2.2.3 Medium Likelihood of Occurrence within the Survey Area

Chuditch (*Dasyurus geoffroii fortis*) – VU (BC Act; EPBC Act)

The Chuditch inhabits areas dominated by sclerophyll forest or drier woodland, heath, and Mallee shrubland (Baker and Gynther, 2023). The species is generally highly mobile and uses bush remnants as corridors (Woinarski et al., 2012). The Chuditch is a largely nocturnal animal, feeding on a carnivorous diet of mammals, birds, lizards, and frogs. However, they have been also recorded foraging during the day during the breeding season or when cold and wet weather restricts their nocturnal movements (Baker and Gynther, 2023). Most diurnal denning sites in sclerophyll forest consist of hollow logs or earth burrows, although Quenda nests and hollow tree bases may be used (Baker and Gynther, 2023). The Chuditch was abundant prior to European settlement, and it is now largely restricted to the southwest of WA, with small numbers in the Midwest, Wheatbelt and South Coast Regions (DBCA, 2017c).

The Chuditch was not recorded during the field survey, however the species has been infrequently recorded within the Desktop Study Area and may occur within the Survey Area. Records of this species within the Desktop Study Area may be related to the reintroduction of the species to the Francois Peron National Park area as part of Project Eden (Government of Western Australia, 2011; Johnson and Morris, 2011). Both *Acacia* Shrubland and *Acacia* Shrubland over *Triodia* habitats within the Survey Area constitute supporting habitat for Chuditch because of their value for foraging and dispersal.

Javelin Lizard (*Delma concinna major*) – P1 (DBCA)

This species occurs in the Shark Bay region with a distribution from Kalbarri to Shark Bay and inhabits dense low coastal heath and associated leaf litter (Wilson and Swan, 2021).

The Javelin Lizard has been recorded within the Desktop Study Area and may occur within the Survey Area. Within the Survey Area, both the *Acacia* Shrubland over *Triodia* and *Acacia* Shrubland habitats constitute core habitat providing basking, foraging, and sheltering sites. This habitat may also be used by the species for dispersal into the surrounding landscape.

7.0 Conclusion

7.1 Flora and Vegetation

- Two vegetation types were delineated across one broad landform within the Survey Area.
- No Threatened or Priority Ecological communities were recorded within the Survey Area.
- Vegetation condition within the Survey Area ranged from Completely Degraded to Good. The majority of the Survey Area was considered to be in Good condition. Disturbance within the Survey Area was largely associated with introduced flora taxa, grazing, vehicle tracks, infrastructure, and litter presence.
- A total of 58 flora taxa were recorded from 49 genera and 27 families.
- No Threatened flora taxa were recorded within the Survey Area.
- Two Priority flora taxa were recorded within the Survey Area: *Triodia plurinervata* (P3) and *Olearia occidentissima* (P2).
- 885 individuals of *Triodia plurinervata* (P3) were recorded from nine locations within the Survey Area. *Triodia plurinervata* was exclusively associated with vegetation type AlTp, where it dominated the lower stratum. Individuals of *Triodia plurinervata* (P3) recorded during the field survey do not represent the full extent of the population within the Survey Area.
- Seventy-three individuals of *Olearia occidentissima* (P2) were recorded from 13 locations withing the Survey Area. *Olearia occidentissima* (P2) was recorded across both vegetation types AlTp and AlAp.
- Ten introduced flora taxa were recorded across the Survey Area. Two introduced flora taxa recorded were WoNS: **Opuntia stricta* (Erect prickly pear) and **Lycium ferocissiumum* (African boxthorn). One taxon, **Opuntia stricta* is listed as a declared pest under the BAM Act. Two individuals of **Opuntia stricta* were recorded from two locations. Five individuals of **Lycium ferocissimum* were recorded from two locations.

7.2 Fauna

- Two fauna habitats were mapped within the Survey Area: *Acacia Shrubland* over *Triodia* and *Acacia Shrubland*. Both of which are widespread and abundant at a regional scale.
- A total of 25 fauna taxa from 23 families were recorded, comprising 14 birds, seven mammals, and four reptiles. No significant taxa were recorded during the fauna survey.
- Five significant fauna taxa were assessed as having a high likelihood of occurring post-survey within the Survey Area, including:
    - Malleefowl (*Leipoa ocellata*), listed as Vulnerable under the BC Act and EPBC Act.
    - Bilby (*Macrotis lagotis*), listed as Vulnerable under the BC Act and EPBC Act.
    - Western Spiny-tailed Skink (*Egernia stokesii badia*), listed as Vulnerable under the BC Act and Endangered under the EPBC Act.
    - Shark Bay Keeled Legless Gecko (*Pletholax edelensis*), listed as Priority 3 by DBCA.

  - Shark Bay Western Grasswren (*Amytornis textilis textilis*), listed as Priority 4 by DBCA.
- Two significant fauna taxa were assessed as having a medium likelihood of occurring within the Survey Area:
  - Chuditch (*Dasyurus geoffroii fortis*), listed as Vulnerable under the BC Act and EPBC Act.
  - Javelin Lizard (*Delma concinna major*), listed as Priority 1 by DBCA.
- The remaining 88 significant fauna taxa were assessed as having a low likelihood of occurring within the Survey Area.
- Both *Acacia* Shrubland and *Acacia* Shrub and over *Triodia* habitats within the Survey Area constitute potential core habitat for Malleefowl, Shark Bay Western Grasswren, Bilby, Western Spiny-tailed Skink and Shark Bay Keeled Legless Gecko and Javelin Lizard.
- Five introduced taxa were recorded during the survey:
  - Goat (**Capra aegagrus hircus*)
  - Dingo/Dog (**Canis familiaris*)
  - Horse (**Equus ferus caballus*)
  - Cat (**Felis catus*)
  - Rabbit (**Oryctolagus cuniculus*)

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Appendix A Maps

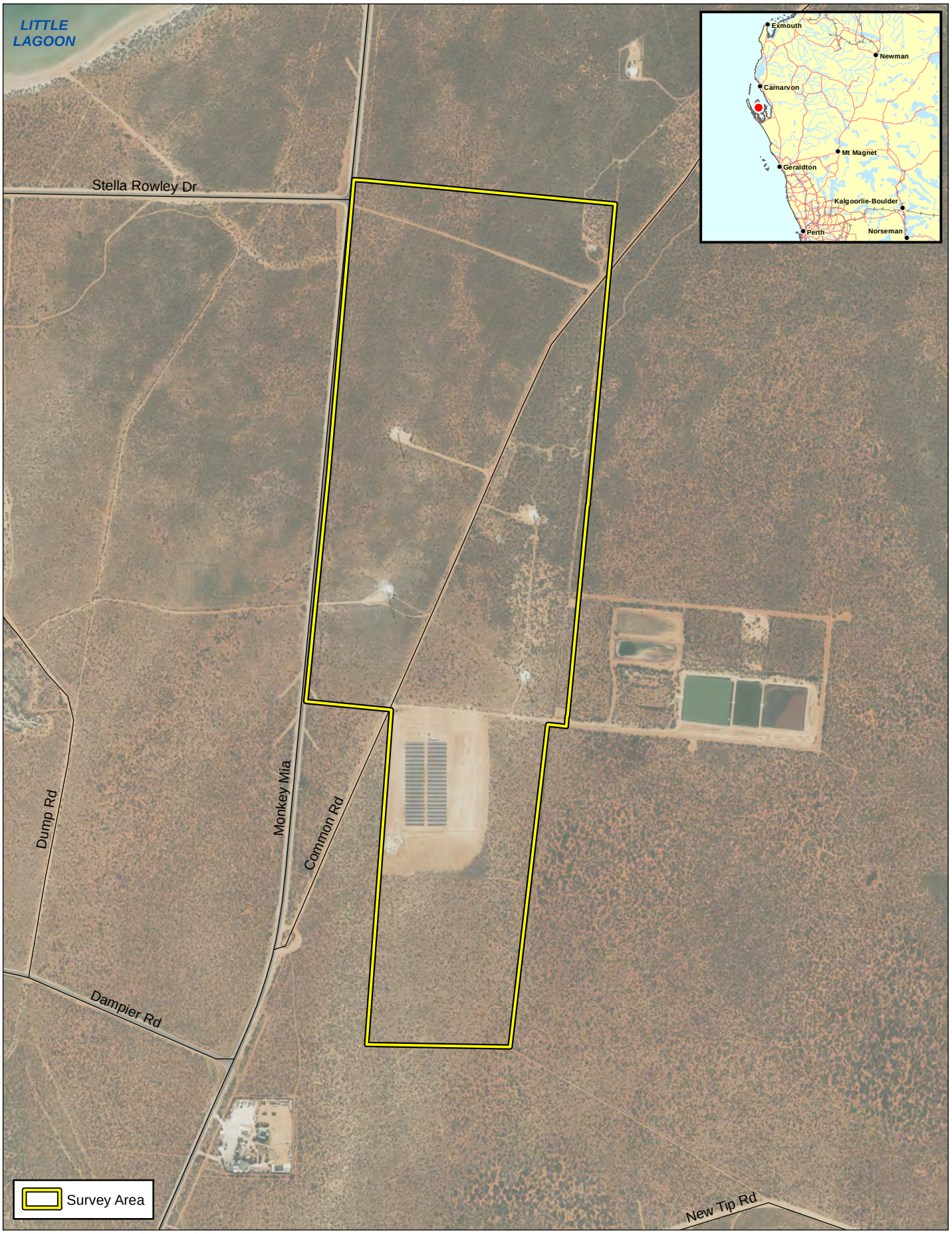
Denham Biological Surveys

Flora, Vegetation and Fauna

Horizon Power

SLR Project No.: 675.073044.00002

18 July 2025



SLR

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Service Layer Credits: Landgate / SLIP

Coordinate System: GDA2020 MGA Zone 49

Scale	: 1:10,000 @ A4
Project Number	: 675.073044.00002
Date Drawn	: 17/06/2025
Drawn By	: Environmaps
Reviewed By	: CM

Horizon Power
Denham
Biological Surveys

Survey Area
MAP 1

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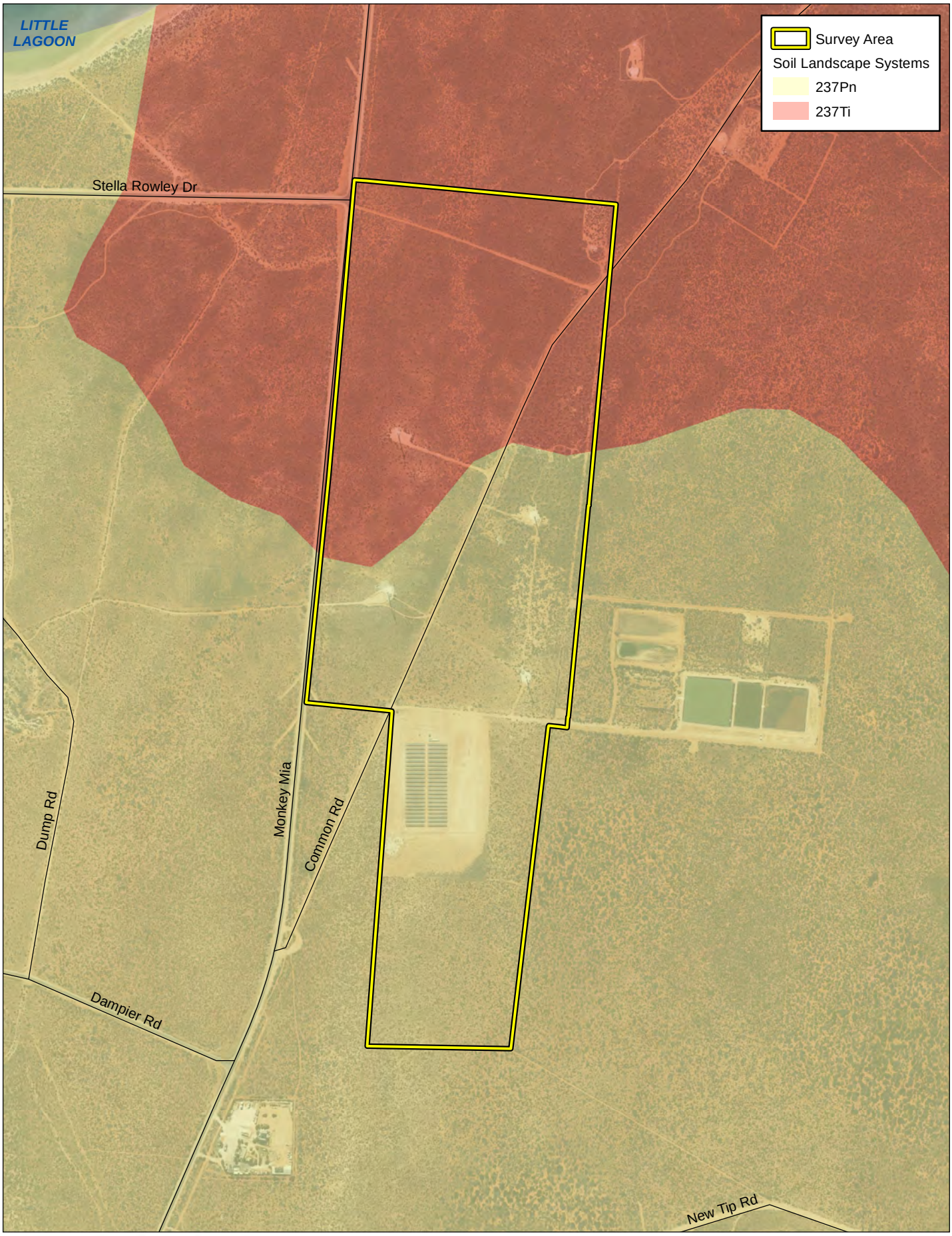

SLR

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N 0 100 200 400 m

Service Layer Credits: Landgate / SLIP
Soil Landscape Systems - DPIRD-027

Coordinate System: GDA2020 MGA Zone 49

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Project Number	: 675.073044.00002
Date Drawn	: 17/06/2025
Drawn By	: Environmaps
Reviewed By	: CM

Horizon Power
Denham
Biological Surveys

Soil Landscape Systems
MAP 2

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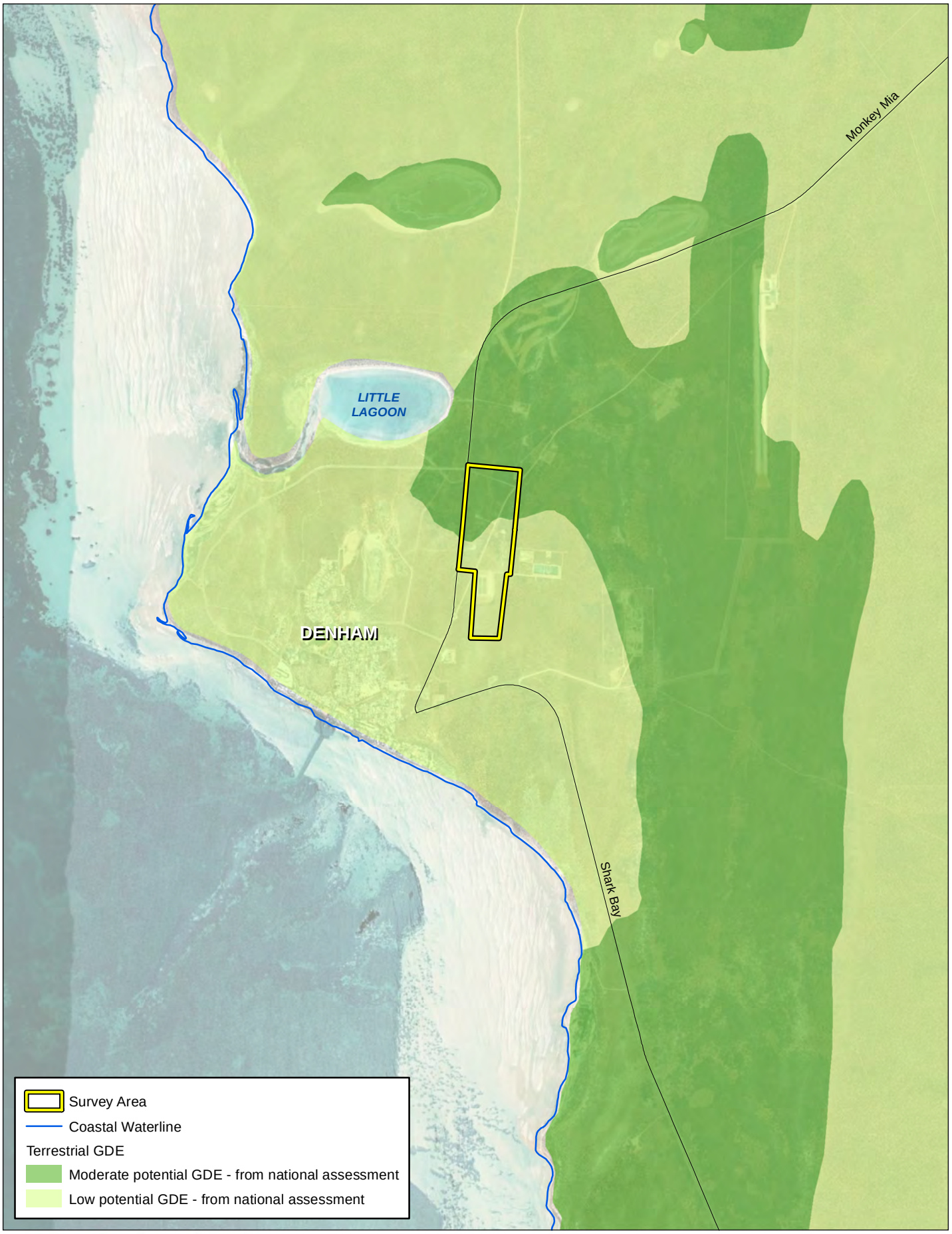

SLR

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N 0 0.5 1 2 km

Service Layer Credits: Landgate / SLIP
GDE - BoM | Hydrography - DWER031

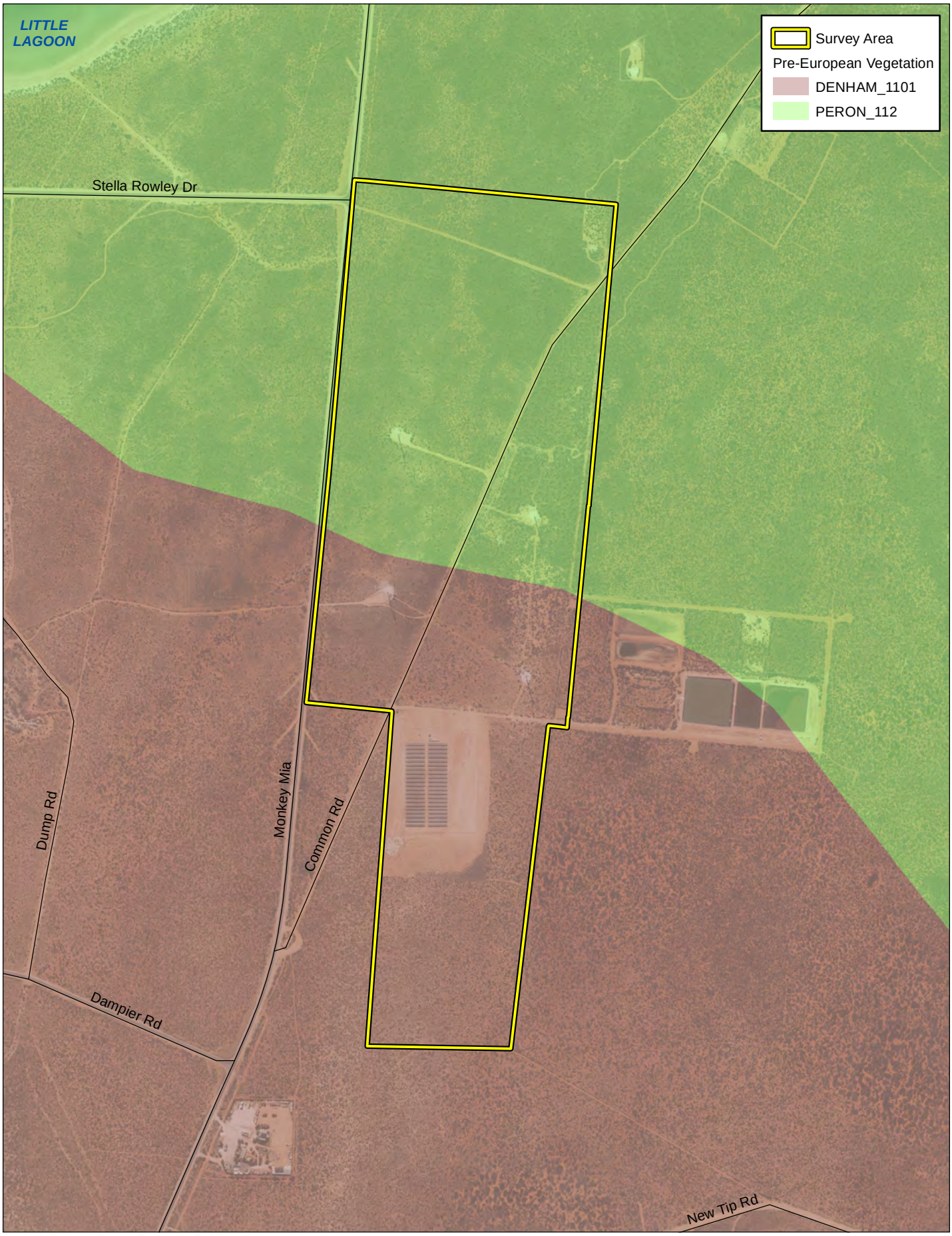
Coordinate System: GDA2020 MGA Zone 49

Scale	: 1:50,000 @ A4
Project Number	: 675.073044.00002
Date Drawn	: 14/07/2025
Drawn By	: Environmaps
Reviewed By	: CM

Horizon Power
Denham
Biological Surveys

Hydrography
MAP 3

C:\GIS\Jobs\360\675.073044.00002 - Denham Biological Surveys\Figures\675-073044-00002_M03 Hydrography_250714.mxd



SLR

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N 0 100 200 400 m

Service Layer Credits: Landgate / SLIP
Pre-European Vegetation - DPIRD 006

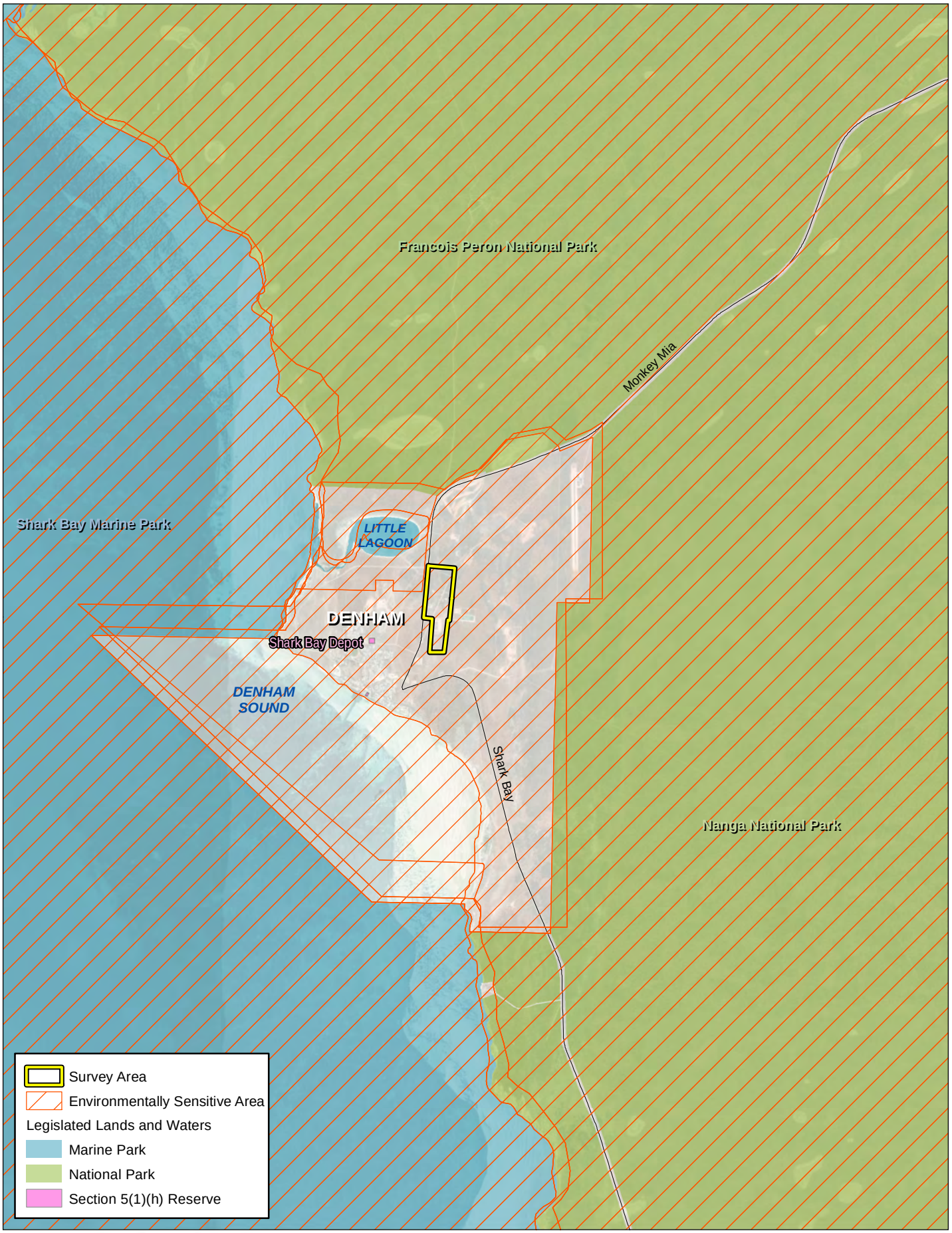
Coordinate System: GDA2020 MGA Zone 49

Scale	: 1:10,000 @ A4
Project Number	: 675.073044.00002
Date Drawn	: 17/07/2025
Drawn By	: Environmaps
Reviewed By	: CM

Horizon Power
Denham
Biological Surveys

Pre-European Vegetation
MAP 4

C:\GIS\Jobs\360\675.073044.00002 - Denham Biological Surveys\Figures\675-073044-00002_M04 Pre-European Vegetation_250717.mxd



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N 0 1 2 4 km

Service Layer Credits: Landgate / SLIP
Wetlands Legis Lands - DBCA | ESA - DWER

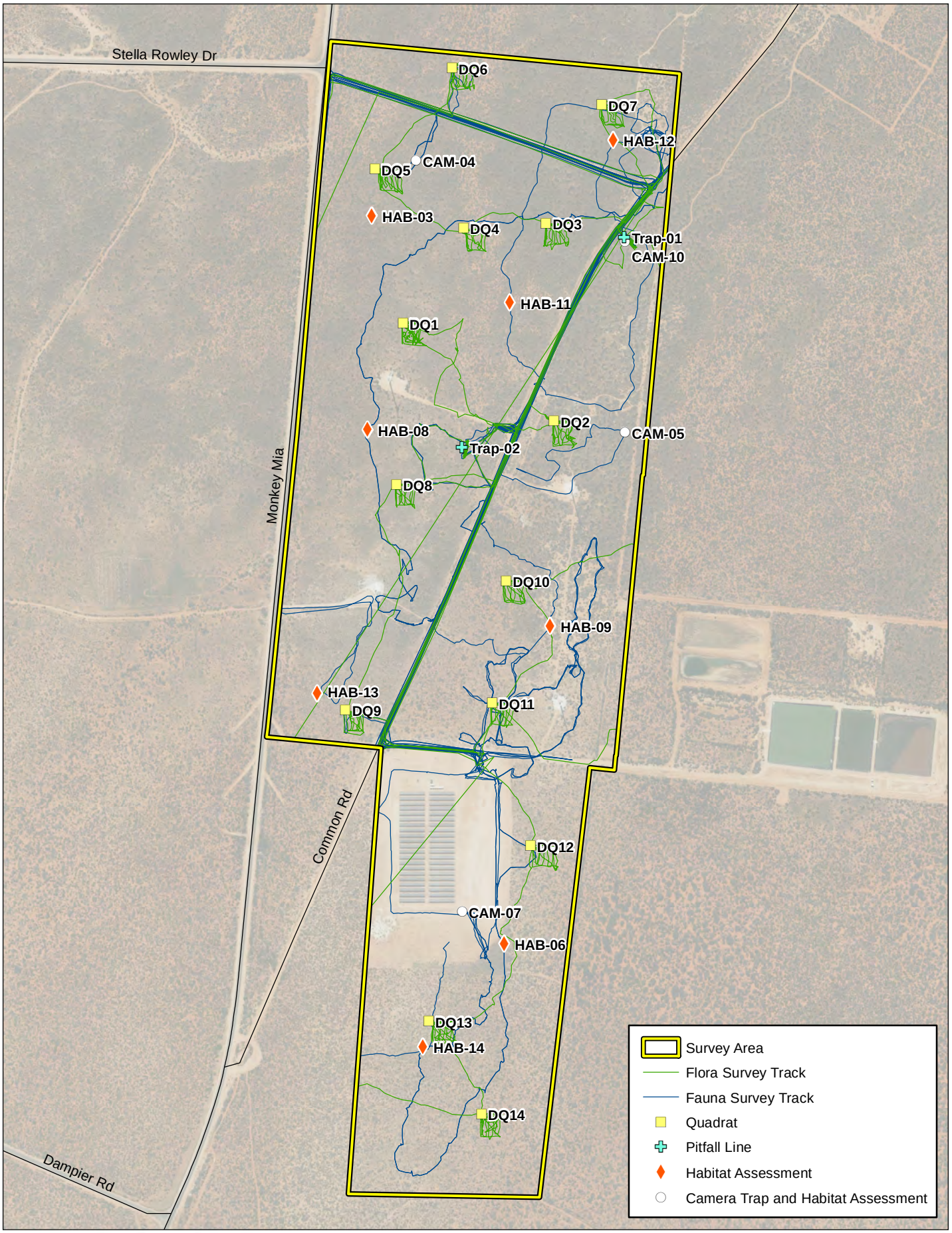
Coordinate System: GDA2020 MGA Zone 49

Scale	: 1:100,000 @ A4
Project Number	: 675.073044.00002
Date Drawn	: 14/07/2025
Drawn By	: Environmaps
Reviewed By	: CM

Horizon Power
Denham
Biological Surveys

Conservation Areas and Environmentally Sensitive Areas MAP 5

C:\GIS\Jobs\360\675.073044.00002 - Denham Biological Surveys\Figures\675-073044-00002_M05 Conservation Areas and Environmentally Sensitive Areas_250617.mxd



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N 0 75 150 300 m

Service Layer Credits: Landgate / SLIP

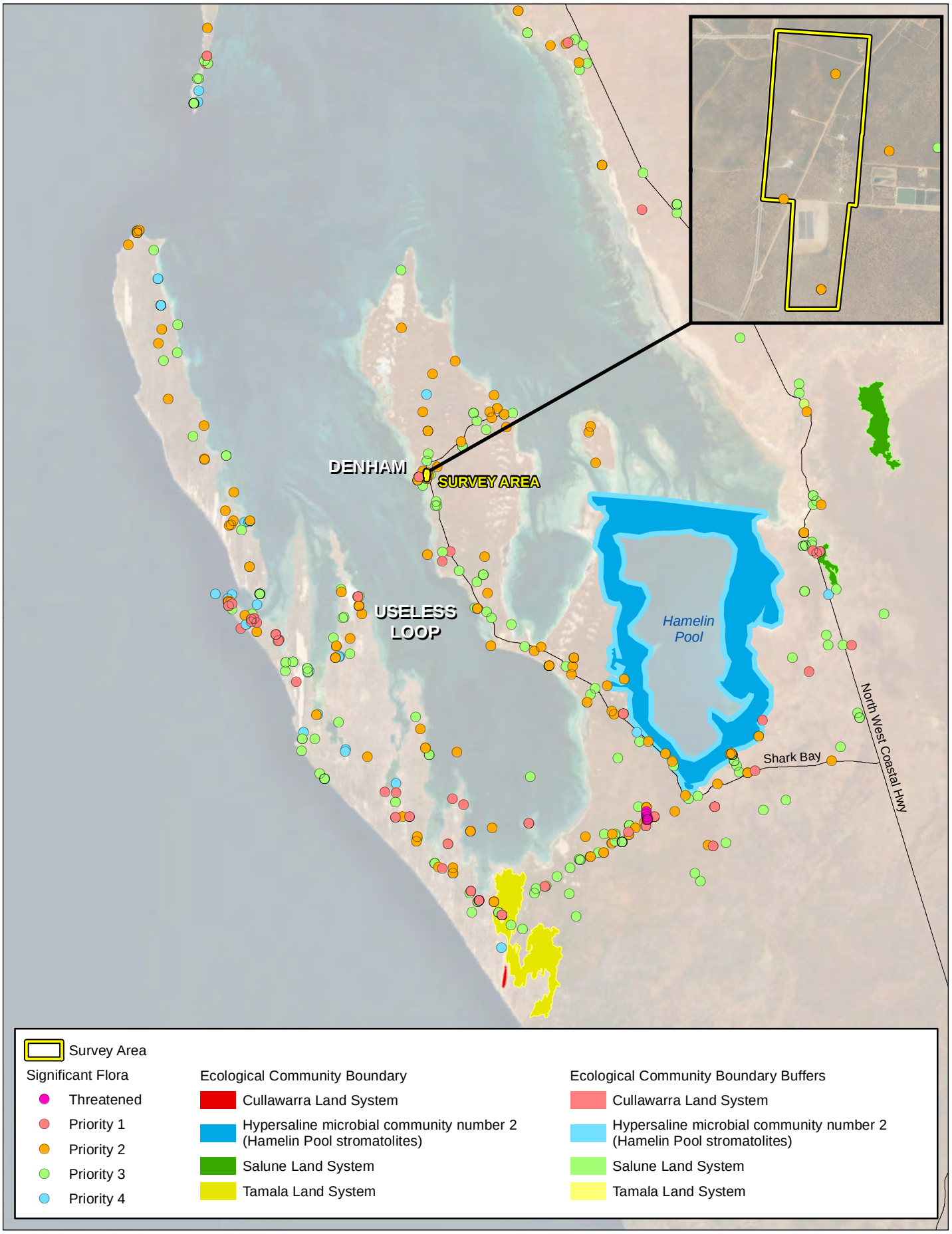
Coordinate System: GDA2020 MGA Zone 49

Scale	: 1:7,500 @ A4
Project Number	: 675.073044.00002
Date Drawn	: 17/06/2025
Drawn By	: Environmaps
Reviewed By	: CM

Horizon Power
Denham
Biological Surveys

Survey Sites and Survey Effort
MAP 6

C:\GIS\Jobs\360\675.073044.00002 - Denham Biological Surveys\Figures\675-073044-00002_M06 Survey Sites and Survey Effort_250617.mxd



Survey Area

Significant Flora
- Threatened
- Priority 1
- Priority 2
- Priority 3
- Priority 4

Ecological Community Boundary
- Cullawarra Land System
- Hypersaline microbial community number 2 (Hamelin Pool stromatolites)
- Salune Land System
- Tamala Land System

Ecological Community Boundary Buffers
- Cullawarra Land System
- Hypersaline microbial community number 2 (Hamelin Pool stromatolites)
- Salune Land System
- Tamala Land System

SLR

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N 0 10 20 40 km

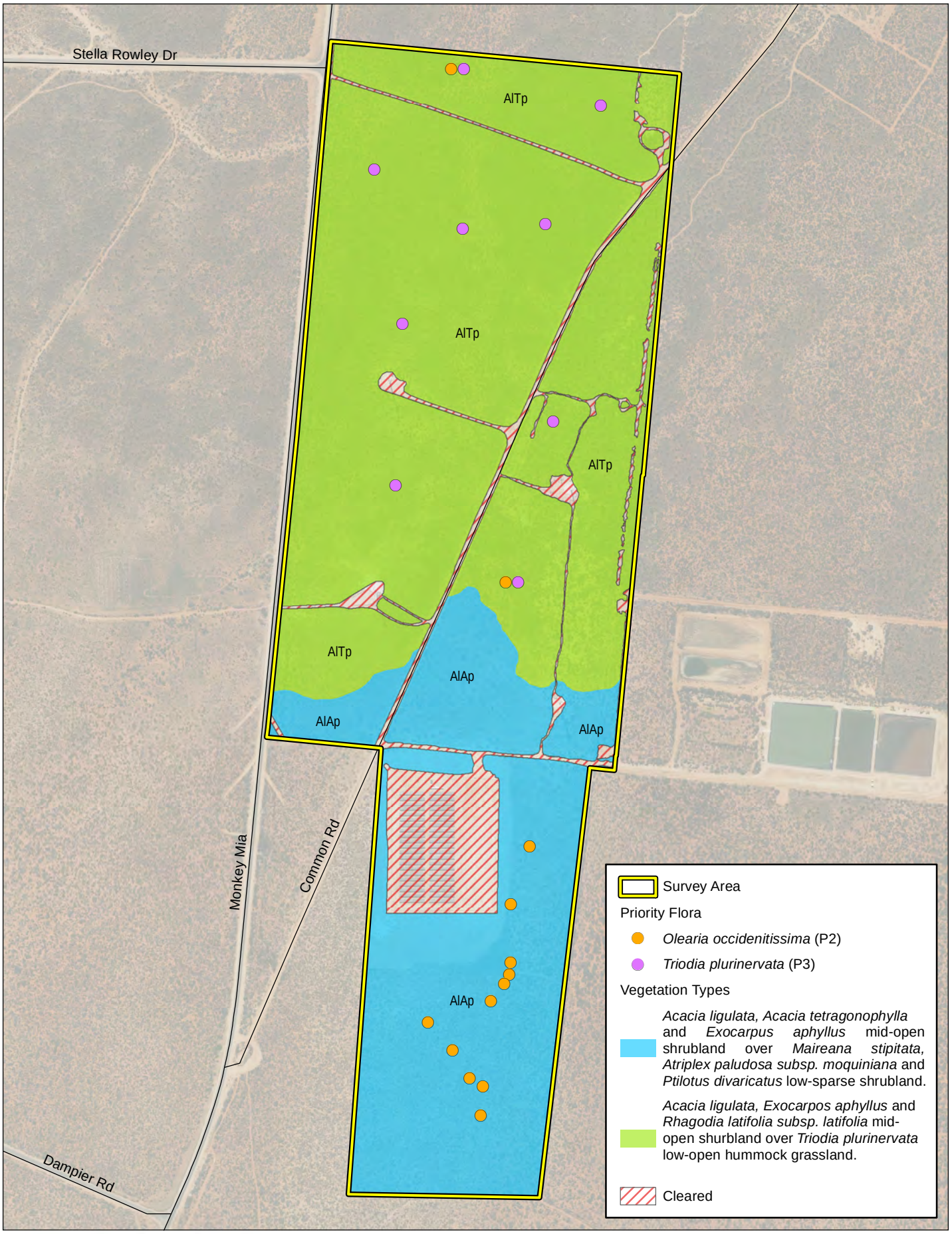
Service Layer Credits: Landgate / SLIP
ConSig Flora / Eco Comms - DBCA

Coordinate System: GDA2020 MGA Zone 49

Scale	: 1:1,000,000 @ A4
Project Number	: 675.073044.00002
Date Drawn	: 17/06/2025
Drawn By	: Environmaps
Reviewed By	: CM

Horizon Power
Denham
Biological Surveys

Significant Flora and Vegetation and Ecological Communities Database Search Results MAP 7



SLR

N 0 75 150 300 m

Service Layer Credits: Landgate / SLIP

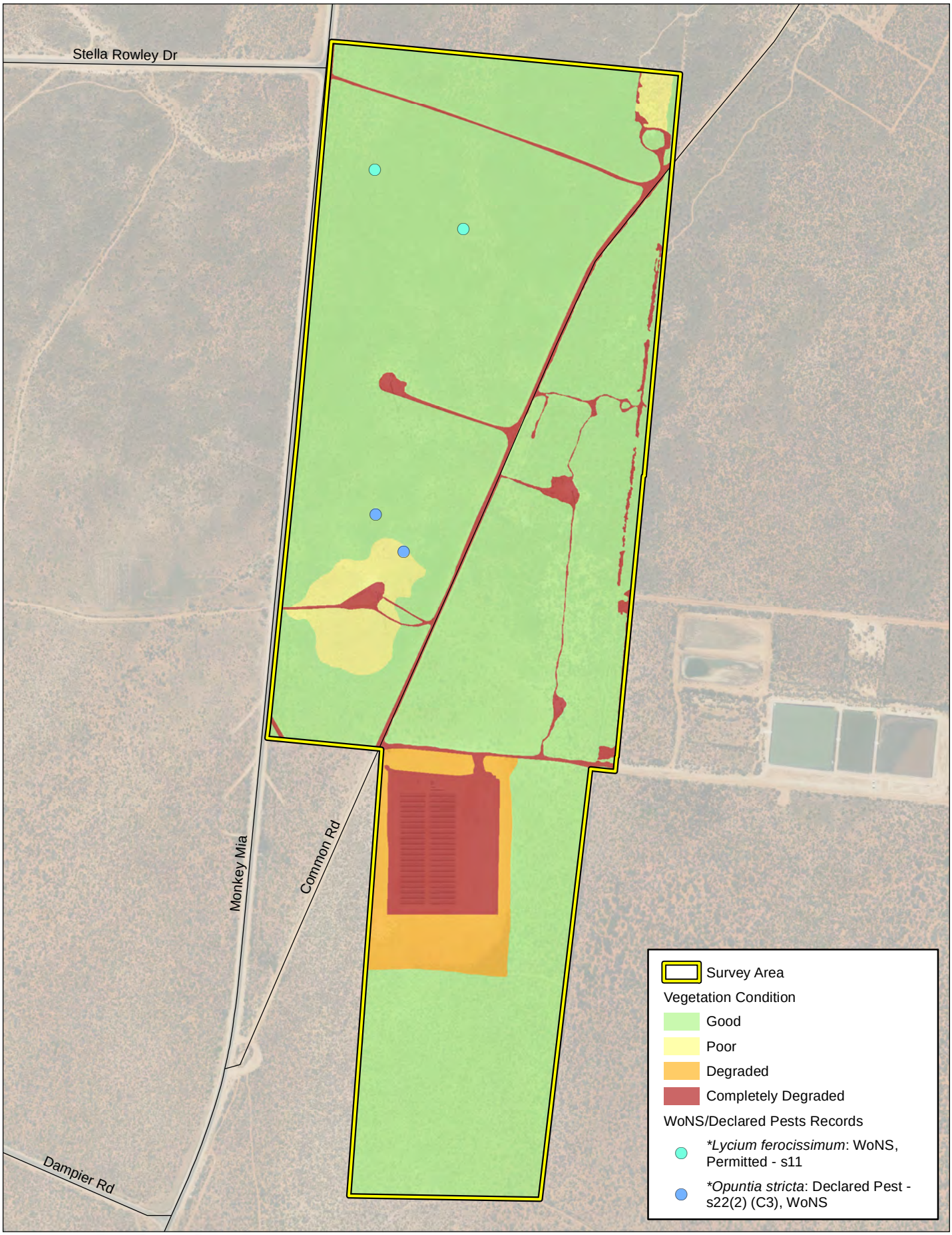
Coordinate System: GDA2020 MGA Zone 49

Scale	: 1:7,500 @ A4
Project Number	: 675.073044.00002
Date Drawn	: 14/07/2025
Drawn By	: Environmaps
Reviewed By	: CM

Horizon Power
Denham
Biological Surveys

Vegetation Types and Priority Flora Records MAP 8

C:\GIS\Jobs\360\675.073044.00002 - Denham Biological Surveys\Figures\675-073044-00002_M08 Vegetation Types and Priority Flora Records_250714.mxd



SLR

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N 0 75 150 300 m

Service Layer Credits: Landgate / SLIP

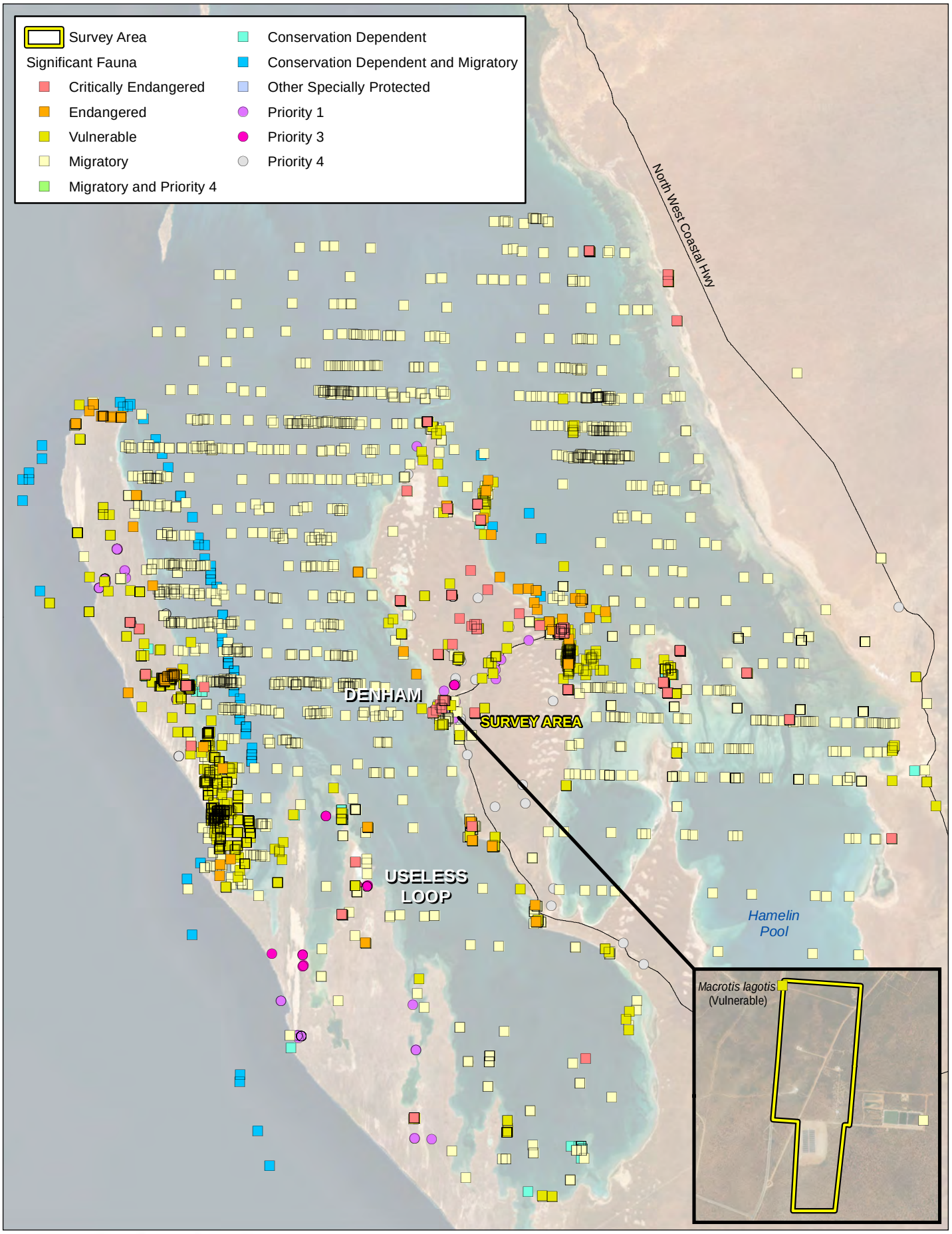
Coordinate System: GDA2020 MGA Zone 49

Scale	: 1:7,500 @ A4
Project Number	: 675.073044.00002
Date Drawn	: 17/06/2025
Drawn By	: Environmaps
Reviewed By	: CM

Horizon Power
Denham
Biological Surveys

Vegetation Condition and WoNS/Declared Pests Records MAP 9

C:\GIS\Jobs\360\675.073044.00002 - Denham Biological Surveys\Figures\675-073044-00002_M09 Vegetation Condition and WoNS-Declared Pests Records_250617.mxd



SLR

DISCLAIMER: All information within this document may be based on external sources. SLR Consulting Pty Ltd makes no warranty regarding data's accuracy or reliability for any purpose.

N 0 5 10 20 km

Service Layer Credits: Landgate / SLIP
Significant Fauna - DBCA

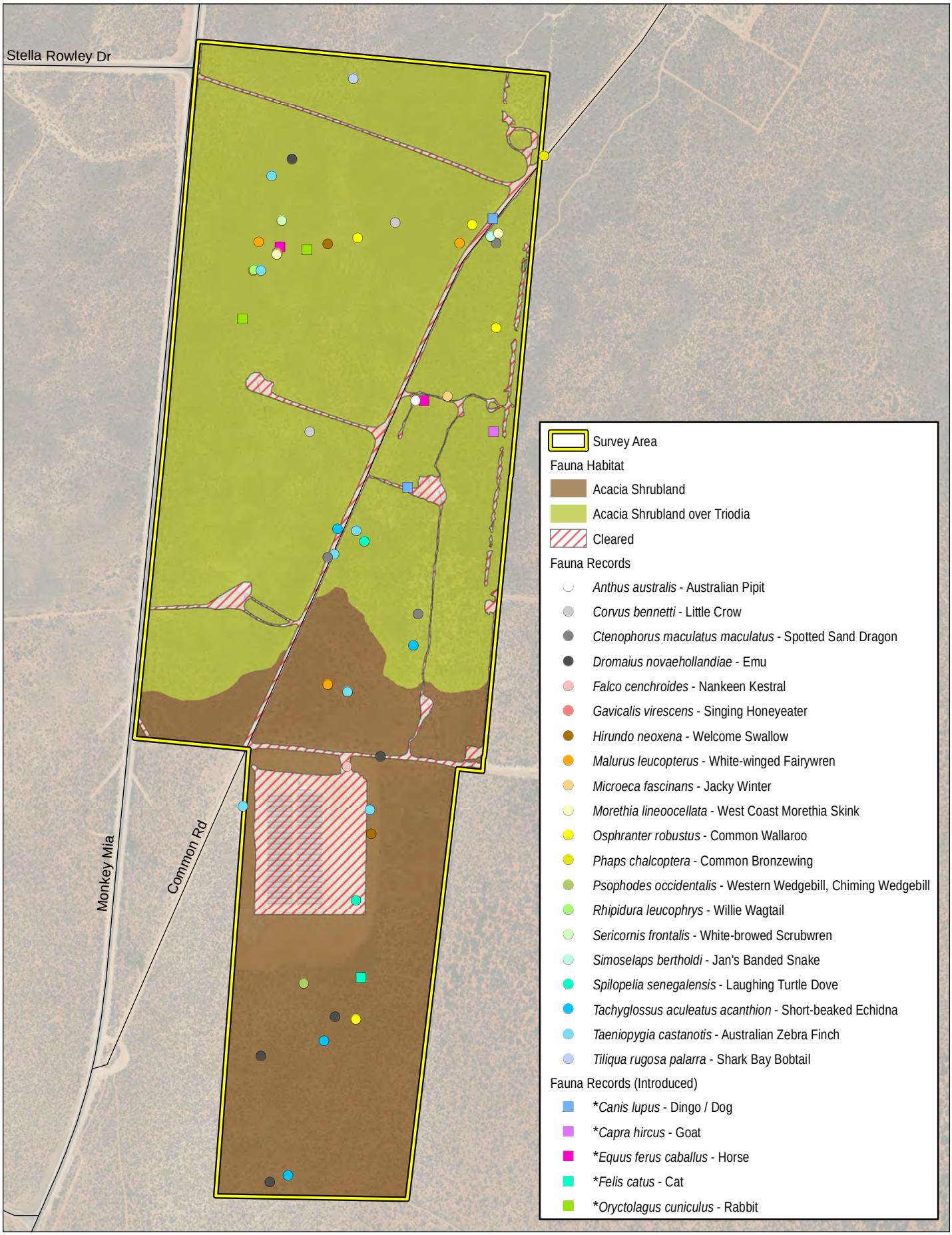
Coordinate System: GDA2020 MGA Zone 49

Scale	: 1:800,000 @ A4
Project Number	: 675.073044.00002
Date Drawn	: 14/07/2025
Drawn By	: Environmaps
Reviewed By	: CM

Horizon Power
Denham
Biological Surveys

Significant Fauna Database Search Results MAP 10

C:\GIS\Jobs\360\675.073044.00002 - Denham Biological Surveys\Figures\675-073044-00002_M10 Significant Fauna Database Search Results_250714.mxd



SLR

DISCLAIMER: All information within this document may be based on external sources. SLR Consulting Pty Ltd makes no warranty regarding data's accuracy or reliability for any purpose.

N 0 75 150 300 m

Service Layer Credits: Landgate / SLIP

Coordinate System: GDA2020 MGA Zone 49

Scale	: 1:7,500 @ A4
Project Number	: 675.073044.00002
Date Drawn	: 14/07/2025
Drawn By	: Environmaps
Reviewed By	: CM

Horizon Power
Denham
Biological Surveys

Fauna Habitat Mapping
MAP 11

C:\GIS\Jobs\360\675.073044.00002 - Denham Biological Surveys\Figures\675-073044-00002_M11 Fauna Habitat Mapping_250714.mxd

Appendix B Literature Review Summary

Denham Biological Surveys

Flora, Vegetation and Fauna

Horizon Power

SLR Project No.: 675.073044.00002

18 July 2025

Report	Survey location	Survey timing	Survey type	Significant ecological communities	Significant flora	Introduced flora
Synergy site, Denham: Flora and Fauna Report (360 Environmental, 2019a)	Intersects the Survey Area	Out-of-season. July 2019.	Detailed, out-of-season flora and vegetation survey.	None recorded	• *Acanthocarpus ?rupestris* (P2) • *Olearia ?occidentissima* (P2) • *Triodia plurinervata* (P3)	• Five introduced flora taxa were recorded during the survey, including: • **Lycium ferocissimum* (WoNS)
Shire of Shark Bay Site, Denham: Flora and Fauna Report (360 Environmental, 2019b)	Intersects the Survey Area	Out-of-season. July 2019.	Detailed, out-of-season flora and vegetation survey.	None recorded	• *Acacnthocarpus* ?rupestris (P2) • *Olearia ?occidentissima* (P2)	• Six introduced flora taxa were recorded during the survey, including: • **Lycium ferocissimum* (WoNS)
Water Corporation Site, Denham: Flora and Fauna Report (360 Environmental, 2019c)	Intersects the Survey Area	Out-of-season. July 2019.	Detailed, out-of-season flora and vegetation survey.	None recorded	• *Acanthocarpus ?rupestris* (P2) • *Olearia ?occidentissima* (P2) • *Triodia plurinervata* (P3)	• Five introduced flora taxa were recorded during the survey, including: • **Lycium ferocissimum* (WoNS)
Shark Bay Biological Survey: Flora, Vegetation and Fauna Assessment (360 Environmental, 2018)	40 km southeast of the Survey Area	Out-of-season. November 2018.	Detailed, out-of-season flora and vegetation survey.	None recorded	• *Olearia occidentissima* (P3) • *Lepidium biplicatum* (P3) • *Melaleuca huegelii* subsp. *pristicensis* (P3) • *Corchorus congener* (P3)	• Fourteen introduced flora taxa were recorded during the survey, including: • **Lycium ferocissimum* (WoNS)

ID	Report	Survey Area	Survey Timing	Survey Effort	Significant Fauna Recorded Onsite	Fauna Habitats
A	Synergy Site (North), Denham: Flora and Fauna Report (360 Environmental Pty Ltd, 2019)	Intersects the Survey Area	July 2019	Basic fauna	• None	• *Acacia* Shrubland over *Triodia* • *Acacia* Shrubland • Cleared/Completely Degraded
B	Shire of Shark Bay Site, Denham: Flora and Fauna Report (360 Environmental Pty Ltd, 2019)	Intersects the Survey Area	July 2019	Basic fauna	• None	• *Acacia* Shrubland • Cleared/Completely Degraded
C	Water Corporation Site, Denham: Flora and Fauna Report (360 Environmental Pty Ltd, 2019)	Adjacent the eastern boundary of the Survey Area	July 2019	Basic fauna	• None	• *Acacia* Shrubland over *Triodia* • *Acacia* Shrubland • Cleared/Completely Degraded
D	Shark Bay Biological Survey: Flora, Vegetation and Fauna Assessment (360 Environmental Pty Ltd, 2018)	Closest Survey Area 40 km southeast, other 2 Survey Areas 83 km south	November 2017	Basic fauna	• Malleefowl (*Leipoa ocellata*) listed as Vulnerable under the BC Act and EPBC Act – Survey Areas 80 km south	• Shrubland • Grassland • Rock Outcrop
E	Vertebrate Fauna Survey Coburn Mineral Sand Project (Ninox Wildlife Consulting, 2005)	99 km southeast of the Survey Area	September 2003, April and October 2004	Detailed fauna	• Malleefowl (*Leipoa ocellata*) listed as Vulnerable under the BC Act and EPBC Act	• Eucalyptus Woodlands • Shrublands • Mosaics

Appendix C Licences and Permits

Denham Biological Surveys

Flora, Vegetation and Fauna

Horizon Power

SLR Project No.: 675.073044.00002

18 July 2025

GOVERNMENT OF WESTERN AUSTRALIA

Department of **Biodiversity, Conservation and Attractions**

AUTHORISATION TO TAKE OR DISTURB THREATENED SPECIES

Section 40 of the Biodiversity Conservation Act 2016

AUTHORISATION DETAILS

Authorisation number: TFA-2425-0224

Authorisation duration: From date signed by Minister's delegate below until 31 March 2026.

AUTHORISATION HOLDER

Lukas Geidans

SLR Consulting Pty Ltd

Unit 4/193, Oxford Street

Leederville WA 6007

AREA TO WHICH THIS AUTHORISATION APPLIES

Survey area located approximately 1 km northwest of Denham (Gascoyne District).

AUTHORISED ACTIVITY

Purpose of taking/disturbance:

Undertake a targeted survey for *Egernia stokesii badia,* (Western spiny-tailed skink) on the behalf of Horizon Power to determine *Egernia stokesii badia* presence and inform future environmental management and relocation plans.

Threatened species authorised to be taken/disturbed (including conservation status):

Egernia stokesii badia, Western spiny-tailed skink (Vulnerable)

Quantity of threatened species authorised to be taken/disturbed:

Any number of individual animals of the above listed threatened fauna species may be captured and released during the trapping program and/or disturbed by the survey activities.

Authorised taking/disturbance methodology:

(1) Fauna capture:

(a) Take threatened fauna using a combination of hand capture and pitfall traps.

i. Traps will be set for a maximum of seven nights.

ii. Traps will be checked, cleared and closed within three hours of sunrise, and reset in the late afternoon.

iii. The number of traps deployed will be proportionate to personnel resourcing to ensure traps are cleared within three hours of sunrise.

iv. If temperature forecasts are expected to be ≥35ºC, traps will be closed throughout the day and reopened in the afternoon.

v. Adequate shade and refuge material will be placed in pitfall traps.

vi. Where extreme weather events are predicted, traps will be closed.

(2) Fauna handling:

(a) All captured fauna will be released immediately at the capture site after identification.

All proposed activities will be conducted in accordance with Animal Ethics Committee approval and Department of Biodiversity, Conservation and Attractions (DBCA) Standard Operating Procedures for fauna survey and monitoring techniques.

Dates within which taking/disturbance authorised:

From date signed by Minister's Delegate below until 31 March 2026.

AUTHORISED PERSONS

Lukas Geidans Serin Subaraj Carter Mooney

Additional personnel who are suitably qualified and experienced in the Authorised Activities working under the direction of the Authorisation Holder.

Field assistants working under the direct supervision of the Authorisation Holder or suitably qualified and experienced named Authorised Persons.

CONDITIONS

1. The written authorisation of the person in possession or occupation of the land accessed and upon which threatened fauna is taken or disturbed must:
    a. state location details (including lot or location number, street/road, suburb and local government authority);
    b. state land owner or occupier name, and contact phone number;
    c. specify the time period that the authorisation is valid for;
    d. be signed and dated; and
    e. be attached to this Authorisation to take or disturb threatened species at all times.
2. This Authorisation to take or disturb threatened species, and any other written authorisation or lawful authority which authorises the take or disturbance of fauna on specified locations for the Authorised Activities must be carried at all times while conducting Authorised Activities and be produced on demand by a wildlife officer.
3. Authorised Persons who are not suitably qualified and experienced in the Authorised Activities, and field assistants assisting with the Authorised Activities, must be working under direct supervision of experienced and competent named Authorised Persons.

4. Any inadvertently captured species of non-target threatened fauna or non-threatened fauna (threatened fauna as defined in *Biodiversity Conservation Act 2016* Section 19) is to be released immediately at the point of capture. Details of such fauna must be included in the fauna taking/disturbance return as required under this Authorisation.

5. The Authorisation Holder, unless specified in the Authorised Activities, must not:

    a. release any threatened fauna in any area where it does not naturally occur;

    b. transfer threatened fauna to any other person or authority (other than the Western Australian Museum) unless the fauna is injured or abandoned fauna (condition 6); or

    c. dispose of the remains of threatened fauna in any manner likely to confuse the natural or present-day distribution of the species.

6. All threatened fauna injuries, unexpected deaths, unplanned euthanasia, and abandoned young or eggs, must be reported by the Authorisation Holder to the DBCA Wildlife Protection Branch, Wildlife Licensing Section (wildlifelicensing@dbca.wa.gov.au) to notify of the incident and for advice on treatment or disposal. All deceased threatened fauna must be offered to the Western Australian Museum.

7. The Authorisation Holder must create, compile and maintain records and information as required in a DBCA approved "Return of Fauna Taken/Disturbed" of all fauna taking/disturbance activities as they occur.

8. A DBCA approved "Return of Fauna Taken/Disturbed" must be completed in full (including nil taking/disturbance details) and submitted to DBCA Wildlife Licensing Section (wildlifelicensing@dbca.wa.gov.au) prior to the end of the Authorisation duration and, if the Authorisation duration is greater than 12 months, prior to the end of each annual period of the Authorisation (from the date signed by the Minister's delegate) (refer to "Additional Information" section below). Where a licence to take or disturb fauna is issued in conjunction with this Authorisation to take or disturb threatened species, a combined "Return of Fauna Taken/Disturbed" may be completed and submitted.

9. A written report detailing the undertaken Authorised Activities, outcome, unintended incidents, injuries and mortalities of threatened fauna, implemented monitoring, mitigation and management, and explaining the records and information as required in a DBCA approved "Return of Fauna Taken/Disturbed" must be submitted, in addition to a "Return of Fauna Taken/Disturbed" to DBCA Wildlife Licensing Section (wildlifelicensing@dbca.wa.gov.au).

ADDITIONAL INFORMATION

1. Before undertaking the Authorised Activity, permission must be obtained from: (a) the owner or occupier of private land; or (b) the department or authority controlling Crown land, on which the threatened fauna occurs. This includes obtaining the written endorsement from DBCA if the Authorised Activity is proposed for land managed by DBCA.

2. This Authorisation to take or disturb threatened species does not constitute lawful authority issued under regulations 4 and 8 of the *Conservation and Land Management Regulations 2002*. Contact the applicable Department District Officer for further information.

3. The approved DBCA "Return of Fauna Taken/Disturbed" template can be obtained from DBCA Wildlife Licensing Section (wildlifelicensing@dbca.wa.gov.au).

4. Any interference or influence involving nationally listed threatened fauna that may be harmful to the fauna and/or invasive may require approval from the Commonwealth Department of Climate Change, Energy, the Environment and Water (https://www.dcceew.gov.au/environment/biodiversity/threatened/permits). Interference or influence with such species is controlled by the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* and *Environment Protection and Biodiversity Conservation Regulations 2000*.

5. It is the responsibility of the Authorisation Holder to ensure that they comply with the requirements of all applicable legislation.

6. An Authorisation to take or disturb threatened species does not constitute an animal ethics approval or a licence to use animals for scientific purposes as required under the *Animal Welfare Act 2002* and *Animal Welfare (Scientific Purposes) Regulations 2003*. Enquiries relating to the Animal Welfare Act scientific purposes licence and animal ethics committee approvals are to be directed to the Western Australian Department of Primary Industries and Regional Development (https://www.agric.wa.gov.au/animalwelfare).

F Stanley
.....
Dr Fran Stanley
Acting Executive Director of
Biodiversity and Conservation Science
AS DELEGATE OF THE MINISTER
DATE: ..24../..03...../2025

FAUNA TAKING (BIOLOGICAL ASSESSMENT) LICENCE

Regulation 27, Biodiversity Conservation Regulations 2018

Licence Number: BA27001281

Licence Holder: Lukas Geidans
SLR Consulting Pty Ltd
Unit 4 / 193 Oxford Street
Leederville WA 6007

Date of Issue: 25/03/2025

Date Valid From: 25/03/2025
Date of Expiry: 31/03/2026

LICENSED ACTIVITIES

Subject to the terms and conditions on this licence, the licence holder may –

1. Undertake a targeted survey for *Egernia stokesii badia*, (Western spiny-tailed skink) on the behalf of Horizon Power to determine *Egernia stokesii badia* presence and inform future environmental management and relocation plans.

   Take fauna using a combination of hand capture and pitfall traps.

i. Traps will be set for a maximum of seven nights.
ii. Traps will be checked, cleared and closed within three hours of sunrise, and reset in the late afternoon. Authorisation to take or disturb threatened species.
iii. The number of traps deployed will be proportionate to personnel resourcing to ensure traps are cleared within three hours of sunrise
iv. If temperature forecasts are expected to be ≥35ºC, traps will be closed throughout the day and reopened in the afternoon.
v. Adequate shade and refuge material will be placed in pitfall traps.
vi. Where extreme weather events are predicted, traps will be closed.
vii. All captured fauna will be released immediately at the capture site after identification.

All proposed activities will be conducted in accordance with Animal Ethics Committee approval and Department of Biodiversity, Conservation and Attractions (DBCA) Standard Operating Procedures for fauna survey and monitoring techniques..

LOCATIONS

1. Survey area located approximately 1 km northwest of Denham (Gascoyne District).

AUTHORISED PERSONS

The following persons or persons of the specified class may assist in carrying out the licensed activities:

1. Lukas Geidans
2. Serin Subaraj
3. Carter Mooney

CONDITIONS

1. Fauna must not be taken on CALM land, (as defined in the Conservation and Land Management Regulations 2002*),* unless authorised by a written notice of a lawful authority issued under regulations 4 and 8 of the Conservation and Land Management Regulations 2002.
2. If persons, other than the licence holder, are authorised to carry out/assist in carrying out the activities under the licence, the licence holder must ensure those persons have read and understand the licence terms and conditions.
3. The written authorisation of the person in possession or occupation of the land accessed and upon which fauna is taken, as required under regulation 101(2) and referred to in "Additional information" below, must:
   a) state location details (including lot or location number, street/road, suburb and local government authority);
   b) state land owner or occupier name, and contact phone number;
   c) specify the time period that the authorisation is valid for;
   d) be signed and dated; and
   e) be attached to this licence at all times.
4. This licence, and any written authorisation or lawful authority which authorises the take of fauna on specified locations must be carried at all times while conducting licensed activities and be produced on demand by a wildlife officer.
5. If a species of fauna listed as a threatened species under Section 19 of the *Biodiversity Conservation Act 2016* is inadvertently captured, that species is to be released immediately at the point of capture. If the fauna is injured or deceased, the licence holder shall contact the DBCA Wildlife Licensing Section (wildlifelicensing@dbca.wa.gov.au) for advice on treatment or disposal. Details of any capture of threatened fauna must be included in the "Return of Fauna Taken."
6. The licence holder must not:
   a) release any fauna in any area where it does not naturally occur;
   b) transfer fauna to any other person or authority (other than the Western Australian Museum) unless approved in writing by the CEO; or
   c) dispose of the remains of fauna in any manner likely to interfere the natural or present day distribution of the species.
7. The licence holder must not take and remove more than ten specimens of any one protected species of fauna from any location less than 20km apart. Where exceptional circumstances make it necessary to take a larger number of specimens from a particular location in order to obtain adequate statistical data, the collector must proceed with circumspection and justify their actions to the Director General in advance.
8. All holotypes and syntypes and a half share of paratypes of species or subspecies permitted to be permanently taken under this licence must be donated to the Western Australian Museum. Duplicates (one pair in each case) of any species collected, which represents a significant extension of geographic range must be offered to the Western Australian Museum.
9. All specimens and material retained under the authority of this licence must be offered to the Western Australian Museum for loan, for inclusion in its collection, or on request be made available to other persons involved in relevant scientific studies.
10. The licence holder must create, compile and maintain records and information as required in a DBCA approved "Return of Fauna Taken" of all fauna taking activities as they occur.
11. A DBCA approved "Return of Fauna Taken" must be completed in full (including nil taking details) and submitted to DBCA Wildlife Licensing Section (wildlifelicensing@dbca.wa.gov.au) prior to the end of

each annual period of the licence (from the valid from date) (refer to "Additional Information" section below).

D Stefoni
LICENSING OFFICER
WILDLIFE PROTECTION BRANCH

Delegate of CEO

ADDITIONAL INFORMATION

1. It is an offence to take any species of fauna listed as a threatened species under Section 19 of the *Biodiversity Conservation Act 2016* unless the person is authorised under Section 40. The penalty ranges between $300 000 and $500 000; Section 150 Biodiversity Conservation Act 2016.
2. Regulation 82 empowers the CEO to add, substitute or delete a term or condition of a licence or to correct errors. Such power may be exercised on application of a licence holder or by the CEO's own initiative. If an amendment to a licence term or condition is required, please contact the CEO or the Licensing Section on wildlifelicensing@dbca.wa.gov.au in the first instance. The licence holder, if adversely affected by a condition imposed in this licence, may apply to the State Administrative Tribunal for review of the decision of the CEO to impose that condition on a licence: regulation 89(2) Biodiversity Conservation Regulations 2018.
3. A person must not contravene a condition of a licence. The penalty for an offence involving the contravention of a condition of a licence is a fine of $10 000: regulation 84 of the Biodiversity Conservation Regulations 2018.
4. It is an offence for persons authorised by this licence to enter land that is not in their possession or under their control without first having the *prior* written authorisation of the current owner or occupier of the land to:

   a) enter the land; and

   b) carry out the activity authorised by this licence.

   The penalty for this offence is a fine of $5 000: regulation 101(2) of the Biodiversity Conservation Regulations 2018.
5. The licence holder must be able to produce for inspection upon request any information or records required by regulation 85(2) of the Biodiversity Conservation Regulations 2018 Penalty $10 000. It is an offence to knowingly include false or misleading information or make statements in records: regulation 85(3) of the Biodiversity Conservation Regulations 2018 Penalty $10 000. It is an offence to include any information or make any statement in a return that the licence holder knows to be false or misleading in a material particular: regulation 86 (2) of the Biodiversity Conservation Regulations 2018 Penalty $10 000.
6. The approved DBCA "Return of Fauna Taken" data file can be downloaded from the DBCA webpage (https://www.dpaw.wa.gov.au/plants-and-animals/licences-and-authorities).

7. The issuing of a licence under the Biodiversity Conservation Regulations 2018 does not constitute an animal ethics approval or a licence to use animals for scientific purposes as required under the *Animal Welfare Act 2002,* Animal Welfare (Scientific Purposes) Regulations 2003. It is the responsibility of a licence applicant / licence holder to ensure that they comply with the requirements of all applicable legislation. Enquiries relating to the Animal Welfare Act licences and animal ethics approvals are to be directed to the Department of Primary Industries and Regional Development (https://www.agric.wa.gov.au/animalwelfare).

8. Threatened fauna can only be taken under a *Biodiversity Conservation Act 2016* Section 40 authorisation, Occurrences of threatened species must be reported to the CEO. For more information please see https://www.dpaw.wa.gov.au/plants-and-animals/threatened-species-and-communities/threatened-animals.

9. Any interaction involving Nationally Listed Threatened Fauna that may be invasive and/or harmful to the fauna may require approval from the Commonwealth Department of the Environment and Energy http://www.environment.gov.au/about-us/business-us/permits-assessments-licences. Interaction with such species is controlled by the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* and Environment Protection and Biodiversity Conservation Regulations 2000 as well as the *Biodiversity Conservation Act 2016* and Biodiversity Conservation Regulations 2018.

Appendix D Threatened and Priority Flora Report Forms

Denham Biological Surveys

Flora, Vegetation and Fauna

Horizon Power

SLR Project No.: 675.073044.00002

18 July 2025

Department of **Biodiversity, Conservation and Attractions**

GOVERNMENT OF WESTERN AUSTRALIA

Threatened and Priority Flora Report Form

Version 1.4 March 2021

Please complete as much of the form as possible, with emphasis on those sections bordered in black. For information on how to complete the form please refer to the Threatened & Priority Flora Report Form (TPRF) manual on the DBCA website at www.dpaw.wa.gov.au/plants-and-animals/threatened-species-and-communities/threatened-plants

TAXON: Olearia occidentissima **TPFL Pop. No:** 73

OBSERVATION DATE: 4/4/25-6/4/25 **CONSERVATION STATUS:** P2 **New population** ☐

OBSERVER/S: Joseph Mooney **PHONE** 08 9422 5900

ROLE: Botanist **ORGANISATION:** SLR Consulting PTY LTD

EMAIL: carter.mooney@slrconsulting.com

DESCRIPTION OF LOCATION (Provide at least nearest town/named locality, and the distance and direction to that place)**:**

5 km east of Carnarvon

Reserve No:

DBCA DISTRICT: Mid West **LGA:** Shire of Carnarvon Land manager present: ☐

DATUM:

GDA94 / MGA94 ☒
AGD84 / AMG84 ☐
WGS84 ☐
Unknown ☐

COORDINATES: (If UTM coords provided, **Zone** is also required)

DecDegrees ☐ DegMinSec ☐ UTMs ☐

Lat / Northing: See attached

Long / Easting: See attached

ZONE: 49

METHOD USED:

GPS ☒ Differential GPS ☐ Map ☐

No. satellites: ____ Map used: _____

Boundary polygon captured: ☐ Map scale: _____

LAND TENURE:

Nature reserve ☐	Timber reserve ☐	Private property ☐	Rail reserve ☐	Shire road reserve ☐
National park ☐	State forest ☐	Pastoral lease ☐	MRWA road reserve ☐	Other Crown reserve ☐
Conservation park ☐	Water reserve ☐	UCL ☒	SLK/Pole _____ to _____	Specify other: _____

AREA ASSESSMENT: Edge survey ☐ Partial survey ☐ Full survey ☐ Area observed (m²): _____

EFFORT: Time spent surveying (minutes): 180 No. of minutes spent / 100 m²: _____

POP'N COUNT ACCURACY: Actual ☒ Extrapolation ☐ Estimate ☐ Count method: _____ (Refer to field manual for list)

WHAT COUNTED: Plants ☒ Clumps ☐ Clonal stems ☐

TOTAL POP'N STRUCTURE:	**Mature:**	**Juveniles:**	**Seedlings:**	**Totals:**
Alive	73			
Dead				

Area of pop (m²): _____

Note: Pls record count as numbers (not percentages) for database.

QUADRATS PRESENT: No. ____ Size _____ Data attached ☐ Total area of quadrats (m²): _____

Summary Quad. Totals: Alive				

REPRODUCTIVE STATE: Clonal ☐ Vegetative ☒ Flowerbud ☐ Flower ☐

Immature fruit ☐ Fruit ☐ Dehisced fruit ☒ Percentage in flower: 0%

CONDITION OF PLANTS: Healthy ☐ Moderate ☐ Poor ☒ Senescent ☐

COMMENT:

THREATS - type, agent and supporting information: Eg clearing, too frequent fire, weed, disease. Refer to field manual for list of threats & agents. **Specify agent** where relevant. Rate current and potential threat impact: N=Nil, L=Low, M=Medium, H=High, E=Extreme Estimate time to potential impact: S=Short (<12mths), M=Medium (<5yrs), L=Long (5yrs+)	**Current impact (N-E)**	**Potential Impact (L-E)**	**Potential Threat Onset (S-L)**
• Grazing	M	M	S
• Weeds	M	M	S
•			

Please return completed form to **Species And Communities Program** DBCA,
Locked Bag 104, BENTLEY DELIVERY CENTRE WA 6983 **OR** email to: flora.data@dbca.wa.gov.au

RECORDS: Please forward to **Flora Administrative Officer,** Species and Communities Program.

Record entered by:_____ **Sheet No.:**_____ **Record Entered in Database** ❑

Department of **Biodiversity, Conservation and Attractions**

GOVERNMENT OF WESTERN AUSTRALIA

Threatened and Priority Flora Report Form

Version 1.4 March 2021

HABITAT INFORMATION:

LANDFORM:
Crest ☐
Hill ☒
Ridge ☐
Outcrop ☐
Slope ☐
Flat ☐
Open depression ☐
Drainage line ☐
Closed depression ☐
Wetland ☐

ROCK TYPE:
Granite ☐
Dolerite ☐
Laterite ☐
Ironstone ☐
Limestone ☐
Quartz ☐
Specify other:
None

LOOSE ROCK:
(on soil surface; eg gravel, quartz fields)
0-10% ☒
10-30% ☐
30-50% ☐
50-100% ☐

SOIL TYPE:
Sand ☒
Sandy loam ☐
Loam ☐
Clay loam ☐
Light clay ☐
Peat ☐
Specify other:
Sandy Clay

SOIL COLOUR:
Red ☒
Brown ☐
Yellow ☐
White ☐
Grey ☐
Black ☐
Specify other:

DRAINAGE:
Well drained ☒
Seasonally inundated ☐
Permanently inundated ☐
Tidal ☐

Specific **Landform** Element:
(Refer to field manual for additional values)

CONDITION OF SOIL: Dry ☒ Moist ☐ Waterlogged ☐ Inundated ☐

VEGETATION CLASSIFICATION*:
Eg: **1**. Banksia woodland (B. attenuata, B. ilicifolia); **2**. Open shrubland (Hibbertia sp., Acacia spp.) ; **3**. Isolated clumps of sedges (M.tetragona)

1. Acacia ligulata, Acacia tetragonophylla, Rhagodia latifolia subsp. latifolia mid open shrubland
2. Triodia plurinervata low hummock grassland OR Atriplex palludosa subsp. moniquiana low spaprse shrubalnd

ASSOCIATED SPECIES:
Other (non-dominant) spp

* Please record up to four of the most representative vegetation layers (with up to three dominant species in each layer). Structural Formations should follow 2009 *Australian Soil and Land Survey Field Handbook* guidelines – refer to field manual for further information and structural formation table.

CONDITION OF HABITAT: Pristine ☐ Excellent ☐ Very good ☐ Good ☒ Degraded ☐ Completely degraded ☐

COMMENT: Restricted to disturbed areas

FIRE HISTORY: **Last Fire:** Season/Month: _____ Year: _____ **Fire Intensity:** High ☐ Medium ☐ Low ☒ No signs of fire ☐

FENCING: Not required ☒ Present ☐ Replace / repair ☐ Required ☐ Length req'd: _____

ROADSIDE MARKERS: Not required ☒ Present ☐ Replace / reposition ☐ Required ☐ Quantity req'd: _____

OTHER COMMENTS: (Please include recommended management actions and/or implemented actions - include date. Also include details of additional data available, and how to locate it.)

FLORA AUTHORISATION / LICENCE No: _____ Note if only observing plants (i.e. no specimens or plant matieral is taken) then no authorisation/licence is required. For further information on authorisation and licening requirements see the Threatened Flora and Wildlife Licensing pages on DBCA's website. Any actions carried out under authorisations/licences should be recorded above in the OTHER COMMENTS section.

SPECIMEN: Collectors No: _____ WA Herb. ☐ Regional Herb. ☐ District Herb. ☐ Other: _____

LODGEMENT: WA Herb Lodgement No: _____

ATTACHED: Map ☐ Mudmap ☐ Photo ☐ GIS data ☒ Field notes ☐ Other: _____

COPY SENT TO: Regional Office ☒ District Office ☐ Other: _____

Submitter of Record: Joseph Mooney Role: Botanist Signed: Date: 16/6/25

Please return completed form to **Species And Communities Program** DBCA,
Locked Bag 104, BENTLEY DELIVERY CENTRE WA 6983 **OR** email to: flora.data@dbca.wa.gov.au

RECORDS: Please forward to **Flora Administrative Officer,** Species and Communities Program.

Record entered by:_____ **Sheet No.:**_____ **Record Entered in Database** ❑

Date	Easting	Northing	Taxon	Status	Count
03-04-2025	755334	7132330	Olearia occidenitissima	P2	5
04-04-2025	755415	7131564	Olearia occidenitissima	P2	5
05-04-2025	755451	7131169	Olearia occidenitissima	P2	5
05-04-2025	755299	7130907	Olearia occidenitissima	P2	2
05-04-2025	755378	7130768	Olearia occidenitissima	P2	10
05-04-2025	755423	7131083	Olearia occidenitissima	P2	5
05-04-2025	755422	7130996	Olearia occidenitissima	P2	5
05-04-2025	755420	7130978	Olearia occidenitissima	P2	6
05-04-2025	755413	7130964	Olearia occidenitissima	P2	10
05-04-2025	755393	7130939	Olearia occidenitissima	P2	6
05-04-2025	755336	7130865	Olearia occidenitissima	P2	6
05-04-2025	755361	7130823	Olearia occidenitissima	P2	4
05-04-2025	755381	7130811	Olearia occidenitissima	P2	4

Department of **Biodiversity, Conservation and Attractions**

GOVERNMENT OF WESTERN AUSTRALIA

Threatened and Priority Flora Report Form

Version 1.4 March 2021

Please complete as much of the form as possible, with emphasis on those sections bordered in black. For information on how to complete the form please refer to the Threatened & Priority Flora Report Form (TPRF) manual on the DBCA website at www.dpaw.wa.gov.au/plants-and-animals/threatened-species-and-communities/threatened-plants

TAXON: Triodia plurinervata **TPFL Pop. No:** 885

OBSERVATION DATE: 3/4/25-5/4/25 **CONSERVATION STATUS:** P3 **New population** ☐

OBSERVER/S: Joseph Mooney **PHONE** 08 9422 5900

ROLE: Botanist **ORGANISATION:** SLR Consulting PTY LTD

EMAIL: carter.mooney@slrconsulting.com

DESCRIPTION OF LOCATION (Provide at least nearest town/named locality, and the distance and direction to that place)**:**

2 km NE of Denham

Reserve No:

DBCA DISTRICT: Midwest **LGA:** Shire of Shark Bay Land manager present: ☐

DATUM:

GDA94 / MGA94 ☒

AGD84 / AMG84 ☐

WGS84 ☐

Unknown ☐

COORDINATES: (If UTM coords provided, **Zone** is also required)

DecDegrees ☐ DegMinSec ☐ UTMs ☐

Lat / Northing: See Attached

Long / Easting: See Attached

ZONE: 49

METHOD USED:

GPS ☒ Differential GPS ☐ Map ☐

No. satellites: ___ Map used: _____

Boundary polygon captured: ☐ Map scale: _____

LAND TENURE:

Nature reserve ☐	Timber reserve ☐	Private property ☐	Rail reserve ☐	Shire road reserve ☐
National park ☐	State forest ☐	Pastoral lease ☒	MRWA road reserve ☐	Other Crown reserve ☐
Conservation park ☐	Water reserve ☐	UCL ☐	SLK/Pole _____ to _____	Specify other: _____

AREA ASSESSMENT: Edge survey ☐ Partial survey ☒ Full survey ☐ Area observed (m²): _____

EFFORT: Time spent surveying (minutes): 400 No. of minutes spent / 100 m²: _____

POP'N COUNT ACCURACY: Actual ☐ Extrapolation ☒ Estimate ☐ Count method: _____ (Refer to field manual for list)

WHAT COUNTED: Plants ☒ Clumps ☐ Clonal stems ☐

TOTAL POP'N STRUCTURE:

	Mature:	Juveniles:	Seedlings:	Totals:
Alive	885			
Dead				

Area of pop (m²): _____

Note: Pls record count as numbers (not percentages) for database.

QUADRATS PRESENT: No. ___ Size _____ Data attached ☐ Total area of quadrats (m²): _____

Summary Quad. Totals: Alive				

REPRODUCTIVE STATE: Clonal ☐ Vegetative ☒ Flowerbud ☒ Flower ☐

Immature fruit ☐ Fruit ☐ Dehisced fruit ☐ Percentage in flower: 1%

CONDITION OF PLANTS: Healthy ☐ Moderate ☐ Poor ☒ Senescent ☐

COMMENT:

THREATS - type, agent and supporting information: Eg clearing, too frequent fire, weed, disease. Refer to field manual for list of threats & agents. **Specify agent** where relevant. Rate current and potential threat impact: N=Nil, L=Low, M=Medium, H=High, E=Extreme Estimate time to potential impact: S=Short (<12mths), M=Medium (<5yrs), L=Long (5yrs+)	**Current impact (N-E)**	**Potential Impact (L-E)**	**Potential Threat Onset (S-L)**
• Grazing	M	M	S
• Weeds	M	M	S
•			

Please return completed form to **Species And Communities Program** DBCA,

Locked Bag 104, BENTLEY DELIVERY CENTRE WA 6983 **OR** email to: flora.data@dbca.wa.gov.au

RECORDS: Please forward to **Flora Administrative Officer,** Species and Communities Program.

Record entered by:_____ **Sheet No.:**_____ **Record Entered in Database** ❑

Department of **Biodiversity, Conservation and Attractions**

GOVERNMENT OF WESTERN AUSTRALIA

Threatened and Priority Flora Report Form

Version 1.4 March 2021

HABITAT INFORMATION:

LANDFORM:
Crest ☐
Hill ☒
Ridge ☐
Outcrop ☐
Slope ☐
Flat ☐
Open depression ☐
Drainage line ☐
Closed depression ☐
Wetland ☐

ROCK TYPE:
Granite ☐
Dolerite ☐
Laterite ☐
Ironstone ☐
Limestone ☐
Quartz ☐
Specify other:
None

LOOSE ROCK:
(on soil surface; eg gravel, quartz fields)
0-10% ☒
10-30% ☐
30-50% ☐
50-100% ☐

SOIL TYPE:
Sand ☒
Sandy loam ☐
Loam ☐
Clay loam ☐
Light clay ☐
Peat ☐
Specify other:
Sandy Clay

SOIL COLOUR:
Red ☒
Brown ☐
Yellow ☐
White ☐
Grey ☐
Black ☐
Specify other:

DRAINAGE:
Well drained ☒
Seasonally inundated ☐
Permanently inundated ☐
Tidal ☐

Specific **Landform** Element:
(Refer to field manual for additional values)

CONDITION OF SOIL: Dry ☒ Moist ☐ Waterlogged ☐ Inundated ☐

VEGETATION CLASSIFICATION*:
Eg: **1**. Banksia woodland (B. attenuata, B. ilicifolia); **2**. Open shrubland (Hibbertia sp., Acacia spp.) ; **3**. Isolated clumps of sedges (M.tetragona)

1: Acacia ligulata, Exocarpos aphyllus, Rhagodia latifolia subsp. latifolia mid-open shrubland

2: Triodia plurinervata low hummock grassland

ASSOCIATED SPECIES:
Other (non-dominant) spp

* Please record up to four of the most representative vegetation layers (with up to three dominant species in each layer). Structural Formations should follow 2009 *Australian Soil and Land Survey Field Handbook* guidelines – refer to field manual for further information and structural formation table.

CONDITION OF HABITAT: Pristine ☐ Excellent ☐ Very good ☐ Good ☒ Degraded ☐ Completely degraded ☐

COMMENT:

FIRE HISTORY: **Last Fire:** Season/Month: _____ Year: _____ **Fire Intensity:** High ☐ Medium ☐ Low ☐ No signs of fire ☒

FENCING: Not required ☒ Present ☐ Replace / repair ☐ Required ☐ Length req'd: _____

ROADSIDE MARKERS: Not required ☒ Present ☐ Replace / reposition ☐ Required ☐ Quantity req'd: _____

OTHER COMMENTS: (Please include recommended management actions and/or implemented actions - include date. Also include details of additional data available, and how to locate it.)

FLORA AUTHORISATION / LICENCE No: _____ Note if only observing plants (i.e. no specimens or plant matieral is taken) then no authorisation/licence is required. For further information on authorisation and licening requirements see the Threatened Flora and Wildlife Licensing pages on DBCA's website. Any actions carried out under authorisations/licences should be recorded above in the OTHER COMMENTS section.

SPECIMEN: Collectors No: 62000690-2 WA Herb. ☐ Regional Herb. ☐ District Herb. ☐ Other: _____

LODGEMENT: WA Herb Lodgement No: _____

ATTACHED: Map ☐ Mudmap ☐ Photo ☒ GIS data ☐ Field notes ☐ Other: _____

COPY SENT TO: Regional Office ☒ District Office ☐ Other: _____

Submitter of Record: Joseph Mooney Role: Botanist Signed:  Date: 16/6/2025

Please return completed form to **Species And Communities Program** DBCA,
Locked Bag 104, BENTLEY DELIVERY CENTRE WA 6983 **OR** email to: flora.data@dbca.wa.gov.au

RECORDS: Please forward to **Flora Administrative Officer,** Species and Communities Program.

Record entered by:_____ **Sheet No.:**_____ **Record Entered in Database** ❑

Date	Easting	Northing	Taxon	Status	Count
03-04-2025	755261	7131949	Triodia plurinervata	P3	100
03-04-2025	755486	7131803	Triodia plurinervata	P3	100
03-04-2025	755474	7132098	Triodia plurinervata	P3	100
03-04-2025	755351	7132091	Triodia plurinervata	P3	35
03-04-2025	755219	7132179	Triodia plurinervata	P3	100
03-04-2025	755334	7132330	Triodia plurinervata	P3	25
04-04-2025	755557	7132275	Triodia plurinervata	P3	200
04-04-2025	755251	7131708	Triodia plurinervata	P3	150
04-04-2025	755415	7131564	Triodia plurinervata	P3	75

Appendix E Flora Desktop Assessment Results and Likelihood of Occurrence

Denham Biological Surveys

Flora, Vegetation and Fauna

Horizon Power

SLR Project No.: 675.073044.00002

18 July 2025

Distance to Nearest Record from the Survey Area is based on a distance analysis undertaken against 2025 Department of Biodiversity, Conservations, and Attractions (DBCA) database. High = Suitable habitat present and records less than 20 km from the Survey Area, Medium = Suitable habitat present and records between 20 km and 50 km from the Survey Area, and Low = No suitable habitat present and/or records greater than 50 km, or an unknown distance from the Survey Area, Unknown = Insufficient information available to classify . EN = Listed as Endangered under the EBPC Act, VU = listed as Vulnerable under the EBPC Act. T = Threatened under the BC Act, P = Priority Listed, Ranked and Listed by the DBCA. Likelihoods are assessed both pre and post survey based on knowledge of the Survey Area, nearest known records, known flowering period of flora taxa and knowledge gained from the survey effort during ground truthing. 1: DBCA (2025). FloraBase - The Western Australian Flora. https://florabase.dbca.wa.gov.au/

Species	Conservation Status		Source				Distance to Nearest Record (km)	Flowering Period	Prefered Habitat [1]	Pre-Survey Likelihood of Occurrence	Habitat occurs within the Survey Area (updated post survey)	Post-Survey Likelihood of Occurrence
	DBCA	EPBC	NatureMap	PMST	DBCA	Literature						
Eucalyptus beardiana	T	VU	X	X	X		79.47	Aug - Sep	Generally occurs on red or yellow, flat or undulating sandplain and sand ridges.	Low	No	Low
Caladenia hoffmanii	T	EN		X			Unknown (>50 km)	Aug - Oct	This species has a preference for clay, sandy clay or clay loam with laterite on reocky hillsides and ridges, or in winter-wet flats.	Low	No	Low
Acacia ampliata	P1				X		87.48	Aug, Oct, Dec	Red, orange sand, sandy loam, loam. Sandplains and hillsides.	Low	No	Low
Calandrinia operta	P1		X		X		78.04	Aug - Oct	Saline pans and drainages.	Low	No	Low
Corynotheca acanthoclada	P1				X		84.58	Unknown	Grey, yellow sandplains.	Low	No	Low
Grevillea speckiana	P1		X		X		1.73	Unknown	Unknown. Described from a single specimen, collected in 1953.	High	Unknown	Low
Ptilotus unguiculatus	P1		X		X		67.50	Jul	Open plains.	Low	No	Low
Rhodanthe sp. Overlander (P.S. Short 2096)	P1				X		85.16	Oct	Sandy loam.	Low	No	Low
Thryptomene caduca subsp. caduca	P1				X		80.87	Jul - Aug	Red, yellow sand.	Low	Yes	Low
Thryptomene maritima subsp. freycinetensis	P1		X		X		64.04	May - Sep	White or brown sand in limestone.	Low	No	Low
Millotia depauperata	P1				X		86.60	Aug - Sep	Sandy loam, granite outcrops.	Low	No	Low
Schoenia filifolia subsp. arenicola	P1				X		89.96	Aug - sep	Sand, red clay. Sub-coastal sand ridges.	Low	Yes	Low
Sclerolaena stylosa	P1		X		X		61.07	Jun	Orange sandy clay. With *Tecticornia indica* and *Atriplex* spp.	Low	No	Low
Dicrastylis sp. Denham (M. Lewis 42/92)	P1		X		X		15.06	Sep	Grey Sand.	High	No	Low
Boronia crenulata subsp. Shark Bay (G. Cockerton 5187)	P1		X		X		27.33	Aug	Limestone outcrop.	Medium	No	Low
Eremophila cuneata	P1		X		X		44.45	Nov - Dec	Below limestone outcrop.	Medium	No	Low
Eremophila splendens	P1		X		X		43.22	Sep	Creamy brown calcareous sand. Slopes, lowland plains.	Medium	No	Low

Distance to Nearest Record from the Survey Area is based on a distance analysis undertaken against 2025 Department of Biodiversity, Conservations, and Attractions (DBCA) database. High = Suitable habitat present and records less than 20 km from the Survey Area, Medium = Suitable habitat present and records between 20 km and 50 km from the Survey Area, and Low = No suitable habitat present and/or records greater than 50 km, or an unknown distance from the Survey Area, Unknown = Insufficient information available to classify . EN = Listed as Endangered under the EBPC Act, VU = listed as Vulnerable under the EBPC Act. T = Threatened under the BC Act, P = Priority Listed, Ranked and Listed by the DBCA. Likelihoods are assessed both pre and post survey based on knowledge of the Survey Area, nearest known records, known flowering period of flora taxa and knowledge gained from the survey effort during ground truthing. 1: DBCA (2025). FloraBase - The Western Australian Flora. https://florabase.dbca.wa.gov.au/

Species	Conservation Status		Source				Distance to Nearest Record (km)	Flowering Period	Prefered Habitat [1]	Pre-Survey Likelihood of Occurrence	Habitat occurs within the Survey Area (updated post survey)	Post-Survey Likelihood of Occurrence
	DBCA	EPBC	NatureMap	PMST	DBCA	Literature						
Acacia subrigida	P2		X		X		78.03	Aug - Oct	Yellow or red sand. Plains.	Low	Yes	Low
Calandrinia sphaerophylla	P2		X		X		40.10	Oct - Dec	Cliff tops, small rocky rises. Pockets of soil in limestone.	Medium	No	Low
Rhodanthe oppositifolia subsp. ornata	P2		X		X		77.76	Jul - Aug	Calcrete soils. On calcrete rises on edges of saline flats.	Low	No	Low
Scholtzia sp. Folly Hill (M.E. Trudgen 12097)	P2				X		86.92	Aug or Oct	Yellow or red sand. Sand dunes.	Low	Yes	Low
Ptilotus alexandri	P2		X		X		28.78	Aug - Oct	Red-white sand. Dunes.	Medium	No	Low
Acanthocarpus rupestris	P2		X		X	X	Previously Recorded	May - Jun	Red sand, limestone.	Previously Recorded	Yes	Medium
Angianthus microcephalus	P2		X		X		33.77	Sep - Dec	Sandy or clayey soils. Salt swamps and pans.	Medium	No	Low
Chthonocephalus muellerianus	P2		X		X		1.73	Sep	Red sand.	High	Yes	Medium
Chthonocephalus tomentellus	P2		X		X		9.20	Aug - Nov	Red sand. Undulating plains, sand dunes, near saline depressions.	High	No	Low
Olearia occidentissima	P2		X		X	X	Previously Recorded	Jul - Sep	Red-orange, sandy clay. Shallow soils. Coastal limestone cliffs.	Previously Recorded	Yes	Recorded
Sondottia glabrata	P2		X		X		2.28	Sep - Oct	Saline flats.	High	No	Low
Scaevola chrysopogon	P2		X		X		44.57	Aug - Oct	Red/brown sand. Sandplains.	Medium	No	Low
Abutilon sp. Hamelin (A.M. Ashby 2196)	P2		X		X		1.86	Jul - Sep	Sand or loam. Limestone rises.	High	No	Low
Abutilon sp. Quobba (H. Demarz 3858)	P2		X		X		15.30	Jul - Sep	Sandplain, brown clayey sand or rock.	High	No	Low
Thryptomene repens	P2		X		X		39.51	Sep	High part of dune; creamy-brownish calcareous sand.	Medium	No	Low
Adenanthos acanthophyllus	P2		X		X		44.57	Apr - Jul or Dec	Red or orange-brown sand.	Medium	Yes	Low
Eremophila occidens	P2				X		81.05	Jul - Aug	Orange/brown sand. Limestone ranges, dunes.	Low	Yes	Low

Distance to Nearest Record from the Survey Area is based on a distance analysis undertaken against 2025 Department of Biodiversity, Conservations, and Attractions (DBCA) database. High = Suitable habitat present and records less than 20 km from the Survey Area, Medium = Suitable habitat present and records between 20 km and 50 km from the Survey Area, and Low = No suitable habitat present and/or records greater than 50 km, or an unknown distance from the Survey Area, Unknown = Insufficient information available to classify . EN = Listed as Endangered under the EBPC Act, VU = listed as Vulnerable under the EBPC Act. T = Threatened under the BC Act, P = Priority Listed, Ranked and Listed by the DBCA. Likelihoods are assessed both pre and post survey based on knowledge of the Survey Area, nearest known records, known flowering period of flora taxa and knowledge gained from the survey effort during ground truthing. 1: DBCA (2025). FloraBase - The Western Australian Flora. https://florabase.dbca.wa.gov.au/

Species	Conservation Status		Source				Distance to Nearest Record (km)	Flowering Period	Prefered Habitat [1]	Pre-Survey Likelihood of Occurrence	Habitat occurs within the Survey Area (updated post survey)	Post-Survey Likelihood of Occurrence
	DBCA	EPBC	NatureMap	PMST	DBCA	Literature						
Balladonia aervoides	P3				X		90.77	Unknown	Shallow grey sands over limestone.	Low	No	Low
Chthonocephalus spathulatus	P3		X		X		75.63	Aug	Undulating plains.	Low	No	Low
Dasymalla glutinosa	P3		X		X		64.73	Unknown	Red sand, near base of dunes.	Low	Yes	Low
Dicrastylis linearifolia	P3				X		98.08	Nov - Dec	Red sand. Sandplains.	Low	No	Low
Lepidium scandens	P3				X		87.48	Aug - Sep	Red sand, clay.	Low	Yes	Low
Lysiandra fuernrohrii	P3		X		X		40.07	Unknown	Limestone.	Medium	No	Low
Orobanche cernua var. australiana	P3		X		X		70.22	Unknown	Unknown. Known from a single record collected in 1998.	Low	Unknown	Low
Thryptomene caduca subsp. incurva	P3				X		79.97	Jul - Aug	Red, yellow sand.	Low	Yes	Low
Verticordia dichroma var. syntoma	P3		X		X		63.27	Oct - Nov	Yellow or red sand. Sandplains.	Low	No	Low
Carpobrotus sp. Thevenard Island (M. White 050)	P3		X		X		1.74	Aug	Coarse white sand. Dune tops, disturbed areas.	High	No	Low
Tetragonia coronata	P3		X		X		67.69	Jul	Red clay loam. Calcrete outcrops.	Low	No	Low
Acanthocarpus parviflorus	P3		X		X		1.73	May - Jun	Sand over limestone or sandstone.	High	Yes	Medium
Lepidium biplicatum	P3		X		X		19.24	Sep	Coastal regions.	High	Yes	Medium
Spergularia nesophila	P3		X		X		38.26	Aug	Brown guano soil over limestone rock. Rock platform off high rock island.	Medium	No	Low
Beyeria cinerea subsp. cinerea	P3		X		X		67.44	May - Aug	Grey sand over limestone.	Low	No	Low
Acacia drepanophylla	P3		X		X		14.54	May - Jul	Red clay or loam over limestone. Flat to undulating plains, low rises.	High	No	Low
Acacia sclerosperma subsp. glaucescens	P3		X		X		71.57	Jul - Aug	Sand, sandy loam, stony soils.	Low	No	Low

Distance to Nearest Record from the Survey Area is based on a distance analysis undertaken against 2025 Department of Biodiversity, Conservations, and Attractions (DBCA) database. High = Suitable habitat present and records less than 20 km from the Survey Area, Medium = Suitable habitat present and records between 20 km and 50 km from the Survey Area, and Low = No suitable habitat present and/or records greater than 50 km, or an unknown distance from the Survey Area, Unknown = Insufficient information available to classify . EN = Listed as Endangered under the EBPC Act, VU = listed as Vulnerable under the EBPC Act. T = Threatened under the BC Act, P = Priority Listed, Ranked and Listed by the DBCA. Likelihoods are assessed both pre and post survey based on knowledge of the Survey Area, nearest known records, known flowering period of flora taxa and knowledge gained from the survey effort during ground truthing. 1: DBCA (2025). FloraBase - The Western Australian Flora. https://florabase.dbca.wa.gov.au/

Species	Conservation Status		Source				Distance to Nearest Record (km)	Flowering Period	Prefered Habitat [1]	Pre-Survey Likelihood of Occurrence	Habitat occurs within the Survey Area (updated post survey)	Post-Survey Likelihood of Occurrence
	DBCA	EPBC	NatureMap	PMST	DBCA	Literature						
Bossiaea calcicola	P3		X		X		1.73	Jul - Sep	Compacted sand over limestone. Exposed sites on coastal cliffs and slopes.	High	No	Low
Dicrastylis micrantha	P3		X		X		53.56	Sep - Dec	Red sand. Sandplains.	Low	No	Low
Physopsis chrysophylla	P3		X		X		1.73	Sep - Dec or Jan	Red or yellow sandy soils. Sandplains.	High	No	Low
Abutilon sp. Pritzelianum (S. van Leeuwen 5095)	P3				X		85.55	Jun, Aug - Sep	Sandy plains.	Low	No	Low
Macarthuria intricata	P3		X		X		44.56	Sep - Dec	Red or black soil over limestone, grey sand over sandstone, sandy clay. Sandplains and sand dunes.	Medium	Yes	Low
Melaleuca huegelii subsp. pristicensis	P3		X		X		27.36	Sep - Oct	Sand.	Medium	Yes	Low
Triodia plurinervata	P3		X		X	X	Previously Recorded	May - Jul or Sep - Oct	Red to orange-brown sand, limestone, sandy loam. Sand dunes and steppes, often coastal areas, drainage basins, salt lakes.	Previously Recorded	Yes	Recorded
Grevillea rogersoniana	P3		X		X		1.73	Aug - Oct	Red sand.	High	Yes	Medium
Stenanthemum divaricatum	P3		X		X		1.73	Aug - Sep	White or yellow sand over sandstone.	High	No	Low
Anthocercis intricata	P3		X		X		1.86	Jun - Sep	Sand or loam over limestone. Consolidated sand dunes.	High	Yes	Medium
Jacksonia dendrospinosa	P4		X		X		65.67	Nov	Flat sandplains with Eucalyptus and Allocasuarina species	Low	No	Low
Lepidium puberulum	P4		X		X		42.10	Jul - Aug or Oct - Nov	Sandy soils.	Medium	Yes	Low
Frankenia glomerata	P4				X		83.18	Nov	White sand.	Low	No	Low
Eucalyptus zopherophloia	P4		X		X		15.76	Oct - Dec or Jan	Grey/white sand with limestone rubble. Coastal areas.	High	No	Low
Triodia bromoides	P4		X		X		36.16	Jul - Oct	Red, grey and calcareous sand. Dunes, sandplains, stony rises.	Medium	No	Low
Lepidobolus densus	P4		X		X		62.48	Aug or Sep	Yellow lateritic sand, lateritic gravel. Dry kwongan.	Low	No	Low

Flora Database Search Results

Conservation Status: Commonwealth – Listed under the Environmental Protection and Biodiversity Conservation Act 1999, EN – Endangered, VU – Vulnerable; State - Listed under Biodiversity Conservation Act 2016 or Department of Biodiversity, Conservation and Attractions Conservation (DBCA), T – Threatened, P - Listed as Priority by DBCA.

Scientific Name	Conservation Status		Source			
	State	Federal	Nature Map	PMST	TPFL	WAHerb
Abutilon sp. Hamelin (A.M. Ashby 2196)	P2		X			X
Abutilon sp. Pritzelianum (S. van Leeuwen 5095)	P3					X
Abutilon sp. Quobba (H. Demarz 3858)	P2		X		X	X
Acacia ampliata	P1					X
Acacia drepanophylla	P3		X			X
Acacia sclerosperma subsp. *glaucescens*	P3		X			X
Acacia subrigida	P2		X		X	X
Acanthocarpus parviflorus	P3		X			X
Acanthocarpus rupestris	P2		X		X	X
Adenanthos acanthophyllus	P2		X			X
Angianthus microcephalus	P2		X			X
Anthocercis intricate	P3		X			X
Balladonia aervoides	P3					X
Beyeria cinerea subsp. *cinerea*	P3		X		X	
Boronia crenulata subsp. Shark Bay (G. Cockerton 5187)	P1		X			X
Bossiaea calcicola	P3		X			X
Caladenia hoffmanii	T	EN		X		
Calandrinia operta	P1		X			X
Calandrinia sphaerophylla	P2		X			X
Carpobrotus sp. Thevenard Island (M. White 050)	P3		X			X
Chthonocephalus muellerianus	P2		X			X
Chthonocephalus spathulatus	P3		X		X	X
Chthonocephalus tomentellus	P2		X			X
Corynotheca acanthoclada	P1					X
Dasymalla glutinosa	P3		X			X
Dicrastylis linearifolia	P3					X
Dicrastylis micrantha	P3		X			X
Dicrastylis sp. Denham (M. Lewis 42/92)	P1		X		X	X
Eremophila cuneata	P1		X		X	X
Eremophila occidens	P2				X	
Eremophila splendens	P1		X		X	X
Eucalyptus beardiana	T	VU	X	X	X	X
Eucalyptus zopherophloia	P4		X			X
Frankenia glomerata	P4					X
Grevillea rogersoniana	P3		X			X
Grevillea speckiana	P1		X			X
Jacksonia dendrospinosa	P4		X			X
Lepidium biplicatum	P3		X			X
Lepidium puberulum	P4		X			X
Lepidium scandens	P3					X
Lepidobolus densus	P4		X		X	X
Lysiandra fuernrohrii	P3		X			X
Macarthuria intricata	P3		X			X
Melaleuca huegelii subsp. *pristicensis*	P3		X			X
Millotia depauperate	P1				X	X
Olearia occidentissima	P2		X			X
Orobanche cernua var. *australiana*	P3		X			X
Physopsis chrysophylla	P3		X			X
Ptilotus alexandri	P2		X			X

Flora Database Search Results

Scientific Name	Conservation Status		Source			
	State	Federal	Nature Map	PMST	TPFL	WAHerb
Ptilotus unguiculatus	P1		X			X
Rhodanthe oppositifolia subsp. *ornata*	P2		X			X
Rhodanthe sp. Overlander (P.S. Short 2096)	P1					X
Scaevola chrysopogon	P2		X			X
Schoenia filifolia subsp. *arenicola*	P1					X
Scholtzia sp. Folly Hill (M.E. Trudgen 12097)	P2					X
Sclerolaena stylosa	P1		X			X
Sondottia glabrata	P2		X			X
Spergularia nesophila	P3		X			X
Stenanthemum divaricatum	P3		X			X
Tetragonia coronata	P3		X			X
Thryptomene caduca subsp. *caduca*	P1					X
Thryptomene caduca subsp. *incurva*	P3					X
Thryptomene maritima subsp. *freycinetensis*	P1		X			X
Thryptomene repens	P2		X			X
Triodia bromoides	P4		X		X	X
Triodia plurinervata	P3		X			X
Verticordia dichroma var. *syntoma*	P3		X			X

Appendix F Flora Recorded During the Field Survey

Denham Biological Surveys

Flora, Vegetation and Fauna

Horizon Power

SLR Project No.: 675.073044.00002

18 July 2025

Family	Taxa	Status
Aizoaceae	**Mesembryanthemum crystallinum*	s11
Amaranthaceae	*Ptilotus divaricatus*	
	Ptilotus obovatus var. *obovatus*	
Asparagaceae	*Acanthocarpus* aff. *preissii*	
Asteraceae	Asteraceae sp.	
	**Centaurea melitensis*	s11
	Gnephosis arachnoidea	
	Olearia occidenitissima	P2
	**Sonchus oleraceus*	s11
	**Urospermum picroides*	s11
Boraginaceae	*Halgania littoralis*	
Brassicaceae	*Lepidium* sp.	
	**Sisymbrium erysimoides*	s11
Cactaceae	**Opuntia stricta*	WoNS, s22 (C3)
Capparaceae	*Capparis spinosa* subsp. *nummularia*	
Chenopodiaceae	*Atriplex paludosa* subsp. *moquiniana*	
	Maireana stipitata	
	Rhagodia latifolia subsp. *latifolia*	
	Rhagodia preissii subsp. *obovata*	
	Salsola australis	
Convolvulaceae	*Duperreya commixta*	
Crassulaceae	*Crassula colorata* var. *colorata*	
Euphorbiaceae	*Euphorbia boophthona*	
	Euphorbia sharkoensis	
Fabaceae	*Acacia ligulata*	
	Acacia galeata	
	Acacia tetragonophylla	
	Chorizema racemosum	
	Indigofera georgei	
Geraniaceae	*Erodium* sp.	
Goodeniaceae	*Goodenia* sp.	
	Scaevola spinescens	
Hemerocallidaceae	*Dianella revoluta* var. *divaricata*	
Malvaceae	*Abutilon oxycarpum*	
	Androcalva gaudichaudii	
Myrtaceae	*Melaleuca cardiophylla*	
	Melaleuca eulobata	
	Thryptomene dampieri subsp. *dampieri*	
Oleaceae	*Jasminum calcareum*	
Poaceae	*Aristida contorta*	
	Aristida sp.	
	Austrostipa sp.	
	**Avena barbata*	s11
	**Cenchrus ciliaris*	s11
	Eragrostis ?falcata	
	**Pentameris airoides*	s11
	Rytidosperma caespitosum	
	Triodia plurinervata	P3
Rutaceae	*Diplolaena grandiflora*	

Family	Taxa	Status
Santalaceae	*Exocarpos aphyllus*	
	Santalum spicatum	
Sapindaceae	*Alectryon oleifolius* subsp. *oleifolius*	
Solanaceae	**Lycium ferocissimum*	WoNS, s11
	Solanum lasiophyllum	
	Solanum orbiculatum subsp. *orbiculatum*	
Surianaceae	*Stylobasium spathulatum*	
Thymelaeaceae	*Pimelea microcephala* subsp. *microcephala*	
Zygophyllaceae	*Roepera* sp.	

Appendix G Selected Inputs for Multivariate Statistics

Denham Biological Surveys

Flora, Vegetation and Fauna

Horizon Power

SLR Project No.: 675.073044.00002

18 July 2025

Species	Status for Multivariate Analysis	Reason for Removal from Multivariate Analysis	Removed from Species Accumulation Analysis
**Avena barbata*	Removed	Singleton, Introduced taxon, Annual taxon	
**Cenchrus ciliaris*	Removed	Introduced taxon	
**Centaurea melitensis*	Removed	Introduced taxon, Annual taxon	
**Lycium ferocissimum*	Removed	Introduced taxon	
**Pentameris airoides*	Removed	Singleton, Introduced taxon, Annual taxon	
**Sisymbrium erysimoides*	Removed	Introduced taxon, Annual taxon	
**Sonchus oleraceus*	Removed	Introduced taxon, Annual taxon	
**Urospermum picroides*	Removed	Introduced taxon, Annual taxon	
Abutilon oxycarpum	Removed	Singleton	
Acacia ligulate	Included	-	
Acacia galeata	Included	-	
Acacia tetragonophylla	Included	-	
Acanthocarpus aff. *preissii*	Included	-	
Alectryon oleifolius subsp. *oleifolius*	Included	-	
Androcalva gaudichaudii	Included	-	
Aristida contorta	Removed	Singleton, Annual taxon	
Aristida sp.	Removed	Singleton, Genus/family-level identification	Y
Asteraceae sp.	Removed	Genus/family-level identification	Y
Atriplex paludosa subsp. *moquiniana*	Included	-	
Austrostipa sp.	Removed	Genus/family-level identification	Y

Species	Status for Multivariate Analysis	Reason for Removal from Multivariate Analysis	Removed from Species Accumulation Analysis
Capparis spinosa subsp. *nummularia*	Removed	Singleton	
Dianella revoluta var. *divaricata*	Included	-	
Diplolaena grandiflora	Removed	Singleton	
Duperreya commixta	Included	-	
Eragrostis ?falcata	Removed	Tentative identification	Y
Erodium sp.	Removed	Genus/family-level identification	Y
Euphorbia boophthona	Removed	Annual taxon	
Euphorbia sharkoensis	Removed	Annual taxon	
Exocarpos aphyllus	Included	-	
Gnephosis arachnoidea	Removed	Annual taxon	
Goodenia sp.	Removed	Singleton, Genus/family-level identification	Y
Halgania littoralis	Removed	Singleton	
Indigofera georgei	Removed	Singleton	
Jasminum calcareum	Included	-	
Lepidium sp.	Removed	Singleton, Genus/family-level identification	Y
Maireana stipitata	Included	-	
Melaleuca cardiophylla	Included	-	
Melaleuca eulobata	Included	-	
Olearia occidenitissima	Included	-	
Pimelea microcephala subsp. *microcephala*	Included	-	

Species	Status for Multivariate Analysis	Reason for Removal from Multivariate Analysis	Removed from Species Accumulation Analysis
Ptilotus divaricatus	Included	-	
Ptilotus obovatus var. *obovatus*	Included	-	
Rhagodia latifolia subsp. *latifolia*	Included	-	
Rhagodia preissii subsp. *obovata*	Included	-	
Roepera sp.	Removed	Genus/family-level identification	Y
Rytidosperma caespitosum	Removed	Singleton	
Salsola australis	Included	-	
Santalum spicatum	Removed	Singleton	
Scaevola spinescens	Included	-	
Solanum lasiophyllum	Included	-	
Solanum orbiculatum subsp. *orbiculatum*	Included	-	
Stylobasium spathulatum	Removed	Singleton	
Thryptomene dampieri subsp. *dampieri*	Included	-	
Triodia plurinervata	Included	-	

Appendix H Flora Site Sheets

Denham Biological Surveys

Flora, Vegetation and Fauna

Horizon Power

SLR Project No.: 675.073044.00002

18 July 2025

FLORA SITE SHEET

Project Name Denham Biological Surveys
Site: DQ1
Location MGA 49 755261 **mE** 7131949 **mN**

Described by: CM
Date: 3-04-2025
Type: Quadrat

Landform: Undulating Sub-Coastal Dune
Slope: Gentle
Rock Type: Limestone
Soil Type: Sandy-Clay
Soil Colour: Orange

Vegetation: *Acacia ligulata, Exocarpos aphyllus and Rhagodia preissii subsp. obovata mid-to-low open shrubland over Triodia plurinervata low hummock grassland*

Condition: Good **Disturbance Type:** Infrastructure,Litter,Vehicle tracks,Weeds
Fire Age: > 10 years

SPECIES LIST

Taxon	Height (cm)	Cover (%)	Notes
Acacia ligulata	175	15	
Exocarpos aphyllus	110	2.5	
Ptilotus divaricatus	100	0.5	
Acacia tetragonophylla	60	0.25	
Rhagodia preissii subsp. obovata	60	2.5	
Ptilotus obovatus var. obovatus	45	0.1	
Rhagodia latifolia subsp. latifolia	45	0.5	
Thryptomene dampieri subsp. dampieri	35	2.5	
Triodia plurinervata	30	50	
**Centaurea melitensis*	25	5	Permitted - s11
Maireana stipitata	25	0.5	
Solanum lasiophyllum	25	0.1	
Androcalva gaudichaudii	20	0.1	
Salsola australis	20	0.5	
**Sisymbrium erysimoides*	15	0.1	Permitted - s11
Acanthocarpus aff. preissii	15	1	
Euphorbia boophthona	15	0.1	
Euphorbia sharkoensis	15	0.1	
Roepera sp.	15	0.1	
Erodium sp.	10	0.1	
Indigofera georgei	5	0.1	

FLORA SITE SHEET

Project Name Denham Biological Surveys
Site: DQ2
Location MGA 49 755486 **mE** 7131803 **mN**

Described by: CM
Date: 3-04-2025
Type: Quadrat

Landform: Undulating Sub-Coastal Dune
Slope: Gentle
Rock Type: None
Soil Type: Sandy-Clay
Soil Colour: Orange

Vegetation: *Acacia ligulata, Rhagodia preissii subsp. obovata and Melaleuca eulobata mid-to-ow open shrubland over Triodia plurinervata low hummock grassland*

Condition: Good **Disturbance Type:** Infrastructure,Litter,Weeds
Fire Age: > 10 years

SPECIES LIST

Taxon	Height (cm)	Cover (%)	Notes
Acacia ligulata	180	20	
Capparis spinosa subsp. nummularia	150	1	
Exocarpos aphyllus	120	1.5	
Rhagodia preissii subsp. obovata	110	5	
Stylobasium spathulatum	110	0.5	
Pimelea microcephala subsp. microcephala	80	0.5	
Rhagodia latifolia subsp. latifolia	50	0.1	
Maireana stipitata	45	0.5	
Melaleuca eulobata	45	5	
Ptilotus divaricatus	45	0.5	
Solanum orbiculatum subsp. orbiculatum	45	0.1	
**Sisymbrium erysimoides*	35	0.1	Permitted - s11
Salsola australis	35	0.1	
Solanum lasiophyllum	35	0.1	
Triodia plurinervata	35	50	
Acanthocarpus aff. preissii	25	0.1	
Halgania littoralis	25	0.1	
Thryptomene dampieri subsp. dampieri	25	0.5	
Euphorbia boophthona	15	0.1	
Euphorbia sharkoensis	15	0.1	

FLORA SITE SHEET

Project Name Denham Biological Surveys
Site: DQ3
Location MGA 49 755474 **mE** 7132098 **mN**

Described by: CM
Date: 3-04-2025
Type: Quadrat

Landform: Undulating Sub-Coastal Dune
Slope: Gentle
Rock Type: Orange
Soil Type: Sandy-Clay
Soil Colour: Orange

Vegetation: *Acacia ligulata, Exocarpos aphyllys and Rhagodia preissii subsp. obovata mid-to-low open shrubland over Triodia plurinervata low hummock grassland*

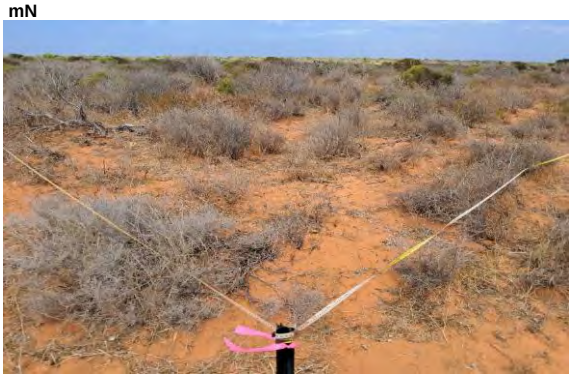
Condition: Good **Disturbance Type:** Light Grazing, Fauna Scats/Tracks, Weeds
Fire Age: > 10 years

SPECIES LIST

Taxon	Height (cm)	Cover (%)	Notes
Acacia ligulata	180	20	
Exocarpos aphyllus	175	2.5	
Scaevola spinescens	150	1	
Atriplex paludosa subsp. moquiniana	110	0.1	
Pimelea microcephala subsp. microcephala	110	0.5	
Rhagodia preissii subsp. obovata	110	10	
Duperreya commixta	50	0.2	
**Sonchus oleraceus*	45	0.1	Permitted - s11
Asteraceae sp.	45	0.1	
Dianella revoluta var. divaricata	45	0.1	
Melaleuca cardiophylla	45	0.5	
Ptilotus divaricatus	45	0.5	
Rhagodia latifolia subsp. latifolia	40	1.5	
Solanum orbiculatum subsp. orbiculatum	35	0.1	
Triodia plurinervata	35	60	
**Sisymbrium erysimoides*	30	0.1	Permitted - s11
**Centaurea melitensis*	25	0.1	Permitted - s11
Maireana stipitata	25	0.1	
Solanum lasiophyllum	20	0.1	
Acanthocarpus aff. preissii	15	0.1	
Euphorbia boophthona	15	0.1	
Euphorbia sharkoensis	15	0.1	

FLORA SITE SHEET

Project Name Denham Biological Surveys
Site: DQ4
Location MGA 49 755351 **mE** 7132091 **mN**



Described by: CM
Date: 3-04-2025
Type: Quadrat

Landform: Undulating Sub-Coastal Dune
Slope: Gentle
Rock Type: Orange
Soil Type: Sandy-Clay
Soil Colour: Orange

Vegetation: *Acacia ligulata,Exocarpos aphyllus and Rhagodia preissii subsp. obovata mid to low open shrubland over Triodia plurinervata low hummock grassland*

Condition: Good **Disturbance Type:** Animal (Other) tracks/scats,Grazing Light,Litter,Weeds
Fire Age: > 10 years

SPECIES LIST

Taxon	Height (cm)	Cover (%)	Notes
**Lycium ferocissimum*	150	1	WoNS Permitted - s11
Acacia ligulata	150	10	
Alectryon oleifolius subsp. oleifolius	110	1.5	
Atriplex paludosa subsp. moquiniana	110	0.1	
Rhagodia latifolia subsp. latifolia	100	0.5	
Exocarpos aphyllus	75	5	
**Sonchus oleraceus*	60	0.1	Permitted - s11
Acacia tetragonophylla	50	5	
Rhagodia preissii subsp. obovata	50	5	
Asteraceae sp.	45	0.1	
Duperreya commixta	45	0.1	
Maireana stipitata	45	0.5	
Salsola australis	45	0.1	
Solanum lasiophyllum	45	0.1	
**Sisymbrium erysimoides*	40	5	Permitted - s11
Acacia galeata	40	0.5	
Melaleuca cardiophylla	40	5	
**Centaurea melitensis*	35	0.1	Permitted - s11
Dianella revoluta var. divaricata	35	0.1	
Ptilotus divaricatus	35	2	
Thryptomene dampieri subsp. dampieri	35	5	
Triodia plurinervata	35	35	
Jasminum calcareum	30	0.5	
Androcalva gaudichaudii	20	0.1	
Aristida contorta	15	0.1	
Erodium sp.	15	0.1	
Euphorbia boophthona	15	0.1	
Rytidosperma caespitosum	15	0.1	
Eragrostis ?falcata	10	0.1	
Euphorbia sharkoensis	10	0.1	
Gnephosis arachnoidea	10	0.1	

FLORA SITE SHEET

Project Name Denham Biological Surveys
Site: DQ5
Location MGA 49 755219 **mE** 7132179 **mN**

Described by: CM
Date: 3-04-2025
Type: Quadrat

Landform: Undulating Sub-Coastal Dune
Slope: Gentle
Rock Type: Orange
Soil Type: Sandy-Clay
Soil Colour: Orange

Vegetation: *Acacia ligulata, Exocarpos aphyllus and Rhagodia preissii subsp. obovata mid-to-low open shrubland over Triodia plurinervata low hummock grassland*

Condition: Good **Disturbance Type:** Animal (Other) tracks/scats,Grazing Light,Litter,Weeds
Fire Age: > 10 years

SPECIES LIST

Taxon	Height (cm)	Cover (%)	Notes
Acacia ligulata	150	10	
Exocarpos aphyllus	150	5	
Scaevola spinescens	150	0.5	
**Lycium ferocissimum*	110	1	WoNS Permitted - s11
Rhagodia preissii subsp. obovata	110	5	
Acacia tetragonophylla	75	2	
Rhagodia latifolia subsp. latifolia	60	0.5	
Melaleuca cardiophylla	50	2	
**Sisymbrium erysimoides*	45	0.5	Permitted - s11
Acacia galeata	45	0.1	
Melaleuca eulobata	45	5	
Ptilotus obovatus var. obovatus	45	0.1	
Thryptomene dampieri subsp. dampieri	45	1.5	
Dianella revoluta var. divaricata	35	0.1	
Ptilotus divaricatus	35	0.1	
Solanum orbiculatum subsp. orbiculatum	35	0.1	
Triodia plurinervata	35	60	
**Centaurea melitensis*	25	0.5	Permitted - s11
Goodenia sp.	25	0.1	
Maireana stipitata	25	0.1	
Solanum lasiophyllum	25	0.1	
Euphorbia boophthona	15	0.1	
Euphorbia sharkoensis	10	0.1	

FLORA SITE SHEET

Project Name Denham Biological Surveys
Site: DQ6
Location MGA 49 755334 **mE** 7132330 **mN**

Described by: CM
Date: 3-04-2025
Type: Quadrat

Landform: Undulating Sub-Coastal Dune
Slope: Gentle
Rock Type: Orange
Soil Type: Sandy-Clay
Soil Colour: Orange

Vegetation: *Acacia ligulata, Exocarpos and Thryptomene dampieri subsp. dampieri mid-to-low shrubland over Triodia plurinervata low open hummock grassland*

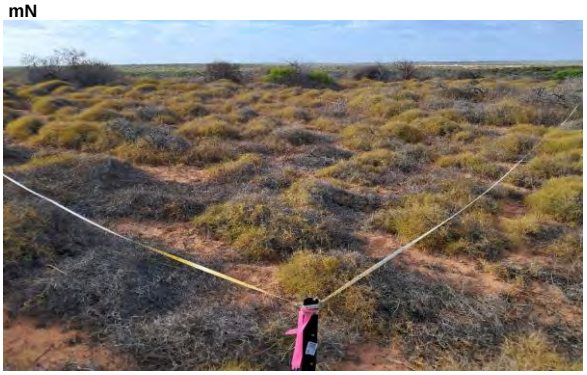
Condition: Good **Disturbance Type:** Weeds, Litter
Fire Age: > 10 years

SPECIES LIST

Taxon	Height (cm)	Cover (%)	Notes
Exocarpos aphyllus	180	5	
Acacia ligulata	175	25	
Scaevola spinescens	100	2.5	
Rhagodia preissii subsp. obovata	75	2.5	
Acacia tetragonophylla	50	1.5	
Rhagodia latifolia subsp. latifolia	50	0.5	
Maireana stipitata	45	0.5	
Melaleuca cardiophylla	45	0.5	
Thryptomene dampieri subsp. dampieri	45	7.5	
**Sisymbrium erysimoides*	35	0.5	Permitted - s11
Dianella revoluta var. divaricata	35	0.5	
Olearia occidenitissima	35	0.1	
Ptilotus divaricatus	35	0.5	
Solanum orbiculatum subsp. orbiculatum	35	0.1	
Triodia plurinervata	35	15	
Acanthocarpus aff. preissii	25	0.1	
Androcalva gaudichaudii	25	0.1	
Jasminum calcareum	25	0.2	
Euphorbia boophthona	10	0.1	
Euphorbia sharkoensis	10	0.1	
Gnephosis arachnoidea	10	0.1	

FLORA SITE SHEET

Project Name Denham Biological Surveys
Site: DQ7
Location MGA 49 755557 **mE** 7132275 **mN**



Described by: CM
Date: 4-04-2025
Type: Quadrat

Landform: Undulating Sub-Coastal Dune
Slope: Moderate
Rock Type: Orange
Soil Type: Sandy-Clay
Soil Colour: Orange

Vegetation: *Acacia ligulata, Exocarpos aphyllus and Rhagodia latifolia subsp. latifolia mid-to-low open shrubland over Triodia plurinervata low hummock grassland*

Condition: Good **Disturbance Type:** Grazing Light,Litter,Weeds
Fire Age: > 10 years

SPECIES LIST

Taxon	Height (cm)	Cover (%)	Notes
Exocarpos aphyllus	125	0.5	
Acacia ligulata	110	10	
Pimelea microcephala subsp. microcephala	100	0.1	
Rhagodia latifolia subsp. latifolia	60	0.5	
Thryptomene dampieri subsp. dampieri	60	0.5	
Atriplex paludosa subsp. moquiniana	50	0.5	
Dianella revoluta var. divaricata	45	0.5	
Maireana stipitata	45	0.5	
**Sonchus oleraceus*	35	0.1	Permitted - s11
Acanthocarpus aff. preissii	35	0.5	
Solanum orbiculatum subsp. orbiculatum	35	0.1	
Triodia plurinervata	35	65	
**Centaurea melitensis*	25	0.1	Permitted - s11
**Urospermum picroides*	25	0.1	Permitted - s11
Acacia galeata	25	0.1	
Salsola australis	25	0.1	
**Sisymbrium erysimoides*	20	0.1	Permitted - s11
Solanum lasiophyllum	20	0.1	
Euphorbia boophthona	15	0.1	
Euphorbia sharkoensis	10	0.1	
Gnephosis arachnoidea	10	0.1	

FLORA SITE SHEET

Project Name Denham Biological Surveys
Site: DQ8
Location MGA 49 755251 **mE** 7131708 **mN**

Described by: CM
Date: 4-04-2025
Type: Quadrat

Landform: Undulating Sub-Coastal Dune
Slope: Gentle
Rock Type: Orange
Soil Type: Sandy-Clay
Soil Colour: Orange

Vegetation: *Acacia ligulata, Rhagodia preissii subsp. obovata and Acacia tetragonophylla mid-to-low open shrubland over Triodia plurinervata low hummock grassland*

Condition: Poor **Disturbance Type:** Grazing Light,Litter,Vehicle tracks,Weeds
Fire Age: > 10 years

SPECIES LIST

Taxon	Height (cm)	Cover (%)	Notes
Acacia ligulata	180	7.5	
Exocarpos aphyllus	110	1	
Rhagodia preissii subsp. obovata	100	5	
Scaevola spinescens	100	0.5	
Acacia tetragonophylla	80	5	
Atriplex paludosa subsp. moquiniana	75	0.5	
Maireana stipitata	50	0.1	
**Avena barbata*	45	0.1	Permitted - s11
**Centaurea melitensis*	45	0.5	Permitted - s11
Ptilotus divaricatus	45	0.5	
Rhagodia latifolia subsp. latifolia	45	0.5	
**Cenchrus ciliaris*	35	1.5	Permitted - s11
Salsola australis	35	0.1	
Triodia plurinervata	35	50	
Acanthocarpus aff. preissii	25	0.1	
Androcalva gaudichaudii	25	0.1	
Eragrostis ?falcata	15	0.1	
Euphorbia boophthona	15	0.1	

FLORA SITE SHEET

Project Name Denham Biological Surveys
Site: DQ9
Location MGA 49 755175 **mE** 7131372 **mN**

Described by: CM
Date: 4-04-2025
Type: Quadrat

Landform: Undulating Sub-Coastal Dune
Slope: Gentle
Rock Type: Orange
Soil Type: Sandy-Clay
Soil Colour: Orange

Vegetation: *Acacia ligulata, Acacia tetragonophylla and Exocarpos aphyllus mid-sparse shrubland over Atriplex paludosa subsp. moquiniana, Rhagodia preissii subsp. obovata and Ptilotus divaricatus low-sparse shrubland*

Condition: Good **Disturbance Type:** Grazing Light,Litter,Vehicle tracks,Weeds
Fire Age: > 10 years

SPECIES LIST

Taxon	Height (cm)	Cover (%)	Notes
Acacia tetragonophylla	125	2.5	
Exocarpos aphyllus	125	2.5	
Acacia ligulata	120	5	
Rhagodia latifolia subsp. latifolia	100	1	
Atriplex paludosa subsp. moquiniana	75	2.5	
Rhagodia preissii subsp. obovata	75	1.5	
**Sisymbrium erysimoides*	50	0.5	Permitted - s11
Aristida sp.	45	0.5	
Dianella revoluta var. divaricata	45	0.1	
Ptilotus obovatus var. obovatus	45	0.5	
Thryptomene dampieri subsp. dampieri	45	0.5	
Jasminum calcareum	35	1	
Maireana stipitata	35	0.5	
Ptilotus divaricatus	35	1	
Solanum lasiophyllum	35	0.5	
**Cenchrus ciliaris*	25	1.5	Permitted - s11
**Centaurea melitensis*	25	0.5	Permitted - s11
Eragrostis ?falcata	20	0.5	
Acanthocarpus aff. preissii	15	0.1	
Androcalva gaudichaudii	15	0.1	
Gnephosis arachnoidea	15	0.1	

FLORA SITE SHEET

Project Name Denham Biological Surveys
Site: DQ10
Location MGA 49 755415 **mE** 7131564 **mN**

Described by: CM
Date: 4-04-2025
Type: Quadrat

Landform: Undulating Sub-Coastal Dune
Slope: Gentle
Rock Type: Orange
Soil Type: Sandy-Clay
Soil Colour: Orange

Vegetation: *Acacia ligulata, Exocarpos aphyllus, and Acacia tetragonophylla mid-open shrubland over Triodia plurinervata low open hummock grassland*

Condition: Good **Disturbance Type:** Grazing Light,Litter,Vehicle tracks,Weeds
Fire Age: > 10 years

SPECIES LIST

Taxon	Height (cm)	Cover (%)	Notes
Acacia ligulata	180	15	
Exocarpos aphyllus	150	5	
Acacia tetragonophylla	110	5	
Atriplex paludosa subsp. moquiniana	110	1.5	
Rhagodia preissii subsp. obovata	75	2.5	
Rhagodia latifolia subsp. latifolia	60	0.5	
Ptilotus divaricatus	50	1.5	
Pimelea microcephala subsp. microcephala	45	0.1	
Thryptomene dampieri subsp. dampieri	45	0.5	
Jasminum calcareum	40	0.5	
**Centaurea melitensis*	35	0.5	Permitted - s11
**Sisymbrium erysimoides*	35	0.1	Permitted - s11
**Urospermum picroides*	35	0.1	Permitted - s11
Acanthocarpus aff. preissii	35	0.1	
Androcalva gaudichaudii	35	0.1	
Maireana stipitata	35	0.1	
Olearia occidenitissima	35	0.1	
Roepera sp.	35	0.1	
Solanum lasiophyllum	35	0.1	
Solanum orbiculatum subsp. orbiculatum	35	0.5	
Triodia plurinervata	35	25	
Salsola australis	25	0.1	
Eragrostis ?falcata	15	0.1	
Euphorbia boophthona	15	0.1	
Euphorbia sharkoensis	10	0.1	
Gnephosis arachnoidea	10	0.1	

FLORA SITE SHEET

Project Name Denham Biological Surveys
Site: DQ11
Location MGA 49 755394 **mE** 7131382 **mN**

Described by: CM
Date: 4-04-2025
Type: Quadrat

Landform: Undulating Sub-Coastal Dune
Slope: Gentle
Rock Type: Orange
Soil Type: Sandy-Clay
Soil Colour: Orange

Vegetation: *Atriplex ligulata mid-sparse shrubland over Acacia tetragonophylla and Atriplex paludosa subsp. moquiniana low-sparse shrubland*

Condition: Poor **Disturbance Type:** Grazing Light,Infrastructure,Litter,Vehicle tracks,Weeds
Fire Age: > 10 years

SPECIES LIST

Taxon	Height (cm)	Cover (%)	Notes
Acacia ligulata	150	7.5	
Acacia tetragonophylla	75	2.5	
Atriplex paludosa subsp. moquiniana	75	5	
Exocarpos aphyllus	75	0.5	
Rhagodia latifolia subsp. latifolia	75	1	
**Sisymbrium erysimoides*	50	1	Permitted - s11
Rhagodia preissii subsp. obovata	50	0.5	
Ptilotus divaricatus	45	0.5	
Thryptomene dampieri subsp. dampieri	45	7.5	
**Centaurea melitensis*	35	0.5	Permitted - s11
Jasminum calcareum	35	0.2	
Maireana stipitata	35	0.5	
Ptilotus obovatus var. obovatus	35	0.5	
Salsola australis	35	0.1	
Solanum lasiophyllum	35	0.5	
Solanum orbiculatum subsp. orbiculatum	35	0.5	
**Cenchrus ciliaris*	25	1	Permitted - s11
Acanthocarpus aff. preissii	25	0.1	
Eragrostis ?falcata	15	0.5	
**Pentameris airoides*	10	0.1	Permitted - s11

FLORA SITE SHEET

Project Name Denham Biological Surveys
Site: DQ12
Location MGA 49 755451 **mE** 7131169 **mN**

Described by: CM
Date: 5-04-2025
Type: Quadrat

Landform: Undulating Sub-Coastal Dune
Slope: Moderate
Rock Type: Orange
Soil Type: Sandy-Clay
Soil Colour: Orange

Vegetation: *Acacia ligulata,Acacia tetragonophylla and Exocarpos aphyllus mid-open shrubland over Thryptomene dampieri subsp. dampieri low-sparse shrubland*

Condition: Good **Disturbance Type:** Infrastructure,Litter,Vehicle tracks,Weeds
Fire Age: > 10 years

SPECIES LIST

Taxon	Height (cm)	Cover (%)	Notes
Acacia ligulata	150	11	
Alectryon oleifolius subsp. oleifolius	150	1.5	
Exocarpos aphyllus	150	2.5	
Acacia tetragonophylla	110	2.5	
Rhagodia latifolia subsp. latifolia	75	1.5	
Solanum lasiophyllum	75	5	
Rhagodia preissii subsp. obovata	65	2.5	
**Sisymbrium erysimoides*	45	0.5	Permitted - s11
Dianella revoluta var. divaricata	45	0.5	
Maireana stipitata	45	0.5	
Olearia occidenitissima	45	0.1	
Ptilotus divaricatus	45	0.5	
Thryptomene dampieri subsp. dampieri	45	5	
**Cenchrus ciliaris*	35	0.5	Permitted - s11
**Centaurea melitensis*	35	2	Permitted - s11
Jasminum calcareum	35	0.6	
Ptilotus obovatus var. obovatus	35	0.1	
Salsola australis	30	0.5	
Androcalva gaudichaudii	25	0.1	
Acanthocarpus aff. preissii	15	0.1	
Austrostipa sp.	15	0.1	
Eragrostis ?falcata	15	0.1	
Euphorbia sharkoensis	15	0.1	
Solanum orbiculatum subsp. orbiculatum	15	0.1	

FLORA SITE SHEET

Project Name Denham Biological Surveys
Site: DQ13
Location MGA 49 755299 **mE** 7130907 **mN**

Described by: CM
Date: 5-04-2025
Type: Quadrat

Landform: Undulating Sub-Coastal Dune
Slope: Moderate
Rock Type: Orange
Soil Type: Sandy-Clay
Soil Colour: Orange

Vegetation: *Acacia ligulata, Exocarpos aphyllus and Scaevola spinescens mid-open shrubland over Acacia tetragonophylla, Atriplex paludosa subsp. moquiniana and Rhagodia preissii subsp. preissii low-sparse shrubland*

Condition: Good **Disturbance Type:** Litter,Weeds
Fire Age: > 10 years

SPECIES LIST

Taxon	Height (cm)	Cover (%)	Notes
Scaevola spinescens	175	1.5	
Acacia ligulata	160	15	
Exocarpos aphyllus	160	5	
Rhagodia latifolia subsp. latifolia	125	1	
Santalum spicatum	80	0.5	
Acacia tetragonophylla	75	1.5	
Atriplex paludosa subsp. moquiniana	70	5	
Rhagodia preissii subsp. obovata	70	1.5	
**Sisymbrium erysimoides*	45	0.5	Permitted - s11
Maireana stipitata	45	0.5	
Ptilotus divaricatus	45	0.5	
Ptilotus obovatus var. obovatus	45	0.5	
**Centaurea melitensis*	35	0.5	Permitted - s11
Acanthocarpus aff. preissii	35	0.1	
Jasminum calcareum	35	0.1	
Solanum orbiculatum subsp. orbiculatum	35	0.1	
Thryptomene dampieri subsp. dampieri	35	1.5	
**Cenchrus ciliaris*	25	0.1	Permitted - s11
Olearia occidenitissima	25	0.1	
Salsola australis	25	0.1	
Austrostipa sp.	20	0.1	
**Urospermum picroides*	15	0.1	Permitted - s11
Euphorbia sharkoensis	15	0.1	
Lepidium sp.	15	0.1	
Eragrostis ?falcata	10	0.1	

FLORA SITE SHEET

Project Name Denham Biological Surveys
Site: DQ14
Location MGA 49 755378 **mE** 7130768 **mN**

Described by: CM
Date: 5-04-2025
Type: Quadrat

Landform: Undulating Sub-Coastal Dune
Slope: Moderate
Rock Type: Orange
Soil Type: Sandy-Clay
Soil Colour: Orange

Vegetation: *Acacia ligulata, Exocarpos aphyllus and Scaevola spinescens mid-open shrubland over Atriplex paludosa subsp. moquiniana low-sparse shrubland*

Condition: Good **Disturbance Type:** Litter,Weeds
Fire Age: > 10 years

SPECIES LIST

Taxon	Height (cm)	Cover (%)	Notes
Acacia ligulata	175	15	
Exocarpos aphyllus	150	5	
Scaevola spinescens	150	1	
Diplolaena grandiflora	100	0.5	
Rhagodia latifolia subsp. latifolia	75	1.5	
Atriplex paludosa subsp. moquiniana	65	7.5	
Acacia tetragonophylla	60	2.5	
Ptilotus divaricatus	60	1	
Jasminum calcareum	45	1	
Rhagodia preissii subsp. obovata	45	0.5	
Thryptomene dampieri subsp. dampieri	45	0.5	
**Sisymbrium erysimoides*	35	0.5	Permitted - s11
Solanum lasiophyllum	35	0.1	
Acanthocarpus aff. preissii	25	0.1	
Androcalva gaudichaudii	25	0.1	
Maireana stipitata	25	1	
Olearia occidenitissima	25	0.1	
Ptilotus obovatus var. obovatus	25	0.1	
Solanum orbiculatum subsp. orbiculatum	25	0.1	
**Urospermum picroides*	20	0.1	Permitted - s11
Salsola australis	20	0.1	
Abutilon oxycarpum	15	0.1	
Euphorbia boophthona	15	0.1	
Euphorbia sharkoensis	10	0.1	

Appendix I Fauna Species Identified in Database Searches

Denham Biological Surveys

Flora, Vegetation and Fauna

Horizon Power

SLR Project No.: 675.073044.00002

18 July 2025

Conservation Status: State - Listed under Biodiversity Conservation Act 2016 or Department of Biodiversity, Conservation and Attractions Conservation, Commonwealth - Listed under Environmental Protection and Biodiversity Conservation Act 1999. CR/CE - Critically Endangered, EN - Endangered, VU - Vulnerable, MI - Migratory, CD - Conservation Dependent fauna, OS - Other Specially Protected fauna, MA - Marine, P - Listed as Priority by DBCA.

Database: NM - NatureMap, PMST - EPBC Protected Matters Search Tool, DBCA - DBCA Threatened and Priority Fauna database search, Field - Recorded during the current field survey.

Literature: A - Synergy Site (North), Denham: Flora and Fauna Report (360 Environmental Pty Ltd, 2019)

Literature: B - Shire of Shark Bay Site, Denham: Flora and Fauna Report (360 Environmental Pty Ltd, 2019)

Literature: C - Water Corporation Site, Denham: Flora and Fauna Report (360 Environmental Pty Ltd, 2019)

Literature: D - Shark Bay Biological Survey: Flora, Vegetation and Fauna Assessment (360 Environmental Pty Ltd, 2018)

Literature: E - Vertebrate Fauna Survey Coburn Mineral Sand Project (Ninox Wildlife Consulting, 2005)

Family	Scientific Name	Common Name	Conservation Status		Database			Field	Literature				
			State	Commonwealth	NM	PMST	DBCA		A	B	C	D	E
Amphibians													
Limnodynastidae	*Neobatrachus fulvus*	Tawny Trilling Frog	-	-	4								
Myobatrachidae	*Arenophryne rotunda*	Sandhill Frog	-	-	91								
Pelodryadidae	*Litoria rubella*	Little Red Tree Frog	-	-	8								
Birds													
Acanthizidae	*Acanthiza apicalis*	Inland Thornbill, Broad-tailed Thornbill	-	-	30								x
Acanthizidae	*Acanthiza iredalei*	Samphire Thornbill, Slender-billed Thornbill	-	-	5								
Acanthizidae	*Acanthiza iredalei iredalei*		-	-	4								
Acanthizidae	*Acanthiza robustirostris*	Slaty-backed Thornbill	-	-	4								
Acanthizidae	*Acanthiza uropygialis*	Chestnut-rumped Thornbill	-	-	31								x
Acanthizidae	*Aphelocephala leucopsis*	Southern Whiteface	-	VU	18	1							
Acanthizidae	*Calamanthus campestris*	Rufous Fieldwren	-	-	79								
Acanthizidae	*Calamanthus campestris hartogi*	Dirk Hartog Island Rufous Fieldwren	VU	-	42		49						
Acanthizidae	*Gerygone fusca*	Western Gerygone	-	-	3							x	x
Acanthizidae	*Gerygone tenebrosa*	Dusky Gerygone	-	-	6								
Acanthizidae	*Pyrrholaemus brunneus*	Redthroat	-	-	89								x
Acanthizidae	*Sericornis frontalis*	White-browed Scrubwren	-	-	134			x	x	x	x	x	x
Acanthizidae	*Sericornis maculatus*	Spotted Scrubwren	-	-	2								
Acanthizidae	*Smicrornis brevirostris*	Weebill	-	-	4								x

Accipitridae	*Accipiter cirrocephalus*	Collared Sparrowhawk	-	-	14								
Accipitridae	*Accipiter fasciatus*	Brown Goshawk	-	MA	27								
Accipitridae	*Aquila audax*	Wedge-tailed Eagle	-	-	72				x	x	x	x	
Accipitridae	*Circus approximans*	Swamp Harrier	-	MA	3								
Accipitridae	*Circus assimilis*	Spotted Harrier	-	-	13								
Accipitridae	*Elanus axillaris*	Black-shouldered Kite	-	-	3								
Accipitridae	*Elanus scriptus*	Letter-winged Kite	P4	-			1						
Accipitridae	*Haliaeetus leucogaster*	White-bellied Sea-eagle	-	MA	50	1			x	x	x		
Accipitridae	*Haliastur sphenurus*	Whistling Kite	-	MA	18								
Accipitridae	*Hieraaetus morphnoides*	Little Eagle	-	-	10								x
Accipitridae	*Milvus migrans*	Black Kite	-	-	4								
Acrocephalidae	*Acrocephalus australis*	Australian Reed Warbler	-	MA	6								
Aegothelidae	*Aegotheles cristatus*	Australian Owlet-nightjar	-	-									x
Alaudidae	*Mirafra javanica*	Horsfield's Bush Lark	-	-	4								
Alcedinidae	*Dacelo leachii*	Blue-winged Kookaburra	-	-	3								
Alcedinidae	*Todiramphus pyrrhopygius*	Red-backed Kingfisher	-	-	2								
Alcedinidae	*Todiramphus sanctus*	Sacred Kingfisher	-	MA	7								
Anatidae	*Anas gracilis*	Grey Teal	-	-	16				x	x	x		
Anatidae	*Anas superciliosa*	Pacific Black Duck	-	-	6								
Anatidae	*Cygnus atratus*	Black Swan	-	-	6								
Anatidae	*Malacorhynchus membranaceus*	Pink-eared Duck	-	-	2								
Anatidae	*Spatula rhynchotis*	Australasian Shoveler	-	-	1								
Anatidae	*Tadorna tadornoides*	Australian Shelduck, Mountain Duck	-	-	37				x	x	x		
Anhingidae	*Anhinga novaehollandiae*	Australasian Darter	-	-	4								
Apodidae	*Apus pacificus*	Pacific Swift, Fork-tailed Swift	MI	MI, MA	1	1	2						
Ardeidae	*Ardea alba modesta*	Eastern Grey Egret	-	MA	25								
Ardeidae	*Ardea pacifica*	White-necked Heron	-	-	4								
Ardeidae	*Bubulcus coromandus*	Eastern Cattle Egret	-	-		1							
Ardeidae	*Butorides striata*	Striated Heron Mangrove Heron	-	-	21								
Ardeidae	*Egretta garzetta*	Little Egret	-	MA	3								
Ardeidae	*Egretta novaehollandiae*	White-faced Heron	-	-	24								
Ardeidae	*Egretta sacra*	Eastern Reef Heron, Pacific Reef Heron	-	MA	52								
Ardeidae	*Nycticorax caledonicus*	Nankeen Night Heron, Rufous Night Heron	-	MA	7								

Artamidae	*Artamus cinereus*	Black-faced Woodswallow	-	-	40							x	
Artamidae	*Artamus leucorynchus*	White-breasted Woodswallow	-	-	31								
Artamidae	*Artamus minor*	Little Woodswallow	-	-	2								
Artamidae	*Artamus personatus*	Masked Woodswallow	-	-	21								
Artamidae	*Cracticus nigrogularis*	Pied Butcherbird	-	-	18								
Artamidae	*Cracticus torquatus*	Grey Butcherbird	-	-	35							x	
Artamidae	*Gymnorhina tibicen*	Australian Magpie	-	-	4								
Burhinidae	*Burhinus grallarius*	Bush Stone-curlew, Bush Thick-knee	-	-	1								
Cacatuidae	*Cacatua sanguinea*	Little Corella	-	-	7								
Cacatuidae	*Calyptorhynchus banksii naso*	Forest Red-tailed Black Cockatoo	VU	VU	1								
Cacatuidae	*Eolophus roseicapilla*	Galah	-	-	34				x	x	x		x
Cacatuidae	*Nymphicus hollandicus*	Cockatiel	-	-	8								
Campephagidae	*Coracina novaehollandiae*	Black-faced Cuckooshrike	-	MA	25				x	x	x		
Campephagidae	*Lalage tricolor*	White-winged Triller	-	-								x	
Caprimulgidae	*Eurostopodus argus*	Spotted Nightjar	-	MA	4								
Casuariidae	*Dromaius novaehollandiae*	Emu	-	-	68			x	x	x	x	x	x
Charadriidae	*Anarhynchus leschenaultii*	Greater Sand Plover	VU	VU, MI, MA	70	1	52						
Charadriidae	*Anarhynchus mongolus*	Siberian Sand Plover	-	EN, MI, MA	34		40						
Charadriidae	*Anarhynchus ruficapillus*	Red-capped Plover	-	MA	144	1							
Charadriidae	*Anarhynchus veredus*	Oriental Plover	MI	MI, MA	1	1	3						
Charadriidae	*Charadrius cucullatus*	Hooded Dotterel	P4	MA			1						
Charadriidae	*Charadrius melanops*	Black-fronted Dotterel	-	-	7								
Charadriidae	*Erythrogonys cinctus*	Red-kneed Dotterel	-	-	3								
Charadriidae	*Pluvialis fulva*	Pacific Golden Plover	MI	MI, MA	2		1						
Charadriidae	*Pluvialis squatarola*	Grey Plover	MI	VU, MI, MA	59	1	50						
Charadriidae	*Vanellus tricolor*	Banded Lapwing	-	-	15								
Columbidae	*Geopelia cuneata*	Diamond Dove	-	-	31							x	
Columbidae	*Geopelia striata*	Zebra Dove	-	-	5								
Columbidae	*Ocyphaps lophotes*	Crested Pigeon	-	-	160							x	
Columbidae	*Phaps chalcoptera*	Common Bronzewing	-	-	33			x					x
Columbidae	*Spilopelia senegalensis*	Laughing Turtle Dove	-	-	86			x	x	x	x		
Corvidae	*Corvus bennetti*	Little Crow	-	-	332			x	x	x	x	x	
Corvidae	*Corvus coronoides*	Australian Raven	-	-	25								
Corvidae	*Corvus orru*	Torresian Crow	-	-	48				x	x	x	x	

Cuculidae	*Cacomantis flabelliformis*	Fan-tailed Cuckoo	-	MA	1								
Cuculidae	*Chalcites basalis*	Horsfield's Bronze Cuckoo	-	MA	1								x
Cuculidae	*Chalcites osculans*	Black-eared Cuckoo	-	MA		1							x
Cuculidae	*Heteroscenes pallidus*	Pallid Cuckoo	-	MA	11								
Dicaeidae	*Dicaeum hirundinaceum*	Mistletoebird	-	-	15								
Diomedeidae	*Diomedea amsterdamensis*	Amsterdam Albatross	CR	EN, MI, MA		1							
Diomedeidae	*Diomedea exulans*	Wandering Albatross	VU	VU, MI, MA		1							
Diomedeidae	*Thalassarche carteri*	Indian Yellow-nosed Albatross	EN	VU, MI, MA		1							
Diomedeidae	*Thalassarche cauta*	Shy Albatross	VU	EN, MI, MA	1	1	2						
Diomedeidae	*Thalassarche cauta steadi*	White-capped Albatross	VU	VU, MI, MA		1							
Diomedeidae	*Thalassarche chlororhynchos*	Atlantic Yellow-nosed Albatross	VU	MI, MA	1		2						
Diomedeidae	*Thalassarche chrysostoma*	Grey-headed Albatross	VU	EN, MI, MA	1		1						
Diomedeidae	*Thalassarche impavida*	Campbell Island Albatross	VU	VU, MI, MA		1							
Diomedeidae	*Thalassarche melanophris*	Black-browed Albatross	EN	VU, MI, MA		1							
Estrildidae	*Taeniopygia castanotis*	Australian Zebra Finch	-	-	194			x	x	x	x	x	
Falconidae	*Falco berigora*	Brown Falcon	-	0	21				x	x	x	x	x
Falconidae	*Falco berigora berigora*	Brown Falcon	-	-	1								
Falconidae	*Falco cenchroides*	Nankeen Kestral	-	MA	147			x	x	x	x	x	x
Falconidae	*Falco cenchroides cenchroides*	Nankeen Kestral	-	MA	2								
Falconidae	*Falco hypoleucos*	Grey Falcon	VU	VU		1							
Falconidae	*Falco longipennis*	Australian Hobby	-	-	8								
Falconidae	*Falco peregrinus*	Peregrine Falcon	OS	-	2		2						
Fregatidae	*Fregata ariel*	Lesser Frigatebird	MI	MI, MA	1	1	1						
Glareolidae	*Glareola maldivarum*	Oriental Pratincole	MI	MI, MA			1						
Haematopodidae	*Haematopus fuliginosus*	Sooty Oystercatcher	-	-	15								
Haematopodidae	*Haematopus longirostris*	Pied Oystercatcher	-	-	172								
Hirundinidae	*Cheramoeca leucosterna*	White-backed Swallow	-	-	50								
Hirundinidae	*Hirundo neoxena*	Welcome Swallow	-	MA	307			x	x	x	x	x	
Hirundinidae	*Petrochelidon ariel*	Fairy Martin	-	-	11							x	
Hirundinidae	*Petrochelidon nigricans*	Tree Martin	-	MA	130				x	x	x	x	
Laridae	*Anous stolidus*	Common Noddy, Brown Noddy	MI	MI, MA		1	1						
Laridae	*Anous tenuirostris melanops*	Australian Lesser Noddy	EN	VU, MA		1							
Laridae	*Chlidonias leucopterus*	White-winged Black Tern	MI	MI, MA	2		1						

Laridae	*Chroicocephalus novaehollandiae*	Silver Gull	-	-	157	1			x	x	x		
Laridae	*Gelochelidon macrotarsa*	Australian Gull-billed Tern	-	-	2								
Laridae	*Gelochelidon nilotica*	Gull-billed Tern	MI	MI, MA	10		6						
Laridae	*Hydroprogne caspia*	Caspian Tern	MI	MI, MA	154	1	137						
Laridae	*Larus pacificus*	Pacific Gull	-	MA	134	1							
Laridae	*Onychoprion anaethetus*	Bridled Tern	MI	MI, MA	8	1	12						
Laridae	*Onychoprion fuscatus*	Sooty Tern	-	MA		1							
Laridae	*Sterna dougallii*	Roseate Tern	MI	MI, MA	16	1	26						
Laridae	*Sterna hirundo*	Common Tern	MI	MI, MA	20		10					x	
Laridae	*Sternula albifrons*	Little Tern	MI	MI, MA	3	1	1						
Laridae	*Sternula nereis*	Fairy Tern	-	MA	71	1							
Laridae	*Sternula nereis nereis*	Australian Fairy Tern	VU	VU		1	4						
Laridae	*Thalasseus bengalensis*	Lesser Crested Tern	-	MA	19	1							
Laridae	*Thalasseus bergii*	Greater Crested Tern, Crested Tern	MI	MI, MA	124	1	139						
Locustellidae	*Cincloramphus cruralis*	Brown Songlark	-	-	29							x	
Locustellidae	*Cincloramphus mathewsi*	Rufous Songlark	-	-	50								
Locustellidae	*Poodytes gramineus*	Little Grassbird	-	-	8								
Maluridae	*Amytornis textilis*	Thick-billed Grasswren	-	-	108								
Maluridae	*Amytornis textilis textilis*	Western Grasswren	P4	-	37		138						
Maluridae	*Malurus assimilis*	Purple-backed Fairywren	-	-	189				x	x	x	x	x
Maluridae	*Malurus leucopterus*	White-winged Fairywren	-	-	226			x	x	x	x	x	
Maluridae	*Malurus leucopterus leucopterus*	Dirk Hartog Island Black And White Fairywren	VU	VU	31	1	33						
Maluridae	*Malurus pulcherrimus*	Blue-breasted Fairywren	-	-	3								x
Maluridae	*Malurus splendens*	Splendid Fairywren	-	-	34								x
Maluridae	*Stipiturus malachurus*	Southern Emu-wren	-	-	9								
Maluridae	*Stipiturus malachurus hartogi*	Dirk Hartog Island Emu-wren	VU	-	4		6						
Megapodiidae	*Leipoa ocellata*	Malleefowl	VU	VU	32	1	38						x
Meliphagidae	*Acanthagenys rufogularis*	Spiny-cheeked Honeyeater	-	-	76								x
Meliphagidae	*Certhionyx variegatus*	Pied Honeyeater	-	-	76								
Meliphagidae	*Epthianura albifrons*	White-fronted Chat	-	-	28								
Meliphagidae	*Epthianura aurifrons*	Orange Chat	-	-	11								
Meliphagidae	*Epthianura tricolor*	Crimson Chat	-	-	48								x

Meliphagidae	*Gavicalis virescens*	Singing Honeyeater	-	-	488			x	x	x	x	x	x
Meliphagidae	*Lichmera indistincta*	Brown Honeyeater	-	-	7								x
Meliphagidae	*Manorina flavigula*	Yellow-throated Miner	-	-	7								x
Meliphagidae	*Melithreptus brevirostris*	Brown-headed Honeyeater	-	-									x
Meliphagidae	*Ptilotula penicillata*	White-plumed Honeyeater	-	-	14								
Meliphagidae	*Ptilotula plumula*	Grey-fronted Honeyeater	-	-	3								x
Meliphagidae	*Purnella albifrons*	White-fronted Honeyeater	-	-	16								x
Meliphagidae	*Sugomel nigrum*	Black Honeyeater	-	-	11								
Meropidae	*Merops ornatus*	Rainbow Bee-eater	-	MA	3	1							x
Monarchidae	*Grallina cyanoleuca*	Magpie-lark	-	MA	21								
Monarchidae	*Myiagra ruficollis mimikae*	Broad-billed Flycatcher	-	-	1								
Motacillidae	*Anthus australis*	Australian Pipit	-	MA	37			x				x	
Motacillidae	*Motacilla cinerea*	Grey Wagtail	MI	MI, MA		1							
Oceanitidae	*Oceanites oceanicus*	Wilson's Storm Petrel	MI	MI, MA	1		4						
Oreoicidae	*Oreoica gutturalis*	Crested Bellbird	-	-	152								x
Otididae	*Ardeotis australis*	Australian Bustard	-	-	19							x	
Pachycephalidae	*Colluricincla harmonica*	Grey Shrikethrush	-	-	42							x	x
Pachycephalidae	*Colluricincla harmonica rufiventris*	Grey Shrikethrush	-	-	1								
Pachycephalidae	*Pachycephala pectoralis*	Golden Whistler	-	(not WAM)									x
Pachycephalidae	*Pachycephala rufiventris*	Rufous Whistler	-	-	38								x
Pandionidae	*Pandion haliaetus*	Osprey	MI	MI, MA		1	44						
Pandionidae	*Pandion haliaetus cristatus*	Eastern Osprey	-	-	49								
Pardalotidae	*Pardalotus striatus*	Striated Pardalote	-	-	3								x
Pelecanidae	*Pelecanus conspicillatus*	Australian Pelican	-	MA	119				x	x	x		
Petroicidae	*Drymodes brunneopygia*	Southern Scrub Robin	-	-	84							x	x
Petroicidae	*Melanodryas cucullata*	Hooded Robin	-	-	38								
Petroicidae	*Microeca fascinans*	Jacky Winter	-	-				x					x
Petroicidae	*Petroica goodenovii*	Red-capped Robin	-	-	45								x
Phaethontidae	*Phaethon lepturus*	White-tailed Tropicbird	MI	MI, MA		1							
Phaethontidae	*Phaethon rubricauda*	Red-tailed Tropicbird	MI, P4	MI, MA		1							
Phalacrocoracidae	*Microcarbo melanoleucos*	Little Pied Cormorant	-	-	26								
Phalacrocoracidae	*Phalacrocorax carbo*	Great Cormorant	-	-	7								
Phalacrocoracidae	*Phalacrocorax sulcirostris*	Little Black Cormorant	-	-	17								
Phalacrocoracidae	*Phalacrocorax varius*	Pied Cormorant, Australian Pied Cormorant	-	-	226								

Phasianidae	*Coturnix pectoralis*	Stubble Quail	-	MA	5								
Phasianidae	*Synoicus ypsilophorus*	Brown Quail	-	-	5								
Podargidae	*Podargus strigoides*	Tawny Frogmouth	-	-	1								
Podicipedidae	*Podiceps cristatus*	Great Crested Grebe	-	-	1								
Podicipedidae	*Poliocephalus poliocephalus*	Hoary-headed Grebe	-	-	2								
Podicipedidae	*Tachybaptus novaehollandiae*	Australasian Grebe, Black-throated Grebe	-	-	5								
Pomatostomidae	*Pomatostomus superciliosus*	White-browed Babbler	-	-	168				x	x	x	x	x
Pomatostomidae	*Pomatostomus temporalis*	Grey-crowned Babbler	-	-	2								
Procellariidae	*Ardenna carneipes*	Flesh-footed Shearwater	VU	MI, MA	1	1	3						
Procellariidae	*Ardenna pacifica*	Wedge-tailed Shearwater	MI	MI, MA	7	1	23						
Procellariidae	*Macronectes giganteus*	Southern Giant Petrel	MI	EN, MI, MA	2	1	2						
Procellariidae	*Macronectes halli*	Northern Giant Petrel	MI	VU, MI, MA		1							
Procellariidae	*Pterodroma mollis*	Soft-plumaged Petrel	-	VU, MA		1							
Procellariidae	*Puffinus huttoni*	Hutton's Shearwater	EN	MA	3		4						
Psittaculidae	*Barnardius zonarius*	Australian Ringneck	-	-	4								x
Psittaculidae	*Melopsittacus undulatus*	Budgerigar	-	-	23								
Psittaculidae	*Neophema petrophila*	Rock Parrot	-	MA	12								
Psittaculidae	*Psephotellus varius*	Mulga Parrot	-	-									x
Psophodidae	*Psophodes occidentalis*	Western Wedgebill, Chiming Wedgebill	-	-	268			x	x	x	x	x	x
Rallidae	*Fulica atra*	Eurasian Coot	-	-	4								
Rallidae	*Hypotaenidia philippensis*	Buff-banded Rail	-	MA	8								
Rallidae	*Porzana fluminea*	Australian Spotted Crake, Australian Crake	-	-	2								
Rallidae	*Tribonyx ventralis*	Black-tailed Native-hen	-	-	7								
Rallidae	*Zapornia pusilla*	Baillon's Crake	-	MA	2								
Rallidae	*Zapornia tabuensis*	Spotless Crake	-	MA	2								
Recurvirostridae	*Cladorhynchus leucocephalus*	Banded Stilt	-	-	3								
Recurvirostridae	*Himantopus himantopus*	Black-winged Stilt	-	MA	13	1			x	x	x		
Recurvirostridae	*Recurvirostra novaehollandiae*	Red-necked Avocet	-	MA	4	1							
Rhipiduridae	*Rhipidura albiscapa*	Grey Fantail	-	-	24								
Rhipiduridae	*Rhipidura leucophrys*	Willie Wagtail	-	-	186			x					
Rhipiduridae	*Rhipidura phasiana*	Mangrove Grey Fantail, Mangrove Fantail	-	-	20								

Rostratulidae	*Rostratula australis*	Australian Painted Snipe	EN	EN, MA		1							
Scolopacidae	*Actitis hypoleucos*	Common Sandpiper	MI	MI, MA	41	1	33						
Scolopacidae	*Arenaria interpres*	Ruddy Turnstone	MI	VU, MI, MA	49	1	74						
Scolopacidae	*Calidris acuminata*	Sharp-tailed Sandpiper	MI	VU, MI, MA	6	1	7						
Scolopacidae	*Calidris alba*	Sanderling	MI	MI, MA	21	1	20						
Scolopacidae	*Calidris canutus*	Red Knot	EN	VU, MI, MA	26	1	16						
Scolopacidae	*Calidris falcinellus*	Broad-billed Sandpiper	MI	MI, MA	1								
Scolopacidae	*Calidris ferruginea*	Curlew Sandpiper	CR	CE, MI, MA	26	1	37						
Scolopacidae	*Calidris melanotos*	Pectoral Sandpiper	MI	MI, MA	2	1							
Scolopacidae	*Calidris minuta*	Little Stint	-	MA	1								
Scolopacidae	*Calidris ruficollis*	Red-necked Stint	MI	MI, MA	88	1	76						
Scolopacidae	*Calidris tenuirostris*	Great Knot	CR	VU, MI, MA	46	1	34						
Scolopacidae	*Gallinago megala*	Swinhoe's Snipe	MI	MI, MA		1							
Scolopacidae	*Gallinago stenura*	Pin-tailed Snipe	MI	MI, MA		1							
Scolopacidae	*Limosa lapponica*	Bar-tailed Godwit	MI	MI, MA	103	1	116						
Scolopacidae	*Limosa lapponica menzbieri*	Bar-tailed Godwit	CR	EN		1							
Scolopacidae	*Limosa limosa*	Black-tailed Godwit	MI	EN, MI, MA	13	1	10						
Scolopacidae	*Numenius madagascariensis*	Far Eastern Curlew, Eastern Curlew	CR	CE, MI, MA	29	1	27						
Scolopacidae	*Numenius minutus*	Little Curlew	MI	MI, MA		1							
Scolopacidae	*Numenius phaeopus*	Whimbrel	MI	MI, MA	28	1	23						
Scolopacidae	*Tringa brevipes*	Grey-tailed Tattler	MI, P4	MI, MA	57	1	30						
Scolopacidae	*Tringa glareola*	Wood Sandpiper	MI	MI, MA	4	1	4						
Scolopacidae	*Tringa nebularia*	Common Greenshank	MI	EN, MI, MA	90	1	94						
Scolopacidae	*Tringa stagnatilis*	Marsh Sandpiper	MI	MI, MA	5		7						
Scolopacidae	*Xenus cinereus*	Terek Sandpiper	MI	VU, MI, MA	10	1	3						
Stercorariidae	*Stercorarius antarcticus lonnbergi*	Brown Skua	P4	-		1	1						
Strigidae	*Ninox boobook boobook*	Southern Boobook	-	MA	1								
Sulidae	*Morus serrator*	Australasian Gannet	-	MA	3								
Threskiornithidae	*Platalea flavipes*	Yellow-billed Spoonbill	-	-	1								
Threskiornithidae	*Plegadis falcinellus*	Glossy Ibis	MI	MI, MA			1						
Threskiornithidae	*Threskiornis spinicollis*	Straw-necked Ibis	-	MA	3								
Turnicidae	*Turnix velox*	Little Buttonquail	-	-	21								
Zosteropidae	*Zosterops lateralis*	Grey-breasted White-eye, Silvereye	-	MA	81								
Zosteropidae	*Zosterops luteus*	Yellow White-eye, Canary White-eye	-	-	35								

Mammals													
Balaenidae	*Eubalaena australis*	Southern Right Whale	VU	EN, MI, Cetacean	2	1	2						
Balaenopteridae	*Balaenoptera acutorostrata*	Dwarf Minke Whale	-	Cetacean	1								
Balaenopteridae	*Balaenoptera borealis schlegelii*	Sei Whale	EN	VU, MI, Cetacean		1							
Balaenopteridae	*Balaenoptera edeni*	Bryde's Whale	MI	MI, Cetacean		1							
Balaenopteridae	*Balaenoptera musculus*	Blue Whale	-	-		1							
Balaenopteridae	*Balaenoptera physalus quoyi*	Fin Whale	EN	VU, MI, Cetacean		1							
Balaenopteridae	*Megaptera novaeangliae australis*	Humpback Whale	MI, CD	MI, Cetacean	82	1	77						
Bovidae	*Bos primigenius taurus*	European Cattle	-	-	1							x	
Bovidae	*Capra aegagrus hircus*	Goat	-	-	2			x	x	x	x	x	x
Bovidae	*Ovis aries*	Sheep	-	-	3							x	
Camelidae	*Camelus dromedarius*	Dromedary Camel	-	-	1								x
Canidae	*Canis familiaris*	Dingo / Dog	-	-				x	x	x	x		
Canidae	*Vulpes vulpes*	Red Fox	-	-	1				x	x	x	x	x
Dasyuridae	*Dasycercus blythi*	Brush-tailed Mulgara, Ampurta	P4	-			3						
Dasyuridae	*Dasyurus geoffroii fortis*	Western Quoll, Chuditch	VU	VU	3	1	3						
Dasyuridae	*Parantechinus apicalis*	Dibbler	EN	EN	1		23						
Dasyuridae	*Phascogale calura*	Red-tailed Phascogale	CD	VU	4		4						
Dasyuridae	*Sminthopsis dolichura*	Little Long-tailed Dunnart	-	-	19								x
Dasyuridae	*Sminthopsis hirtipes*	Hairy-footed Dunnart	-	-	1								x
Deliphinidae	*Globicephala melas edwardii*	Long-finned Pilot Whale	-	Cetacean	1								
Deliphinidae	*Orcinus orca*	Killer Whale	MI	MI, Cetacean		1							
Deliphinidae	*Sousa sahulensis*	Indo-pacific Humpback Dolphin	MI, P4	MI, Cetacean			1						
Deliphinidae	*Tursiops aduncus*	Indo-pacific Bottlenose Dolphin	MI	MI (Arafura/Timor Sea pops.), Cetacean	4744		2						
Deliphinidae	*Tursiops truncatus truncatus*	Bottlenose Dolphin	-	Cetacean	5								
Delphinidae	*Delphinus delphis*	Common Dolphin	-	Cetacean (not WAM)	1								
Dugonidae	*Dugong dugon*	Dugong	MI	MI, MA	207	1	1281						
Equidae	*Equus ferus caballus*	Horse	-	-	2			x	x	x	x		
Felidae	*Felis catus*	Cat	-	-	6			x	x	x	x	x	x
Leporidae	*Oryctolagus cuniculus*	Rabbit	-	-	3			x	x	x	x	x	x

Macropodidae	*Lagorchestes hirsutus bernieri*	Bay Is. Rufous Hare-wallaby	VU	VU		1	794							
Macropodidae	*Lagostrophus fasciatus fasciatus*	Banded Hare-wallaby	VU	VU	19	1	207							
Macropodidae	*Macropus fuliginosus melanops*	Western Grey Kangaroo	-	-								x		
Macropodidae	*Osphranter robustus*	Common Wallaroo	-	-								x		
Macropodidae	*Osphranter robustus erubescens*	Euro, Biggada	-	-	5				x	x	x			
Macropodidae	*Osphranter rufus*	Red Kangaroo, Marlu	-	-	1									
Molossidae	*Austronomus australis*	White-striped Free-tailed Bat	-	-	2									
Molossidae	*Chaerephon jobensis colonicus*	Greater Northern Free-tailed Bat	-	-	2									
Muridae	*Leporillus conditor*	Greater Stick-nest Rat	CD	VU	21	1	39							
Muridae	*Mus musculus*	House Mouse	-	-	37				x	x	x			
Muridae	*Notomys alexis alexis*	Spinifex Hopping-mouse	-	-	66				x	x	x	x	x	
Muridae	*Pseudomys albocinereus*	Ash-grey Mouse	-	(not WAM)	33									
Muridae	*Pseudomys desertor*	Desert Mouse	-	-	1									
Muridae	*Pseudomys gouldii*	Shark Bay Mouse	VU	VU	70		96							
Muridae	*Pseudomys hermannsburgensis*	Sandy Inland Mouse	-	-	62								x	
Muridae	*Pseudomys shortridgei*	Heath Mouse	VU	EN	1		2							
Muridae	*Rattus tunneyi tunneyi*	Pale Field-rat	-	-	25									
Otariidae	*Neophoca cinerea*	Australian Sea Lion	EN	EN, MA	1		4							
Peramelidae	*Perameles bougainville*	Shark Bay Bandicoot, Little Marl	VU	EN	83	1	225							
Potoroidae	*Bettongia lesueur lesueur*	Shark Bay Burrowing Bettong	CD	VU	43	1	100							
Potoroidae	*Bettongia penicillata ogilbyi*	Brush-tailed Bettong, Woylie	CR	E	11	1	13							
Tachyglossidae	*Tachyglossus aculeatus acanthion*	Short-beaked Echidna	-	-	2			x	x	x	x	x		
Thylacomyidae	*Macrotis lagotis*	Bilby, Dalgyte	VU	VU	1	1	3							
Vespertilionidae	*Nyctophilus geoffroyi geoffroyi*	Lesser Long-eared Bat	-	-	7									
Vespertilionidae	*Vespadelus finlaysoni*	Finlayson's Cave Bat	-	-	8									
Ziphiidae	*Mesoplodon densirostris*	Blainville's Beaked Whale	-	Cetacean	1									
Ziphiidae	*Tasmacetus shepherdi*	Shepherd's Beaked Whale	-	Cetacean	1									

Reptiles													
Agamidae	*Ctenophorus badius*	Variable Sand Dragon	-	-	7								
Agamidae	*Ctenophorus butlerorum*	Shark Bay Heath Dragon	-	-	49								
Agamidae	*Ctenophorus maculatus*	Spotted Sand Dragon	-	(not WAM)	133			x	x	x	x	x	x
Agamidae	*Ctenophorus nuchalis*	Central Netted Dragon	-	-	16								
Agamidae	*Ctenophorus parviceps*	Northern Heath Dragon	-	-	1								
Agamidae	*Ctenophorus reticulatus*	Western Netted Dragon	-	-	75								
Agamidae	*Ctenophorus scutulatus*	Lozenge-Marked Dragon	-	-	11								x
Agamidae	*Gowidon longirostris*	Long-nosed Dragon	-	-	9								
Agamidae	*Moloch horridus*	Thorny Devil	-	-	10							x	x
Agamidae	*Pogona minor*	Dwarf Bearded Dragon	-	-	2							x	x
Agamidae	*Pogona minor minor*	Western Bearded Dragon	-	-	41								
Carphodactylidae	*Nephrurus levis*	Smooth knob-tailed gecko	-	-	13								
Carphodactylidae	*Nephrurus levis levis*	Smooth knob-tailed gecko	-	-	2								
Carphodactylidae	*Nephrurus levis occidentalis*	Smooth knob-tailed gecko	-	-	67								x
Carphodactylidae	*Underwoodisaurus milii*	Southern Barking Gecko	-	-	31								
Chelidae	*Chelodina steindachneri*	Flat-shelled Turtle	-	-	3								
Cheloniidae	*Caretta caretta*	Loggerhead Turtle	EN	EN, MI, MA	42	1	45						
Cheloniidae	*Chelonia mydas*	Green Turtle	VU	VU, MI, MA	73	1	145						
Cheloniidae	*Eretmochelys imbricata*	Hawksbill Turtle	VU	VU, MI, MA	2		2						
Cheloniidae	*Natator depressus*	Flatback Turtle	VU	VU, MI, MA		1							
Crocodylidae	*Crocodylus porosus*	Saltwater Crocodile	MI	MI, MA		1							
Dermochelyidae	*Dermochelys coriacea*	Leatherback Turtle	VU	EN, MI, MA		1							
Diplodactylidae	*Diplodactylus klugei*	Kluge's Gecko	-	-	2								
Diplodactylidae	*Diplodactylus ornatus*	Ornate Stone Gecko	-	-	57								
Diplodactylidae	*Diplodactylus pulcher*	Fine-faced Gecko	-	-	15								
Diplodactylidae	*Lucasium alboguttatum*	White-spotted Ground Gecko	-	-	82								x
Diplodactylidae	*Lucasium squarrosum*	Mottled Ground Gecko	-	-	8								
Diplodactylidae	*Strophurus michaelseni*	Robust striped gecko	-	-	12								
Diplodactylidae	*Strophurus spinigerus*	Soft Spiny-tailed Gecko	-	(not WAM)	60								
Diplodactylidae	*Strophurus strophurus*	Western Spiny-tailed Gecko	-	-	46								x
Elapidae	*Aipysurus apraefrontalis*	Short-nosed Sea Snake	CR	CE, MA		1							
Elapidae	*Aipysurus foliosquama*	Leaf-scaled Sea Snake	CR	CE, MA		1	1						

Elapidae	*Aipysurus laevis*	Olive Sea Snake	-	MA		1							
Elapidae	*Aipysurus pooleorum*	Shark Bay Sea Snake	-	MA	45	1							
Elapidae	*Aipysurus tenuis*	Brown-lined Sea Snake	-	MA	1								
Elapidae	*Brachyurophis fasciolatus fasciolatus*	Narrow-banded Shovel-nosed Snake	-	-	6								
Elapidae	*Demansia calodera*	Black-necked Whipsnake	-	-	26								
Elapidae	*Demansia reticulata*	Reticulated Whipsnake	-	(not WAM)	11								
Elapidae	*Emydocephalus annulatus*	Eastern Turtle-headed Sea Snake	-	MA		1							
Elapidae	*Ephalophis greyae*	Northwestern Mangrove Sea Snake	-	MA		1							
Elapidae	*Hydrophis major*	Olive-headed sea snake	-	MA	2								
Elapidae	*Narophis bimaculatus*	Black-naped Snake	-	-	2								
Elapidae	*Pseudechis australis*	Mulga Snake	-	-	5								
Elapidae	*Pseudonaja mengdeni*	Western Brown Snake	-	-	16								
Elapidae	*Pseudonaja modesta*	Ringed Brown Snake	-	-	4								x
Elapidae	*Pseudonaja nuchalis*	Gwardar; Northern Brown Snake	-	-	1								
Elapidae	*Simoselaps bertholdi*	Jan's Banded Snake	-	-	4			x					
Elapidae	*Simoselaps littoralis*	West Coast Banded Snake	-	-	46								x
Elapidae	*Suta fasciata*	Rosen's Snake	-	-	1								
Elapidae	*Suta monachus*	Inland Hooded Snake	-	-	5								x
Gekkonidae	*Christinus marmoratus*	Marbled Gecko	-	-	7								
Gekkonidae	*Gehyra variegata*	Variegated Gehyra	-	-	130								x
Gekkonidae	*Heteronotia binoei*	Bynoe's Gecko	-	-	270								x
Pygopodidae	*Aprasia haroldi*	Shark Bay Worm-Lizard	P1	-	25		40						
Pygopodidae	*Aprasia smithi*	Zyutdorp Worm-Lizard	-	-	2								
Pygopodidae	*Delma butleri*	Spinifex Delma	-	-	11								x
Pygopodidae	*Delma concinna major*	Javelin Lizard	P1	-			1						
Pygopodidae	*Delma fraseri*	Fraser's Delma	-	-	2								
Pygopodidae	*Delma nasuta*	Sharp-snouted Delma	-	-	5								
Pygopodidae	*Delma tincta*	Excitable Delma	-	-	2								
Pygopodidae	*Lialis burtonis*	Burton's Snake-lizard	-	-	26								
Pygopodidae	*Pletholax edelensis*	Shark Bay Keeled Legless Gecko	P3	-	17		26						
Pygopodidae	*Pletholax gracilis*	West Coast Keeled Legless Gecko	-	-	4								
Pygopodidae	*Pygopus lepidopodus*	Common Scaly Foot	-	-	8								

Pygopodidae	*Pygopus nigriceps*	Western Hooded Scaly-foot	-	-	6								x
Pythonidae	*Antaresia childreni*	Children's Python	-	-	2								
Pythonidae	*Aspidites ramsayi*	Woma	-	-	5		12						
Scincidae	*Cryptoblepharus plagiocephalus*	Péron's Snake-eyed Skink	-	-	52				x	x	x		
Scincidae	*Ctenotus australis*	Western Limestone Ctenotus	-	-	24								
Scincidae	*Ctenotus fallens*	West-coast Laterite Ctenotus	-	-	74								x
Scincidae	*Ctenotus pantherinus*	Leopard Ctenotus	-	-	1								
Scincidae	*Ctenotus robustus*	Robust Striped Ctenotus	-	-	1								
Scincidae	*Ctenotus schomburgkii*	Barred Wedge-snouted Ctenotus	-	-	28								
Scincidae	*Ctenotus severus*	Stern Ctenotus	-	-	5								
Scincidae	*Ctenotus youngsoni*	Shark Bay Southwest Ctenotus	-	-	24								
Scincidae	*Cyclodomorphus celatus*	Western Slender Blue-tongue	-	-	41								x
Scincidae	*Egernia depressa*	Southern Pygmy Spiny-tailed Skink	-	-	2								
Scincidae	*Egernia kingii*	King's Skink	-	-	3								
Scincidae	*Egernia stokesii badia*	Western Spiny-tailed Skink	VU	EN	20	1	39						
Scincidae	*Egernia stokesii stokesii*	Stokes's skink	P4	-	19								
Scincidae	*Eremiascincus richardsonii*	Broad-banded Sand Swimmer	-	-	4								
Scincidae	*Lerista connivens*	Blinking Broad-blazed Slider	-	-	46								
Scincidae	*Lerista elegans*	Elegant Slider	-	-	91								
Scincidae	*Lerista kendricki*	Dark Broad-Blazed Slider	-	-	10								x
Scincidae	*Lerista lineopunctulata*	Dotted-line Robust Slider	-	-	120								x
Scincidae	*Lerista macropisthopus fusciceps*	Unpatterned Robust Slide	-	-	55								
Scincidae	*Lerista micra*	Little Slider	-	-	73								
Scincidae	*Lerista planiventralis*	Keeled Slider	-	(not WAM)	22								x
Scincidae	*Lerista praepedita*	Blunt-tailed West-coast Slider	-	-	72								x
Scincidae	*Lerista uniduo*	Slender Broad-blazed Slider	-	-	80								
Scincidae	*Lerista varia*	Shark Bay Broad-Blazed S	-	-	151								

Scincidae	*Menetia greyii*	Common Dwarf Skink	-	-	70								x
Scincidae	*Menetia surda cresswelli*	Carnarvon Basin Dwarf Sl	-	-	20								x
Scincidae	*Morethia butleri*	Butler's Snake-Eye	-	-	1								
Scincidae	*Morethia lineoocellata*	West Coast Morethia Skink	-	-	129			x				x	x
Scincidae	*Morethia obscura*	Shrubland Morethia Skink	-	-	4								
Scincidae	Tiliqua multifasciata	Central Blue-tongue	-	-								x	
Scincidae	Tiliqua occipitalis	Western Bluetongue	-	-	6								x
Scincidae	Tiliqua rugosa	Bobtail	-	(not WAM)	4							x	
Scincidae	Tiliqua rugosa palarra	Shark Bay Bobtail	-	-	19			x	x	x	x		
Typhlopidae	Anilios australis	Southern Blind Snake	-	-	12								
Typhlopidae	Anilios grypus	Long-beaked Blind Snake	-	-	9								
Typhlopidae	Anilios hamatus	Pale-Headed Blind Snake	-	-	3								
Typhlopidae	Anilios leptosoma	Murchison Blind Snake	-	-	2								
Varanidae	Varanus brevicauda	Short-tailed Pygmy Goanna	-	-	1								
Varanidae	Varanus caudolineatus	Stripe-Tailed Goanna	-	-	2								x
Varanidae	Varanus eremius	Pygmy Desert Goanna	-	-	5								x
Varanidae	Varanus gouldii	Bungarra Or Sand Goanna	-	-	20							x	

Appendix J Fauna Site Sheets

Denham Biological Surveys

Flora, Vegetation and Fauna

Horizon Power

SLR Project No.: 675.073044.00002

18 July 2025

675.073044.00002-HAB-01

Project	675.073044.00002			**Latitude**	-25.90744026	**Longitude**	113.5514149
Date	2025-04-03	**Sample Type**	Terrestrial vertebrate fauna - HAB			**Weather**	Warm, clear

Landform and Soil		**Rock**	
Landform	Undulating plain	**Rock type/s**	Absent
Aspect	Northwest	**Pebble/stone cover**	NA
Soil type	Sand	**Rock/boulder cover**	NA
Soil colour	Orange	**Outcropping cover**	NA
Condition		**Habitat Features**	
Quality	Moderate	**Water Source**	Absent
Fire History	Unknown	**Microhabitats**	Hummocks,Woody debris
Disturbance	Vehicle tracks		
Introduced fauna	None observed	**Leaf litter cover**	5 - 25%

Vegetation			
Upper stratum	Absent	NA	*NA*
Mid stratum	Mid (1-2 m)	Sparse shrubland and/or heathland (0.25-20%)	*Acacia ligulata, Exocarpos aphyllus and Rhagodia latifolia subsp. latifolia*
Ground stratum	Low (>0.5 m)	Open hummock grassland (20-50%)	*Triodia plurinervata*

Fulcrum photo ID	36cd5f9d-2327-4f14-9f16-1e966bdc8c79,c741f83b-96b7-4dc2-a2d1-

675.073044.00002-HAB-02

Project	675.073044.00002			**Latitude**	-25.9103172	**Longitude**	113.549058
Date	2025-04-03	**Sample Type**	Terrestrial vertebrate fauna - HAB			**Weather**	Warm, clear

Landform and Soil		**Rock**	
Landform	Undulating plain	**Rock type/s**	Absent
Aspect	West	**Pebble/stone cover**	NA
Soil type	Sand	**Rock/boulder cover**	NA
Soil colour	Orange	**Outcropping cover**	NA
Condition		**Habitat Features**	
Quality	Moderate	**Water Source**	Absent
Fire History	Unknown	**Microhabitats**	Hummocks,Woody debris
Disturbance	Vehicle tracks		
Introduced fauna	None observed	**Leaf litter cover**	5 - 25%

Vegetation			
Upper stratum	Absent	NA	*NA*
Mid stratum	Mid (1-2 m)	Sparse shrubland and/or heathland (0.25-20%)	*Acacia ligulata, Exocarpos aphyllus and Rhagodia latifolia subsp. latifolia*
Ground stratum	Low (>0.5 m)	Open hummock grassland (20-50%)	*Triodia plurinervata*

Fulcrum photo ID	1593be77-fa48-43a4-9601-c100a6da4f54,3c639b3f-4082-4f08-9710-

675.073044.00002-HAB-03

Project	675.073044.00002			**Latitude**	-25.9072198	**Longitude**	113.5476486
Date	2025-04-03	**Sample Type**	Terrestrial vertebrate fauna - HAB			**Weather**	Warm, clear

Landform and Soil		**Rock**	
Landform	Undulating plain	**Rock type/s**	Absent
Aspect	Northwest	**Pebble/stone cover**	NA
Soil type	Sand	**Rock/boulder cover**	NA
Soil colour	Orange	**Outcropping cover**	NA
Condition		**Habitat Features**	
Quality	Moderate	**Water Source**	Absent
Fire History	Unknown	**Microhabitats**	Hummocks,Woody debris
Disturbance	None observed		
Introduced fauna	None observed	**Leaf litter cover**	5 - 25%

Vegetation			
Upper stratum	Absent	NA	*NA*
Mid stratum	Mid (1-2 m)	Open shrubland and/or heathland (20-50%)	*Acacia ligulata, Exocarpos aphyllus and Rhagodia latifolia subsp. latifolia*
Ground stratum	Low (>0.5 m)	Open hummock grassland (20-50%)	*Triodia plurinervata*

Fulcrum photo ID	0d6939ce-bdbd-4cc8-9f19-a86fda9a189b,13b3d201-0e50-46ba-95bb-

675.073044.00002-CAM-04

Project	675.073044.00002			**Latitude**	-25.9064639	**Longitude**	113.5482939
Date	2025-04-03	**Sample Type**	Terrestrial vertebrate fauna - CAM			**Weather**	Warm, clear

Landform and Soil		**Rock**	
Landform	Undulating plain	**Rock type/s**	Absent
Aspect	West	**Pebble/stone cover**	NA
Soil type	Sand	**Rock/boulder cover**	NA
Soil colour	Orange	**Outcropping cover**	NA
Condition		**Habitat Features**	
Quality	Moderate	**Water Source**	Absent
Fire History	Unknown	**Microhabitats**	Hummocks,Woody debris
Disturbance	None observed		
Introduced fauna	None observed	**Leaf litter cover**	5 - 25%

Vegetation			
Upper stratum	Absent	NA	*NA*
Mid stratum	Mid (1-2 m)	Open shrubland and/or heathland (20-50%)	*Acacia ligulata, Exocarpos aphyllus and Rhagodia latifolia subsp. latifolia*
Ground stratum	Low (>0.5 m)	Open hummock grassland (20-50%)	*Triodia plurinervata*

Fulcrum photo ID	1666e9a8-72d7-40ba-9bdd-abb037ea38c4,0202f238-bf0c-4043-90d2-

675.073044.00002-CAM-05

Project	675.073044.00002			**Latitude**	-25.9100691	**Longitude**	113.5514839
Date	2025-04-03	**Sample Type**	Terrestrial vertebrate fauna - CAM			**Weather**	Warm, clear

Landform and Soil		**Rock**	
Landform	Undulating plain	**Rock type/s**	Absent
Aspect	East	**Pebble/stone cover**	NA
Soil type	Sand	**Rock/boulder cover**	NA
Soil colour	Orange	**Outcropping cover**	NA
Condition		**Habitat Features**	
Quality	Moderate	**Water Source**	Absent
Fire History	Unknown	**Microhabitats**	Hummocks,Woody debris
Disturbance	None observed		
Introduced fauna	None observed	**Leaf litter cover**	5 - 25%

Vegetation			
Upper stratum	Absent	NA	*NA*
Mid stratum	Mid (1-2 m)	Open shrubland and/or heathland (20-50%)	*Acacia ligulata, Exocarpos aphyllus and Rhagodia latifolia subsp. latifolia*
Ground stratum	Low (>0.5 m)	Open hummock grassland (20-50%)	*Triodia plurinervata*

Fulcrum photo ID	5a7d444f-82ae-46ab-82f1-f0787959c13f,72fd1330-9a03-4fa4-971d-

675.073044.00002-HAB-06

Project	675.073044.00002			**Latitude**	-25.916991	**Longitude**	113.5498326
Date	2025-04-03	**Sample Type**	Terrestrial vertebrate fauna - HAB			**Weather**	Warm, clear

Landform and Soil		**Rock**	
Landform	Undulating plain	**Rock type/s**	Absent
Aspect	South	**Pebble/stone cover**	NA
Soil type	Sand	**Rock/boulder cover**	NA
Soil colour	Orange	**Outcropping cover**	NA
Condition		**Habitat Features**	
Quality	Low	**Water Source**	Absent
Fire History	Unknown	**Microhabitats**	Hummocks,Woody debris
Disturbance	Clearing,Vehicle tracks		
Introduced fauna	None observed	**Leaf litter cover**	25 - 50%

Vegetation			
Upper stratum	Absent	NA	*NA*
Mid stratum	Mid (1-2 m)	Open shrubland and/or heathland (20-50%)	*Acacia ligulata, Acacia tetragonophylla and Exocarpus aphyllus*
Ground stratum	Low (>0.5 m)	Open hummock grassland (20-50%)	*Maireana stipitata, Atriplex paludosa subsp. moquiniana and Ptilotus divaricatus*

Fulcrum photo ID	a5bf2702-2d3b-440c-8998-2e31a2b53df5,9f7c1e34-2a49-4825-a77f-

675.073044.00002-CAM-07

Project	675.073044.00002			**Latitude**	-25.9165646	**Longitude**	113.5491996
Date	2025-04-03	**Sample Type**	Terrestrial vertebrate fauna - CAM			**Weather**	Warm, clear

Landform and Soil		**Rock**	
Landform	Undulating plain	**Rock type/s**	Absent
Aspect	South	**Pebble/stone cover**	NA
Soil type	Sand	**Rock/boulder cover**	NA
Soil colour	Orange	**Outcropping cover**	NA
Condition		**Habitat Features**	
Quality	Very low	**Water Source**	Absent
Fire History	Unknown	**Microhabitats**	
Disturbance	Clearing,Infrastructure,Litter,Vehicle tracks,Weeds		
Introduced fauna	None observed	**Leaf litter cover**	<5%

Vegetation			
Upper stratum	Absent	NA	*NA*
Mid stratum	Absent	NA	*NA*
Ground stratum	Low (>0.5 m)	Isolated hummock grasses (<0.25%)	*Maireana stipitata, Atriplex paludosa subsp. moquiniana and Ptilotus*

Fulcrum photo ID	29162321-3174-4e5a-89aa-0680cfe279d7,469212ee-bbfa-4177-bf10-

675.073044.00002-HAB-08

Project	675.073044.00002			**Latitude**	-25.9101047	**Longitude**	113.5476503
Date	2025-04-04	**Sample Type**	Terrestrial vertebrate fauna - HAB			**Weather**	Warm, clear

Landform and Soil		**Rock**	
Landform	Undulating plain	**Rock type/s**	Absent
Aspect	South	**Pebble/stone cover**	NA
Soil type	Sand	**Rock/boulder cover**	NA
Soil colour	Orange	**Outcropping cover**	NA
Condition		**Habitat Features**	
Quality	Moderate	**Water Source**	Absent
Fire History	Unknown	**Microhabitats**	Hummocks,Woody debris
Disturbance	None observed		
Introduced fauna	None observed	**Leaf litter cover**	5 - 25%

Vegetation			
Upper stratum	Absent	NA	*NA*
Mid stratum	Mid (1-2 m)	Sparse shrubland and/or heathland (0.25-20%)	*Acacia ligulata, Exocarpos aphyllus and Rhagodia latifolia subsp. latifolia*
Ground stratum	Low (>0.5 m)	Sparse hummock grassland (0.25-20%)	*Triodia plurinervata*

Fulcrum photo ID	b1d88ffe-1fb4-4528-966b-ad7f5e8f339b,e666f3f6-5fc9-464d-966e-

675.073044.00002-HAB-09

Project	675.073044.00002			**Latitude**	-25.9126993	**Longitude**	113.5504242
Date	2025-04-04	**Sample Type**	Terrestrial vertebrate fauna - HAB			**Weather**	Warm, clear

Landform and Soil		**Rock**	
Landform	Undulating plain	**Rock type/s**	Absent
Aspect	West	**Pebble/stone cover**	NA
Soil type	Sand	**Rock/boulder cover**	NA
Soil colour	Orange	**Outcropping cover**	NA
Condition		**Habitat Features**	
Quality	Moderate	**Water Source**	Absent
Fire History	Little or no fire evidence (>5 years)	**Microhabitats**	Hummocks
Disturbance	None observed		
Introduced fauna	None observed	**Leaf litter cover**	<5%

Vegetation			
Upper stratum	Absent	NA	*NA*
Mid stratum	Mid (1-2 m)	Open shrubland and/or heathland (20-50%)	*Acacia ligulata, Exocarpos aphyllus and Rhagodia latifolia subsp. latifolia*
Ground stratum	Low (>0.5 m)	Sparse hummock grassland (0.25-20%)	*Triodia plurinervata*

Fulcrum photo ID	9c786ee1-89d0-4250-a991-241caafde577,caf87d78-9be2-4978-bf79-

675.073044.00002-CAM-10

Project	675.073044.00002			**Latitude**	-25.9075051	**Longitude**	113.5514283
Date	2025-04-05	**Sample Type**	Terrestrial vertebrate fauna - CAM			**Weather**	Warm, clear

Landform and Soil		**Rock**	
Landform	Undulating plain	**Rock type/s**	Absent
Aspect	Northwest	**Pebble/stone cover**	NA
Soil type	Sand	**Rock/boulder cover**	NA
Soil colour	Orange	**Outcropping cover**	NA
Condition		**Habitat Features**	
Quality	Moderate	**Water Source**	Absent
Fire History	Unknown	**Microhabitats**	Hummocks,Woody debris
Disturbance	Vehicle tracks		
Introduced fauna	None observed	**Leaf litter cover**	5 - 25%

Vegetation			
Upper stratum	Absent	NA	*NA*
Mid stratum	Mid (1-2 m)	Sparse shrubland and/or heathland (0.25-20%)	*Acacia ligulata, Exocarpos aphyllus and Rhagodia latifolia subsp. latifolia*
Ground stratum	Low (>0.5 m)	Open hummock grassland (20-50%)	*Triodia plurinervata*

Fulcrum photo ID	90a151ae-80dd-4422-85ad-783b22949f15

675.073044.00002-HAB-11

Project	675.073044.00002			**Latitude**	-25.908356	**Longitude**	113.5497303
Date	2025-04-05	**Sample Type**	Terrestrial vertebrate fauna - HAB			**Weather**	Warm, clear

Landform and Soil		**Rock**	
Landform	Undulating plain	**Rock type/s**	Absent
Aspect	Negligible	**Pebble/stone cover**	NA
Soil type	Sand	**Rock/boulder cover**	NA
Soil colour	Orange	**Outcropping cover**	NA
Condition		**Habitat Features**	
Quality	Moderate	**Water Source**	Absent
Fire History	Little or no fire evidence (>5 years)	**Microhabitats**	Hummocks,Woody debris
Disturbance	Weeds		
Introduced fauna	None observed	**Leaf litter cover**	5 - 25%

Vegetation			
Upper stratum	Absent	NA	*NA*
Mid stratum	Mid (1-2 m)	Sparse shrubland and/or heathland (0.25-20%)	*Acacia ligulata, Exocarpos aphyllus and Rhagodia latifolia subsp. latifolia*
Ground stratum	Low (>0.5 m)	Sparse hummock grassland (0.25-20%)	*Triodia plurinervata*

Fulcrum photo ID	139b8ffd-be6d-434c-a94a-c108b1ed55d3,bb2ba3ac-5b5e-4fad-a982-

675.073044.00002-HAB-12

Project	675.073044.00002			**Latitude**	-25.9061382	**Longitude**	113.5512175
Date	2025-04-05	**Sample Type**	Terrestrial vertebrate fauna - HAB			**Weather**	Warm, clear

Landform and Soil		**Rock**	
Landform	Undulating plain	**Rock type/s**	Absent
Aspect	South	**Pebble/stone cover**	NA
Soil type	Sand	**Rock/boulder cover**	NA
Soil colour	Orange	**Outcropping cover**	NA
Condition		**Habitat Features**	
Quality	Moderate	**Water Source**	Absent
Fire History	Little or no fire evidence (>5 years)	**Microhabitats**	Hummocks
Disturbance	None observed		
Introduced fauna	None observed	**Leaf litter cover**	25 - 50%

Vegetation			
Upper stratum	Absent	NA	*NA*
Mid stratum	Mid (1-2 m)	Sparse shrubland and/or heathland (0.25-20%)	*Acacia ligulata, Exocarpos aphyllus and Rhagodia latifolia subsp. latifolia*
Ground stratum	Low (>0.5 m)	Hummock grassland (50-80%)	*Triodia plurinervata*

Fulcrum photo ID	068749d3-f169-449e-bba9-549baa3303b2,501ff559-6597-4da7-b986-

675.073044.00002-HAB-13

Project	675.073044.00002			**Latitude**	-25.9136718	**Longitude**	113.5469759
Date	2025-04-05	**Sample Type**	Terrestrial vertebrate fauna - HAB			**Weather**	Warm, clear

Landform and Soil		**Rock**	
Landform	Undulating plain	**Rock type/s**	Absent
Aspect	South	**Pebble/stone cover**	NA
Soil type	Sand	**Rock/boulder cover**	NA
Soil colour	Orange	**Outcropping cover**	NA
Condition		**Habitat Features**	
Quality	Low	**Water Source**	Absent
Fire History	Unknown	**Microhabitats**	Hummocks,Woody debris
Disturbance	Litter,Weeds		
Introduced fauna	None observed	**Leaf litter cover**	5 - 25%

Vegetation			
Upper stratum	Absent	NA	*NA*
Mid stratum	Mid (1-2 m)	Sparse shrubland and/or heathland (0.25-20%)	*Acacia ligulata, Exocarpos aphyllus and Rhagodia latifolia subsp. latifolia*
Ground stratum	Low (>0.5 m)	Sparse hummock grassland (0.25-20%)	*Triodia plurinervata*

Fulcrum photo ID	2c4256ad-f83f-4deb-b5fb-114505e3e84f,20f8fe6e-5eb8-481b-a854-

675.073044.00002-HAB-14

Project	675.073044.00002			**Latitude**	-25.9183978	**Longitude**	113.5486517
Date	2025-04-06	**Sample Type**	Terrestrial vertebrate fauna - HAB			**Weather**	Warm, clear

Landform and Soil		**Rock**	
Landform	Undulating plain	**Rock type/s**	Absent
Aspect	East	**Pebble/stone cover**	NA
Soil type	Sand	**Rock/boulder cover**	NA
Soil colour	Orange	**Outcropping cover**	NA
Condition		**Habitat Features**	
Quality	Moderate	**Water Source**	Absent
Fire History	Unknown	**Microhabitats**	Woody debris
Disturbance	Weeds		
Introduced fauna	None observed	**Leaf litter cover**	25 - 50%

Vegetation			
Upper stratum	Absent	NA	*NA*
Mid stratum	Mid (1-2 m)	Open shrubland and/or heathland (20-50%)	*Acacia ligulata, Acacia tetragonophylla and Exocarpus aphyllus*
Ground stratum	Low (>0.5 m)	Sparse hummock grassland (0.25-20%)	*Maireana stipitata, Atriplex paludosa subsp. moquiniana and Ptilotus divaricatus*

Fulcrum photo ID	597140ee-68e3-4d7c-b835-7e6ed4a5fefa,df883423-d28a-4b80-bd33-

Appendix K Significant Fauna Likelihood of Occurrence

Denham Biological Surveys

Flora, Vegetation and Fauna

Horizon Power

SLR Project No.: 675.073044.00002

18 July 2025

Conservation Status: State - Listed under Biodiversity Conservation Act 2016 or Department of Biodiversity, Conservation and Attractions Conservation, Commonwealth - Listed under Environmental Protection and Biodiversity Conservation Act 1999. CR/CE - Critically Endangered, EN - Endangered, VU - Vulnerable, MI - Migratory, CD - Conservation Dependent fauna, OS - Other Specially Protected fauna, MA - Marine, P - Listed as Priority by DBCA. **Source:** NM - NatureMap, PMST - EPBC Protected Matters Search Tool, DBCA - DBCA Threatened and Priority Fauna database search, Field - Recorded during the current field survey.

Family	Scientific Name	Conservation Status		Habitat	Previous Records	Likelihood of Occurrence
		State	Commonwealth			
Birds						
Acanthizidae	*Aphelocephala leucopsis* Southern Whiteface	-	VU	Open forest and woodland, inland scrubs such as mallee, mulga, cypress pine; saltbush, dead trees, stumps (Pizzey and Knight, 2012).	The NatureMap search returned 18 records within 80 km of the Survey Area (NatureMap, 2025).	**Low** No recent or nearby records identified from the database searches. No suitable habitat is present within the Survey Area.
Acanthizidae	*Calamanthus campestris hartogi* Dirk Hartog Island Rufous Fieldwren	VU	-	Occurs in low, sparse to dense shrublands, from temperate to arid regions. Characteristic of chenopod shrublands and samphire, also in mallee heathlands and has been recorded in Triodia grasslands and dwarf mangroves (Pizzey and Knight, 2012).	The DBCA database search identified 49 records within 80 km of the Survey Area, including 40.4 km southwest in 2016 and 17.5 km north in 1959 (DBCA, 2025).	**Low** Records are associated with Dirk Hartog Island where the taxa is endemic.
Accipitridae	*Elanus scriptus* Letter-winged Kite	P4	-	Grasslands, with trees; tree-lined watercourses (Pizzey and Knight, 2012).	The DBCA database search identified one historical record within 80 km of the Survey Area, 54.9 km south in 1977 (DBCA, 2025).	**Low** One historical record, the Survey Area is outside of known distribution.
Apodidae	*Apus pacificus* Pacific Swift, Fork-tailed Swift	MI	MI, MA	Low to very high airspace over varied habitat (Pizzey and Knight, 2012).	The DBCA database search identified two records within 80 km of the Survey Area, including 75.4 km east in 2006 and 20.5 km northeast in 1985 (DBCA, 2025).	**Low** Taxa may occupy airspace of Survey Area, however, only two historical records identified.
Cacatuidae	*Calyptorhynchus banksii naso* Forest Red-tailed Black Cockatoo	VU	VU	Tall eucalypt forest, woodland, feeds on seeds of large-fruited eucalypts (Menkhorst et al., 2017).	The NatureMap search returned one record within 80 km of the Survey Area (NatureMap, 2025).	**Low** Outside of known distribution.
Charadriidae	*Charadrius leschenaultii* Greater Sand Plover	VU	VU, MI, MA	Wide, sandy or shelly beaches; sandspits, tidal mudflats, reefs, sand cays, mangroves, saltmarsh, dune wilderness, bare paddocks; seldom far inland (Pizzey and Knight, 2012).	The DBCA database search identified 52 records within 80 km of the Survey Area, including 18.2 km east in 2016 and 1.2 km northwest in 2015 (DBCA, 2025).	**Low** Records are associated with coastal habitats and Little Lagoon 0.6 km northwest of the Survey Area. This taxa may utilise airspace/infrequently be present in the Survey Area when moving between preferred habitats, no suitable habitat within the Survey Area.
Charadriidae	*Anarhynchus veredus* Oriental Plover	MI	MI, MA	Open plains; bare, rolling country, often far from water; ploughed land; muddy or sandy wastes near inland swamps or tidal flats; bare claypans; margins of coastal marshes; grassy airfields, sportsfields, lawns (Pizzey and Knight, 2012).	The DBCA database search identified three historical records within 80 km of the Survey Area, including 31.2 km north in 1999 and 22.1 km southwest in 1981 (DBCA, 2025).	**Low** Records are historical, no suitable habtiat within the Survey Area.
Charadriidae	*Thinornis cucullatus* Hooded Dotterel	P4	MA	Sandy beaches and adjacent sand dunes; weedy rock shelves and reefs; occasionally tidal flats; coastal and inland salt lakes (Pizzey and Knight, 2012).	The DBCA database search identified one historical record within 80 km of the Survey Area, 72.2 km east in 1977 (DBCA, 2025).	**Low** One historical record.
Charadriidae	*Pluvialis fulva* Pacific Golden Plover	MI	MI, MA	Estuaries, mudflats, saltmarshes, mangroves; rocky reefs and stranded seaweed on ocean shores; margins of shallow open inland swamps; sewage ponds, short-grass paddocks, sportsground, airfield, ploughed land (Pizzey and Knight, 2012).	The DBCA database search identified one record within 80 km of the Survey Area, 34 km east in 2016 (DBCA, 2025).	**Low** One record identified, no suitable habitat within the Survey Area.
Charadriidae	*Pluvialis squatarola* Grey Plover	MI	VU, MI, MA	Mudflats, saltmarsh; tidal reefs and estuaries, rarely inland (Pizzey and Knight, 2012).	The DBCA database search identified 50 records within 80 km of the Survey Area, including 56.4 km west in 2017 and 1.1 km northwest in 2014 (DBCA, 2025).	**Low** No suitable habitat within the Survey Area.
Diomedeidae	*Diomedea amsterdamensis* Amsterdam Albatross	CR	EN, MI, MA	Oceanic (Pizzey & Knight 1999).	No nearby records identified from the database searches or literature.	**Low** No records identified, no suitable habitat within the Survey Area.
Diomedeidae	*Diomedea exulans* Wandering Albatross	VU	VU, MI, MA	Breeds on South Georgia and sub-Antarctic islands of Indian Ocean with very small breeding population at Macquarie and Heard Island; otherwise circumpolar in Southern Ocean (Menkhorst et al., 2017).	No nearby records identified from the database searches or literature.	**Low** No records identified, no suitable habitat within the Survey Area.
Diomedeidae	*Thalassarche carteri* Indian Yellow-nosed Albatross	EN	VU, MI, MA	Inshore and offshore waters (Menkhorst et al., 2017).	No nearby records identified from the database searches or literature.	**Low** No records identified, no suitable habitat within the Survey Area.
Diomedeidae	*Thalassarche cauta* Shy Albatross	VU	EN, MI, MA	Breeds on Australian and New Zealand islands with circumpolar distribution in Southern Ocean; scarce visitor to south-western seas. Oceanic (Johnstone & Storr, 1998).	The DBCA database search identified two records within 80 km of the Survey Area, both are 74.6 km northwest in 2007 and 2010 (DBCA, 2025).	**Low** No nearby records, no suitablle habitat within the Survey Area.
Diomedeidae	*Thalassarche cauta steadi* White-capped Albatross	VU	VU, MI, MA	Inshore and offshore waters (Menkhorst et al., 2017).	No nearby records identified from the database searches or literature.	**Low** No records identified, no suitable habitat within the Survey Area.
Diomedeidae	*Thalassarche chlororhynchos* Atlantic Yellow-nosed Albatross	VU	MI, MA	Inshore and offshore waters (Menkhorst et al., 2017).	The DBCA database search identified two historical records within 80 km of the Survey Area, both 64.2 km south in 1980 (DBCA, 2025).	**Low** Records are historical, no suitable habtiat within the Survey Area.
Diomedeidae	*Thalassarche chrysostoma* Grey-headed Albatross	VU	EN, MI, MA	Oceanic (Menkhorst et al., 2017).	The DBCA database search identified one historical record within 80 km of the Survey Area, 66 km west in 1938 (DBCA, 2025).	**Low** Record is historical, no suitable habitat within the Survey Area.
Diomedeidae	*Thalassarche impavida* Campbell Island Albatross	VU	VU, MI, MA	Oceanic (Menkhorst et al., 2017).	No nearby records identified from the database searches or literature.	**Low** No records identified, no suitable habitat within the Survey Area.
Diomedeidae	*Thalassarche melanophris* Black-browed Albatross	EN	VU, MI, MA	Oceanic (Menkhorst et al., 2017).	No nearby records identified from the database searches or literature.	**Low** No records identified, no suitable habitat within the Survey Area.
Falconidae	*Falco hypoleucos* Grey Falcon	VU	VU	Open plains with treed watercourses in arid inland (Menkhorst et al., 2017).	No nearby records identified from the database searches or literature.	**Low** No records identified, limited suitable habitat within the Survey Area.

Family	Scientific Name	Conservation Status		Habitat	Previous Records	Likelihood of Occurrence
		State	Commonwealth			
Falconidae	*Falco peregrinus* Peregrine Falcon	OS	-	Most environments with suitable nest sites: cliff faces preferred, including man-made ones, commonly uses stick nests built by other species (Menkhorst et al., 2017).	The DBCA database search identified two records within 80 km of the Survey Area, both 35.3 km southeast in 2002 (DBCA, 2025).	**Low** No recent records, habitat suitablility limited to hunting.
Fregatidae	*Fregata ariel* Lesser Frigatebird	MI	MI, MA	Oceanic, breed on islands (Pizzey and Knight, 2012).	The DBCA database search identified one record within 80 km of the Survey Area, 26.4 km southwest in 1999 (DBCA, 2025).	**Low** One historical record, no suitable habitat within the Survey Area.
Glareolidae	*Glareola maldivarum* Oriental Pratincole	MI	MI, MA	Plains; shallow wet and dry edges of open bare wetlands; tidal mudflats, beaches (Pizzey and Knight, 2012).	The DBCA database search identified one record within 80 km of the Survey Area, 45.2 km north in 1978 (DBCA, 2025).	**Low** One historical record, no suitable habitat within the Survey Area.
Laridae	*Anous stolidus* Common Noddy, Brown Noddy	MI	MI, MA	Oceanic; cays, reefs, buoys and piles (Pizzey and Knight, 2012).	The DBCA database search identified one record within 80 km of the Survey Area, 76 km south in 1980 (DBCA, 2025).	**Low** One historical record, no suitable habitat within the Survey Area.
Laridae	*Anous tenuirostris melanops* Australian Lesser Noddy	EN	VU, MA	Main Australia breeding population on Abrolhos Island, infrequently storm-blown to coast of mainland WA (Menkhorst et al., 2017).	No nearby records identified from the database searches or literature.	**Low** No records identified, no suitable habitat within the Survey Area.
Laridae	*Chlidonias leucopterus* White-winged Black Tern	MI	MI, MA	Large coastal and inland wetland; saltfields, sewage ponds, estuaries, coastal waters (Pizzey and Knight, 2012).	The DBCA database search identified one record within 80 km of the Survey Area, 34 km east in 2016 (DBCA, 2025).	**Low** One record identified, no suitable habitat within the Survey Area.
Laridae	*Gelochelidon nilotica* Gull-billed Tern	MI	MI, MA	Coastal, offshore waters; beaches, mudflats, estuaries, larger rivers, reserviors, lakes (Pizzey and Knight, 2012).	The DBCA database search identified six records within 80 km of the Survey Area, including 76 km northeast in 2005 and 31.8 km southwest in 1998 (DBCA, 2025).	**Low** No recent records, no suitable habitat within the Survey Area.
Laridae	*Hydroprogne caspia* Caspian Tern	MI	MI, MA	Coastal, offshore waters; beaches, mudflats, estuaries, larger rivers, reservoirs, lakes. Sometimes found inland (Pizzey and Knight, 2012).	The DBCA database search identified 137 records within 80 km of the Survey Area, including 17.2 km south in 2017 and 1.2 km northwest in 2015 (DBCA, 2025).	**Low** Records are associated with coastal habitats and Little Lagoon 0.6 km northwest of the Survey Area. This taxa may utilise airspace/infrequently be present in the Survey Area when moving between preferred habitats, no suitable habitat within the Survey Area.
Laridae	*Onychoprion anaethetus* Bridled Tern	MI	MI, MA	Oceanic, rarely coastal (Pizzey and Knight, 2012).	The DBCA database search identified 12 records within 80 km of the Survey Area, including 74.8 km northwest in 2018 and 17.2 km south in 2013 (DBCA, 2025).	**Low** No suitable habitat within the Survey Area.
Laridae	*Sterna dougallii* Roseate Tern	MI	MI, MA	Offshore waters, islands, coral reefs, sand cays, beaches, tidal inlets (Pizzey and Knight, 2012).	The DBCA database search identified 26 records within 80 km of the Survey Area, including 42.2 km northwest in 2018 and 20.8 km northeast in 2008 (DBCA, 2025).	**Low** No suitable habitat within the Survey Area.
Laridae	*Sterna hirundo* Common Tern	MI	MI, MA	Offshore waters, beaches, reefs, bays, estuaries, sandflats, saltfields, sewage ponds, freshwater wetlands (Pizzey and Knight, 2012).	The DBCA database search identified ten records within 80 km of the Survey Area, including 1.2 km northwest in 2015 and 1.1 km northwest in 2014 (DBCA, 2025).	**Low** Records are associated with coastal habitats and Little Lagoon 0.6 km northwest of the Survey Area. This taxa may utilise airspace/infrequently be present in the Survey Area when moving between preferred habitats, no suitable habitat within the Survey Area.
Laridae	*Sternula albifrons* Little Tern	MI	MI, MA	Coastal waters, bays, inlets, saline or brackish lakes, saltfields, sewage ponds near coast (Pizzey and Knight, 2012).	The DBCA database search identified one record within 80 km of the Survey Area, 35.3 km southeast in 2002 (DBCA, 2025).	**Low** No recent records, no suitable habitat within the Survey Area.
Laridae	*Sternula nereis nereis* Australian Fairy Tern	VU	VU	Coastal, bays, inlets, beaches, salt ponds and lakes (Morcombe, 2003).	The DBCA database search identified four records within 80 km of the Survey Area, including one historical record 42.1 km south in 1997 and three records 35.8 km west with no date (DBCA, 2025).	**Low** No recent nearby records, no suitable habitat within the Survey Area.
Laridae	*Thalasseus bergii* Greater Crested Tern, Crested Tern	MI	MI, MA	Coastal, beaches, bays, lagoons, salt ponds and lakes, estuaries, tidal creeks (Morcombe, 2003; Johnstone and Storr, 1998).	The DBCA database search identified 139 records within 80 km of the Survey Area, including 42.2 km west in 2018 and 18.2 km east in 2016 (DBCA, 2025).	**Low** Records are associated with coastal habitats and Little Lagoon 0.6 km northwest of the Survey Area. This taxa may utilise airspace/infrequently be present in the Survey Area when moving between preferred habitats, no suitable habitat within the Survey Area.
Maluridae	*Amytornis textilis textilis* Shark Bay Western Grasswren	P4	(A. modestus VU)	In Shark Bay region prefers Acacia shrubland with dense shrub clumps and lower recumbent shrubs in which foliage extends to the ground (Menkhorst et al., 2017).	The DBCA database search identified 138 records within 80 km of the Survey Area, including 5.3 km northeast in 2022 and 20.5 km northeast in 2017 (DBCA, 2025).	**High** Recent nearby records, suitable habitat within the Survey Area.
Maluridae	*Malurus assimilis* Purple-backed Fairywren	(M. assimilis bernieri VU)	-	Dense shrubland vegetation including coastal scrub, thickets and along creeklines. M. assimills bernieri is confined to Bernier Island (BirdLife, 2019).	The NatureMap search returned 189 records within 80 km of the Survey Area (NatureMap, 2025).	**Low** No recent or nearby records identified from the database searches. Taxon is confined to Bernier Island.
Maluridae	*Malurus leucopterus leucopterus* Dirk Hartog Island Black And White Fairywren	VU	VU	Confined to Dirk Hartog Island; inhabits low, dense shrublands and heathlands, and open flats dominated by shrubs (such as Acacia, Atriplex, Dryandra, Hakea, Halosarcia, Melaleuca, Rhagodia, Scaevola, Sida and Thryptomene), and that, in some locations, also support some spinifex (SPRAT, 2024).	The DBCA database search identified 33 historical records within 80 km of the Survey Area, including 41.4 km west in 1998 and 21 km northeast in 1961 (DBCA, 2025).	**Low** Records are all historical and are associated with Dirk Hartog Island where the taxa is endemic.

Family	Scientific Name	Conservation Status		Habitat	Previous Records	Likelihood of Occurrence
		State	Commonwealth			
Maluridae	*Stipiturus malachurus hartogi* Dirk Hartog Island Emu-wren	VU	-	Confined to Dirk Hartog Island; inhabits sandplain heaths and dune thickets (SPRAT, 2024)	The DBCA database search identified six records within 80 km of the Survey Area, including 63.1 km northwest in 2014 and 41.9 km west in 1916 (DBCA, 2025).	**Low** Records are associated with Dirk Hartog Island where the taxa is endemic.
Megapodiidae	*Leipoa ocellata* Malleefowl	VU	VU	Mallee, acacia, paperbark, she-oak and other scrubs; eucalypt woodland; coastal heath; mostly on sandy or gravel soils (Pizzey and Knight, 2012).	The DBCA database search identified 38 records within 80 km of the Survey Area, including 12.3 km northeast in 2022 and 6.2 km northeast in 2017 (DBCA, 2025).	**High** Recent nearby records, suitable habitat within the Survey Area.
Motacillidae	*Motacilla cinerea* Grey Wagtail	MI	MI, MA	Running water near disused quarries; sandy, rocky streams in escarpments; sewage ponds, ploughed fields, airfields (Pizzey and Knight 2012).	No nearby records identified from the database searches or literature.	**Low** No records identified, limited suitable habitat within the Survey Area.
Oceanitidae	*Oceanites oceanicus* Wilson's Storm Petrel	MI	MI, MA	Oceanic (Menkhorst et al., 2017).	The DBCA database search identified four records within 80 km of the Survey Area, including 13.6 km northwest in 2008 and 64.2 km south in 1980 (DBCA, 2025).	**Low** No recent records, no suitable habitat within the Survey Area.
Pandionidae	*Pandion haliaetus* Osprey	MI	MI, MA	Coasts, estuaries, bays, inlets; islands and surrounding waters; coral atolls, reefs, lagoons, rock cliffs, stacks; larger rivers (Pizzey and Knight, 2012).	The DBCA database search identified 44 records within 80 km of the Survey Area, including 42.2 km west in 2018 and 0.8 km southwest in 2004 (DBCA, 2025).	**Low** Records associated with coastal habitat no suitable habitat within the Survey Area.
Phaethontidae	*Phaethon lepturus* White-tailed Tropicbird	MI	MI, MA	Oceanic; Tropical pelagic waters and is solitary at sea, seeking fish and squid. Rarely near land except at breeding colonies. Breeds at Ashmore Reef and rarely Rowley Shoals in the northwaest. Also Cocos (Keeling) Island (Menkhorst et al., 2019).	No nearby records identified from the database searches or literature.	**Low** No records identified, no suitable habitat within the Survey Area.
Phaethontidae	*Phaethon rubricauda* Red-tailed Tropicbird	MI, P4	MI, MA	Oceanic; tropical pelagic waters (Menkhorst et al., 2019)	No nearby records identified from the database searches or literature.	**Low** No records identified, no suitable habitat within the Survey Area.
Procellariidae	*Ardenna carneipes* Flesh-footed Shearwater	VU	MI, MA	Oceanic. Temperate to tropical waters, breeding mostly on islands off south WA, also SA and Lord Howe Island (Menkhorst et al., 2019).	The DBCA database search identified three records within 80 km of the Survey Area, including 45 km southwest in 2010 and 45 km southwest in 2007 (DBCA, 2025).	**Low** No suitable habitat within the Survey Area.
Procellariidae	*Ardenna pacifica* Wedge-tailed Shearwater	MI	MI, MA	Oceanic; common in inshore and offshore waters of tropical and subtropical seas. Small numbers present year round off northwestern WA. Trans-equatorial migrant in Indian Pacific Oceans, largely absent from Australian waters late May to early September (Menkhorst et al., 2019).	The DBCA database search identified 23 records within 80 km of the Survey Area, including 51.3 km west in 2015 and 74.6 km northwest in 2007 (DBCA, 2025).	**Low** No recent nearby records, no suitable habitat within the Survey Area.
Procellariidae	*Macronectes giganteus* Southern Giant Petrel	MI	EN, MI, MA	Occupies southern oceans, moving north in winter when juveniles and immatures frequent waters off southern Australia and will enter bays and harbours. Breeding sites found at Macquarie and Heard Islands and in Antarctica. At breeding grounds, routinely ashore to feed and rest, rarely so on mainland (Menkhorst et al., 2019).	The DBCA database search identified two historical records within 80 km of the Survey Area, both 20.8 km northeast in 1999 (DBCA, 2025).	**Low** Both records are historical, no suitable habitat within the Survey Area.
Procellariidae	*Macronectes halli* Northern Giant Petrel	MI	VU, MI, MA	Widespread in southern oceans, moving north in winter when juveniles and immature members frequent waters off southern Australia. Adults are rare off the mainland nd morefrequent off southern Tasmania. Seasonally common off the southern coastline, breeding at Macquarie Island and other sub-Antartcic islands north of the Antarctic Convergence (Menkhorst et al., 2019).	No nearby records identified from the database searches or literature.	**Low** No records identified, no suitable habitat within the Survey Area.
Procellariidae	*Pterodroma mollis* Soft-plumaged Petrel	-	VU, MA	Common winter-spring visitor (May-August) to pelagic waters off southwest WA, north to around Exmouth and extending east to western Victoria (Menkhorst et al., 2019).	No nearby records identified from the database searches or literature.	**Low** No records identified, no suitable habitat within the Survey Area.
Procellariidae	*Puffinus huttoni* Hutton's Shearwater	EN	MA	Prefers waters of the continental shelf, at times coming inhore into estuaries, bays and channels (Wilson and Swan, 2017).	The DBCA database search identified four records within 80 km of the Survey Area, including 51.3 km west in 2015 and 51.3 km west in 2015 (DBCA, 2025).	**Low** No suitable habitat within the Survey Area.
Rostratulidae	*Rostratula australis* Australian Painted Snipe	EN	EN, MA	Well-vegetated shallows and margins of wetlands, dams, sewage ponds; wet pastures, marshy areas, irrigation systems, lignum, tea-tree scrub, open timber (Pizzey and Knight, 2012).	No nearby records identified from the database searches or literature.	**Low** No records identified, no suitable habitat within the Survey Area.
Scolopacidae	*Actitis hypoleucos* Common Sandpiper	MI	MI, MA	Shallow, pebbly, muddy or sandy sedges of rivers and streams, coastal to far inland; dams, lakes, sewage ponds; margins of tidal rivers; waterways in mangroves or saltmarsh; mudflats; rocky or sandy beaches; causeways, riverside lawns, drains, street gutters (Pizzey and Knight, 2012).	The DBCA database search identified 33 records within 80 km of the Survey Area, including 42.2 km west in 2018 and 1.1 km northwest in 2015 (DBCA, 2025).	**Low** Records are associated with coastal habitats and Little Lagoon 0.6 km northwest of the Survey Area. This taxa may utilise airspace/infrequently be present in the Survey Area when moving between preferred habitats, no suitable habitat within the Survey Area.

Family	Scientific Name	Conservation Status		Habitat	Previous Records	Likelihood of Occurrence
		State	Commonwealth			
Scolopacidae	*Arenaria interpres* Ruddy Turnstone	MI	VU, MI, MA	Tidal reefs and pools; weed-covered rocks; pebbly, shelly and sandy shores with stranded seaweed; mudflats; occasionally inland on shallow waters; sewage ponds, commercial saltflats (Pizzey and Knight, 2012).	The DBCA database search identified 74 records within 80 km of the Survey Area, including 42.2 km west in 2018 and 18.2 km east in 2016 (DBCA, 2025).	**Low** No suitable habitat within the Survey Area.
Scolopacidae	*Calidris acuminata* Sharp-tailed Sandpiper	MI	VU, MI, MA	Tidal mudflats, saltmarshes, mangroves; shallow fresh, brackish or saline inland wetlands; muddy edges of lagoons, swamps, lakes, floodwaters, dams, irrigated patures and crops; sewage ponds, saltfields (Morcombe, 2003; Pizzey and Knight, 2012).	The DBCA database search identified seven records within 80 km of the Survey Area, including 34 km east in 2016 and 1.2 km northwest in 2015 (DBCA, 2025).	**Low** Records are associated with coastal habitats and Little Lagoon 0.6 km northwest of the Survey Area. This taxa may utilise airspace/infrequently be present in the Survey Area when moving between preferred habitats, no suitable habitat within the Survey Area.
Scolopacidae	*Calidris alba* Sanderling	MI	MI, MA	Broad ocean beaches of firm sand with seaweed; often near river mouths; also inlets, tidal mudflats, coastal lagoons (Pizzey and Knight, 2012).	The DBCA database search identified 20 records within 80 km of the Survey Area, including 34 km east in 2016 and 0.7 km north in 2001 (DBCA, 2025).	**Low** Records are associated with coastal habitats and Little Lagoon 0.6 km northwest of the Survey Area. This taxa may utilise airspace/infrequently be present in the Survey Area when moving between preferred habitats, no suitable habitat within the Survey Area.
Scolopacidae	*Calidris canutus* Red Knot	EN	VU, MI, MA	Tidal mudflats, sandflats, beaches, saltmarshes, flooded pastures, ploughed lands (Pizzey and Knight, 2012).	The DBCA database search identified 16 records within 80 km of the Survey Area, including 18.2 km east in 2016 and 1.2 km northwest in 2015 (DBCA, 2025).	**Low** Records are associated with coastal habitats and Little Lagoon 0.6 km northwest of the Survey Area. This taxa may utilise airspace/infrequently be present in the Survey Area when moving between preferred habitats, no suitable habitat within the Survey Area.
Scolopacidae	*Calidris falcinellus* Broad-billed Sandpiper	MI	MI, MA	Tidal mudflats,estuaries, reefs, saltmarsh, freshwater wetlands and lakes, near-coastal salt lakes; sewage ponds; favours muddy ooze (Morcombe, 2003; Pizzey and Knight, 2012).	The NatureMap search returned one record within 80 km of the Survey Area (NatureMap, 2025).	**Low** No records identified, no suitable habitat within the Survey Area.
Scolopacidae	*Calidris ferruginea* Curlew Sandpiper	CR	CE, MI, MA	Inter-tidal mudflats of estuaries, lagoons, mangrove channel; saltmarsh, saltfields; fresh, brachish or saline wetlands; flooded saltbush surrounds of inland lakes; dams, floodwaters, sewage ponds (Morcombe, 2003; Pizzey and Knight, 2012).	The DBCA database search identified 37 records within 80 km of the Survey Area, including 18.2 km east in 2016 and 18.5 km northwest in 2015 (DBCA, 2025).	**Low** No suitable habitat within the Survey Area.
Scolopacidae	*Calidris melanotos* Pectoral Sandpiper	MI	MI, MA	Shallow fresh waters, often with low grass or other herbage; swamp margins, flooded pastures, sewage ponds; occasionally tidal areas, saltmarshes (Pizzey and Knight, 2012).	The NatureMap search returned two records within 80 km of the Survey Area (NatureMap, 2025).	**Low** No records identified, no suitable habitat within the Survey Area.
Scolopacidae	*Calidris ruficollis* Red-necked Stint	MI	MI, MA	Tidal mudflats, saltmarshes, sandy or shelly beaches; saline and freshwater wetlands, salt fields, sewage ponds (Pizzey and Knight, 2012).	The DBCA database search identified 76 records within 80 km of the Survey Area, including 42.2 km west in 2018 and 1.2 km northwest in 2015 (DBCA, 2025).	**Low** Records are associated with coastal habitats and Little Lagoon 0.6 km northwest of the Survey Area. This taxa may utilise airspace/infrequently be present in the Survey Area when moving between preferred habitats, no suitable habitat within the Survey Area.
Scolopacidae	*Calidris tenuirostris* Great Knot	CR	VU, MI, MA	Tidal mudflats; sandy ocean and bay shores; estuaries; shallow saline and freshwater wetlands (Pizzey and Knight, 2012).	The DBCA database search identified 34 records within 80 km of the Survey Area, including 18.2 km east in 2016 and 1.2 km northwest in 2007 (DBCA, 2025).	**Low** Records are associated with coastal habitats and Little Lagoon 0.6 km northwest of the Survey Area. This taxa may utilise airspace/infrequently be present in the Survey Area when moving between preferred habitats, no suitable habitat within the Survey Area.
Scolopacidae	*Gallinago megala* Swinhoe's Snipe	MI	MI, MA	Wet grassy ground; edges of reedy swamps (Pizzey and Knight, 2012). Migrant to grassy margins of freshwater wetlands in northern Australia but also uses constructed wetlands (eg sewage farms) (Menkhorst et al, 2019).	No nearby records identified from the database searches or literature.	**Low** No records identified, no suitable habitat within the Survey Area.
Scolopacidae	*Gallinago stenura* Pin-tailed Snipe	MI	MI, MA	Boggy edges of vegetated wetlands; sewage and other ponds; stubbles, grasslands with shrubs, pastures (Pizzey and Knight, 2012).	No nearby records identified from the database searches or literature.	**Low** No records identified, no suitable habitat within the Survey Area.
Scolopacidae	*Limosa lapponica* Bar-tailed Godwit	MI (L. l. bauerii VU; L. l. menzbieri CR)	MI, MA (L. lapponica bauerii Chris. Is. EN; L. lapponica menzbieri EN)	Tidal mudflats, estuaries, sewage ponds, shallow river margins, brackish or saline inland lakes, flooded pastures, airfields (Pizzey and Knight, 2012).	The DBCA database search identified 116 records within 80 km of the Survey Area, including 21.7 km south in 2017 and 1.1 km northwest in 2014 (DBCA, 2025).	**Low** Records are associated with coastal habitats and Little Lagoon 0.6 km northwest of the Survey Area. This taxa may utilise airspace/infrequently be present in the Survey Area when moving between preferred habitats, no suitable habitat within the Survey Area.
Scolopacidae	*Limosa lapponica menzbieri* Bar-tailed Godwit	CR	EN	Tidal mudflats, estuaries, sewage ponds, shallow river margins, brackish or saline inland lakes, flooded pastures, airfields (Pizzey and Knight, 2012).	No nearby records identified from the database searches or literature.	**Low** No records identified, no suitable habitat within the Survey Area.
Scolopacidae	*Limosa limosa* Black-tailed Godwit	MI	EN, MI, MA	Tidal mudflats, estuaries, sandspits, shallow river margins, sewage ponds; inland on large shallow fresh or brackish waters (Pizzey and Knight, 2012).	The DBCA database search identified ten records within 80 km of the Survey Area, including 1.2 km northwest in 2015 and 1.2 km northwest in 2015 (DBCA, 2025).	**Low** Records are associated with coastal habitats and Little Lagoon 0.6 km northwest of the Survey Area. This taxa may utilise airspace/infrequently be present in the Survey Area when moving between preferred habitats, no suitable habitat within the Survey Area.

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		State	Commonwealth			
Scolopacidae	*Numenius madagascariensis* Far Eastern Curlew, Eastern Curlew	CR	CE, MI, MA	Estuaries, tidal mudflats, sandspits, saltmarshes, mangroves; occasionally fresh or brackish lakes; bare grasslands near water (Pizzey and Knight, 2012).	The DBCA database search identified 27 records within 80 km of the Survey Area, including 42.2 km west in 2018 and 1.2 km northwest in 2015 (DBCA, 2025).	**Low** Records are associated with coastal habitats and Little Lagoon 0.6 km northwest of the Survey Area. This taxa may utilise airspace/infrequently be present in the Survey Area when moving between preferred habitats, no suitable habitat within the Survey Area.
Scolopacidae	*Numenius minutus* Little Curlew	MI	MI, MA	Dry grasslands, floodplains, margins of drying swamps; tidal mudflats, airfields, playing fields, crops, commercial saltfields, sewage ponds (Pizzey and Knight, 2012).	No nearby records identified from the database searches or literature.	**Low** No records identified, no suitable habitat within the Survey Area.
Scolopacidae	*Numenius phaeopus* Whimbrel	MI	MI, MA	Estuaries, mangroves, tidal flats, coral cays, exposed reefs, flooded paddocks, sewage ponds, bare grasslands, sport grounds, lawns (Pizzey and Knight, 2012).	The DBCA database search identified 23 records within 80 km of the Survey Area, including 34 km east in 2016 and 13.9 km northwest in 2004 (DBCA, 2025).	**Low** Records are associated with coastal habitats and Little Lagoon 0.6 km northwest of the Survey Area. This taxa may utilise airspace/infrequently be present in the Survey Area when moving between preferred habitats, no suitable habitat within the Survey Area.
Scolopacidae	*Tringa brevipes* Grey-tailed Tattler	MI, P4	MI, MA	Estuaries, tidal mudflats, mangroves; wave-washed rocks and reefs; shallow margins of coastal or inland rivers (Pizzey and Knight, 2012).	The DBCA database search identified records within 80 km of the Survey Area, including 56.4 km west in 2017 and 1.1 km northwest in 2014 (DBCA, 2025).	**Low** Records are associated with coastal habitats and Little Lagoon 0.6 km northwest of the Survey Area. This taxa may utilise airspace/infrequently be present in the Survey Area when moving between preferred habitats, no suitable habitat within the Survey Area.
Scolopacidae	*Tringa glareola* Wood Sandpiper	MI	MI, MA	Muddy margins of wetlands with emergent sedges and taller fringing vegetation; tidal mangroves; margins of tidal mudflats; saltmarshes, sewage pond (Pizzey and Knight, 2012; Menkhorst et al., 2017).	The DBCA database search identified records within 80 km of the Survey Area, including 0.6 km southwest in 2004 and 0.5 km southeast in 2004 (DBCA, 2025).	**Low** Records are associated with coastal habitats and Little Lagoon 0.6 km northwest of the Survey Area, no suitable habitat within the Survey Area.
Scolopacidae	*Tringa nebularia* Common Greenshank	MI	EN, MI, MA	Mudflats, estuaries, saltmarshes, swamps, margins of lakes, muddy shallows of lagoons; permanent and temporary wetlands, claypans; commercial saltfield, irrigated crops, sewage ponds (Morcombe, 2003; Pizzey and Knight, 2012).	The DBCA database search identified 94 records within 80 km of the Survey Area, including 18.2 km east in 2016 and 1.1 km northwest in 2014 (DBCA, 2025).	**Low** Records are associated with coastal habitats and Little Lagoon 0.6 km northwest of the Survey Area. This taxa may utilise airspace/infrequently be present in the Survey Area when moving between preferred habitats, no suitable habitat within the Survey Area.
Scolopacidae	*Tringa stagnatilis* Marsh Sandpiper	MI	MI, MA	Fresh, brackish and saline wetlands; sewage ponds, commercial saltfields, bore drains, mangroves, tidal mudflats, estuaries (Pizzey and Knight, 2012).	The DBCA database search identified seven records within 80 km of the Survey Area, including 37 km east in 2010 and 8.4 km north in 2004 (DBCA, 2025).	**Low** Records are associated with coastal habitats and Little Lagoon 0.6 km northwest of the Survey Area. This taxa may utilise airspace/infrequently be present in the Survey Area when moving between preferred habitats, no suitable habitat within the Survey Area.
Scolopacidae	*Xenus cinereus* Terek Sandpiper	MI	VU, MI, MA	Tidal mudflats, estuaries; shores and reefs of islands; coastal swamps, commercial saltfields (Pizzey and Knight, 2012).	The DBCA database search identified three records within 80 km of the Survey Area, including 34 km east in 2016 and 1.4 km northwest in 1999 (DBCA, 2025).	**Low** Records are associated with coastal habitats and Little Lagoon 0.6 km northwest of the Survey Area. This taxa may utilise airspace/infrequently be present in the Survey Area when moving between preferred habitats, no suitable habitat within the Survey Area.
Stercorariidae	*Stercorarius antarcticus lonnbergi* Brown Skua	P4	-	Oceanic (SPRAT, 2022).	The DBCA database search identified one historical record within 80 km of the Survey Area,64.2 km south in 1980 (DBCA, 2025).	**Low** No records identified, no suitable habitat within the Survey Area.
Threskiornithidae	*Plegadis falcinellus* Glossy Ibis	MI	MI, MA	Well-vegetated wetlands, wet pastures, ricefields, flooded waters, floodplains; brackish or occasionally saline wetlands, mangroves, mudflats, occasionally dry grasslands (Pizzey and Knight, 2012).	The DBCA database search identified one historical record within 80 km of the Survey Area, including 72.4 km east in 1979 (DBCA, 2025).	**Low** No records identified, no suitable habitat within the Survey Area.
Mammals						
Dasyuridae	*Dasycercus blythi* Brush-tailed Mulgara, Ampurta	P4	-	Hummock grasslands (e.g. Triodia spp.) and shrublands on sandy soils (Menkhorst and Knight, 2010).	The DBCA database search identified three records within 80 km of the Survey Area, including 47.9 km west in 2023 and 47.9 km west in 2023 (DBCA, 2025).	**Low** Records are from a translocation in 2023 on Dirk Hartog Island.
Dasyuridae	*Dasyurus geoffroii fortis* Western Quoll, Chuditch	VU	VU	Areas dominated by sclerophyll forest or drier woodland, heath and mallee shrubland (Van Dyck and Strahan, 2008).	The DBCA database search identified three records within 80 km of the Survey Area, including 12.8 km north in 2011 and two records with no dates 48.9 km west and 29.6 km southeast (DBCA, 2025).	**Medium** Limited records, likely to be related to the reintroduction of individuals as part of Project Eden. Limited suitable habitat within the Survey Area.
Dasyuridae	*Parantechinus apicalis* Dibbler	EN	EN	Dense, long unburnt vegetation with a thick litter layer and sandy soils (DBCA, 2012). Mature mallee-heath on mainland; low heath and scrubland on islands (Van Dyck, Gynther and Baker, 2013).	The DBCA database search identified 23 records within 80 km of the Survey Area, including 44.3 km west in 2023 and 44.2 km west in 2022 (DBCA, 2025).	**Low** Records are from a translocation in 2019, with subsequent monitoring since with a further translocation in 2022 on Dirk Hartog Island.
Dasyuridae	*Phascogale calura* Red-tailed Phascogale	CD	VU	Allocasuarina woodlands with hollow containing eucalypts (e.g. Eucalyptus wandoo) and Gastrolobium spp.; prefers vegetation not burnt for at least 20 years (Van Dyck and Strahan, 2008).	The DBCA database search identified four historical records with no dates within 80 km of the Survey Area, including 73.7 km east and 29.2 km north (DBCA, 2025).	**Low** Records are from historical literature with no dates. No suitable habitat within the Survey Area.
Macropodidae	*Lagorchestes hirsutus bernieri* Bay Is. Rufous Hare-wallaby	VU	VU	Found on Bernier Island Shark Bay in dune habitats, hummock grasslands, heath and spinifex sandplains (DCCEEW, 2012)	The DBCA database search identified 794 records within 80 km of the Survey Area, including 40.6 km southwest in 2019 and 36.1 km west in 2019 (DBCA, 2025).	**Low** Records are associated with Bernier Island where the taxa is endemic.
Macropodidae	*Lagostrophus fasciatus fasciatus* Banded Hare-wallaby	VU	VU	Dense thickets of Acacia and Alectryon scrub on the sandplains, and Diplolaena and Acacia on the dunes (Van Dyck, Gynther and Baker, 2013).	The DBCA database search identified 207 records within 80 km of the Survey Area, including 39.8 km west in 2019 (DBCA, 2025).	**Low** Records are from a translocation in 2018 and the subsequent monitoring since on Dirk Hartog Island. As well as records from a translocation in 2017 on Faure Island to the east of the Survey Area.
Muridae	*Leporillus conditor* Greater Stick-nest Rat	CD	VU	Semi-arid to arid shrublands (Van Dyck, Gynther and Baker, 2013).	The DBCA database search identified 39 records within 80 km of the Survey Area, including 42.1 km west in 2022 and 23 km southwest in 1999 (DBCA, 2025).	**Low** Records are from a translocation in 2022 on Dirk Hartog Island and the subsequent monitoring.

Family	Scientific Name	Conservation Status		Habitat	Previous Records	Likelihood of Occurrence
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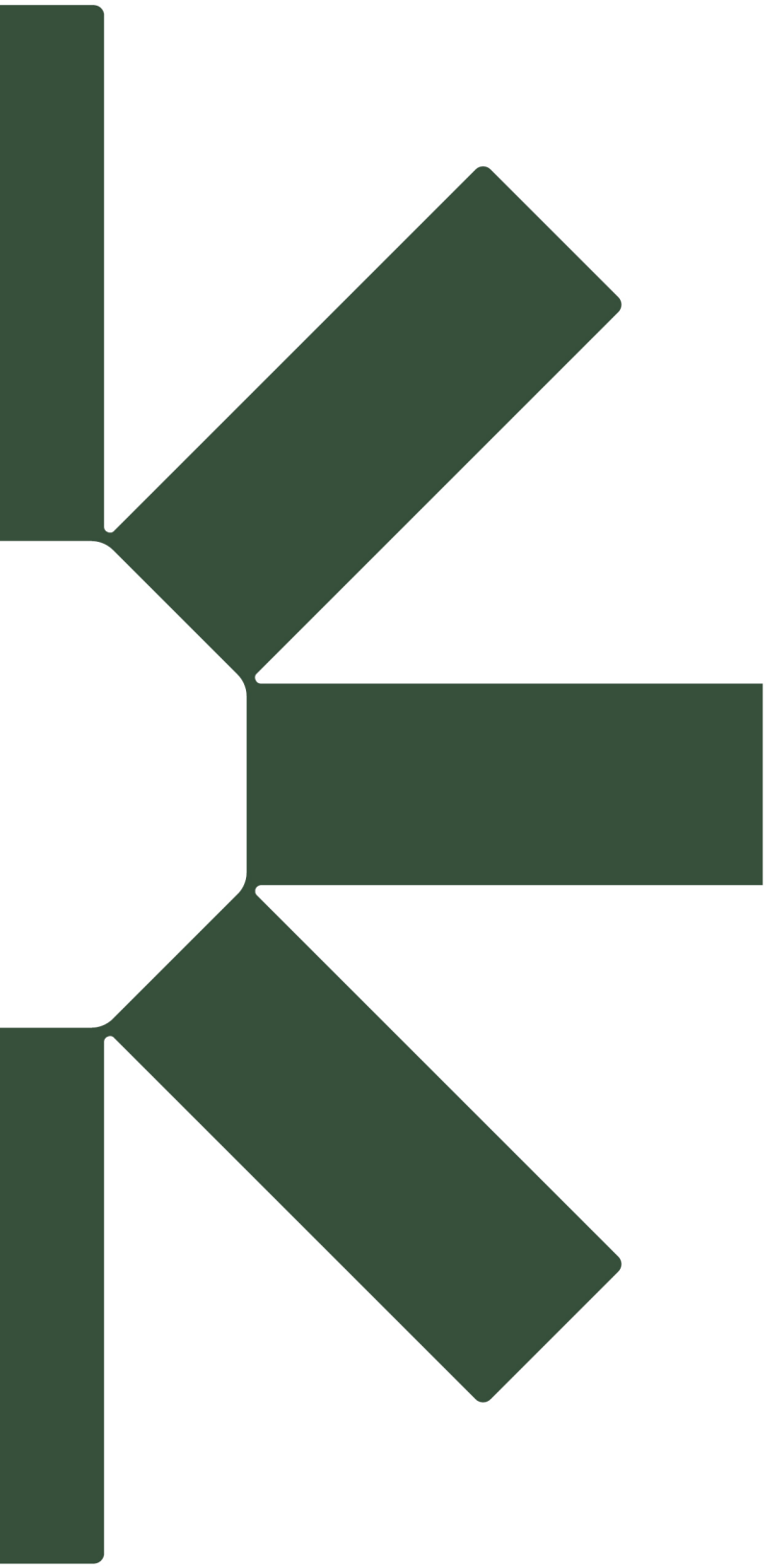
Muridae	*Pseudomys gouldii* Shark Bay Mouse	VU	VU	Confined to Bernier Island and recently introduced to Doole Island in Exmouth Gulf and North West Island in Montebello Group. On Bernier is most common on dunes covered in spinifex, less abundant in heath on island's plateau (Menkhorst and Knight, 2001).	The DBCA database search identified 64 records within 80 km of the Survey Area, including 35.3 km east in 2017 and 33.5 km east in 2009 (DBCA, 2025).	**Low** Records are from a translocation in 2021 and the subsequent monitoring since on Dirk Hartog Island. As well as records from a translocation in 2018 on Faure Island to the east of the Survey Area.
Muridae	*Pseudomys shortridgei* Heath Mouse	VU	EN	Inhabits species-rich dry heathland, open woodlands and forests with heath understorey (Seebeck and Menkhorst, 2000).	The DBCA database search identified two records within 80 km of the Survey Area, including 49 km west in 2017 and 48.9 km west with no date (DBCA, 2025).	**Low** No nearby records, no suitable habitat within the Survey Area.
Peramelidae	*Perameles bougainville* Shark Bay Bandicoot, Little Marl	VU	EN	Arid and semi-arid areas with open saltbush, scrublands and stony hills. Occur on Bernier and Dorre Islands in Shark Bay (DCCEEW, 2023).	The DBCA database search identified 225 records within 80 km of the Survey Area, including 60.6 km northwest in 2024 and 23.2 km southwest in 2009 (DBCA, 2025).	**Low** Recent records are from a translocation in 2019 and the subsequent monitoring since on Dirk Hartog Island. As well as records from 2018 on Faure Island to the east of the Survey Area.
Potoroidae	*Bettongia lesueur lesueur* Shark Bay Burrowing Bettong	CD	VU	Low heath and shrubland, spinifex and coastal dunes and Triodia habitats for warrens (DCCEEW, 2023).	The DBCA database search identified 100 records within 80 km of the Survey Area, including 49 km west in 2017 and 33.5 km east in 2016 (DBCA, 2025).	**Low** Records are largely associated with Dirk Hartog Island and Faure Island.
Potoroidae	*Bettongia penicillata ogilbyi* Brush-tailed Bettong, Woylie	CR	EN (as B. penicillata ogilbyi)	Well-drained soils supporting patchy vegetation thickets, ogten characterised by the plant genus Gastrolobium. Diurnal rest sites also known from Macrozamia and skirts of Xanthorrhoea (Van Dyck, Gynther and Baker, 2013).	The DBCA database search identified 13 histroical records within 80 km of the Survey Area, including 19.2 km north in 1999 and 9.6 km north in 1997 (DBCA, 2025).	**Low** Records are historical, limited suitable habitat within the Survey Area.
Thylacomyidae	*Macrotis lagotis* Bilby, Dalgyte	VU	VU	Mitchell grass and stony downs country of cracking clays, desert sandplains and dune fields sometimes containing laterite, hummock grassland and massive red earths with Acacia shrubland (Van Dyck, Gynther and Baker, 2013).	The DBCA database search identified three records within 80 km of the Survey Area, including 100 m northwest in 2019 and 12.8 km north in 2010 (DBCA, 2025).	**High** Limited records, though recent records adjacent the Survey Area boundry, suitable habitat within the Survey Area.
Reptiles						
Pygopodidae	*Aprasia haroldi* Shark Bay Worm-lizard	P1	-	Coastal sand dune and sandy desert of Shark Bay (Wilson and Swan, 2021)	The DBCA database search identified 40 records within 80 km of the Survey Area, including 59.2 km west in 2024 and 43.8 km west in 2024 (DBCA, 2025).	**Low** Records associated with coastal habitat and Dirk Hartog Island.
Pygopodidae	*Delma concinna major* Javelin Lizard	P1	-	Dense matrix of low vegetation and leaf litter (Wilson and Swan, 2021)	The DBCA database search identified one historical record within 80 km of the Survey Area, including 44.2 km southeast in 1994 (DBCA, 2025).	**Medium** One historical record returned by the DBCA. SLR internal records indicate that the species occurs 45.2 km southeast of the Survey Area.
Pygopodidae	*Pletholax edelensis* Shark Bay Keeled Legless Gecko	P3	-	Acacia shrubs, Triodia, coastal spinifex, and heath associated with coastal dunes and sandplains in the Shark Bay region (Wilson and Swan, 2021)	The DBCA database search identified 26 records within 80 km of the Survey Area, including 58.9 km west in 2024 and 3.3 km north in 1994 (DBCA, 2025).	**High** One nearby DBCA record is historical, recent records are associated with Dirk Hartog Island and coastal habitats. Suitable habitat within the Survey Area. SLR internal records indicate that the species occurs 18.3 km south of the Survey Area.
Pythonidae	*Aspidites ramsayi* Woma	P1 (southwest subpop.)	-	Woodlands, heaths, and shrublands, often with spinifex. Shelters mainly in abandoned monitor and mammal burrows and in soil cracks (Wilson and Swan, 2021).	The DBCA database search identified 12 records within 80 km of the Survey Area, including 8.6 km northeast in 2012 and 10.3 km northeast in 2001 (DBCA, 2025).	**Low** Outside of known distribution.
Scincidae	*Egernia stokesii badia* Western Spiny-tailed Skink	VU	EN	Occupies rock crevices and hollow timber in southwest interior of WA and on Dirk Hartog Island, Shark Bay (Wilson and Swan, 2021).	The DBCA database search identified 39 records within 80 km of the Survey Area, including 58.6 km west in 2011 and 4.9 km east in 2003 (DBCA, 2025).	**High** No recent nearby DBCA records. SLR internal records indicate that the species occurs within the vicinity of the Survey Area. Suitable habitat within the Survey Area.
Scincidae	*Egernia stokesii stokesii* Stoke's Skink	P4	-	Shelters under low open shrubland and limestone slabs and in crevices and cracks on arid islands (DCCEEW, 2012).	The NatureMap search returned 19 records within 80 km of the Survey Area (NatureMap, 2025).	**Low** No records identified.



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